

I 29.74 : IL 6/2



HISTORIC AMERICAN BUILDING SURVEY/HISTORIC AMERICAN ENGINEERING RECORD

AN INVENTORY OF HISTORIC ENGINEERING AND INDUSTRIAL STRUCTURES
WITHIN THE ILLINOIS AND MICHIGAN CANAL NATIONAL HERITAGE
CORRIDOR



96-0177-P




U.S. Department
of the Interior
National Park Service

PUBLIC DOCUMENTS
DEPOSITORY ITEM
MAR 25 1996
CLEMSON
LIBRARY



Illinois & Michigan Canal
National Heritage Corridor



Digitized by the Internet Archive
in 2012 with funding from
LYRASIS Members and Sloan Foundation

<http://archive.org/details/inventoryofhisto00fitz>

AN INVENTORY OF HISTORIC ENGINEERING
AND INDUSTRIAL STRUCTURES WITHIN
THE ILLINOIS AND MICHIGAN CANAL
NATIONAL HERITAGE CORRIDOR

by Gray Fitzimons
Project Historian

with contributions from:
Frances P. Alexander
Mary Carolyn Brown
Joseph DeRose
David M. Kelliher
Douglas E. Kupel
Margaret M. Mulrooney
John Nicolay
Charles Scott
Timothy J. Whittaker

Edited by Lee Hanson

Historic American Buildings Survey/Historic American Engineering Record

Illinois & Michigan Canal National Heritage Corridor

National Park Service
U.S. Department of the Interior
Washington, D.C.
1995

Library of Congress Cataloging-in-Publication Data

Fitzsimons, Gray, 1955-

An Inventory of Historic Engineering and Industrial Structures in the Illinois & Michigan Canal National Heritage Corridor / by Gray Fitzsimons ; Lee Hanson, editor ; with contributions by Frances P. Alexander, George Berndt, Mary Carolyn Brown, Berle Clemensen, Joseph DeRose, David M. Kelliher, Douglas E. Kupel, Margaret M. Mulrooney, John Nicolay, Charles Scott, and Timothy J. Whittaker; edited by Lee Hanson.

p. cm.

Included bibliographical references and index.

1. Industrial Archeology - Illinois - Illinois & Michigan Canal National Heritage Corridor.

2. Illinois & Michigan Canal National Heritage Corridor (Illinois).

3. Industrial Buildings - Illinois - Illinois & Michigan Canal National Heritage Corridor.

4. Architecture - Industrial - Illinois - Illinois & Michigan Canal National Heritage Corridor.

I. Hanson, Lee H. II. Title

T22.I3F58 1995

609.773--dc20

95-39888

CIP

Cover photo: Lock #1 at Lockport, Illinois; Illinois & Michigan Canal National Heritage Corridor. Photo by Jet Lowe, HAER.

THE HAER INVENTORY PROGRAM

by Gray Fitzsimon, HAER Project Historian

The HAER Inventory is an ongoing, comprehensive research project which identifies and analyzes through written documentation, oral history, and historic structures inventories, the nation's significant engineering and industrial sites. Its objective is threefold: (1) it is the first step in identifying sites for further study and preservation; (2) it provides historians, engineers, planners, preservationists, and others interested in the fields of economic and technological history, as well as industrial archaeology, with basic descriptive and historical information on significant sites; this baseline information is intended to be a guide to America's historic industrial and engineering resources; (3) it establishes a broader context for evaluating the historical and technological significance of individual sites for listing in the National Register of Historic Places.

Just as the construction of the Illinois and Michigan Canal was an arduous and often slow process--it took about a dozen years to complete the 100-mile long waterway--so was the work of the Historic American Engineering Record's inventory of historic engineering and industrial resources of the Illinois and Michigan Canal National Heritage Corridor. The Historic American Engineering Record (HAER) began the inventory project in the summer of 1985 with funds provided by the Midwest Regional Office of the National Park Service, Charles H. Odegaard, Regional Director, and Francis A. Ketterson, Chief of Cultural Resources. Sally K. Tompkins, Historian for the Historic American Buildings Survey, served as the initial project director of the HAER inventory.

Two HAER Historians, Gray Fitzsimons, from the University of Washington, and Douglas E. Kupel, from the University of Arizona, initiated the field work, research and writing in June, 1985. Starting in LaSalle-Peru, the most western section of the canal, the survey was conducted along the I&M and encompassed the transportation and industrial resources of the canal towns. All resources included in the survey were built prior to 1940, a date selected in accordance with the "fifty-years or older" guideline observed by the National Register in its evaluation of cultural resources. At the end of the first summer the field work was completed as far as Ottawa.

The second summer Gray Fitzsimons assumed the role of project director and fielded a team of seven HAER Historians and four Architects. The historians included the field supervisor, Charles Scott from Rutgers University, and the surveyors, Mary Carolyn Brown and Frances P. Alexander from George Washington University, David M. Kelliher from Carleton College, Joseph DeRose from Loyola University, Timothy J. Whittaker from Polytechnic of Central London, and John Nicolay from Virginia Polytechnic University. The architects included Cliff Goodhart from the University of Florida, Kelly Sarver from the University of Oregon, and Michael Drasnin from the University of California, Berkeley. The seven historians completed the field work from Ottawa to Chicago, and the architects produced architectural measured drawings of the Illinois Central Railroad's freight depot in LaSalle, as well as the Ottawa Silica Company's Mill "C" complex near Ottawa. In addition, Jet Lowe,

the HAER Staff Photographer, commenced the large-format photography of significant engineering and industrial resources in the Heritage Corridor.

In 1986 the Commission named Lee Hanson as Executive Director of the Heritage Corridor. From the outset Mr. Hanson was an active supporter of the HAER program and coordinated with the Midwest Regional Office all documentation work in the Heritage Corridor. In the summer of 1987, HAER conducted a photographic documentation project focusing on the Chicago area. The majority of sites chosen for the photographic work were bridges identified in the previous summer's inventory. Along with the photographic documentation, a team of HAER architects produced measured drawings of Armour's Warehouse (a grain elevator in Seneca), the Dresden Mule Barn near Dresden Island Lock and Dam, and the Sulphur Springs Hotel near Utica. John A. Burns, architect with the Historic American Buildings Survey, directed the project, and the summer team included architectural technicians Susan E. Keil from the University of Houston, Gilbert E. Witte and Ellen F. Stoner from the University of Illinois, and historian Dawn E. Deusing from the University of Northern Illinois.

Preparation of the HAER Inventory Cards was carried out in 1987-88, and shortly thereafter work began on putting together a manuscript for this volume. Among those contributing to this effort were historians Frances P. Alexander and Margaret M. Mulrooney. Final editing of the manuscript was carried out in the summers of 1988 and 1989, with HAER Historian Kenneth D. Rose from the University of California, Los Angeles, and HAER Staff Historian Gray Fitzsimons serving as the senior editors. The manuscript was extensively edited during this time--some additional research was conducted and the descriptions of several of the sites included in the inventory were updated to reflect physical changes to the structures. Finally, in anticipation of the publication, photographer Martin Stupich carried additional large-format photographic documentation for HAER during the summer of 1988. Through the efforts of Lee Hanson and the Midwest Regional Office, funds were obtained to cover the latter photographic work, as well as the costs of publishing this volume.

Many individuals contributed time and energy to the HAER inventory project. I want especially to thank Gerald W. Adelmann, President of the Canal Corridor Association and Executive Director of the Chicago Open Lands Project. Considered by many the mastermind in the creation of the Heritage Corridor, Jerry has been an outstanding supporter of the HAER inventory and documentation work, and served as a principal contact in our numerous meetings with local historians and business leaders. Roberta Deering of the Illinois Historic Preservation Agency aided the HAER effort, alerting me on several occasions to industrial and engineering resources threatened with destruction. In a number of cases we were able to record the endangered structures prior to demolition.

Of particular help in our documentation of canal structures was David Carr, Superintendent of the Illinois and Michigan Canal State Trail. David granted us complete access to the Park Archives at Gebhard Woods in Morris, and shared generously with me information on the Canal, not to mention hearty food and beverages during my many research trips to the park.

The HAER documentation of the impressive Ottawa Silica Mill "C" complex was greatly aided by Edmund B. Thornton, Director of the Ottawa Silica Foundation and Chairman of the I&M Canal Heritage Corridor Commission at the time.

Many others were wonderfully helpful, sharing information and providing us with important contacts. John Lamb, Professor of History at Lewis University, discussed with me his work on William Gooding, chief engineer on the I&M Canal, and allowed me full access to the University Archives. Sonia Kallick shared her extensive writings on the history of Lemont and its stone industry. Virginia and George Brown of Morris not only aided our understanding of the industry and architecture in Grundy County, but were wonderful hosts to the summer team during the first year of the project.

Illinois & Michigan Canal National Heritage Corridor

The Illinois & Michigan Canal National Heritage Corridor was created in 1984 as an experiment in minimal federalism. The question asked was whether an area with nationally significant natural and historic resources could be preserved without creating a National Park unit. To accomplish this, Congress set up the first National Heritage Corridor, a partnership park, where the only federal presence would be a small staff and an unpaid commission appointed by the Secretary of the Interior. The federal government would have no management role and would acquire no property. Furthermore, no additional restrictions would be imposed which would hinder economic development.

The Corridor starts at Lake Michigan in Chicago and extends west to the Illinois River, following the route of the old I&M Canal, built in 1848. The purpose of that legislation was to "...retain, enhance, and interpret, for the benefit and inspiration of present and future generations, the cultural, historical, natural, recreational, and economic resources of the corridor, where feasible, consistent with industrial and economic growth."

The commission consists of 19 members representing the National Park Service, the State of Illinois, local government, industry and the preservation community. The staff consists of an executive director hired by the Commission, and two employees detailed from the National Park Service. Administrative services for the Commission are provided by the National Park Service. The Commission is funded by Congress, augmented with state funds and other grants.

The key to success is the partnership that has been developed by federal, state, local and private agencies to improve the Corridor. Often, the Commission acts only in the role of catalyst, by bringing parties with mutual interests together in an atmosphere of mutual trust and commitment. A number of ad hoc groups meet regularly to address common issues.

In the past ten years, the limited federal funding--less than \$3 million dollars--has stimulated over \$30 million in private, local government and state funding to rehabilitate existing trails and structures, develop additional infrastructure, such as lodging and visitor centers, and to improve programs for visitors.

CONTENTS

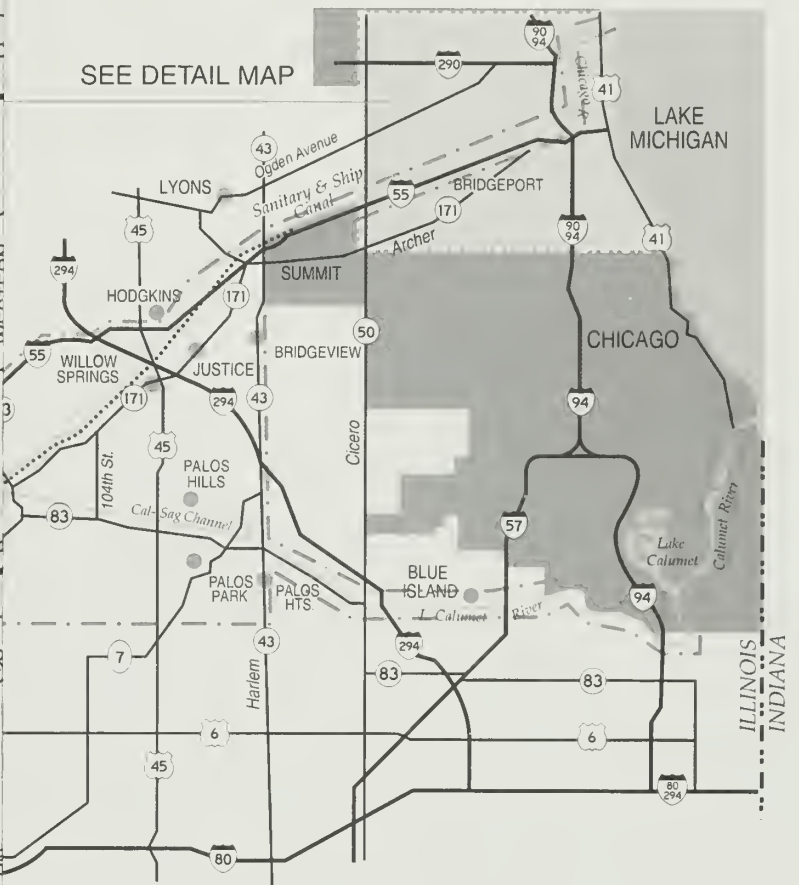
LIST OF ILLUSTRATIONS	vi
INTRODUCTION	1
ILLINOIS AND MICHIGAN CANAL STRUCTURES	11
OTHER CANAL-ERA BUILDINGS	33
ILLINOIS WATERWAY STRUCTURES.	39
RAILROAD SHOPS, SWITCH TOWERS, YARDS, AND DEPOTS . .	57
RAILROAD BRIDGES.	91
GRAIN INDUSTRY	135
BULK PRODUCTS.	155
TEXTILES	181
LUMBER, PAPER, GLASS AND STEEL INDUSTRIES	183
THERMALLY PRODUCED PRODUCTS	203
CHEMICAL INDUSTRY	215
MANUFACTURING	227
IRON, STEEL, AND METALS INDUSTRIES	267
EXTRACTIVE INDUSTRIES	281
HIGHWAY BRIDGES	293
COOK COUNTY BRIDGES	293
WILL COUNTY BRIDGES	318
GRUNDY COUNTY BRIDGES.	328
LASALLE COUNTY BRIDGES	333
INTERURBAN RAILWAYS.	337
UTILITIES	347
APPENDIX A	375
INDEX.	401

LIST OF ILLUSTRATIONS

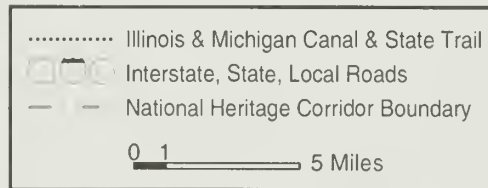
Cover. I&M Canal Lift Lock No. 1 (ca. 1848), Lockport	Cover
Map of the I&M Canal National Heritage Corridor, Illinois	ix
Photo 1. I&M Canal Headquarters (1837, 1876), Lockport.	11
Photo 2. I&M Canal Lift Lock No. 10 (ca. 1848, 1878, 1933), Marseilles.. . . .	15
Photo 3. I&M Canal Lift Lock No. 14 (near) and No. 15 (ca. 1848, 1982), LaSalle-Peru.	16
Photo 4. I&M Canal Lift Lock No. 6 and Locktenders House.	19
Photo 5. I&M Canal DuPage River Dam (ca. 1846, 1877, 1934), Channahon.	21
Photo 6. I&M Canal Aux Sable Creek Aqueduct (ca. 1847, 1927), Aux Sable.	25
Photo 7. I&M Canal: Kickapoo Creek Culvert (ca. 1870's), Marseilles.	28
Photo 8. I&M Canal: Fox River Aqueduct (ca. 1848, 1919), view of steel trough, Ottawa.	30
Photo 9. G.B. Martin Building -- commonly known as the Gaylord Building -- (1840's, 1850's), Lockport.	35
Photo 10. Mule Barn, 603-1/2 Fillmore Street (ca. 1850), Ottawa.	36
Photo 11. The controlling works of the Chicago Sanitary and Ship Canal at Lockport, under construction in 1899.	43
Photo 12. The Bear Trap Dam and sluice gates (right) nearing completion in 1899.	44
Photo 13. Illinois Waterway: Lockport Vertical Lift Lock (1926), Lockport.	48
Photo 14. Illinois Waterway: Lockport Lock Master's Office (1926), Lockport.. . . .	49
Photo 15. Illinois Waterway: Dresden Dam and Taintor Gates (1921-1923), Dresden.	51
Photo 16. Illinois Waterway: Lock Gates of Starved Rock Lift Lock (1929), Utica.. . . .	54
Photo 17. C&ARR: Handcar Storage Building (ca. 1915), Chicago.	60
Photo 18. C&ARR: Lockport Passenger Station (1855), Lockport.	61
Photo 19. C&ARR: South Joliet yard (1910), Joliet.	63
Photo 20. CB&QRR: Ottawa passenger Station (1913), Ottawa.	65
Photo 21. City of Joliet Union Station (1912), Joliet.	66
Photo 22. EJ&ERR: East Joliet Shops, Locomotive Repair Shop (1912), Joliet.. . . .	69
Photo 23. EJ&ERR: East Joliet Shops, Roundhouse (1911, 1924), Joliet.	70
Photo 24. ICRR: LaSalle Freight Depot, during its conversion to a Locomotive Repair Shop in 1918-19.	75
Photo 25. Illinois Central Railroad: LaSalle Freight Depot (1857), LaSalle.. . . .	76
Photo 26. RIRR: LaSalle Freight Depot (ca. 1896), LaSalle.	79
Photo 27. RIRR: LaSalle Passenger Station (ca. 1898), LaSalle.	80
Photo 28. RIRR: Marseilles Passenger Station (1917), Marseilles.	82
Photo 29. RIRR: Ottawa Passenger Station (ca. 1890), Ottawa.	85
Photo 30. Sante Fe Railroad Joliet Freight Depot (1889), Joliet.	88
Photo 31. Sante Fe Railroad: Locomotive Turntable (ca. 1908), Joliet.	90
Photo 32. AT&SFRR: I&M Canal Bridge (ca. 1909), Joliet.	93
Photo 33. Baltimore and Ohio Railroad: Chicago Terminal RR Bridge (1930), Chicago.	100
Photo 34. C&ARR: S. Fork of S. Branch Chicago River Bridge (1906), Chicago.	101

Photo 35. CB&QRR: Illinois River Bridge (1898, 1932), Ottawa..	103
Photo 36. CM&NRR: Chicago Drainage Canal Bridge (1899), Chicago.	105
Photo 37. Illinois Central Railroad: Illinois River Bridge (1855, rebld. 1893, 1932), LaSalle.	110
Photo 38. IHBRR, B&CIRR, GIWRR: Calumet-Sag Bridges (ca. 1935, rebld. 1964-65), Blue Island..	111
Photo 39. Joliet Track Elevation: Rock Island Railroad's Washington Street Bridge (ca. 1912), Joliet.	114
Photo 40. PCC&StLRR, C&NPRR, ISY&TRR: Chicago Drainage Canal Bridges (1901, 1909), Chicago.	118
Photo 41. PCC&StLRR, C&NPRR, ISW&TRR: Chicago Drainage Canal Bridges (1901, 1909), Chicago.	119
Photo 42. PRR: S. Branch Chicago River Bridge (1915), Chicago.	120
Photo 43. RIRR: Des Plaines River Bridge (1932), Joliet..	122
Photo 44. RIRR: I&M Canal Bridge (ca. 1905), Morris..	125
Photo 45. RIRR: I&M Canal Bridge (1911), Rockdale.	126
Photo 46. RIRR: Illinois River Bridge (ca. 1900, rebld. 1934).	128
Photo 47. Atchison, Topeka & Santa Fe Railroad: Grain Elevator and Power Plant (1906), Chicago.	137
Photo 48. Atchison, Topeka & Santa Fe Railroad Grain Elevator and Silos (1906), Chicago.	138
Photo 49. J. Harrington and Company: Grain Elevator (1892), Marseilles.	141
Photo 50. Lockport DuPage Farmer's Grain Elevator (ca. 1890 and 1910), Lockport. . .	142
Photo 51. Morris Grain Company's Elevator (1902), Morris.	145
Photo 52. Nash, Wright & Company's Elevator (ca. 1892), right. Utica Elevator Company's Grain Elevator (ca. 1958), left, Utica..	147
Photo 53. Clark Warehouse (ca. 1848), Utica.	160
Photo 54. Gebhard Brewery (1896-1900), Morris..	162
Photo 55. National Biscuit Co. (Nabisco): Main Carton Factory (1921), and power canal, Marseilles.	168
Photo 56. Norton & Company Granary and General Store (1855), Lockport.	171
Photo 57. Peru Beer Company: Office (ca. 1910), Peru..	174
Photo 58. General Refractories Company: Rockdale Works (ca. 1914), Rockdale. . . .	205
Photo 59. Alpha Portland Cement Company: LaSalle Plant, Ball Mill (ca. 1924), LaSalle..	207
Photo 60. Texaco Petroleum Refinery at Lockport: Crude Unit No. 1, (1911).	223
Photo 61. Illinois Pure Aluminum Company; the original (1892) factory, right, and the later (1922) addition, left; view of the east facade featuring company signage, Lemont.	245
Photo 62. Illinois Pure Aluminum Company; one of the deep-draw presses manufactured (ca. 1900), by the E.W. Bliss Co. of Brooklyn, N.Y.	246
Photo 63. King & Hamilton Company Factory (ca. 1900), Ottawa.	251
Photo 64. Western Clock Co. (Westclox), factory entrance (1920s), Peru.	265
Photo 65. Joliet Iron and Steel Company: Machine Shop (1872), Joliet..	274

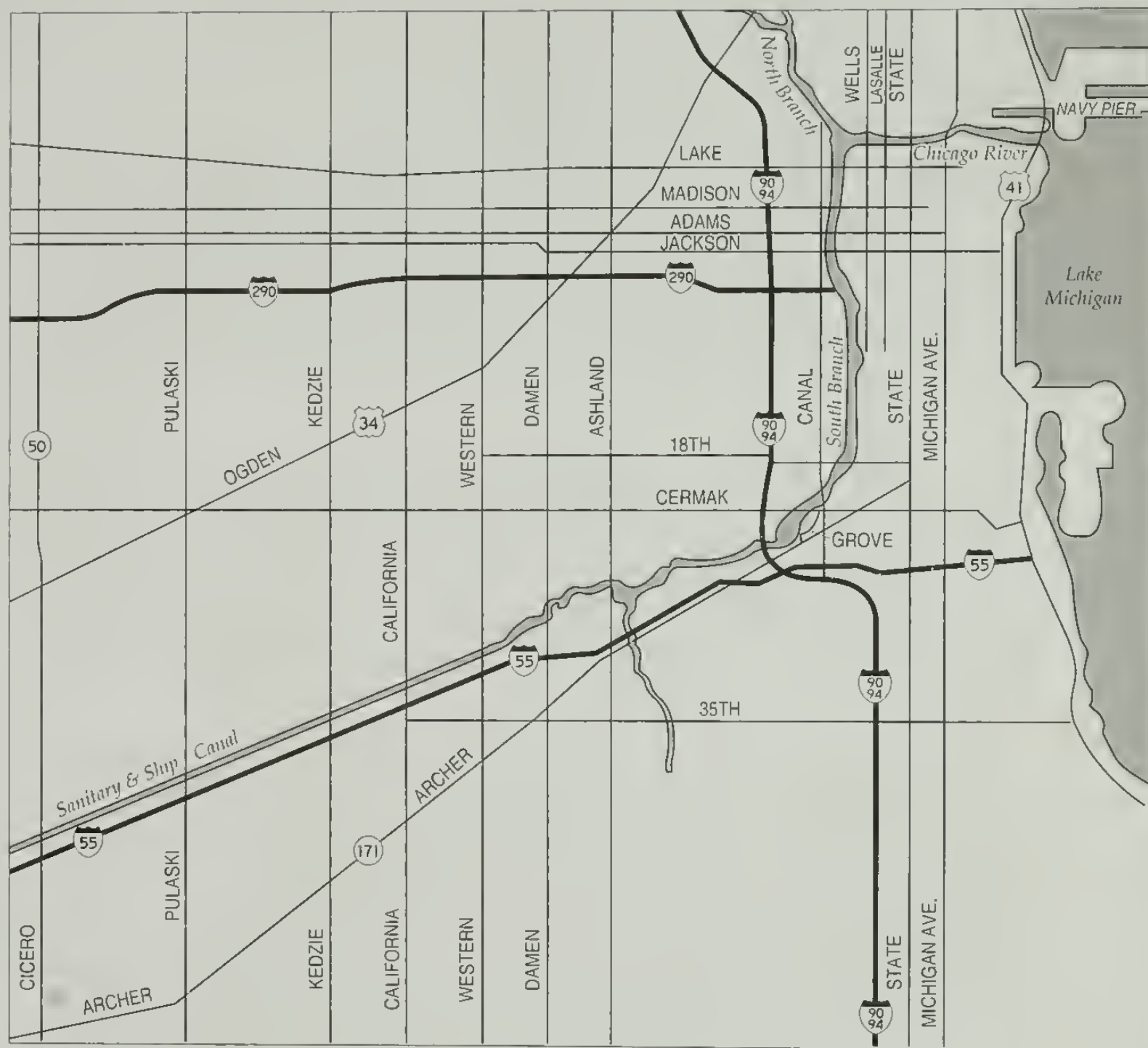
Photo 66. Joliet Iron and Steel Company: Pattern Shop (1872-1873), Joliet.	275
Photo 67. Joliet Iron and Steel Company: Office (1873), Joliet.	276
Photo 68. Joliet Iron and Steel Company: Powerhouse (1890), Joliet.	277
Photo 69. Joliet Iron and Steel Company: Stores Building (1870s, 1897), Joliet.	278
Photo 70. Consumer Quarry Company: Joliet Road Quarry (originally open ca. 1840); this photograph was taken in 1932 by the U.S. Army Corps of Engineers.	283
Photo 71. National Stone Company's Stone Crushing and Sorting Plant (ca. 1910s), Joliet.	287
Photo 72. Ottawa Silica Sand Company's Mill "C" Sand-sorting Building (1917, 1928), Ottawa.	289
Photo 73. W. Adams Street: Chicago River Bridge (1926), Chicago.	295
Photo 74. Cermak Road: Chicago River Bridge (1906), detail of counterweight, Chicago.	298
Photo 75. Michigan Avenue: Chicago River Bridge (1920), detail of trunnion girder, Chicago.	308
Photo 76. W. Washington Street: Chicago River Bridge (1913), Chicago.	312
Photo 77. Western Avenue: Sanitary and Ship Canal Bridge (1940), showing the vertical lift towers-- the counterweights have been removed, Chicago.	315
Photo 78. Jackson Street: Des Plaines River Bridge (1932), Joliet.	321
Photo 79. Romeo Road: Chicago Drainage Canal Bridge (1899), detail of center pier L and bridge tender's house, Romeoville (vicinity).	326
Photo 80. Shippingsport Bridge over the Illinois River (1929), LaSalle.	336
Photo 81. Illinois Traction System: Minooka Passenger Station (ca. 1916), Minooka.	341
Photo 82. Illinois Traction System: Morris Passenger Station (ca. 1908), Morris.	343
Photo 83. Commonwealth Edison Co. Crawford Electric Generating Station (1924-1925), Chicago.	354
Photo 84. Commonwealth Edison Co. Fisk Street Electric Generating Station (1903), Chicago.	357
Photo 85. Commonwealth Edison Co. Fisk Street Electric Generating Station Interior (1903), Chicago.	358
Photo 86. Illinois Power Company: Interior of the Marseilles Hydroelectric Plant (ca. 1911).	362
Photo 87. Metropolitan Sanitary District of Chicago: Lockport Hydroelectric Plant (1905-1907), Lockport.	366
Appendix A: Armours Warehouse (Hogan Grain Elevator), six HAER drawings, Seneca.	375
Appendix A: Rutherford Barn, four HAER drawings, Dresden.	381
Appendix A: Illinois Central Railroad Freight Depot, three HAER drawings, LaSalle.	385
Appendix A: Ottawa Silica Sand Mill "C", eleven HAER drawings, Ottawa.	388



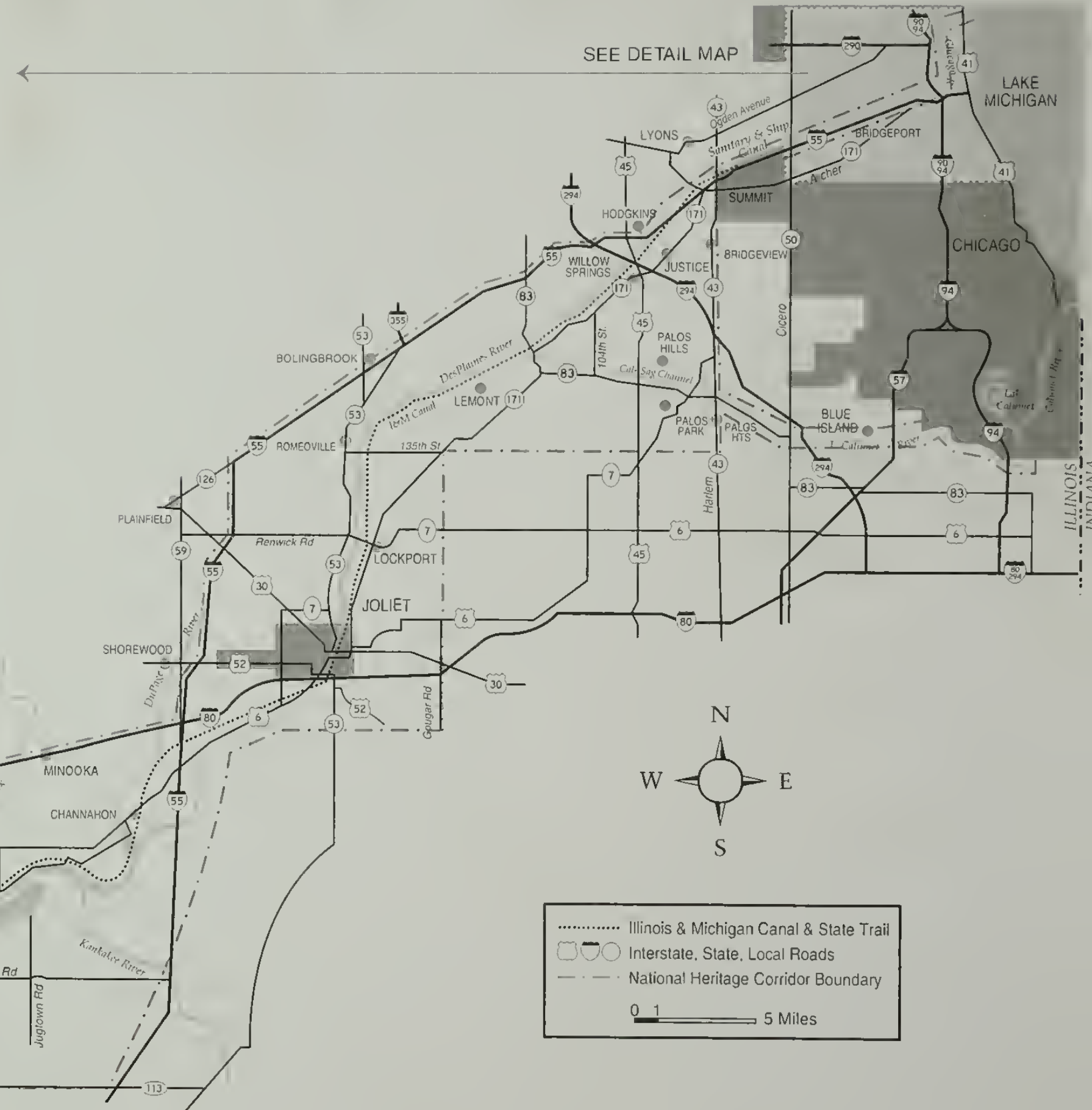
SEE DETAIL MAP



NATIONAL HERITAGE CORRIDOR



CHICAGO DETAIL MAP



ILLINOIS & MICHIGAN CANAL NATIONAL HERITAGE CORRIDOR

INTRODUCTION

by Berle Clemensen and George Berndt

The Illinois & Michigan Canal National Heritage Corridor is one of the newer additions to the National Park System --a 100-mile long urban cultural park between Peru and Chicago, Illinois, with branches up the Chicago River and the Calumet-Sag Channel. It includes towns and cities, as well as industries, parks and museums. The national importance of this area was made clear in 1984 when Congress established the region as the nation's first National Heritage Corridor to preserve its history and to guide its future. The I&M Canal, built between 1836 and 1848, forms the primary cultural resource or "backbone" of the corridor.

The corridor's physical setting varies from large urban centers and heavily industrialized areas to open prairies and thickly forested woodlands. For the most part, the corridor is enveloped by vast tracts of fertile farmland. Small rural towns, generally located along the canal, streams or rivers, dot the countryside. Within these diverse landscapes, there may be found a rich variety of historic architecture, engineering, and industrial sites that offer a tangible record of the region's evolution. In fact, the corridor presents a microcosm of the historical processes which transformed the Midwestern United States from a wilderness to an industrial center.

Throughout human history, the Des Plaines and Illinois river valley has been a strategic transportation corridor and center of cultural activity. Archeological studies have shown that the corridor has been occupied for over 10,000 years by a variety of Native American cultures. The idea of developing a waterway to connect the Great Lakes to the Gulf of Mexico was suggested by the topography of the region--the result of the last glacial retreat. Meltwaters from retreating glaciers about 20,000 years ago carved the existing river valleys, leaving a low saddle between the Chicago River flowing into Lake Michigan and the Des Plaines, headwaters of the Illinois River. Native Americans used this waterway, with the "Chicago Portage," to carry on their commerce. The low divide between the Des Plaines and Chicago rivers was only a few miles wide. It was so flat and swampy that during wet seasons the Indians and early explorers could travel by canoe from one river to the other without portaging.

The French explorer, Louis Jolliet, recognized the potential importance of a canal connecting the Des Plaines and Chicago rivers as early as 1673. Recognition of the commercial value of such a canal was the impetus for moving the original boundaries of Illinois about 50 miles north to include a coast on Lake Michigan and a site for the terminus of the canal to be built when the territory would become a state in 1819. In 1830, Chicago was surveyed as the potential terminus of the Illinois & Michigan Canal. Located strategically at the mouth of the Chicago River, Chicago was no more than a small fur trading settlement and military outpost with a population of 350 in 1833.

Introduction

Completed in 1848, the I&M Canal became an important link in a great inland water route between New York and New Orleans. Once opened, the canal stimulated agriculture and industry, established towns and cities, and created a population boom, which, in turn, stimulated a demand for goods and services. Chicago grew from its modest beginnings to a major city and port on the Great Lakes. Many of the towns and factories which lined the canal's route remain.

The Canal commissioners influenced settlement patterns by selecting the sites of four of the cities: Chicago, Lockport, Ottawa, and LaSalle. Of the canal population centers, Joliet, Ottawa Marseilles and LaSalle/Peru became the more important manufacturing areas. Here manufacturing moved through several periods from a reliance on locally obtained raw materials to heavy industry and finally to the present base of oil and petrochemical plants. Industry centered for a time on limestone quarrying in the eastern section of the corridor and coal mining in the western part, while grain handling always played a prominent role. In addition, the early railroads running through the corridor contribute in a large way to the region's historic fabric. Agriculture has maintained a significant position in the corridor. The number of farmers drastically increased until 1880 then leveled off until 1910 when a decline began. Technological innovations over time gave farmers easier means of production, while improvements occurred in seed grains and livestock.

Three distinct manufacturing periods can be seen in the I&M Canal era. The first began in the late 1830s and relied for the most part on raw materials produced in the region. The products tended to be made for local consumption. Beginning in the 1870s a transition started to heavy industry and other types of concerns which relied on raw materials from other areas. These businesses sent their items of manufacture to areas in and beyond the region. The final era came after the Second World War with diminishing heavy industry and a rise of manufacturing based on oil and petrochemicals.

The I&M Canal fostered the first manufacturing in the area. In 1836 Hiram Norton, a New Yorker who had migrated to Canada, arrived in Lockport and developed a hydraulic lime cement plant which made all of the cement used in canal construction. Flour mills appeared in the canal towns at the same time. They ground wheat not only for the local farmers, but supplied the needs of canal laborers.

As the population of the area grew in the late 1840s, businesses appeared which used locally obtained materials, for the most part, and made products basically for local consumption both for farmers and village dwellers. Bridgeport, the village at the head of the canal, had brick and lumberyards, while Summit, a small settlement a few miles west, contained a brickyard. Lockport, the first town in Will County on the upper part of the canal, had three

blacksmiths (one of which made plows), two shoemakers who obtained hides from area tanners, two harness makers, a tailor who specialized in coats, and a tinsmith who produced tin and copperware. In addition there was a flour mill established by Hiram Norton, two copper shops which made flour barrels, a large distillery that obtained corn from area farmers, a sawmill, and a lime kiln.

Joliet, which became the Will County seat in 1836, grew at a commendable pace and attracted a goodly complement of among others, flour mills, cooper shops, blacksmiths, shoemakers, distilleries, and tailor shops along with several fledgling foundries. Other towns downstream from Joliet such as Channahon, Morris, Ottawa, and LaSalle attracted the same types of manufacturing concerns in varying degrees. Ottawa had one distinction which the other towns did not possess in that it had a marble factory which produced tombstones.

In the 1850s, as the population grew, so did the number of manufacturing concerns of a similar nature, which had developed in the previous decade. The technological revolution in agricultural implements gave a new dimension to the types of goods manufactured. Morris gained two plow factories and a reaper manufacturer. Ottawa had two reaper producers and a corn planter maker, which reflected the growing importance of corn in the area, as well as several more plow factories. Peru, a village at the Steamboat Basin, saw the development of a factory which made fanning mills and corn shellers. Another sign of technological change was found in the Ottawa Instrument Factory which produced telegraph equipment such as relays, keys, and zinc batteries.

In the 1860s few changes occurred in the manufacturing area. Some of the businesses expanded while others of identical nature appeared. With the opening of the huge Chicago Union Stockyards just south of Bridgeport in 1865, the meat packing interests began to relocate there. In Lockport the Norton mills came to be the largest flour producer in the state. By 1870 Lockport had become solely dependent on Norton and Company.

Beginning in 1869 heavy industry appeared in Joliet and Bridgeport. In that year the Union Coal Iron & Transportation Company opened. Its function was to make new railroad rails and re-roll old rails. Soon other steel mills with their associated coke ovens and blast furnaces located there. Bridgeport, like Joliet, attracted steel mills in the 1870s. A branch of the Cleveland Rolling Mill was the first to locate there in 1871 with a small mill and Bessemer steel retort. The Illinois Steel Rolling Mills and the Union Iron and Steel Company soon established plants in Bridgeport. In the 1890s these operations moved to the South Chicago area. Soon after the Chicago Fire of 1871 the International Harvester works moved to Bridgeport. It was the only company plant until the early twentieth century. Glass factories opened in that community during the 1880s.

Introduction

Some downstream towns expanded their manufacturing base in the 1870s. The discovery of silica sand on the west side of Ottawa led to the development of glass factories there. One glass factory was also located in LaSalle. The Matthiessen and Hegler zinc works developed into one of the largest smelter operations in the world. The Illinois Zinc Company located in Peru by 1870 and grew into a large concern. The chief manufacturing interest in Marseilles came to be a paper mill, while North Utica was noted for its cement plant.

In the period 1899-1929 the canal corridor was a fast growing, prosperous place. It offered immigrants and citizens alike opportunity and wages. With the loss of the steel plants and slaughter houses to other areas around Chicago, Bridgeport became more of a residential community. In the early twentieth century Lemont and Lockport made a great effort to draw industry. In 1911 the Northern Illinois Cereal Company reopened the old Norton and Company mills. The Texas Oil Company (Texaco) built a refinery, its first one outside the State of Texas, the same year on the northern edge of Lockport. About 1925 the Material Service Corporation developed gravel quarries just west of Lockport. It used the Sanitary and Ship Canal for transport.

Joliet also prospered in the first third of the twentieth century, primarily with the coming of heavy industry. The largest of these plants was the Illinois Steel Company which had taken over the Joliet Steel Company in 1888 and expanded the operation. It, in turn, became part of the United States Steel in 1901. The fastest growing manufacturing business in the period 1901-1919, however, came in the wallpaper industry. In that time six such companies opened in Joliet.

At the turn of the twentieth century, LaSalle's economy was mainly supported by zinc smelting and refining, clock making, and a cement plant. Ottawa's economic strength came from the production of agricultural implements, musical instruments, carriages and wagons, plate glass making, and pottery, terra cotta, and fired clay products. By the First World War its industry depended basically on the National Plate Glass Company and the silica sand pits which supported the glass manufacturing. The National Biscuit Company opened a box board factory in Marseilles.

The depression of the 1930s brought an end to prosperity and the close of many plants in the I&M Canal corridor. In Lemont the Illinois Pure Aluminum Company, making pots and pans, survived. Texaco continued operation in Lockport as did the Material Service Corporation and the Northern Illinois Cereal Company. The steel mills predominated in Joliet along with several chemical concerns. Paper manufacturing dominated Morris and Marseilles. In Ottawa, Libby-Owens purchased the National Plate Glass Company which allowed glass manufacturing to remain as the main industry. In LaSalle zinc smelting and cement making remained.

America's entrance into the Second World War revived prosperity in the canal corridor--especially in Seneca. It was here in 1942 that the Chicago Bridge and Iron Company located a ship construction yard for building LSTs. These vessels were launched into the Illinois River and sailed to the Gulf of Mexico. The village population grew fivefold.

After the war, heavy industry was slowly phased out to be replaced in the main by oil refineries and the petrochemical industry. The Tri-central Marine Terminal, Inc. opened in Lemont in 1948. The Illinois Pure Aluminum Company broadened its manufacturing in the 1950s to include utensils for restaurants, hotels, and institutions. It, however, ceased operating about 1980. South of Lemont a large refinery developed. Built by the Globe Oil and Refinery Company, it was later purchased by the Pure Oil Company and ultimately operated by Union 76 which expanded it. The antiquated Texaco refinery just north of Lockport ceased production in 1980. Along the canal the Lockport Iron Works has a plant as well as the Northern Pacific Paper Company which prints labels. The Material Service Corporation also expanded to produce concrete pipe and pre-stressed concrete slabs.

A number of refineries and petrochemical plants have located downstream from Joliet. Several metal and fabrication concerns also have established production stations. Glass manufacturing remains the major business in Ottawa. Zinc smelting in LaSalle ended about 1975 and the paper plants in Morris and Marseilles have closed. The Federal Paperboard Company still operates a printing and box board factory in Marseilles.

Industry formed a solid economic basis in the canal corridor from the earliest settlement. Quarrying, mining, grain handling, grist mills, and meat packing relied, for the most part, on local sources. Depletion of resources and a shifting economic emphasis have taken their toll on these industries except for grain handling.

Geologically, dolomitic limestone underlay a large area along much of the canal corridor with the greatest concentration in the area from just south of Joliet to north of Lemont. The towns of Joliet, Lockport, and Lemont became the centers of quarrying activity. Rudimentary limestone quarrying began almost from the earliest settlement with the first stone building in Joliet constructed in 1835. The use of this stone in any amount, however, began with the building of the I&M Canal. Dressed limestone blocks were used for foundations, bridge abutments, aqueducts piers, and lock walls. Most of the stone was obtained in the area north of Joliet, but there were two other quarry tracts--one at Aux Sable and the other at Ottawa. These latter two areas were abandoned after the canal was constructed never to be developed for commercial purposes.

Introduction

The development of limestone quarries in any measure did not begin until the early 1850s. For the first ten years, however, quarries developed slowly because of doubt as to the stone's durability. Activity in the quarries increased dramatically by the end of the 1860s. The I&M Canal furnished cheap transportation to Chicago and huge amounts of limestone building materials found their way over that route. By the end of the nineteenth century railroads became the primary hauler of the stone.

Limestone was not just quarried for building stone. The greatest quantity was rubble or crushed stone which was used for roads, along railroad track, in concrete work, and for the Lake Michigan shoreline in Chicago. Limestone was heated to make lime. In the process of heating it gave off carbon dioxide which was used to make carbonated beverages. Some limestone was cut for flagstone which was used for sidewalks. It was also used to make sodium carbonate, aluminum oxide, calcium nitrate, phenol, and fertilizer. The high magnesium carbonate content, however, restricted its use for fertilizer.

Limestone quarrying for building stone ended around 1900. The development of steel skeleton buildings in the 1890s superseded the use of limestone. Crushed rock became the main product of quarries, but, since the demand for this stone had decreased, many quarries began to close. By 1925 there were only two quarries in operation at Joliet and one at Lockport. The crushed rock which they produced was used for roads, concrete, and flux.

Mining in the canal corridor was limited to coal. In 1673 coal was discovered in the region in the vicinity of Lake Peoria. It was later found in LaSalle, Grundy, and Will Counties, but its development awaited the growth of settlement and industry. In the 1850s coal mining began in those canal counties. It was used to fire the steam boilers of foundries, casting shops, cabinet shops, machine shops, and railroad engines. Also in that decade coal gas was used for street lighting.

Of the three canal counties which contained coal, LaSalle had the most, with three mines near the town of LaSalle. Between there and Ottawa, coal was near the surface and lay in three seams. The Matthiessen and Hegler Zinc Company operated its own coal mine on land just north of its LaSalle smelter from the late 1850s. It provided the fuel for the large smelter which was located on the east side of the town of LaSalle. In addition there were three mines near North Utica and one each around Marseilles and Seneca. Most of the coal in Grundy County was found in the southern part with only a limited field near Morris. Like the LaSalle/Ottawa mines, the Morris area coal was near the surface in seams from two and a half to three feet thick.

In the 1920s the improvement of earth moving equipment permitted strip mining of coal in the canal corridor. This method of extraction produced an unsightly terrain, especially near the canal west of Ottawa. At the same time coal production rose to a peak and then declined until the 1933-37 period. As the depression moderated, the use of coal again increased until the Second World War. After that conflict it again went down. In the 1950s the mines in the LaSalle/Ottawa area closed while those in the section east of Morris lingered until the mid-1970s.

Grist and lumber mills were the earliest form of economic activity in the canal corridor. The first flour mill in Lockport was built in 1838 and became known as Daggett's Mill. By 1850 Hiram Norton operated the sole mill in that village. With the completion of the hydraulic basin off the I&M Canal in 1853, Norton obtained exclusive waterpower rights and built his flour mill on its western edge. In the 1870s it grew to become the largest mill in the state. As the production of local wheat decreased, winter wheat was obtained from southern Illinois and spring wheat came from Minneapolis. In 1896 the company went into receivership and closed in 1907. Nearly all flour mills in the area had gone out of business by this date as the great flour mills of Minneapolis became the major supplier.

Joliet had only one small flour mill until the Civil War. By 1880 there were six mills, but none were able to compete with the Norton Company. This number was reduced to three by 1904 and soon thereafter these ceased operation. Most of the mills used waterpower obtained from the dams which the I&M Canal Trustees had built on the DesPlaines River. Downstream from Joliet each settlement had its flour mills as well. Channahon's main economic basis for at least forty years was its small grist mills. Marseilles, Morris, Ottawa, and LaSalle had as many as one to four mills until about 1880.

Grist mills produced other products than wheat flour. Some ground more corn meal than flour. All sold bran and shorts which were by-products of wheat milling. In the 1870s the mills of Joliet and Morris ground buckwheat flour. At times small quantities of rye flour were also produced.

Several communities contained lumber mills from their beginning in the 1830s. They were small and undoubtedly obtained trees locally. Lockport, Joliet, and Morris seemed to be the centers of this activity. When the I&M Canal opened, thus allowing large amounts of lumber products to be shipped to the area from Wisconsin and Michigan, all of the mills in the canal corridor closed except for the one in Lockport. The Norton Company of Lockport, in addition to its other activities, operated that lumber mill. This saw mill managed to survive until 1872, long after the others had closed. At that date it was converted to a paper mill.

Introduction

The grain trade began with the opening of the I&M Canal. It has remained the most stable of businesses to the present day while the manufacturing economy evolved through several changes. Warehouses followed by elevators sprang up along the canal banks in each town as grain marketing formed a considerable portion of the area's economic activity. Although by the end of the nineteenth century railroads had taken most of the grain transport from the canal, the modern Illinois Waterway has returned as a major factor in grain movement. Chicago, which was the shipping center to which grain was sent from 1848 through most of the first half of the twentieth century, has declined. Barges now take large amounts of grain from numerous canal corridor elevators to terminals on the lower Mississippi River. The kinds of grain hauled to market from the area has changed over time. At first wheat and corn predominated. After the Civil War to the 1930s, corn and oats made up the major crops, while since that time corn and soy beans have come into the ascendancy.

The first railroad in the I&M canal area was initially viewed as aiding the canal by expanding its drawing region. This belief was short lived, for railroads came to be the canal's greatest competitor. On Feb. 27, 1847, the Illinois General Assembly granted a charter to the Rock Island and LaSalle Railroad. The intent was to have that line connect the Mississippi River at Rock Island to the I&M Canal at LaSalle. In combination, the two transportation systems would draw trade from the upper Mississippi River and intervening points to Chicago.

The directors of the Chicago and Rock Island (as the system was now called) began to lay track on Oct. 1, 1851, from Chicago. On March 21, 1853, the line had reached LaSalle, and in the summer of 1854 service was opened to the Mississippi River. This railroad was only the first of a number of railroads to pass through canal territory. The Chicago, Alton, and St. Louis joined Joliet to St. Louis in 1854. Its tracks extended to Chicago via Lockport in 1858. The Illinois Central mainline between Cairo and LaSalle was completed on January 8, 1855. Perhaps the most important line as far as Joliet was concerned was the spur of the Michigan Central Railway which came to that city through Indiana in 1855. In 1886 the Chicago, St. Louis & Western Railroad (now the Santa Fe) entered Joliet and paralleled the canal's south side through Lemont to Chicago. Finally, the Elgin, Joliet and Eastern (also called the Chicago Outer Belt Line) track connected points on the shore of Lake Michigan with Joliet in 1888.

Competition between railroads and canal increased in the 1870s. In their competition, railroads ran spurs to the warehouses and manufacturing concerns which were located on the canal banks. These same railroads also ran tracks to most of the major business in Chicago. Even grain, which comprised the largest manifest of canal business, was not exempt from the railroads. By the 1870s these carriers began to run spurs to most small towns allowing

farmers to cut travel time as opposed to taking their produce to canal sites. In the end railroads won the competition with the I&M Canal because of convenience, year around availability, and speed. In the 1920s and 1930s some railroads went out of business while other consolidated. In competition now with the barges of the Illinois Waterway System, they haul mostly grain, crude oil, and petrochemical products which reflects the changing industry.

The "Rating" segment of the Inventory was based on the following criteria:

1. Structures that possess national significance in engineering, industry, business and/or labor; or structures that are regionally or locally significant but retain much of their historic appearance or materials of construction.
2. Structures that possess only regional significance in engineering, industry, business and/or labor.
3. Structures that possess only local significance in engineering, industry, business and/or labor.

ILLINOIS AND MICHIGAN CANAL STRUCTURES

I&M Canal Headquarters

803 South State Street, Lockport

RATING: 1

Construction Date: 1837, 1876

UTM: Joliet Quad. 16 E.411760 N.4604720

DESCRIPTION: The original office of the I&M Canal Commissioners consists of a one-story wood-framed building with a stone foundation, hipped roof, and clapboard siding. A porch extends along much of the east (main) facade. In 1876, a two-story residence was constructed at the southern end of the office building. The wood-framed addition contains a stone foundation, a hipped roof, projecting eaves, a wooden cornice with ornate brackets and dentils, and a projecting bay at the second-story level.



Photo 1. I&M Canal Headquarters (1837, 1876), Lockport.
Photo by Joseph DeRose, HAER

I&M Canal Structures

HISTORY: In 1837, the State of Illinois erected this building in Lockport shortly after construction commenced on the Illinois and Michigan Canal. It served as the offices of the I&M Canal Commissioners, as well as the offices of the canal engineer and the Land and Toll office. The main entrance was located along Archer Road (now State Street), and the west facade overlooked the canal. In 1876 a two-story addition was erected at the southern end of the building to serve as a residence for the I&M Canal Superintendent. Following the abandonment of commercial navigation on the I&M in 1933 (between Joliet and Peru), the building continued to serve as a repository for documents related to the operation of the Canal. About 1975 the State of Illinois, Division of Waterways, transferred the title of the property to the Will County Historical Society, and the building now serves as an archive and museum.

SOURCES:

Gleanings and Biographies (Lockport, IL: The Will County Historical Society, 1969).
Lockport, Illinois: A Collective Heritage (Lockport, IL: Bank of Lockport, 1980), 20.

I&M Canal Lift Locks

Lockport to LaSalle

RATING: 1

Construction Date: 1836-1848

HISTORY AND DESCRIPTION: In consultation with the renowned engineer Benjamin Wright, the chief engineer of the I&M Canal, William Gooding, designed the I&M Canal lift locks in 1837. Gooding opted for a standard width of 18 feet and a length of 110 feet. In accordance with the deep-cut plan, a total of fifteen lift locks were devised for the I&M. Contracts for the locks were let in 1838. Obtained from local quarries, the stone for the lock chambers was laid with natural and hydraulic cement, much of it manufactured in Utica, Illinois. William Norton of Lockport, Illinois, operated the cement works. The original timber lock gates contained miter sills, hand-operated pivoting valves that permitted water into the lock chamber, and manually operated balance beams. Much of the work on the canal locks was carried out in 1846-48. Because of funding difficulties, a shallow-cut plan was adopted and, as a result, when the canal opened in 1848, a pumping station was required in Bridgeport which drew Lake Michigan water into the canal through the Summit section, south of Chicago.

During the early 1870s, the I&M was reconstructed using the original deep-cut plan. The waters of Lake Michigan were thus drawn into the Canal via the Chicago River and filled the Canal from Bridgeport through Summit without the aid of a pumping station. The lift locks remained in place until the 1930s when, after the I&M had ceased commercial operation, the state reconstructed large sections of the Canal for use as a recreational park. The Civilian

Conservation Corps (CCC) was extensively involved in the refurbishing of locks, locktender's houses, aqueducts, and other canal structures.

With the exception of Lock No. 5 in Joliet and Lock #13 near LaSalle, remnants of the other fourteen lift locks are still visible. The original fifteen lift locks needed to overcome a change in elevation of 140 feet over a distance of ninety-eight miles.

Lift Lock No. 1: Located in Lockport, 29.5 miles from the canal entrance at Bridgeport, this lock originally had a lift of 10.30 feet. Prior to its reconstruction in 1987, the walls were of ashlar limestone. The lock chamber was recently reconstructed with concrete.

Lift Lock No. 2: Located south of Lockport, 30.5 miles from Bridgeport, this lock originally had a lift of 9.65 feet. The walls are constructed of ashlar limestone. Some of the hardware for the gate hinges remains in place. The gates, however, were removed many years ago.

Lift Lock No. 3: Located in Joliet, about 31.5 miles from Bridgeport, this lock originally had a lift of 9.85 feet. The walls are constructed of ashlar limestone. The gates have been removed and thick vegetation is growing in the lock chamber.

Lift Lock No. 4: Located in Joliet, about 31.7 miles from Bridgeport, this lock originally had a lift of 9.90 feet. The walls are constructed of ashlar limestone which has deteriorated, and thick vegetation is growing in the lock chamber.

Lift Lock No. 5: Just over one mile from Lock No. 4, the I&M Canal entered the Des Plaines River through Lock No. 5, which had a lift of 10.10 feet. From this lift lock boats entered into the Des Plaines River, where waters were navigable over a distance of about two miles. Located in Joliet on the east side of the Des Plaines River, this lift lock was completely submerged when the Illinois Waterway opened to traffic in 1933.

Des Plaines River Guard Lock: About 3,000 feet below Lift Lock No. 5, the I&M Canal exited the Des Plaines River through a guard lock that contained a lift of only two inches. This guard lock was obliterated during the construction of the Illinois Waterway. In its place, a new guard lock of reinforced concrete was constructed near the Brandon Road Lock and Dam, at Rockdale, several hundred feet downstream from the location of the original guard lock. This new guard lock contains a lift of about 8 feet.

Lift Lock No. 6: Located in Channahon on the east side of the DuPage River, some 45 miles from Bridgeport, this lock originally had a lift of 11.87 feet. Completed about 1847,

I&M Canal Structures

the lock was reconstructed in 1885 and again in 1936. The walls contain ashlar limestone as well as concrete, which was used for patching deteriorated stones; this work was done by the Civilian Conservation Corps in the 1930s. The wooden lock gates have been removed, although some iron fittings remain and are marked, "Mall Iron Co., Chicago." A modern concrete barrier with wooden gates was constructed in 1956 at the north end of the lock, and a recently constructed wooden foot-bridge crosses the lock, providing access to the locktender's house (see entry for Channahon Locktender's House).

Lift Lock No. 7: Located in Channahon on the west side of the DuPage River, about 45.5 miles from Bridgeport, this lock originally had a lift of 3.90 feet. The walls are constructed of ashlar limestone. The wooden lock gates have been removed, although some of the iron hardware attached to the lock walls remains in place. A reinforced-concrete barrier, erected in 1956, stands at the eastern end of the lock. On the western side of the lock stood an office and shelter for the locktender. This wood-framed structure was demolished in 1910. It had clapboard walls, a wood-shingle gable roof, and six-over-six-light double-hung sash windows.

Lift Lock No. 8: Located at Aux Sable, 53 miles from Bridgeport, this lock originally had a lift of 6.55 feet. The walls are constructed of ashlar limestone, and some of the stones have been replaced with concrete. Some capping stones are held together by iron clamps. In 1887 a sawmill and a stave and barrel factory stood adjacent to the lock. These facilities used waterpower furnished by a spillway that ran along the north side of the lock. Operating under a head of 6'-9", these small mills were provided with about 40 horsepower for the saws and other woodworking equipment. Nothing remains of these mills. In 1936-37 the Civilian Conservation Corps repaired the lock. In addition to the work on the lock walls, the CCC replaced the original wooden lock gates with nearly identical wooden gates. The upstream lock gates were replaced between 1959 and 1964 with immovable reinforced concrete gates, while the downstream set was removed sometime after 1967.

Lift Lock No. 9: Located east of Chicago Street in Marseilles, 75 miles from Bridgeport, this lock originally had a lift of 8.33 feet. Constructed of sandstone in 1845-48, this lock was rebuilt with limestone in 1876. The present reinforced-concrete lock walls were constructed in 1937-38 by the Civilian Conservation Corps. (Some of the stonework dating from the nineteenth century survives at the base of the walls.)

Lift Lock No. 10: Located in Marseilles a few hundred feet west of Lift Lock No. 9, this lock also had a lift of 8.33 feet. It was originally constructed in 1845-48 of sandstone, but was partially rebuilt in timber about 1865. In 1877-78 the walls were reconstructed with

ashlar limestone. The lock remained in operation until 1933, and four years later was rebuilt in concrete by the Civilian Conservation Corps.



Photo 2. I&M Canal Lift Lock No. 10 (ca. 1848, 1878, 1933), Marseilles.

Photo by Jet Lowe, HAER.

Lift Lock No. 11: Located west of Ottawa, 82 miles from Bridgeport, this lock originally had a lift of 9.75 feet. It was greatly altered in the 1930s when mass concrete was added in place of the limestone walls. The concrete was scored to give the appearance of stone masonry.

Lift Lock No. 12: Located west of Ottawa, 85 miles from Bridgeport, this lock originally had a lift of 9.85 feet. The lock chamber retains much of its original ashlar sandstone. The use of towlines is evidenced by the scored stone along the western wingwall. A locktender's house, once situated on the south side of the lift lock, no longer exists. Presently, Lock #12 is in poor condition. The physical integrity of the lock walls has been impaired by tree roots which are pushing some of the stones out of plumb. Additionally, there is considerable debris strewn about in the lock chamber.

I&M Canal Structures

Lift Lock No. 13: Located east of LaSalle and west of Utica, near Pecumsaugan Creek, 94 miles from Bridgeport, this lock originally had a lift of 6.4 feet. Little survives of Lift Lock No. 13; only a few blocks of stone remain in place at the southwest corner of the lock chamber. A small wooden locktender's house was located along the north side of the lock, but was demolished, possibly as early as the 1930s. The lock remained in operation until 1933 when the Peru-to-Joliet section of the I&M was closed.

Lift Lock No. 14: Located in LaSalle, Illinois, 96 miles from Bridgeport, this lock was completely reconstructed in 1981-82 by the LaSalle County Volunteers in conjunction with the Illinois Department of Conservation. Ashlar sandstone was used in reconstructing this lock. It originally had a lift of 13.75 feet, the greatest lift of any I&M Canal lock. Lock No. 14 is adjacent to the canal boat basin.



Photo 3. I&M Canal Lift Lock No. 14 (near) and No. 15 (ca. 1848, 1982), LaSalle-Peru.
Photo by Martin Stupich, HAER.

Lift Lock No. 15: The most western lock, located in LaSalle-Peru, is about 200 feet west of Lock No. 14. It originally had a lift of 11.52 feet. The lock was situated between the steamboat basin to the west and the canal boat basin to the east. Since the 1930s it has been submerged beneath the waters of the Illinois River. Its lock gates were removed and much of the lock chamber has silted in. Lock No. 15 adjoined the steamboat basin which extended about one mile to its junction with the Illinois River at Peru.

SOURCES:

- U.S. Congress, House, "Michigan and Illinois Canal, Letter from the Secretary of War," Ex. Doc. No. 79, 49th Congress, 2nd session, 1887, 19-21.
- Mary Yeater Rathbun, The Illinois and Michigan Canal (State of Illinois, Department of Conservation, Division of Historic Sites, 1981), 17-37.
- A. Berle Clemensen, Illinois and Michigan Canal, National Heritage Corridor, Illinois: Historical Inventory, History, and Significance (Denver: National Park Service, 1985), 20-5, 32-3.
- Walter A. Howe, Documentary History of the Illinois and Michigan Canal (Springfield, IL: State of Illinois, Department of Public Works and Buildings, Division of Waterways, 1956), 148-52.
- John Lamb, "Locks on the Illinois and Michigan Canal: Lock #1 and #2," unpublished mss, (located in the Lewis University Archives, n.d.).
- State of Illinois, Report of the Canal Commissioners to Shelby M. Cullon, Gov. of Illinois, Dec. 1st, 1877 (Springfield, Illinois: State of Illinois, 1877).
- U.S. Department of the Interior, National Park Service, Historic American Buildings Survey, "Early [Illinois and Michigan] Canal Locks, Channahon, Illinois, Survey No. IL 157," two sheets of drawings and field notes, dated 1936, available at the Library of Congress, Washington, D.C.
- State of Illinois, Division of Waterways, "Inspection of Structures Along the Illinois and Michigan Canal from LaSalle to Summit, Illinois," 1959, (available at the I&M Canal State Trail Headquarters, Gebhard Woods Access, Morris, Illinois).
- State of Illinois, Division of Waterways, "Illinois-Michigan Canal Annual Inspection, November 1967," (available at the I&M Canal State Trail Headquarters, Gebhard Woods Access, Morris, Illinois).
- State of Illinois, Division of Waterways, 20th Annual Report (1936-37).
- Dept. of the Interior, Census Office, Reports on the Waterpower of the United States: Part II (Washington D.C.: Government Printing Office, 1887).
- U.S. Department of the Interior, Office of National Parks, Buildings and Reservations, State Park Emergency Conservation Work, Monthly Reports for year 1934, prepared by Theo. M. Kingsbury, Project Superintendent, (available on microfilm, Roll #3, I&M Canal State Trail Archives, at I&M Canal State Trail Headquarters, Gebhard Woods Access, Morris, Illinois).

I&M Canal Structures

I&M Canal: Kankakee Feeder

RATING: 1

south of Des Plaines River extending four-and-one-half miles from Kankakee to the Des Plaines River along the east side of the Kankakee River

Construction Date: 1846-48

DESCRIPTION: This feeder was originally a four-and-one-half-mile long canal which ran from the Kankakee River in Wilmington along the north side of the river, in a northwesterly direction, to the Des Plaines River, where it crossed the river via an aqueduct 300 feet in length. The feeder was originally 40 feet wide at the surface, 26 feet wide at the base with 2:1 side slopes. The remnants include parts of the canal prism and limestone blocks, some with iron pins, which were once a part of the guard lock and dam on the Kankakee River at Wilmington.

HISTORY: Canal engineers first saw the need for an additional source of water for the Dresden pool of the canal in 1845, when they noted that there was a great deal of seepage in the Channahon area. In 1846 the state awarded contracts for the Kankakee Feeder, which was completed in time for the canal's opening in 1848. While operating as a water source for the canal, the feeder also served as a navigable transportation route. Canal records from the 1870s included toll receipts for the transport of products such as corn, ice, lumber and stone. Eventually a private concern, the Kankakee Company, completed the canal as far as Warner's Landing in the southeast corner of Wesley Township, a distance of twenty-one miles from the I&M Canal.

Constructed of stone piers and a wooden trough, the aqueduct carrying the feeder across the Des Plaines River was a source of constant trouble for canal administrators. Canal Commissioners' Reports from the 1870s indicate a number of costly repairs were required throughout the decade. Since canal revenues were declining by the late 1880s, the Commissioners could not justify the annual repairs to the aqueduct. In 1887 the masonry and aqueduct received only enough refurbishing to keep them in operating order for another year. The following year the Canal Commissioners decided to abandon the Kankakee Feeder, relying instead on the DuPage Feeder. In 1899 the Commission considered revising the Kankakee Feeder as a source of water for the I&M Canal, but this idea was never implemented. In the 1930s the area where the aqueduct fed into the Canal on the north side of the Des Plaines was transformed into a state park by the Civilian Conservation Corps, which constructed a boat landing area and several picnic shelters. Today the remnants of the Kankakee Feeder include several stone abutments of the aqueduct and sections of the canal prism. (Although it is outside the Corridor, there appears to be a guard lock on the Kankakee River just east of I-55 that was part of the Kankakee Feeder.)

SOURCES:

Walter A. Howe, Documentary History of the Illinois and Michigan Canal (Springfield, IL: State of Illinois, Department of Public Works and Buildings, Division of Waterways, 1956).
State of Illinois, Report of the Canal Commissioners of the State of Illinois (Springfield, IL: State of Illinois, 1882, 1886, 1887).
State of Illinois, Division of Waterways, Annual Report, for years 1934-35, 1935-36, and 1936-37.
William W. Schofield, "The Kankakee Canal," published by Will County Historical Society, 1978.



Photo 4. I&M Canal Lift Lock No. 6 and Locktenders House.
(ca. 1838, 1933), Channahon. Photo by Jet Lowe, HAER.

I&M Canal Structures

I&M Canal: Channahon Locktender's House (Lock No. 6)

at Lift Lock No. 6, Channahon

RATING: 1

Construction Date: ca. 1848

UTM: Minooka Quad. 16 E.397400 N.4586270

DESCRIPTION: This two-story timber-framed building measures approximately 25' x 18'. It contains a rubble limestone foundation, horizontal clapboard siding with corner boards, and a box cornice along the eaves with gable returns. The south facade features a central six-panel door, with four-light double-hung sash windows on either the side of the door. A lean-to extension to the north was built as a storeroom in 1885.

HISTORY: Built in 1848 when the I&M Canal began operating, this house was constructed at Lockport and transported to the site. It is one of two remaining I&M Canal locktender's houses. (The other one is at Aux Sable.) Despite the remodeling work in 1941, the building retains much of its original appearance with clapboard siding and double-hung sash windows.

SOURCES:

U.S. Congress, House, Michigan and Illinois Canal, Letter from the Secretary of War, Ex. Doc. No. 79, 49th Congress, 2nd Session, 1887, 19-21.

State of Illinois, Division of Waterways, Ninth Annual Report (1925-1926).

Mary Yeater Rathburn, The Illinois and Michigan Canal (State of Illinois, Dept. of Conservation, Division of Historic Sites, 1981).

Robert E. Sterling, A Pictorial History of Will County, v. 2 (Chicago: Sterling Publishers, 1976).

U.S. Department of the Interior, National Park Service, Historic American Buildings Survey, "Early [Illinois and Michigan] Canal Locks, Channahon, Illinois, Survey No. IL 157," two sheets of drawings and field notes, dated 1936, available at the Library of Congress, Washington, D.C.

Rock Run Dam

Junction of I&M Canal and Rock Run, Channahon (vicinity)

RATING: 1

Construction Date: Ca 1846

UTM: Channahon Quad. 16 E.4592520 N.402500

DESCRIPTION: The dam and spillway are in ruins. The limestone abutments of the dam are intact.

HISTORY: This dam and spillway were built as part of the I&M Canal crossing of Rock Run, a small stream near Channahon. A map by the U.S. Army Corps of Engineers from

1902 indicates an "old spillway and dam." The dam probably functioned until 1933 when the Joliet to LaSalle section of the I&M ceased operation. Near this site was Rock Run Park, an early twentieth century amusement area which included a dance pavilion. Also located near the dam was a Rock Island Railroad passenger depot. Although little remains from the dam, other than the stone abutments, the contour of the impounding reservoir is still visible.

SOURCES:

J.W. Woerman, Map of the Illinois & Des Plaines Rivers (U.S. Army Corps of Engineers, 1902).

I&M Canal: DuPage River Dam

RATING: 2

between Lock No. 6 and No. 7, on the DuPage River, Channahon Construction Date: 1846, rebuilt 1934

UTM: Channahon Quad. 16 E.397440 N.4586120

DESCRIPTION: Approximately 150 feet long and 12 feet high, this dam was originally of timber-crib construction. It was rebuilt in stone and, in 1934, with reinforced concrete.



Photo 5. I&M Canal DuPage River Dam (ca. 1846, 1877, 1934), Channahon.
Photo by Jet Lowe, HAER

I&M Canal Structures

HISTORY: Rather than bridge the DuPage River with an aqueduct, chief engineer William Gooding designed a slackwater dam whereby canal barges were pulled across the river behind the dam. The original structure, a timber crib dam, was probably built in the 1840s. In 1877 a stone dam, constructed at a cost of \$3,207.24 and being 150 feet long and 11 feet high, replaced the much-repaired crib dam. Floods in 1918, 1920, and 1925 damaged this stone dam; in August, 1934, work began on the present reinforced concrete dam. The Civilian Conservation Corps carried out the work at a cost of \$14,647.

SOURCES:

U.S. Department of the Interior, National Park Service, Historic American Buildings Survey, "Early [Illinois and Michigan] Canal Locks, Channahon, Illinois, Survey No. ILL 157," two sheets of drawings and field notes, dated 1936, available at the Library of Congress, Washington, D.C.

State of Illinois, Report of the Canal Commissioners to Shelby M. Cullon, Gov. of Illinois, Dec. 1st, 1877 (Springfield, IL: State of Illinois, 1877).

State of Illinois, Division of Waterways, Annual Report, for years 1918, 1919-20, 1920-21 and 1925-26, (published by the State of Illinois, Springfield, IL).

I&M Canal: DuPage River Feeder

Channahon (vicinity)

RATING: 1

Construction Date: 1838-1840

UTM: Channahon Quad. 16 E.398040 N.4590000

DESCRIPTION: Approximately 100 feet wide and one-quarter mile long, the feeder ran almost due east from the DuPage River to the I&M Canal. Now overgrown with thick vegetation, its prism is barely visible.

HISTORY: Constructed in 1838-40 to provide water at the Channahon level of the I&M Canal, the berms of the DuPage River Feeder extended from the head of the feeder 27 chains [1782 feet] up the east side of the DuPage River. Engineers constructed a low timber-crib dam across the DuPage to divert water into the feeder. The feeder was in working order when the Canal opened in 1848, but was abandoned after the construction of the deep-cut channel through Summit in the 1870s. Today, little remains of the DuPage River Feeder.

SOURCES:

State of Illinois, Report of the Canal Commissioners of the State of Illinois (Springhill, IL: State of Illinois, 1836, 1840, 1848, 1877, 1887 and 1900).

Mary Yeater Rathbun, Illinois & Michigan Canal (State of Illinois, Dept. of Conservation, Division of Historic Sites, 1981).

Walter A. Howe, Documentary History of the Illinois and Michigan Canal (Springfield, IL: State of Illinois, Department of Public Works and Buildings, Division of Waterways, 1956).

Minooka Widewater Channel and Carpenter's Landing

RATING: 1

Channahon (vicinity)

Construction Date: 1836-1848

UTM: Channahon Quad. 16 E.397600 N.4589170

DESCRIPTION: This widewater was originally around two miles long and 400 to 600 feet wide. It remains largely intact; however, it has become partially filled with silt, and thick vegetation is growing around its perimeter. Remnants of the prism of the DuPage Feeder Canal enter the I&M just east of the widewater. The east side of the widewater originally was used for loading and unloading barges. Along the widewater stood a grain elevator near the McCowans Farm at a site called Carpenter's Landing. Nothing remains of this timber-framed structure.

HISTORY: The Minooka Widewater was one of several constructed along the I&M Canal. In the area around the headwaters of the Illinois River, the I&M was constructed with earthen berms along the river side of the Canal. The flooded countryside which resulted created a widewater often hundreds of feet wide. In 1860 the grain merchant A.P. Carpenter bought 117 acres along the east side of the Minooka widewater and built a grain elevator with steam power on the opposite side of the channel from his farm. The site of this elevator became known as "Carpenter's Landing." The widewater at Minooka is the best preserved of a number of widders along the Canal.

SOURCES:

Portrait and Biographical Album of Will County, Illinois (Chicago: Chapman Bros., 1885).

Combination Atlas Map of Will County, Illinois (Elgin, IL: Thompson Bros. and Burr, 1873).

Walter A. Howe, Documentary History of the Illinois and Michigan Canal (Springfield, IL: State of Illinois, Department of Public Works and Buildings, Division of Waterways, 1956).

State of Illinois, Division of Waterways, Annual Report, 1944.

I&M Canal Structures

I&M Canal: Aux Sable Locktender's House

Aux Sable

RATING: 1

Construction Date: ca. 1848, 1940

UTM: Minooka Quad. 16 E.388680 N.4583310

DESCRIPTION: This two-story timber-framed building measures approximately 25' x 18'. It contains a rubble limestone foundation, horizontal clapboard siding with corner boards, and a box cornice along the eaves with gable returns. Adjoining the north facade is a concrete-block and wooden addition.

HISTORY: This two-story building was originally erected as a locktender's house in 1848, when operations commenced on the I&M. It remained in service until 1933, when the Joliet to LaSalle section of the canal, the last remaining operable part of the I&M, was closed. The Civilian Conservation Corps repaired the building in 1933-34, and it was totally remodeled in 1940. The latter work included a flat-roofed kitchen addition to the southwest, replacing the original summer kitchen. The original six-over-six-light double-hung sash windows were replaced by three-over-one-light sash windows.

SOURCES:

State of Illinois, Division of Waterways, Fifteenth Annual Report (1931-1932).

Photographs of the remodeling of the Locktender's house, Aux Sable 1940 (at I&M Canal State Trail Headquarters, Morris, Illinois).

I&M Canal: Aux Sable Creek Aqueduct

I&M Canal crossing Aux Sable Creek, Aux Sable

RATING: 1

Construction Date: 1847; rebuilt 1927

UTM: Minooka Quad. 16 E.388780 N.4583330

DESCRIPTION: This aqueduct consisted of a trough, constructed of riveted-steel plate girders, resting on ashlar limestone piers and abutments. The two-span structure has a total length of 136 feet and is 18 feet wide. In 1987, the Illinois Department of Conservation replaced the piers and abutments in scored concrete and refurbished the steel trough. Attached to the trough on the south was a wooden structure, consisting of heavy timbers, which carried the towpath on the same piers and abutments that supported the aqueduct.



Photo 6. I&M Canal Aux Sable Creek Aqueduct (ca. 1847, 1927), Aux Sable.
Photo by Jet Lowe, HAER.

HISTORY: Completed about 1847, this aqueduct originally consisted of a two-span timber Howe truss resting on limestone piers and abutments. The original wooden aqueduct was replaced by the present steel structure in 1927-28. In 1948 the abutments and piers were strengthened by pumping mortar, fine sand, and cement into the interior of the structure. The towpath bridge was also rebuilt at this time, but was removed in about 1960. Substantial changes were made to this structure in 1987 and the towpath bridge was rebuilt in 1993.

SOURCES:

State of Illinois, Division of Waterways, Annual Report, for years 1925-26, 1926-27, 1947-48, and 1948-49.

I&M Canal Structures

Widewater Basin

between Morris and Aux Sable

RATING: 1

Construction Date: 1836-1848

UTM: Minooka Quad. 16 E.387140 N.458250

DESCRIPTION: There are four widewater basins or inlets on the north side of the Canal between Morris and Lift Lock No. 8 at Aux Sable. These widders are now heavily overgrown and silted in.

HISTORY: Similar to the Minooka Widewater, this series of widders between Aux Sable and Morris was formed when earthen berms were constructed on the river side of the Canal, and the resulting low-lying lands to the north were simply allowed to fill with water.

SOURCES:

Mary Yeater Rathbun, Illinois & Michigan Canal (State of Illinois, Dept. of Conservation, Division of Historic Sites, 1981).

Walter A. Howe, Documentary History of the Illinois and Michigan Canal (Springfield, IL: State of Illinois, Department of Public Works and Buildings, Division of Waterways, 1956).

Gum Creek Culvert and Spillway

Three-quarters of a mile east of Main Street, Marseilles

RATING: 3

Construction Date: 1928

UTM: Marseilles Quad. 16 E.358080 N.4575980

DESCRIPTION: This structure is a reinforced-concrete box culvert carrying Gum Creek under the I&M Canal and spillway. It is approximately 15 feet wide and 6 feet high.

HISTORY: Constructed in 1928, this reinforced concrete culvert carrying Gum Creek under the I&M Canal near Marseilles was one of the last improvements made to the I&M during its final years of commercial operation. The Wood Bros. Construction Company of Lincoln, Nebraska, served as contractors for the project. The canal banks were excavated, the new concrete structure built, and the canal banks reconstructed. In addition, a coffer dam was built in the canal prism above the Nettle Creek Aqueduct to maintain an adequate water level in the canal.

SOURCES:

State of Illinois, Division of Waterways, Annual Report, for years 1927-28 and 1931-32.

State of Illinois, Division of Waterways, "Inspection of Structures Along the Illinois and Michigan Canal from LaSalle to Summit, Illinois," 1959 (available at the I&M Canal State Trail Headquarters, Gebhard Woods Access, Morris, Illinois).

State of Illinois, Division of Waterways, "Illinois-Michigan Canal Annual Inspection, November, 1967," (available at the I&M Canal State Trail Headquarters, Gebhard Woods Access, Morris, Illinois).

State of Illinois, Division of Waterways, correspondence, 1928-32 (in Illinois & Michigan Canal State Trail Archives, at I&M Canal State Trail Headquarters, Gebhard Woods Access, Morris, Illinois)

I&M Canal: Kickapoo Creek Culvert

RATING: 1

I&M Canal crossing Kickapoo Creek, Marseilles (vicinity)

Construction Date: ca. 1870s

UTM: Marseilles Quad. 16 E.361730 N.4574920

DESCRIPTION: This arch culvert is constructed of ashlar sandstone and is lined with brick. It has a span of about 10 feet and is over 60 feet in width.

HISTORY: This stone arch culvert probably dates from the 1870s, when many of the original I&M Canal culverts were replaced. The Kickapoo Creek Culvert was lined with brick in 1897. It is one of the best preserved I&M culverts dating from the nineteenth century.

SOURCES:

State of Illinois, Division of Waterways, "Inspection of Structures Along the Illinois and Michigan Canal from LaSalle to Summit, Illinois," 1959 (available at the I&M Canal State Trail Headquarters, Gebhard Woods Access, Morris, Illinois).

State of Illinois, Division of Waterways, "Illinois-Michigan Canal Annual Inspection, November, 1967," (available at the I&M Canal State Trail Headquarters, Gebhard Woods Access, Morris, Illinois).

State of Illinois, Report of the Canal Commissioners of the State of Illinois, 1897 (Springfield, IL: State of Illinois, 1897).



Photo 7. I&M Canal: Kickapoo Creek Culvert (ca. 1870's), Marseilles.
Photo by Timothy Whittaker, HAER.

I&M Canal: Fox River Aqueduct

I&M Canal crossing the Fox River, Ottawa

RATING: 1

Construction Date: ca. 1848, 1919

UTM: Ottawa Quad. 16 E.347060 N.4579280

DESCRIPTION: This aqueduct consists of rough-cut, regular-course limestone piers and abutments, capped with poured concrete. It contains seven piers and two abutments supporting a superstructure consisting of a steel trough of riveted steel plate girders. Its total length is approximately 500 feet.

HISTORY: The original aqueduct across the Fox River was completed about 1848 and contained eight wooden Howe truss spans supporting a timber trough. The towpath extended

along the south side of the aqueduct and consisted of timber trusses supporting a timber deck. In the 1870s steam powered canal boats superseded those that were pulled by mule teams, and the towpath bridge subsequently fell into disrepair. However, the Illinois Traction System, completed from LaSalle-Peru to Marseilles in 1903, utilized the piers of the wooden towpath spans for its crossing of the Fox River (see entry of Illinois Traction System: Fox River Bridge). In addition, a highway bridge was built adjacent to the interurban bridge and, although demolished, the stone piers extending south from the piers of the old interurban bridge remain in place.

The timber superstructure and trough of the Fox River Aqueduct remained unaltered until 1918-19, when the federal government provided funds to improve the canal from Joliet to LaSalle-Peru, the last commercially operating section of the I&M. All timber members of the remaining aqueducts were replaced with steel. Following the closing of the Canal in 1933, the Civilian Conservation Corps added brick, stone, and concrete infill to the river piers and abutments to stabilize the structure. The interurban line ceased operation in 1934, and the bridge has been abandoned ever since. The aqueduct and interurban spans are presently in poor condition. The limestone of the piers has greatly deteriorated, and some of the concrete, added in the early 1900s, has spalled. (ed. note: A contract is scheduled to be let in 1995 to rehabilitate the piers and the steel trough.) In 1978, the Illinois Department of Conservation rehabilitated the old interurban bridge for use as a pedestrian walkway.

SOURCES:

- "McKinley Syndicate Properties of Northern Illinois," Street Railway Review, vol. 15, (March 15, 1905), 131-35.
- U.S. Department of the Interior, Office of National Parks, Buildings and Reservations, State Park Emergency Conservation Work, Monthly Reports for year 1934, prepared by Theo. M. Kingsbury, Project Superintendent, (available on microfilm, Roll #3, I&M Canal State Trail Archives, at I&M Canal State Trail Headquarters, Gebhard Woods Access, Morris, Illinois).
- Mary Yeater Rathbun, The Illinois and Michigan Canal (State of Illinois, Department of Conservation, Division of Historic Sites, 1981), 35-7.



Photo 8. I&M Canal: Fox River Aqueduct (ca. 1848, 1919), view of steel trough, Ottawa.
Photo by Jet Lowe, HAER.

I&M Canal: Fox River Feeder and Lateral Canal

from Dayton to Ottawa

RATING: 1

Construction Date: 1837-1842

DESCRIPTION: This feeder canal extends approximately four-and-one-quarter miles from the Dayton Dam on the Fox River to the southwest joining the I&M Canal in Ottawa. The prism is about 40 feet wide and three to four feet deep. Little of the Fox River Feeder remains; the most visible section extends south below the Dayton Dam.

HISTORY: Surveys for the Fox River Feeder were conducted by William Jerome, engineer in charge of the Western Section of the I&M Canal in early 1837. By December of that year construction was under way. Plans included the construction of two culverts, one road bridge, one guard lock, a dam across the Fox River, and earthen berms. The Fox River Feeder was widened to 60 feet for the last one-quarter mile in Ottawa and had a masonry and gravel dam and guard lock at Dayton. Work on the feeder was completed by 1842 and opened as part of the canal system in 1848.

Ottawa's Lateral Canal, a one-half mile-long, 60-foot wide power canal (now filled in) was constructed in conjunction with the feeder. It furnished waterpower and gave industry access to the canal by way of a guard lock. The feeder served the Canal and the Hydraulic Basin in Ottawa until 1909, when the Lateral Canal through Ottawa was abandoned and the city began to fill in sections of the hydraulic system. In the 1930s the Civilian Conservation Corps refurbished the area between the feeder and the Fox River and built a shelter at the entrance to Ottawa's Lateral Canal.

SOURCES:

Miscellaneous letters and accounts relating to Fox River Feeder in Illinois & Michigan Canal State Trail Archives, at I&M Canal State Trail Headquarters, Gebhard Woods Access, Morris, Illinois.
 Mary Yeater Rathbun, Illinois & Michigan Canal (State of Illinois, Dept. of Conservation, Division of Historic Sites, 1981).
 Walter A. Howe, Documentary History of the Illinois and Michigan Canal (Springfield, IL: State of Illinois, Department of Public Works and Buildings, Division of Waterways, 1956).
 State of Illinois, Report of the Canal Commissioners of the State of Illinois, for years 1836, 1840, 1848, 1877, 1887 and 1900, (published by the State of Illinois in Springfield, Illinois).

I&M Canal: Towpath Walker's House

located on the Aiken Farm, Utica

RATING: 1

Construction Date: ca. 1848

UTM: Starved Rock Quad. 16 E.333660 N.4577690

DESCRIPTION: The ruins of the former towpath walker's house contain random range limestone walls with quoins of dressed limestone. The old doorway is framed with stone. The ruins measure approximately 20' x 15', and the walls are approximately 5 feet high. These ruins are situated on the Aiken Farm, one-half mile east of Utica.

HISTORY: These ruins, located between Lock #12 and Lock #13, have been tentatively identified as the foundation and walls of a towpath walker's house. The towpath walker inspected the canal for maintenance problems (namely erosion of the banks and deterioration of the locks and aqueducts) and checked to insure that an adequate water level was maintained between the canal locks. This individual controlled the water level by manipulating the waste gates. The remains probably date from 1848, the year the entire I&M was placed into commercial operation.

I&M Canal Structures

SOURCES:

Mary Yeater Rathbun, The Illinois and Michigan Canal (State of Illinois, Department of Conservation, Division of Historic Sites, 1981), 42-3.

I&M Canal: Little Vermillion Aqueduct

I&M Canal crossing the Little Vermillion River east of LaSalle

RATING: 1

Construction Date: 1848, 1919

UTM: LaSalle Quad. 16 E.325640 N.4577020

DESCRIPTION: The aqueduct contains five spans, each span measuring approximately 40 feet in length. The rough cut, regular coursed, sandstone piers and concrete covering the original sandstone abutments support a riveted steel trough. The recently reconstructed towpath bridge consists of a concrete deck supported on steel stringers.

HISTORY: The Little Vermillion River Aqueduct was originally constructed as a five-span series of timber Howe trusses supported on stone piers. Chief engineer William Gooding designed all of the I&M Canal aqueducts using timber instead of masonry for trusses and troughs because of the savings in the initial construction costs. Despite the expensive maintenance costs, the system of timber aqueducts remained in place until the First World War period. In 1918-19 federal funds were made available to improve the last commercially operating stretch of the I&M Canal. (This extended from Joliet to LaSalle-Peru.) Three of the timber aqueducts were removed and riveted steel troughs were constructed on top of the original limestone piers and abutments. A new five-span steel trough was erected across the Little Vermillion River.

In 1936, four years after commercial operations on the I&M had ceased, the Civilian Conservation Corps refurbished the towpath of the Little Vermillion River Aqueduct. The CCC installed a series of timber arch spans to carry a wooden walkway. In addition, loose stones were removed from the piers and the abutments, and the voids were filled with concrete. In 1963, the Illinois Department of Transportation replaced the wooden-arch towpath spans with steel girders and installed a concrete deck for the walkway. The Department of Transportation also placed concrete over the existing abutments. The Little Vermillion River Aqueduct is one of four remaining aqueducts along the I&M Canal. In 1989, the Illinois Department of Conservation rehabilitated the trough, piers and abutments.

SOURCES:

- U.S. Department of the Interior, Office of National Parks, Buildings, and Reservations, State Park Emergency Conservation Work, Monthly Reports prepared by Theo. M. Kingsbury, Project Superintendent, for the year 1936, (available on microfilm, Roll #3, I&M Canal State Trail Archives, at I&M Canal State Trail Headquarters, Gebhard Woods Access, Morris, Illinois).
- State of Illinois, Division of Water Resources, "Plan of Little Vermillion Aqueduct Improvements," on file in I & M Canal State Trail Archives, at I&M Canal State Trail Headquarters, Gebhard Woods Access, Morris, Illinois.
- Mary Yeater Rathbun, The Illinois and Michigan Canal (State of Illinois, Department of Conservation, Division of Historic Sites, 1981), 35-7.

OTHER CANAL-ERA BUILDINGS

Dresden Inn

Old Stage Coach Road, Dresden

RATING: 1

Construction Date: ca. 1840s

UTM: Minooka Quad. 16 E.392860 N.4584130

DESCRIPTION: This two-and-one-half-story building measures 40' x 25'. It contains horizontal clapboard siding, multi-light double-hung sash windows, and a gable roof. A one-story porch extends along the south facade. East of the old inn are two wooden buildings, one serving as a garage, and the other as a residence. The latter building may have been built as a summer kitchen in the mid-nineteenth century.

HISTORY: Salmon Rutherford, a German immigrant, first built a cabin here in 1833. The area became known as Dresden because it reputedly reminded Rutherford of his native Dresden. In the early 1840s, he built the present structure as an inn and tavern to service a stage coach line which passed through the area. The inn was pictured in Captain Henry Ainslee's 1842 painting "Dresden Inn." By the 1840s Dresden received much stage coach traffic and grew to include a post office and a church. The Dresden area boomed once again with the building of the I&M Canal, and Dresden was the home of many Irish immigrant canal workers. A Roman Catholic church was built and included a cemetery in which many canal workers are buried. The decline of stagecoach travel, and Dresden's failure to attract a railroad line, namely the Rock Island Railroad (which decided to locate in Minooka rather than Dresden), led to a reversal in the town's fortunes. Today, the Dresden Inn is a farm residence and the town of Dresden is little more than a handful of residences.

Other Canal Structures

SOURCES:

Chicago History, v. 7, Spring 1967.

Joliet Herald-News, April 13, 1963, 14-15.

"How Dresden Got Its Name" - Lecture Notes, prepared by Tom Smith, November 6, 1978 (at Three Rivers Library, Channahon).

G.B. Martin Building (Gaylord Building)

8th Street and the I&M Canal, Lockport

RATING: 1

Construction Date: 1837, 1860s

UTM: Joliet Quad. 16 E.411700 N.4604780

DESCRIPTION: In 1837, the State of Illinois erected a large one-and-one-half-story warehouse building along the Illinois and Michigan Canal. It has recently been restored and retains some measure of its original exterior. The building contains limestone load-bearing walls, an intersecting gable roof and two impressive arched entrances along its southern (8th Street) facade. It is presently used as a restaurant. Adjoining to the east is a three-story building of limestone construction with an interior timber post-and-beam frame. Erected in the early 1860s, this three-bay, faintly Italianate building features ornate limestone dentils and arched windows and doorways.

HISTORY: In 1837, the State of Illinois constructed a warehouse in Lockport to serve the Illinois and Michigan Canal. George B. Martin, a local merchant, purchased the building in 1853 and used the one-and-one-half-story limestone building to store grain. In the early 1860s, Martin expanded his business with a three-story addition, adjoining the east facade of the warehouse. German mason Julius Schiebe, erected this limestone building which featured arched windows and doorways and ornate pilasters and dentils along the main (8th Street) facade. The Martin Building was subsequently purchased by George Gaylord, followed by Hiram Norton. Both men were successful grain merchants and operated dry-goods stores.

In the early 1890s, the Barrows Lock Company acquired the property and added two stories to the old canal warehouse. The walls of these upper two floors were built of red brick and stood in marked contrast to the original dolomitic limestone. In 1948, the Hyland Plumbing Supply Company bought the buildings, operating a wholesale plumbing supply store until the late 1970s. Shortly after going out of business, the property was purchased by the Gaylord Lockport Company and descendants of George Gaylord, who then undertook a restoration of both buildings. Completed in 1987, the warehouse building had its upper two floors removed, and a gable roof resembling the original one was constructed. It now serves as a restaurant. The refurbished adjoining three-story building houses an interpretative center for the Illinois and Michigan Canal State Trail.



Photo 9. G.B. Martin Building -- commonly known as the Gaylord Building -- (1840's, 1850's), Lockport.
Photo by Joseph DeRose, HAER.

SOURCES:

Lockport, Illinois: A Collective Heritage (Lockport, IL: Bank of Lockport, 1980), 21.

Richard Hellinger, "Lockport Historic District," unpublished manuscript, (Historic American Engineering Record, National Park Service, 1979), 6, 15, 23.

Other Canal Structures

Ottawa Mule Barns

603-1/2 Fillmore Street and 502 Webster Street, Ottawa

RATING: 1

Construction Date: ca. 1850

UTM: Ottawa Quad. 16 E.345360 N.4578480

DESCRIPTION: These two nearly identical structures are located within three blocks of each other. The two-story buildings contain rubble sandstone walls and heavy timber interior framing.

HISTORY: Prior to the advent of steam-powered vessels on the I&M in the 1870s, canal boat operators employed mules to pull the barges. These two stone buildings are thought by locals to have served as mule barns. Both are located a short distance west of Ottawa's Lateral Canal, which was obliterated in the early 1900s. They may have been carriage houses rather than mule barns.



Photo 10. Mule Barn, 603-1/2 Fillmore Street (ca. 1850), Ottawa.
Photo by Gray Fitzsimons, HAER.

SOURCES:

Interview with Mr. Leonard Lock, an Ottawa resident, July 29, 1985.

Mary Yeater Rathbun, The Illinois and Michigan Canal (State of Illinois, Department of Conservation, Division of Historic Sites, 1981), 39.

Dresden Mule Barn

Dresden (vicinity)

RATING: 1

Construction Date: ca. 1848

UTM: Minooka Quad. 16 E.392950 N.4584040

DESCRIPTION: Situated along the north side of the canal, this two-and-one-half-story timber-framed building measures approximately 60' x 25'. It contains limestone foundations, wood siding, and a gable roof (see Appendix A).

HISTORY: This structure was erected around 1848 across from the Dresden Inn, an establishment owned by Salomon Rutherford, one of Dresden's earliest residents. The upper part of the barn may have been used by Rutherford for grain storage. Grain was stored here for shipment via the Canal. This barn may also have been used as a resting and changing facility for canal teams and mules; three stalls still exist on the second floor with access to the north side of the Canal. It presently serves as a barn for hay storage.

SOURCES:

Joliet Herald, April 13, 1963.

"How Dresden Got Its Name" - Lecture Notes, prepared by Tom Smith, November 6, 1978 (at Three Rivers Library, Channahon).

Chicago History, v. 7, Spring 1967.

ILLINOIS WATERWAY STRUCTURES

Calumet-Sag Channel

Calumet River through Sag Valley

RATING: 2

Construction Date: 1922, 1955

DESCRIPTION: This channel was built through the Sag Valley and connected the Calumet River with the Chicago Sanitary and Ship Canal. When completed in 1922, the Cal-Sag Channel was 20 feet deep, 16 miles long, about 60 feet wide, with a capacity of 2,000 cubic feet per second. In 1955 work began on widening the channel to 225 feet.

HISTORY: When the first European settlers arrived in the early 1800s, the Calumet River was a small meandering stream, puddling into Lake Calumet and draining into Lake Michigan. The potential for developing a harbor in the area around the lake was recognized when the federal government conducted surveys for the I&M Canal in the 1820s and 1830s. As part of the construction of the I&M, the Calumet Feeder was built from the Little Calumet River at Blue Island, due west to its junction with the Canal at Sag Bridge, a distance of 17 miles. In 1869 the federal government began improvements to the Calumet Harbor, in the area where the Calumet joined with Lake Michigan. The harbor quickly emerged as an important Great Lakes shipping facility, particularly with the increase in the copper and iron-ore trade from the upper lakes region. By 1874 the Calumet River was straightened at the harbor to a width of 300 feet and depth of 18 feet, and six miles of shoreline were opened for industrial development.

Shortly after the completion of the Chicago Sanitary and Ship Canal in 1900, its chief engineer, Isham Randolph, recommended to the Chicago Sanitary District the construction of a Calumet Drainage Canal. A dramatic growth in industry and urban development in the Calumet watershed vastly increased sewage and industrial wastes and threatened the drinking water of Chicago. In fact, the junction between the city's water source, Lake Michigan, and the increasingly polluted Calumet River was a mere three and three-fifths miles from the Hyde Park Waterworks, which served over one-half million people. Randolph proposed to reverse the flow of the Calumet, with the waters emptying into the Chicago Drainage Canal at Sag Bridge.

The Sanitary District did not act on this recommendation, and in 1907, a new study was conducted by Rudolph Hering, engineer in charge of the Drainage Canal. Hering's plan was virtually identical to the earlier proposal, calling for the construction of the Calumet Drainage Canal, part of which was to follow the path of the old Calumet Feeder. As the Calumet Drainage Canal was designed to reverse the flow of the Calumet River and thus, as with the Chicago Sanitary and Ship Canal, lower the level of the Great Lakes, the

Illinois Waterway Structures

International Waterways Commission debated at great length Hering's proposal. Finally, in 1910, after two more studies were conducted, the Secretary of War issued a permit to the District to commence construction of the Calumet-Sag Channel.

Begun in 1912, construction work included the channel, a controlling works, a pumping station, and numerous intercepting sewers. Excavation for the channel was divided into two types of materials: glacial drift and solid rock. Whereas the typical earth section consisted of a trapezoidal cross-section--36 feet wide at the channel bottom, with a 1:2 slope covered with riprap along the sides--the typical rock section was to be 60 feet wide, with vertical channeled rock sides. In either case, the channel was to be 20 feet deep with a capability of carrying 2,000 cubic feet of water per second.

Several contractors were employed in the project that took nearly ten years to complete. Winston Bros. Company of Minneapolis, Minnesota, S.R.H. Robinson & Son Contracting Co. of St. Louis, Green & Sons Co. of Chicago, and Thomas J. Forschner of Lemont, Illinois, served as contractors on various parts of the project. In 1922 the Sanitary District completed the Calumet-Sag Channel. Importantly, the original design of the newly operating Cal-Sag Channel incorporated a plan for increasing its width.

With the completion of the Illinois Waterway in 1933, the U.S. Army Corps of Engineers, which now administered the Cal-Sag Channel, proposed to carry out the plans for widening the waterway to 225 feet. However, the plan met fierce resistance from the railroads. Barge traffic on the Cal-Sag continued to increase--by 1948 the Waterway was accommodating two million tons of cargo each year. Finally, in 1955, the Corps commenced the channel-widening project. This work was completed three years later at a cost of \$125 million. Bridges built through this area were elevated to a height which allowed for easy ship passage, eliminating the need for movable bridges. The Waterway remains in service; however, in recent years many of the industries in the Calumet District have shut down.

SOURCES:

- Harold M. Mayer and Richard C. Wade. Chicago: Growth of a Metropolis (Chicago: University of Chicago Press 1969).
- Robert I. Randolph. "Review of the Development of Chicago Waterways", The Western Society of Engineers, v. 28, (1923), 395-401.
- W.W. De Berard, "Engineering Problems of the Chicago Region and Their Solution," Engineering News-Record, v. 101 (November 22, 1928), 758-764.
- E.J. Kelly, "Construction of the Calumet-Sag Channel," Engineering News, v. 69 (New York: 23 January 1913), 146-50.
- "A Favorable Report on the Calumet Drainage Canal," The Engineering Record, v. 56 (New York: 26 October 1907), 453-55.
- "The Calumet Channel," The Engineering Record, v. 56 (New York: 21 September 1907), 303.
- Calumet Sag Waterway Opposed," Railway Age, v. 91 (New York: 14 November 1931), 740-42, 757-58.

Chicago River (South Branch): Channel Straightening

RATING: 2

South Branch of the Chicago River
between Polk and 18th streets, Chicago

Construction Date: 1926-1931

DESCRIPTION: Between Polk and 18th streets, approximately 850 feet east of the current channel, the Chicago River made a sharp bend and blocked LaSalle, Wells, and Sherman streets south of the central business district. The property west of this bend was covered with railroad tracks and terminal buildings. To extend the blocked north-south streets, improve navigation, and consolidate and modernize the west side railroad terminals, a 4,700-foot long, 200-foot wide, and 26-foot deep new South Branch Channel was dug and the original river channel filled. The new channel was opened to navigation in 1933.

HISTORY: The straightening of the South Branch of the Chicago River has its origins in the efforts of the Chicago Plan Commission, beginning in 1909, to increase the number of streets running south from the central business district (the Loop) and relieve traffic congestion on the two existing north-south through streets. In 1915, and again in 1921, the Railway Terminal Commission had suggested modernizing and consolidating the railroad terminals west of the Chicago River. The cumulative result of these initially diverse efforts was a unified plan to straighten the South Branch, build a new Union Station and freight terminal on the west side of the new channel, extend three streets south of the Loop and improve the east-west roads crossing the new channel and new railroad terminal.

In 1925 the Citizens Committee on River Straightening devised a formula for reallocating among the participating railroads the distribution of costs and benefits, the ownership of the land reclaimed from the abandoned channel and the land being acquired for the new channel. With the negotiations and ordinances completed, the work began in 1926 under the direction of the Chicago Department of Public Works, Hugh E. Young, Chief Engineer. The Great Lakes Dredge and Dock Company, general contractor for the project, excavated in excess of one million cubic yards and constructed 9,000 feet of concrete dock wall. Since the old channel could not be filled until the new channel was opened, excavated material was dumped into Lake Michigan, and an equal amount of clean lake sand fill was later used to fill the old channel. This project was part of the larger effort of the City of Chicago, the Sanitary District, the State of Illinois and, later, the United States Government, to create a navigable waterway between Chicago and the Mississippi River, a modern version of the obsolete I&M Canal.

SOURCES:

"Busiest Railway Crossing Is No More," Railway Age, v. 91 (August 15, 1931), 241-244, 251.
Chicago Department of Public Works, Chicago Public Works: A History (Chicago: Rand McNally, 1973), 42.
Chicago Plan Commission, Ten Years Work of the Chicago Plan Commission (Chicago: Chicago Plan Commission, 1920), 42.
W.W. De Berard, "Engineering Problems of the Chicago Region and Their Solution," Engineering News-Record, v. 101 (November 22, 1928), 758-764.
"Excavating New Million-Yard Channel for the Chicago River," Engineering News-Record, v. 102 (May 2, 1929), 717-719.
"Longest Single-Leaf Bascule Bridge: Chicago River," Engineering News-Record, v. 83 (December 25, 1919), 1056-1060.
C.H. Mottier, "A Complex Bridge-Moving Job," Railway Age, 90 (February 28, 1931), 445-447.
"Proposed Improvements of Chicago Railway Terminals," Engineering News-Record, 86 (May 21, 1921), 845-847.
"Raise 3330-Ton Bascule Span 11-1/2 Ft.," Railway Age, v. 92 (January 9, 1932), 83-85.
State of Illinois, Division of Waterways, 10th Annual Report (1926-1927), 16-19.
"Straightening the Chicago River Involves Many Problems," Engineering News-Record, v. 97 (November 4, 1926), 745-747.
The Straightening of the Chicago River (Chicago: James T. Igoe Co., 1926).
"Three-Level Grade Separation at Chicago," Engineering News-Record, v. 106 (April 30, 1931), 731-734.

**Chicago Drainage Canal: Lockport Controlling Works
and Bear Trap Dam**

RATING: 2

west bank of Chicago Sanitary and Ship Canal
one-half mile north of Ninth Street, Lockport.

Construction Date: 1899-1900

UTM: Joliet Quad. 16 E.411060 N.4605420

DESCRIPTION: The structure has eight concrete piers, 38 feet center to center. It has a concrete and stone masonry foundation and common-bond brick with pilasters and recessed panels. Each of its seven steel "Stony" gates is 30 feet wide and 20 feet high. The dual leaf movable Bear Trap dam is 160 feet long and has a 12-foot vertical oscillation.

HISTORY: Designed by the Chicago Sanitary District, the original Controlling Works of the Chicago Drainage Canal comprised the Bear Trap dam and sluice gates at the west side of what was formerly the canal turning or "windage" basin--the original terminus of the Canal between 1900 and 1908. The windage basin was 1050 feet long, 424 feet wide at the southern end and 175 feet wide at the entrance. The dam and sluice gates, placed in operation on January 2, 1900, regulated the flow through, and the velocity and level of, the

Drainage Canal. The original design for the controlling works included fifteen sluice gates, but only seven were installed. Water passing over the dam or through the gates discharged into the Des Plaines River. An operator's control tower was originally located at the southern end of the sluice gates, just north of the Bear Trap dam. In 1907, after the Drainage Canal was extended 10,700 feet south to the Lockport Hydroelectric Power Plant, the newly built Butterfly dam, located a short distance below the Bear Trap dam, superseded the latter structure in controlling the flow of water into the canal.

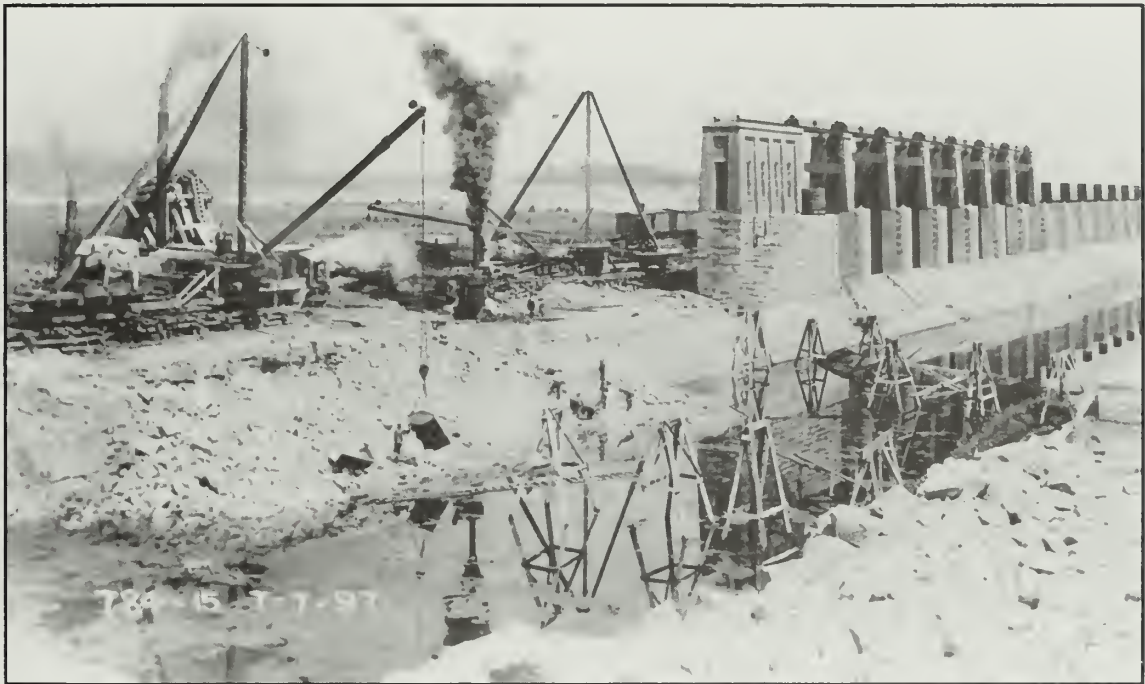


Photo 11. The controlling works of the Chicago Sanitary and Ship Canal at Lockport, under construction in 1899. Photo courtesy of the U.S. Army Corps of Engineers.

Illinois Waterway Structures

SOURCES:

Isham Randolph, "The Salient Features of the Chief Engineer's Annual Report of the Drainage Canal of the Sanitary District of Chicago for 1898," Journal of the Western Society of Engineers, v. 4 (August 1899), 317-334.

"The Chicago Main Drainage Canal," Engineering News, v. 23 (June 27, 1895), 415-417; v. 24 (November 21, 1895), 338-340; v. 34 (December 12, 1895), 387-389.

George M. Wisner, "A Description of the Opening of the Chicago Drainage Canal," Journal of the Western Society of Engineers, v. 87 (January 1900), 8-11.

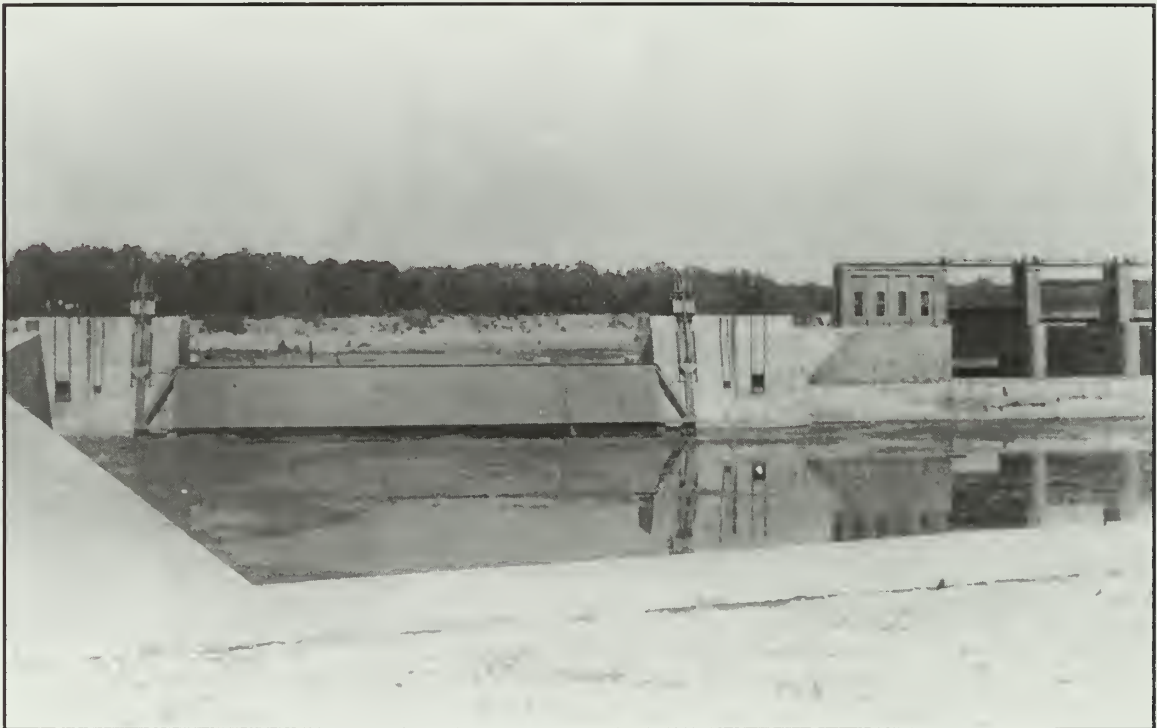


Photo 12. The Bear Trap Dam and sluice gates (right) nearing completion in 1899.
Photo courtesy of the U.S. Army Corps of Engineers.

Chicago Drainage Canal: Butterfly Dam

RATING: 2

about 700 feet south of the Bear Trap Dam
on the Chicago Sanitary and Ship Canal, Lockport

Construction Date: 1907

UTM: Joliet Quad. 16 E.411240 N.4605250

DESCRIPTION: The Butterfly dam is located at the head of the power and navigation canal which extends over 10,000 feet to the Lockport Power Plant and is similar in appearance to a large steel lock-gate. However, the Butterfly dam pivots at its center. It is normally in a fully open position, that is, the massive steel gate, which rotates about a central pivot in the center line of the power canal, is fully parallel to the flow in the canal. The ends of the gate are protected by large concrete guard piers between which spans a riveted-steel Pratt through truss bridge. (The turn bridge also runs parallel with the power canal.) Importantly, the center of the truss carries the upper pivot of the Butterfly dam; the lower pivot is embedded in concrete. The power canal is 80 feet wide on either side of the concrete pier. Electrically powered, the dam measures 184.5 feet in length, 30 feet in height, and weighs about 700 tons.

HISTORY: In conjunction with the construction of the Lockport Power Plant and Dam, and the extension of the canal from the Lockport "windage" basin to Joliet, the Chicago Sanitary District built a new controlling works just south of the Bear Trap dam and sluice gates. This structure, a "butterfly dam" that consisted of a large pivoting steel gate, was built as a safeguard so that, in the event of an emergency, water could be completely blocked from entering the new power and navigation canal. The new canal was constructed with the same width (160 feet) and grade (1 in 20,000) as the existing Chicago Sanitary and Ship Canal. From the Lockport "windage" basin, the power and navigation canal extended 10,700 feet to the Lockport Power Plant, and from there to the "upper basin" of the I&M in Joliet. Two Chicago contractors, Joseph J. Duffy and the Lorimer & Gallagher Company, performed the work on the canal. The cost of the canal, dams, and power plant was estimated at a little over 2.5 million dollars.

At three o'clock in the morning of August 22, 1907, the coffer dam between the "windage" basin and the power and navigation canal was blown up, and water was allowed to reach the Butterfly dam. About one week later the Chicago Sanitary District opened the Butterfly dam and permitted water into the full length of the power and navigation canal. The butterfly dam, canal, and power plant are still in service and have had few alterations over the years.

SOURCES:

"Water Power Development on the Chicago Drainage Canal," Engineering News, v. 53, (January 12, 1905), 25-27.

"The Movable Dams and Lock at the Power Plant on the Chicago Drainage Canal," Engineering News, v. 60, (November 12, 1908), 512-15.

Isham Randolph, "The Sanitary District of Chicago A Review of 20 Years of Engineering Work," Engineering News, v. 62 (July 22, 1909), 90-94.

Chicago Drainage Canal: Lockport Dam and Movable Crest Dams

RATING: 2

one mile south of Division Street

on the Chicago Sanitary and Ship Canal, Lockport

Construction Date: 1907

UTM: Joliet Quad. 16 E.409880 N.4602240

DESCRIPTION: There are two Movable Crest Dams at the Lockport Power Plant. The dam across the Des Plaines River at this point measures about 600 feet in length, of which 386 feet is incorporated into the Lockport Power Plant. At the eastern side of this concrete dam there are two sections, each containing movable crest dams of steel construction. The easternmost movable crest dam is 48 feet long; the one closest to the power plant is 12 feet long. Each movable crest dam is a horizontally pivoting type. The vertical range of each of these dams is 18 feet, from 2 feet above the Chicago city datum to 16 feet below this elevation. The water level in the forebay which backs behind the two dams is normally kept at an elevation of 6 feet below the Chicago city datum. The dams serve two purposes: to regulate the flow in the canal in conjunction with the water used by the power plant, and to carry off debris or ice that might otherwise collect in the forebay.

Of the two dams, the 48-foot movable dam is the primary regulator of flow in the canal. The two dams are identical in design and construction, each fabricated of steel and composed of a 45° sector of a horizontal cylinder 52 feet in diameter. The curved face of the dam is of riveted steel plates supported on steel frames which lean on a horizontal pivot.

HISTORY: Shortly after the controlling works of the Bear Trap dam and sluice gates were completed in 1900, the Sanitary District Commissioners began formulating plans to construct a hydroelectric facility, some 10,700 feet below the Lockport "windage" basin. Constructed between 1905 and 1907, the Lockport Power Plant and Dam were designed with two movable-crest dams, which were operated in conjunction with the flow into the power plant. Of steel construction, the two movable crest dams remain in operation and are in good condition.

SOURCES:

- Isham Randolph, "The Salient Features of the Chief Engineer's Annual Report of the Drainage Canal of the Sanitary District of Chicago for 1898," Journal of the Western Society of Engineers, v. 4 (August 1899), 317-334.
- Isham Randolph, "The Sanitary District of Chicago A Review of 20 Years of Engineering Work," Engineering News, v. 62 (July 22, 1909), 90-94.
- Isham Randolph, "The Work of the Sanitary District of Chicago; Below the Controlling Works at Lockport," Journal of the Western Society of Engineers, (June 1907), 514-534.
- "The Chicago Main Drainage Canal," Engineering News, v. 33 (June 27, 1895), 415-417; v. 34 (November 21, 1895), 338-340; v. 34 (December 12, 1895), 387-389.
- George M. Wisner, "A Description of the Opening of the Chicago Drainage Canal," Journal of the Western Society of Engineers, v. 87 (January 1900), 8-11.

Illinois Waterway: Lockport Lock

Adjacent to the Lockport Power Plant, Lockport

RATING: 2

Construction Date: 1907, 1926

UTM: Joliet Quad. 16 E.409880 N.4602240

DESCRIPTION: This lock has a maximum lift of 40 feet. It contains miter gates at the lower (southern) end and vertical lift gates at the upper end.

Located along the east side of the lock chamber, the lock master's office building is a T-shaped, one-and-one-half-story building measuring 30' x 20'. It contains a concrete foundation, common-bond brick walls with limestone belt courses, and an intersecting gable roof. To the south of the lock master's office is the lock master's residence. This building is a two-story rectangular structure measuring 40' x 30'. It has a concrete foundation, a wood frame covered with clapboard siding, and a gable roof.

HISTORY: When the extension to the Drainage Canal was completed from Lockport to Joliet in 1907, a navigation lock was constructed at the Lockport dam, adjacent to the Lockport Power Plant. Measuring 117' x 22', the lock contained a lift of 34 feet. It was fitted with double-leaf gates, constructed of Oregon fir, and the lock chamber was built with concrete. Importantly, an area just east of this lift lock was reserved for the construction of a larger deep waterway lift lock.

Construction of this larger lift lock commenced in 1926 when the State of Illinois Division of Waterways undertook the construction of the long-sought Illinois Waterway. Concern over the pressure exerted against the retaining wall that separated the new lock from the existing lock led to the construction of vertical lift gates at the upper end of the new lock chamber. With the collapse of funding for the project in the late 1920s, the U.S. Army Corps of Engineers assumed control of the nearly completed waterway. In 1933 the Illinois

Illinois Waterway Structures

waterway was opened for navigation. The smaller lift lock at the Lockport dam was retired from service; however, it remains in place. The larger lift lock continues to operate with virtually no modifications.

SOURCES:

"Water Power Development on the Chicago Drainage Canal," Engineering News," v. 53, (January 12, 1905), 25-27.

"The Movable Dams and Lock at the Power Plant on the Chicago Drainage Canal," Engineering News," v. 60, (November 12, 1908), 512-15.

"Lockport Lock Construction Plant, Illinois Waterway," Engineering News-Record, v. 96 (February 11, 1926), 228-231.

Walter M. Smith, "Heavy Lift Gate at Lockport Lock of the Illinois Waterway," Engineering News-Record, v. 96 (May 6, 1926), 722-723.

Interview with Doyal Kuykendall, Lock Master, Lockport, Illinois, July 1986.

Review of Reports on the Illinois Waterway, Senate Document 126, 71st Congress, 2nd Session, 1929-1930.

Road D. Tweet, History of Transportation on the Upper Mississippi and Illinois Rivers, (Washington, D.C.: U.S. Army Engineers Water Resources Support Center, 1983), 61-71.

U.S. Army Engineer District, "Chicago, Navigation Structures Illinois Waterway, Locks and Dams - Upper River, Operations and Maintenance," (Chicago: U.S. Corps of Engineers, 1963).



Photo 13. Illinois Waterway: Lockport Vertical Lift Lock (1926), Lockport.
Photo by Joseph DeRosa, HAER.



Photo 14. Illinois Waterway: Lockport Lock Master's Office (1926), Lockport.
Photo by Joseph DeRosa, HAER.

Illinois Waterway: Brandon Road Lock and Dam

east of Brandon Road, Rockdale

RATING: 2

Construction Date: ca. 1923

UTM: Joliet Quad. 16 E.408340 N.45595140

DESCRIPTION: The Brandon Road dam consists of a concrete weir, the crest of which is 2'-3" below the level of the water maintained by the adjacent Taintor gates. Extending west from the concrete weir, there are twenty-one Taintor gates, each measuring 50 feet in length and 2'-3" in height. The lock is 600 feet long and 110 feet wide, and has a lift of 32.8'. The upper and lower gates are large steel double-leaf gates, electrically operated. The lock master's house is a one-and-one-half story, T-shaped building, measuring 30' x 20'. It has a concrete foundation, Flemish-bond brick walls with limestone belt courses, and an intersecting gable roof.

HISTORY: The State of Illinois Division of Waterways completed construction of the Brandon Road dam in 1923. The resulting pool elevation of 539 feet extended up the Des

Illinois Waterway Structures

Plaines River, through Joliet, to the Lockport Power Plant. In addition, the pool formed a turning basin for the old I&M Canal, which was then in service from Joliet, west to LaSalle-Peru. As part of the Illinois Waterway, the new Brandon Road Lock, containing a lift of 32.8 feet, the second greatest lift along the Waterway, was opened to barge traffic in 1933.

SOURCES:

U.S. Army Engineer District, Chicago, Navigation Structures, Illinois Waterway Locks and Dams--Upper River, Operation and Maintenance Manual (U.S. Army Corps of Engineers, Chicago, Illinois, 1963).

Illinois Waterway-Brandon Road Lock and Dam Major Rehabilitation, U.S. Army Corps of Engineers, August 1984.

Letter F. Filson, "From Whence Came a City: The Story of Joliet and Will County, Illinois", unpublished mss, 1957, available in the Joliet Public Library.

Illinois Waterway: Dresden Island Lock and Dam

Dresden Island on the Illinois River, Channahon

RATING: 2

Construction Date: 1921-1933

UTM: Minooka Quad. 16 E.392850 N.4583580

DESCRIPTION: The lock is of steel and concrete construction, consisting of two sets of double-leaf gates, the lock chamber, and the accompanying electrically-powered machinery. The upper gates are 20 feet high, with each leaf weighing 90 tons, and the lower gates are 37 feet high, with each leaf weighing 162 tons. The gates have rubber seals at the bottom, and the lock chamber is constructed of concrete. It measures 600 feet in length and 110 feet in width, and has a lift of 21.75 ft. The lock chamber takes 14 minutes to fill and 12 minutes to empty.

The Dresden Dam consists of a concrete weir approximately 1,100 feet long and 20 feet high. It contains nine Taintor gates, each 60 feet in length and sustaining a head of 14', as well as an ice chute, 30 feet long and sustaining a head of 5'.

The lock master's office is a one-and-one-half-story, T-shaped brick building measuring 30' x 20', and containing a concrete foundation, Flemish-bond brick walls with limestone belt courses, and an intersecting gable roof covered with asbestos shingles. The building has concrete coping on the parapet walls of its gable ends and has four belt courses (at grade, first floor level, and immediately above and below the first floor windows).

HISTORY: The State of Illinois Division of Waterways began construction of the Dresden Island Lock and Dam in 1921; it was completed in 1933 by the U.S. Army Corps of Engineers. Located fourteen miles below the Brandon Road Lock and Dam, construction of Dresden Island Dam formed a pool with a normal elevation of 505 feet. Between Brandon

Road and Dresden Island, two rivers, the DuPage and the Kankakee, join with the Des Plaines to form the Illinois River.



Photo 15. Illinois Waterway: Dresden Dam and Taintor Gates (1921-1923), Dresden. Photo by Timothy Whittaker, HAER.

SOURCES:

Walter M. Smith, "Engineering Features of the Illinois Waterway," Transactions of the American Society of Civil Engineers, v. 98 (New York, 1933), 309-61.

U.S. Army Engineer District, Chicago, Navigation Structures, Illinois Waterway Locks and Dams--Upper River, Operation and Maintenance Manual (U.S. Army Corps of Engineers, Chicago, Illinois, 1963).

Illinois Waterway: Marseilles Lock and Dam

on Illinois River at Bell's Island, Marseilles

RATING: 2

Construction Date: 1921-1933

UTM: Marseilles Quad. 16 E.353240 to E.353460 N.4576500

DESCRIPTION: Located at Bell's Island, two-and-one-half miles below the Marseilles Dam, the Marseilles Lock is of steel and concrete construction, consisting of two sets of steel double-leaf gates, a concrete lock chamber, and electrically-powered machinery for operating the gates. The upper gates are 20 feet high, with each leaf weighing 90 tons. The lower gates are 39 feet high, with each leaf weighing 170 tons. The lock chamber is 600 feet long and 110 feet wide. The lock has a lift of 24.25 feet and takes 15 minutes to fill and 10 minutes to empty.

The Marseilles Dam is 970 feet long and includes seven Taintor gates, each of which measures 60 feet in length and 14 feet in height. The north side of the dam includes an ice chute, 46 feet wide, constructed of concrete, with a steel Taintor gate.

Two diversion dams are located northeast of the Marseilles Dam: the westernmost dam diverts water into the south head race, and has two steel Taintor gates, with the entire dam measuring 140 feet in length. The easternmost dam diverts water into the north head race and has three Taintor gates, with the entire dam being approximately 200 feet long.

The lock master's office is a one-and-one-half-story T-shaped brick building measuring 30' x 20' and containing a concrete foundation, Flemish-bond brick walls with limestone belt courses, and an intersecting gable roof covered with asbestos shingles. The building has concrete coping on the parapet walls of its gable ends and has four belt courses (at grade, first floor level, and immediately above and below the first floor windows).

HISTORY: Unlike other locks and dams on the Illinois Waterway, the Marseilles Lock and Dam were built as two separate units. The lock is at the end of a channel dug around Bell's Island. The dam stretches from the other side of the island, across the Illinois River, to a point near the old Nabisco plant in Marseilles. Small dams were also constructed across the openings of the north and south head races, diverting water to several industries and a hydroelectric plant in Marseilles that utilize water power. This plant ceased operation in 1988.

SOURCES:

"Construction Methods and Plant on the Marseilles Lock," Engineering News-Record, v. 89 (New York: December 7, 1922), 962-65.

Walter M. Smith, "Engineering Features of the Illinois Waterway," Transactions of the American Society of Civil Engineers, v. 98 (New York, 1933), 309-61.

U.S. Army Engineer District, Chicago. Navigation Structures, Illinois Waterway Locks and Dams--Upper River, Operation and Maintenance Manual (U.S. Army Corps of Engineers, Chicago, Illinois, 1963).

Illinois Waterway: Starved Rock Lock and Dam

14 miles south of Utica, 1.5 miles east of State Route 178, Utica

RATING: 1

Construction Date: 1929

UTM: Starved Rock Quad. 16 E.333800 N.4576380

DESCRIPTION: The Starved Rock dam consists of ten steel Taintor gates, each 60 feet long, constructed into a concrete dam with a total length of about 1,200 feet. Each Taintor gate normally sustains a head of 17'. The dam also includes an ice chute, 30 feet wide, with a steel Taintor gate.

The lock master's office is a one-and-one-half-story T-shaped brick building measuring 30' x 20' and containing a concrete foundation, Flemish-bond brick walls with limestone belt courses, and an intersecting gable roof covered with asbestos shingles. The building has concrete coping on the parapet walls of its gable ends and has four belt courses (at grade, first floor level, and immediately above and below the first floor windows). It contains office space and facilities for operating personnel, as well as a central control board and a standby power unit.

HISTORY: The State of Illinois Division of Waterways commenced construction of the Starved Rock Lock and Dam in 1920; however, it was the last portion of the Illinois Waterway to be completed in 1933. The U.S. Army Corps of Engineers, authorized to assume control of the project in 1930, opened the Starved Rock Lock for barge traffic in 1933. It is the westernmost lock of the Illinois Waterway within the Heritage Corridor.

SOURCES:

Walter M. Smith, "Engineering Features of the Illinois Waterway," Transactions of the American Society of Civil Engineers, v. 98 (New York, 1933), 309-61.

U.S. Army Engineer District, Chicago, Navigation Structures, Illinois Waterway Locks and Dams--Upper River, Operation and Maintenance Manual (U.S. Army Corps of Engineers, Chicago, Illinois, 1963).



Photo 16. Illinois Waterway: Lock Gates of Starved Rock Lift Lock (1929), Utica.
Photo by Gray Fitzsimons, HAER.

State of Illinois: Chicago Barge Terminal (Tri-River Docking)

RATING: 2

Sanitary and Ship Canal, one-fourth mile west of Turning Basin, Chicago

Construction Date: 1935

UTM: Englewood Quad. 16 E.444180 N.4632140

DESCRIPTION: These several buildings are situated on a triangular plot of land extending between the Santa Fe slip and rail spur. The largest building is a one-and-one-half-story brick structure erected to serve as a warehouse. Its east side contains loading bays for river barges. The building measures 150' x 80' and has a flat roof with monitors. A two-and-one-half-story brick addition adjoins the south facade and measures 60' x 30'. The main facade features a brick veneer with ornamental brick pilasters. The building contains a steel frame.

HISTORY: Plans for a state-owned barge terminal at Damen Avenue, along the Sanitary and Ship Canal, were submitted to the State of Illinois Division of Waterways in November, 1928, by Randolph Perkins Co., Engineers. The terminal was to be built on a twenty-one

acre site west of the Santa Fe Railroad Grain Elevators, and facilities for receipt and transfer of all classes of commodities were planned. The original design called for a large terminal building with barge, rail and truck service. Slightly expanded over the years, the building continues to serve as a warehouse. Lack of funds during the Depression prevented execution of this ambitious plan, and instead this modest warehouse facility was constructed.

SOURCES:

State of Illinois, Division of Waterways, 12th Annual Report (1928-1929).

State of Illinois, Division of Waterways, 16th Annual Report (1932-1933).

RAILROAD SHOPS, SWITCH TOWERS, YARDS, AND DEPOTS

Railroad Abbreviations

Atchison, Topeka & Santa Fe	AT&SFRR
Baltimore & Chicago Terminal	B&CTRR
Baltimore & Ohio	B&ORR
Chicago & Alton	C&ARR
Chicago & Illinois Western	C&IW RR
Chicago & Northern Pacific	C&NPRR
Chicago & Western Indiana	C&WIRR
Chicago, Burlington & Quincy	CB&QRR
Chicago, Madison & Northern	CM&NRR
Chicago, Rock Island & Pacific (Rock Island)	RIRR
Chicago Terminal Transfer	CTTRR
Elgin, Joliet & Eastern	EJ&ERR
Grand Trunk Western	GTWRR
Gulf, Mobile & Ohio	GM&ORR
Illinois Central	ICRR
Illinois Central Gulf	ICGRR
Illinois Northern	INRR
Illinois Stock Yards & Transit	ISY&TRR
Indiana Harbor Belt	IHBRR
Michigan Central	MCRR
Pennsylvania	PRR
Pittsburgh, Cincinnati, Chicago & St. Louis	PCC&StLRR
St. Charles Air Line	StCALRR
Santa Fe	SFRR

Railroad Shops and Depots

C&ARR: Brighton Park Yard Terminal

South California Avenue, Chicago

RATING: 3

Construction Date: ca. 1920, 1945

UTM: Englewood Quad. 16 E.442400 N.4623000

DESCRIPTION: This long narrow rail and truck terminal extends about 600 feet along the Illinois Central Gulf Railroad line at the Brighton Park Yard. The terminal is of brick and steel construction and contains twenty-seven truck bays, each of which is 20 feet wide. A second story extends about 75 feet in length and is used for administrative offices. The terminal building was originally about 900 feet long. The railroad demolished some 320 feet of the southwest section of the building.

HISTORY: The Chicago & Alton Railroad developed this site as a rail yard in the 1920s. Known as the Brighton Park Yard, the site contained a large freight depot and a locomotive roundhouse. Presently, the yard features the terminal building erected (or possibly expanded from an earlier warehouse structure) in 1945, with additions in 1951. A two-story brick building at the California Avenue entrance to the site is the former C&A Brighton Park Yard office. A locomotive roundhouse on the property was destroyed by fire some twenty years ago. Also on the grounds was a zinc smelting concern which operated two furnaces. This plant was completely demolished, and a trucking firm now occupies the site.

SOURCES:

Sanborn Map Co., Chicago, 1949-1950, v. E, (New York: Sanborn Map Co., 1949-1950).

C&ARR: Glenn Yard

Glenn Yard, Chicago

RATING: 3

Construction Date: ca. 1913

UTM: Berwyn Quad. 16 E.435360 N.4628060

DESCRIPTION: The Glen Yard was developed by the Chicago & Alton Railroad, now the Illinois Central Gulf Railroad, and comprised several buildings, most of which are now abandoned.

The Chicago & Alton Roundhouse: the only remnant of the roundhouse which was erected in the 1910s is a turntable, a riveted steel plate girder measuring about 90 feet in length. It is still in operation and is electrically powered.

The Commissary and Warehouse: a two-story, brick building, it is adjacent to the remains of the roundhouse. It is approximately 150 feet long (including the loading dock) and 35 feet wide. The building has a concrete foundation, brick load-bearing walls, and a new gable roof. Adjoining this building to the north is an ice house, a small one-story, common-bond brick building, measuring 15' x 15'. Adjacent to the ice house is a frame shed building housing a 1910 era fire hose coiled on a wooden spoke wheel.

HISTORY: When completed and placed in full operation in 1913, the Chicago & Alton Railroad's Glenn Yard had the capacity to hold 3,700 railroad cars. Glenn Yard was built to relieve congestion that the much smaller Brighton Park Yard, located closer to Chicago, was experiencing as the volume of freight traffic grew during the early twentieth century. In addition to being a "flat yard" for railroad cars, Glenn Yard was also an engine terminal, equipped with a thirty-stall roundhouse, a 90-foot diameter turntable, a coaling tower, and an ash handling pit.

The roundhouse and commissary were connected by an underground tunnel. The commissary was used by trainmen working in the roundhouse, with a portion of the building used as a bunk house. In the years when segregation was practiced by the railroads, the second floor contained rooms for white employees, while black employees slept in the basement. The building also had an office and store room, and an ice house which served the commissary. The steel tank adjacent to the commissary was originally used for steam locomotive water storage, and is currently used for diesel fuel storage. Jim Evans, owner of Midway Cartage Co., has leased the commissary since 1960 and bought the building from the Illinois Central Gulf Railroad in 1982. Although architecturally undistinguished, the establishment of Glenn Yard was important in the continued development of Chicago as a major railroad hub.

SOURCES:

Interview with Jim Evans, owner, Midway Cartage Co., Chicago, Illinois, August 1986.
"New Yards of the Chicago & Alton near Chicago," Railway Age Gazette, v. 54 (June 13, 1913), 1327-1328.
Sanborn Map Co., Chicago, 1949-1950, v. E (New York: Sanborn Map Co., 1949-1950).



Photo 17. C&ARR: Handcar Storage Building (ca. 1915), Chicago.
Photo by Frances Alexander, HAER.

C&ARR: Handcar Storage Building
west of Ashland Avenue, Chicago

RATING: 3
Construction Date: ca. 1915

UTM: Englewood Quad. 16 E.444420 N.4631800

DESCRIPTION: This small one-story wood-framed storage house for handcars measures approximately 40' x 15' and contains asbestos shingles and a gable roof. The building retains its original three bays and wooden double doors.

HISTORY: Originally built about 1915 by the Chicago & Alton Railroad (now part of the Illinois Central Gulf Railroad), this wood-framed shed was used to store handcars that the railroad employed in its maintenance-of-way operations. It is presently abandoned.

SOURCES:

Sanborn Map Co., Chicago, 1949-1950, v. E (New York: Sanborn Map Co., 1949-1950).

C&ARR: Lockport Passenger Station

Thirteenth and Commerce streets, Lockport

RATING: 1

Construction Date: ca. 1855

UTM: Joliet Quad. 16 E.411460 N.46044220

DESCRIPTION: This station is a one-and-one-half-story building with random range limestone walls and a steeply pitched gable roof covered with asphalt shingles. The roof features projecting eaves and verges with curved and chamfered wood brackets. The west facade parallels the railroad tracks; the south side of the building faces a parking lot.



Photo 18: C&ARR: Lockport Passenger Station (1855), Lockport.
Photo by Joseph DeRosa, HAER.

Railroad Shops and Depots

HISTORY: This building of native limestone was erected by the Chicago & Alton Railroad in about 1855 to serve as a passenger station. The design employed by the Chicago & Alton for its Lockport Passenger Station is nearly identical to that for its Lemont Station. The Chicago & Alton Railroad ran from St. Louis to Alton, Illinois, and northeast to Chicago. In 1947 the Gulf, Mobile, & Ohio Railway Company purchased the Chicago and Alton. When the Illinois Central Railroad bought the road in 1972, it became the Illinois Central Gulf. The building has been rehabilitated and is currently being used as a Metro Commuter Rail station and as offices for a surveying firm.

SOURCES:

Illinois Central Gulf Railroad, Office of Chief Engineer, Chicago Division Condensed Profile, Chicago, 1981.
William T. Chambers, "A Geographical Study of Joliet, Illinois: An Urban Center Dominated by Manufacturing," unpublished Ph.D. dissertation, University of Chicago, 1926.
Gleanings and Biographies (Lockport, IL: Will County Historical Society, 1969).

C&ARR: South Joliet Yard

between Patterson Road and IL Rte. 52, Joliet

RATING: 3

Construction Date: 1910

UTM: Joliet Quad. 16 E.409520 N.4595200

DESCRIPTION: Developed by the Chicago & Alton Railroad in 1910, the South Joliet Yard contains several structures:

Water Purification Plant (ca. 1910): At the entrance to the yard stands the former water purification plant, a one-story brick building with concrete foundation. It contains a central entrance with multi-light windows to either side.

Warehouse (ca. 1910): this is a one-story, wood-framed building with a concrete foundation and measures 25' x 25'. The clapboard siding is covered with white asbestos shingles, and a gable roof is covered with dark asphalt shingles. The entrance at the northwest facade contains a portico.

Roundhouse and Turntable (ca. 1910): little remains of the seven-stall locomotive roundhouse which was erected with brick load-bearing walls and an interior timber frame. Adjacent to these ruins is the turntable, formerly operated with compressed air; the turntable is fabricated with a riveted steel plate girder and measures about 75 feet in length.

South of the Warehouse is a railroad caboose set on a concrete foundation and covered with white asbestos shingle veneer. The yard also contains a timber-frame sanding tower.

HISTORY: The Chicago & Alton Railroad established the South Joliet yard and locomotive terminal in 1910 after removing these facilities from downtown Joliet. This work was done in conjunction with the track elevation through Joliet. The site featured a roundhouse, turntable, sand tower, storage buildings and offices, and a water purification plant. The latter structure removed minerals from the local water which was used in the boilers of the steam locomotives. The partially destroyed roundhouse and the yard have been abandoned for many years.

SOURCES:

R.A. Cook, "Track Elevation of the Chicago & Alton R.R. At Joliet, Ill.," Illinois Society of Engineers and Surveyors Journal, (1913), 192-99.



Photo 19. C&ARR: South Joliet yard (1910), Joliet.
Photo by Joseph DeRosa, HAER.

Railroad Shops and Depots

C&ARR: Switching Tower

northwest of Argo Corn Products, Summit

RATING: 2

Construction Date: ca. 1910

UTM: Berwyn Quad. 16 E.432280 N.4625000

DESCRIPTION: This two-story building measures 35' x 15' and contains common-bond brick walls, a hipped roof, and a concrete foundation. The windows on the first floor are spanned by segmental arches and are partially infilled with aluminum siding. The second story has been modernized and is covered with clapboard-style aluminum siding. An external steel staircase provides access to the second story. The upper floor contains mechanical and electrical switching equipment.

HISTORY: This switching tower was erected in 1910 to serve several railroads, including the Chicago Terminal Transfer, the Indiana Harbor Belt, and the Chicago and Alton Railroad. The tower remains in operation with the 1910 switching equipment still in use.

SOURCES:

Sanborn Map Co., Summit, Illinois (New York: Sanborn Map Co., 1897, 1911, 1925, 1950).

CB&QRR: Ottawa Passenger Station

corner of Walnut and Main streets, Ottawa

RATING: 2

Construction Date: 1913

UTM: Ottawa Quad. 16 E.345480 N.4578720

DESCRIPTION: This one-and-one-half-story brick building measures approximately 60' x 25' and contains buff-colored stretcher-bond brick walls, a cast stone water table and belt course, an intersecting hipped roof covered with terra cotta tile, and a concrete foundation. It features projecting eaves with a wood tongue-and-groove soffit, an interior brick chimney, and one-over-one-light, wood, double-hung sash windows. The main entrances are located along the east and west facades, and the tracks extend along the west side of the building. Brick pavers extend from the west entrance to the tracks.

HISTORY: This building, formerly the Chicago, Burlington & Quincy Railroad passenger station, was built in 1913. At this time two railroads, including the Chicago Burlington & Quincy and the Rock Island Railroad, as well as an interurban railway, the Chicago, Ottawa, & Peoria, provided Ottawa with passenger service. The Chicago Burlington & Quincy

station, with its distinctive intersecting hipped roof with terra cotta tiles and finely crafted brickwork, replaced an earlier wood-framed passenger station. An adjacent wood-framed freight house was located on the corner of Main and Madison streets. Both of these late nineteenth century structures were demolished. Ottawa is no longer served by passenger rail, and the old Chicago Burlington & Quincy station is now used as offices by the Burlington Northern Railroad.

SOURCES:

Sanborn Map Co., Ottawa, LaSalle County, Illinois (New York: Sanborn Map Co., 1888, 1891, 1898, 1913, 1925).

Ottawa, Old and New: A Complete History of Ottawa, Illinois, 1823-1914 (Ottawa, IL: The Republican Times, 1912-1914, reprinted by Bireline Publishing Co., Newell, Iowa, 1984), 155.



Photo 20. CB&QRR: Ottawa passenger Station (1913), Ottawa.
Photo by Gray Fitzsimons, HAER

Railroad Shops and Depots

City of Joliet: Union Station

50 East Jefferson Street, Joliet

RATING: 1

Construction Date: 1912

UTM: Joliet Quad. 16 E.409920 N.4597350

DESCRIPTION: This impressive railroad station was designed in the Beaux-Arts style with an emphasis on Classical motifs and a symmetrical plan. Flanked by two wings, the central section of the three-story building measures 80' x 60'; the overall length including the wings is 240 feet. The building was constructed with a steel frame and reinforced concrete floors, and the exterior was faced with Bedford limestone. A broad elevated walkway extends across the eastern facade of the building at the second-story level. The second floor houses an open concourse area. The main entrance at the lower level opens down a corridor to the left to the AMTRAK ticket office, and a parcel post station at right; a centrally located main staircase leads to the upper-level concourse (with a METRA ticket office to the right). The wings of the building at the second-floor level originally housed mens' and ladies' lounges (they are now on the ground level); offices and locker rooms were located in the wings at the lower level. The interior of this building is finished in polished Tennessee marble; the lighting fixtures in the main lobby and waiting room are bronze. The ticket desk is made of a single slab of Belgian marble, 57 feet long, 38 inches wide, and 5 inches thick. The building was restored in 1991.



Photo 21. City of Joliet Union Station (1912), Joliet. Photo by Martin Stupich, HAER.

HISTORY: Designed by architect Jarvis Hunt, Joliet's Union Station was constructed between 1908 and 1912. The Adam Groth Company, a Joliet firm, was the contractor. Jarvis Hunt was the nephew of Richard Hunt, who was one of the first American architects to be trained at the Ecole des Beaux Arts. Jarvis Hunt also followed the prevailing design principles of that school, creating a station similar in style to those constructed in many of the larger cities throughout the country. (Hunt's work also included the Kansas City Union Station, the Rector Building, American Trust and Savings Bank in Chicago, Newark Museum, Arbor Lodge in Nebraska City, Gordon Hall in Cleveland, and Chicago's Lake Shore Athletic Club.)

Construction of the station was part of a municipal project to improve rail transportation systems through track elevation and construction of a new station. Union Station replaced the four separate stations operated by the various rail companies in Joliet, including the Rock Island Railroad, the Atchison, Topeka and Santa Fe Railroad, the Chicago & Alton Railroad, and the Michigan Central Railroad, in addition to two belt lines, the Eastern, Joliet & Elgin, and the Chicago, Milwaukee and Gary.

Upon completion in 1912, passenger traffic reached a peak of 100 trains daily. Numerous streetcars and two interurban lines, the Chicago and Joliet Electric Railroad Co. and the Illinois Traction Co., also served the city. Presently the station is served by AMTRAK and two METRA commuter lines. The total number of trains varies with the day of the week but reaches a high of over thirty on weekdays.

SOURCES:

Letter F. Filson, "From Whence Came a City: The Story of Joliet and Will County, Illinois", unpublished mss, 1957, available in the Joliet Public Library.

Robert E. Sterling, Pictorial History of Will County, v. 1 (Joliet, IL: Will County Historical Publications Company, 1975).

Carl K. Klimek and Associates, Architects and Planners, Joliet Union Station Restoration and Adaptive Reuse Study, October 1981.

Interview with Dennis Kolodziej, METRA ticket agent, July 1986.

Railroad Shops and Depots

Elgin, Joliet & Eastern RR: East Joliet Shops and Freight Yard

RATING: 1

north of Jackson Street, west of Maple Street, Joliet

Construction Date: ca. 1890

UTM: Joliet Quad. 16 E.41 1800 N.4598400

HISTORY AND DESCRIPTION: Construction of the EJ&ERR, also known as the Chicago Outer Belt Line, was the result of rising railroad transportation costs in and through Chicago. The EJ&E circumscribed the City of Chicago, traversing less expensive and more sparsely populated, but industrializing, areas. The Joliet shops and freight classification yard were established in the late 1880s at a point midway between the EJ&E's northern terminus at Waukegan, Illinois and its southern terminus at Porter, Indiana. The Joliet facility serviced, repaired, and overhauled locomotives, freight cars, and machinery as well as building new freight cars.

At Joliet, the EJ&E interchanged freight with the Chicago, Rock Island & Pacific Railroad; Chicago & Alton; Atchison, Topeka and Santa Fe; and Michigan Central railroads. Extensive interchange service at Joliet and elsewhere along the Outer Belt Line assured the EJ&E owners, the Illinois Steel Company, later United States Steel Corporation, that both raw materials and finished products could be easily shipped via the large trunk line railroads at the lowest possible rates. Coal for coke ovens, for example, came from Kentucky, West Virginia, and Illinois via trunk lines, and was delivered to the Joliet Works of Illinois Steel by the EJ&E. With the expansion of the trucking industry during the 1950s and 1960s, both freight traffic on the EJ&E and the number of employees at the Joliet shops and yard declined. The EJ&E continues to function as an Outer Belt Line while serving local industries still relying on railroad freight service. The shops continue to operate but at a significantly reduced level.

During the early decades of the twentieth-century, the EJ&E Railroad's Joliet shops and freight assembly and classification yard employed as many as 2,000 workers, making it the second largest employer in Joliet. The establishment of the shops and yard in Joliet furthered the city's identity as a major interchange point for railroad traffic and a highly desirable location for the railroad-dependent steel, paper and wallpaper, stone, and sand and gravel industries. As a major purchaser of steel parts and supplies, the presence of the EJ&E shops encouraged the growth of railroad hardware and equipment manufacturers in Joliet and the Calumet industrial district. An EJ&E Railroad branch line to Wilmington, Illinois and Coal City, Illinois, promoted the development of the coal mining industry in that area.

A number of historic structures remain standing in the EJ&E shop complex. These include:

The **Woodworking Shop**, erected in 1899, is the oldest intact building in this shop complex. It consists of a two-and-one-half-story structure measuring 250' x 60'. It contains a post-and-beam structural system with timber roof trusses and load-bearing random-range masonry walls, which were constructed with native limestone.

The **Master Mechanic's Office**, erected about 1900, consists of a two-story red brick building and measures 36' x 20'. It features a hipped roof, two-over-two-light double-hung sash windows spanned by brick segmental arches, and an exterior stairway leading to the second floor along the north facade. A one-story rear addition contains a shed roof and measures 15' x 15'.



Photo 22. EJ&ERR: East Joliet Shops, Locomotive Repair Shop (1912), Joliet.
Photo by Charles Scott, HAER.

Railroad Shops and Depots



Photo 23. EJ&ERR: East Joliet Shops, Roundhouse (1911, 1924), Joliet.
Photo by Charles Scott, HAER.

The **Storehouse**, built around 1910, is a large red-brick building measuring 169' x 125'. It contains common-bond brick walls and pilasters and an interior post-and-beam frame. A two-and-one-half-story section is flanked by two one-and-one-half-story sections. A raised concrete platform extends the full length of the west facade.

The **Locomotive Repair Shop**, erected in 1912, is a two-and-one-half-story building measuring 572' x 150'. Its exterior walls are constructed with concrete block, and each bay is highlighted with decorative pilasters containing ornate capitals. The riveted steel roof trusses and full-length monitor are supported by a steel frame. The interior features three electric-powered overhead cranes and several service pits extending beneath the tracks.

When the Locomotive Repair Shop was completed, it partially enclosed a machine shop that may date from the original construction of the shop complex. The remnants of this earlier structure include one row of brick piers, three bays with wood trusses, and two bays with steel trusses. A section of the original EJ&E roundhouse was also incorporated into the construction of the Locomotive Repair Shop. Four bays, each containing brick circular arches spanning the double doors, remain in place. The interior of the remnants of the original roundhouse are framed with heavy timber members.

In 1911, about the same time that the new Locomotive Repair Shop was under construction, the EJ&E erected a new roundhouse containing seventeen stalls. Measuring about 300 feet in length, this reinforced concrete building was designed by EJ&E Chief Engineer A. Montzheimer. Adjacent is an electrically-powered turntable with a diameter of 100 feet. In 1924, fourteen more stalls were added to the roundhouse. Currently in service, stalls one through sixteen are used for storage, and stalls seventeen through thirty-one service diesel locomotives. A reinforced concrete coaling tower, which had a 1,000-ton capacity and was built next to the roundhouse in 1911, has been demolished.

The **Roundhouse Office**, built in 1911, is a one-and-one-half-story rectangular brick building, 30' x 100'. It contains a concrete foundation, common-bond brick walls, a brick rowlock watertable, and wooden rafters. The main facade features a front gable roof with the parapet measuring approximately 15 feet in height. The building retains its original two-over-two-light double-hung sash windows with stone sills. Two large garage-type doors are located at the west facade.

In early 1923, a fire destroyed the several wooden-frame shed buildings that served as the car repair shop. Soon after, the EJ&E began construction of a new steel and brick structure, designed by Chief Engineer A. Montzheimer, with a capacity of eighty-five railroad cars and built in sections to permit the immediate use of some car repair equipment. The building was completed and placed in full operation on February 20, 1924. The Car Repair Shop consists of a large steel-framed building with brick walls and a multiple monitor roof. It measures about 500 feet in length, 300 feet wide at one end, and 170 feet wide at the other end. The shop is divided into seven longitudinal bays, each 42 feet wide, without partitions. Each bay has an overhead crane running its full length. Two tracks lead into each bay.

A narrow gauge railroad system connected this building to the other shop and repair buildings in the East Joliet complex. This narrow gauge system, used for moving tools and parts among buildings, was removed and replaced by rubber-tired vehicles in 1932.

The **Storage Buildings**, erected in the 1920s-1950s, consist of: Building No. 97A, Records Storage, a one-and-one-half-story red brick building, measuring 155' x 150'. The windowless building contains a concrete foundation, double doors, and a low-pitched gable roof.

Railroad Shops and Depots

Building No. 97B, the "Torpedo Storage," is a one-story red brick building, measuring 46' x 46'. It contains two sliding steel doors at the west facade and two hinged doors at the east facade. Building 97B was once the ice storage building for the EJ&E Railroad shops and yard.

Building 36, Paint Storage, is a one-story concrete-block building, measuring 40' x 36'.

The **Blacksmith Shop**, erected in 1924, is a two-and-one-half-story brick building measuring 200' x 80'. It contains a concrete foundation, stretcher-bond brick walls and pilasters, and a gable roof. A railroad track extends the full length of the building which houses forges and steam hammers.

The **Car Repair Office and Shop**, erected in 1926, is a long narrow one-story brick building, measuring approximately 355' x 43'. It contains a concrete foundation, common-bond brick walls and pilasters, and riveted steel roof trusses. Its exterior features stepped gable ends with matching corbeled brickwork.

Around 1930 the EJ&E erected a new steam station that is still in operation. This three-story steel-framed structure, with a brick exterior, measures 150' x 60' and over a concrete foundation. An enclosed inclined conveyor connects with a coal hopper beneath a railroad siding immediately east of this building. Three riveted-steel chimneys extend through the middle of the building, which contains coal-fired boilers used to produce steam for heating all of the railroad shops and office buildings. Acetylene for use in the shops was also produced in a section of the steam plant.

Erected in 1930, the **General Office Building** is a one-story brick building and measures 134' x 68'. It sits on a concrete foundation, has brick walls with pilasters, and a low-pitched gable roof. The concrete walls at the basement level are rusticated as is the balustrade that leads up the stairs to the main entrance. A concrete panel with the inscription "OFFICE" is located above the entrance.

SOURCES:

"Floating Power' Wins on E.J.& E.," Railway Age, v. 92 (April 30, 1932), 721-724.

"Elgin, Joliet & Eastern Builds Half-Million Dollar Car Shop," Railway Age, v. 78 (May 30, 1925), 1315-1318.

"Elgin, Joliet & Eastern," Railway Age Gazette, v. 48 (1910), 1114.

Sanborn Map Co., Joliet, Illinois (New York: Sanborn Map Co., 1886, 1891, 1898, 1924, and 1924-49).

Elgin, Joliet & Eastern: Joliet Passenger Station

101 East Clinton Street, Joliet

RATING: 2

Construction Date: 1881

UTM: Joliet Quad. 16 E.41006 N.4597520

DESCRIPTION: This two-and-one-half-story limestone building measures 125' x 60'. It contains a pyramidal roof with gable and turreted dormer, limestone bearing walls, an interior timber frame, and a stone foundation.

HISTORY: In 1881 the Elgin, Joliet & Eastern Railroad constructed this passenger station near Joliet's downtown. Featuring native limestone walls and a timber-framed interior, this station was used as late as 1912 when Union Station was completed, thus uniting the several passenger railroads that served Joliet in a single station. The core of the structure has been converted into a new fire station for the City of Joliet.

SOURCES:

Robert E. Sterling, A Pictorial History of Will County, v. 1 (Joliet, IL: Will County Historical Publication Co., 1976).

Elgin, Joliet & Eastern: Switch Tower

north of Hickory Creek and Washington Street, Joliet

RATING: 3

Construction Date: 1920

UTM: Joliet Quad. 16 E.411920 N.4597460

DESCRIPTION: This switch tower consists of a two-story brick building with a concrete foundation and a hipped roof. It remains in operation.

HISTORY: Located in Joliet near the junction of the Elgin, Joliet & Eastern Railroad and Rock Island Line, the EJ&E erected this switch tower in 1920. This stretch of track was extremely active in the 1910s and 1920s.

SOURCES:

Sanborn Map Co., Joliet, Illinois, (New York: Sanborn Map Co., 1886, 1891, 1898, 1924, and 1924-49).

Railroad Shops and Depots

Elgin Joliet & Eastern RR: Yardmaster's Tower

Railroad yard at Jackson Street, Joliet

RATING: 2

Construction Date: ca. 1900

UTM: Joliet Quad. 16 E.411680 N.4598200

DESCRIPTION: The adjacent yardmaster's tower is 15' x 15' square and 70 feet high. It is a steel truss tower with an enclosed upper level, which has large plate glass windows, asbestos shingle siding, and a flat hipped roof.

HISTORY: Located at the southern extreme of the Elgin, Joliet & Eastern Railroad's freight classification yard in East Joliet, the EJ&E erected this tower around 1900. It remains in service; however, the amount of rail traffic in the yard has dramatically decreased over the last decade.

SOURCES:

Sanborn Map Co., Joliet, Illinois (New York: Sanborn Map Co., 1886, 1891, 1898, 1924, and 1924-49).

ICRR: LaSalle Freight Depot

north of First Street and east of Union Street, LaSalle

RATING: 1

Construction Date: 1857

UTM: LaSalle Quad. 16 E.325430 N.4577310

DESCRIPTION: This two-and-one-half-story building measures approximately 100' x 40'. It features random-range limestone and sandstone walls and pilasters and timber Queen post roof trusses with mortise and tenon connections supporting timber purlins. It contains four-over-four-light, wood, double-hung sash windows and eight-over-eight-light, wood, double-hung sash windows, spanned by large limestone lintels, and containing limestone sills. Some of the window openings are now bricked up. The north facade contains large double doors which extend two stories in height; one of the doors is now boarded shut. The stonework features ornate quoins and ornamental capitals on top of the pilasters. The interior contains two railroad tracks, each with a mechanic's pit underneath. One of the pits has been filled in. Also inside the building is a concrete floor, plastered stone walls, and exposed roofing members (See Appendix A).

HISTORY: Originally built in 1857 by the Illinois Central Railroad as a freight depot, this structure was converted into a locomotive repair shop in 1919. It is one of the few surviving ante-bellum railroad structures in the Heritage Corridor. Erected with sandstone and dolomitic limestone that probably came from Joliet, the building retains much of its original appearance despite its poor condition. It has been abandoned for several years.



Photo 24. ICRR: LaSalle Freight Depot, during its conversion to a Locomotive Repair Shop in 1918-19.
Photo courtesy of the ICG Railroad.

SOURCES:

Sanborn Map Co., LaSalle, Illinois (New York: Sanborn Map Co., 1888, 1892, 1898, 1906, 1911, 1926).

Carlton J. Corliss, Main Line of Mid-America: The Story of the Illinois Central (New York: Creative Age Press, 1950).

Warner & Beers, Atlas of LaSalle County and the State of Illinois (New York: Warner & Beers, 1876), 74.

State Public Utilities Commission of Illinois, Railroad Map of Illinois, 1916.



Photo 25. Illinois Central Railroad: LaSalle Freight Depot (1857), LaSalle.
Photo by Jet Lowe, HAER.

ICRR: LaSalle Freight House

Union and First streets, LaSalle

RATING: 2

Construction Date: 1917

UTM: LaSalle Quad. 16 E.325400 N.4577250

DESCRIPTION: This building was destroyed by fire in 1986. It was the second Illinois Central Freight Depot at LaSalle and consisted of a long narrow brick building, measuring approximately 120' x 30'. The building contained eleven bays, was one-and-one-half-stories tall and rested on a concrete foundation. The medium-pitched gable roof consisted of Howe trusses of timber and iron supporting 10" x 12" timber purlins and 2" x 10" timber rafters, with wood tongue-and-groove roofing covered with tar.

HISTORY: This building, last operated as a freight house by the Illinois Central Gulf Railroad, was destroyed by fire in 1986, after being abandoned for several years. When completed in 1917, it superseded the original Illinois Central Railroad Freight Depot, an

impressive stone building, which still stands. At one time the Illinois Central Railroad maintained a series of sidings to the east of the brick freight house; these have since been abandoned.

SOURCES:

Sanborn Map Co., LaSalle, Illinois (New York: Sanborn Map Co., 1888, 1892, 1898, 1906, 1911, 1926).
Warner & Beers, Atlas of LaSalle County and the State of Illinois (New York: Warner & Beers, 1876), 74.
The Past and Present of LaSalle County, Illinois (Chicago: H.F. Kett & Co., 1877), 301.
State Public Utilities Commission of Illinois, Railroad Map of Illinois, 1916.

Michigan Central Railroad: Joliet Engine House and Turntable

RATING: 2

Bissell Street, Joliet

Construction Date: ca. 1910

UTM: Joliet Quad. 16 E.411660 N.4597460

DESCRIPTION: Now abandoned, the Engine House is a two-story steel-frame building measuring approximately 120' x 60' and resting on a concrete foundation. It contains sheet-metal siding, multi-light windows, most of which are broken, and a monitor roof. Two tracks, each containing a service pit, extend through the building. West of the abandoned Engine House is a turntable, 80' long and fabricated with a riveted-steel plate girder. The turntable was electrically powered.

HISTORY: The Michigan Central Railroad erected this Engine House and Turntable about 1910 as part of the Joliet track realignment and elevation project. In the early 1900s, the Michigan Central Railroad served a number of Joliet's wallpaper manufacturers as well as industries located southeast, south, and southwest of the city. Presently the site is occupied by an auto scrap dealer.

SOURCES:

"Grade Separation in Joliet, Ill.," Railway Age Gazette, v. 48, (March 16, 1910), 627-629.
Sanborn Map Co., Joliet, Illinois (New York: Sanborn Map Co., 1924).

Railroad Shops and Depots

MCRR: Switch and Signal Tower

east of Henderson Avenue, Joliet

RATING: 2

Construction Date: ca. 1920

UTM: Joliet Quad. 16 E.411320 N.4597420

DESCRIPTION: This two-story, common-bond brick structure with a hipped roof measures 30' x 15'. The east facade has "Michigan Central" painted on it.

HISTORY: The Michigan Central Railroad, which became part of the New York Central Railroad and later Penn-Central Railroad and Conrail, ran from Detroit to Chicago and vicinity, and to Joliet and points west. An abandoned double track, two span, plate girder bridge with concrete abutments and central pier, located a few hundred feet east of the switch tower, marks the former Michigan Central right-of-way after it split from the Rock Island Line and crossed Hickory Creek. This tower controlled the movements of the Michigan Central and the Rock Island trains passing through this interchange. It is one of only two extant Michigan Central Railroad structures in the I&M Canal National Heritage Corridor.

SOURCES:

"Grade Separation in Joliet, Ill.," Railway Age Gazette, v. 48, (March 16, 1910), 627-629.

RIRR: LaSalle Freight Depot

Canal Street, east of Creve Coeur Street, LaSalle

RATING: 1

Construction Date: ca. 1896

UTM: LaSalle Quad. 16 E.324420 N.4576980

DESCRIPTION: This one-and-one-half-story brick building measures approximately 50' x 20'. It contains an ashlar limestone foundation, common-bond brick walls and brick pilasters, an interior post-and-beam frame, and a medium-pitched gable roof covered with asphaltic shingles. With the exception of four along the north facade, most of the windows have been altered. These are six-over-six-light, wood, double-hung sash windows, spanned by brick segmental arches. They contain limestone sills. Sliding wooden doors are located at the north and south facades, with a concrete loading dock (probably built in the early twentieth century) along the west facade. The south facade faces the Rock Island tracks, and a deteriorated wooden platform extends along this side of the building. It is no longer used as a freight depot.

HISTORY: The Chicago, Rock Island & Pacific Railroad, originally chartered in 1847 as the Rock Island & LaSalle Railroad, was completed through LaSalle in 1854. By 1855 the city was also served by the Illinois Central Railroad. Warehousing districts grew up along

the Illinois Central line on the east side of town, as well as along the Rock Island line and the I&M Canal, located in south LaSalle. The Chicago, Burlington & Quincy Railroad paralleled the Rock Island when it came through LaSalle in the 1870s.



Photo 26. RIRR: LaSalle Freight Depot (ca. 1896), LaSalle. Photo by Gray Fitzsimons, HAER.

This former Rock Island Railroad freight depot was erected about 1896, and is one of the oldest remaining freight depots on the Rock Island Railroad line in the Heritage Corridor. It retains many of its original features, notably the distinctive corbeled brick cornice, as well as the segmental arches over the door and window openings.

SOURCES:

Sanborn Map Co., LaSalle, Illinois (New York: Sanborn Map Co., 1892, 1898, 1906, 1911, 1926).
Warner & Beers, Atlas of LaSalle County and the State of Illinois (New York: Warner & Beers, 1876), 74.
Dwight L. Agnew, "Beginning of the Rock Island Lines," Illinois State Historical Society Journal, v. 46 (1953), 407-24.
LaSalle Centennial Committee, LaSalle, Illinois: An Historical Sketch (LaSalle, IL: n.p., 1952), 35-7.

Railroad Shops and Depots

RIRR: LaSalle Passenger Station

First Street, east of Creve Coeur Street, LaSalle

RATING: 2

Construction Date: ca. 1898

UTM: LaSalle Quad. 16 E.324150 N.4577020

DESCRIPTION: This two-and-one-half-story brick building measures approximately 60' x 25'. It contains a concrete foundation, common-bond red-brick and dolomitic-limestone walls, and a large hipped roof with hipped roof dormers. A recently-built oriel extends along the south facade, and a storage shed extends along the east facade. The first-story windows are rectangular and have been boarded over; they contain limestone sills and lintels. The second-story windows are composed of three lights flanked on either side by one light (this appears to be a recent alteration); they are framed by circular brick arches and limestone lintels. The first floor opens onto the passenger platform which extends along the south facade. The First Street (main) entrance is at the second-floor level.



Photo 27. RIRR: LaSalle Passenger Station (ca. 1898), LaSalle. Photo by Gray Fitzsimons, HAER.

HISTORY: Throughout the late-nineteenth century, LaSalle-Peru was served by three railroads: the Rock Island Railroad, the Illinois Central Railroad, and the Chicago, Burlington & Quincy Railroad. About 1898 the Rock Island erected a new brick and stone passenger station on a steeply sloping hillside (local residents referred to the steeply sloping road that led down to the station as "Rock Island Hill"). Passenger rail service through LaSalle-Peru was discontinued in the early 1970s, and this was the only station in the Twin Cities to survive--those of the Illinois Central and the Chicago Burlington & Quincy have been demolished. The Rock Island Railroad's LaSalle Passenger Station has been converted into a lawn and garden center.

SOURCES:

Sanborn Map Co., LaSalle, Illinois (New York: Sanborn Map Co., 1888, 1892, 1898, 1906, 1911, 1926).
History of LaSalle County, Illinois, v. 2 (Chicago: Inter-State Publishing Co., 1886), 677-8.

RIRR: Marseilles Passenger Depot

east of Main Street, Marseilles

RATING: 2

Construction Date: 1917

UTM: Marseilles Quad. 16 E.457630 N.357180

DESCRIPTION: This one-and-one-half-story brick building features a large intersecting hipped roof covered with terra-cotta tiles. It measures approximately 90' x 30' and rests on a concrete foundation. The exterior contains a running-bond brick skirting, with a cast-stone string course, and brick walls covered with stucco above the string course. Brick quoins and brick corbeling support decorative wooden brackets with knee braces, which, in turn, support the overhanging eaves. The north and south facades feature a projecting central bay with a gable roof and a segmental arched window. Concrete steps descend to the brick passenger platform on the south side of the building. The brick pavers were manufactured by Neosehs Brick & Tile Co. of Kansas.

HISTORY: The Chicago, Rock Island & Pacific Railroad commenced its rail operations through Marseilles in March, 1853. The first Rock Island passenger station in Marseilles stood on the south side of the tracks and was a wood-framed building. An 1889 Sanborn Insurance map shows the wood-framed station with an artesian well and coal shed just to its east. In 1917 the present brick building was erected north of the tracks at a cost of \$20,000. The freight house (now demolished) stood south of the tracks, east of the original passenger station. The impressive brick passenger station with ornamental brick and woodwork closed in the early 1970s. It is now vacant.

Railroad Shops and Depots



Photo 28. RIRR: Marseilles Passenger Station (1917), Marseilles.
Photo by Jet Lowe, HAER.

SOURCES:

Sanborn Map Co., Marseilles, Illinois (New York: Sanborn Map Co., 1888, 1891, 1898, 1907, 1913, 1925).
Historical Booklet Committee, Marseilles Sesquicentennial, 1835-1985 (Coal City, IL: Bailey Printing Co., 1985).

RIRR: Morris Freight House

Liberty Avenue, Morris

RATING: 3

Construction Date: ca. 1900

UTM: Morris Quad. 16 E.381000 N.4579000

DESCRIPTION: This one-and-one-half-story brick building measures approximately 70' x 30'. It contains a concrete foundation, brick veneer, and a timber frame supporting a gable roof. A concrete block lean-to addition adjoins the north facade.

HISTORY: This freight house is shown on a 1907 Sanborn Insurance map as a wooden building with a wooden platform extending along the Rock Island Railroad tracks. In the 1930s or 1940s a brick veneer was constructed around the exterior walls. It has not served as a freight depot for many years. Around 1970 the building was modified to serve as a workshop for the Vacca Memorial Company, producers of tombstones.

SOURCES:

Sanborn Map Co., Morris, Illinois (New York: Sanborn Map Co., 1907, 1916, 1927).

RIRR: Morris Passenger Station

east of Liberty Avenue, Morris

RATING: 2

Construction Date: 1907

UTM: Morris Quad. 16. E.381000 N. 4579920

DESCRIPTION: This is a one-and-one-half-story brick building with an impressive hipped roof and gable-roof dormer. It measures approximately 75' x 25' and features a tapered rock-faced brick skirting, a red sandstone string-course, above which extends a common-bond red-brick exterior. The window sills are of red sandstone, and steel angle sections faced with brick form the lintels. The wide projecting eaves of the roof are supported by ornate wooden brackets which in turn rest on red-sandstone corbels. A central bay on the north side is flanked by doors which open onto the passenger platform.

HISTORY: In the early 1900s the Chicago, Rock Island & Pacific Railroad constructed several new passenger stations between LaSalle and Chicago, including this one in Morris. They contained intersecting gable or hipped roofs with projecting eaves as well as decorative woodwork and brick and stone masonry. The Rock Island passenger station in Morris was erected about 1905 and replaced a wooden frame station built in the early 1890s. Presently the building is abandoned.

SOURCES:

Sanborn Map Co., Morris, Illinois (New York: Sanborn Map Co., 1888, 1891, 1898, 1907, 1913, 1925).

Railroad Shops and Depots

R I RR: Ottawa Passenger Station

east side of Columbus Street between East Marquette
and East Joliet streets, Ottawa

RATING: 2

Construction Date: ca. 1910

UTM: Ottawa Quad. 16 E.346070 N.4579540

DESCRIPTION: This one-and-one-half-story brick building contains a two-story turret. It measures 60' x 25' and features a roughly textured red- and tan-brick exterior which is carried halfway up the building, and a tan-brick exterior which extends from mid-height to the roof. A port cochere extends along the south facade and joins with the main hipped roof. The roofs are covered with asphalt shingles and the projecting eaves are supported by ornamental wooden brackets. The two-story turret features wooden dentils and a wooden exterior. The symmetrical fenestration is marked by single one-over-one-light, wood, double-hung, sash windows flanked by long, narrow, fixed one-light windows; the second story of the turret contains narrow, one-over-one-light, wood, double-hung sash windows. Decorative jack-arch lintels span above a number of the window openings which contain cast-stone sills. Originally, the baggage room, located to the east of the passenger station, was a separate building. At an unknown date (probably in the 1950s) it was connected to the station by a brick infill addition. Brick pavers forming the sidewalks and platform extend from the station to the railroad tracks.

HISTORY: The original Chicago, Rock Island & Pacific Railroad Passenger Station in Ottawa was constructed in the 1850s. It was probably a wood-framed building and was replaced by 1888 with a one-story brick structure. Around 1910 the Rock Island Railroad constructed the present passenger station, a one-and-one-half-story building with a two-story turret. As with several other early twentieth century Rock Island stations, it was designed with a number of lightly ornamented elements including cast stone sills, a port cochere supported by a series of brick arches, and a two-story turret with a conical roof. No longer a passenger station--Ottawa has not had passenger rail service for over a decade--the building currently houses offices for the Chessie System. It is an excellent example of railroad architecture and is one of few extant passenger depots in the Heritage Corridor dating from the early twentieth century.

SOURCES:

Sanborn Map Co., Ottawa, LaSalle County, Illinois (New York: Sanborn Map Co., 1888, 1891, 1898, 1913, 1925).

Ottawa, Old and New: A Complete History of Ottawa, Illinois, 1823-1914 (Ottawa, IL: The Republican Times, 1912-1914, reprinted by Bireline Publishing Co., Newell, Iowa, 1984), 114, 152.



Photo 29. RIRR: Ottawa Passenger Station (ca. 1890), Ottawa.
Photo by Gray Fitzsimons, HAER.

Rock Island Railroad: Peru Scale House

south side of Rock Island tracks north of Brunner Street, Peru

RATING: 2

Construction Date: ca. 1890

UTM: LaSalle Quad. 16 E.323520 N.4577020

DESCRIPTION: This small one-story wood-framed building measures approximately 15' x 10'. It contains clapboard siding, a gable roof, and, importantly, an 1890s weighing scale and counterweight. The weighing platform is located along the north side of the building.

HISTORY: Constructed by the Chicago, Rock Island & Pacific Railroad about 1890, this scale house contains a spring-loaded weighing apparatus, possibly the only one of its kind surviving within the Heritage Corridor. The architectural detailing of the building exemplifies the design quality of railroad utility structures of the late nineteenth century.

Railroad Shops and Depots

SOURCES:

Chicago, Burlington & Quincy R.R. Co., blueprint of "Station Map, LaSalle and Peru," dated December 11, 1928, (on file at I&M Canal State Trail Archives, Gebhard Woods Access, Morris, Illinois).

R I RR: Seneca Passenger Depot

Main and Cash streets, Seneca

RATING: 2

Construction Date: 1911-1912

UTM: Seneca Quad. 16 E.365350 N.4575300

DESCRIPTION: This one-and-one-half-story wood-framed building measures approximately 50' x 17'. The exterior is covered with asbestos shingles (which probably has been placed over the original wood clapboard siding). The large hipped roof contains asphalt shingles, and the windows and doors are boarded over.

HISTORY: The Chicago, Rock Island & Pacific Railroad reached Seneca by 1853, and the town was served by a small timber-framed freight and passenger station. The present passenger station was constructed in 1911-12 after a fire in 1911 destroyed an earlier structure. (The Kankakee and Seneca Railroad, a subsidiary of the Rock Island Line, built this earlier station in 1882.) One of the few timber-framed passenger stations in the Heritage Corridor--most are of brick and stone construction--this building has been abandoned for many years.

SOURCES:

Sanborn Map Co., Seneca, Illinois (New York: Sanborn Map Co., 1892, 1898, 1907, and 1924).

Morris Daily Herald, December 18, 1911.

History of La Salle County, Illinois (Chicago: Interstate Publishing Co., 1886).

R I RR: Utica Passenger Depot

east of Clark Street, north of Grove Street, Utica

RATING: 1

Construction Date: ca. 1870

UTM: LaSalle Quad. 16 E.3319200 N.4578540

DESCRIPTION: This one-and-one-half-story brick building measures approximately 50' x 18'. It contains a limestone foundation, stretcher-bond brick load-bearing walls, and a steeply pitched gable roof, covered with asphalt shingles; the projecting purlins at the gable ends rest on curved and chamfered wooden brackets. The long narrow window openings are presently boarded up; brick segmental arches span the window openings. Three wooden doors are located along the north facade, one of which is a sliding door opening into the old baggage room; two wooden doors are located along the south facade, one of which is also a sliding door. The north facade faces the railroad tracks, the south facade faces a parking area. The station is currently abandoned and is in danger of demolition.

HISTORY: This railroad passenger station in Utica is one of the oldest surviving stations on the Rock Island Railroad Line. Although the Chicago, Rock Island & Pacific Railroad was completed from LaSalle to Chicago in 1854, most of the extant passenger stations date from the late nineteenth century. The passenger station in Utica has been abandoned for many years.

SOURCES:

Sanborn Map Co., Utica, Illinois (New York: Sanborn Map Co., 1888).

Dwight L. Agnew, "Beginning of the Rock Island Lines," Illinois State, Historical Society Journal, v. 46 (1953), 407-24.

History of LaSalle County, Illinois, v. 2 (Chicago: Inter-State Publishing Co., 1886), 677-8.

SFRR / C&ARR: Switching Tower

north of the Atchison, Topeka and Santa Fe Railroad Fe RR
Corwith Yard, Chicago

RATING: 2

Construction Date: 1918

UTM: Englewood Quad. 16 E.440500 N.4630350

DESCRIPTION: A two-story brick building with a one-story wing, it measures 47' x 14' and features brick quoins, and a hipped roof on a concrete foundation. The second story retains its original continuous band of one-over-one-light double-hung sash windows. The original electrical and mechanical switching equipment remains in place.

Railroad Shops and Depots

HISTORY: Located at the junction of the Santa Fe and Illinois Central Gulf railroad lines, this switching tower was built in 1918 to control train movements in the nearby Atchison, Topeka and Santa Fe Railroad yards. It remains in service as a signal tower for the Santa Fe and Illinois Central Gulf railroads.

SOURCES:

Sanborn Map Co., Chicago, 1949-1950, v. E (New York: Sanborn Map Co., 1949-1950).

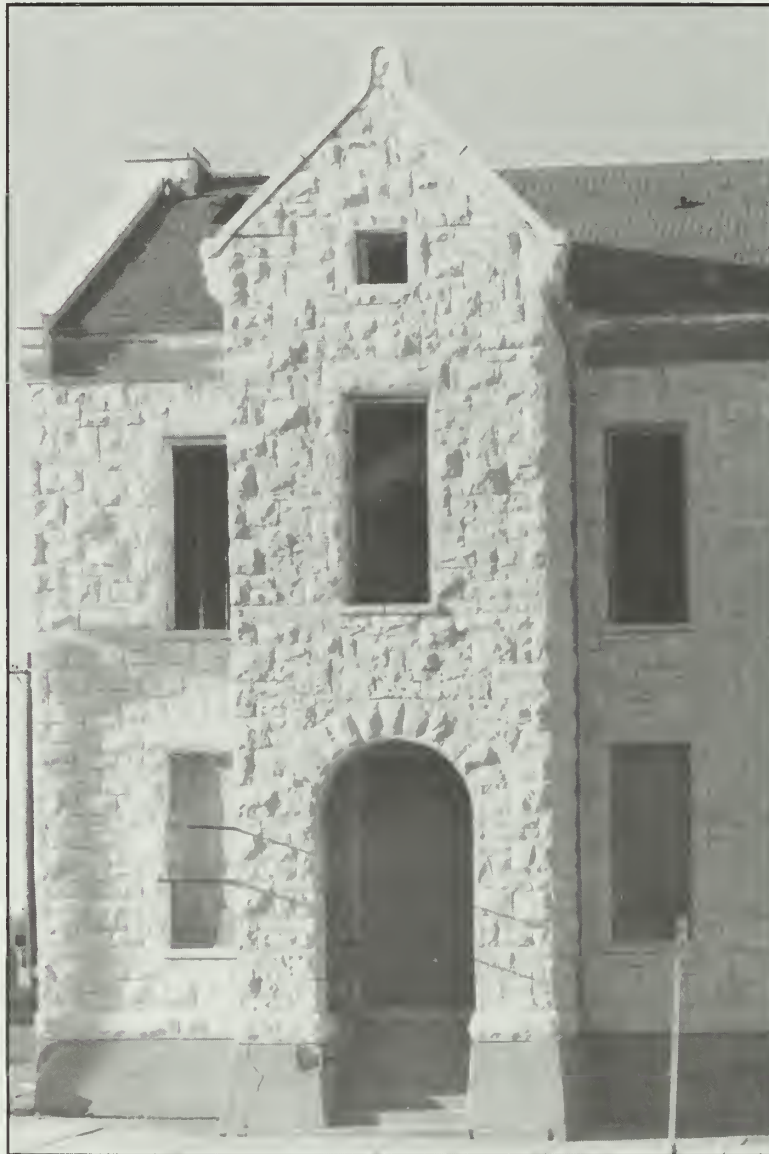


Photo 30. Sante Fe Railroad Joliet Freight Depot (1889), Joliet.
Joliet. Photo by Joseph DeRosa, HAER.

SFRR: Joliet Freight Depot

Cass and Scott streets, Joliet

RATING: 1

Construction Date: ca. 1889

UTM: Joliet Quad. 16 E.410020 N.459762

DESCRIPTION: This two-and-one-half-story limestone building measured 35' x 35'. It was destroyed by fire in 1988. The remaining stone walls of the main building and its stone foundation and that of an adjoining warehouse have been obliterated. The structure featured random-range limestone walls with an interior timber post-and-beam frame and an intersecting gable roof. The projecting main entrance was highlighted by a stone-arch doorway. The tall narrow window openings were spanned by limestone lintels. All the windows had been removed at the time of examination. A warehouse building, consisted of a one-and-one-half-story timber-framed structure, measuring about 146' x 30', adjoining the stone building. This timber-framed structure contained about 20 bays on either side and was constructed in the early 1900s.

HISTORY: The Atchison Topeka & Santa Fe Railroad, incorporated in 1873, originally ran west from Kansas. Seeking an entrance into Chicago and connections with railroads running to the Atlantic coast, the Santa Fe organized the Chicago, Santa Fe and California Railroad, and built a new line, west from Chicago, to Kansas. This Midwestern branch began serving Lockport and Joliet in May, 1888. About one year later the Santa Fe completed construction of this freight depot in Joliet. The two-and-one-half-story limestone building served as an office and adjoined a timber-framed warehouse building. The long narrow warehouse building dates from the early 1900s.

SOURCES:

Robert E. Sterling, Joliet: A Pictorial History (St. Louis: G. Bradley Publishing, Inc., 1986).
Sanborn Map Co., Joliet, Illinois (New York: Sanborn Map Co., 1924).

Railroad Shops and Depots

SFRR: Locomotive Turntable

Joliet

RATING: 3

Construction Date: 1908

UTM: Joliet Quad. 16 E.409880 N.4599320

DESCRIPTION: This riveted steel plate girder measures about 45' in length. Still operable, the turntable is electrically powered.

HISTORY: This turntable, fabricated and erected by the American Bridge Company of New York in 1908, was one of a number of rail improvements carried out in Joliet by the Santa Fe Railroad in the early 1900s. Although the Santa Fe is still active through Joliet, this turntable does not appear to be used.

SOURCES:

Nameplate on turntable.

Sanborn Map Co., Joliet, Illinois (New York : Sanborn Map Co., 1924).



Photo 31. Sante Fe Railroad: Locomotive Turntable (ca. 1908), Joliet. Photo by Joseph DeRosa, HAER.

RAILROAD BRIDGES

AT&SFRR: Chicago Drainage Canal Bridge

crossing the Sanitary and Ship Canal,
east of Harlem Avenue, Chicago

RATING: 1

Construction Date: 1899

UTM: Berwyn Quad. 16 E.434600 N.4628250

DESCRIPTION: Formerly a center-pivot swing bridge, it is now a fixed single span 372'-6" in length. The superstructure consists of a steel, pin-connected Pratt through truss. It rests on ashlar limestone abutments, and the ashlar limestone center pier is capped with concrete. The center pier measures 33'-8" in diameter and supports a 28'-0" diameter turntable. The bridge carries two tracks.

HISTORY: The Atchison, Topeka & Santa Fe Railroad was carried across the newly constructed Chicago Sanitary and Ship Canal in 1899 with this center-pivot swing bridge. The Keystone Bridge Company of Pittsburgh fabricated the steel for the pin-connected Pratt through truss, and the Carnegie Steel Company erected the superstructure. The bridge was placed in operation in April, 1899. It is nearly identical to the AT&SFRR bridge crossing the Chicago Sanitary and Ship Canal in Lemont, both of which are still in use.

SOURCES:

"Bridges Over the Chicago Drainage Canal," Engineering Record, v. 36 (June 19, 1897), 53.

"Railway Drawbridges Over the Chicago Drainage Canal," Engineering News, v. 38 (December 2, 1897), 363-366.

Isham Randolph, "The Salient Features of the Chief Engineer's Annual Report of the Drainage Canal of the Sanitary District of Chicago for 1898," Journal of the Western Society of Engineers, v. 4 (August, 1899), 317-334.

"Swing Bridges on the Chicago Drainage Canal," Engineering Record, v. 36 (October 2, 1897), 378; v. 36 (October 30, 1897), 469; v. 37 (December 25, 1897), 71-73; v. 37 (March 19, 1898), 338-339.

C. Arch Williams, The Sanitary District of Chicago: History of its Growth and Development (Chicago: The Sanitary District of Chicago: 1919).

Railroad Bridges

AT&SFRR: Des Plaines River Channel and Chicago Drainage Canal Bridge

RATING: 1

crossing the Des Plaines River Channel and the Sanitary and Ship Canal,
near Stephen Street, Lemont

Construction Date: 1899

UTM: Sag Bridge Quad. 16 E.416600 N.4614400

DESCRIPTION: The span crossing the Des Plaines River Channel is a double-tracked riveted steel plate through-girder. It measures about 80 feet in length and rests on ashlar limestone abutments. The Sanitary and Ship Canal span is a pin-connected steel through truss swing span. It measures about 375 feet in length; the superstructure consists of a steel, pin-connected Pratt through truss; the rim-bearing turntable span, 28'-0" in diameter, rests on an ashlar limestone center pier, measuring about 33 feet in diameter.

HISTORY: The Atchison, Topeka & Santa Fe Railroad extends southwest from Chicago to Lemont where it crosses the Diversion Channel of the Des Plaines River and the Chicago Sanitary and Ship Canal. In 1899 the line was carried across the man-made Des Plaines River Channel with a steel plate girder span; it bridged the newly constructed canal with this center-pivot swing bridge. The Keystone Bridge Company of Pittsburgh erected the rim-bearing swing span, following the design specifications of Isham Randolph, chief engineer for the Chicago Sanitary District. It is nearly identical to the Santa Fe swing span, also erected in 1899 across the Sanitary and Ship Canal in Chicago.

SOURCES:

See above entry.

AT&SFRR: I&M Canal Bridge

RATING: 2

crossing the I&M Canal at its junction
with the Des Plaines River, Joliet

Construction Date: ca. 1909

UTM: Joliet Quad. 16 E.409780 N.4598860

DESCRIPTION: This bridge contains a single span and consists of a skewed, subdivided double-intersection Warren through truss, with riveted gusset plate connections, resting on concrete abutments. It is approximately 200 feet long and is double tracked.

HISTORY: Aligned on an extreme skew, this bridge was built around 1909 as part of the right-of-way realignment and track elevation project in Joliet carried out by the Atchison, Topeka & Santa Fe Railroad. The American Bridge Company of New York fabricated the superstructure. Still operated by the Santa Fe, this bridge is the only subdivided double-intersection Warren through truss in the Upper Illinois Valley.

SOURCES:

Nameplate on bridge.

Also see entry of Joliet Track Elevation Project.



Photo 32. AT&SFRR: I&M Canal Bridge (ca. 1909), Joliet.
Photo by Joseph DeRosa, HAER.

Railroad Bridges

AT&SFRR: I&M Canal Trestle

crossing the I&M Canal south of Lock #4, Joliet

RATING: 3

Construction Date: 1910

UTM: Joliet Quad. 16 E.410260 N.4600260

DESCRIPTION: This structure consists of a multi-span timber trestle, with a total length of about 100 feet. It contains timber pile caps resting on timber bents braced with large boards. The trestle supports a single track.

HISTORY: This trestle marks the original alignment of the Atchison, Topeka & Santa Fe Railroad before the railroad moved its line to the west in the early 1900s, paralleling the Des Plaines River and crossing the I&M Canal at a point farther south, just north of Ruby Street in Joliet. After shifting the mainline west and building a switching yard and locomotive terminal along the Des Plaines River, the Santa Fe used this trestle to interchange freight entering and leaving the steelworks of the United States Steel Corporation's Joliet Works. After the abandonment of this interchange, the trestle crossing the I&M was converted into a vehicular bridge.

SOURCES:

See Joliet Track Elevation Project.

Chicago Track Elevation Project

various railroads through south Chicago

Rating: 1

Construction Date: 1892-1922

HISTORY AND DESCRIPTION: Chicago's railroad tracks were elevated in an attempt to minimize interruptions to street traffic and to reduce the number of accidents, injuries, and deaths at railroad grade crossings. Initially, streets were elevated on viaducts above the tracks, but this policy proved to be unpopular because it required steep roadway approaches and had a deleterious effect on property values.

The track elevation project in Chicago began in 1892 when the Illinois Central Railroad elevated its Hyde Park line to provide swift, frequent, and uninterrupted service to the 1893 World's Columbian Exposition. Following the track elevation of the Illinois Central Railroad, the City of Chicago systematically issued track elevation ordinances establishing specific minimum vertical clearances and maximum bridge plate heights and requiring the railroads to pay one hundred percent of the cost of track elevation. The ordinance requiring

the elevation of the Chicago & Alton Railroad, the Atchison, Topeka & Santa Fe Railroad and the Chicago, Madison & Northern Railroad trackage passed in 1899, but work did not begin until early 1901.

Between 18th Street and S. Western Avenue, the track was elevated using sand fill between unreinforced, mass concrete retaining walls and bridge abutments. The bridges were either single plate girder without pier supports, or multiple plate girder with intermediate pier supports--all with floors of I-beams perpendicular to the plate girders. The C&ARR introduced a new method of decking using creosoted timber covered with asphalt waterproofing beneath rock ballast. This system not only drained water to one end of the bridge, but also provided solid, smooth, and safer track, as well as reducing noise and vibration. The American Bridge Company of New York fabricated and erected the steel.

Track elevation in Chicago was a monumental, twenty-year engineering and construction project involving the largest and most complex railroad terminal in the United States. Track elevation engineers in Chicago refined shallow floor bridge design to provide maximum vertical clearance with minimum track elevation, and the pioneering techniques of the C&ARR in its use of the ballasted deck bridge was subsequently copied by other cities adopting track elevation ordinances. By 1911 the Chicago track elevation program had eliminated 780 grade crossings, had cost 70 million dollars, and had dramatically reduced grade crossing accidents and deaths. Joliet was the only other Illinois city to adopt track elevation during this time period. The track elevation of the C&ARR was part of a system-wide rebuilding of its physical plant. In addition to elevating track in Chicago, the C&ARR rebuilt 318 bridges along its Chicago to St. Louis right-of-way during the first few years of the twentieth century.

Numerous examples of Chicago's track elevation project exist in the Heritage Corridor. The following is a list of the typical types that may be found:

AT&SFRR, C&ARR, and CM&NRR: Robinson Street Bridge (ca. 1901): this bridge carries the Santa Fe, the Chicago & Alton, and the Chicago, Madison & Northern lines--the latter two rail lines are now part of the Illinois Central Gulf Railroad--across Robinson Street, at the intersection of W. 31st Street. A steel through plate girder bridge, the main span measures 41'-11" in length and rests on concrete abutments. Railroad ties are supported on steel I-beams, which in turn rest on floor beams of riveted steel plate girders; the bridge carries four tracks.

AT&SFRR, C&ARR, and CM&NRR: Canal and Cermack Street Bridges (ca. 1901): these bridges carry the Santa Fe, the Chicago & Alton, and the Chicago, Madison & Northern lines across Canal and Cermack streets. Each of the two steel plate girder spans measures 68'-11" in length and rests on concrete abutments.

Railroad Bridges

AT&SFRR, C&ARR, and CM&NRR: Lock Street Bridge (ca. 1901): this bridge carries the Santa Fe, the Chicago & Alton, and the Chicago, Madison & Northern lines across Lock Street. A steel plate girder span measuring 73'-9" in length rests on concrete abutments. It accommodates five tracks.

AT&SFRR, C&ARR, and CM&NRR: Loomis Street Bridge (ca. 1901): this bridge carries the Santa Fe, the Chicago & Alton, and the Chicago, Madison & Northern lines across Loomis Street. A steel plate girder span measuring 73'-10" in length rests on concrete abutments. It accommodates five tracks.

AT&SFRR, C&ARR, and CM&NRR: Throop Street Bridge (ca. 1901): this bridge carries the Santa Fe, the Chicago & Alton, and the Chicago, Madison & Northern lines across Throop Street. A steel plate girder span measuring 73'-10" in length rests on concrete abutments. It accommodates five tracks.

AT&SFRR, C&ARR, and CM&NRR: Grove Street and 23rd Place Bridges (ca. 1901): these bridges carry the Santa Fe, the Chicago & Alton, and the Chicago, Madison & Northern lines across Grove Street and 23rd Place, north of Archer Avenue. Both bridges are of steel plate girder construction. The Grove Street span measures 42'-0" in length, and the span crossing 23rd Place measures 56'-0" in length. Both spans rest on concrete abutments. The bridges accommodate four tracks.

AT&SFRR, C&ARR, and CM&NRR: Ashland Avenue Bridge (ca. 1901): this bridge carries the Santa Fe, the Chicago & Alton, and the Chicago, Madison & Northern lines across Archer Avenue in Bridgeport. On a skewed alignment, this four-tracked bridge has four spans. Two cross the roadway, with each measuring 42'-10" in length; the other two spans cross the sidewalk, with one being 18'-0" long and the other 16'-3" long. The bridge rests on concrete abutments and carries four tracks.

AT&SFRR, C&ARR, and CM&NRR: Fuller Street and Short Street Bridge (ca. 1901): this bridge carries the Santa Fe, the Chicago & Alton, and the Chicago, Madison & Northern lines across Fuller and Short streets. On a skewed alignment, this four-tracked bridge has three spans, with the one crossing the roadway measuring 66'-7" in length. Each of the two spans crossing the sidewalk is 20'-5" long. The bridge rests on concrete abutments and carries five tracks.

AT&SFRR, C&ARR, and CM&NRR: S. Halstead Street Bridge (ca. 1901): this bridge carries the Santa Fe, the Chicago & Alton, and the Chicago, Madison & Northern lines across S. Halstead Street. Aligned on a slight skew, this four-span steel plate girder measures 101'-0" in length and rests on concrete abutments. It accommodates six tracks.

AT&SFRR, C&ARR, and CM&NRR: Corbett Street Bridge (ca. 1901): this bridge carries the Santa Fe, the Chicago & Alton, and the Chicago, Madison & Northern lines across Corbett Street at Archer Avenue. This single-span steel plate girder measures 40'-10" in length and rests on concrete abutments. It accommodates six tracks.

AT&SFRR, C&ARR, and CM&NRR: S. Wallace Street Bridge (ca. 1901): this bridge carries the Santa Fe, the Chicago & Alton, and the Chicago, Madison & Northern lines across S. Wallace Street at Archer Avenue. This single-span steel plate girder is virtually identical to the Corbett Street Bridge, measures 40'-10" in length, and rests on concrete abutments. It accommodates six tracks.

CM&NRR: S. Wallace Street Bridge (1899): this bridge carries the Chicago, Madison & Northern lines across Kedzie Avenue in Chicago. This single-span steel plate girder measures 80 feet in length and rests on ashlar limestone abutments. It accommodates two tracks and is one of the earliest surviving plate girder bridges constructed as part of the track elevation project in Chicago.

C&IWRR: 31st Street Bridge (1914): a combination steel I-beam girder and through plate girder bridge encased in decorative concrete, its total length measures 169'-0". Heavily skewed concrete abutments and diagonally braced steel bent piers encased in concrete support one through plate girder and three I-beam girder spans. The through plate girder is 55'-6" long and the I-beam girders are 27'-11", 26'-10", and 26'-7" long. A ballasted concrete slab deck carries two tracks.

C&ARR: S. Wood Street Bridge (1903): this bridge carries the Chicago & Alton line, now the Illinois Central Gulf Railroad, across S. Wood Street in Chicago. This three-span steel plate girder measures 95'-6" in length; its main span across the roadway measures 60'-6" in length, and the two shorter spans crossing the sidewalks each measure 17'-9". It rests on concrete abutments and accommodates three tracks.

C&ARR: S. Oakley Avenue and 36th Street Bridge (1902): this bridge carries the Chicago & Alton line, now the Illinois Central Gulf Railroad, across S. Oakley Avenue at its intersection with 36th Street in Chicago. Aligned on a skew, this three-span steel plate girder measures 117'-11" in length; its main span across the roadway measures 64'-7" in length, and of the two shorter spans crossing the sidewalks, one measures 31'-2", the other 22'-2". It rests on concrete abutments and accommodates three tracks.

Railroad Bridges

C&ARR: W. 33th Street Bridge (1903): this bridge carries the Chicago & Alton line, now the Illinois Central Gulf Railroad, across W. 33th Street at its junction with Selby Avenue. This three-span steel plate girder measures 110'-10" in length; its main span across the roadway measures 70'-3" in length, and the two shorter spans crossing the sidewalks each measure 20'-7". It rests on concrete abutments and accommodates three tracks.

C&ARR: W. 34th Street Bridge (1903): this bridge carries the Chicago & Alton line, now the Illinois Central Gulf Railroad, across W. 34th Street at its junction with Wilcott Avenue. This three-span steel plate girder measures 104'-9" in length; its main span across the roadway measures 72'-5" in length, and the two shorter spans crossing the sidewalks each measure 21'-2". It rests on concrete abutments and accommodates three tracks.

C&ARR: W. 35th Street Bridge (1903): this bridge carries the Chicago & Alton line, now the Illinois Central Gulf Railroad, across W. 35th Street at its junction with Hamilton and Leavitt streets. This three-span steel plate girder measures 93'-7" in length; its main span across the roadway measures 60'-6" in length, and the two shorter spans crossing the sidewalks each measure 21'-2". It rests on concrete abutments and accommodates three tracks.

C&ARR: Kedzie Avenue Bridge (1903): this bridge carries the Chicago & Alton line, now the Illinois Central Gulf Railroad, across Kedzie Avenue, north of 37th Street. This single-span steel plate girder measures 72'-2" in length; it rests on concrete abutments and accommodates four tracks.

C&ARR: Rockwell Street Bridge (1903): this bridge carries the Chicago & Alton line, now the Illinois Central Gulf Railroad, across Rockwell Street. This single-span steel plate girder measures 72'-0" in length; it rests on concrete abutments and accommodates four tracks.

C&ARR: Lincoln Avenue Bridge (1902): this bridge carries the Chicago & Alton line, now the Illinois Central Gulf Railroad, across Lincoln Avenue in Summit, south of Chicago. Aligned on a skew, this three-span steel plate girder measures approximately 90 feet in length, with each span measuring about 30 feet in length. It rests on concrete abutments and accommodates three tracks.

SOURCES:

City of Chicago, Track Elevation Department, Track Elevation Within the Corporate Limits of Chicago (Chicago: City of Chicago, 1909, 1911).

J. Seymour Currey, Chicago: Its History and Its Builders (Chicago: S.J. Clarke Publishing, 1912), 183-189.

"Grade Separation Laws and Requirements," Railway Age Gazette, v. 55 (December 12, 1913), 1118-1121.

Illinois Central Gulf Railroad, Office of Chief Engineer, Chicago Division Condensed Profile, Chicago, 1981.

W.S. Lacher, "The Track Elevation Subways in Chicago," Railway Age Gazette, v. 56 (March 6, 1914), 459-463.

Frank H. Spearman, "Rebuilding A Great Railroad," The Worlds Work, v. 8 (October, 1904), 5371-5376.

"Track Elevation in Chicago," Engineering News, v. 43 (January 11, 1900), 18-22; v. 43 (January 11, 1900), 24-26; v.43 (February 22, 1900), 122-126; v. 48 (September 11, 1902), 181; v. 61 (June 3, 1909), 610-613; v. 72 (September 3, 1914), 503-504.

"Track Elevation in Chicago," Engineering Record, v. 59 (May 29, 1909), 679-682.

"Track Elevation in Chicago," The Railway Age, (April 26, 1901), 462-464; (May 10, 1901), 509-511.

B & O RR: Chicago Terminal RR Bridge

RATING: 2

crossing the Chicago River (South Branch), north of the
St. Charles Air Line Railroad Bascule Bridge, Chicago

Construction Date: 1930

UTM: Englewood Quad. 16 E.447360 N.4634300

DESCRIPTION: This bridge is a single-leaf, Strauss trunnion bascule bridge, 186'-0" long. It rests on concrete abutments and carries two tracks.

HISTORY: This bridge was built in 1930 to permit the Baltimore & Ohio Railroad's Chicago Terminal Railroad to cross the newly straightened South Branch channel of the Chicago River. The Chicago Terminal Railroad operated a marshalling yard and terminal on the east side of the Chicago River's South Branch. In 1931 the span was raised 11'-6" as part of a track separation project carried out in the early 1930s by the B & O Railroad.

SOURCES:

"Busiest Railway Crossing Is No More," Railway Age, v. 91 (August 15, 1931), 241-244, 251.

"Raise 3330-Ton Bascule Span 11-1/2 Ft.," Railway Age, v. 92 (January 9, 1932), 83-85.

C.H. Mottier, "A Complex Bridge-Moving Job," Railway Age, v. 90 (February 28, 1931), 445-447.



Photo 33: Baltimore and Ohio Railroad: Chicago Terminal RR Bridge (1930), Chicago.
Photo by Jet Lowe, HAER.

C & A RR: S. Fork of S. Branch Chicago River Bridge

RATING: 2

crossing the South Fork of the South Branch Chicago River
north of Archer Avenue, Chicago

Construction Date: 1906

UTM: Englewood Quad. 16 E.444840 N.4632000

DESCRIPTION: The main span of this bridge consists of a single-leaf, Page bascule; the superstructure consists of a riveted steel Warren through truss, 150 feet in length. The approach span is comprised of a riveted steel plate girder 64 feet in length. The bridge rests on concrete abutments. The nameplate reads: "American Bridge Co. of N.Y. (1906)." The bridge tender's cabin is located along the north approach; it is a one-story brick building

measuring approximately 20' x 15' and containing a hipped roof and a chimney (for a stove inside); casement windows provide the interior with natural light.

HISTORY: Located near Chicago's stockyards, this Chicago & Alton Railroad bridge crossing the South Fork of the Chicago River's South Branch was erected in 1906 and replaced an 1880s "bob-tailed" swing span. Importantly, this 1906 span marked the first use of a Page bascule for a railroad bridge. William M. Hughes, engineer for the Chicago & Alton, designed the span, and the American Bridge Company of New York fabricated the steel for the superstructure. The Kelly & Atkinson Company served as contractors for the substructure.

SOURCES:

"Bids for a Bascule Bridge for the Chicago & Alton R.R.," Engineering News, v. 52 (November 3, 1904), 405-406.

"The Elevation of the Chicago and Alton Bridge at Bridgeport, Chicago," Railway Age, (January 23, 1903), 122-125.

"Page Type of Bascule Bridge: Chicago, Ill.," Engineering News, v 58 (July 18, 1907), 57-58.



Photo 34. C&ARR: S. Fork of S. Branch Chicago River Bridge (1906), Chicago.
Photo by Jet Lowe, HAER.

Railroad Bridges

C&ARR: Sugar Creek Culvert

across Sugar Creek 800' south of AT&SF Railroad, Joliet

RATING: 2

Construction Date: ca. 1880

UTM: Joliet Quad. 16 E.408860 N.4594820

DESCRIPTION: Originally a stone arch culvert, this structure has been greatly altered with the addition of an ARMCO corrugated-steel culvert supporting the arch and a concrete spandrel wall extending 10 feet above the original ashlar limestone spandrel wall. The culvert has a span of 25 feet and is about 40 feet wide. It carries a single track.

HISTORY: The Chicago & Alton Railroad bridges in Joliet and Lockport were originally constructed between 1854 and 1870. All bridges were subsequently rebuilt beginning in the 1880s. Fixed clearance I-beam girder and plate girder bridges were generally used for crossing streams, roads, and other railroads. The C&ARR did build and maintain a number of stone arch bridges, concrete arch culverts, and timber pile trestles. This culvert is the only stone arch railroad span in the Joliet area.

CB&QRR: Illinois River Bridge

crossing the Illinois River, Ottawa

RATING: 2

Construction Date: 1898, 1932

UTM: Ottawa Quad. 16 E.345470 N.4578120

DESCRIPTION: A multi-span railroad bridge, three of the spans are fixed steel Pratt through trusses with pin connections (built in 1898 by the King Bridge Company of Cleveland, Ohio). The main span is a vertical lift Pratt through truss with pin connections (the vertical lift span of the Waddell and Harrington type is probably a ca. 1932 addition); each span is approximately 20 feet in length. A number of timber trestle approach spans are located to the north and south. Ashlar sandstone piers support each of the truss spans. The bridge is single tracked.

HISTORY: A railroad crossing of the Illinois River at Ottawa has existed since 1871 when the Chicago, Burlington & Quincy Railroad leased the line of the Ottawa, Oswego & Fox River Valley Company, and began operating a road to Streator, Illinois. One of the nation's prominent late nineteenth century bridge-manufacturing concerns, the King Bridge Company of Cleveland, Ohio, erected this pin-connected Pratt through truss spans in 1898. With the advent of the Illinois Waterway in the early 1930s, one of the spans was reconstructed and a Waddell and Harrington vertical lift bridge was erected. In addition to the CB&QRR bridge

at Ottawa, several other similar vertical lift spans exist across the Illinois River within the Heritage Corridor. Presently the Burlington Northern Railroad owns and operates the bridge.

SOURCES:

W.W. Baldwin, "Corporate History of the Chicago, Burlington & Quincy Railroad Company," (manuscript prepared for the U.S. Interstate Commerce Commission, June 30, 1917, available at the Newberry Library, Chicago, Illinois), 35.

Ottawa, Old and New: A Complete History of Ottawa, Illinois, 1823-1914 (Ottawa, IL: The Republican Times, 1912-1914, reprinted by Bireline Publishing Co., Newell, Iowa, 1984), 37.

State Public Utilities Commission of Illinois, Railroad Map of Illinois, 1916.



Photo 35. CB&QRR: Illinois River Bridge (1898, 1932), Ottawa.
Photo by Gray Fitzsimons, HAER.

Railroad Bridges

C&IWRR: Sanitary Canal Collateral Channel Bridge

RATING: 3

crossing Sanitary Canal Collateral Channel
to the City of Chicago Waterwork, Chicago

Construction Date: 1937

UTM: Berwyn Quad. 16 E.434600 N.4628280

DESCRIPTION: A single-leaf Page bascule bridge with plate girder approach spans, this bridge measures 233 feet in length. The Page bascule bridge is 90 feet long.

HISTORY: In 1937 the Chicago & Illinois Western Railroad erected this single-leaf Page bascule bridge across the Chicago Sanitary and Ship Canal's Collateral Channel. The single track line served the City of Chicago Waterworks.

SOURCE:

Illinois Central Gulf Railroad, Office of Chief Engineer, Chicago Division Condensed Profile, Chicago, 1981.

CM&NRR: Chicago Drainage Canal Bridge

RATING: 2

crossing the Sanitary and Ship Canal east of Kedzie Avenue, Chicago

Construction Date: 1899

UTM: Englewood Quad. 16 E.441670 N.4631200

DESCRIPTION: Originally a center-pivot swing bridge, it is now a fixed span. The superstructure consists of a pin-connected, steel Pratt through truss; the span measures 479'-5" in length and rests on ashlar limestone abutments. The ashlar limestone center pivot, capped with concrete, measures 32'-6" in diameter and supports a 28'-0" diameter turntable that is no longer operable.

HISTORY: This bridge was erected by the Toledo Bridge Company (Toledo, Ohio) for the Chicago Madison & Northern Railroad. It was placed in operation on July 2, 1899. By 1906 one fixed truss and fourteen swing bridges crossed the Chicago Drainage Canal (later called the Sanitary and Ship Canal). One of seven surviving swing bridges crossing the Sanitary and Ship, this structure contains the longest swing span of any in the region. Presently, the Illinois Central Gulf Railroad owns and operates the bridge.

SOURCES:

See entry of AT&SFRR: Chicago Drainage Canal Bridge.



Photo 36. CM&NRR: Chicago Drainage Canal Bridge (1899), Chicago.
Photo by Jet Lowe, HAER.

CTTRR: Chicago Drainage Canal Bridge

crossing the Sanitary and Ship Canal
northwest of Argo Corn Products, Summit

RATING: 2

Construction Date: 1898

UTM: Berwyn Quad. 16 E.431350 N.4625820

DESCRIPTION: Erected in 1898, this steel Pratt through truss center-pivot swing bridge has been greatly altered. Seven of the original fourteen truss panels have been removed and replaced by fixed plate girder spans supported by a concrete abutment and circular concrete piers. The surviving original truss panels contain pin connections with steel eyebar tension

Railroad Bridges

members, steel plate and steel channel sections forming the compression members. The bridge measures 316'-7" in length and carries two tracks. The ashlar limestone center pier measures 36'-6" in diameter and the rim-bearing turntable remains in place.

HISTORY: This bridge was erected by the Wisconsin Bridge & Iron Company and placed in operation in October, 1898. It is one of seven surviving highway and railway swing bridges crossing the Chicago Drainage Canal erected between 1898 and 1900. This bridge is the most altered of the group.

SOURCES:

See entry of AT&SFRR: Chicago Drainage Canal Bridge.

C&WIRR: Chicago Drainage Canal Bridge

crossing Sanitary and Ship Canal at Nerska Junction,
east of Cicero Avenue, Chicago

RATING: 2

Construction Date: ca. 1900

UTM: Englewood Quad. 16 E.438680 N.4629950

DESCRIPTION: Originally constructed as a center-pivot swing bridge, it is now a fixed span. The bridge measures 334'-6" in length. The superstructure consists of a pin-connected steel Pratt through truss with eyebar tension members, riveted plates and channel sections forming the compression members. The tracks are carried on riveted steel plate girder floor beams. Originally a four-track bridge with one set of tracks cantilevered on each side of the bridge outside of the truss panels, the two cantilevered tracks have been removed. The superstructure rests on an ashlar limestone abutment, and the stone center pivot, capped with concrete, measures 33'-8" in diameter. It supports a 28'-0" diameter turntable that is no longer operable.

HISTORY: The Chicago & Western Indiana Railroad was carried over the newly constructed Chicago Drainage Canal in 1900 with the erection of this center-pivot swing span. Between 1898 and 1900, the Sanitary District of Chicago supervised the design of this and fourteen other movable highway and railway bridges crossing the Drainage Canal. Originally double-tracked, the bridge was later built to carry four tracks. Presently, the bridge is double-tracked and is operated as part of the Belt Railroad of Chicago.

SOURCES:

See entry of AT&SFRR: Chicago Drainage Canal Bridge.

EJ&ERR: I&M Canal Bridge

crossing the I&M Canal west of Channahon

RATING: 3

Construction Date: 1910

UTM: Minooka Quad. 16 E.391550 N.4584400

DESCRIPTION: This bridge spans the I&M Canal and consists of a single-span riveted steel plate girder carrying a single track. Approximately 66' long by 18' wide, the bridge rests on ashlar limestone abutments.

HISTORY: The Elgin, Joliet & Eastern Railroad was constructed in the 1880s and extended from Waukegan, Illinois, through south Chicago, and into Gary, Indiana. In the late nineteenth century a spur of the EJ&E was built through and connected Wilmington, Illinois and Coal City, Illinois to the main line at Plainfield, Illinois. Soon after its formation in 1901, U.S. Steel acquired the EJ&E. This plate girder bridge spanning the I&M Canal was part of the spur line through Minooka, Illinois and was erected by U.S. Steel's American Bridge Company in 1910. Not surprisingly, the Carnegie Steel Company, a subsidiary of U.S. Steel, supplied the structural steel for the bridge. Though the EJ&E continues to use the spur line through Minooka, rail traffic is very sporadic.

SOURCES:

Nameplate on bridge.

Elgin, Joliet and Eastern Railroad, "Bridge Inspection Report," 1983.

EJ&ERR: Joliet Viaduct

RATING: 3

EJ&ERR crossing the I&M Canal, the Sanitary and Ship Canal,
the AT&SFRR, and the Des Plaines River, Joliet

Construction Date: 1906, 1910, 1913, 1933

UTM: Joliet Quad 16 E.410140 N.4600680

DESCRIPTION: The Elgin, Joliet & Eastern Railroad viaduct contains several bridges, the most impressive of which are a vertical lift span and a riveted steel plate girder with a span of 120'-0". Starting from the east, the bridges are:

Railroad Bridges

Bridge #201, across the Chicago & Alton (now the Illinois Central Gulf) Railroad tracks, was built in 1913. It is a steel through plate girder bridge 90 feet long. Stone and concrete abutments and riveted steel bents with diagonal cross-bracing support one main span and two approach spans. The bridge has an open deck and carries two tracks.

Bridge #199, across the I&M Canal, was built 1910. It is a single steel plate girder deck bridge 65 feet long. It has an open deck and carries one track.

Bridge #198(A), across an access road to AT&SF Railroad yard, consists of a two-span riveted steel through plate girder bridge 80 feet long. Concrete abutments and one riveted steel bent with diagonal cross bracing support the two spans. It has an open deck and carries one track.

Bridge #198(B) was built in 1906 and is nearly identical to Bridge #198(A). It crosses the AT&SF Railroad tracks.

Bridge #198(C), across the Chicago Sanitary and Ship Canal, is a single track, vertical lift span built in 1933. The lift span is about 240 feet long and rests on cylindrical concrete piers. The steel towers contain the massive cables for lifting the bridge, the sheave wheels, and the pig-iron counterweights. Concrete piers support the two steel plate girder deck approach spans on the west side of the vertical lift bridge. Bridge #198(C) is one of five vertical lift railroad bridges built to replace fixed plate girder or through truss bridges and to accommodate navigation on the Illinois Waterway between Joliet and Ottawa.

Bridge #198(D), across the Des Plaines River, was built in 1926 and consists of a single-tracked, steel plate girder deck bridge 120'-10" long. Stone and concrete piers support the plate girder which contains a ballasted concrete deck. Bridge #198(D), when built in 1926, was the longest ballasted concrete deck plate girder railroad bridge in existence.

HISTORY: The EJ&E Railroad bridges in the Joliet, Illinois area were initially constructed between 1890 and 1910. The EJ&E, a subsidiary of the Illinois Steel Company (later United States Steel), contracted with the American Bridge Company, the steel fabrication division of U.S. Steel, for the construction of these bridges.

EJ&ERR: U.S. Steel Coke Plant Bridge

RATING: 3

east side of Collins Street, north of the Joliet State prison,
Joliet (vicinity)

Construction Date: ca. 1900

UTM: Joliet Quad. 16 N.4600910 E.414042

DESCRIPTION: Formerly a railroad viaduct, this structure contains nine I-beam girder spans and two plate girder spans. It measures about 1,000 feet in length and is about 15 feet wide. Steel bents support the superstructure.

HISTORY: This structure formerly served as a railroad bridge for the EJ&ERR into the U.S. Steel plant and was converted to a vehicular bridge presumably when the coke works were dismantled. Still in use as a private access road to a mobile-home court and a garage located at the old coke plant site, this simple steel viaduct is the only one of its kind in the Heritage Corridor.

SOURCES:

"The Illinois Steel Company's Joliet Extensions," Iron Age, v. 78 (November 15, 1906), 1287-1295.

ICRR: Illinois River Bridge

RATING: 1

crossing the Illinois River, LaSalle

Construction Date: 1855, rebuilt in 1893 & 1932

UTM: LaSalle Quad. 16 E.325680 N.4576420

DESCRIPTION: A multi-span railroad bridge, sixteen of the spans are steel Pratt deck trusses built in 1893, each approximately 150 feet long and containing pin connections. The main span is a Parker through truss erected in 1932 by McClintic Marshall Corporation of Pottstown, Pennsylvania, and measures approximately 300 feet in length. It contains riveted gusset plate connections. In addition, three steel plate girder spans, built in 1920, are adjacent to the main span. Each measures 60 feet in length. The south approach consists of a large earth-filled embankment. The deck trusses are supported on ashlar sandstone piers (1853-5); the through truss is supported on reinforced concrete piers (1932). The bridge carries a single track.

HISTORY: The Illinois Central Railroad's crossing of the Illinois River at LaSalle dates from 1853-55, when the first continuous north-south rail line through Illinois was under construction. The original bridge consisted of a series of cast and wrought iron Howe deck

Railroad Bridges

trusses resting on ashlar sandstone piers. One of its northernmost spans crossed the I&M Canal and the Chicago, Rock Island & Pacific Railroad. The achievement of spanning the Illinois River in the 1850s was perhaps overshadowed by labor unrest, social tensions between Irish Catholic immigrants and native Americans, and cholera epidemics, all of which occurred during the bridge's construction. Following its completion in 1855, the bridge served the Illinois Central for nearly forty years. In 1893 its superstructure was fully reconstructed with pin-connected, steel Pratt deck trusses. Rail service remained uninterrupted during the reconstruction. With the opening of the Illinois Waterway in 1933, two deck trusses were replaced with a single through truss span. The single-tracked bridge served rail traffic through the 1970s. Recently, the Illinois Central Gulf Railroad abandoned this section of the line and retired the bridge from service.

SOURCES:

LaSalle Centennial Committee, LaSalle, Illinois: An Historical Sketch (LaSalle, IL: n.p., 1952), 35-7.

Mark Wyman, Immigrants in the Valley: Irish, Germans, and Americans in the Upper Mississippi Country, 1830-1860 (Chicago: Nelson Hall, 1984), 177-80.

Carlton J. Corliss, Trails to Rails: A Story of Transportation Progress in Illinois (Chicago: n.p., 1934), 34-7.

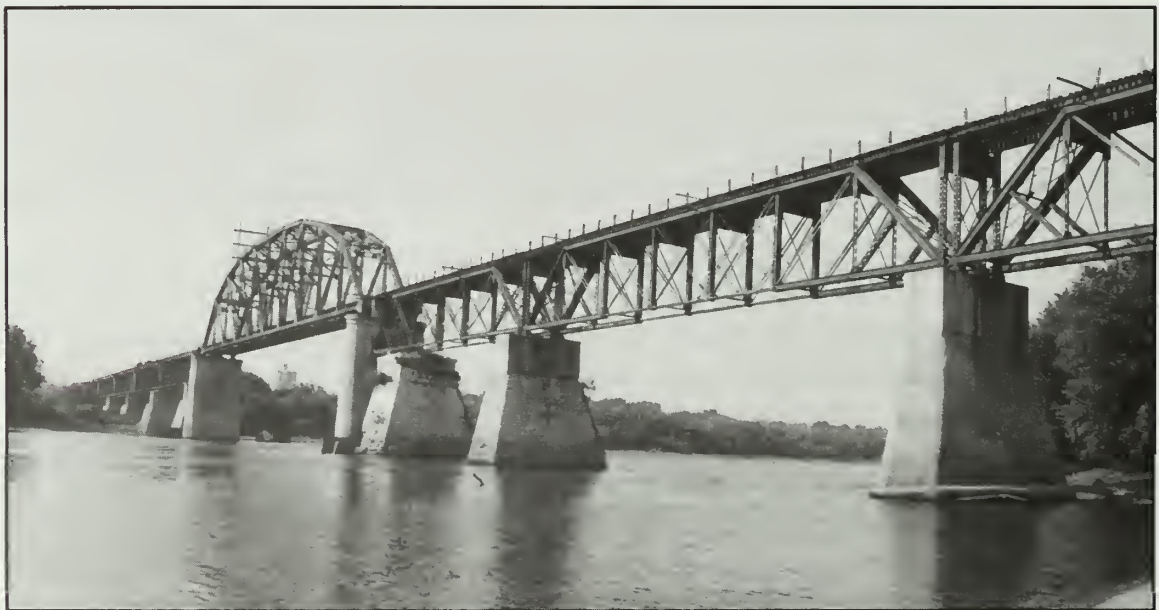


Photo 37. Illinois Central Railroad: Illinois River Bridge (1855, rebld. 1893, 1932), LaSalle.

Photo by Frances Alexander, HAER.

IHBRR, B&CTRR, GTWRR: Calumet-Sag Bridges

RATING: 3

Calumet-Sag Channel, Blue Island (vicinity)

Construction Date: ca. 1935, rebuilt 1964-65

UTM: Blue Island Quad. 16 E.442800 N.4611170

HISTORY AND DESCRIPTION: All five bridges are identical and employ double tracks, except for the center bridge, which has only a single track. The Indiana Harbor Belt Railroad and the Baltimore & Chicago Terminal Railroad rail bridges are adjacent to each other on the western side of the group, while the three bridges to the east are the property of the Grand Trunk Western Railroad. The bridges are steel, fixed span through bridges with Pratt trusses. Members are connected by riveted gusset plates. They consist of plates and angles forming I-beams. Each bridge has one main span 150 feet long and two approach spans each 15 feet long. The bridges have concrete piers, abutments, retainer walls and fenders. There is a concrete culvert west of the bridges on the north bank.

SOURCES:

E.J. Kelly, "Construction of the Calumet-Sag Channel," Engineering News, v. 69 (New York: 23 January 1913), 146-50.

Calumet Sag Waterway Opposed," Railway Age, v. 91 (New York: 14 November, 1931), 740-42, 757-58.



Photo 38. IHBRR, B&CTRR, GTWRR: Calumet-Sag Bridges (ca. 1935, rebuilt 1964-65), Blue Island.
Photo by Frances Alexander, HAER.

Railroad Bridges

INRR: Chicago Drainage Canal Bridge

crossing the Sanitary and Ship Canal,
east of Pulaski Avenue, Chicago

RATING: 2

Construction Date: 1899

UTM: Englewood Quad. 16 E.440680 N.4630780

DESCRIPTION: This single span was formerly a center-pivot swing bridge, but is now a fixed span 327'-8" in length. The superstructure consists of a steel, pin-connected Pratt through truss, with eyebar tension members and riveted plates and channel sections forming the compression members. It has plate girder floor beams, ashlar limestone abutments and has two tracks. The stone capped concrete center pivot is 33'-8" in diameter and supports a 28'-0" diameter turntable.

HISTORY: This was one of fifteen bridges initially constructed over the Chicago Drainage Canal in 1899, with the Sanitary District of Chicago supervising the design and construction of these bridges. The Carnegie Steel Company supplied the steel for the bridge. By 1906 one fixed truss and fourteen swing bridges crossed the Chicago Drainage Canal (later called the Sanitary and Ship Canal). This bridge is one of the seven surviving 1899 swing bridges across the canal. It is currently owned by the Atchison, Topeka & Santa Fe Railroad.

Joliet Track Elevation Project

various railroads through Joliet

RATING: 2

Construction Date: 1908-1912

HISTORY AND DESCRIPTION: In 1903 Joliet, Illinois ordered the five railroads serving the city to elevate sections of their tracks to eliminate the delays and dangers faced by pedestrians and wagons at downtown grade crossings. The railroads resisted this directive until 1908 when the Rock Island, Atchison, Topeka & Santa Fe, Chicago & Alton Railroad, and Michigan Central railroad elevated their tracks and constructed a single Union Depot to serve all Joliet passenger trains. Tracks were elevated using sand fill between unreinforced, mass concrete retaining walls and bridge abutments. Most of the Joliet track elevation bridges were built with steel girders, with some employing intermediate pier supports, I-beam floors, and waterproofed concrete decks with rock ballast. This system not only drained water to one end of the bridge, but also provided smoother and safer track operation as well as reducing noise and vibration.

Track elevation was designed to reduce interruptions to street traffic and the number of accidents, injuries, and deaths at railroad grade crossings. Track elevation began in Chicago in 1892 when the Illinois Central Railroad elevated its Hyde Park line to provide swift,

frequent, and uninterrupted service to the 1893 World's Columbian Exposition. Joliet and Chicago were the only two Illinois cities to require track elevation during the first two decades of the 1900s. The Joliet Union Depot, listed on the National Register of Historic Places, is the centerpiece of the track elevation project.

AT&SFRR: Scott Street and Liberty Street Bridge (1908): Carrying the Santa Fe across Scott and Liberty streets in Joliet, this four-span steel plate deck-girder bridge has a total length of approximately 180 feet. Erected in 1908 by the American Bridge Company, it is aligned on an extreme skew. The two main spans each measure about 60 feet in length and are supported on steel bents; the approach spans, each measuring about 18 feet long, extend from the steel bents to concrete abutments. The bridge carries two tracks.

AT&SFRR: Scott Street and Ohio Street Bridge (ca. 1909): Carrying the Santa Fe across Scott and Ohio streets in Joliet, this three-span steel plate deck-girder bridge has a total length of approximately 65 feet. It is aligned on a slight skew. The main span measures about 40 feet in length and rests on steel bents; the approach spans, each about 12 feet long, extend from the steel bents to concrete abutments. The bridge carries two tracks.

AT&SFRR and C&A RR: Fourth Street Bridge (ca. 1909): Carrying the Santa Fe and the Chicago & Alton railroads across Fourth Street, west of the Illinois Central Gulf Railroad at Eastern Avenue in Joliet, this three-span steel plate through-girder bridge has a total length of 76'-9". The main span measures 35'-9" and rests on steel bents; the approach spans, each measuring 18'-2" in length, extend from the steel bents to concrete abutments. The bridge carries two tracks and retains its "GMO" (Gulf, Mobile & Ohio) marker, as well as the sign "4 Trains to St. Louis."

AT&SFRR and C&ARR: Fifth Avenue Bridge, (1910): Carrying the Santa Fe and the Chicago & Alton across Fifth Street, west of the Illinois Central Gulf Railroad in Joliet, this three-span steel plate deck-girder bridge has a total length of 71'-0" and is supported on steel bents and concrete abutments. It carries four tracks.

AT&SFRR and C&ARR: Osgood Street Bridge, (1910): Carrying the Santa Fe and the Chicago & Alton across Osgood Street, west of York Street in Joliet, this three-span steel stringer (I-beam) bridge has a total length of 72'-4" and is supported on steel bents and concrete abutments. Originally it carried six tracks, but now carries only four.

AT&SFRR and C&ARR: Jefferson Street Bridge, (1910): Crossing Jefferson Street in Joliet, this four-span steel stringer (I-beam) bridge has a total length of 72 feet and is supported on steel bents and concrete abutments. The fascia stringers are of reinforced concrete. Originally the bridge carried six tracks, but now carries only four.

AT&SFRR and C&ARR: Michigan Street Bridge, (1910): Crossing Michigan Street at

Railroad Bridges

its intersection with Cass Avenue in Joliet, this four-span steel stringer (I-beam) bridge has a total length of 72 feet and is supported on steel bents and concrete abutments. Originally it carried six tracks, but now carries only four.

EJ&ERR: Broadway Bridge, (1923): Carrying the Elgin Joliet & Eastern Railroad across Broadway in Joliet, this two-span steel plate deck-girder bridge is aligned on a slight skew and measures about 60 feet in length. Known by the EJ&ERR as Bridge No. 197.5, it rests on steel bents and concrete abutments and carries four tracks.

EJ&ERR: Collins Street Bridge, (1910): Carrying the Elgin Joliet & Eastern Railroad across Collins Street in Joliet, this two-span steel plate deck-girder bridge is aligned on a slight skew and is about 65 feet long. Known by the EJ&ERR as Bridge No. 202, it was erected by the American Bridge Company in 1910. The bridge rests on steel bents and combination ashlar limestone and concrete abutments and carries four tracks.



Photo 39. Joliet Track Elevation: Rock Island Railroad's Washington Street Bridge (ca. 1912), Joliet.
Photo by Joseph DeRosa, HAER.

RIRR and MCRR: Washington Street and York Street Bridges (ca. 1912): Carrying the Rock Island Railroad and the Michigan Central across Washington Street at York Street in Joliet, Illinois, this viaduct is aligned on a curve and contains a three-span steel plate girder bridge and a seven-span reinforced-concrete girder bridge. The steel structure measures about 80 feet in length, and the total length of the concrete spans is about 150 feet. This viaduct permitted the interchange of traffic between the Rock Island and Michigan Central railroads running east to west and the Chicago & Alton and Santa Fe railroads running north to south.

R I RR and M C RR: Chicago Street Bridge, (ca. 1912): This bridge carries the old Rock Island Line and Michigan Central Railroad across Chicago Street, north of Lafayette Street in Joliet. It is a three-span steel plate girder bridge with a total length of 50 feet. The bridge rests on steel bents and reinforced concrete abutments. The super-structure is composed of I-beam floor beams, a ballasted concrete deck, and concrete fascia girders. It originally carried four tracks, but now has only two.

RIRR and MCRR: Michigan Street Bridge, (ca. 1912): This elevated rail of the old Chicago, Rock Island & Pacific Railroad and Michigan Central Railroad crosses Michigan Street in Joliet. It contains two steel plate deck girder bridges. The bridge to the north is a three-span steel plate girder bridge measuring 60 feet in length and carrying a single track. It rests on steel bents and concrete abutments. The plate girders support a ballasted reinforced concrete deck. The three-span bridge to the south carries two tracks and is 60 feet long.

RIRR and MCRR: Richards Street Bridge, (ca. 1912): Crossing Richards Street in Joliet, this slightly skewed steel plate deck-girder bridge contains one main span and two approach spans. The bridge is 70 feet long and originally carried four tracks. The main span measures 40 feet in length and rests on steel bents. Only one track is now used.

RIRR and MCRR: Eastern Avenue Bridge, (ca. 1912): Crossing Eastern Avenue in Joliet, this slightly skewed steel plate deck-girder bridge contains one main span and two approach spans. The bridge is 70 feet long and originally carried four tracks. The main span measures 40 feet in length and rests on steel bents. Only one track is now used.

RIRR and MCRR: Ottawa Street Bridge, (ca. 1912): Crossing Ottawa Street in Joliet, this moderately skewed steel plate girder bridge contains one main span and two approach spans. The bridge is 75 feet long and is nearly 60 feet wide. It rests on steel bents and concrete abutments. Originally the bridge contained four tracks, but now only one is used.

Railroad Bridges

RIRR and MCRR: Scott Street Bridge, (ca. 1912): Crossing Scott Street at its junction with New Street in Joliet, this 60-foot wide reinforced concrete deck-girder bridge contains a single span measuring 25 feet in length. Originally it carried six tracks. It rests on concrete abutments.

RIRR and MCRR: Henderson Street Bridge, (ca. 1912): Crossing Scott Street in Joliet, this steel plate deck-girder bridge, with concrete fascia girders, contains two spans. The roadway span measures 40 feet in length and the sidewalk span 8 feet in length. The bridge is nearly 40 feet wide and originally carried six tracks. Only one is now in service. It rests on steel bents and concrete abutments.

SOURCES:

R.A. Cook, "Track Elevation of the Chicago & Alton R.R. At Joliet, Ill.," Illinois Society of Engineers and Surveyors Journal, (1913), 192-199.

"Design of Joliet Interlocking," Railway Age Gazette, v. 57 (September 4, 1914), 434.

"Grade Separation in Joliet, Ill.," Railway Age Gazette, v. 48 (March 16, 1910), 627-629.

"Joliet, Ill.," Engineering Record, v. 47 (February 21, 1903), 213.

"Newly Completed Union Station at Joliet," Engineering Record, v. 67 (January 18, 1913), 74-75.

"Rock Island Interlocking Plant at Joliet," Railway Age Gazette, v. 57 (August 28, 1914), 381-383.

"Track Elevation at Joliet, Ill.," Engineering News, v. 69 (May 8, 1913), 952-955.

"Union Station and Grade Separation in Joliet," Railway Age Gazette, v. 52 (April 5, 1912), 789-795.

Illinois Central Gulf Railroad, Office of Chief Engineer, "Chicago Division Condensed Profile," Chicago, 1981.

PCC&StLRR, C&NPRR, ISY&TRR: Chicago Drainage Canal Bridges **RATING: 1**
across Sanitary and Ship Canal, west of Western Avenue, Chicago **Construction Date: 1901, 1909**

UTM: Englewood Quad. 16 E.442950 N.4631740

DESCRIPTION: These four parallel single-leaf, Scherzer rolling lift bascule bridges each contain double tracking. The lift bridges are approximately 140 feet long and originally carried the Pittsburgh, Cincinnati, Chicago & St. Louis Railroad, the Illinois Stock Yards & Transit Railroad, and the Chicago & Northern Pacific Railroad railroads across the Chicago Drainage Canal. The substructure consists of ashlar limestone piers capped with concrete. Riveted-steel Warren trusses, erected in 1901, serve as the approach spans. The lift spans are through Warren trusses with inclined top chords. The bridge is now fixed and has the lowest vertical clearance (16'-0") of any bridge crossing the Sanitary and Ship Canal.

HISTORY: The original design for this bridge called for a 399'-0" long, 116'-0" wide, swing bridge pivoting on a 78'-7" diameter center pier to be placed across the Chicago Drainage Canal. The three railroads crossing at this point were opposed to this design, fearing that damage to any part of the bridge would close the span to all three railroads. A request by the Sanitary District for competitive bids brought new designs and litigation. The construction contract was eventually awarded to the Scherzer Rolling Lift Bridge Company. Scherzer designed the crossing as four parallel double-tracked double-leaf bridges to be built as four through truss spans but with pin connections permitting an eventual transformation into double-leaf rolling-lift spans.

Each bridge was erected as a three-hinged through truss bridge with one pin at the center of the span in the upper chord, one pin at the intersection of each lower chord, and the end post over the pier. As the 1909 deadline neared for converting fixed bridges to movable spans, it was decided that four new single-leaf, rolling lift-spans could be built for slightly more than the cost of modifying the existing through-truss bridges. In addition, single-leaf bridges also had lower operating costs, avoiding the need for two sets of operating machinery for each bridge.

In 1908 a contract was awarded to Chicago Bridge & Iron Works to erect new single-leaf spans using the existing approach spans and piers. Since the piers were inadequate to accommodate the width of the track girder required by the rolling-lift span, a new pier was built behind each of the existing piers, and a plate and track girder were installed to span the two piers. Except for this modification the approach spans were not altered.

The history and configuration of the "eight track" crossing is the most unusual one encountered in the I&M Canal National Heritage Corridor. The four bridges, with inclined top chords, somewhat streamlined counterweights, and counterweights alternating between north and south piers, possess a graceful, triangular symmetry. The incorporation of the existing approach spans into the new crossing reduced construction costs. The use of a single leaf reduced future operations and maintenance costs. From an engineering standpoint, alternating the counterweights between north and south piers reduced the compression on the piers. Although the piers were strong enough to accommodate the increased load of the counterweights, it was decided that there was insufficient room to place the operating machinery of the adjacent spans on the same pier. Consequently, the placement of the counterweights was alternated between north and south piers. Beginning with the easternmost span on July 12, 1909, construction proceeded with one span being modified at a time until the last of the spans was returned to full service on October 2, 1909. The bridge continues to serve rail traffic.

Railroad Bridges

SOURCES:

"An Eight-Track Rolling Lift Bridge," Railway Age, (May 25, 1900), 526-528.

C.R. Dart and S. T. Smetters, "The Eight-Track Bascule Bridge at Campbell Avenue, Chicago," Journal of the Western Society of Engineers, v. 15 (August, 1910), 513-528.

"Eight-Track Rolling-Lift Drawbridge Over the Chicago Drainage Canal," Engineering News, v. 43 (May 24, 1900), 338-339.

"Eight-Track Scherzer Bridge," Railway Age Gazette, v. 48 (March 15, 1910), 565-567.

"Electrical Operation of Eight-Track Lift Bridge," Electrical World, v. 55 (April 14, 1910), 938-939.

"Erection of an Eight-Track Rolling Lift Bridge," Engineering Record, v. 62 (August 13, 1910), 192-194.

Isham Randolph, "The Salient Features of the Chief Engineer's Annual Report of the Drainage Canal of the Sanitary District of Chicago for 1898," Journal of the Western Society of Engineers, v. 4 (August, 1899), 317-334.

"Rebuilding a Double-Leaf Bascule Bridge as a Single-Leaf Bascule," Engineering News, v. 64 (October 13, 1910), 397.

"The 8-Track Railway Drawbridge," Engineering News, v. 39 (April 7, 1898), 231; v. 40 (October 20, 1898), 241; v. 40 (November 10, 1898), 289; v. 43 (March 1, 1900), 137.

"The Eight-Track Scherzer Rolling Lift Bridge at Chicago," Engineering Record, v. 41 (May 26, 1900), 491-492.

C. Arch Williams, The Sanitary District of Chicago: History of its Growth and Development (Chicago: The Sanitary District of Chicago: 1919).

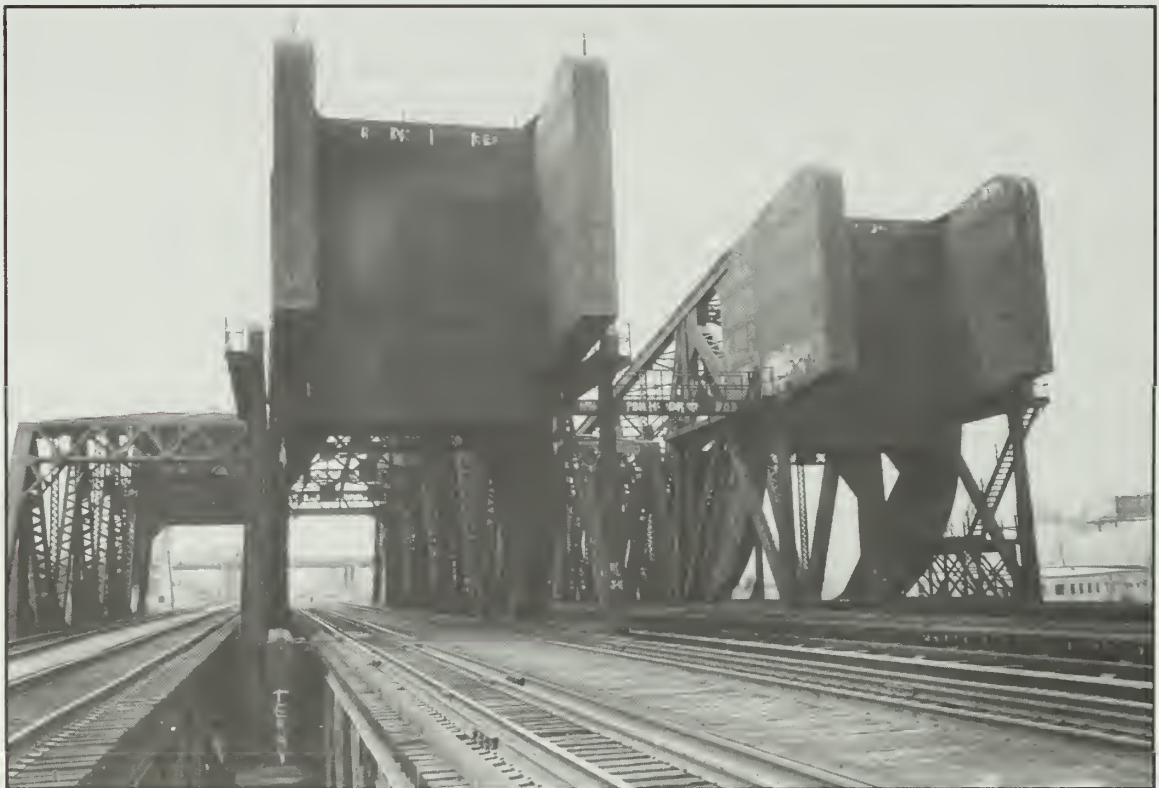


Photo 40. PCC&StLRR, C&NPRR, ISY&TRR: Chicago Drainage Canal Bridges (1901, 1909), Chicago.

Photo by Jet Lowe, HAER.



Photo 41. PCC&StLRR, C&NPRR, ISY&TRR: Chicago Drainage Canal Bridges (1901, 1909), Chicago.
Photo by Jet Lowe, HAER.

PRR: S. Branch Chicago River Bridge

crossing the Chicago River (South Branch), east of Canal Street, Chicago

RATING: 1

Construction Date: 1915

UTM: Englewood Quad. 16 E.447160 N.4633600

DESCRIPTION: This is a double-tracked vertical lift bridge of the Waddell and Harrington type. The lift span measures 272'-10" in length and consists of a Pratt through truss with riveted gusset plate connections. The lift towers, 195 feet high, are supported by concrete piers. The original bridge tender's cabin is located on the upper chord of the lift span and contains corrugated-metal siding and a gable roof. The current bridge tender's cabin is a two-story brick building located twenty feet southeast of the south lift tower.

HISTORY: This bridge was designed by Waddell and Harrington, consulting engineers, for the Pennsylvania Railroad. It was fabricated and constructed by the Pennsylvania Steel Company, Steelton, Pennsylvania. After the two lift towers were erected, the 1,500 ton main lift span was placed in the elevated position 130 feet above the water. Timber falsework was used to erect the bridge in the open position. Engineers chose this approach for constructing

Railroad Bridges

the bridge because of the need to keep the existing center-pier swing-span in operation until the new bridge was completed. Upon its completion in 1915, the new movable bridge had the heaviest (1,500 ton) main span of any vertical lift bridge. This bridge is currently maintained by AMTRAK.

SOURCES:

W.J. Howard, "Erection of a Cable Lift Bridge," Engineering News, v. 70 (September 11, 1913), 500-501.

"Modern Drawbridges Attain Great Weights and Spans," Engineering News-Record, v. 80 (May 2, 1918), 860.

"Replacing a Swing Bridge With a Vertical Lift Structure," Railway Age Gazette, v. 57 (August 21, 1914), 353-354.

W. L. Smith and W.W. Priest, "The Design and Erection of the Pennsylvania Lift Bridge No. 458 Over the South Branch of the Chicago River," Journal of the Western Society of Engineers, v. 20 (May, 1915), 478-500.

"Special Conditions Govern Selection of Lift Bridge and Methods of Erection," Engineering Record, v. 71 (May 15, 1915), 611-613.

"The Cable Lift Drawbridge," Engineering News, v. 72 (August 6, 1914), 291.



Photo 42. PRR: S. Branch Chicago River Bridge (1915), Chicago.
Photo by Jet Lowe, HAER.

RIRR: Des Plaines River Bridge

RATING: 2

crossing the Des Plaines River south of Jefferson Street, Joliet

Construction Date: 1932

UTM: Joliet Quad. 16 E.409260 N.4596880

DESCRIPTION: This subdivided Warren through truss, vertical lift bridge is 302 feet long and 32 feet wide. Of the two through truss approach spans, the east span is 100 feet long and the west span 150 feet long. The bridge carries two tracks and rests on concrete piers and abutments. The lift span has a 9'-6" vertical clearance when lowered and a 59'-6" vertical clearance when raised. Atop each lift tower are two thirty-seven ton, thirteen-foot diameter sheave wheels, each with sixteen 2-¼" diameter steel lift cables. The bridge counterweights are of pig iron and concrete. The bridge tender's cabin is on the east bank of the Des Plaines River.

HISTORY: This bridge replaced a five-span through truss bridge built in 1900, and was designed to accommodate the increased vertical clearance required by navigation on the Des Plaines River section of the Illinois Waterway. The American Bridge Company furnished and fabricated the steel and the Ketler-Elliot Company of Chicago erected the bridge superstructure. Placed in full operation in 1932, this is one of four vertical lift railroad bridges crossing the Illinois Waterway. All four bridges were erected on the sites of existing fixed through truss bridges. The Rock Island Railroad's Des Plaines River Bridge in Joliet featured an innovative design for the location of its lifting machinery. Instead of placing the lifting machinery on top of the movable span, as was commonly done, the machinery was installed on the lift towers. Importantly, this placement not only relieved the main span of the weight of the lifting machinery, but also simplified the cable lift configuration. The precedent for this design was a Rock Island Railroad bridge erected across the White River in DeValls' Bluff, Arkansas in 1927.

SOURCES:

"Convert Old Fixed Spans Into Vertical Lift Spans," Railway Age, v. 97 (August 11, 1934), 168-171.

"Direct Hoist Lift Bridge; Rock Island Lines," Engineering News-Record, v. 99 (November 3, 1927), 705-708.

"Rock Island Lift Bridge Erected on Old Fixed Spans," Engineering News-Record, v. 109 (August 25, 1932), 227-230.

Railroad Bridges



Photo 43. RIRR: Des Plaines River Bridge (1932), Joliet.
Photo by Martin Stupich, HAER.

R I RR: DuPage River Bridge

crossing the DuPage River, Channahon (vicinity)

RATING: 3

Construction Date: ca. 1910

UTM: Channahon Quad. 16 E.399090 N.4591560

DESCRIPTION: These two parallel bridges each have four spans, with each span approximately 60 feet long and carrying a single track. The bridges are riveted steel plate girders (covered with tar) resting on concrete and stone piers. (The middle pier contains both ashlar limestone and concrete; the two piers flanking it are of reinforced concrete.) Concrete abutments exist on the east and west river banks. The southernmost bridge is now abandoned.

HISTORY: As with several other nearby Rock Island Railroad bridges, this span was probably erected about 1910 by the American Bridge Company of New York. Between 1900 and 1920, the Rock Island Railroad undertook the replacement of a number of its iron

bridges with riveted steel plate girder spans. Interestingly, for its larger river crossings in Central Illinois, the Rock Island opted to construct two parallel plate girder spans, each with single tracking, rather than to erect a single plate girder bridge with double tracking. (See entry of RIRR: Fox River Bridge.)

RIRR: Fox River Bridge

crossing the Fox River, Ottawa

RATING: 3

Construction Date: 1919, ca. 1970

UTM: Ottawa Quad. 16 E.347070 N.4579430

DESCRIPTION: Each of the two parallel bridges has five spans. The southernmost bridge consists of five riveted-steel, through plate girders, each measuring approximately 75 feet in length; the northern and southern spans share the same ashlar sandstone piers. These were probably constructed in the late nineteenth century; one pier has been reconstructed with concrete. The northernmost bridge contains four recently constructed welded steel plate girders and one 1919 riveted steel plate girder; each span is also approximately 75 feet long. Both bridges contain a single track.

HISTORY: This line, now operated by the Chessie System, was once part of the original Chicago, Rock Island & Pacific Railroad that was completed from Chicago to LaSalle in 1854. The present steel-plate girder bridge crossing the Fox River was erected in 1919 by the American Bridge Company (of New York) using the ashlar sandstone piers (probably dating from the 1870s) of the old bridge. The riveted steel-plate girder was commonly used in the construction of late nineteenth and early twentieth century railroad bridges with span lengths of from 20 to 100 feet. Numerous plate girder bridges dating from this period may be found in the Heritage Corridor.

SOURCES:

Dwight L. Agnew, "Beginning of the Rock Island Lines," Illinois State Historical Society Journal, v. 46 (1953), 407-24.

Nameplate on plate girder span.

Railroad Bridges

RIRR: I&M Canal Bridge

crossing the I&M west of Main Street, Marseilles

RATING: 2

Construction Date: ca. 1900

UTM: Marseilles Quad. 16 E.365730 N.4576410

DESCRIPTION: This steel plate-girder swing span is approximately 90 feet long and carries a single track. The swing span was manually operated with a "tee" wrench, with drive shafts linking the central mechanism to the ends of the bridge. The central mechanism has gears, shafts, cams, and cog wheels resting on a circular concrete pad. Riveted steel plate girders were fabricated by the Illinois Steel Company of Joliet.

HISTORY: Erected about 1900, this plate-girder swing span originally carried a Rock Island Railroad spur across the I&M Canal and into the paper mills of Marseilles. It replaced an earlier (ca. 1870s) wrought-iron truss swing bridge. The Illinois Steel Company of Joliet fabricated the steel plate girders. For many years the bridge was privately owned and manually operated. Though it has been abandoned, the bridge retains its original swing mechanisms. One other nearly identical swing bridge crossing the I&M is located west of Rockdale.

SOURCES:

Sanborn Map Co., Marseilles, Illinois (New York: The Sanborn Map Co., 1889, 1898, 1907, 1913, 1929).
Historical Booklet Committee, "Marseilles Sesquicentennial, 1835-1985", (Coal City, IL: Bailey Printing Co., 1985).

RIRR: I&M Canal Bridge

crossing the I&M Canal, Morris

RATING: 2

Construction Date: ca. 1905

UTM: Morris Quad. 16 E.379700 N.4579040

DESCRIPTION: This single span, triple-intersection Warren through truss bridge is about 130 feet long and carries a single track. It contains riveted gusset plate connections. The lower chords are fabricated with steel angles while the upper chords are fabricated with steel angles and plates. The floor beams are of steel riveted angles and plates. A wood pedestrian decking with 6" x 2" diagonal planking has recently been added. The truss is supported at either end by timber pile bents which are located on either side of the canal.

HISTORY: This steel truss bridge carried a Rock Island Railroad spur across the I&M Canal east of Calhoun Street. The spur served such Morris industries as the Morris Paper Company Mills, Woelfel Tannery Company, and the Coleman Hardware Company. The triple intersection Warren through truss bridge is the only surviving example of this bridge type in the Heritage Corridor. The Carnegie Steel Company supplied the steel for the bridge. An identical bridge across the I&M, nearly one mile east of this span, carried a Rock Island spur to the plant of the Morris Paper Mill Company. It was recently torn down.

SOURCES:

Sanborn Map Co., Morris, Illinois
(New York: The Sanborn
Map Co., 1894, 1907, and
1927).

State of Illinois, Division of
Waterways, Photographic
Survey of Illinois &
Michigan Canal, 1959 and
1967 (available at I&M
Canal State Trail Archives,
Gebhard Woods Access,
Morris, Illinois).



Photo 44, RIRR: I&M Canal Bridge (ca. 1905), Morris.
Photo by Timothy Whittaker, HAER.

Railroad Bridges

RIRR: I&M Canal Bridge

crossing I&M Canal west of Johns Manville Company, Rockdale

RATING: 2

Construction Date: 1911

UTM: Joliet Quad. 16 E.404880 N.4594100

DESCRIPTION: This riveted steel, deck plate-girder swing span is about 90 feet long and carries a single track. The swing span is no longer operable.

HISTORY: This manually operated swing bridge was built in 1911 by the American Bridge Company for the Rock Island Railroad. No longer movable, it is used as a rail spur into the Shuller International, Inc. and Caterpillar Corporation tractor factories. The bridge is one of two railroad swing spans crossing the I&M Canal with the pivot pier in the center of the canal prism.

SOURCES:

State of Illinois, Division of Waterways, "Inspection of Structures Along the Illinois and Michigan Canal from LaSalle to Summit, Illinois," 1959, photo 142, (available at the I&M Canal State Trail Headquarters, Gebhard Woods Access, Morris, Illinois).

State of Illinois, Division of Waterways, "Illinois-Michigan Canal Annual Inspection, November 1967," photo 179, (available at the I&M Canal State Trail Headquarters, Gebhard Woods Access, Morris, Illinois).



Photo 45. RIRR: I&M Canal Bridge (1911), Rockdale.
Photo by Timothy Whittaker, HAER.

RIRR: I&M Canal Bridge

Rock Island Railroad spur crossing I&M Canal, Utica

RATING: 2

Construction Date: ca. 1900

UTM: LaSalle Quad. 16 E.331480 N.4578360

DESCRIPTION: This single span, Howe pony truss bridge rests on random range limestone abutments which are capped with concrete. The truss members are connected with riveted gusset plates; the upper chords, lower chords, vertical members, and diagonal members are all fabricated with steel angle sections. The bridge contains single tracking.

HISTORY: A rail spur of the Chicago, Rock Island & Pacific Railroad has crossed the I&M Canal at this location since at least the 1870s. On the north side of the canal, the line served the Utica Fire Brick Company (established in the 1870s or 1880s and abandoned by 1896). On the south side of the canal, just across the bridge, stood the Utica Sewer Pipe & Terra Cotta Company (begun in the 1880s by A.T. Griffin). The spur also served the Utica Hydraulic Cement Company and the town's grain elevators. The Rock Island Railroad erected this riveted steel Howe pony truss bridge across the I&M around 1900. Presently abandoned, it is one of only two Howe truss bridges surviving in the Heritage Corridor (the other one is located in Marseilles) and one of the few extant rail crossings of the I&M Canal.

SOURCES:

Sanborn Map Co., Utica, Illinois (New York: The Sanborn Map Co., 1888, 1891, 1896, 1901, 1909, 1929).

Standard Atlas of LaSalle County, Illinois (Chicago: Brock & Co., 1929).

"Plat of Property in Utica, LaSalle, and Deerpark Township Owned by Utica Hydraulic Cement Company," n.d., available in "Clippings Scrapbook," at LaSalle County Historical Society, Utica, Illinois.

RIRR: Illinois River Bridge

crossing the Illinois River, Seneca

RATING: 2

Construction Date: ca. 1900, rebuilt 1934

UTM: Morris Quad. 16 E.382300 N.4579580

DESCRIPTION: This railroad bridge features two fixed Pratt through truss spans (erected ca. 1900) and one Pratt through truss vertical lift span (1934). All the spans are about 180 feet long and 18 feet wide. The Pratt trusses have vertical members of channel sections with lacing bars and pinned connections. The hipped verticals and diagonals are eyebars while the inclined posts and top chords are laced channel sections. The vertical lift towers contain the pig-iron counterweights. The truss spans are supported by concrete and ashlar sandstone piers. The lift span has a horizontal clearance of 141'-0" and a vertical clearance in the

Railroad Bridges

lowered position of 19'-9" above pool stage and 7'-8" above high water. The vertical clearance in the fully raised position is 47'-5" above pool stage and 35'-4" above high water. In addition to the truss spans, this bridge contains several short-span, riveted-steel plate girders.



Photo 46. RIRR: Illinois River Bridge (ca. 1900, rblt. 1934) Detail of counterweight, Seneca. Photo by Timothy Whittaker, HAER.

HISTORY: This bridge was built around 1900 and was probably part of the Seneca & Kankakee Railroad before its acquisition by the Rock Island Railroad. With the advent of the Illinois Waterway in 1933, a lift span was erected in place of a fixed truss span. The American Bridge Company of New York, New York, fabricated the lift span (of the Waddell and Harrington type). The Strobel Steel Construction Company of Chicago erected the lift span, and I.L. Simmons served as the supervising engineer. The bridge now serves a spur line linking the DuPont Company's plant on the south side of the Illinois River to the mainline at Seneca. The Chessie System presently operates the former Rock Island line.

SOURCES:

U.S. Army Corps of Engineers, Illinois Waterway - (Navigation Chart).
"Convert Old Fixed Spans into Vertical Lift Spans," Railway Age, v. 97 (August 11, 1934).

RIRR: Little Vermillion River Bridge

crossing the Little Vermillion River, east of LaSalle

RATING: 3

Construction Date: 1900, rebuilt 1952

UTM: LaSalle Quad. 16 E.325640 N.4577030

DESCRIPTION: This riveted steel-plate girder railroad bridge crossing the Little Vermillion River east of LaSalle contains three spans, with each being about 50 feet long. Poured concrete abutments and piers cover the original ashlar sandstone. The bridge carries two tracks.

HISTORY: The Chicago, Rock Island & Pacific Railroad was completed from Chicago to LaSalle-Peru in 1854. At the turn of the century the American Bridge Company of New York, erected new steel-plate girder spans using the original ashlar sandstone piers. In 1952 the bridge was rebuilt, with the Bethlehem Steel Company replacing two of the plate girder spans. The new plate girders were virtually identical to the 1900 spans. In addition, the stone piers were encased in concrete. Used by the Chessie System, one track on the bridge remains in service.

SOURCES:

Dwight L. Agnew, "Beginning of the Rock Island Lines," Illinois State Historical Society Journal, v. 46 (1953), 407-24.
LaSalle Centennial Committee, "LaSalle, Illinois: An Historical Sketch" (LaSalle, IL: n.p., 1952), 35-7.
Nameplates on bridge.

Railroad Bridges

RIRR: Nabisco Bridges

RATING: 2

crossing power canals, at Nabisco paper mill, Marseilles

Construction Date: 1888, 1910, ca. 1950

UTM: Marseilles Quad. 16 E.356780 N.4576160

DESCRIPTION: Two late nineteenth century railroad bridges span the headrace of the Marseilles power canal; each is a spur of the Rock Island Line and carries a single track. The bridges are:

A single span Howe pony Truss railway bridge measuring about 96 feet long and 20 wide, with spans constructed of riveted laced channels and angles and riveted gusset plate connections. The bridge has wood decking with unused rails on top. The nameplate reads: "1888, M. Lassig, Builder, Chicago, Illinois."

A single span Howe pony truss bridge, erected ca. 1900, measuring about 80-90 feet long and 20 feet wide and constructed of riveted plates, channels and lattice work.

HISTORY: Of these four spans crossing the Marseilles power canal, the Howe pony truss bridge, erected in 1888 by the Lassig Bridge Company of Chicago, is the most significant. This bridge is one of the oldest in the Heritage Corridor. For late nineteenth century bridges, the Howe truss is far less common than the ubiquitous Pratt and Warren truss types.

RIRR: Pecamsaugan Creek Bridge

RATING: 3

crossing Pecamsaugan Creek, west of Utica

Construction Date: ca. 1900

UTM: LaSalle Quad. 16 E.3288100 N.4578070

DESCRIPTION: This steel half-deck, slightly skewed, girder bridge contains two spans, each approximately 55 feet long (total length 110 feet). The single tracked (formerly double tracked) bridge rests on concrete piers and abutments.

HISTORY: The first crossing of the Chicago, Rock Island & Pacific Railroad at Pecamsaugan Creek dates from about 1854 when the rail line from LaSalle to Chicago was first completed. This two-span bridge is similar to the Rock Island bridge crossing the Little Vermillion River. It was probably built by the American Bridge Company of New York, around 1900. (See entry of RIRR: Little Vermillion River Bridge.)

SOURCES:

Dwight L. Agnew, "Beginning of the Rock Island Lines," Illinois State Historical Society Journal, v. 46 (1953), 407-24.

RIRR: Split Rock Tunnel

west of Utica, north side of I&M Canal at Canal Station, Utica

RATING: 1

Construction Date: ca. 1853

UTM: LaSalle Quad. 16 E.331340 N.4578060

DESCRIPTION: This unlined railroad tunnel, through a large outcrop of sandstone at Split Rock, was constructed by drilling and blasting. Measuring approximately 160 feet long and 25 feet wide, it carried a single track paralleling the I&M Canal. Most of the tunnel is unlined, with the exception of a rough-cut coursed limestone retaining wall along the eastern one-quarter of the north wall and a poured concrete retaining wall at the base of the southeast portal.

HISTORY: Constructed about 1853, this tunnel at Split Rock, about one-mile east of LaSalle, was part of the original Chicago, Rock Island & Pacific Railroad which paralleled much of the I&M Canal between LaSalle and Joliet. It carried a single track and is about 160 feet long. When the Rock Island Line was rerouted to the south of the tunnel in the late nineteenth century, the tunnel was abandoned. It is one of the earliest extant railroad tunnels in the region.

SOURCES:

Berle A. Clemensen, Illinois & Michigan Canal National Heritage Corridor, Illinois: Cultural Inventory, History and Significance (Denver: National Park Service, Denver Service Center, 1985) M.S. prepared for National Park Service, Denver Service Center, 1985.

John W. Huett, The Geology of LaSalle County, The Past and Present of LaSalle County, (Chicago: H.F. Kett & Co., 1877), 229.

Railroad Bridges

RIRR: Utica Spur Line

west of Washington Street, Utica

RATING: 2

Construction Date: ca. 1880s

UTM: LaSalle Quad. 16 E.331340 N.4578060

DESCRIPTION: This 1880s spur line features an earth embankment approximately 2,000 feet long and a skewed stone-arch culvert approximately 15 feet long and 40 feet wide.

HISTORY: This spur line of the Rock Island Railroad served the late nineteenth century cement works of the Clark family (see entry of Utica Hydraulic Cement Company). The line crossed the I&M Canal west of Washington Street and extended nearly one-half mile along an earth embankment. A series of lime quarries were adjacent to the rail spur which ran to the warehouse and storage silo of the cement company. The spur features a skewed stone arch spanning about 15 feet. The cement works and the rail line were abandoned in the 1930s.

SOURCES:

Sanborn Map Co., Utica, Illinois (New York: The Sanborn Map Co., 1888, 1891, 1896, 1901, 1909, 1929).

"Utica Bricklayers Cement", (n.p., n.d.); a copy of this ca. 1925 company promotional publication is in the possession of Mrs. Lucille Keating, a former resident of Ottawa, Illinois.

Philip E. Vierling, Hiking the Illinois & Michigan Canal (Chicago: Dandellis Printing, 1986), 153-60.

Plat of Property in Utica, LaSalle, and Deerpark Township Owned by Utica Hydraulic Cement Company," n.d., available in "Clippings Scrapbook," at LaSalle County Historical Society, Utica, Illinois.

StCALRR: 18th Street Bridge

crossing South Branch of Chicago River north of W. 18th Street
adjacent to Carson, Pirie, Scott Company Warehouse, Chicago

RATING: 2

Construction Date: 1919, 1931

UTM: Englewood Quad. 16 E.447380 N.4634320

DESCRIPTION: This single-leaf Strauss trunnion bascule bridge measures 260 feet between trunnions and end bearings. The superstructure consists of a steel subdivided Warren through truss with riveted gusset-plate connections. It rests on concrete abutments and carries two tracks.

HISTORY: Designed by A.S. Baldwin, Chief Engineer of the Illinois Central Railroad, this single-leaf Strauss trunnion bascule bridge was completed in 1919 and replaced a late nineteenth century center-pier swing span. The Ferro Construction Company began construction on this bridge in 1918 and completed the job the following year. The American

Bridge Company of New York, fabricated the steel. The bridge was originally located on the west side of the South Branch of the Chicago River and was designed to be rotated in place. It was anticipated that the bridge would eventually be transferred to a new trunnion pier to be built on the east side of the proposed straightened channel of the South Branch of the Chicago River. In 1931 when the river was finally straightened, the St. Charles Air Line Railroad retained the Strobel Steel Construction Company to dismantle and rebuild the bridge on the west side of the new channel. Since the bridge crossed the new channel at a right angle rather than at its original sixty-three degree skew, it was shortened to 220 feet by removing one truss panel. Until this bridge was shortened, it was the longest single leaf Strauss-trunnion bascule bridge in existence.

SOURCES:

- "Busiest Railway Crossing Is No More," Railway Age, v. 91 (August 15, 1931), 241-244, 251.
- W.W. De Berard, "Engineering Problems of the Chicago Region and Their Solution," Engineering News-Record, v. 101 (November 22, 1928), 758-764.
- "Excavating New Million-Yard Channel for the Chicago River," Engineering News-Record, v. 102 (May 2, 1929), 717-719.
- "High Gantry Used for Handling Heavy Members of Large Bascule," Engineering News-Record, v. 84 (January 8, 1920), 79-80.
- "Longest Single-Leaf Bascule Bridge: Chicago River," Engineering News-Record, v. 83 (December 25, 1919), 1056-1060.
- "Modern Drawbridges Attain Great Weights and Spans," Engineering News-Record, v. 80 (May 2, 1918), 860.
- C.H. Mottier, "A Complex Bridge-Moving Job," Railway Age

GRAIN INDUSTRY

Armour's Warehouse (M.J. Hogan Grain Elevator)

north side of I&M Canal, west of Main Street, Seneca

RATING: 1

Construction Date: 1862

UTM: Seneca Quad. 16 E.365110 N.4574750

DESCRIPTION: This timber-framed grain elevator measures 80' x 40' and rests on a limestone foundation (See Appendix A). The elevator is 65 feet high. The original clapboard siding is now covered with corrugated sheet metal. The building has four stories with a basement: the first story serves as the operating floor, the second level is the bin level, the headhouse is at the third level, and the headhouse loft is at the fourth level. The elevator contains six-over-six-light, double-hung sash windows. A wooden shed that sheltered wagons is located on the north side of the grain elevator. It houses three hoppers for unloading grain. Attached to this shed was another shed structure covering a railroad spur line (the shed was recently demolished for safety reasons). Adjoining this structure is a wooden building which houses a Fairbanks weighing scale where the weight of the railroad cars was recorded.

HISTORY: This elevator, with a capacity of 100,000 bushels, was constructed by John Armour in 1862 and is the oldest standing grain elevator in the Heritage Corridor. During its first twenty years the elevator had a variety of owners, including James Armour, N.J. Rulison (by 1872), and G.C. Griswold (by 1877). Sanborn Insurance maps also indicate changes in ownership, beginning in 1890, when Messrs. Hogan and Neilson acquired the elevator. Hogan dissolved his partnership with Neilson in 1906 and incorporated his grain business as the M.J. Hogan Grain Company. The elevator was served by the Illinois and Michigan Canal as well as the Rock Island Railroad. The elevator was bought by Dunn Brothers Co-op, Inc. in 1949; in 1985 the Illinois Department of Conservation acquired the property. The structure is now vacant. Plans are under way to restore it.

SOURCES:

History of LaSalle County, Illinois (Chicago: Inter-state Publishing Co., 1886).

Sanborn Map Co., Seneca, Illinois (New York: Sanborn Map Co., 1892, 1898, 1907, 1924).

"Armour's Warehouse (Hogan Grain Elevator)," Historic American Engineering Record, No. IL-25.

Illinois and Michigan Canal Records, Series 491, Illinois State Archives, Springfield, IL.

Atchison, Topeka & Santa Fe Railroad Grain Elevator

RATING: 2

On AT&SF Slip, south side of Chicago Sanitary and Ship Canal
east of South Damen Avenue, north of the Stevenson Expressway, Chicago

Construction Date: 1906

UTM: Englewood Quad. 16 E.444100 N.4632120

DESCRIPTION: This site contains several buildings, including a grain processing and storage building and a grain elevator. At the western end of the site is a two-story brick powerhouse which measures 100' x 40'. This building has a concrete foundation, brick walls and pilasters, and a corbeled brick cornice. It also contains a low-pitched gable roof and brick segmental arches which span the window openings. All windows have been filled with brick, wood, or corrugated metal. Adjacent to the powerhouse is a 165-foot tall brick chimney. Attached to the east side of the powerhouse is the Hess dryer house, a 40' x 25' brick building which also adjoins the power house and the grain processing elevator. The two- and three-story elevator house consists of a brick, timber-framed, and corrugated-steel-sided structure 225' long and 56' wide. Mechanical works, including bleachers, are located on the roof. The elevator is of reinforced concrete, 165 feet high and about 50 feet square, and sits above two tracks and the grain unloading hopper. Chutes run from the elevator to the railroad tracks and to the Hess dryer house. The elevator contains numerous multi-light windows, many of which are broken out. Silos attached to the elevator are for receiving, shipping, and processing.

South of the railroad tracks is a corrugated-metal shed containing a modern rotary car dump. South of the car dump is the grain silo storage annex with thirty-five silos. Each concrete silo is 23 feet in diameter and is 100 high. A conveyor, housed in a steel truss bridge with corrugated-metal siding, crosses the railroad sidings and connects the elevator silos to the storage silos. Several small auxiliary buildings, including a small one-story office building, a one-story machine shop, and a one-story railroad repair shop, are at the east end of the site. All of these buildings are constructed of brick.

HISTORY: The John S. Metcalf Company, consulting engineers, designed and built this facility for the Atchison, Topeka & Santa Fe Railroad in 1906. The original complex included a powerhouse, an elevator with temporary storage and processing silos, and thirty-five grain storage silos. With a 400,000 bushel capacity, this complex could accommodate sixty railroad cars at the elevator and 300 railroad cars at a yard a short distance away. Equipment at the site included two driers, as well as bleachers, oat clippers, cleaners, scourers and dust packers. Using filtered water from the adjacent South Branch of the Chicago River, boilers with a total of 1,500 horsepower generated the steam and electricity required by the machinery. The thirty-five grain silos south of this facility had a total capacity of one million bushels. A grain dust explosion in 1932 ignited a fire which destroyed the original timber and brick building.

The Atchison Topeka & Santa Fe Railroad rebuilt the concrete processing house with fourteen reinforced concrete silos, and increased the capacity of the facility to 1,700,000 bushels. After reconstruction the railroad leased the facility to the Stratton Grain Company. The complex is currently abandoned.

SOURCES:

Board of Engineers for Rivers and Harbors and U.S. Shipping Board, Bureau of Operations, Transportation on the Great Lakes (Washington, D.C.: Government Printing Office, 1926, 1930, and 1937 editions).

"New Grain Elevator for the Santa Fe System at Chicago," The Railway Age (March 23, 1906), 408-10.

State of Illinois, Division of Waterways, Seventeenth Annual Report, 1933-1934.

"The Handling and Storage of Our Huge Grain Crop," Scientific American (December 11, 1909), 444-45, 451.

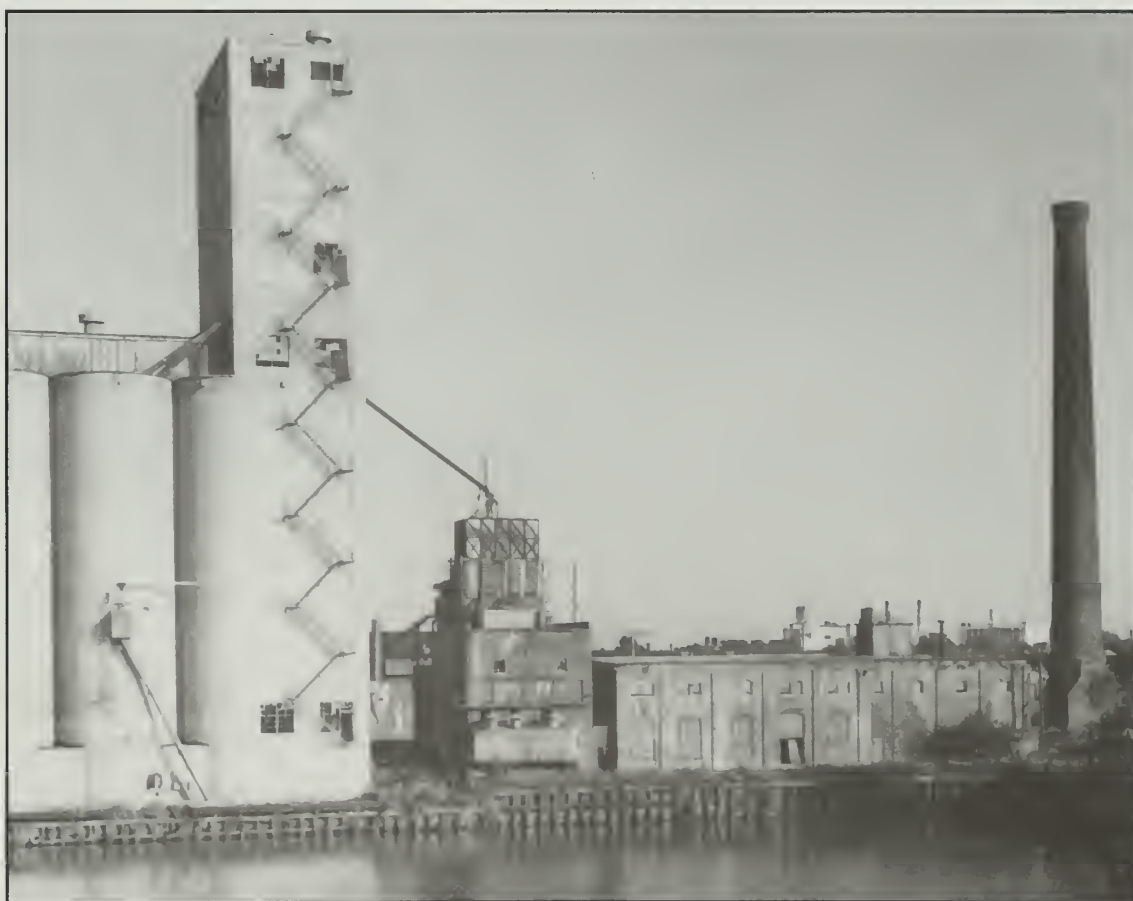


Photo 47. Atchison, Topeka & Santa Fe Railroad: Grain Elevator and Power Plant (1906), Chicago.
Photo by Martin Stupich, HAER.



Phot 48. Atchison, Topeka & Santa Fe Railroad Grain Elevator and Silos (1906), Chicago.
Photo by Martin Stupich, HAER.

Farmers' Square Deal Cooperative Grain Elevator

Liberty and Division streets, on south side of R I RR, Morris

RATING: 1

Construction Date: 1913

UTM: Morris Quad. 16 E.380950 N.457990

DESCRIPTION: This reinforced concrete grain elevator measures approximately 60' x 25' and is about 70 feet high. Painted on the side of the elevator is "Square Deal Grain Co., See Grain, Fencing."

HISTORY: An elevator has stood on or near this site since the end of the last century. According to an 1894 Sanborn Insurance map, the M.N. Hull & Sons Company owned a wooden grain elevator at this location, which was powered by steam and had a capacity of

10,000 bushels. Fuel was provided by coal and cobs, and equipment included one corn sheller, two cleaners, and two fans. The original all-wood elevator was replaced in 1901 with a wooden elevator containing iron cladding; it had a capacity of 60,000 bushels. The present elevator, with a capacity of 40,000 bushels, dates from 1913 and was owned by the Farmers' Square Deal Cooperative until that organization went bankrupt in 1965. Formerly served by the Rock Island Line, the elevator has been abandoned for many years.

SOURCES:

Sanborn Map Co., Morris, Illinois (New York: Sanborn Map Co., 1894, 1907, 1916, 1927).
Interview, Fred Aellig, (former plant manager, Morris Grain Co., 1957-1975), June 24, 1986.

Farmers' Square Deal Cooperative Weigh House and Office

south of R I RR tracks and east of Liberty Street, Morris

RATING: 2

Construction Date: 1918

UTM: Morris Quad. 16 E.380950 N.457990

DESCRIPTION: This one-and-one-half-story building contains offices and a weighing scale. The office section is of brick construction with a concrete foundation. It features a castellated parapet and a date stone with the inscription "1918." The weighing scale, adjoining to the south, is sheltered by a roof supported by brick columns. The building measures approximately 40' x 30'.

HISTORY: Built in 1918, this building is shown on a 1927 Sanborn Insurance map as an office and scales for the Farmers' Square Deal Grain Company. A wooden building formerly stood on this site; it was probably part of the M.N. Hull & Sons Company elevator complex built in the 1890s. The office is presently used by the Chessie rail system.

SOURCES:

Sanborn Map Co., Morris, Illinois (New York: Sanborn Map Co., 1894, 1907, 1916, 1927).
Date stone on west facade.

Grain Industry

Grain Elevator and Mule Barn (ruins)

RATING: 1

west bank of I&M Canal (station 1346+00)

at Romeo Road (135th St.), Romeoville

Construction Date: ca. 1848

UTM: Romeoville Quad. 16 E.411900 N.4610250

DESCRIPTION: On the site are the limestone walls and foundation of the grain elevator and barn, which was erected in the 1840s and which operated through the early twentieth century. This area is the site of the village of Romeo. Sanitary District photos show a large grain elevator and mule barn here and a cluster of houses between the I&M Canal and Sanitary and Ship Canal.

HISTORY: Located on the west side of the Illinois and Michigan Canal, next to the abandoned village of Romeo, these limestone foundation remains are part of a once-impressive grain warehouse and elevator and a barn building. This section of the I&M closed in 1910, and the structures were subsequently demolished.

SOURCES:

State of Illinois, Division of Waterways, "Inspection of Structures Along the Illinois and Michigan Canal from LaSalle to Summit, Illinois," 1959, photograph 176, (available at the I&M Canal State Trail Headquarters, Gebhard Woods Access, Morris, Illinois).

J. Harrington and Company Grain Elevator and Office

RATING: 2

north side of I&M Canal, west side of Main Street, Marseilles

Construction Date: 1892

UTM: Marseilles Quad. 16 E.365970 N.4576290

DESCRIPTION: Located along the I&M Canal, this wood-framed grain elevator measures 60' x 30' and is clad with stucco and corrugated-metal. It rises nearly 50 feet. A covered wagon way is located along the north side of the elevator. The one-story office is adjacent to the elevator, and weighing scales extend along the north side. A limestone foundation supports the heavy timber frame of the grain elevator.

HISTORY: This elevator was constructed in 1872 by Messrs. Scott and Harrington, and operated under that partnership until 1880 when J.G. Scott. became sole owner. In 1886 J. Harrington & Company bought it. An 1889 Sanborn Insurance map describes the facility as having a capacity of 70,000 bushels, with an attached cob house to the west. Shown to the north on this map are two corn cribs, a harness building, an office, and a building marked

"B&S." By 1898 the elevator had been acquired by the partnership of Bruce and Jamieson, and a Rock Island Railroad spur line had been extended to the site. The capacity of the elevator at this time, however, was only 40,000 bushels. By 1892 a new 50,000 bushel capacity elevator had been built, with one cleaner and one corn sheller, and powered by gasoline. By 1907, according to a Sanborn Insurance map, the elevator had become the property of the Bruce Grain Company. The Marseilles Grain and Supply Company had, by 1929, acquired the elevator. By that date the present office and scales had been built. The elevator now belongs to the M&M Grain and Farm Supply Company.

SOURCES:

Sanborn Map Co., Marseilles, Illinois (New York: Sanborn Map Co., 1889, 1898, 1907, 1913, 1929).



Photo 49. J. Harrington and Company: Grain Elevator (1892), Marseilles. Photo by Jet Lowe, HAER.

Grain Industry

Lockport DuPage Farmer's Elevator Company

South of Romeoville Road along the AT&SFRR, Lockport

RATING: 2

Construction Date: ca. 1890

UTM: Romeoville Quad. 16 E.411800 N.4610100

DESCRIPTION: This site contains two grain elevators. The northernmost elevator consists of a three-story timber-framed structure with corrugated-metal siding, supporting a one-and-one-half-story wooden head-house. It was erected about 1890. Attached to this elevator is a one-story wood-framed warehouse building. Adjacent to the warehouse is the second elevator, erected ca. 1910s, which consists of two silos, each about 40 feet high, supporting a three-story wooden head-house, the exterior of which is covered with asphalt siding. Adjoining the three-story head-house is a reinforced concrete silo, about 50 feet high. An adjacent wood-framed one-story office building has wooden siding and measures 40' x 15'. It features a squared wooden false-front and one-over-one-light double-hung sash windows.



Photo 50. Lockport DuPage Farmer's Grain Elevator (ca. 1890 and 1910), Lockport. Photo by Martin Stupich, HAER.

HISTORY: This grain elevator was constructed as early as the 1890s and was served by the Chicago & Alton Railroad. It continues in service and is operated by the Lockport DuPage Farmer's Elevator Company. The Illinois Central Gulf Railroad provides rail transport for the elevator.

SOURCES:

State Public Utilities Commission of Illinois, Railroad Map of Illinois, 1916.

Minooka Grain, Lumber & Supply Company: Grain Elevator

RATING: 2

Mondamin and Oseola streets, Minooka

Construction Date: 1910

UTM: Minooka Quad. 16 E.304530 N.4589780

DESCRIPTION: The three-and-one-half-story timber-frame grain elevator, constructed in 1910, is now dwarfed by ten large reinforced concrete silos that surround it. The elevator is located on the south side of Mondamin Street, at the south end of Oseola Street, next to the former Rock Island Line (now operated by Chessie). It is covered with corrugated-metal siding and contains an asbestos tile roof. The elevator measures approximately 45' x 40'. The present capacity of this grain storage complex, including the ten concrete silos and two metal silos, is 90,000 bushels.

HISTORY: In the mid-nineteenth century, grain produced in this area was hauled to two canal warehouses, one at nearby Carpenter's Landing with a 20,000 bushel capacity, and the other at Channahon with a 49,000 bushel capacity. An elevator has stood on this site in Minooka since 1868 when Almeron K. Knapp and a Mr. Griswold built a facility for Minooka Lee. Besides the elevator, the site included a lumber yard (constructed in 1868), a planing mill (constructed in 1873), and the Minooka Exchange Bank, which Mr. Knapp established in 1865 in an elevator office. After Griswold sold his interest in the company to a Mr. Thayer, the firm was able to acquire a monopoly of the grain trade in this part of Grundy County. In January, 1881, the elevator and contents burned down, and a new elevator with a capacity of 75,000 bushels was built the following year. This elevator was also destroyed by fire and was replaced by the present structure in 1910. Sanborn Insurance maps of 1893, 1898, and 1907 show an elevator, bank, corn crib and mill on this site.

Grain Industry

SOURCES:

Sanborn Map Co., Minooka, Illinois (New York: Sanborn Map Co., 1893, 1898, 1907, 1926).
D.A. Lawrence and A.R. Thompson, Grundy County Directory (Morris, Illinois: 1877-8).
Morris Daily Herald, February 7, 1975.
Standard Atlas of Grundy County (Chicago: Ogle & Co., 1909).
Platbook of Grundy County (Chicago: Alden Ogle, 1892).
Virginia Sparr Brown (ed.), Grundy County, Illinois: Landmarks (Morris, IL: Grundy County Historical Society, 1981).

Morris Grain Company: Elevator

along Rock Island Railroad, Morris

RATING: 1

Construction Date: 1902

UTM: Morris Quad. 16 E.380880 N.4580050

DESCRIPTION: This site encompasses three structures, each of which contains a concrete foundation, a timber frame, and metal cladding. The grain elevator measures 60' x 36' and rises nearly 75 feet in height at the top of the cupola. The north side of the elevator has a sign proclaiming "Morris Grain Co., Seeds That Grow." The south facade contains a sign with a likeness of William Penn flanked by two signs, "Quaker Oats" and "Grain Feed." The grain elevator retains its cupola and is a visual landmark in the town of Morris. Adjoining the grain elevator is the Seed Mill, a three-story wood-framed structure measuring 40' x 36'. Adjoining to the west is the wood-framed warehouse with an enamel sign, "FUL-O-PEP FEEDS."

HISTORY: This elevator was built in 1902, with a capacity of 75,000 bushels. To the west stood a steam dryer, and to the east, an engine room with dust collector, office and scales. All of these structures have been demolished. The seed mill and warehouse were added by 1927. The elevator originally belonged to the Morris Grain Company, which sold it to the Collins family. The Quaker Oats Company, which had leased and then bought the adjacent oatmeal mill from the Morris Oatmeal Company around 1907, bought the elevator from the Collins family sometime before the Second World War. Quaker Oats used the elevator complex to produce crushed cobs to make FerFerol for the U.S. government in the Second World War. After the war, the cob plant was removed and the building sold to the Morris Elevator Company in 1964. It is now used for soybean storage.



Photo 51. Morris Grain Company's Elevator (1902), Morris.
Photo by Timothy Whittaker, HAER.

SOURCES:

Interview, Fred Aellig, (former plant manager, Morris Grain Co., 1957-1975), June 24, 1986.
Sanborn Map Co., Morris, Illinois (New York: Sanborn Map Co., 1907, 1916, 1927).
Morris Daily Herald, September 16, 1964.

Grain Industry

Nash, Wright & Company: Elevator

southwest corner of Canal and Mill streets, Utica

RATING: 1

Construction Date: ca. 1892

UTM: LaSalle Quad. 16 E.331720 N.4578320

DESCRIPTION: Located along the canal, this grain elevator was torn down in 1988. It was about five stories in height, including the cupola, and was built of heavy timber post-and-beams and was clad with corrugated-metal. The elevator rested on a stone foundation. Remains of a rough-coursed limestone retaining wall along the canal may have been part of a ca. 1880 loading dock.

HISTORY: This grain elevator, the second to be built on this site, was constructed ca. 1892 by Nash, Wright & Company. The first elevator, built in 1880 by C.J. Gardner and A.T. Griffin, was of heavy timber construction with a steam-powered hoist and a capacity of 50,000 bushels of corn. In 1881 H.S. Gilbert & Company, which owned the largest grain business in the county, acquired this property. After the elevator was destroyed by fire in 1892, Nash, Wright & Company built a new elevator on this site and also opened a weighing scale and office building nearby. Other operators of the elevator and office have included the Dunaway Ruckrigel & Company (1901) and the Illinois Valley Grain Company (1909-1930s). In 1952 the elevator, then owned by Adolph Jessie of LaSalle, was sold to the Utica Elevator Company. From 1960 to the present the elevator has been used strictly for grain storage. The Utica Elevator Company demolished the structure in 1988, leaving only two surviving canal-era grain elevators along the I&M Canal.

SOURCES:

Sanborn Map Co., Utica, Illinois (New York: Sanborn Map Co., 1888, 1891, 1896, 1901, 1909, 1929).

A. Berle Clemensen, Illinois and Michigan Canal, National Heritage Corridor, Illinois: Cultural Inventory, History, and Significance (Denver: National Park Service, 1985), 51-4.

H.F. Kett & Co., The Past and Present of LaSalle County, Illinois (Chicago: H.F. Kett & Co., 1877), 333-7.
History of LaSalle County, Illinois (Chicago: Inter-state Publishing Co., 1886), 678-9, 691.

Interview with Mr. Roy Carder, manager of Utica Elevator Company, Utica, Illinois, July 1985.



Photo 52. Nash, Wright & Company's Elevator (ca. 1892), right. Utica Elevator Company's Grain Elevator (ca. 1958), left, Utica. Photo by Jet Lowe, HAER.

Nash, Wright & Company: Office and Weighing Scale

southwest corner of Canal and Mill streets, Utica

RATING: 2

Construction Date: ca. 1892

UTM: LaSalle Quad. 16 E.331790 N.4578300

DESCRIPTION: This one-story building, serving as an office for various companies in Utica, contains a rough-cut, coursed, stone foundation with scored mortar, a wood-frame, and clapboard siding. It has a hipped gable roof with attic vents and is covered with asphalt shingles. A weighing scale is located along the north side of the building, which was remodeled around 1970.

Grain Industry

HISTORY: Located near the site of Gilbert & Company's grain elevator (destroyed ca. 1890), this office building and weighing scale are associated with the grain elevator constructed about 1892 by the Nash, Wright & Company (see entry of Nash, Wright & Company: Elevator). The building is no longer associated with the grain business.

SOURCES:

Sanborn Map Co., Utica, Illinois (New York: Sanborn Map Co., 1888, 1891, 1896, 1901, 1909, 1929).
A. Berle Clemensen, Illinois and Michigan Canal, National Heritage Corridor, Illinois: Historical Inventory, History, and Significance (Denver: National Park Service, 1985), 50-3, 69-72.
H.F. Kett & Co., The Past and Present of LaSalle County, Illinois (Chicago: H.F. Kett & Co., 1877), 333-7.

E.F. Pulsifier's Grain Elevator Engine House Chimney

along south side of I&M Canal east of Mill Street, Utica

RATING: 1

Construction Date: ca. 1850

UTM: LaSalle Quad. 16 E.331890 N.4578230

DESCRIPTION: This chimney is built of two different kinds of sandstone capped with corbeled common-bond red brick. The chimney measures about 8' x 6' in plan and is about 40 feet tall. It is all that remains of the first grain elevator complex in Utica, erected shortly after the canal was completed in 1848. The chimney was probably built about 1850.

HISTORY: A grain elevator and feed mill were erected on this site as early as the 1850s. It was operated by various grain dealers, including E.F. Pulsifier (1888), Keith & Schmieding (1896), Van R. St. John (1901), Utica Elevator Company (1929). The grain elevator has since been demolished.

SOURCES:

Sanborn Map Co., Utica, Illinois (New York: Sanborn Map Co., 1888, 1891, 1896, 1901, 1909, 1929).
A. Berle Clemensen, Illinois and Michigan Canal, National Heritage Corridor, Illinois: Cultural Inventory, History and Significance (Denver: National Park Service, 1985), 51-4.
H.F. Kett & Co., The Past and Present of LaSalle County, Illinois (Chicago: H.F. Kett & Co., 1877), 333-7.
History of LaSalle County, Illinois (Chicago: Inter-state Publishing Co., 1886), 678-9, 691.
Interview with Mr. Roy Carder, manager of Utica Elevator Company, Utica, Illinois, July, 1985.

Quaker Oats Company: Oat Storage Building and Molasses Tanks

RATING: 3

Wauponsee Street and RIRR Lines, Morris

Construction Date: ca. 1900

UTM: Morris Quad. 16 E.380850 N.4580045

DESCRIPTION: The Oat Storage Building is a two-story wooden structure clad with iron. It contains a slightly pitched roof supporting a wooden cupola. Two steel tanks for storing molasses are adjacent to the Oat Storage Building. Each tank is about 25 feet in diameter and 25 feet in height. The tanks rest on a concrete pad. The tanks were heated by boilers located in the adjacent mill. (See entry of Morris Grain Company: Elevator).

HISTORY: The Morris Oatmeal Company of Morris, Illinois, erected a mill for producing oatmeal in the early 1900s. This property was leased and then purchased by the Quaker Oats Company about 1907. The mill continued in operation as late as the 1960s. Around this time the property, which included the oat storage building and the molasses tanks, was acquired by the Beatty Lumber Company. Presently both the storage bin and molasses tanks are unused.

SOURCES:

Interview with Fred Aellig (former plant manager, Morris Grain Co., 1957-1975), June 24, 1986.

Morris Daily Herald, November 1982, September 16, 1964.

Sanborn Map Co., Morris, Illinois (New York: Sanborn Map Co., 1888, 1891, 1898, 1907, 1913, 1925).

Quaker Oats Company: Office

RATING: 2

Adams and Fulton streets, Morris

Construction Date: ca. 1900

UTM: Morris Quad. 16 E.4580050 N.380850

DESCRIPTION: This one-and one-half story brick building served as an office for the mill of the Quaker Oats Company. It contains load-bearing birch walls, a flat roof, and a portico extending along the west facade. The building measures 28' x 28'. The office was heated by steam fired by boilers in the adjacent mill. Inside the office is a scale which was installed in the 1920s. These tanks were heated by the steam engine in the mill building.

HISTORY: This brick office building and weighing scale were erected around 1900 by the Morris Oatmeal Company. The Quaker Oats Company purchased the property about 1907. It is currently owned by the Beatty Lumber Company.

Grain Industry

SOURCES:

Interview with Fred Aellig (former plant manager, Morris Grain Co., 1957-1975), June 24, 1986.
Sanborn Map Co., Morris, Illinois (New York: Sanborn Map Co., 1894, 1907, 1916, 1927).
Morris Daily Herald, November, 1982; September 16, 1964.

Quaker Oats Processing Plant and Warehouse

Waupousee and Adams Streets, Morris

RATING: 3

Construction Date: ca. 1910

UTM: Morris Quad. 16 E.380850 N.4580050

DESCRIPTION: This four story timber-framed building measures 244' x 43'. The exterior contains weather board and corrugated-metal siding. The interior conveyor is supported by a concrete frame and the entire structure is supported on a concrete foundation. Adjacent to the mill is a two-story timber-framed warehouse building. It measures 100' x 60' and rests on a concrete foundation. Two large enameled signs are attached to the warehouse. One proclaims "Wayne Feeds," and the other "Full-of-pep Feeds."

HISTORY: Erected around 1900 by the Morris Oatmeal Company, this mill was acquired by the Quaker Oats Company about 1904. This structure was originally used as an oat warehouse and processing plant for the Quaker Oats Company. A system of rotary augers was suspended in the loft above the floor and carried oats to any of a number of bins located on either side of the conveyor. The Rock Island Railroad served the oatmeal mill. In the 1960s, when the Quaker Oats Company abandoned the mill, it was purchased by the Beatty Lumber Company for use as a lumber warehouse.

SOURCES:

Interview with Fred Aellig (former plant manager, Morris Grain Co., 1957-75) June, 1986.
Sanborn Map Co., Morris, Illinois (New York: Sanborn Map Co., 1894, 1907, 1916, 1927).
Morris Daily Herald, September 16, 1964.

Seneca Farmers' Company: Office and Scales

RATING: 3

east of Main Street, south of R I RR, Seneca

Construction Date: ca. 1882

UTM: Seneca Quad. 16 E.365350 N.4575290

DESCRIPTION: The office and scales building is a one-story wooden structure resting on a concrete-block foundation wall. It contains a gable roof and asbestos-shingle siding. The building measures 20' x 18'.

HISTORY: An office with scales has stood on this site since at least the late nineteenth century, when it served an adjacent grain elevator (1882) of 150,000 bushel capacity. By 1898 ownership had passed from the original proprietor, P.H. Graves, to the State Bank of Seneca, who leased the facility to Bruce and Jamieson. By 1907 the site belonged to the Seneca Farmers' Company, and today it is the property of the Seneca Stockdale Fertilizer Company. The building is now vacant.

SOURCES:

Sanborn Map Co., Seneca, Illinois (New York: Sanborn Map Co., 1892, 1898, 1924).

Corn Crib & Warehouse

RATING: 3

east of Liberty Street, south of R I RR, Morris

Construction Date: ca. 1920

UTM: Morris Quad. 16 E.380950 N.4579900

DESCRIPTION: This wooden corn crib measures 44' x 42'. It contains an impressive gambrel roof covered in asbestos shingles with overhanging eaves and soffit, capped by a rectangular cupola with a circular metal vent on top.

HISTORY: This corn crib is one of several storage buildings along the Rock Island Line east of Liberty Street in Morris. It was probably erected in the 1920s. At present, this structure is being used by the Trenter Oil Company, which also owns several structures to the east of the corn crib.

Grain Industry

SOURCES:

Sanborn Map Co., Morris, Illinois (New York: Sanborn Map Co., 1894, 1907, 1916, 1927).

Utica Elevator Company: Coal Barn

on I&M Canal west of Vine Street, east of Mill Street, Utica

RATING: 2

Construction Date: ca. 1918

UTM: LaSalle Quad. 16 E.331860 N.4578200

DESCRIPTION: This timber-framed building measures approximately 110' x 40' and has a gambrel roof. The barn contains seven hoppers which formerly held coal. The barn is no longer used for coal storage.

HISTORY: This building, erected in the late 1910s, is the only known coal barn in the canal corridor. It contains hoppers for storing and loading coal into trucks or wagons, devices which offered a unique solution to the problem of delivering coal by employing a gravity hopper system instead of a mechanically-powered conveyor. Locally-mined bituminous coal was used extensively in the region, not only in industry but also in the grain trade, where it was used to fire corn shellers and dryers, and to power steam engines for hoisting grain into grain elevators.

SOURCES:

A. Berle Clemensen, Illinois and Michigan Canal, National Heritage Corridor, Illinois: Historical Inventory, History, and Significance (Denver: National Park Service, 1985) 67-9, 71-2.

Utica Elevator Co. Feed Store

east side of Mill Street, south of I&M Canal, Utica

RATING: 3

Construction Date: 1918

UTM: LaSalle Quad. 16 E.331830 N.4578200

DESCRIPTION: This two-and-one-half story building contains a concrete foundation, brick walls clad with cement stucco, and a flat roof. It measures approximately 100' x 40'. Most of the windows are covered with fiberglass. The loading dock and ramp entrance to the basement are located at the rear. The Mill Street facade features a storefront and pediment with cast-stone coping. The interior features a pressed tin ceiling. The scale for weighing grain is located along the north side of the building.

HISTORY: Erected in 1918 by the Utica Elevator Company, the feed store was part of a complex of structures which also included a corn crib (demolished) and a barn for coal storage (still standing). Most local farmers brought their farm products to this facility and obtained manufactured goods in return. This feed store continues to be a functioning part of the Utica community. Although it is a typical early twentieth century commercial building, it retains its elaborate pressed tin ceiling.

SOURCES:

Sanborn Map Co., Utica, Illinois (New York: Sanborn Map Co., 1888, 1891, 1896, 1901, 1909, 1929).
A. Berle Clemensen, Illinois and Michigan Canal, National Heritage Corridor, Illinois: Historical Inventory, History, and Significance (Denver: National Park Service, 1985), 50-3, 69-72.

Utica Elevator Company: Warehouse

Mill Street south of I&M Canal, Utica

RATING: 3

Construction Date: ca. 1920

UTM: LaSalle Quad. 16 E.340860 N.4577210

DESCRIPTION: This two-story wooden building is approximately 50' x 30' and has a gable roof. The upper story opens onto the Mill Street level, the lower story opens onto the Canal towpath. Its Mill Street facade has a false-front pediment and pressed metal siding (giving the appearance of rusticated stone). The structure remains largely unaltered except for blocked windows and doors.

HISTORY: Appearing on a 1929 Sanborn Insurance map as a "Lime & Cement" warehouse, this structure may once have been associated with Utica's hydraulic cement industry. It is currently operated as a warehouse by the Utica Elevator Company.

SOURCES:

Sanborn Map Co., Utica, LaSalle County, Illinois (New York: Sanborn Map Co., 1909, 1929).
Interview with Mr. Roy Carder, general manager Utica Elevator Company, July, 1985.

BULK PRODUCTS

Armour & Company: Joliet Warehouse

South Chicago Street (at Marion Street), Joliet

RATING: 3

Construction Date: ca. 1910

UTM: Joliet Quad. 16 E.409800 N.4597000

DESCRIPTION: This two-story brick building appears to have been built in three stages: the two earliest sections probably date from the 1910s and contain stone foundations and common-bond brick walls. The third section, added about the 1920s, consists of brick load-bearing walls resting on a concrete foundation. The older wings retain the original one-over-one-light, double-hung sash windows, framed by limestone sills and lintels. The 1920s wing retains its multi-light, double-hung sash windows and its segmental brick arches spanning the window openings, along with its original double doors.

HISTORY: Armour & Company was one of three meat-packing concerns that operated warehouse and packing plants in the light manufacturing district of Joliet along Chicago Street. As with Swift & Company, Armour was attracted to Joliet because of its proximity to Chicago and because of its excellent railroad connections. This warehouse building was erected in the 1910s and is one of the few surviving structures associated with the meat-packing industry in Joliet. (See entry of Swift & Company: Joliet Warehouse.)

SOURCES:

William T. Chambers, "A Geographical Study of Joliet, Illinois: An Urban Center Dominated by Manufacturing," unpublished Ph.D. dissertation, University of Chicago, 1926.

Baker, Wignall & Company: Warehouse

southeast corner of Chartres and Canal streets, LaSalle

RATING: 2

Construction Date: ca. 1910

UTM: LaSalle Quad. 16 E.323980 N.4577000

DESCRIPTION: This two-story brick building measures 115' x 50' and rests on a stone foundation. It has timber post-and-beam framing and wood floors, a flat roof, and three brick chimneys (two along the north facade and one along the south facade) with corbeled brick chimney caps. A number of original one-over-one- and two-over-two-light, wood, double-hung, sash windows remain, along with brick segmental arches spanning the window

Bulk Products

openings. Decorative brickwork extends above the segmental arches, and the building is highlighted with brick quoins. A wooden cupola with louvered vents is located in the center of the roof. The main (north) facade of the building faces the abandoned Chicago Burlington & Quincy Railroad tracks.

HISTORY: Around 1910 Baker, Wignall & Company, wholesale grocers in LaSalle, erected this two-story warehouse building along a siding of the Chicago Burlington & Quincy Railroad. Brick for the load-bearing walls of the building was probably obtained from the adjacent LaSalle Pressed-Brick Company. In 1919 the wholesale grocery warehouse was taken over by C.H. Adams and H.H. Smith. During the next decade LaSalle's industrial and warehouse district bustled with activity. In addition to the brick works and Smith & Adams Grocers, several other companies, including Armour & Company and Cudahy Packing Company. (two meat packing concerns), as well as Pabst Brewing Co., Schlitz Brewing Co., and the Chicago Fruit and Produce Co., operated warehouses in this district. Railroad lines serving this district included the Chicago, Burlington & Quincy, the Rock Island, and the Illinois Central. During the Great Depression, a number of warehousing companies changed ownership or went out of business. Smith & Adams Grocers had disbanded by 1930. The warehouse building has been abandoned for many years.

SOURCES:

Sanborn Map Co., LaSalle, Illinois (New York: Sanborn Map Co., 1888, 1892, 1898, 1906, 1911, 1926).
Leshnick's LaSalle and Peru City Directory (Peoria, IL: Leshnick Directory Co., 1917-18, 1919-20, 1928, and 1930).

Chicago, Burlington & Quincy Railroad Co., blueprint of "Station Map, LaSalle and Peru, LaSalle County," dated December 11, 1928, (available at the I&M Canal State Trail Archives, Gebhard Woods Access, Morris, Illinois).

Carson, Pirie, Scott Company: Warehouse

Lumber Street, south of 18th Street, Chicago

RATING: 2

Construction Date: ca. 1890

UTM: Englewood Quad. 16 E.442310 N.4634120

DESCRIPTION: This is a four-story, brick warehouse building with a limestone foundation. It measures 150' x 80' and features brick segmental arches spanning the window openings, as well as the original eight-over-eight-light, double-hung sash windows. A truck loading dock extends off the south facade; rail loading bays extend along the west facade.

HISTORY: According to a Sanborn Insurance map of 1914, this building is listed as Warehouse "C" of the Carson, Pirie, Scott Company, which used it to store dry goods. Although the original dimensions were 270' x 150', the southern half of this building was demolished some time after 1914 to allow for the addition of a truck loading shed adjacent to a spur line of the Pittsburgh, Ft. Wayne & Chicago Railroad. In 1932 the Continental Paper Grading Company acquired the building. It is currently used as a warehouse by the paper company.

SOURCES:

Interview with Mr. Samuel Epstein, Chairman of the Board, Continental Paper Grading Company, August, 1986. Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1914).

Certified Grocers of Illinois Warehouses

facing Kedzie Avenue, Chicago

RATING: 3

Construction Date: ca. 1925

UTM: Englewood Quad. 16 E.441700 N.4631610

DESCRIPTION: This group of buildings includes several from the 1920s and several from the 1950s. Between these decades, the site was occupied by a wholesale grocer, a manufacturer of hair care products, and a scrap iron dealer. The wholesale grocer, Certified Grocers of Illinois, ran a large warehouse on the south side of the property.

Southern Plant:

1) The office building is a four-story brick structure with an elevator tower on the north facade. It contains a concrete frame with brick walls and decorative pilasters, and multi-light, as well as, glass-block windows. The building measures about 300' x 80'.

2) A warehouse is located south of the office; it is a two-story brick building measuring 80' x 40'. A corrugated metal building with loading bays is located between the warehouse and the office. One ca. 1950s brick warehouse stands to the rear.

Bulk Products

3) Two other warehouse structures, erected ca. 1920s, are located behind the office building. They are brick structures with pilasters framing the openings of the loading bays; these loading bays have been infilled with brick. Brick and concrete loading docks curve alongside a rail spur.

4) A three-story warehouse, erected after 1940, is located directly north of the office.

Northern Plant:

1) The office building is a two-story, brick structure with a concrete foundation. It measures 60' x 40' and contains a central doorway with concrete pilasters, frieze, and parapet. The central portion of the building is rusticated. A concrete molded cornice extends along the parapet. The first-story windows contain awnings. The second story contains eight-over-one-light, double-hung sash windows.

2) The factory is a brick building, measuring approximately 300' x 85', with a low-pitched gable roof, brick pilasters, and large factory windows. The north facade is sheathed in corrugated metal. The middle section of the factory contains brick walls supporting bowstring roof trusses and loading bays.

3) A warehouse building, located perpendicular to the factory, is a five-story brick structure, measuring 300' x 80', with bands of windows at the upper story. It is sited for rail loading along the east facade, though the openings are now brick infilled. Its west facade was adapted for truck loading.

4) A garage is located on the north side of the complex; this building is a three-story brick structure measuring 100' x 80'. Some of the bays have been infilled with brick. The Art-Deco influence is evident in some of the detailing of the garage, including decorative brick patterning and brick pilasters with pitched concrete caps.

HISTORY: Certified Grocers of Illinois, Inc., occupied the southern half of the site between 1919-1951, while two firms, the Toni Company, manufacturer of hair care products, and the Western Metal Company, dealers in scrap iron, occupied the northern half of the property. One owner, the Union Liquor Company has occupied the entire site since 1957.

SOURCES:

Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1919-1951).

Interview with plant manager, Consolidated Distilled Products, Inc. (Union Liquor), August, 1986.

Chicago Butchers & Packers Company Meatpacking Plant

901 West Marquette Street, Ottawa

RATING: 3

Construction Date: ca. 1920

UTM: Ottawa Quad. 16 E.344930 N.4579460

DESCRIPTION: This two-story brick building measures approximately 100' x 60'. It contains brick load-bearing walls, a timber post-and-beam interior frame, a flat roof, and a concrete foundation. The first-floor sliding doors on the north and south facades have been altered. However, two second-story sliding doors on the west facade are original. Notable exterior decorative elements include brick pilasters, entablature with dentil course, and tile coping on the pediment. A weighing scale stands outside the building to the north. The exterior of this former meat-packing plant and warehouse has been considerably altered and now houses a scrap iron business.

HISTORY: The Chicago Butchers & Packers Company built this two-story brick building about 1920 to serve as a meat-packing plant for both beef and pork. To the west of the plant, a stock pen led into the plant's first floor by way of a wooden incline. Although this building was erected along the I&M Canal when the Canal was still in operation, Chicago Butchers & Packers depended exclusively upon the railroad to transport its goods. A rail spur extended from the Rock Island Line to the south side of the building. The Drover Packing Company succeeded Chicago Butchers and Packers Company at this site, and in 1942 the building was taken over by the Newrson Iron Company for use as a metal recycling operation. In 1974 the present owners purchased the property and have continued the metal recycling business. The building is one of few remaining structures in the Heritage Corridor associated with the meat packing industry.

SOURCES:

Sanborn Map Co., Ottawa, LaSalle County, Illinois (New York: Sanborn Map Co., 1913, 1925).

Berle Clemensen, Illinois and Michigan Canal, National Heritage Corridor, Illinois: Historical Inventory, History, and Significance (Denver: National Park Service, 1985), 72.

Clark Warehouse

Canal and Mill Streets, Utica

RATING: 1

Construction Date: ca. 1848

UTM: LaSalle Quad. 16 E.331840 N.4578280

DESCRIPTION: This two-story building measures approximately 75' x 35' and features rough-cut, random-range sandstone foundation and walls. Its south side faces the I&M Canal.

Bulk Products

Refurbished into an historical museum, the building contains a timber frame and recently installed steel I-beam stringers resting on reinforced concrete columns. Its north facade, remodeled into a museum entrance, contains double-wide doors flanked by two large plate-glass windows. Other alterations include the removal of a wooden cupola, located in the center of the roof, and a stone chimney, located along the east facade, removed in the 1890s.



Photo 53. Clark Warehouse (ca. 1848), Utica. Photo by Gray Fitzsimons, HAER.

HISTORY: This warehouse building was erected by James Clark about 1849. Clark, an English immigrant and early settler (ca. 1837) in Utica, was a prominent entrepreneur in LaSalle County. In addition to operating a canal warehouse business, Clark owned the Utica Cement Company from ca. 1838 until his death in 1888 (see entries of Utica Cement Company). Other uses of the warehouse building include: William Foley Livery (1888), Thomas Manly Livery (1891), livery (1896), livery (1901), and garage for a gas station (1929). The former canal warehouse was converted into the LaSalle County Historical Society museum in 1967.

SOURCES:

Sanborn Map Co., Utica, LaSalle County, Illinois (New York: Sanborn Map Co., 1888, 1891, 1896, 1901, 1909, 1929).

A. Berle Clemensen, Illinois and Michigan Canal National Heritage Corridor, Illinois: Historical Inventory, History, and Significance (Denver: National Park Service, 1985), 50-3, 69-72.

H.F. Kett & Co., The Past and Present of LaSalle County, Illinois (Chicago: H.F. Kett & Co., 1877), 333-7.

History of LaSalle County, Illinois (Chicago: Inter-state Publishing Co., 1886), 678-9, 691.

Albert Dickinson Seed Company: Warehouse

2750 West 35th Street, Chicago

RATING: 1

Construction Date: ca. 1915

UTM: Englewood Quad. 16 E.442480 N.4631000

DESCRIPTION: This large brick building extends over an area measuring 400' x 400', with an E-shaped plan, and rail spur lines and loading platforms located between the three wings. Most of the building is five-stories tall, but the rear portions rise to eight stories. The main facade is symmetrical, with a projecting six-story central section containing a corrugated metal gable roof and a brick parapet wall with concrete coping. Concrete belt courses frame the company logo and the doorway, which is in the neo-Classical style with highly decorative motifs. The original wood and glass door remains in place. Much of the warehouse has a flat roof; the westernmost wing has a series of sawtooth monitor roofs. The window openings are spanned by brick segmental arches with headers, and keystones are located over each arch. The upper floor contains two-over-two-light windows with awnings. Other windows contain multi-lights.

HISTORY: Albert Dickinson took over his father's wholesale seed business after the Civil War and incorporated the business in 1886. At a cost of three million dollars, Dickinson built this plant in 1915 with a water frontage of 2,000 feet and a track capacity of 350 cars. It was located in the newly formed Pershing Division of the Central Manufacturing District. During the early twentieth century, this company was the largest wholesaler of seeds, poultry, and stock feeds in the United States. The company went bankrupt in 1938, and two new companies were formed: the Albert Dickinson Company, which took over the operations of the old company, and Dickinson Industrial Site, Inc., a real-estate concern which served as the parent company of the Albert Dickinson Company.

SOURCES:

Paul Gilbert and Charles Bryson, Chicago and its Makers (Chicago: Felix Mendelssohn Publishers, 1939).

Moody's Manual of Investments (New York: 1939), 1480.

Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1919).

Gebhard Brewery

Washington and Nettle Streets, Morris

RATING: 2

Construction Date: 1896-1900

UTM: Morris Quad. 16 E.380380 N.4579180

DESCRIPTION: The Gebhard Brewery consists of the Brewery and Warehouse Building and the Bottling Plant. The Brewery and Warehouse Building was erected about 1896 with additions constructed over the next decade. The brew house section rises four stories in height and, as with the rest of the building, contains a steel frame with common-bond brick walls. It measures approximately 80' x 60'. None of the brewing equipment remains. The Bottling Plant was erected about 1900 and consists of a two-and-one-half-story brick building with an interior wood frame. It contains a gable roof, a stone foundation, and measures approximately 60' x 30'.



Photo 54. Gebhard Brewery (1896-1900), Morris.
Photo by Timothy Whittaker, HAER.

HISTORY: The Gebhard Brewery, located on Washington Street near Nettle Creek, was started in 1866 by Louis Gebhard. Originally, a one-and-one-half story brick building housed the brewery operation. Gebhard's enterprise was successful, and by 1896, he had erected a large brick and steel building. The new building contained a large brewing room complete with a copper vat. Grain was prepared on the upper floors of the five-story brew house. Less than ten years later a large brick and steel addition was built to the north of the brew house. Another addition to the brewery, built at the same time, consisted of a two-and-one-half story brick and timber building and served as a bottling plant. William Gebhard succeeded his father in the business and used the wealth generated by the brewery to construct homes and commercial buildings in Morris. The Gebhard family eventually had the most extensive land holdings in the town.

With the advent of prohibition the brewery closed down. Most of the machinery was dismantled and sold abroad. After standing abandoned for a few years, the brew house was converted into a flour mill. First known as the Morris Milling Company and later as the Brown Mill, named after owner Dan H. Brown, the enterprise was never entirely successful as it went through periods of activity and abandonment. In 1946 the Lindsey Light and Chemical Company purchased the old bottling plant and began to manufacture mantles for lanterns. Currently the building is owned by a British firm that continues to produce mantles. The old Gebhard Brewery is occupied by a light industrial concern.

SOURCES:

Sanborn Map Co., Morris, Illinois (New York: Sanborn Map Co., 1894, 1907, 1927).

W.M. Hoyt Company: Warehouse
corner of Cermak Road and Grove Street, Chicago

RATING: 1
Construction Date: 1910

UTM: Englewood Quad. 16 E.446850 N.4633300

DESCRIPTION: This six-story, brick warehouse building, of an irregular plan to fit the site (one corner is canted), is highly ornamented, the motifs of which are eclectic and which show some Oriental influence. It has a concrete foundation and sills. The entrance contains a limestone portico with Tuscan columns, which have full entablatures of eclectic detailing. The large segmental arch transom is supported by short, heavy piers above the portico. There is a series of brick pilasters with geometric concrete caps between the windows.

Bulk Products

Upper floor windows feature corbeled concrete belt courses. The brick surrounding these windows is rusticated. The building contains two-over-two-light, double-hung sash windows, some of which have been infilled. Some of the windows also have segmental arches. Because the plan is irregular, the dimensions range from approximately 195' x 25' to 260' x 195'.

HISTORY: W.M. Hoyt moved from Vermont to Chicago at the age of eighteen. After working in various small groceries in the area, he was able to start his own small wholesale grocery while still in his early twenties. From 1872-1910, his store occupied the site of old Fort Dearborn on Michigan Avenue. The spectacular growth of his business enabled Hoyt to sell this building in 1910 and to construct a larger warehouse building at Cermak and Grove Streets. George Nimmons, one of the most prominent architects of turn-of-the-century industrial buildings in the United States, designed the building. The elevators and cooling systems which were installed for the Hoyt company were state-of-the-art and among the earliest of their kind in Chicago. Hoyt also founded the Grocer's Criterion in 1872, the leading grocery trade journal in the United States

SOURCES:

Manufacturing and Wholesale Industries of Chicago (Chicago: Thomas B. Poole Co., 1918).

Pierce, Bessie K., A History of Chicago (Chicago: University of Chicago Press, 1957).

Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1911).

Joliet Citizen's Brewing Company

104 Collins Street, Joliet

RATING: 3

Construction Date: 1904

UTM: Joliet Quad. 16 E.410540 N.4597340

DESCRIPTION: A one-story building measuring 150' x 25', it contains cast-stone exterior walls, ashlar limestone quoins, a concrete foundation, and a concrete floor. The windows have been infilled with brick and concrete block, but retain the concrete lintels and sills. The reconstructed northern section of the building contains brick walls and an arched roof which is covered with corrugated metal.

HISTORY: The Joliet Citizen's Brewing Company began in 1904 as one of six brewing companies in the city. Beer produced by the company was bottled at this site until about 1915, when the Joliet Bottling Company, located on North Bluff Street, took over this facility. During prohibition the company produced soft drinks. The brewery became the Bohemian Brewing Company in 1945. In 1958 the Monarch Brewing Company purchased

the site and brewed beer in the facility until 1966. Until 1970, Monarch Brewing maintained a beer distributorship, after which the buildings were abandoned. The former brewery is currently used as a school for welding under the auspices of the Joliet School District.

SOURCES:

Sanborn Map Co., Joliet, Illinois (New York: Sanborn Map Co., 1898, 1924).

Joliet City Directory, v. 12-13 (Joliet IL: R. L. Polk and Co., 1904-1906).

Joliet Warehouse and Transfer Company Warehouse

12 New Street, Joliet

RATING: 2

Construction Date:

UTM: Joliet Quad. 16 E.409940 N.4597140

DESCRIPTION: This five-story rectangular building measures 275' x 50'. It contains a stone foundation, common-bond brick walls with brick pilasters, and a barrel vaulted roof.. Four large doors are located at the west facade. Small multi-light windows are at the second, third, and fourth floors. The first-floor level contains larger, one-over-one-light, double-hung sash windows with segmental brick arches spanning the window openings. A small one-story addition is at the rear and has a concrete loading dock. Railroad sidings originally ran along both the east and west facades, but tracks remain today along the east facade only.

HISTORY: The Joliet Warehouse and Transfer Company has operated at this location since about 1901. The Chicago and Alton Railroad (now the Illinois Central Gulf) served the company's shipping needs for nearly half a century. Currently, the warehouse building is used for storage.

SOURCES:

Joliet Times, "A Glimpse of the Past," Special Supplement, Week of January 28-February 3, 1976.

Bulk Products

Marseilles Roller Mill

Commercial Street along north head race, Marseilles

RATING: 2

Construction Date: ca. 1880

UTM: Marseilles Quad. 16 E.356920 N.4576310

DESCRIPTION: This three-story brick building measures 55' x 30'. It has a distinctive mansard roof, which contains a metal covering, gable-roof dormers, and a brick chimney. Decorative brick dental cornices are at the eaves. Windows (now boarded up) have arched brick hoods. To the north is a large one story concrete-block building, erected about 1940. It contains a monitor roof.

HISTORY: Constructed in the late nineteenth century, this building is shown as the Marseilles Roller Mill on an 1889 Sanborn Insurance map, with grinding facilities on the first floor, cleaning on the second floor, and bolting on the third floor. By 1898 it was a flour mill for the adjacent Illinois Valley Milling and Shipping Company. A 1907 Sanborn Insurance map shows the building as belonging to the Marseilles Manufacturing Company, established in 1870, manufacturers of corn shellers, windmills, and cultivators. The first floor of this building was a woodworking shop, the second floor a paint shop, and the third floor a storage area. By 1913, the structure had been acquired by the O'Neil Implement Company and was used as a buggy and implement warehouse. A 1929 Sanborn Insurance map shows that the building was used as a printing house, probably belonging to the National Biscuit Company.

SOURCES:

Sanborn Map Co., Marseilles, Illinois (New York: Sanborn Map Co., 1889, 1898, 1907, 1913, 1929).
History of LaSalle County, Illinois (Chicago: Inter-state Publishing Co., 1886).
Marseilles Plain Dealer, September 18, 1915.

National Biscuit Company: Marseilles Factory

off Main Street, on Marseilles Power Canal, Marseilles

RATING: 2

Construction Date: ca. 1902

UTM: Marseilles Quad. 16 E.356850 N.4576220

DESCRIPTION: Situated along the Illinois River adjacent to the falls at Marseilles, this industrial complex of the National Biscuit Company (Nabisco) consists of fourteen buildings and a hydraulic system that includes a diversion dam and a series of power canals. The most impressive building of the complex is the Main Carton Factory. Erected in 1920-21, the eight-story building contains printing, gluing, and folding machinery. It measures

approximately 180' x 150'. The building is composed of a reinforced concrete frame on a concrete foundation, and contains a brick veneer, multi-light windows, brick lintels and sills, and a flat roof. Decorative features include a cream-colored string course at the top of the sixth and eighth stories and three red-brick turrets housing elevator shafts. A large "NABISCO" sign is painted on the east facade.

Other buildings include:

The Printing Building/Former Carton Factory is one of the original structures built by Nabisco when it acquired the property in 1902. The three-story brick building measures 130' x 110' and contains a slightly-pitched gable roof supported by timber trusses.

The Mill Room, erected in 1902, is a two-story brick building housing machinery for milling paper board. It measures approximately 300' x 90' and contains an interior timber frame, a gable roof and monitor, multi-light windows, and a stone foundation, recently partially rebuilt with concrete. This building presently stands unused; however, the milling machinery remains intact.

The Warehouses consist of five buildings, two of which date from ca. 1902 and three from the 1960s. The two early 1900s buildings are constructed of brick with interior timber frames. One of them measures approximately 210' x 100' and contains an ornamented brick cornice. The other measures approximately 165' x 50'. Railroad spur lines extend along the warehouses.

The Rotary Building was built ca. 1902. It consists of brick walls with an interior timber frame and measures approximately 110' x 50'.

The Straw Room/Storage Building, dating from the 1920s, was used to store straw and other paper-making materials before processing in the Rotary Building.

The Beater Room, erected in the 1950s, houses machinery that was used for processing paper. The two-story concrete-block building houses steel tanks that contained large blades for chopping scrap paper. Following the chopping of the paper, water was added and the vat was heated. The pulp was then removed for pressing into paper board. Although the machinery is still in place, it is unused.

The two **Finished Product Warehouses**, erected about 1920-21, are located on Commercial Street and connect with the factory complex via a railroad spur. They are long, narrow, timber-framed buildings with corrugated metal siding and concrete foundations.

Bulk Products

The Boiler House, erected ca. 1920-21, contains a reinforced concrete frame with a brick veneer. The boilers remain in place, as do the two brick chimneys, one of which is approximately 160 feet tall and the other nearly 120 feet in height. The former Consolidated Water & Light Co. Power Plant was erected about 1907 and subsequently acquired by Nabisco. The building measures 50' x 40' and contains pilastered brick walls, an ornate cornice, and a large timber roof truss. Originally, this building contained two turbines and generators; however, by 1913 it was vacant. More recently, Nabisco has used the building for storage. The Nabisco Power House was built about 1900, originally serving as a factory for the O'Neil Implement Company. Nabisco acquired it around 1925 and converted it into a hydroelectric plant, installing three turbines and generators. In addition, the building housed a steam turbine-generator; none of the power generating equipment survives. More recently, the two-story brick building has served as a warehouse.

The Printing Building, (erected ca. 1970), is the newest structure in the factory complex; it is a two-story concrete-block building, measuring approximately 220' x 150'.



Photo 55. National Biscuit Co. (Nabisco): Main Carton Factory (1921), and power canal, Marseilles.
Photo by Jet Lowe, HAER.

HISTORY: Water power from the falls at Marseilles on the Illinois River was developed as early as 1832 when Ephraim Sprague established a sawmill. A number of other industries have stood here since, including an oatmeal mill, a farm implement manufacturer, and various electric power companies. The predominant industry, however, was paper making, and several firms were located here, including J.F. Clark Paper Company, the Columbia Straw Paper Company and the Marseilles Wrapping Paper Company.

Soon after 1900, when the National Biscuit Company (Nabisco) was in the process of expanding its operation in New York, the Howe & Davidson Company in Marseilles was producing paper board boxes. In 1902, Nabisco purchased the site and began work on a new paper mill. Nabisco expanded its Marseilles operation further in 1920, when it constructed a new brick factory for producing cartons. Completed in 1921, this impressive eight-story building quickly became a city landmark. The building contained numerous printing presses and automated machinery for cutting, gluing, and folding the paper board. Finished products were shipped from the first floor. At present the building is used for offices, shipping, and storage. A number of changes were made to the complex between 1920 and the 1970s. In 1984 the property was purchased by the Federal Paper Board Company, which immediately closed the plant's paper mill but continued the printing and carton-making operations.

SOURCES:

Sanborn Map Co., Marseilles, Illinois (New York: Sanborn Map Co., 1889, 1898, 1907, 1913, 1929).

Nabisco Co., correspondence, 1950s - 1960s, available at Nabisco factory, Marseilles, Illinois.

Historical Booklet Committee, Marseilles Sesquicentennial, 1835-1985 (Coal City, IL: Bailey Printing Co., 1985).

"N.B. Co. Has Modern Carton Factory Here," Marseilles Daily Press, August 28, 1935.

Northern Illinois Cereal Factory

205 Clinton Street, Lockport

RATING: 3

Construction Date: ca. 1920

UTM: Joliet Quad. 16 E.411480 N.4604520

DESCRIPTION: The former Northern Illinois Cereal Factory is composed of several one- and two-story structures joined to form one large complex measuring approximately 225' x 100'. The northernmost section of the complex contains a one-and-one-half story building with a concrete foundation, load-bearing brick walls, and a front-gable roof. A decorative concrete belt-course frames the window and door surrounds; the brick pilasters contain decorative concrete caps. The main entrance features a pedimented portico with decorative whitewashed iron columns resting on a brick wall. A two-story building adjoins this

Bulk Products

northernmost structure and has a nearly identical architectural style; it retains its original one-over-one-light, double-hung sash windows spanned by Gothic-style arches with small decorative square panels above the arches.

Another building, consisting of a one-story brick structure with a stone foundation, is attached to the south facade; the brick pilasters have decorative brick capitals. This building has three bays with a clerestory in the center bay; the multi-light windows contain wood mullions. Inside this building is a small overhead crane.

Two other adjoining buildings have concrete foundations and load-bearing concrete-block walls. A recently erected Butler building also adjoins the complex. Finally, a covered garage connects an adjacent building to the complex. This structure is composed of stuccoed concrete-block walls, glass-block windows, and a hipped roof covered with asphalt shingles.

HISTORY: About 1910, the Northern Illinois Cereal Company acquired the mills of the defunct Norton Company in Lockport, and set about converting many of the older structures into grain storage facilities. Its property extended as far south as 13th Street, and was supplemented by the construction of these newer buildings to the north. The company was served by the Atchison, Topeka, and Santa Fe Railroad with three railroad spurs leading into the complex. Several of the 1910s buildings, located in the southern half of the complex, were destroyed by a tornado in the early 1970s. The buildings are currently used for fabricating railroad car products, including boxcar covers.

SOURCES:

Sanborn Map Co., Lockport, Illinois (New York: Sanborn Map Co., 1926).

Norton & Company Granary and General Store

10th and Commerce Streets, Lockport

RATING: 1

Construction Date: ca. 1850

UTM: Joliet Quad. 16 E.411540 N.4604420

DESCRIPTION: This three-and-one-half-story building contains random-range limestone walls with limestone pilasters and an interior timber post-and-beam frame. It measures approximately 100' x 100'. The exterior features iron starplates and windows with limestone sills and lintels. Recent construction work includes a new metal roof and overhead sliding

garage doors. Adjoining to the east is a three-and-one-half-story building of ashlar limestone construction. Containing two bays, this building originally served as Norton's dry-goods store and featured a cast-iron storefront (now restored).

HISTORY: Located on the Public Landing in Lockport, this structure is the last remaining building of the once extensive Norton & Company holdings. Constructed in 1855, it originally had a mixed industrial and commercial use, but primarily served as a grain facility. By the late 1850s Norton & Company had vertically integrated into the purchase, storage, milling, transporting and marketing of grain, with this warehouse serving as the central depot for grain arriving into the Norton system. The company's greatest expansion occurred after the deep cut modifications on the I&M Canal in 1871. During that time, two new grain elevators were built at the warehouse, water-powered machinery was installed, and a corn grinding operation was established. Norton & Company continued to prosper until the depression of 1893. In 1896 the company went into receivership. By 1911, the Northern Illinois Cereal Company had acquired the warehouse and used it primarily in its oat



Photo 56. Norton & Company Granary and General Store (1855), Lockport. Photo by Jet Lowe, HAER.

Bulk Products

milling operation. In 1950, the warehouse was sold to the Kellogg Corporation, which radically modified the structure by removing the floor joists and turning the original four separate floors into one huge open space from floor to ceiling. The wood-framed head-house was removed at an unknown date. It is presently being converted into a mini-brewery, pub and restaurant.

SOURCES:

Sanborn Map Co., Lockport, Illinois (New York: Sanborn Map Co., 1886, 1891, 1897, 1902, 1909, 1926).
Richard Hellinger, Historic American Engineering Record, "Lockport Historic District," IL-16, 1979. (mss available at the Library of Congress, Prints and Photographs Division).

Peru Beer Company: Brewery, Bottling Plant & Office

RATING: 2

southeast corner of Farm and Center streets, Peru

Construction Date: ca. 1890-1915

UTM: LaSalle Quad. 16 E.322700 N.4576900

DESCRIPTION: Brewery: (erected ca. 1890-1910s) this complex of brick buildings was once part of the brewing operation of the Peru Beer Company. The Brew House, Engine House, and attached chimney have been demolished. The former Malting House and Refrigerator House, ranging from one to three stories, compose the southern two-thirds of the complex. These structures consist of coursed rubble limestone foundations, common-bond, red-brick, load-bearing walls with iron tie-rods and starplates, an interior steel frame of Lally columns supporting rolled I-beams, and a vaulted hollow-clay-tile ceiling. Its flat roof has wooden rafters. Window openings have brick segmental arches and limestone lug sills below. The iron door on the second floor of the west facade formerly led into the adjacent brew house (now demolished). The fourth-story section was used to store malt, and the first, second and third stories served as storage for beer and grain. The northern one-third of the complex, which contained the refrigeration machinery, is two stories high and consists of the following: foundation walls of coursed rubble limestone; common-bond, red-brick, load-bearing walls; an interior containing steel Lally columns; and a recently rebuilt roof of concrete tee-beams. A four-story yellow-brick structure, located at the south end of the complex, was erected about 1940 and served as an elevator tower.

Ice House: (erected ca. 1908) this building, of a modified L-shape, is located several yards north of the brewery complex and contains a rubble limestone foundation and common-bond, red-brick, load-bearing walls. It is two and two-and-one-half stories high and has a flat roof. Its brick parapet walls have terra-cotta tile coping. It has glass-block masonry windows (a recent alteration), with brick segmental arches over the window openings and brick window sills. The ice house has wooden double doors and a concrete

loading dock along the south facade. This building is currently a refrigerated warehouse for beverages.

Bottling Plant: (erected ca. 1915) a former bottling plant now used as an office and a warehouse, this is a two-story building with a full basement. It has common-bond, brick load-bearing walls, with red-brick below the water table and mottled-brick above, an interior steel frame, and a concrete foundation. Its flat roof sits atop stepped parapet walls with cast-stone coping and ornamental brick work. The building has four-over-four-light, wood, double-hung, sash windows, with brick segmental arches over the window openings and cast-stone window sills. A sliding door at the north facade opens onto a concrete loading dock.

Office: (erected ca. 1910) located at Farm and Bluff streets overlooking the brewery, this one-and-one-half-stories building has a full basement and contains a concrete foundation (assumed) and brick load-bearing walls with a cast-stone veneer up to the water table. It has a flat roof, brick parapet walls with cast stone coping, and a cast stone cornice. The main (south) facade contains an ornate entrance with a battlement and circular arch above the doorway. There are ornate window details, similar to those at the entrance, with circular arches and sills of cast stone. The building has one-over-one-light, wood, double-hung, sash windows; all the windows have had the original pairs of single-light transoms removed.

HISTORY: The Peru Beer Company originated in 1847 when William Rausch established a brewery several blocks west of this complex of brick buildings. In 1851 Rausch moved his operation to this site, and six years later he was bought out by Behrend & Kitzenger. Behrend later became the exclusive proprietor, but in 1868 the business failed. Residents of Peru subsequently organized a stock company called the Peru Beer Company and took control of the brewery. In 1872 the firm of Hebel & Brunner acquired the business, operating it under that name until 1889. By 1890 the business was again called the Peru Beer Company. Its major competitor in Peru was the Star Union Brewing Company.

From ca. 1880 until ca. 1908 the Peru Beer Company used three one-story, wood-framed, gable-roofed buildings to serve as ice houses. Ice was stored in the cellar of the buildings. Around 1908, the company replaced these old ice houses with the current two-story brick building. It contained three large storage cellars (with a capacity of 18,000 barrels of beer) cooled by two Linde ice machines. Power was provided by two 200 horsepower steam engines driving two General Electric generators, one with a 75 kilowatt capacity and the other with a 25 kilowatt capacity. Around 1910, Peru Beer further modernized its operation, constructing a new four-story brew house containing a copper kettle (300 barrel capacity), mash tubs, malt hoppers, and beer coolers. In addition, the company erected a new office building on a bluff overlooking the brewery. The two-story brick structure was highlighted

Bulk Products

by an ornate entrance with a battlement and circular arch above the doorway. By 1915 a new two-story bottling plant, featuring an ornate brick cornice, was in operation. Both Star Union and Peru Beer continued to brew beer until the advent of prohibition in 1920.

During the 1920s and early 1930s, Peru Beer produced ice, root beer, and soft drinks. Despite the end of prohibition in 1933, many of the local breweries never regained their share of the beer market. Peru Beer ceased operations shortly after the Second World War, and subsequently a beverage distributor acquired the old brewery. Although the ice house is still operating as a refrigerated warehouse, none of the original machinery remains. The former Peru Beer office now serves as a chiropractor's clinic. Recently, the Brew House was razed along with the Engine House. The remaining section of the brewery, including the Malt House and the beer storage cellars, dates from ca. 1890. These buildings are associated with one of the earliest brewing businesses in the Heritage Corridor and are among the few remaining structures connected with the once important brewing industry.



Photo 57. Peru Beer Company: Office (ca. 1910), Peru. Photo by Gray Fitzsimons, HAER.

SOURCES:

Sanborn Map Co., Peru, Illinois (New York: Sanborn Map Co., 1888, 1892, 1897, 1909, 1926).
 Twentieth Anniversary Edition, The LaSalle Tribune, July, 1911: The Twin Cities, LaSalle and Peru in 1911
 (LaSalle, IL: LaSalle Tribune, 1911), 104-6.
 Nancy Chadbourne Maze (ed.), Tales and Pictures of Peru (Peru, IL: Letterkraft Printers Inc., 1985), 133-8.

B.A. Railton Company: Warehouse**RATING: 2**

Kedzie Avenue and Chicago Sanitary Ship Canal, Chicago

Construction Date: ca. 1925

UTM: Englewood Quad. 16 E.441600 N.4631000

DESCRIPTION: This three-story brick building, with a shed-roof wing, measures 80' x 40'. The warehouse is located along the Sanitary and Ship Canal and contains a concrete foundation and a stepped gable facade. The main facade has four pilasters on each side of a central entrance, which features a large fanlight over a wide door. The multi-light windows are framed by the brick pilasters. Each pilaster has a concrete cap. The warehouse has a flat roof with a full-length monitor.

HISTORY: This 1920s building was originally part of a copper rolling mill complex, with copper ingots supplied by barges plying the Sanitary and Ship Canal. For many years it has been used as a warehouse. The B.A. Railton Company, a wholesale grocery concern, occupied the building until 1975, when ownership was assumed by Bricks, Inc.

SOURCES:

Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1920, 1919-1951).

Rock Island Railroad Stockyards**RATING: 3**

on Stockdale 4 miles west of the Grundy County Courthouse, Morris

Construction Date: ca. 1916

UTM: Morris Quad. 16 E.374900 N.4578510

DESCRIPTION: This site contains a warehouse and two livestock barns. The warehouse, used for storing soybeans, is a one-and-one-half-story timber-framed building with a gable roof and monitor. It measures approximately 250' x 150' and rests on a concrete foundation.

Bulk Products

The two livestock barns, each a timber-framed building measuring approximately 300' x 70', contain one-and-one-half stories with shed roofs covered with asphalt. The exteriors feature weatherboard siding and shuttered windows.

HISTORY: In 1892, the Rock Island Railroad established a large stockyard in Morris where sheep brought in by railroad from the West were fed, watered, even sheared and dipped, before continuing their journey to the stockyards in Chicago. The yards had a series of runways to lead the sheep from the pens to a loading yard and platform. A 1907 Sanborn Insurance map shows an elevator clad with iron, an office and scales, as well as three stock barns to the south--all belonging to the railroad. In addition, the Rock Island Line operated a boarding house, adjacent to the stockyards. By 1916 three more stock barns and a corn crib had been built south of the yards, and the elevator, stockyards and barns were all being leased from the railroad by G.H. Weitz. By 1927, more sheep barns had been constructed to the southeast of the yards. Only two sheep barns now remain. A large soybean warehouse has replaced the other sheep barns.

SOURCES:

Sanborn Map Co., Morris, Illinois (New York: Sanborn Map Co., 1907, 1916, 1927).

Schoenhofen Brewing Company: Warehouse

First Street, west of Chartres Street, LaSalle

RATING: 3

Construction Date: ca. 1914

UTM: LaSalle Quad. 16 E.323710 N.4577010

DESCRIPTION: This one-and-one-half-story warehouse, with a full basement, is located between the old Chicago, Rock Island & Pacific Railroad to the north and the former Chicago, Burlington & Quincy Railroad to the south. It measures approximately 100' x 25' and contains stretcher-bond brick load-bearing walls, a hipped roof covered with asphalt, and a concrete foundation. Recently installed overhead doors of galvanized steel are located at the west facade. A reinforced concrete loading dock extends along the north facade, facing First Street. A railroad flatcar serves as a loading dock along the west facade.

HISTORY: This building was built around 1914 to serve as a warehouse for the Peter Schoenhofen Brewing Company, a Chicago-based firm and brewers of Edelweiss beer and Maltine. Schoenhofen's agent in LaSalle was George A. Grosskrutz. With the advent of prohibition in 1920, the warehouse was vacated by Schoenhofen. Beginning about 1921, the

Chicago Fruit and Produce Supply Company then occupied the building. In 1930 this wholesale produce firm changed its name to the Illinois Fruit & Produce Company. It is not known how long it stayed in business. The concrete bins used for storing the produce, which were cooled by ice, remain in the basement of the warehouse. A one-story brick addition adjoins the eastern section of the warehouse. Currently, Double "D" Express occupies the warehouse.

SOURCES:

Sanborn Map Co., LaSalle, Illinois (New York: Sanborn Map Co., 1888, 1892, 1898, 1906, 1911, 1926).

Lesnick's LaSalle and Peru City Directory (Peoria, IL: Leshnick Directory Co., 1914, 1917-18, 1919-20, 1921, and 1930).

Chicago, Burlington & Quincy Railroad Co., blueprint of "Station Map, LaSalle & Peru, LaSalle County," dated December 11, 1928. (Available at the I&M Canal State Trail Archives, Gebhard Woods Access, Morris, Illinois).

Star Union Beer Co. Brewery and Bottling Works

102 Pike Street, Peru

RATING: 2

Construction Date: ca. 1892, 1909

UTM: Spring Valley Quad. 16 E.321500 N. 4576460

DESCRIPTION: This two-story structure is composed of three sections; the complex once served as a bottling plant and warehouse. The main block was built in 1892 and 1909, and contains a stone foundation and common-bond brick load-bearing walls. It has a rectangular plan, a flat roof, a brick parapet wall, and a corbeled brick cornice. Boarded-up windows at the first-floor level contain brick segmental arches and stone lug sills. The second story contains two-over-two-light, double-hung sash windows with brick segmental arches and stone lug sills. A loading dock of reinforced concrete and an aluminum canopy run the length of the main facade. A one-and-one-half story brick addition adjoins the north facade.

HISTORY: The original brewery was established in 1845 by Fred Kaiser, and was incorporated as the Union Beer Company in 1868. In 1880 the company was acquired by Henry Hoerner who renamed it the Star Union Beer Company. Hoerner served as President and General Manager until 1930. In 1920, after the advent of prohibition, Star Union installed an ice maker and began to manufacture root beer. The bottling works were built between 1892 and 1909, expanded to the west in 1909 and 1916, and reached its present size by 1926. In 1927 the name was again changed to the Star Union Products Company. When prohibition was repealed, Star Union became one of the largest breweries in Illinois, with

Bulk Products

over 100 employees by 1935. The plant closed in 1966. From 1966 to 1981 the bottling department housed Dresbach Beer Distributors. The brewery complex, which stood to the west at 101 Pike Street, was razed in the early 1970s. The former bottling plant and warehouse are now vacant.

SOURCES:

A.L. Hennessey and H.F. Tyler, Peru and LaSalle City Directory for 1876 (A.L. Hennessey, 1876).
Sanborn Map Co., Peru, Illinois (New York: Sanborn Map Co., 1888, 1892, 1897, 1909, 1916, 1926).
Peru Historical Committee, Peru, Illinois Centennial, 1835-1935 (Peru, IL: n.p., 1935).
Nancy Chadbourne Maze, ed., Tales and Pictures of Peru (Peru, IL: W.H. Maze Co., 1985).
U.S. Department of the Interior, Census Office, Report on the Manufactures of the United States at the Tenth Census (Washington, D.C.: Government Printing Office, 1883).

Stein-Hirsh Company

2841 S. Ashland Avenue, Chicago

RATING: 2

Construction Date: ca. 1905, 1920s

UTM: Englewood Quad. 16 E.444720 N.4632100

DESCRIPTION: It is a large four-and-one-half-story factory brick building measuring 250' x 50'. It has had many additions and modifications. The main building has a decorative facade featuring large glass-block windows with continuous concrete sills and belt courses above the windows. The windows on the upper floors are framed with wide belt courses and rusticated pilasters. (Also on the top floor is a decorative logo framed by brackets.) The building has two main entrances: one is central, the other is located in the northernmost bay. The entrances feature brick pilasters and concrete segmental arches above the doors. Several of the first-floor bays have been modified for truck loading. A rail spur extends the length of a long shed structure of brick construction behind the main factory building. To the south stands a starch factory. This two-story brick building measures 30' x 20' and contains a concrete foundation and tall brick segmental arch windows, two of which have been converted into doorways. Located to the rear is the ruins of another factory. It is approximately four-stories tall and measures 50' x 20'.

HISTORY: The earliest factory building on this site was erected in the early 1900s and served as a starch and corn-products processing plant for the Stein-Hirsh Company. Corn was shipped by both rail and water. The largest factory building on the site was built in the 1920s. Insilco, a paint manufacturer, has occupied this site since 1974.

SOURCES:

Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1911).

Swift & Company Joliet Plant and Warehouse

New and Chicago streets, Joliet

RATING: 3

Construction Date: ca. 1900

UTM: Joliet Quad. 16 E.409780 N.4597120

DESCRIPTION: This two-story brick building with a flat roof measures 125' x 50' and contains common-bond brick walls, brick segmental arches over the window openings, and some of its original two-over-two-light, double-hung sash windows, with stone sills. The building features a corbeled brick cornice and a stone chimney.

HISTORY: Swift & Company was one of three meat-packing concerns which established warehouses in Joliet's manufacturing district at New and Chicago streets. The city's excellent rail service and its proximity to the meat-packing facilities in Chicago led Swift & Company to open a warehouse in Joliet to accommodate an expanding market. The Joliet facility received refrigerated rail cars from plants in Kansas City, St. Joseph, and Omaha, and shipped to communities throughout Illinois and adjoining states. Swift & Company moved out of this warehouse many years ago, and its current owner is unknown.

SOURCES:

William T. Chambers, "A Geographical Study of Joliet, Illinois: An Urban Center Dominated by Manufacturing," unpublished Ph.D. dissertation, University of Chicago, 1926.

Thompson & Taylor Spice Company: Warehouse

500 Cermak Road and Lumber Street, Chicago

RATING: 2

Construction Date: 1911

UTM: Englewood Quad. 16 E.446770 N.4633440

DESCRIPTION: A large nine-story warehouse of brick construction, it contains a trapezoidal plan to fit an irregular site. The building measures roughly 150' x 80'. The east facade borders the South Branch of the Chicago River along which is located a concrete dock

Bulk Products

and two levels of loading bays the length of the building. The building retains its original glass and wooden dock doors along the loading bays. The corners of the building are canted. It is visually divided into three sections by the use of terra cotta cornices and string courses. The parapet has concrete decoration, with pedimented and arched gables at the corners. The main facade is symmetrical with a central doorway, which is elaborately treated with granite columns and terra cotta entablature. The door, however, is not original. Segmental arched windows are paired, three-over-three double light. Brick pilasters are capped by three terra cotta belts. The roof is edged in terra cotta.

The Lumber Street facade contains truck and railroad bays. This section is seven stories tall. The interior contains a steel Pratt roof truss, and marks of original machinery locations are visible. Much of the interior walls and ceilings remain unchanged. The interior also features original marble paneling in the entrance stairwell, three walk-in safes, incinerator chutes, counterweight pulley doors, a compressed air sprinkler system (one of the earliest in Chicago), and a DC electric-powered elevator. There are two additions to the rear facade. One includes a two-story brick building, which housed a boiler room and which has a gabled roof and parapet. The other is a one-story brick building with load-bearing walls, a flat, corrugated metal roof, and a brick parapet wall.

HISTORY: Thompson & Taylor Spice Company, producers of commercial foodstuffs, was the original occupant of this site. The factory was designed by the architectural firm of Chatten and Hammonds, and was erected in 1911. Thompson and Taylor manufactured tin cans, roasted and ground coffee, ground and packaged spices, and printed their packages. After Thompson and Taylor vacated the property, probably during the Depression, the building became Don's Public Warehouse. The building has been served by rail, water, and trucks. In 1986 the building was acquired by the Artcrest Company, which is slowly remodeling and subdividing the building into office space. It retains many early twentieth-century electrical and mechanical features, including wiring for DC power, DC elevators, vacuum-activated speaker systems, and a compressed air sprinkler system.

SOURCES:

Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1914, 1923-1951).
Interview with Art Choyke, president, Artcrest Co., August, 1986.

TEXTILES

Seaman Bag Company

2521 Damen Street, Chicago

RATING: 3

Construction Date: ca. 1910

UTM: Englewood Quad. 16 E.443780 N.4632820

DESCRIPTION: This large warehouse building of brick construction contains four stories and measures 160' x 80'. A recently-built yellow-brick elevator shaft is located on the south side of the warehouse. A water tower sits on the flat roof. The warehouse has a one-story brick addition measuring 80' x 30', with a monitor roof and several loading bays. One rail spur extends along the front of the building. An adjacent warehouse and factory building is three stories tall and has brick walls and a concrete foundation. It measures 100' x 50' and features multi-light windows, though many have been infilled.

HISTORY: Originally this site housed the factory of the Seaman Bag Company, manufacturers of burlap and cotton bags. Seaman Bag occupied four brick buildings, of which only two, the factory and a warehouse, are extant.

SOURCES:

Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1923-1951).

United Felt Company

3729 St. Louis Street, Chicago

RATING: 2

Construction Date: ca. 1920

UTM: Englewood Quad. E.440840 N.4630320

DESCRIPTION: The earliest buildings associated with the United Felt Company's factory and warehouses date from the 1920s-1940s. The site was subsequently subdivided, with other industries moving in. The earlier structures are flanked by two buildings erected in the 1950s. The original two-story factory building contains a concrete frame with brick curtain walls. Its main facade features decorative concrete work. Many of the original door and window openings have been infilled with brick.

Textiles

HISTORY: Originally, this factory and warehouse complex was devoted to processing wool and cotton, and included three processing rooms, built in different stages between the 1920s-1940s. An Illinois Central Railroad spur line served the factory and adjacent warehouses. The company now specializes in the production of bulk polyester fiber, but retains much of its 1920s-1930s equipment. One of the adjacent warehouses was purchased in the 1960s and served as an architectural iron shop of the United Iron and Wire Company. It is currently occupied by United National Industries.

SOURCES:

Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1919-1951).
Interview with plant manager, United National Industries, August, 1986.

LUMBER, PAPER, GLASS AND STEEL INDUSTRIES

Certain-teed Roofing Company

Commercial Street, at North Head Race,, Marseilles

RATING: 3

Construction Date: ca. 1910

UTM: Marseilles 16 E.356500 N.4576300

DESCRIPTION: This complex consists of five buildings--an office, three warehouses, and the foundations of the original factory, which once manufactured asphaltic roofing paper. The office building, now serving as a tavern, contains a concrete foundation, brick walls laid in Flemish bond with a concrete string course, four-light double-hung sash windows, and a low-pitched gable roof with asphalt shingles and projecting eaves. It measures approximately 60' x 40'. Warehouse No. 1 is a brick structure with a flat roof and measures approximately 500' x 90'. Warehouse No. 2 is a brick structure with a recently built Mansard roof and sheet metal cladding and is about 150' x 50'. The "Finished Products Warehouse" is a modern metal-frame building and measures roughly 200' x 120'. The original factory of the Certain-teed Roofing Company is in ruins with parts of the concrete foundations visible; the site is used by Nabisco for water treatment.

HISTORY: This site has been utilized by many industries attracted by the power potential of the Illinois River. Paper mills, including the Pitts Mfg. Company and the W.D. Boyce Company, were the first to occupy the site beginning in the late nineteenth century. About 1910 the General Roofing Mfg. Company built the roofing manufacturing plant; it was sold to the Certain-teed Roofing Company in 1919. It was at this time that most of the extant buildings on the site were constructed. In the late 1950s a fire destroyed the main factory, and it was never rebuilt. The surviving warehouse and office buildings now house such establishments as Kelly's Bar, Marseilles Variety and Liquor, and an excavating company.

SOURCES:

Sanborn Map Co., Marseilles, Illinois (New York: Sanborn Map Co., 1889, 1898, 1907, 1913, 1929).

Historical Booklet Committee, Marseilles Sesquicentennial, 1835-1985 (Coal City, IL: Bailey Printing Co., 1985).

Lumber, Paper, Glass & Steel

Chicago Carton Company

South Pulaski Avenue, Chicago

RATING: 1

Construction Date: 1933-34

UTM: Englewood Quad. 16 E.439720 N.4629750

DESCRIPTION: This is a large factory complex with a six-story, steel-frame building flanked by two wings. The six-story section is the most visually imposing; its Art-Deco styling features a buff-colored brick veneer forming tall, narrow, ornamental pilasters that are set back upon one another, giving the appearance of a much taller skyscraper. This section of the factory contains the main entrance and is highlighted by a tall, starkly ornamented doorway with flat marble surrounds. Originally, the central tower was flanked by two wings, each containing three bays, and rising two-and-one-half stories in height. In 1935 a two-and-one-half-story addition to the north was constructed along with a three-story paper processing plant. These additions were executed using compatible materials, forming ornamental pilasters capped with decorative limestone. Attached to the south and west is a 1950 addition containing loading bays for trucks.

HISTORY: The Chicago Carton Company was incorporated in 1908, with Ralph Richardson as its first president. Richardson was originally affiliated with the Howe and Davidson Company of Marseilles, Illinois, a subsidiary of the National Biscuit Company. In 1928 Chicago Carton became a subsidiary of the United Biscuit Company of America. From 1921 to 1933, Chicago Carton was one of the leading manufacturers of paper containers, specializing in cartons and folding paper boxes for the food processing industry. The increased demand for Chicago Carton's products created a need for new facilities, and construction of the present plant began in 1933. The architect was A. Epstein, with E.J. Poirot serving as the contractor. Chicago Carton's plant was the second facility constructed in South Chicago's Crawford Industrial Park--the first modern industrial park in the United States. There have been two additions to the original site: a warehouse and paper processing plant built in 1935, and a manufacturing and storage area built in 1950, both of which were designed to be visually compatible with the original building. The Waldorf Company bought Chicago Carton in the 1960s and continues to manufacture paper boxes and containers.

SOURCES:

Central Manufacturing District Magazine, Chicago, December, 1958.

Cuneo Press**RATING: 3**

Bounded by Cermak, Canal, Grove, streets and the Chicago River, Chicago Construction Date: ca. 1925

UTM: Englewood Quad. E.446930 N.4633350

DESCRIPTION: This complex of four large buildings was constructed of concrete and steel with brick veneers. The walls of all buildings contain large banks of factory windows. An elevator tower, which marks the entrance on Cermak Street, rises an additional two stories (eight stories) at the northwest corner. This main entrance is highly embellished with eclectic motifs done in concrete; it retains its original wood and glass door. Bas relief sculpture of symbols and figures associated with printing accentuate other entrances along Grove Street. The shaft of the elevator and the brick pilasters have concrete caps. The six-story building is approximately 400' x 80'. There are two additional elevator shafts on the west facade. The other large building on the site is located along the South Branch of the Chicago River behind the William Hoyt building. It is a seven-and-one-half-story building with an H-plan and measures 220' x 180'. It is connected to the six-story building via a two-story catwalk. The seven-story structure has a concrete and steel frame, large multi-light windows, and a brick veneer at the upper story. Rail spur lines run between the Cuneo buildings.

HISTORY: John F. Cuneo, born 1885, began his printing company in 1907 with the purchase of the Chicago firm of Jenkins & George Company, edition binders. Cuneo Press printed mail order catalogs, telephone directories, and popular magazines. After acquiring the Jenkins & George Company, Cuneo Press constructed three large buildings to the rear of the William Hoyt Company's building on Grove and 22nd streets. Alfred Alschuler served as architect. This expansion gave Cuneo a printing capacity of 450 tons per day. In 1924 Cuneo Press merged with the Henneberry Company, a catalog printing company. By the 1930s Cuneo had operations on the East Coast as well. In 1936 Cuneo bought the New York Times rotogravure plant. By 1938, printing had become the second largest industry in Chicago partly because such huge mail-order houses as Sears and Spiegel had created a great demand for catalog printing. At that time Cuneo employed 6,000 people. However, in 1940 Cuneo declared bankruptcy. The site has continued to serve printing establishments to the present time.

SOURCES:

- Pierce, Bessie, A History of Chicago (Chicago: University of Chicago Press, 1957).
 "Industrial and Commercial Background for Planning Chicago," The Chicago Planning Commission, September, 1942.
 Chicago Association of Commerce, editors, Chicago: The Great Central Market (Chicago: R.L. Polk and Co. 1923).
Chicago: Its History and Its Builders (Chicago: S.J. Clarke Publishing Co., 1912).
Moody's Manual of Investments (New York: 1927 and 1939).

Gerlach-Barkow Company

306 E. Washington, Joliet

RATING: 2

Construction Date: 1907

UTM: Joliet Quad. 16 E.410200 N.4597140

DESCRIPTION: The earliest remaining section of this complex is the shipping area, built in 1907. It has five small garage doors flanking a two-door main entrance, a concrete floor, wooden columns, and wire and glass windows. The one-and-one-half-story building measures approximately 125' x 100', and the roof supports a 50,000 gal. steel gravity water tank. In 1914, the shipping area was encompassed by a three-story U-shaped addition measuring 300' x 200'. It was built by the Gerlach-Barkow Company and has a stone foundation and reinforced concrete walls. The brick walls have pilasters and a stone belt course and resemble the original shipping area. In 1920 a large three-story addition measuring 300' x 150' was built. It is nearly identical in appearance to the earlier addition, with the exception of an arched doorway made of glazed stone. The south facade of this building is constructed in common-bond brick and is slightly shorter than the more ornate west facade. A fire in 1992 destroyed this 1920 addition. It was demolished in 1995.

HISTORY: In 1907, Theodore R. Gerlach, and E.J. Barkow founded the Gerlach-Barkow Company, a firm which specialized in selling calendars throughout the United States and Canada. In 1924, Gerlach purchased the P.F. Vodland Company, manufacturers of children's books, gift books and greeting cards. Gerlach acquired the Artographic Corporation Publishers in the late 1940s. At its peak in the 1920s, Gerlach employed as many as 800 people.

SOURCES:

Sanborn Map Co., Joliet, Illinois (New York: Sanborn Map Co., 1924-1956).

August Maue, History of Will County, v. 2 (Topeka-Indianapolis: Historical Publishing Co., 1928).

Letter F. Filson, "From Whence Came a City: The Story of Joliet and Will County, Illinois", unpublished mss, 1957, available in the Joliet Public Library.

Joliet Herald News, June 10, 1925; and June 3, 1936

John Gillespie Lumber Company

2530 South Laflin, Chicago

RATING: 2

Construction Date: ca. 1925

UTM: Englewood Quad. E.444840 N.4633540

DESCRIPTION: This site consists of two small buildings, each one-and-one-half-stories in height. The building which faces the street measures approximately 25' x 25'. The facade is symmetrical with a central doorway and flanking, paired, one-over-one-light windows with shutters. Both the door and windows have segmental arches. The basement windows have concrete lintels, above which is a concrete belt course separating the stories. The roof has a parapet beneath which is a concrete cornice and decorative brick corbeling. The side walls are unornamented. The rear building is a 25' x 15' brick garage with standard garage doors. Both buildings have flat composition roofs.

HISTORY: The site was first surveyed in 1853 for Lord Bushnell Lumber, later known as Keith Lumber. By 1914 the buildings were owned by the John Gillespie Lumber Company. The entire site was once divided into a series of small, specialty lumber yards. Subsequently, the site was acquired by Acme Barge Cleaners. The most recent occupant has been Mobile Builder's Supply, a wholesaler of building materials to road construction contractors. Both buildings have been substantially modified.

SOURCES:

Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1914).

Hacker-Sime Company

102 Collins Street, Joliet

RATING: 2

Construction Date: 1893, 1924

UTM: Joliet Quad. 16 E.410540 N.4597300

DESCRIPTION: Each of the several buildings in this large complex contains numerous alterations and additions. The most notable buildings date from the 1920s and are of brick construction with interior post-and-beam frames. The two-story buildings have a common-bond brick exterior and multi-light windows. The buildings are no longer occupied. The structure was demolished in 1992.

Lumber, Paper, Glass & Steel

HISTORY: The Hacker-Sime Company, manufacturer of building supplies, was founded in 1882, expanding from its original stone building to a complex of several brick factory buildings in 1919. The following year, the entire factory and a major portion of the warehouse were destroyed by a fire. The rebuilding of those structures in 1921 included installation of modern equipment for mill work production and a molding machine capable of producing 650 linear feet of trim per hour. In 1935 a new building was constructed which incorporated the original stone structure. The lumber yard was served by the Rock Island Railroad. The buildings are currently abandoned, and the Hacker Mill and Lumber Yard now operates out of a trailer parked on the property.

SOURCES:

Sanborn Map Co., Joliet, Illinois (New York: Sanborn Map Co., 1925).
Joliet Herald News, February 25, 1957, (Diamond Jubilee Souvenir Section).

Hines Lumber Company

bounded by Blue Island Avenue, Halsted Street,
and the former I&M Canal Turning Basin, Chicago

RATING: 3

Construction Date: ca. 1900, 1920

UTM: Englewood Quad. 16 E.444060 N.4632800

DESCRIPTION: This large complex contains seven pre-1940s buildings, constructed of brick and wood. A small, wood-framed guard house, relocated about 20 feet from its original site, stands at the entrance gate. It is attached to a large, wood-framed shed which is clad with clapboard. It contains wood roof trusses and a monitor roof and measures 250' x 150'. The building was built for the Hines retail trade. East of this shed is a one-and-one-half-story brick building measuring 100' x 80'. It contains a monitor roof supported by Pratt trusses. The west facade has two large loading doors and a smaller service door. Directly east is a two-story brick building containing segmental arched casement windows. To the south is a one-and-one-half-story shed of wood construction. To the southwest stands the original stable, (ca. 1900) two-and-one-half stories, with a monitor roof on a slightly pitched roof. The east facade has a stable door. On the second floor is a hayloft with door, flanked by two segmental arch windows. The original administration building has been modified to an L-plan. The old building is three stories, 80' x 40', with a 60' x 60' rear addition. It has many segmental arch windows, although they have been greatly altered.

Facing the original administration building is the sawmill, measuring 200' x 20', with a gable roof and monitors supported by Pratt roof trusses. The front facade is brick, and one-half of the rear facade is brick; the remainder of the building is wood. A rail spur extends along the building. West of the sawmill stand the two-story Boiler House, still in service, and the five-story brick Vacuum House, used to collect sawdust from the sawmill.

HISTORY: In 1892 Edward Hines founded the Hines Lumber Yard, and by 1900 he had turned his business into the largest lumber yard in the world, doing an annual business of five-to-six million dollars with a marine fleet of seventeen vessels. This operation remained a private, family concern until 1982, when it was sold to the Weyerhaeuser Corporation, its current owner.

SOURCES:

Paul Gilbert and Charles L. Bryson, Chicago and its Makers (Chicago: Felix Mendelssohn Publishers, 1929).
Industrial Chicago, The Manufacturing Interests, v. 3 (Chicago: The Goodspeed Publishing Co., 1894).
Chicago Tribune, May 20, 1982.
Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1914).

Joliet Wallpaper Company

Logan and Second streets, Joliet

RATING: 2

Construction Date: ca. 1914

UTM: Joliet Quad. 16 E.411960 N.4596620

DESCRIPTION: These were originally three factory complexes, now owned by the Ivex Corporation, a manufacturer of paper. The earliest factory is that of the Joliet Wallpaper Company, later acquired and combined with the mills of the adjacent Prairie State Paper Mill Company, and the factory of the Midwest Wallpaper Company. The most impressive building on this site is the original factory of the Joliet Wallpaper Company. It consists of a two-story brick building measuring approximately 200' x 75', with load-bearing brick walls and iron tie-rods, a wood post-and-beam interior frame, and multi-light, wood-frame sash windows. A spur line of the Elgin, Joliet, and Eastern Railroad extends along the east side of the building. The south facade contains lightly ornamented brickwork and a pedimented limestone block over the door with the inscription "Joliet Wall Paper Company, 1914."

Among the structures that survive from the Prairie State Paper Mill complex, which is located just east of the former Joliet Wallpaper factory, is a two-story building measuring approximately 200' x 75'. It contains a steel frame resting on concrete foundations, a brick

Lumber, Paper, Glass & Steel

veneer, and steel roof trusses. The multi-light, steel-frame windows are topped by segmental arches of brick. A spur line of the EJ&E extends along both sides of the building.

Two buildings survive from the Midwest Wallpaper Company's factory. They date from the mid-1920s and are one-story brick buildings featuring large, paired, double-hung sash windows. Each building measures approximately 150' x 50', and a railroad spur of the EJ&E runs between them.

HISTORY: The factory of the Joliet Wall Paper Company was designed by John E. Chalston, and constructed in 1914. Joliet Wall Paper was the second wallpaper factory to locate in Joliet--the Star-Peerless Company was the first (see entry of Star-Peerless Wallpaper Company). The smaller factory of the Midwest Wall Paper Company opened in the 1920s, followed soon after by the mills of the Prairie State Paper Company. This latter company, currently known as the Ivex Corporation, took over Joliet Wall Paper and Midwest Wall Paper in the 1930s

SOURCES:

William T. Chambers, "A Geographical Study of Joliet, Illinois: An Urban Center Dominated by Manufacturing," unpublished Ph.D. dissertation, University of Chicago, 1926.

Lennon Wallpaper Company

807 Fourth Avenue, Joliet

RATING: 2

Construction Date: ca. 1880

UTM: Joliet Quad. 16 E.4111520 N.4596680

DESCRIPTION: This complex contains four buildings erected at various stages. The earliest buildings were constructed in the late nineteenth century and have stone foundations, wood frames, and brick veneers. The oldest building is a one-story, narrow, rectangular brick structure facing south on Fourth Avenue. It measures approximately 450' x 60' and contains brick pilasters and brick segmental arches spanning the window openings. New metal-frame windows have been installed.

A one-story building was added to the west facade of this building. It measures approximately 200' x 130' and contains load-bearing concrete-block walls, a flat roof, and metal frame windows. On the south side of Fourth Avenue is a one-story building which appears to have been constructed not long after the original building. While the front section

of the building is constructed of concrete block, the rear section of the building has a stone foundation, wood columns and brick walls. An addition was built (ca. 1950s) to the west. These buildings contain very little ornamentation. Also on the site of the Lennon Wallpaper Company is the warehouse of the National Refining Company, a two-story building measuring 100' x 40'. It has a stone foundation, gable roof, segmental arch windows with stone sills, and a cast-stone veneer.

HISTORY: The Lennon Wallpaper Company was founded in 1919 as the fourth wallpaper mill in Joliet, which was billed as "the wallpaper capital of the world." As the company expanded production in the 1920s, new buildings were constructed. In addition, the company acquired a warehouse of the adjacent National Refining Company, located just south of the factory on Grant Street. Lennon Wallpaper quickly became the city's largest wallpaper producer. The Lennon Wallpaper Company is the last of the early wallpaper mills in Joliet still operating.

SOURCES:

William T. Chambers, "A Geographical Study of Joliet, Illinois: An Urban Center Dominated by Manufacturing," unpublished Ph.D. dissertation, University of Chicago, 1926.

W.H. Maze Company: Lumberyard

1207 Water Street, Peru

RATING: 2

Construction Date: 1926

UTM: LaSalle Quad. 16 E.322480 N.4576780

DESCRIPTION: The office building of the W.H. Maze Lumberyard is one of the earliest surviving buildings of the W.H. Maze complex, located here since 1848. The office building is one story in height, square in plan. It has a glazed orange brick veneer exterior. The south (main) facade is three bays wide. The building has a flat roof and brick parapet with stone coping. The main entrance in the southeast corner contains a wood and glass door with sidelights and a multi-paned semi-circular transom. Two large, round-headed multi-paned windows complete the south facade; three appear in the east facade. Brick pilasters set on marble bases and surmounted by a granite entablature frame the openings on the south and east facades. The cornerstone reads: "Maze 1854, 1863, 1869, 1885, 1890, 1893, 1895, 1911, 1912, 1922, 1928."

HISTORY: The W.H. Maze Company is the oldest continually operating business in Peru. Samuel Nesbit Maze opened his lumberyard at this location in 1848, specializing in wood shingles. Maze purchased grain locally, then shipped it by barge to Chicago, where he

Lumber, Paper, Glass & Steel

exchanged it for lumber and hardware. Hardwoods were brought from New Orleans by steamboat. Walter H. Maze succeeded his father in 1885. He acquired the Peru Planing Mill in 1893 and expanded operations to include the production of zinc-coated nails. W.H. Maze Company was incorporated in 1912. The office building, erected in the mid 1920s, is the most impressive historic structure still standing. Maze continues in business operating the lumber yard and nail factory.

SOURCES:

Isabel Katherine Billings, "The LaSalle-Peru-Oglesby Area as a Type Unit Study In Geography," M.A. Thesis, Illinois State Normal University, 1945.
"Maze Lumber Dates Back to 1848," LaSalle News Tribune, June 28, 1985.
Sanborn Map Co., Peru, Illinois (New York: Sanborn Map Co., 1888, 1892, 1897, 1909, 1916, 1926).
Louis H. Shadensack, Peru's Water Street a Century Ago (Peru, IL: W.H. Maze Co., 1966).
Nancy Chadbourne Maze, ed., Tales and Pictures of Peru (Peru, IL: W.H. Maze Co., 1985).

Morris Paper Mills

East Washington Street on north side of I&M Canal, Morris

RATING: 2

Construction Date: 1900

UTM: Morris Quad. 16 E.38200 N.457560

DESCRIPTION: Currently undergoing partial demolition, this factory complex is composed of about twenty buildings. The major historic structures include:

The **Main Mill**, erected ca. 1925, is a two-story building containing a steel frame and brick exterior walls; boxes were manufactured in this building and packaged for shipping. The **Beater Room**, erected ca. 1925, is a brick and steel-frame building containing vats for processing pulp. The **Roll Storage Building**, erected ca. 1925, is a brick and steel-frame building. The **Raw Material Warehouse**, erected ca. 1925, contains reinforced a concrete and steel-frame with a brick veneer; this building is being demolished. The **Power Plant**, erected ca. 1917, contains a steel frame with brick veneer; a 180' high brick smokestack is adjacent to the power plant. The **Boiler House**, erected ca. 1925, contained a coal-fired boiler and conveyor system for transporting coal to boiler from adjacent storage area; this building is being demolished. The **Box-Manufacturing Building**, erected ca. 1917, contained pressing and folding machinery, and housed the cutting department. It consists of brick pilasters and brick walls, a steel frame, and a concrete floor.

HISTORY: By 1888 the Allen Paper Car Wheel Company was operating a large paper mill complex on the east side of Morris along the I&M Canal. This company produced laminated paper primarily for passenger railroad cars manufactured by George Pullman in Chicago. In 1900 the Morris Paper Company acquired the property. By 1907, the factory was owned by the Prairie Box Board Company, which manufactured boxes and paper board, and employed about fifty people. A spur line of the Rock Island Railroad served the factory. Following bankruptcy in 1910, Prairie Box Board was reorganized in 1913, and three years later was operating as the Morris Paper Mill Company.

Between 1917 and 1927, Morris Paper Mill rebuilt and expanded its industrial complex. Producers of boxes and paper board, the company erected new warehouses and offices, buildings for processing and laminating paper, and a new electric power plant. The mill became the largest single employer in Morris and remained in operation through the Depression of the 1930s. Federal Paper Board, a New Jersey-based company, acquired Morris Paper Mill in 1956, which by then was employing some 500 workers. The factory continued producing paper board through the early 1980s, when Federal Paper Board cut back its Morris operations. Finally in 1985, the plant was closed and demolition quickly ensued. A light-industrial facility is planned for the site, and few of the historic buildings are slated for reuse.

SOURCES:

Sanborn Map Co., Morris, Illinois (New York: Sanborn Map Co., 1888, 1891, 1898, 1907, 1913, 1925).
Grundy County Sentinel, September 27, 1900 and October 4, 1900.
Morris Daily Herald, December 31, 1910; January 2, 1912; December 31, 1913; December 31, 1917.
Helen S. Ullrich, This Is Grundy County (Dixon, IL: 1968), 235.

National Carton Company

1 South Park Road, Ingalls Park, Joliet (vicinity)

RATING: 3

Construction Date: ca. 1903

UTM: Joliet Quad. 16 E.413440 N.459730

DESCRIPTION: This factory is an L-shaped two-story brick building that measures 435' x 90'. It consists of a concrete foundation, brick common-bond walls, five loading doors, one of which is bricked up, a gabled roof, and segmental arch windows, some of which are bricked in. A water tower 60' high stands adjacent to the structure. A detached one-story warehouse building, located south of box factory, measures 150' x 70' and has brick walls, pilasters and wooden posts.

Lumber, Paper, Glass & Steel

HISTORY: The National Carton Company, manufacturer of boxes and paper products, constructed these buildings around 1903. Railroad sidings ran along both north and south facades and to the paper warehouse. National Carton operated until 1960, when this plant was acquired by Midwest Supply Company, its current owner.

SOURCES:

Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1923-1951).

National Plate Glass Company:

RATING: 2

Federal Division (Plant No. 5)

Illinois Division (Plant No. 7)

along the Illinois River, Naplate

Construction Date: 1901, 1923

UTM: Starved Rock Quad. 16 E.342400 N.4577000

Ottawa Quad. 16 E.342950 N.4577000

DESCRIPTION: The original factory of the Federal Plate Glass Company was constructed in 1910 and is now known as Plant No. 5 of the Libby-Owens Ford Company. When opened for production in 1910, the plant consisted of: 1) a **Rolling and Annealing Building**, a one-and-one-half-story brick and steel-framed structure, measuring 240' x 150'. It housed four melting and two annealing furnaces and was adjacent to the long annealing, or lehr, furnace and rolling operation; 2) the **Finishing Building**, a one- and two-story brick and steel-framed structure, measuring 375' x 125', and housing the glass storage section, as well as the grinding and polishing operation; and 3) the adjoining **Warehouse Building**, a one-story brick and timber-framed structure, measuring 275' x 125'. In addition, the **Pot House**, a two-story brick and steel-framed structure, measuring 150' x 150', was built between the Rolling and Annealing Building and the Finishing Building.

In 1923, two years after the Fisher Body Company acquired Federal Plate Glass through Fisher's subsidiary, the National Plate Glass Company, a second plant was constructed just east of the existing facility. Now known as Plant No. 7 of the Libby-Owens Ford Company, this facility was nearly identical in design and layout to its neighbor; however, it was substantially larger. The Rolling and Annealing Building, measuring about 900' x 175' and of steel-frame construction with brick curtain walls and a full-length monitor roof, contained ten melting furnaces and a continuous lehr furnace over 400 feet in length. The Finishing Building, containing the continuous grinding and polishing operations, consisted of a steel

frame with brick curtain walls, a full-length monitor roof, measured nearly 1200 feet in length, and ranged in width from about 150 feet to 300 feet. The adjoining Warehouse Building, also of steel-framed and brick curtain wall construction, measured 575' x 275'. The Pot House, constructed in the same fashion, measured 400' x 150'. In addition, the plant contained a new three- and four-story brick and steel-framed Powerhouse.

In 1928, National Plate modernized its Federal Division plant with the construction of a continuous 184" Grinding and Polishing line. Libby-Owens Ford acquired National Plate Glass in 1931 and has made a number of alterations to Plant No. 5, including the installation of a float tank process in 1969, whereby plate glass is wholly manufactured by the Pilkington process. Plant No. 7 also has been altered since Libby-Owens Ford assumed ownership. It is now devoted solely to the manufacture of laminated safety glass.

HISTORY: The abundance of easily mined silica sand in the Ottawa area led to the establishment of several glass-making concerns as early as the 1860s. One site west of Ottawa, along the Illinois River, near the sand pits of the United States Silica Company, was developed in 1899 by Monroe Sieberling of Kokomo, Indiana. Sieberling's plant operated less than two years before Pittsburgh Plate Glass acquired it. The latter company then tore down the plant to squelch potential competition. The Federal Plate Glass company purchased the property in 1910 and proceeded to construct a large factory complex. The silica sand was brought by rail to the batch house where it was stored in concrete bins. Melted in gas-fired furnaces, the raw materials moved in a continuous process from the rolls through the annealing, or lehr, furnaces, into the grinding and polishing department, and on to the warehouse where the plate glass was shipped by rail to the customers. The process was fully electrified and was carried out on a single floor.

In 1921, the Fisher Body Company acquired Federal Plate Glass through its subsidiary the National Plate Glass Company and renamed the Ottawa facility the Federal Division of National Plate. Fisher produced auto bodies for Cadillac, Buick, and Ford; much of the plate glass produced at the Ottawa plant was shipped to Detroit. In 1923 National Plate Glass added a second plant next to the Federal Division, its layout being almost identical to the existing plant, but nearly twice as large. Established as the Illinois Division of National Plate, the plant featured the continuous rolling and annealing process with electrical power supplied by a new coal-fired electric generating station. In addition to the glass plant, National Plate Glass erected a number of houses nearby. Located on the western outskirts of Ottawa, the company named this community Naplate. The town contained about twenty brick and fifteen wood-framed bungalows. Many of the glass workers and residents of Naplate were immigrants from Italy and eastern Europe.

Lumber, Paper, Glass & Steel

The General Motors Corporation acquired Fisher Body in 1926 and continued operating the two Ottawa glass plants. Two years later, General Motors installed a modern continuous 184"-wide grinding and polishing plant. Modernization of the plant was scarcely underway when the effects of the Great Depression began to be severely felt. In 1931, General Motors sold its National Plate Glass Company to the Libby-Owens Ford Company, producers of automobile glass, primarily for the Ford Motor Company. Shortly after this acquisition, Libby-Owens Ford closed the plants. In 1933, the company reopened the two facilities as Plant No. 5 and Plant No. 7. During the Second World War the plant shifted production from the automobile to the defense industry, producing such items as glass for aircraft and prefabricated defense housing. The plants boomed in the postwar 1950s, once again producing automobile glass. Libby-Owens Ford was the area's largest employer with nearly 1,500 workers in its two plants. In 1970 Libby-Owens installed a float tank process in Plant No. 5, thereby eliminating the old grinding and polishing lines. Production in Plant No. 7 was devoted solely to laminated glass. Libby-Owens Ford continues to produce glass for the automobile industry.

SOURCES:

Caroline Campaigne (ed.), Ottawa Sesquicentennial Commemorative Book (Ottawa, IL: n.p., 1987), 92-3.

Sanborn Map Co., Ottawa, Illinois (New York: Sanborn Map Co., 1913, 1925).

Philip Devon Wolfe, "Ottawa's Economy: Growth and Change in Commerce, Industry, and Government," in

Michael P. Conzen (ed.), Focus on Ottawa: A Historical and Geographical Survey of Ottawa, Illinois, in the Twentieth Century (Chicago, IL: University of Chicago, Committee on Geographical Studies), 11-15.

Peru Planing Mill

1315 Water Street, Peru

RATING: 2

Construction Date: ca. 1876

UTM: LaSalle Quad. 16 E.322160 N.4576700

DESCRIPTION: Located in Peru's earliest industrial and commercial district, this structure consists of a main block with five additions. The main three-story block was built between 1876 and 1880 to house the Peru Planing Mill. It has Italianate styling, a stone foundation, brick load-bearing walls laid in common bond, molded brickwork forming the cornice, and a wooden cornice with a diamond pattern above first floor. The highly ornate window surrounds are of cast iron. The south end of the west facade contains a one-story brick addition. To the north (rear) of this addition is a two-story, frame structure with a corrugated metal siding. This section joins the main block to a two-story, rectangular warehouse to the

west. Built between 1897 and 1909, this warehouse is a wood-framed building with corrugated metal siding and a low pitched front gable roof with asphalt shingles.

On the northwest corner of the block is a three-and-a-half-story wood-framed addition with asbestos siding. It was erected between 1897 and 1909. On the east facade of the main block is a two-story addition dating from the 1920s. It contains common bond brick load-bearing walls resting on a concrete foundation, and its south (main) facade features a corbeled brick cornice. This complex currently houses the city's Department of Public Works.

HISTORY: The Peru Planing Mill was erected between 1876 and 1880 for August Heinze. The company manufactured flooring, siding, and moldings of white pine brought in from Wisconsin and Michigan by way of the I&M Canal. Walter H. Maze purchased the company in 1893 and expanded the operations by building the warehouse and northwest corner additions between 1909 and 1916. Additional buildings were added to the east between 1916 and 1926. It has variously been operated as the Illinois Valley Sash and Door Company (from 1922 to ca. 1935), the Illinois Valley Mfg. Company (from ca. 1938 to 1960), and the Illinois Millwork Corporation (from 1960 to 1977). Since 1980 it has housed the City of Peru, Department of Public Works.

SOURCES:

U.S. Department of the Interior, Census Office, Report on the Manufactures of the United States at the Tenth Census (Washington, D.C.: U.S. Government Printing Office, 1883).

R.R. Donnelly and Sons, LaSalle and Peru City Directory 1885-1886 (Chicago: R.R. Donnelly and Sons, 1885).

Sanborn Map Co., Peru, Illinois (New York: Sanborn Map Co., 1888, 1892, 1897, 1909, 1916, 1926).

Louis H. Shadensack, Peru's Water Street a Century Ago (Peru, IL: W.H. Maze Co., 1966).

Scully Iron & Steel Company

2364 Ashland Avenue, Chicago

RATING: 2

Construction Date: ca. 1890

UTM: Englewood Quad. 16 E.444700 N.4632800

DESCRIPTION: This is a series of buildings roughly parallel to each other in three lines, now owned by Rodi Marine. Originally the complex comprised two separate manufacturing facilities, the westernmost buildings belonging to American Car, and the easternmost buildings belonging to Scully Steel. In addition to these sites, the complex includes a freestanding building located in the northernmost portion of the site on Ashland Avenue, as well as another building farther south on Ashland. The northernmost building is two-and-a-

Lumber, Paper, Glass & Steel

half stories and measures 120' x 100'. It has been greatly modified. The building has a concrete foundation and sills, a flat roof, and a tile cornice. There is also a barrel vaulted, modern brick garage with walls apparently from a now demolished portion, suggesting an original L-shaped plan. The one-and-one-half-story garage has a large truck bay and four large cantilevered windows. At the northwest corner is a 30-foot tall smoke stack. The barrel vault is supported by wooden Warren trusses. Directly to the west is a large three-story 120' x 40' factory building with a gable roof. It has a modern metal overhead door, as well as three other post-1940s additions to the north facade.

HISTORY: This company was founded in May of 1891 by Alexander Scully and Alfred M. Castle under the name Scully-Castle Company. In 1893 Castle sold out his part of the business to Scully, and the name of the company was changed to Scully Steel and Iron Company. The company specialized in selling and distributing steel products, which included boiler plate, sheet iron, and railroad supplies. Though it is unlikely that any casting was done here, finishing probably was. The company expanded in 1909 and, having bought out the interests of Kelly, Maus & Company, moved to the Ashland Avenue site. Scully remained president of the company until his death in 1914. The company was subsequently acquired by U.S. Steel. The availability of rail, water, and highway transportation facilities made Scully an ideal center for the reception and dispatch of steel products to the Chicago market. The site is now occupied by Rodi Marine.

SOURCES:

Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1914).

Moody's Analysis of Industrials (New York: 1917), 2055.

Moody's Manual of Investments (New York: 1939), 3071-75.

Manufacturing and Wholesale Industries of Chicago (Chicago: Thomas B. Poole Co., 1918).

J.W. Sefton Manufacturing Company

West 35th Street between the Chicago River
(South Branch) and Iron Street, Chicago

RATING: 3

Construction Date: 1907

UTM: Englewood Quad. 16 E.445350 N.4630850

DESCRIPTION: This four-story brick building with a concrete foundation measures approximately 610' x 180'. It has a U-shaped plan with a one-story middle section. The main facade has two symmetrical four-story sections connected by a one-story section which has a series of sawtooth monitors. Both four-story sections have four bays, with the

doorways located in the innermost bays. A concrete cornice extends above the rusticated one-story base. The upper three stories have brick pilasters which frame the windows. The pilasters have concrete bases and are capped by stylized brick chevrons. The first and second floors contain three-over-three light, double-hung sash windows, and the upper floors contain glass-block windows. The main facade features neo-Classical doorways with entablatures. The original wooden doors have been replaced. The westernmost section is in poor condition with numerous windows boarded up or broken. The Machine Shop addition measures 150' x 75' and contains a reinforced concrete frame. This addition projects from the middle of the rear facade and its exterior features large glass-block windows.

HISTORY: This building was designed by the architectural firm of Postle and Mahler and erected in 1907 in the Central Manufacturing District for the Sefton Manufacturing Company. The machine shop addition was built about 1914, with Postle and Fisher serving as architects. Sefton Manufacturing Corporation was incorporated in New York in 1916, succeeding the J.W. Sefton Manufacturing Company, which was organized in 1888. The company manufactured paper boxes, manila paper products, boxes, cartons, and oyster pails. The Central Manufacturing District became home to many light manufacturing industries between 1890 and 1915. After being fully occupied in 1915, the District expanded west with the development of the Pershing Tract, followed in the 1920s by the Kedzie Development, and by Crawford Industrial Park in the 1930s. The District acted as an industrial developer - buying land, laying streets, providing architects and engineers, as well as providing financial services. The District was one of the first industrial districts in the United States and was the precursor of the modern industrial park. It was unique in the scope and coordination of services provided, and its location, just north of the stockyards along the river with excellent rail service, was prime. The area was served by the Chicago Junction Railroad which connected the area with every trunk line directly entering Chicago.

SOURCES:

Harold Mayer and Richard Wade, Chicago: Growth of a Metropolis Chicago (University of Chicago Press, 1969).

Moody's Analysis of Industrials (New York: 1917), 2055.

Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1912).

Lumber, Paper, Glass & Steel

Star-Peerless Wallpaper Company

219 Maple Street, Joliet

RATING: 2

Construction Date: 1901, 1927

UTM: Joliet Quad. 16 E.411520 N.4597540

DESCRIPTION: The original section of the three-story mill measures approximately 125' x 75' and contains brick pilasters and common-bond brick walls, an internal wood post-and-beam frame, a lightly ornamented cornice, a rubble stone foundation, and a flat roof. The many windows that once existed have been infilled with brick. A major three-story addition, built in 1925, consists of a reinforced concrete frame, with brick curtain walls, and numerous multi-light windows, many of which have been infilled with brick or concrete block.

HISTORY: The Star-Peerless Wallpaper Company relocated to Joliet from Chicago in 1901 and became the first wallpaper factory in the area. By the 1920s Joliet was considered the center of wallpaper production in the United States. The rise of the wallpaper industry in Joliet can be attributed to the city's proximity to raw-paper goods from Michigan and Wisconsin, to the numerous rail lines available to transport the finished products to the major markets, and to the low cost of doing business in Joliet. Originally occupying one large building, Star-Peerless constructed a large factory addition in 1927. Spur lines of the Rock Island and the Elgin, Joliet, and Eastern Railroad served the Star-Peerless plant. Beginning in the 1960s, Joliet's wallpaper manufacturers steadily declined, and Star-Peerless subsequently went out of business. Presently, a flea market occupies part of the factory complex.

SOURCES:

William T. Chambers, "A Geographical Study of Joliet, Illinois: An Urban Center Dominated by Manufacturing," unpublished Ph.D. dissertation, University of Chicago, 1926.

Superior Wall Paper Company

900 East Washington Street, Joliet

RATING: 2

Construction Date: 1919

UTM: Joliet Quad. 16 E.411620 N.4597180

DESCRIPTION: Two structures survive from the wallpaper factory: a two-story building with a large hipped roof, and a one-story building containing a flat roof. The two-story building is the more architecturally impressive, containing ashlar Joliet limestone and limestone lintels and sills for the windows. The one-story section contains brick pilasters

and brick walls. Converted to a chemical plant in the 1970's, none of the machinery for the manufacture of wallpaper is thought to have survived.

HISTORY: Founded in Joliet in 1919, the Superior Wallpaper Company was the city's third wallpaper manufacturer. Just a few hundred yards away stood the Joliet Wallpaper Company and less than one mile to the south was the Star-Peerless Wallpaper Company. As with these other wallpaper manufacturers, Superior Wallpaper received bulk paper from Wisconsin and Michigan, then processed, printed, and cut it in the factory. Superior Wallpaper may have remained in business through the 1960s. DeSoto, Inc., a manufacturer of soaps and other chemical products, subsequently acquired the property and extensively renovated the factory complex. Little remains of the original wallpaper plant.

SOURCES:

William T. Chambers, "A Geographical Study of Joliet, Illinois: An Urban Center Dominated by Manufacturing," unpublished Ph.D. dissertation, University of Chicago, 1926.

THERMALLY PRODUCED PRODUCTS

General Refractories Company: Joliet Works

2000 N. Broadway, Joliet

RATING: 3

Construction Date: 1916

UTM: Joliet Quad. 16 E.409510 N.4601280

DESCRIPTION: This site contains several buildings dating from the 1910s through the 1920s, including the office, the machine shop, the blacksmith shop, the dustmill, the carpenter shop, and a water tower. The office building is a one-and-a-half-story brick structure measuring 35' x 25'. It contains a stone foundation, common-bond brick walls, and brick segmental arches over the door and window openings. The machine shop is a one-and-a-half-story brick building and measures 140' x 75'. It features common-bond brick walls, a rubble limestone foundation, corbeled brickwork, and brick segmental arches over the door and window openings. The flat roof is supported by shallow steel trusses. Interestingly, the interior retains a number of pulleys associated with the original overhead line shafting. The blacksmith shop is housed in a two-story brick and concrete block building measuring 70' x 25'. One of the forges remains in place. The dustmill is a three-story brick building with an interior steel frame. It measures 160' x 90' and retains some of the dust removing equipment. The carpenter shop is a one-story brick building measuring 50' x 50'. It contains an interior timber post-and-beam frame. Some of the original line shafting remains in place. A wooden-stave water tower, supported on a timber and iron frame, rises about 70 feet and is located near the machine shop.

HISTORY: Shortly after it opened the nearby Rockdale Works in 1914, the General Refractories Company constructed a refractory in Joliet. The two plants combined to produce the largest amount of silica brick in the Upper Midwest. In the 1920s the Joliet Plant produced approximately 80,000 silica bricks per day. After the plant closed in the 1970s, the site was acquired by Seeler Industries. Neither the kilns nor the main factory survives. Several of the support buildings remain, including the machine shop, dustmill, and blacksmith shop.

Thermally Produced Products

SOURCES:

Robert E. Sterling, A Pictorial History of Will County, v. I (Joliet, IL: Will County Historical Publications, 1975).
William T. Chambers, "A Geographical Study of Joliet, Illinois: An Urban Center Dominated by Manufacturing," unpublished Ph.D. dissertation, University of Chicago, 1926.

Mary D. Schopp, "General Refractories--Crucible of Industry," Central Manufacturing District Magazine, January, 1955.

Interview with Dick Walsh, employee of General Refractories, July, 1986.

General Refractories Company: Rockdale Works

1808 Mound and 2000 N. Broadway, Rockdale

RATING: 3

Construction Date: 1910s-1970s

UTM: Joliet Quad. 16 N.459040 E.405980

DESCRIPTION: This site contains several structures dating from the 1910s through the 1920s, including the main factory building, the kilns, the material storage silos, the mould storage building, and the warehouse buildings. The main factory building housed the mixing and moulding operation and was erected in the 1910s with numerous subsequent additions. The five-story structure contains a steel and wooden frame with brick walls and corrugated metal cladding. It measures 475' x 125'. Warehouse buildings stand to the south of the main factory building. Also adjacent to the main factory is a single brick kiln, the last survivor of the twenty-one kilns that were located here.

The office building, located north and east of the main factory, was erected in 1925 and originally served as a boiler house. The one-story brick structure measures 50' x 25'.

HISTORY: The General Refractories Company was one of the nation's largest producers of specialty fire brick and ganister brick, which was used primarily in the steel industry. General Refractories operated plants throughout the country, with at least three situated in the greater Chicago region. The Rockdale plant, built about 1914, is the oldest and largest plant in the area, originally containing twelve brick kilns. Shortly after the Rockdale facility was completed, General Refractories constructed a second plant at Joliet (see other entry). Much of the refractory material produced at Rockdale and Joliet was shipped to the U.S. Steel plants in Joliet and Chicago, as well as other steel mills in the Calumet District of Illinois. While the Rockdale facility remains in operation, General Refractories has closed the Joliet plant.

SOURCES:

See entry of General Refractories Company: Joliet Works.



Photo 58. General Refractories Company: Rockdale Works (ca. 1914), Rockdale.
Photo by Joseph DeRosa, HAER.

**German-American Portland Cement Company
(Alpha Portland Cement Co.): LaSalle Works**

RATING: 3

Canal Street, east of Little Vermillion River, LaSalle

Construction Date: 1898, 1920s

UTM: LaSalle Quad. 16 E.325750 N.4577080

DESCRIPTION: The cement works covers about thirty acres and includes an office building, a ball mill, a cement bagging plant and warehouse, several storage silos, calcining kilns, a raw feed storage mill, a machine shop, and a changing room.

The two-story office building contains a hipped roof, brick load-bearing walls and a concrete foundation. It was moved to this site around the turn of the century. The exterior was recently covered with pebble dash veneer.

Thermally Produced Products

With the exception of the company office building, virtually nothing remains of the old German-American Cement plant. Most of the extant structures were built by the Alpha Portland Cement Company in the 1920s. This includes: 1) a ball mill, a two-story reinforced concrete structure still in operation; 2) a bagging plant and warehouse, both housed in a four-story, reinforced concrete structure, no longer used; 3) four storage silos, each constructed of reinforced concrete and rising about seven stories; 4) two calcining kilns of brick construction on top of which rests a massive steel-frame hopper; 5) a raw feed storage mill of reinforced concrete standing four stories; and 6) two one-and-one-half-story reinforced concrete frame buildings each containing a gable roof (one building serves as a machine shop, the other as an employee locker and wash room).

HISTORY: As early as the 1880s, the Eliel Brewery occupied this site along the Little Vermillion River. The brewery contained an impressive three-story, stone brew-house, a three- and four-story, stone malt house and a three-story fermenting house; however, none of these buildings remains standing. Upon acquiring the property of the Eliel Brewery in 1898, Carl Prussig, director of Portland Cementfabrick of Hamburg, Germany, established the German-American Cement Company. Large kilns, a grinding mill, several storage silos, and a boiler house, were soon in operation. German-American Cement purchased a nearby farm house (built in the 1870s) and moved it to its cement works where it served as the company office.

Producers of "Owl" Cement, the German-owned company had both German and American stockholders. By 1910 the cement operation covered nearly 400 acres east of the Little Vermillion River and employed 350 men. Following America's entry into the First World War, all German holdings in the United States were confiscated by the federal government. Subsequently, an American firm, Alpha Portland Cement Company, acquired the German-American Cement plant. Based in Pennsylvania, the new owner proceeded to modernize the existing plant, reconstructing virtually all of the buildings, including new calcining kilns, a ball mill, a machine shop, a bagging plant, and storage silos. A rail spur of the Rock Island Railroad served the plant. Alpha continued to operate the cement works until the late 1960s. Subsequently, Centex Corporation, a Texas-based firm, purchased the cement works and established the Illinois Cement Company. Centex erected new kilns and a new raw feed mill. Illinois Cement continues to operate the plant. The ball mill (ca. 1924) is still in operation, although the 1920s cement bagging plant has been abandoned. The finished product is now shipped out by truck and packaged elsewhere. The former farm house that was converted into an office is all that survives from the German-American Cement era.

SOURCES:

Sanborn Map Co., LaSalle, Illinois (New York: Sanborn Map Co., 1888, 1892, 1898, 1906, 1911, 1926).

Photograph, ca. 1910s or 1920s, in possession of Illinois Cement Company, LaSalle, Illinois.

Twentieth Anniversary Edition, The LaSalle Tribune, July, 1911: The Twin Cities, LaSalle and Peru in 1911 (LaSalle, IL: LaSalle Tribune, 1911), 87-9.

Interview with Mr. Walter Menning, a LaSalle resident (who was born in the German-American Cement Company office), July, 1985.



Photo 59. Alpha Portland Cement Company: LaSalle Plant, Ball Mill (ca. 1924), LaSalle.
Photo by Gray Fitzsimons, HAER.

Thermally Produced Products

LaSalle Pressed-Brick Company

Canal and Chartres Streets, LaSalle

RATING: 3

Construction Date: ca. 1890

UTM: LaSalle Quad. 16 E.323820 N.4576920

DESCRIPTION: This structure was formerly L-shaped but is now divided into two rectangular buildings. One of the buildings, containing a sign "Buckman Iron & Metal Company," consists of load-bearing brick walls supported on a rubble stone foundation. It is one-and-one-half-stories high and has a flat roof covering two-thirds of building and a gable roof extending over one-third of the building. The adjacent warehouse building contains load-bearing brick walls resting on a rubble stone foundation. It is one-and-one-half-stories high and features a steeply-pitched gable roof.

HISTORY: Brick making in LaSalle began as early as 1838. Clay was obtained from the surrounding hillside above the Illinois River. In 1884, George Raymond, owner of a lumber yard in LaSalle, established the LaSalle Pressed-Face Company, and by the following year the operation encompassed about two and one-half blocks. The original brick works contained two wood-framed buildings adjacent to six brick beehive kilns. One of the buildings contained three stories and was used for clay grinding, brick pressing, and storage. Another building served as a warehouse and was located along the Chicago, Burlington & Quincy Railroad tracks. In 1887 the firm became the LaSalle Pressed-Brick Company and manufactured some 7,000 red bricks daily. Improvements to the brick works in 1892 included the replacement of the old wood buildings with a single L-shaped brick building in about 1892.

By 1910, the capacity of the works amounted to 30,000 bricks per day, and a variety of colors were produced including red, buff, brown, pink mottled, gray, and white. Under president and general manager Charles Steinmayer the company shipped brick as far as New York, Tennessee, Oklahoma, and North and South Dakota. Brick manufacturing continued at the site until the early 1920s when Romanofsky's Scrap Iron business took over the property. Presently, Buckman Iron & Metal Company, dealers in scrap iron, occupies the site. None of the beehive kilns remain and the 1890s L-shaped brick building associated with Steinmayer's brick-making enterprise has been greatly altered. Currently operated as a scrap yard, little is left of the brick works. The last of the beehive kilns was recently demolished.

SOURCES:

Lesnick's LaSalle and Peru City Directory (Peoria, IL: Leshnick Directory Company, 1917-18, 1919-20, 1928, 1935).

History of LaSalle County, Illinois (Chicago: Inter-state Publishing Company, 1886), 753, 791.

Sanborn Map Co., LaSalle, Illinois (New York: Sanborn Map Co., 1888, 1892, 1898, 1906, 1911, 1926).

Twentieth Anniversary Edition, The LaSalle Tribune, "July, 1911: The Twin Cities, LaSalle and Peru in 1911" (LaSalle, IL: LaSalle Tribune, 1911), 108.

Interview with Mr. George Buckman, manager of Buckman Iron & Metal Company, LaSalle, Illinois, June, 1985.

United States Steel, Joliet Works: Coke Plant

west of Collins Street, north of State Street, Joliet

RATING: 1

Construction Date: 1908

UTM: Joliet Quad. 16 E.410260 N.4600120

DESCRIPTION: The Coke Plant, now in ruins, comprised four batteries each with seventy ovens. The reinforced-concrete coke ovens remain in place. In addition to the coke ovens, the plant retains two buildings, one of which is a one-story brick building measuring 50' x 20' and containing common-bond brick walls, pilasters and steel roof trusses (the gable roof has partially collapsed). The other building consists of a two-story steel-framed structure covered with corrugated metal and resting on a concrete foundation.

HISTORY: The Joliet works had produced its own coke since the 1870s. By the turn of the century, many advances were being made in Europe and the United States in the use of by-product ovens, and one of the most important of these innovations came from Heinrich Koppers of Germany. Koppers developed a new oven that positioned the regenerator ninety degrees, parallel to and beneath the oven chamber, permitting greater control of the flow of air inside and a more even firing of the coal. This simple change enabled coke manufacturers to increase their net yield of coke per ton of charged coal. Recognizing the efficiency of such an arrangement, U.S. Steel commissioned four batteries of ovens based on Koppers' design. The Joliet coke plant became the first site of the Koppers by-product ovens in America. During the 1910s, the use of the Koppers by-product ovens became standard practice.

SOURCES:

See entry of U.S. Steel Corporation: Joliet Works.

Thermally Produced Products

Utica Cement Company: Blackball Mines & Cement Works

RATING: 2

along Pecumsaugan Creek near its junction with the I&M Canal,
west of Utica

Construction Date: 1870s-1890s

UTM: LaSalle Quad. 16 E.328200 N.4578100

DESCRIPTION: The Blackball mine and cement works, abandoned since the 1930s, presently contain several structures in ruins, the mine adits and pillared caves, and reportedly, mining equipment and rail cars. The ruins consist of four kilns constructed of limestone and brick that were used for calcining and limestone foundations with parts of the brick walls of the grinding mill, bagging mill, warehouse, and engine house. A railroad grade for the narrow gage mining railroad is also evident.

HISTORY: Cement-making limestone was discovered in the Utica area during the excavation of the I&M Canal. The manufacturing of natural cement began around 1838, when William Norton of Lockport, Illinois, set up a kiln for calcining and a mill for grinding. Canal contractors used the cement in the construction of the canal locks. The James Clark Cement Company subsequently took over Norton's operations, as well as expanding production at his works north of Utica.

In 1869, Henry C. Freeman, an engineer with the Illinois State Geological Survey, was asked by the newly formed "Utica Cement Company" to take charge of developing a cement works along Pecumsaugan Creek. The plant which was established consisted of a sixty horsepower Babcock & Wilcox boiler, two Burleigh compressors used for drilling tunnels, a blacksmith shop, four kilns (two of 1,000 barrels capacity each and two of 500 barrels capacity each), a three-story mill building, a one-story wing to the mill building (also of stone) for boilers and steam engine, a one-story warehouse (100' x 37'), and a house for the plant superintendent. The site also contained a narrow gage railroad constructed of 4 x 6 inch oak scantling. A spur line from the Rock Island Railroad served the plant.

In addition to the industrial structures, the Utica Cement Company built workers' housing on the bluff overlooking the cement plant. Although the site was operated intermittently after about 1900, limestone was mined and cement was produced at the Blackball site until the 1930s. It has been abandoned since.

SOURCES:

Sanborn Map Co., Utica, Illinois (New York: Sanborn Map Co., 1888, 1891, 1896, 1901, 1909, 1929).

U.J. Hoffnman, History of LaSalle County, Illinois (Chicago: S.J. Clark Publishing Company, 1906), 220-3.

Henry C. Freeman, "The Hydraulic Cement Works of the Utica Cement Company, LaSalle, Ill.," *Transactions of the American Institute of Mining Engineers*, v. 13, (1887), 172-83.

Nancy Chadbourne Maze (ed.), Tales and Pictures of Peru (Peru, IL: Letterkraft Printers Inc., 1985), 128-32.

Interview with Mr. John Mateika, a resident at Pecamsaugan Creek, August, 1985.

Utica Cement Company, The Utica Cement Company's Works, Embracing an Account of Its Extensive Mines and Mills and a Sketch of Their Locality (Evanston, IL: The Index, 1876).

Utica Hydraulic Cement Company: Cement Works

south of Washington Street, west of State Rte. 178, Utica

RATING: 2

Construction Date: ca. 1880s

UTM: LaSalle Quad. 16 E.331300 N.4578060

DESCRIPTION: At its peak in the early 1900s, the Utica Hydraulic Cement Company operated a grinding mill, a bagging plant, a warehouse, an office, and a laboratory (all of which were stone buildings), in addition to the four concrete silos and five coal-fired lime kilns. A railroad spur from the Rock Island Line served the factory complex (see entry of Rock Island RR: Utica Spur Line). Presently only the lime kilns (in ruins), the laboratory, and the silos are standing.

The one-and-one-half-story laboratory building contains coursed rubble limestone load-bearing walls, covered with stucco, and a rubble limestone foundation. It features a shed roof, a brick chimney, six-over-six-light, wood, double-hung sash windows, and triple brick headers which form segmental arches and span the window openings.

Constructed in the 1920s, the storage silos are of reinforced concrete and rise about five stories in height.

HISTORY: James Clark, born in Sussex, England in 1811, emigrated to the United States in 1830. He farmed in Ohio before moving to LaSalle County in the mid 1830s. In the 1840s Clark established the James Clark Cement Company near Utica, and began manufacturing cement for commercial use and for the construction of the I&M Canal. Around 1852 Clark's son, John L. Clark, became a partner in the firm. The cement rock was mined in open pits and from the bluffs located in north Utica. The mined materials were processed in what was likely the original site of the cement works -- at the base of the bluffs north of town. The ruins of this early cement works may be found west of Mill Street and north of the Chicago, Rock Island & Pacific Railroad tracks.

Thermally Produced Products

A second cement works was established by Clark in the 1880s. Called the Utica Hydraulic Cement Company, the operation produced cement through the late nineteenth century; it closed in the 1950s. Remnants of this cement works include these lime kilns, four concrete silos, a laboratory building, and a railroad spur that served the complex. Following his death in 1888, Clark's second wife, Mary Cary Clark, assumed ownership of the business. Upon her death in 1906, her son, Norman J. Cary, served as president. The company closed down during the late 1910s, opening again about 1920. Although Utica Hydraulic Cement Company produced "Utica Bricklayers Cement" throughout the 1920s and 1930s, the company's fortunes declined during the depression years. The Clark company finally went bankrupt in 1942.

After the war the property was purchased by the American Silica Sand Company, which reopened the cement works in 1945. Finally closing around 1947, only the open pit quarries were worked to obtain rock for road construction. These also have recently been closed.

SOURCES:

Sanborn Map Co., Utica, Illinois (New York: Sanborn Map Co., 1888, 1891, 1896, 1901, 1909, 1929).

Michael C. O'Byrne, History of LaSalle County, Illinois, v. 3 (Chicago and New York: Lewis Publishing Company, 1924), 563-64.

John W. Huett, "The Geology of LaSalle County," in The Past and Present of LaSalle County, Illinois (Chicago: H.F. Kett & Company, 1877), 301.

Utica Bricklayers Cement, (n.p., n.d.); a copy of this ca. 1925 company promotional publication is in the possession of Mrs. Lucille Keating, a resident of Ottawa, Illinois.

Philip E. Vierling, Hiking the Illinois & Michigan Canal (Chicago: Dandellis Printing, 1986), 153-60.

"Plat of Property in Utica, LaSalle, and Deerpark Township Owned by Utica Hydraulic Cement Company," n.d., available in "Clippings Scrapbook," at LaSalle County Historical Society, Utica, Illinois.

Welsch Waterproof Block Company

Gardner Street, Joliet

RATING: 3

Construction Date: 1928, 1960

UTM: Joliet Quad. 16 E.4595540 N.410020

DESCRIPTION: This site contains several buildings, the largest of which is a one-story warehouse and factory, constructed in 1928. It measures 150' x 70' and features a large stepped gable front and concrete-block walls. The Mixing House, also constructed about 1928 and located on the north side of the warehouse and factory building, measures 25' x 25'. A spur line of the Illinois Central Gulf Railroad serves the factory. A one-story building, measuring 40' x 30' and constructed of concrete block, serves as an office. Adjacent to the

office is a one-story 50' x 40' warehouse building, also of concrete-block construction, erected in 1930. All of the main facades have stepped gables. A corrugated metal building adjoining the warehouse building on Gardner Street was erected in 1960.

HISTORY: Now called Welsch Red-E-Mix, Inc., this firm began as the Welsch Waterproof Block Company in 1920, and was Joliet's first producer of concrete block. Originally located on Stevens Street in Joliet, Welsch moved to Gardner Street in 1928 and built a large warehouse and factory building, as well as a small office building, near a Chicago & Alton Railroad spur line. Employing twenty-five workers, and manufacturing 4,000 blocks each day, Welsch made a variety of concrete products for fireplaces, garbage receptacles and garden furniture.

SOURCES:

August Maue, History of Will County, Illinois, v. 2 (Topeka-Indianapolis: Historical Publishing Company, 1928).

CHEMICAL INDUSTRY

Armour Dial Company

1400 West 31st Street, Chicago

RATING: 2

Construction Date: ca. 1900

UTM: Englewood Quad. E.445000 N.4630720

DESCRIPTION: This large four-story brick building measures 340' x 70' and contains a concrete foundation and a flat roof. The exterior is without ornamentation and features two-over-two-light, double-hung sash windows spanned by brick segmental arches. An elevator and stairwell shaft rises five stories along the south facade. The east facade has a one-story addition with sheltered truck-loading bays.

HISTORY: This is the only extant building of a once large complex owned by the Armour Dial Company. Armour incorporated in Illinois in 1900, succeeding the partnership of Armour & Company, established in 1863. Although Armour was primarily a meat-packing business, it was also involved in industries ancillary to the meat packing process. Armour transported its meat by-products by water to this complex, where they were used in the manufacture of glue, soap, sandpaper, shampoo, and coated abrasives.

SOURCES:

Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1912).

Moody's Manual of Investments (New York: 1939), 1538-39.

The Chicago Planning Commission, "Industrial and Commercial Background for Planning," Chicago, September, 1942.

Central Manufacturing District Magazine, January, 1955.

Ashland Oil Company

California Avenue, Chicago

RATING: 3

Construction Date: ca. 1925

UTM: Englewood Quad. 16 E.442370 N.4631320

DESCRIPTION: This site contains several brick buildings situated along the south side of the Sanitary and Ship Canal, off California Avenue. Two of these structures were erected in the 1920s. Several large storage tanks stand adjacent to the warehouse buildings.

Chemical Industry

HISTORY: This company was originally incorporated in Kentucky in 1918 as the Ashland Refining Company. Ashland constructed this storage facility along the Sanitary and Ship Canal in the 1920s. In 1936 Ashland acquired the Swiss Oil Corporation and reincorporated in Kentucky. This company produced gasoline, kerosene, and asphalt from small private wells. The site along the waterway in Chicago is abandoned and the buildings are in disrepair.

SOURCES:

Moody's Manual of Investments, v. 30, part 2 (New York: 1939), 660.

W.H. Barber Company

Homan Avenue, Chicago

RATING: 2

Construction Date: 1920

UTM: Englewood Quad. 16 E.440960 N.4630500

DESCRIPTION: This site contains several structures, the earliest of which are the office building and the factory. The office building is a one-story brick structure with numerous one-over-one light, double-hung sash windows and brick stringcourses above the windows. The building measures 80' x 30'. Adjoining the office building is a recently constructed warehouse, a steel-framed structure with corrugated metal siding. It measures 100' x 40'.

The factory consists of a two-story brick building that parallels a rail line. It measures 140' x 40' and contains multi-light windows. The roof is supported by a series of large combination wood and wrought-iron Bowstring trusses. A number of steel tanks are located behind the factory.

HISTORY: The W.H. Barber Company was established in Minneapolis in 1905 and manufactured pine-tar oil, turpentine, linseed oil, rosin oil, and denatured alcohol. The company also refined petroleum products. W.H. Barber had plants in Minneapolis, Chicago, and Spokane. The office building of the Chicago plant dates from 1920, and the factory building, also constructed about 1920, was subsequently expanded. The facility remains in operation.

SOURCES:

Moody's Manual of Investments, v. 18 (New York: 1927).

Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1919-1951).

Bodie-Hoover Company

3900 West 38th Street, Chicago

RATING: 2

Construction Date: ca. 1910

UTM: Englewood Quad. 16 E.439720 N.4629780

DESCRIPTION: This site contains a one- and two-story brick building measuring 100' x 60'. It was probably constructed in the 1910s. The two-story section houses the company offices, and the rear one-story section houses the factory. The office building features a highly embellished central doorway containing eclectic terra cotta decoration with Gothic and neo-Classical elements. The adjoining factory contains brick pilasters with terra cotta caps and large multi-light windows. The building has brick pilasters supporting timber and iron roof trusses.

HISTORY: Bodie-Hoover was founded in December, 1925 by Seifert Hoover and George Bodie, producers of lubricants and industrial oils. Their first plant was located on Pershing Road; in 1930 the company moved to this site on W. 38th Street. Not much is known about the building prior to the company's occupancy, but its proximity to the Corwith Yards of the Santa Fe Railroad suggests that it may have been constructed by the railroad. Bodie-Hoover left this site in August, 1970 and moved to Lemont. Nothing is known about its current occupants.

SOURCES:

Interview with Mr. Hoover, Chairman of the Board, Bodie-Hoover, Inc., August, 1986.
Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1919-1951).

Citgo Company

Western Avenue, Chicago

RATING: 2

Construction Date: ca. 1920

UTM: Englewood Quad. 16 E.443020 N.4631530

DESCRIPTION: Now owned by the Viscosity Oil Company, which operates a blending and compounding plant for lubricants, this complex consists of five buildings, all of which are uniform in design and degree of embellishment. The two-story office building is of brick construction with large glass-block windows, a projecting entrance spanned by a brick segmental arch porch, with a frieze and Tuscan columns. The building measures 70' x 70'. The one-story warehouse building, of brick construction, measures 150' x 50'. It contains

Chemical Industry

multi-light windows with awnings, a flat roof, and a loading dock of concrete. Adjacent to the warehouse is a Butler building added in 1982. The three-story laboratory building has brick walls, with the upper two stories covered with corrugated metal.

HISTORY: According to the plant manager, this facility was built by the Indian Refining Company about 1920, and served as a light-grade oil blending plant. It was subsequently bought by Citgo because of the plant's proximity to the International Harvester factory, an important Citgo client. Viscosity, a producer of private label petroleum products, acquired this site in the late fifties or early sixties. The facility on Western Avenue has had few modifications. The office building was extended to its present size in 1935, and the Butler building was added in 1982. Viscosity distributes its products from this site.

SOURCES:

Manufacturing and Wholesale Industries of Chicago (Chicago: Thos. B. Poole Company, 1918).
The Central Manufacturing District, November, 1915, published by Chicago Junction Railway Service.
Interview with Eugene Grzeslo, plant manager, Viscosity Oil Company, August, 1986.

Joliet Industrial District

Industry Avenue, Joliet

RATING: 3

Construction Date: ca. 1880-1900

UTM: Joliet Quad. 16 E.409510 N.4600110

DESCRIPTION: This site contains several one- and two-story brick buildings. Dating from the late nineteenth century, these buildings contain common-bond brick walls, stone foundations, and timber and iron roof trusses. Most of these buildings are abandoned and in disrepair.

HISTORY: The Joliet Industrial District was created in the late nineteenth century on the west side of Joliet on the Des Plaines River. It was located immediately south of the Phoenix Horseshoe Company and over the years housed several industries. The two major companies at this site were the Superior Chemical Company and the Federal Match Company. Around 1920 Superior Chemical relocated to an area in South Joliet and the Calumet Chemical Company acquired the property. Calumet Chemical was well-known for its production of baking powder ingredients, as well as the processing of cornstarch for Argo. Baking powder is still visible on the rafters in one building. The Federal Match Company, located at the southern end of the district, was the only match producer in the area. The majority of its

buildings were destroyed by an explosion at the site. During World War II, prisoners of war, primarily Germans, were employed at these industries. Industrial Color, Inc., a color pigment processing company, presently occupies the site.

SOURCES:

Sanborn Map Co., Joliet, Illinois (New York: Sanborn Map Co., 1924).

Koppers Company, Inc.

39th Street, east of Laramie Avenue, Stickney

RATING: 2**Construction Date: 1921-1922**

UTM: Berwyn Quad. 16 E.437490 N.4629900

DESCRIPTION: This is a thirty-six acre tract consisting of factory, storage, and shipment buildings, as well as distillation tanks and a storage tower. The main administration building measures 80' x 20' and is one-and one-half stories tall. It contains brick walls resting on a concrete foundation. Four factory buildings of the original plant remain. Directly behind the office is a one-story brick workshop which measures 30' x 15'. East of this building stand three brick buildings; each is one-story in height with large multi-light windows, a brick arcade, and tile-edged roofs. One of these buildings serves as a warehouse with a spur line running along its east facade. A 1950s warehouse facility is adjacent to this building. The easternmost building serves as a laboratory and measures 30' x 30' with a pedimented gable and many brick infilled windows. Two other buildings, each measuring 60' x 20', are adjacent to the laboratory.

HISTORY: Heinrich Koppers, a German engineer who invented the coal tar oven, was brought to America by Andrew Carnegie to build by-product coke ovens for Carnegie Steel. Koppers eventually went into business for himself, and the German company bearing his name later merged to form the present conglomerate, Koppers-Krupp. In 1924 Koppers acquired the American Tar Products Company, and began operating out of the Laramie Avenue location. The original facilities included a felt saturation building, a boiler house, shop and service building, and a laboratory. The Koppers company made roofing pitch, creosote, road tar, and saturated felt. By 1945 Koppers added a plant for producing naphthalene. This plant remains in operation and, in addition to naphthalene, the plant produces polyester resins.

Chemical Industry

SOURCES:

"An Introduction to Koppers Chicago Plant," Koppers Company, Inc., 1980.

Interview with Frank Spinola, plant manager, Koppers Company, August, 1986.

Miscellaneous brochures and photographs housed in the Koppers Company, Main Administration Building.

Pacific Coast Borax

Union and Lumber streets, Chicago

RATING: 3

Construction Date: ca. 1895

UTM: Englewood Quad. 16 E.446540 N.4633150

DESCRIPTION: The only extant portion of this once large industrial complex is this three-story brick building with tall segmental arch windows, most of which are broken or infilled with sheet metal. This building measures 100' x 50'. According to a Sanborn Insurance map of 1914, a large two-story wood-framed factory building adjoined the brick building.

HISTORY: This plant manufactured "20 Mule Team Borax", using the first floor for shipping and the second floor for processing. The factory building is now demolished except for the ruins of a brick fire wall on the east facade. It was probably abandoned before the construction of the adjacent Dan Ryan Expressway. American Steel Products currently occupies this site.

SOURCES:

U.S. Army Corps of Engineers map, 1911.

Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1914).

Superior Chemical Company

1306 McKinley Street, Joliet

RATING: 2

Construction Date: 1921

UTM: Joliet Quad. 16 E.409100 N.4594580

DESCRIPTION: This site contains six buildings including an office, two warehouses, one processing plant, one "labor shanty," and a maintenance shop. The two-story office building is of brick construction and measures 50' x 20'. It contains a gable roof. One of the warehouses, originally used to store dry alum, is a one-and-one-half-story brick building that measures 70' x 30'. The other warehouse served as a bagging and storage facility and is of

brick construction; it measures 100' x 50'. The processing plant consists of a steel frame with corrugated metal siding and a concrete foundation. It is three stories tall and measures 130' x 35'. The "labor shanty" is a 50' x 30' one-story building with brick walls, a concrete foundation, and a gable roof. The one-and-one-half-story maintenance shop measures 90' x 40' and contains brick pilasters, a concrete foundation, and a monitor roof.

HISTORY: These buildings were originally constructed for the Superior Chemical Company, producers of dry alum and baking powder. From 1901 to 1921, Superior Chemical Company maintained a site in the Joliet Industrial District. In 1921 this site was sold to the Calumet Chemical Company, and Superior moved to its present location. American Cyanamid bought this plant in 1931 and continued to produce both dry alum and, beginning in 1953, liquid alum. Alum produced in this plant was used by paper mills in Wisconsin and Michigan, as well as by baking powder factories and water purification stations in Chicago. By 1984 American Cyanamid had ceased production of dry alum altogether in favor of liquid alum.

SOURCES:

"Joliet Plant fact sheet, " printed by American Cyanamid Company.

Interview with Phil Higate, American Cyanamid Company employee, July, 1986.

William T. Chambers, "A Geographical Study of Joliet, Illinois: An Urban Center Dominated by Manufacturing," unpublished Ph.D. dissertation, University of Chicago, 1926.

Texaco Petroleum Refinery

Second Street, Lockport

RATING: 2

Construction Date: 1911-1970s

UTM: Joliet Quad. 16 E.411620 N.4605760

HISTORY AND DESCRIPTION: The Lockport, Illinois, petroleum refinery was the fifth one built by Texaco. It began operating in 1911 with a refining capacity of 3,000 barrels of petroleum per day. John W. Gates, a Chicago financier associated with the American Wire Company and an organizer of Texaco, was responsible for bringing the refinery to Lockport. The production capacity of this refinery during the first quarter of the twentieth century made Lockport, Illinois, the "Oil City of the Midwest." Approximately 800 employees worked at this refinery, making it one of Lockport's most significant employers.

By 1970, the refinery's capacity had been expanded to 70,000 barrels per day, and the Lockport refinery was ranked seventh among Texaco's twelve United States petroleum refineries. The refinery processed crude oil obtained by pipeline from Illinois, Kansas,

Chemical Industry

Oklahoma, and Texas, until it was shut down in 1983. The facility continues to store petroleum products in the extensive tank farm adjacent to the abandoned refinery structures.

The Texaco Petroleum Refinery consists of approximately fifteen historic buildings and structures, the majority being one- and two-story brick buildings with concrete foundations. Some of the older buildings have a stucco veneer. The site also contains numerous steel-framed refinery structures and a large petroleum storage tank farm. The Texaco Petroleum Refinery occupies land on both sides of the I&M Canal right-of-way and pipelines. Railroad tracks and vehicular bridges cross the canal.

The historic structures include:

Crude Unit No.1, erected about 1911, contains a number of brick buildings and three brick chimneys each approximately 70 feet tall.

The Pumphouse, erected about 1911, is a two-story brick building containing pumps and compressors. It measures 100' x 70' and features a double gable roof, multi-light windows, a lunette over each door, and a circular window beneath the peak of each gable.

One of the earliest **Storage** tanks survives, constructed about 1911 and containing brick walls. It measures approximately 30 feet in diameter and is 35 feet tall. Some pipeline entrances have been bricked over, while others still have steel openings 2 feet in diameter.

The three-story **Boiler House**, erected about 1911, measures approximately 120' x 50'. It contains brick walls, a concrete foundation, and a monitor roof covered with corrugated metal. Several short metal stacks extend through the roof. This building generated steam for use by the refinery.

The **Firebarn**, erected about 1911, is a two-story L-shaped brick building measuring approximately 60' x 60'. It contains a gable roof covered with corrugated metal.

The "**Zone**" **Office Building**, erected about 1920, is a one-story brick or block building covered with stucco. It measures 40' x 20' and rests on a concrete foundation. This building housed the "zone offices" of Texaco. The refinery was divided up into various zones, and the administrative offices for these zones were located in this building.

The **Lubrication Plant and First Aid Building**, erected about 1920, is a two-story brick structure measuring approximately 120' x 30'. It rests on a concrete foundation and contains multi-light windows, decorative brick work, and a loading area along the south facade. This building formerly served as the lubricant plant for Texaco and also housed a first aid station. A railroad spur once ran alongside the south facade; loading bays at this side of the building have been blocked up or refitted with doors.

The **Trucker's House**, built about 1920, is a one-story brick building covered with stucco and measuring approximately 30' x 15'. It contains a concrete foundation, multi-light windows with awnings, and a gable roof. This building was used as a waiting room by drivers having their trucks filled with kerosene, gasoline, and other refined petroleum products.

The **Bottlewash Shed**, erected about 1930, measures approximately 40' x 40' and is two-and-one-half stories tall. It contains a steel frame supporting a monitor roof and rests on a concrete foundation. The building is clad with corrugated metal. The building was



Photo 60. Texaco Petroleum Refinery at Lockport: Crude Unit No. 1, (1911).
Photo by Joseph DeRosa, HAER.

Chemical Industry

originally used for washing and storing sample bottles used in the refining process and bound for the laboratory. It is now used for the storage of asbestos.

A series of steel pipelines, built as early as the 1940s, cross I&M Canal at Lockport. They vary in diameter from six inches to two feet. These pipelines are supported by three steel I-beams on three circular concrete piers. Also nearby are pipes between one and three feet in diameter and 100 feet in length. They are carried across I&M Canal by a riveted steel truss with a walkway on top.

SOURCES:

Joliet Herald News, May 17, 1953, July 12, 1981.

Robert B. Simonson and Bruce D. Cheadle, Lockport, Illinois, Historic Canal Town (Bloomington, IL: Mullins Corp., 1975).

State of Illinois, Division of Waterways, "Inspection of Structures Along the Illinois and Michigan Canal from LaSalle to Summit, Illinois," 1959, photos 160-175 (available at the I&M Canal State Trail Headquarters, Gebhard Woods Access, Morris, Illinois).

State of Illinois, Division of Waterways, "Illinois-Michigan Canal Annual Inspection, November 1967," photo 206 (available at the I&M Canal State Trail Headquarters, Gebhard Woods Access, Morris, Illinois).

Universal Oil Products

Joliet Road and Lawndale Avenue, McCook

RATING: 2

Construction Date: 1921-1922

UTM: Berwyn Quad. 16 E.431270 N.4627630

DESCRIPTION: This is a research and manufacturing facility for the petroleum industry. Universal Oil Products manufactures chemicals for catalytic converters, oil additives, rust inhibitors, catalysts for the refining industry, as well as food preservatives. The plant is divided into two parts, one of which contains the manufacturing buildings, and the other the research and development facilities. The Research and Development Division is housed in three buildings arranged in a semi-circle at the intersection of the two roads. All three buildings are tall, one-story brick (Flemish bond) buildings, with Classical detailing. The two end buildings are identical, measuring 50' x 30'. Brick and iron gates connect the three buildings. Access to the Manufacturing Division was not permitted.

HISTORY: In 1914 the National Hydrocarbon Company was formed to acquire the patents and applications of Jesse A. Dubbs, who developed a method of processing petroleum. In August, 1915, the name of the company was changed to Universal Oil Products, and by 1919, the company had developed a commercially viable method of converting heavy oil to gasoline, using the Dubbs method. In 1921-22 the company moved from Kansas City and

established research facilities at this site in McCook, Illinois. By 1937, the Universal works encompassed 25 acres. Most of the company relocated to Des Plaines, Illinois, in 1952. The McCook facilities now specialize in pilot plant development.

SOURCES:

History and Progress of the Village of McCook 1926-1976 (McCook, IL: McCook Historical Commission, 1976).

Interview with Charles McGrew, chemical engineer, Universal Oil Products, July, 1986.

MANUFACTURING

Advance Aluminum Casting Corporation

2743 36th Place, Chicago

RATING: 2

Construction Date: ca. 1925

UTM: Englewood Quad. 16 N.4630700 E.442370

DESCRIPTION: This long, rectangular, brick building has one, two, and three-story sections. It measures approximately 500' x 80' and is backed by the Illinois Central Gulf Railroad and fronted on 36th Place. The building has a simple unembellished exterior and rests on a concrete foundation. It is of steel construction and has ornamental brick pilasters with concrete caps. The sawtooth monitors have been removed from the flat roof. The entrance has some ornamentation with concrete door surrounds, and the multi-light windows remain in place. The large water tower, with the Plochman's logo painted in yellow, tops the building.

HISTORY: The site was originally developed by the Advance Aluminum Castings Corporation, one of the numerous small foundries which were developed in this area in the 1920s. Little is known about this foundry, yet this site is located in an area with several small foundries, and was apparently chosen because of its proximity to a major railroad transportation route. Plochman's Inc., producers of mustard, moved to this site in 1961. None of the foundry equipment is thought to have survived.

SOURCES:

Interview with Terry Plochman, of Plochman's Inc., August, 1986.
Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1919-1951).

Aluminum Products Company: Plant No. 2

New Avenue along the Illinois Central Gulf Railroad, Lemont

RATING:

Construction Date: ca. 1900

UTM: Sag Bridge Quad. 16 E.415600 N.4613700

DESCRIPTION: This is a series of one-and-one-half- and two-story brick buildings; the original section measures approximately 250' x 60' and consists of a steel frame supporting a riveted-steel roof with sawtooth monitors. The exterior walls are of stretcher-bond brick construction. Adjoining to the west is a two-story brick building with a gable roof. This building is attached to a recently constructed three-story concrete block building.

Manufacturing

HISTORY: Nearly two decades after the Illinois Pure Aluminum Company opened its factory in Lemont in 1892 (see other entry), the Aluminum Products Company established a factory and warehouse on the western fringe of Lemont. Called Plant No. 2, American Aluminum began operations around 1912. (The company's Plant No. 1 was established in LaGrange, Illinois.) The company produced aluminum cooking utensils and specialty wares. Plant No. 2 comprised a one-story brick building, measuring 200' x 56', with 11,200 square feet of floor space. The plant was fully electrified, and raw materials were brought in by rail for pressing, shaping, grinding, and finishing -- all on the one floor. Finished goods were loaded through the front shipping door into freight cars of the Chicago & Alton Railroad.

Plant No. 2 operation was capitalized at \$150,000. The officers included Dr. C.F. McClure., President, G.P. Luce, Vice President, Wm. A. Hastings, Secretary, E.P. McClure, Treasurer, and Conrad Diesel, Factory Superintendent. By the 1940s, Reynolds Metals Company, the forerunner of Reynolds Aluminum, had acquired the Aluminum Products Company, and was operating Plant No. 2, producing stainless steel cooking utensils. The factory was slightly expanded with a brick warehouse addition adjoining the original plant to the west. Presently, a light-industrial firm occupies the small factory complex.

SOURCES:

Sanborn Map Co., Lemont, Illinois, v. H, in the series Chicago, Cook County, Illinois (New York: Sanborn Map Co., 1949).

Albert Lewis Walker (ed.), Lemont, Cook County, Illinois: Interesting Views of Public Buildings, Schools, Churches, Parks, Residences, Street Views, and Industries of the City (Lemont, IL: Commercial Association, 1913).

American Can Co. Rockdale Plant

Moen Avenue, (between Stryker and Morris streets), Rockdale

RATING: 2

Construction Date: ca. 1910-1950s

UTM: Joliet Quad. 16 E.406460 N.4595120

DESCRIPTION: The former industrial complex of the American Can Company's Rockdale Plant, this site contains two main buildings forming an L-shape and rising one-and-one-half stories. One section extends along Moen Avenue, the other parallels a spur of the Rock Island Railroad. Several buildings and two water towers stand adjacent to the two main buildings; dates of construction of the industrial complex range from about 1910 to the 1950s. The older main buildings contain common-bond brick walls, brick pilasters, and

concrete foundations; the longer section of the ell measures approximately 300' x 100'. Two railroad spur lines extend along the west facade which contains several loading docks.

HISTORY: The American Can Company Plant in Rockdale was established about 1910, producing fiber cans and containers that were used for packaging such dry goods as salt, cereal, spices, and talcum powder. Among the major companies doing business with American Can were the Quaker Oats Company and the Morton Salt Company. During its peak years of the 1920s through the 1960s, American Can employed about 450 people, one-third of whom were women. Production at the Rockdale plant continued through the 1970s but at reduced capacity. The plant has recently been closed.

SOURCES:

William T. Chambers, "A Geographical Study of Joliet, Illinois: An Urban Center Dominated by Manufacturing," unpublished Ph.D. dissertation, University of Chicago, 1926.
Sanborn Map Co., Joliet, Illinois (New York: Sanborn Map Co., 1924).

American Ruberoid Plant at Joliet Industrial Park

1 Genstar Drive, Joliet

RATING: 3

Construction Date: ca. 1917

UTM: Joliet Quad. 16 E.409720 N.4600720

DESCRIPTION: Originally developed by the Standard Paint Company in 1917, this industrial park includes several buildings dating from the 1920s. These were constructed by American Ruberoid, owners of the property from the 1920s through the 1960s. Among the most impressive structures are the machine shops.

Northern Machine Shop: This two-story building measures 80' x 40' and has tarpaper siding and a monitor roof. The main facade contains multi-light windows with awnings on the upper story.

Central Machine Shop: This four-story rectangular building measures 100' x 30' and has a concrete foundation, common-bond brick walls and pilasters, and a gable roof.

Southern Machine Shop: This structure features large, multi-light windows with a vaulted roof.

Manufacturing

Other buildings within the American Ruberoid complex include:

Factory: (ca. 1920) A one-and-one-half-story brick building measuring 125' x 40', it contains brick walls and asbestos siding, a steel frame, and a flat concrete roof on a steel deck.

Packing House: (ca. 1920) A one-story building measuring 100' x 75', it has common-bond brick pilastered walls with recessed bays and a riveted steel roof truss which supports a flat roof.

Mixing Building: (ca. 1920) This is a brick and steel frame one-and-one-half-story building measuring 150' x 50'.

Factory Building Cafeteria: (ca. 1920) This is a one-story brick building measuring 60' x 60'.

Sound Deadening Plant: (ca. 1920) This is an L-shaped one-and-one-half story building measuring 250' x 125'. The walls are constructed of concrete block and brick.

Wood Chip Plant: (ca. 1920) This is a four-story corrugated steel structure measuring 160' x 75'. It has a gable roof and a sign proclaiming "Ruberoid." Inside were produced wood chips needed for the manufacture of shingles.

HISTORY: Prior to the industrialization of this section of Joliet in 1893, much of the city's industry was located on the east side of the Des Plaines River. The Joliet Industrial District was developed on the west side of the river in the 1910s, with this plant located in the northern part of the Joliet Industrial District. The first occupant of the plant was the Standard Paint Company in 1917, with Ruberoid taking over in the early 1920s. Ruberoid was one of the largest manufacturers of roofing materials in the Joliet area. In 1969 GAF acquired the property.

SOURCES:

Interview with Arlene Finkle and Bruce Fitzwilliam, July, 1986.

Bates Machine Company

East Jackson and Henderson streets, Joliet

RATING: 2

Construction Date: 1888

UTM: Joliet Quad. 16 E.411360 N.4598160

DESCRIPTION: The main factory building consists of a one-and-one-half-story section flanked by one-story wings. It measures 300' x 100' and contains a stone foundation, common-bond brick walls and brick pilasters, framing decorative corbeled brickwork. Corinthian columns highlight the main office entrance. The building features paired multi-light double-hung sash windows with brick segmental arches and limestone sills. The foundry contains a two-story section flanked by one-story wings. It measures 300' x 150' and contains a stone foundation, common-bond brick walls, and brick pilasters. Brick segmental arch windows with two headers and a wood-framed monitor roof are supported on wrought-iron plate girders and wrought-iron columns.

HISTORY: In 1885 A.J. Bates organized the Bates Machine Company in Joliet and incorporated the firm three years later. The company produced the Bates-Corliss steam engine that was used to power the Bates "Steel Mule," one of the early iron-tread tractors manufactured in the United States. In addition to the steam powered tractor, Bates developed an innovative wire-fence weaving machine in 1895. The company went on to specialize in the manufacture of machinery for wire-making, which included annealing, drawing, galvanizing, and barbing equipment. By the early 1900s, 300 employees worked for Bates Machine. By 1926, the company was mainly involved in the production of power machinery for use in agriculture and manufacturing. Bates Machine did not survive the Depression of the 1930s, and by 1937 a local hardware retailing firm, Barret Hardware, acquired the property. This company presently occupies the old office and foundry buildings.

SOURCES:

- William T. Chambers, "A Geographical Study of Joliet, Illinois: An Urban Center Dominated by Manufacturing," unpublished Ph.D. dissertation, University of Chicago, 1926.
- Letter F. Filson, "From Whence Came a City: The Story of Joliet and Will County, Illinois", unpublished mss, 1957, available in the Joliet Public Library.
- "Barretts 1850-1950: 100 Years of Service," commemorative pamphlet.
- Robert E. Sterling, Joliet: A Pictorial History (St. Louis: G. Bradley Publishing, Inc., 1986), 100.

Manufacturing

Brunner Foundry

Brunner Street east of Water Street, Peru

RATING: 3

Construction Date: ca. 1890

UTM: LaSalle Quad. 16 E.323320 N.4576980

DESCRIPTION: Originally built in three sections, the foundry now consists of only two sections. It has a stone and concrete foundation and brick pilaster construction with common-bond brick curtain walls. Being one- and two-story sections, the building has a rectangular plan measuring approximately 300' x 40' and features a flat roof with stepped gable. The eastern section contains a gable roof covered with rolled asphalt. Large wooden double doors extend along the north facade (along the railroad track). Windows have been infilled with brick. The Rock Island Railroad tracks run immediately to the north. A two-story section along the east and south facades has been extensively modified by covering over the brick with pebble-dash veneer. A steel-framed second story with corrugated metal siding and nine-over-nine-light steel-framed windows were added to part of the one-story section.

HISTORY: Established by Charles Brunner in 1873, the Brunner Foundry soon became an important local manufacturer of weighing scales, boilers, and, by the early 1900s, stationary gasoline engines (purchased primarily by farmers to grind feed and shell corn.) The foundry on Water Street was built in three sections beginning about 1890. The easternmost section, since demolished, contained the boiler works, where iron boilers were manufactured; the central section contained the machine shop; and the westernmost section contained the casting room. In 1923 the foundry was sold to George W. Mundie who started production of the "Cowboy" water tank, an iron tub with a coal fired heating element used for watering livestock during the winter months. In 1957 the building was sold to the Meyer Furnace Company, then later sold to Hyman Ramenofsky, and finally to Foster Grant, one of the largest plastics manufacturing concerns in the United States. (Foster Grant also acquired the adjacent industrial complex of the former Illinois Zinc Company.) This site is presently occupied by American Hoescht, a producer of plastics and petro-chemicals.

SOURCES:

Nancy Chadbourne Maze (ed.), Tales and Pictures of Peru (Peru, IL: Letterkraft Printers Inc., 1985), 139-41.
Ernest L. Bogart and Charles M Thomson, The Industrial State (Springfield, IL: Centennial Commission, 1920), 403.
H.F. Kett & Co., The Past and Present of LaSalle County, Illinois (Chicago: H.F. Kett & Co., 1877), 585.

Carson, Pirie, Scott Co.: Warehouse

Lumber Street (now on AMTRAK property), Chicago

RATING: 2

Construction Date: ca. 1890

UTM: Englewood Quad. 16 E.447180 N.4633900

DESCRIPTION: This four-story brick warehouse and building with limestone foundation measures 150' x 80'. It features segmental arch windows, and eight-over-eight-light double-hung sash windows. The basement windows have been infilled. A truck loading dock is located along the south facade; rail loading bays extending along the west facade were originally canopied.

HISTORY: According to a Sanborn Insurance map of 1914, this building is listed as Warehouse "C" of the Carson, Pirie, Scott Company, which used it to store dry goods. Although the original dimensions were 270' x 150', the southern half of this building was demolished sometime after 1914 to allow for the addition of a truck loading shed for the Pittsburgh, Ft. Wayne, and Chicago Railroad. In 1932 Continental Paper Grading Company acquired the building. It is currently used as a warehouse.

SOURCES:

Interview with Mr. Samuel Epstein, Chairman of the Board, Continental Paper Grading Co., August, 1986.
Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1914).

Caspers Tin Plate Company

41st Street, one block West of Pulaski Avenue, Chicago

RATING: 1

Construction Date: 1937

UTM: Englewood Quad. 16 E.439720 N.4629720

DESCRIPTION: The site contains an office building with plant buildings to the rear. The office building has a streamlined, symmetrical facade consisting of a buff-colored brick veneer. A central section, flanked by one-story wings, rises two stories. All corners are rounded, typical of the streamlined Art Moderne design. There are continuous bands of leaded cantilevered windows which extend around the corners. The limestone central portion is curved and extends above the roof line of the building. The door and windows of this section are highly embellished with geometric motifs. The interior is unchanged and reflects a nautical influence popular in the 1930s. It features metal ship railings, blond paneling and custom-designed blond furniture, and original metal and glass doors. Little

Manufacturing

remodeling has been done to the glass-block receptionist's room. The west facade contains a 1950s two-story addition that includes the same buff-colored brick but which has little ornamentation. The plant to the rear retains its original lithographic and tin plate equipment. Railroad spur lines extend into a warehouse which is composed of a steel frame, brick walls, and a steel Pratt roof truss. There is also a recently constructed, prefabricated building serving as a warehouse. Several other warehouses are outside. The plant occupies almost an entire block, measuring approximately 900' x 300'.

HISTORY: Originally this facility belonged to the Caspers Tin Plate Co., incorporated in 1922, with the partnership of Raymond Caspers and Alphonse Thiffault. Prior to their partnership, both men had been associated with the steel industry: Thiffault had owned a light steel manufacturing plant in Indiana, and Caspers had been a representative for U.S. Steel Corporation in Iowa. Initially Caspers and Thiffault concentrated their energies on warehousing, specializing in steel products. By the 1930s, however, the company had become involved in the lithography business. By 1937 the company dealt only in lithography and constructed a 90,000 square-foot facility in Chicago's Crawford Industrial District. Chicago architect W.N. Alderman designed the new plant and Lewis Epstein served as the consulting structural engineer. Additions to the Chicago facility were made in 1938, 1941, and 1947. By the 1950s Caspers was the largest metal lithographer in the United States, employing nearly 500 employees. Caspers was also instrumental in the development of highly specialized lithographic processes. The company held a patent on the rotary air oven and developed a new drive for the conveyor chain which carried wickets through the oven. It also developed a dual-line mechanism for the simultaneous coating of tin plates. The Ball Company acquired Caspers in 1964 and continues to operate the Chicago plant, utilizing much of the original equipment.

SOURCES:

Central Manufacturing District Magazine, July, 1955 and July, 1957.

Interview with Joseph Siwek, Personnel Manager, Ball Metal Decorating Co., August, 1986.

Central Pattern & Foundry Co.

3737 South Sacramento at 38th Street, Chicago

RATING: 3

Construction Date: ca. late 1920s

UTM: Englewood Quad. 16 E.441870 N.4630270

DESCRIPTION: This is a two-and-one-half-story building measuring approximately 100' x 60'. It contains common-bond brick walls and brick pilasters. The pilasters are capped by two concrete semicircles. The roof features stepped ends. A band of glass-block windows is

divided by the pilasters. There is evidence that a large building was once attached to the west and rear facades.

HISTORY: Originally, this building housed the Central Pattern and Foundry Company. The company produced aluminum, bronze, and brass castings. By 1940 it employed 262 people. Subsequently, the Mogan-David Wine Corporation of America used the building to store and process wine. The building was served by a railroad siding coming from the adjacent Brighton Park Yard of the Illinois Central Gulf (ICG) Railroad. The building is currently vacant and for sale.

SOURCES:

Chicago Association of Commerce, Geographic Directory of Manufacturers in the Chicago Industrial Area (Chicago: Chicago Association of Commerce, 1947), 50.

Chicago Association of Commerce, Manufacturers in Chicago and Metropolitan Area (Chicago: Chicago Association of Commerce, 1940), 27.

Champion Machinery Company

210 W. Center Street, Joliet

RATING: 2

Construction Date: 1888, 1908, 1920s

UTM: Joliet Quad. 16 E.4089800 N.4596720

DESCRIPTION: This is a two-story building measuring 250' x 125'. The original elements date from 1888 and consist of wrought-iron columns, limestone exterior walls, and wood-and-iron Howe roof trusses. Most of the windows have been infilled with brick, concrete block, or translucent fiberglass. The building has been greatly altered over the years; additions of cast stone date from the 1920s, as does the stepped gable roof.

HISTORY: In 1888 Phil F. Carroll established the Carroll Company, a firm specializing in baking machinery. The company was bought by William E. Fay and renamed the Champion Manufacturing Company. During the two World Wars, Champion manufactured food equipment that was used on battleships and in troop camps. Champion currently manufactures bread-making ovens.

Manufacturing

SOURCES:

Maue, August, History of Will County Illinois, v. 2 (Topeka-Indianapolis: The Historic Publishing Co., 1928), 698-99.

Joliet Herald News, June 10, 1924.

Chicago Metal Fabricating Co.

3724 South Rockwell Street, Chicago

RATING: 2

Construction Date: 1922

UTM: Englewood Quad. 16 E.442600 N.4630500

DESCRIPTION: This building occupies an entire city block and measures 470' x 190'. The original building abuts an ICG spur line which is rarely used. The building is two stories high with a small utility shed infill next to the spur line. The main building consists of a stone foundation, common-bond brick veneer, and a gable roof. The main facade has ten multi-light casement windows per story and segmental arched window openings with ornamental keystones. The first story is of steel construction, whereas brick load-bearing walls were used for the second. To the east is a modern brick addition with a steel frame. It adjoins a ca. 1945 office addition which is constructed with running-bond brick, and is designed in the Art Moderne style. The central portico has large rounded columns and a flat, projecting architrave. It features a streamlined door surround with tall windows.

HISTORY: Founded in 1908 by George Hauf, a German immigrant, the Chicago Metal Fabricating Company manufactures metal cases for multiple purposes. The company is divided into production units of sheet metal cutting and welding. An Illinois Central Gulf Railroad spur line is maintained at the site. Chicago Metal Fabricating is typical of the small, family-owned, specialty metal industries in Chicago.

SOURCES:

Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1919-1951).

Interview with William Vorhies, Jr., grandson of founder of Chicago Metal Fabricating Co., August, 1986.

Coleman Hardware Company

Canal and Benton streets, Morris

RATING:

Construction Date: ca. 1874, 1884

UTM: Morris Quad. 16 E.380500 N.4578900

DESCRIPTION: This one-story U-shaped building is located along the Illinois and Michigan Canal. It contains common-bond brick walls, an interior timber post-and-beam frame, a gable roof, and a limestone foundation. Many of original multi-light wooden-frame double-hung sash windows remain in place. Reportedly, some turn-of-the-century foundry equipment survives, along with the patterns. Ruins of the wall and foundation of the Japan building, which housed the enameling operation, are located to the south of the main building. In addition, a tall brick chimney stands adjacent to the ruins of the boiler house which occupied the west end of the south wing.

HISTORY: The origin of the Coleman Hardware Company may be traced to a Grundy County legislative bill of 1873 that encouraged companies to locate in the area. One industrial concern that did so was the Sherwood School Furniture Company which established a factory in Morris in 1874. Less than ten years later, the furniture company ran into financial difficulties and J.G. Coleman, secretary of the firm, took over its assets. Subsequently known as Coleman Hardware, the company expanded its operations, employing as many as 300 workers by 1910, thereby making it one of the city's largest industrial concerns. Operating a foundry, carpenter shop, and finishing shop, this Coleman Hardware produced housewares and agricultural implements. The company fared less well in the 1920s and limped along until the Depression. Soon after workers called a strike in March, 1933, the company asked for a receiver. Coleman Hardware operated sporadically through the 1940s before shutting down. Though in fair condition, the building has been unoccupied for many years.

SOURCES:

E.B. Fletcher (ed.), "Historical Sketch of Grundy County," in the Morris Herald, 1888.

Morris Daily Herald, March 1, 1933.

Sanborn Map Co., Morris, Illinois (New York: Sanborn Map Co., 1889, 1894, 1907, 1916, 1927).

Manufacturing

Colwell's Plow Works

Northwest corner of Superior and Fulton streets, Ottawa

RATING: 2

Construction Date: ca. 1885

UTM: Ottawa Quad. 16 E.345630 N.4579300

DESCRIPTION: The corner of Superior and Fulton streets is the site of several late 19th and early 20th century manufacturing concerns. As shown on an 1888 Sanborn Insurance map, a water-powered plow works was located next to the canal lock of Ottawa's Lateral Canal. The manufacturing firm had a long, narrow two-story brick building (which served as a carpenter's shop, warehouse and office), adjoining a one-story, L-shaped, frame building, which housed the waterwheel and served as the machine shop. The plow works was served not by the I&M Canal, but rather by the Rock Island Railroad, which had a spur line along Fulton Street. Today, little is recognizable of the original factory complex. A one-story brick building stands connected to a two-story brick building. The one-story section contains a concrete foundation, common-bond red-brick (painted brown) load-bearing walls, a flat roof, and brick parapet walls with terra cotta tile coping. The two-story section contains a concrete foundation, common-bond red-brick (painted brown) load-bearing walls, flat roof and brick parapet walls with cast stone coping. Windows at the second-story level are composed of glass-block masonry; several original six-over-two-light, wood double-hung sash windows remain at the first story level (these windows probably date from about 1900).

HISTORY: Located along the former Lateral Canal in Ottawa, this site was occupied by several small industrial concerns including William Colwell's Plow Works (1888), Ottawa Bottle Mould Company (1891), T.J. Nertny Company (1898), manufacturer of slot machines, American Hardware Mfg. Company (1907), and Parret Tractor Company (1913). A one-story brick building containing a second-story addition constitutes the primary extant structure on this site and dates from 1900. Since the 1920s, parts of the building have been occupied by an auto painting shop, and more recently by a beverage distributor. Unfortunately, virtually no trace remains of Ottawa's Lateral Canal.

SOURCES:

Sanborn Map Co., Ottawa, LaSalle County, Illinois (New York: Sanborn Map Co., 1888, 1891, 1898, 1913, 1925).

Ottawa, Old and New A Complete History of Ottawa, Illinois, 1823-1914 (Ottawa: The Republican Times, 1912-1914, reprinted by Bireline Publishing Co., Newell, Iowa, 1984), 131-2.

S.S. Connelly Company

California Avenue at the Chicago Sanitary and Ship Canal, Chicago

RATING: 2

Construction Date: ca. 1900

UTM: Englewood Quad. 16 E.442220 N.4631420

DESCRIPTION: This industrial complex contains three principal buildings. The main administration building is actually composed of several buildings fronting California Avenue. Some of the northernmost buildings have one story. Some windows and doors have been infilled with brick or cinder block. There have been several loading doors cut into the basement level on the west facade. Most of the building is two stories with common-bond brick walls. The windows have segmental arches. All windows below the second story are infilled with brick. The second-story features one-over-one-light, double-hung sash windows with concrete sills and flat, tile-edged roof. This building measures roughly 100' x 25'. The factory building is a three-story common-bond brick structure with a stepped roof line. It has an L-shaped plan with a through passage large enough to accommodate rail cars; the tracks are still in place, but are no longer used. Historic photos show rows of large multi-light factory windows, most of which have been infilled with brick. The factory retains a few early pieces of machinery including grinders dating from the 1920s. A concrete-block addition, built in 1977, adjoins the factory. To the north of the site is a corrugated-metal shed building used for storage.

HISTORY: The S.S. Connelly Company was founded in Newark, New Jersey, in 1866 as manufacturers of horse-drawn frames. By 1889, the company had converted to the production of gas motors, and by 1900 Connelly was established in the Chicago area. In 1956, the Klein Family purchased G.P.M. Connelly. It now produces gas purification material.

SOURCES:Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1919-1951).

Manufacturing

Continental Can Company

3730 St. Louis Avenue, Chicago

RATING: 2

Construction Date: 1926

UTM: Englewood Quad 16 E.440720 N.4630370

DESCRIPTION: This large brick building, measuring 527' x 251', consists of a simple utilitarian design. It has a U-shape and retains its tile-edged parapet and some of its original glass-block windows. The east facade contains the entrance and truck loading docks. The rear facade also has truck loading docks. Rail spur lines enter into the interior "courtyard" of the building. The roof features four bowstring trusses, and the original beaded board interior paneling is visible in the foyer.

HISTORY: This building was constructed in 1926 by the Santa Fe Railroad, but leased to Continental Can Company as a warehouse. It was one of many warehouse facilities owned by Continental Can throughout the country. The Santa Fe sold the building in 1979 to Paper Chase Exchange, the current occupant of the warehouse.

SOURCES:

Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1919-1951).

DuPont Company: Chicago Munitions Plant

2323 Halsted Avenue, Chicago

RATING: 3

Construction Date: 1094, 1921, 1951

UTM: Englewood Quad. 16 E.446340 N.4633220

DESCRIPTION: Formerly located along a slip of the Sanitary and Ship Canal, this site contains three brick buildings, all with concrete foundations. The southernmost building is a one story building sheathed in metal siding with a flat roof. The roof is supported by two bowstring trusses. It has large multi-light windows and several glass-block windows. An "L" has been added to the south facade for offices. The middle building is a narrow, two-story brick building (also metal clad) which measures 110' x 37'. The northernmost building is also brick covered with metal siding, and is one story in height, with a flat roof and large multi-light windows. It measures roughly 137' x 110'.

HISTORY: Although it is not known who built this facility, one of its early occupants was the DuPont Company, which manufactured munitions during World War I. The canal slip

which ran behind these buildings was called DuPont Slip. It was later infilled and rail spur lines were laid to allow for loading. The middle building was built in 1921; the northernmost building was built in 1904. The National Straw Company occupied this site after DuPont. In 1950 the southernmost building burned to the ground and was rebuilt the following year. The A.H. Weiss Company, a manufacturer of bias cloth bindings, has occupied this site for eight years.

SOURCES:

Interview with Mr. Robinson, President of A.H. Weiss Company, July, 1986.
Real Estate Appraisal prepared for A.H. Weiss, n.d.

Economy Motor Buggy Company

100 Bissel Street, Joliet

RATING: 2

Construction Date: ca. 1909

UTM: Joliet Quad. 16 E.411540 N.4597580

DESCRIPTION: This two-and-one-half-story building measures approximately 135' x 90'. It contains a rubble-stone foundation, common-bond brick walls and brick pilasters. The west (main) facade contains nine bays and the entrance at the central bay features the stone inscription "Economy Motor Buggy Company." The building has a flat roof and all of the windows are constructed of glass block. A concrete-block addition extends along the east facade.

HISTORY: Around 1909 the Economy Motor Buggy Company established a factory on Bissel Street in Joliet to manufacture automobiles. The Economy Motor Buggy featured a chain-driven rear wheel, hard-rubber tires, and an umbrella top. Most of the parts for the automobiles were purchased from outside suppliers, and the assembly was carried out at the Bissel Street plant. The Economy Motor Buggy Company probably remained in business through the 1910s until it was no longer able to compete with the larger automobile companies. By 1940, the factory was converted into a printing plant by Graphic Paper of Joliet, Inc., its present occupant.

SOURCES:

Robert E. Sterling, Joliet: A Pictorial History (St. Louis: G. Bradley Publishing, Inc., 1986), 122-3.

Manufacturing

Farrell Manufacturing Company

804 East Cass Street, Joliet

RATING: 3

Construction Date: ca. 1920

UTM: Joliet Quad. 16 E.4111480 N.4597740

DESCRIPTION: This is a one-story and two-story brick building and measures 150' x 120'. It contains brick walls and pilasters and rests on a concrete foundation. The north (main) facade contains five bays, and single and paired one-over-one-light, double-hung sash windows; an inscribed limestone block on the east facade proclaims "Farrell Mfg. Co." The grade of an abandoned rail spur is visible to the south of the factory. Originally this building was part of a larger industrial complex that included eight buildings. This is the only intact structure associated with Farrell Manufacturing.

HISTORY: Clayton S. Farrell, a former steel-mill employee, in partnership with H.C. Gushe, began making oil tanks and other sheet metal products in 1907. Their original building was located on Clinton Street across from the Post Office. When William B. Kemp became a partner in 1910, the business was renamed the Farrell-Kemp-Gushe Company. The company moved to East Cass Street in 1916. By this time Farrell-Kemp-Gushe was a leading manufacturer of oil tanks for truck trailers. The company obtained steel for the fabrication of oil tanks from the mills in the South Chicago and Calumet districts. Farrell-Kemp-Gushe Company products were sold primarily in the large Midwestern cities of Chicago, Illinois, Indianapolis, Indiana, and Milwaukee, Wisconsin. The surviving building of the Farrell Company is now largely vacant.

SOURCES:

Lester F. Filson, "From Whence Came a City: The Story of Joliet and Will County, Illinois", unpublished mss, 1957, available in the Joliet Public Library.

William T. Chambers, "A Geographical Study of Joliet, Illinois: An Urban Center Dominated by Manufacturing," unpublished Ph.D. dissertation, University of Chicago, 1926.

S.G. Gay Carriage Company

northeast corner of Lafayette and Fulton streets, Ottawa

RATING: 3

Construction Date: ca. 1885

UTM: Ottawa Quad. E.345670 N.4579050

DESCRIPTION: The two buildings that comprise the remains of the S.G. Gay Carriage Co. are the Warehouse and Freight Building (ca. 1900) and a part of the old factory (ca. 1885), now an automotive garage. The Warehouse and Freight Building is one-and-one-half

stories tall and has a rubble stone foundation supporting a heavy timber frame. The exterior walls are covered with plank siding, and the building is topped by a gable roof. The plank siding is covered with stucco along the west facade. The Warehouse and Freight Building retains much of its historical appearance. The old factory building, converted into an auto repair facility in the 1920s, originally contained two- and three-story sections; it retains only the first story as well as brick load-bearing walls, a rectangular plan, and a flat roof. Above the large loading bays are steel I-beam lintels; a cast-stone pediment extends along the south facade. The old factory complex of the S.G. Gay Carriage Co. now has several different businesses occupying the site.

HISTORY: Joshua G. Gay began manufacturing carriages in Ottawa in 1848 when he and his partner William Palmer opened a small shop. Their enterprise was successful, and in 1870 Gay, having taken over the firm, moved his wagon works into an old church building located at the corner of Clinton and Jefferson streets. In 1880 Gay's son, Simeon, joined him in the business. Over the next two decades their manufacturing firm was highly successful. Gay expanded the works in 1890 by purchasing the Cushman Foundry and Machine Shop. Having succeeded his father in the business, Simeon subsequently erected a large two-story warehouse and freight building. The operation occupied an entire block on the north side of Lafayette Street between Clinton and Fulton. Throughout the late nineteenth and early twentieth centuries, S.G. Gay & Son produced carriages, surreys, phaetons, buggies, and road wagons. At its peak the plant employed about sixty men and produced 5,000 vehicles per year. The vehicles were sold primarily in the West and Pacific Northwest. The widespread use of the internal combustion engine in the twentieth century put many of the old carriage makers out of business. S.G. Gay & Son continued to manufacture wagons through the 1910s. By 1925 the factory was converted into an auto garage and sales office.

SOURCES:

Sanborn Map Co., Ottawa, LaSalle County, Illinois (New York: Sanborn Map Co., 1888, 1891, 1898, 1913, 1925).

History of LaSalle County, Illinois, v. 1 (Chicago: Interstate Publishing Co., 1886), 524.

C.C. Tisler, Story of Ottawa, Illinois (Ottawa, IL: Illinois Office Supply Co., 1953), 32.

Ottawa, Old and New: A Complete History of Ottawa, Illinois, 1823-1914 (Ottawa: The Republican Times, 1912-1913, reprinted by Bireline Publishing Co., Newell, Iowa, 1984), 79-80.

Manufacturing

Humphrey & Sons Company Machine Shop and Foundry

63 South Ottawa Street, Joliet

RATING: 3

Construction Date: ca. 1930

UTM: Joliet Quad. 16 E.409640 N.4597060

DESCRIPTION: The foundry building measures 275' x 150' and is two-and-one-half stories tall. It contains a concrete foundation, concrete floors, and common-bond brick walls. The first-story glass-block windows are framed by brick segmental arches and concrete sills. The second story contains multi-light windows. The adjacent warehouse building is two stories in height and measures 250' x 75'. It contains common-bond brick walls, segmental arches framing the window openings, and a flat roof.

HISTORY: For many years this foundry was the largest industrial building in the immediate vicinity of downtown Joliet. Castings manufactured by this foundry were widely used, and included gun parts produced for World War II. The foundry used coal from southern Illinois, molding sand from Wilmington, Illinois, core sand from Michigan City, Indiana, and pig and scrap iron from Chicago. At its peak in the 1940s, the foundry employed about 100 persons. Humphrey & Sons continues in business, producing specialty castings.

SOURCES:

Interview with Cheryl Vogrin, employee of Humphrey and Sons, July, 1986.

William T. Chambers, "A Geographical Study of Joliet, Illinois: An Urban Center Dominated by Manufacturing," unpublished Ph.D. dissertation, University of Chicago, 1926.

Illinois Pure Aluminum Company

109 Holmes Street, Lemont

RATING: 1

Construction Date: 1892, 1922

UTM: Sag Bridge Quad. 16 E.417020 N.4614020

DESCRIPTION: The original two-story factory building consists of a coursed limestone foundation and ashlar limestone walls extending to the second-floor level, above which rests brick load-bearing walls supporting timber roof trusses. The interior framing consists of massive timber posts and beams. The east and north facades feature six-over-six-light, double-hung sash windows with limestone lintels above window openings. The two-story addition, erected in 1922, wraps around the south and west facade of the original factory. The addition consists of a reinforced concrete frame, a limestone and brick veneer along the

south facade, and a brick veneer along the west facade. Several hand-painted signs are visible on the east facade, including "Walker Ware," "American Maid," and "Illinois Pure Aluminum Co. Cooking Utensils Establishment."

A one-story brick building to the west, measuring about 50' x 40' and containing a gable roof, was constructed around 1900 as a Commonwealth Edison Company substation, but was subsequently acquired by Illinois Pure Aluminum and served as a warehouse. The interior of the 1892 section of the building contains the original overhead belting--the factory was originally powered by steam--as well as several ca. 1910s and 1920s deep-draw presses manufactured by the E.W. Bliss Company of Brooklyn, New York. The presses, located in the basement, were used to produce the aluminum pots and pans. The first floor housed the company office, drying ovens, and conveyor belts; and the second floor contained the acid vat and buffing machinery, and the employees' dressing room, shower, and toilets.



Photo 61. Illinois Pure Aluminum Company; the original (1892) factory, right, and the later (1922) addition, left; view of the east facade featuring company signage, Lemont. Photo by Jet Lowe, HAER.

HISTORY: One of the nation's earliest aluminum manufacturing concerns, the Illinois Pure Aluminum Co. was established in Lemont in 1892. The company quickly developed a regional market for its line of products, including aluminum combs, hairpins, thimbles, cookware, and road signs. Among the company's original founders was Edwin P. Walker, a long-time resident of Lemont who had emigrated to America from England in 1856. Shortly after Illinois Pure Aluminum began operations, George S. Walker, Edwin's son, became the company president. Though the company enjoyed considerable success marketing its line of cooking utensils as "Walker Ware," it remained a small, family-owned business. During its best years the company employed no more than sixty to 100 workers. Its one factory in

Lemont was greatly expanded in 1922 when a fireproof reinforced concrete addition, containing ashlar limestone and brick walls, was constructed to the south and west of the original building. Illinois Pure Aluminum continued in business through the 1970s. By 1985 the property was in receivership. The factory was demolished in 1987.

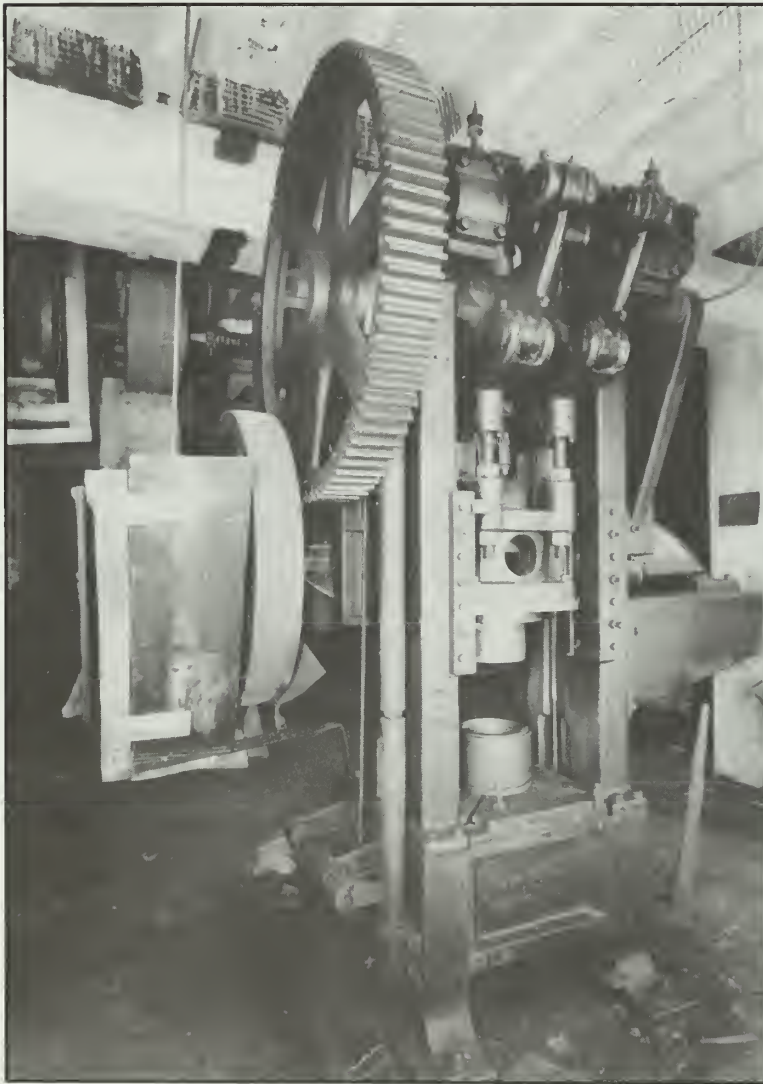


Photo 62. Illinois Pure Aluminum Company; one of the deep-draw presses manufactured (ca. 1900), by the E.W. Bliss Co. of Brooklyn, N.Y. Photo by Jet Lowe, HAER.

SOURCES:

Lemont, Illinois: Its History in Commemoration of the Centennial of Its Incorporation (Lemont, IL: Lemont Area Historical Society, 1984) 184-5.

Lemont Observer, January 16, 1897 and July 20, 1897.

Sanborn Map Co., Lemont, Illinois, v. H, in the series Chicago, Cook County, Illinois (New York: Sanborn Map Co., 1949).

Lemont Weekly Observer, v. 2, March 23, 1894.

Inland Iron Works Company: Joliet Foundry

315 West McDonough Street, Joliet

RATING: 3

Construction Date: ca. 1900

UTM: Joliet Quad. 16 E.409080 N.4596380

DESCRIPTION: The Foundry and Machine Shop is the only extant structure built prior to the 1940s. It is a one-and-one-half-story brick building measuring 80' x 60' and resting on a stone foundation. Spanned by brick segmental arches, the windows have been infilled with brick. Several other steel-framed buildings, covered with corrugated metal and built in the 1950s, are adjacent to the Foundry and Machine Shop.

HISTORY: Beginning in the early 1900s, the Inland Iron Works operated a foundry in Joliet producing iron, brass, and copper castings, much of which was used for pumping machinery. Inland Iron was served by the channelized Des Plaines River and by the Elgin, Joliet and Eastern Railroad. Its products were sold throughout the upper Midwest. The only remaining historic structure of Inland Iron is the Foundry and Machine Shop, a brick building with little embellishment. Though the foundry operated until recently, the entire complex is now abandoned.

SOURCES:

William T. Chambers, "A Geographical Study of Joliet, Illinois: An Urban Center Dominated by Manufacturing," unpublished Ph.D. dissertation, University of Chicago, 1926.

Manufacturing

International Harvester

Western Avenue along the Chicago River (South Branch), Chicago

RATING: 2

Construction Date: ca. 1925

UTM: Englewood Quad. 16 E.443100 N.4631880

DESCRIPTION: This one-story brick building is the last remaining building of the International Harvester Corporation complex on Western Avenue. It measures approximately 200' x 100'. Although the interior is now entirely open, the building was originally divided into three sections. The northernmost section has bowstring roof trusses with a monitor. The other two sections have flat, tile-edged roofs. The facade of the two northernmost sections of the building contains a stepped parapet with concrete and brick ornamentation and numerous multi-light windows with awnings. The southernmost section has a decorative central doorway with a bracketed segmental arch overdoor of brick and concrete. The door opening has been infilled with brick. Other facades have large glass-block windows, some of which have been infilled with concrete block. A rear brick addition was erected as part of a truck loading dock. A warehouse measuring 100' x 20' and covered with corrugated metal siding is located to the rear of the property.

HISTORY: Following its move from Cincinnati to Chicago in 1847, the McCormick Reaper Company quickly became one of the city's most important manufacturers. In 1902, McCormick merged with several other agricultural implement manufacturers to become International Harvester. After the original McCormick plant was destroyed in the fire of 1871, the company relocated to South Chicago where it built a large factory along the South Branch of the Chicago River near the I&M Canal Turning Basin. Most of these 1870s-1880s buildings were demolished in the 1950s when International Harvester discontinued its Chicago operations. The lone surviving International Harvester factory building was built about 1925. It was sold to Amstar, a sugar manufacturer, in the 1950s, and was recently bought by the El Milagro Tortillas Company.

SOURCES:

Harold Mayer and Richard Wade. Chicago: Growth of a Metropolis (Chicago: University of Chicago Press, 1969).

Bessie Pierce, A History of Chicago (Chicago: University of Chicago Press, 1959).

Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1914-1949).

Joliet Manufacturing Company

152 Young Street, Joliet

RATING: 2

Construction Date: 1867, 1915

UTM: Joliet Quad. 16 E.410860 N.4597500

DESCRIPTION: This industrial complex consists of one limestone and several brick buildings. Ranging in height from one to three stories, the buildings contain brick pilasters and heavy post-and-beam construction and rest on stone foundations. Several windows have cast-iron lintels with floral details. Many windows are infilled with concrete block or brick. Some belt-driven lathes and shapers, dating from the late nineteenth century, remain in place.

HISTORY: The Joliet Manufacturing Company was founded in 1849 in Plainfield, Illinois, as the Dillman Foundry, a producer of corn shelling machinery. About 1863 the foundry operations were moved to Joliet, and the plant was reestablished on the corner of Cass Street and Youngs Avenue. Led by A.H. Shreffler, the Joliet Manufacturing Company produced shellers, reapers, mowers, and plows. The company eventually specialized in corn shellers, and by the 1880s was producing some 500 steam-powered shellers annually. By 1924 the factory complex encompassed ten buildings on ten acres, with 600 feet fronting a spur of the Rock Island Railroad. In addition to producing corn shelling machinery, the company also maintained an automobile paint shop. As with several other agricultural implement manufacturers in the Upper Illinois Valley, the Joliet Manufacturing Company did not survive the Depression of the 1930s. The buildings are currently owned by the Gardner Warehouse Company. A small ceiling tile company is also located on the site.

SOURCES:

Interview with Robert M. Gardener, President, Gardener Warehouse company, July, 1986.

Sanborn Map Co., Joliet, Illinois (New York: Sanborn Map Co., 1924).Joliet Herald News, June 10, 1927, Industrial Section.Robert E. Sterling, Joliet: A Pictorial History (St. Louis: G. Bradley Publishing, Inc., 1986), 42.

Manufacturing

Ketler-Elliott Construction Company

California Avenue and the Chicago River (south Branch), Chicago

RATING: 3

Construction Date: 1915

UTM: Englewood Quad. 16 E.442280 N.4631540

DESCRIPTION: This three-story steel-framed building has had many additions since its construction in 1915. The building has a brick veneer, with multi-light windows on the first floor, and glass-block windows on the second and third floors. Four bays are divided by rusticated brick pilasters. A doorway with neo-Classical elements in the northernmost bay contains brick pilasters, concrete capitals, and an ornate frieze. The building measures 60' x 40'. Concrete string courses extend between the floors. Two post-1940s additions adjoin the south facade of the building. A 1950s vintage building containing brick walls adjoins the south facade and is used for shipping and receiving with the Illinois Central Gulf spur. Extending along the other side of the rail spur are three rectangular shed buildings which are now part of Parnell Ornamental Iron Works.

HISTORY: A Sanborn Insurance map of 1919 shows that before 1920, the Ketler-Elliott facilities consisted only of a tool shed, loading shed, small office building, and crane shed--all south of the spur line. The main buildings were built after Ketler-Elliott received the contracts to construct the superstructures of many of the Chicago River bascule bridges in the late teens. Ketler-Elliott, in fact, became the largest contractor of the famous Chicago River bascule bridges. For the past decade, the site has been occupied by a succession of adhesives factories, including the current occupant, Swift Adhesives.

SOURCES:

Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1919).
U.S. Army Corps of Engineers, aerial photos, 1939.

King & Hamilton Company Factory and Office

Clinton and Marquette streets, Ottawa

RATING: 2

Construction Date: 1880-1900

UTM: Ottawa Quad. 16 E.345780 N.4579520

DESCRIPTION: Factory Building: (ca. 1900) This is a three-story brick building with a stone foundation, common-bond, (red) brick load-bearing walls, and a heavy timber interior frame with chamfered columns supporting massive timber beams. It measures

approximately 225' x 40' and contains a flat roof. The main facade faces south and has numerous windows. Window openings contain brick segmental arches, each with a timber lintel behind the arch. The original wooden sills have rotted in some windows and have been replaced by cast stone sills. A large sliding door is at the loading dock. The north facade, facing the railroad spur, has windows on the second floor only; these twelve windows are symmetrically centered on a large sliding door. The west facade once adjoined another building. Decorative elements include an entablature with belt course, a brick dentil course, and corbeled buttresses topped by tile coping on the north side and wood coping on the south side. The southwest corner of the building was damaged by a fire. The original company sign remains in place below the cornice at the east facade.

Office Building and Showroom: (ca. 1880) This structure was originally rectangular in plan, but with a ca. 1898 addition, it assumed an L-shape. The two-story building contains a stone foundation, brick walls covered with stucco, and a flat roof on the main part of building, running north-south. Some of the original four-over-one-light, wooden



Photo 63. King & Hamilton Company Factory (ca. 1900), Ottawa. Photo by Jet Lowe, HAER.

Manufacturing

double-hung sash windows remain in place. The windows are framed by arching brick stringer courses with round wooden window frames and brick sills. A weighing scale is located outside the building at the northeast corner. All of the original windows of the ell have been infilled with brick.

HISTORY: The King & Hamilton Company was started as Gilman, King & Hamilton Company in 1868, a manufacturer of farm implements that included corn shellers, corn planters, and corn plows. The original office was a small, two-story brick building erected about 1880. Around 1898 the office was extended to the south, and a showroom, consisting of a one-story, gable-roofed brick structure was erected off the west facade. The two-story office addition included a large bank vault. King & Hamilton remained in business through the 1920s. The two extant buildings of the King and Hamilton factory complex are among the few remaining structures in the Heritage Corridor associated with the manufacture of agricultural implements.

SOURCES:

Sanborn Map Co., Ottawa, LaSalle County, Illinois (New York: Sanborn Map Co., 1888, 1891, 1898, 1913, 1925).

The Past and Present of LaSalle County Illinois (Chicago: H.F. Kett & Co., 1877), 285-9.

Illinois of Today and its Progressive Cities (n.p., n.d.), 139.

Ottawa, Old and New: A Complete History of Ottawa, Illinois, 1823-1914 (Ottawa: The Republican Times, 1912-1914, reprinted by Bireline Publishing Co., Newell, Iowa, 1984), 67.

Lanvin & Sons Company

3426 S. Kedzie Ave, Chicago

RATING: 2

Construction Date: ca. 1925

UTM: Englewood Quad. 16 E.441180 N.4630960

DESCRIPTION: This industrial site comprises a long rectangular block paralleling the Santa Fe Railroad. In the mid-1920s two structures, an office building and a mill, occupied the site. In 1939 a large rolling mill was added. The office building is one-and-one-half stories tall and measures 45' x 35'. It contains a concrete foundation, a brick veneer, and a central doorway with freestanding Corinthian columns. A brick string course defines the roof line of the flat roof. The original mill (now a laboratory) is a one-story brick building with numerous glass-block windows. It measures 130' x 30'. This building is connected to the office building. The large foundry measures 610' x 100' and consists of a steel frame with a monitor roof; its exterior is covered with corrugated metal. It has large loading bays along the south facade.

HISTORY: Lanvin & Sons, a private, family-owned brass smelting and foundry business, was established in the mid-1920s. In 1928 the company operated a small foundry and an office. A decade later Lanvin expanded the brass foundry, constructing a much larger steel-framed foundry building. Lanvin & Sons continues in business. Unfortunately, historical information on this site is scant because Bennett Lanvin, president of the company, refused access to the property.

SOURCES:

U.S. Army Corps of Engineers, aerial photos, 1928, 1939, 1982.
Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1919-1951).

Lasker Boiler and Engineering Company

3201 Wolcott Street, Chicago

RATING: 2

Construction Date: ca. 1900

UTM: Englewood Quad. 16 E.444140 N.4631500

DESCRIPTION: This two-story steel-framed building contains brick walls and measures 200' x 50'. The riveted-steel Warren roof trusses support a full-length monitor. A running-bond brick veneer covers the steel frame. About ten feet away is an 18' x 18' two-story shed with corrugated metal siding. Attached to this shed is a 10' x 10' brick lean-to. To the rear of the main factory is an Illinois Central Gulf Railroad siding which at one time entered the main building. Extending perpendicular to the rear of the main building and forming an ell is another building, one-and-one-half stories tall, with multi-light windows and a gable roof. Parallel and attached to this building is a 50' x 15' shed roof structure. Perpendicular to the ell is a modern brick building, used for truck storage and loading.

HISTORY: This industrial site was home to three companies: the Lasker Boiler and Engineering Company, Economy Light & Power Company, and the Superior Copper Company. Lasker subsequently grew and acquired the entire property. Thomas Lasker and his five brothers founded the firm that eventually became the largest producer of steam boilers in the Chicago area.

SOURCES:

Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1911).

Manufacturing

McCarthy Foundry

3307 Lawndale Avenue, Chicago

RATING: 3

Construction Date: ca. 1935

UTM: Englewood Quad. 16 E.440420 N.4631100

DESCRIPTION: This industrial complex consists of two large warehouse buildings. One of them parallels Lawndale Avenue and consists of a large two-story building with metal sheathing over the brick base. The flat roof is supported by a riveted steel Warren truss. The south facade has a steel and corrugated metal shed addition for truck loading. The second warehouse is perpendicular to the other and consists of a two-story brick building measuring 300' x 120'. It contains a steel frame and monitor roof with asphalt shingles. All of the truck loading bays on the north facade have been infilled with concrete and glass block. The two warehouses are connected by a one-story corrugated metal building.

HISTORY: In the 1930s these buildings were occupied by the McCarthy Foundry. The warehouse which faces Lawndale Avenue was used for finishing and shipping. The adjacent building housed the actual foundry. The pattern shop for the foundry is a brick building measuring 80' x 40'. It is now used as a garage. This plant is located in a small foundry district where brass, iron, and steel was produced. Most of the structures in the district date from the late 1930s and early 1940s.

SOURCES:

Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1919-1951).

Milles Supply Company

2201-2 West 35th Street, Chicago

RATING: 2

Construction Date: 1921

UTM: Englewood Quad. 16 E.443420 N.4630960

DESCRIPTION: This is a large, two-story brick building whose many later additions have created an irregular plan. The oldest building has a monitor roof and measures 100' x 40'. There is an Illinois Central Gulf spur line at the rear of this two-story section. Of steel-frame construction, this building originally served as a foundry.

HISTORY: Before going into business for himself, Charles H. Milles had been a foreman at a foundry which made castings for the Monarch Brewery, located in Chicago at 18th Street and Damen Avenue. The brewery turned over operation of a foundry to Milles with the stipulation that he work exclusively under contract to Monarch. Milles was finally able to open his own foundry in 1921. The foundry is now owned by his grandson and is still in operation, producing castings and equipment for use in other foundries.

SOURCES:

Interview with Glen Milles, of Milles Supply Co., August, 1986.

Page Engineering Company

Lawndale Road, east of LaGrange Road, McCook

RATING: 2

Construction Date: 1923

UTM: Berwyn Quad. 16 E.431800 N.4628560

DESCRIPTION: Originally, this factory complex had an L-shaped plan, and, interestingly, was landscaped with the aim of providing a park-like setting. The Office Building, dating from 1923, is a two-story brick structure with concrete foundation. It measures 60' x 30'. The facade is divided into three bays by brick pilasters which have decorative concrete capitals. A truck loading dock has been cut into southernmost bay. The projecting foyer of the main entrance dates from the 1950s or 1960s as does a one-story brick addition to the north facade. A large two-story brick office building, dating from the 1960s, parallels the old office building. There are two factory buildings: one is connected to the Office Building and contains corrugated metal siding and a multi-light monitor roof constructed of steel. The second factory building is perpendicular to the first factory and is divided into three sections, each measuring about 300 feet in length; it also contains corrugated metal siding and multi-light monitor roofs. Detached from the main plant is a small concrete block garage with gable roof. There are a few other corrugated metal or brick buildings which were added to the complex after the Second World War.

HISTORY: About 1910 John Page, a civil engineer who had developed a steam-powered dragline while working on the construction of the Hennepin Canal in Illinois, established a manufacturing concern in McCook for the production of large earth-moving equipment. (Interestingly, in addition to developing the dragline, Page patented a type of trunnion bascule bridge as well as an innovative concrete mixer.) Page chose the Lawndale Avenue site because of its proximity to barge and rail service. Incorporated in 1912, the company's

Manufacturing

earliest building, the main office, dates from 1923. The adjacent steel-framed industrial buildings were designed to accommodate the fabrication of large earth-moving equipment. Page Engineering continues in business, specializing in custom-designed draglines.

SOURCES:

Interview with William Bates, president of Page Engineering Company, August, 1986.

History and Progress of the Village of McCook, 1926-76 (McCook, IL: McCook Historical Commission, 1976).

Chicago: Its History and Its Builders (Chicago: S.J. Clarke Publishing Co., 1912).

Phoenix Horseshoe Company

Industry Avenue Joliet

RATING: 1

Construction Date: ca. 1893

UTM: Joliet Quad. 16 E.409820 N.4600180

DESCRIPTION: The Phoenix Horseshoe Company, located on sixty-five acres at the west bank of the Des Plaines River and bordering Industry Avenue, includes sixteen buildings, twelve of which were erected prior to 1940. (Of these, only the Main Office, Administration Building, Loading Room, Warehouse and Punch Room were permitted to be photographed.) The majority of the historic buildings are rectangular in shape and constructed of some combination of iron, stone, or brick. The pre-1940 buildings at Phoenix Horseshoe Company are:

Office Building: erected in 1887, this L-shaped, two-story building measures approximately 100' x 80'. It has random-range limestone walls and multi-light, wooden double-hung sash windows which have limestone lentils and sills. An intersecting hipped roof has hipped roof dormers. An addition to the southwest facade was completed in 1927.

Roll Shop: erected in 1892, the building was first used for a horseshoe bending and grinding shop. It once also housed a bolt and rivet manufacturing area on north side. Iron columns rest on concrete piers. The building has corrugated metal cladding and a monitor roof with iron trusses. Originally 360' x 90', an addition was added to the west facade in 1905, when the structure was connected to an adjacent mill.

Warehouse: erected in 1900, the building is two stories and measures 330' x 90'. It has a brick floor, random-range limestone walls and pilasters. The windows and doors contain segmental brick arches and multi-light, wooden double-hung sash windows with limestone lentils. The gable roof is supported by a riveted steel Fink truss, and asphalt shingles cover the roof. A concrete-block addition to north facade adds 90 feet in length to the warehouse. Various door and window openings have been filled in with concrete block.

Machine Shop: erected in 1900, this structure is two stories and measures 150' x 45'. It consists of random-range limestone construction with stone pilasters; the gable roof supported by a riveted steel Fink truss.

Punch Room Guiding: erected in 1905, this one-and-one-half story building measures 150' x 60'. It is of random-range limestone construction with stone pilasters. It has multi-light, wooden-framed windows with segmental brick arches and concrete sills; the interior contains original line shafting. The gable roof, which has recently been covered with corrugated metal and which has numerous vents, is supported by a riveted steel Fink truss. A corrugated metal addition was constructed in 1952.

Boiler / Engine House: erected in 1905, this building originally served as a boiler/engine house for a rolling mill that was replaced in the 1950s. It had become a carpenter shop by the 1930s. Steel columns rest on concrete piers. The structure has corrugated metal cladding, and the roof, which has a monitor, is supported by a riveted steel roof truss. A small, brick structure (ca. 1900) attached to the east facade contains pilastered walls and corbeled gable ends.

Racing Shoes Manufacturing Building: erected in 1925, this concrete-block structure measures 80' x 55'.

Administration Building: erected in 1928, this one-story building measures 120' x 90'. It has common-bond, brick pilastered walls, a concrete floor, and a flat roof. Several of the multi-light windows, which have concrete sills and lentils, have awnings.

Loading Room: erected in 1932, this one-story building measures 240' x 60'. It is clad in corrugated metal, has a steel roof truss and wood tongue-and-groove roof sheaving, and rests on a concrete foundation.

The complex also contains a brick Maintenance Garage (1932) and a small concrete Bath House (1916).

HISTORY: The Phoenix Horseshoe Company was founded in 1882 in Hartford, Connecticut, as the Spring Horseshoe Company. In 1884 the company relocated to Poughkeepsie, New York, and changed its name to the Phoenix Horseshoe Company. A great demand for horseshoes in the Midwest prompted the company to open a new plant in Joliet in 1893. In addition to the favorable market conditions in the West, the company located in Joliet because of the city's outstanding rail service. At one time Phoenix Horseshoe was the largest manufacturer of horseshoes and horseshoe caulks in the United States, producing more than 68 million horseshoes in one year. Also, it was the first major

Manufacturing

industry to locate on the west side of the Des Plaines River in Joliet, a move which later prompted several other industries to settle in the same vicinity. In 1928 the company was acquired by the Bryden Neverslip Company of Catasauqua, Pennsylvania, and was renamed the Phoenix Manufacturing Company. The company again changed hands in 1957 when it was purchased by Union Tank Car. This company expanded the plant greatly, constructing three large mills and a steel-framed warehouse, measuring 510' x 170'. It is currently known as Continental Steel Corporation, a company based in Kokomo, Indiana. The horseshoe mill was closed in 1966, leaving the company to concentrate on the production of rolled steel bars and structural shapes. The site is currently owned by the Sheffield Steel Corporation.

SOURCES:

William T. Chambers, "A Geographical Study of Joliet, Illinois: An Urban Center Dominated by Manufacturing," unpublished Ph.D. dissertation, University of Chicago, 1926.

Joliet Herald News, July 1, 1986.

"Continental Steel Corporation, Joliet Bar Mill Division," undated company brochure.

Sanborn Map Co., Joliet, Illinois (New York: Sanborn Map Co., 1924).

Albert Pick Company

1200 West 35th Street, Chicago

RATING: 1

Construction Date: 1911

UTM: Englewood Quad. 16 E.445500 N.4631000

DESCRIPTION: This large, six-story warehouse measures 600' x 400' and extends along the South Fork of the Chicago River's South Branch. It contains a concrete foundation, common-bond load-bearing brick walls, and brick pilasters with decorative concrete elements. A number of original three-over-one-light, double-hung sash windows remain. The main facade contains a central ornamented doorway. This section projects slightly and has decorative brick patterning. The door has decorative window surrounds and two modified Tuscan concrete columns. The second floor has large windows, and the corner windows have bracketed hoods. The roof has a series of monitors. The facade facing the waterway has numerous loading docks which contain the original doors. There is a two-story addition on the Racine Street facade; this addition has a gable roof, multi-light windows, segmental brick arches, and decorative concrete work. The site is served by two railroad spur lines, one which runs through the two-story addition, the other which extends along Racine Street.

HISTORY: Incorporated in 1896, the Albert Pick Company constructed its main warehousing facilities in Chicago's Central Manufacturing District in 1911. The prominent

Chicago architect Alfred Alschuler designed the company's main warehouse building, employing a range of eclectic motifs in brick and concrete. In addition, Alschuler included in the design a series of truck bays, a very early example of this facet of warehouse construction. The original building had five floors, each containing 48,000 square feet. It also had offices, four freight elevators, eight truck bays, and a truck garage on 34th Street. In 1919 an addition was constructed to the north facade which doubled the square footage. That year a serious fire destroyed much of the fifth floor. Repairs, however, were quickly made. Nonetheless, after the fire the offices of the Albert Pick Company were moved to Randolph Street.

From 1919 to 1928 the warehousing complex was used for manufacturing and warehousing. Light manufacturing was done on the fifth floor, which contained the electrically powered machinery and vats. The kitchenware manufactured by the Pick company included china, glass, engraving, silver plates, kitchen utensils, and linens. At its peak in the 1910s and 1920s, the company employed as many as 120 workers in its kitchenwares department alone. The Pick Co. had its own engineering and design department which created kitchen facilities for major hotels, clubs, restaurants, and institutions. The company also manufactured and shipped such diverse products as billiard and bowling balls and floor coverings. Pick's slogan was "The Saloon Supply House of the World," but prohibition seriously affected sales. In 1928 the Pick Company merged with L. Barth & Company and the John VanRange Company. To finance this merger, the companies sold bonds in 1927. In 1931, when the bonds came due, the company went bankrupt and lost ownership of the building. It was acquired by the Atlas Company, which leased it to the Pick Company until 1936 when it was sold to the Spiegel Company. Spiegel owned the warehouse building until recently, when it donated the property to Goodwill Industries. Goodwill in turn sold the building to Harry Alter Heating and Air Conditioning Company, the present occupants.

SOURCES:

Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1912).

Moody's Manual of Investments, v. 18 (New York: 1927), 2540-41.

Orange Smalley and Frederick Sturdivant, The Credit Merchants (Carbondale, IL: Southern Illinois University Press, 1973.)

I.S. Anoff, The Albert Pick Story, Chicago, published by author, 1972.

Manufacturing

W.E. Pratt Mfg. Company

18-20 Henderson Avenue, Joliet

RATING: 2

Construction Date: ca. 1870, 1920

UTM: Joliet Quad. 16 E.411300 N.4597520

DESCRIPTION: This two-and-one-half-story factory of random-range Joliet limestone measures approximately 80' x 40'. It contains a gable roof and interior framing of timber post-and-beam construction. Several of the original six-over-six-light double-hung sash windows remain, along with the brick segmental arches and keystones spanning the window openings. A two-story brick addition to the rear dates from the 1920s and contains brick pilasters, multi-light, metal-frame pivoting windows, a brick parapet wall with terra-cotta coping, and a flat roof; this addition measures approximately 150' x 60' and has no ornamental elements. An adjacent brick building, erected about 1942 by the Klasing Hand Brake Company, measures 300' x 100'. It contains a stepped gable facade, a steel frame, multi-light windows, and a flat roof.

HISTORY: Located on Henderson Avenue in Joliet, this industrial complex contains one of the city's earliest extant industrial buildings, a two-story limestone structure. By 1904 the William E. Pratt Manufacturing Company was located here. Pratt Manufacturing produced a wide range of metal goods, including gray-iron castings, sheet steel and wire products, and roller bearings. The factory was served by the Rock Island and the Michigan Central railroads. Prior to its demise in the 1930s, Pratt produced such diverse finished goods as tire pumps, automobile jacks, mouse traps, and decoys, and marketed its products through a mail order catalog. The Klasing Hand Brake Company acquired the property around 1942 and still owns the buildings. Parts of the site are leased as warehouse space.

SOURCES:

Sanborn Map Co., Joliet, Illinois (New York: Sanborn Map Co., 1924-1956).

William T. Chambers, "A Geographic Study of Joliet Illinois: An Urban Center Dominated By Manufacturing," unpublished Ph.D. dissertation, University of Chicago, 1926.

Joliet Herald News, Industrial Section, 10 June 1924, 2.

Pressed Steel Car Company (Heggie Mfg. Company)

1102 Collins Street, Joliet

RATING: 2

Construction Date: ca. 1880

UTM: Joliet Quad. 16 E.410600 N.4599420

DESCRIPTION: This industrial complex comprises four buildings which include an office, locker room, boiler shop, and warehouse. The one-story office is a square building, 60' x 60', and has been substantially modified with aluminum siding (the stone foundation is the only visible original part of the building.) The one-story locker room building is rectangular in plan, measuring 100' x 35'. It contains brick walls, a gable roof, and features door and window openings with brick segmental arches and stone sills; windows have been covered with corrugated fiberglass. The two-story boiler shop measures 560' x 125' and features original limestone walls, pilasters and quoins, and round windows spanned by brick soldier courses; other windows contain brick segmental arches and stone sills. The boiler shop is topped by a multiple gable roof of corrugated metal. The east addition has brick pilastered walls, windows covered with translucent fiberglass, and concrete window sills. The two-story warehouse building measures 200' x 125' and has a steel roof truss with a monitor supported by interior steel columns and exterior pilastered limestone walls. The windows containing segmental arches and limestone sills have been infilled with brick.

HISTORY: About 1880 the Pressed Steel Car Company established a factory on Collins Street in Joliet. The nineteen-acre site was purchased in 1911 by the James G. Heggie and Sons Company, a metals casting concern founded in 1892 and specializing in the manufacture of boilers and steel plate products. At this time the industrial complex consisted of the main shop building, a power house, machine shop, pattern shop, pattern storage houses, and a large office building. Many of these buildings were constructed of Joliet limestone. In 1917 a major addition was constructed the length of the main shop, the purpose being to increase production for the war effort. The James G. Heggie Company was one of the largest industrial concerns in the Joliet area, employing approximately 250 people at its peak. In 1920 another building was added that was used for fabricating and assembling truck tanks as well as steel gondola cars. Underframes for freight cars were manufactured in the main shop, which had two electric overhead cranes. Steel plates, shapes, and rivets were purchased from the steel mills in South Chicago and delivered to the factory by the Elgin Joliet & Eastern Railroad. Later known as Heggie Manufacturing Company, operations continued through the 1920s and 1930s. The industrial complex is now occupied by Universal Lockport Corporation, a light manufacturing concern.

Manufacturing

SOURCES:

Interview with Clark Root, Universal Lockport Corporation employee, July, 1986.

William T. Chambers, "A Geographical Study of Joliet, Illinois: An Urban Center Dominated by Manufacturing," unpublished Ph.D. dissertation, University of Chicago, 1926.

Sanders Brothers Mfg. Company Carpenter Shop

northwest corner of Canal and Main streets, Ottawa

RATING: 3

Construction Date: ca. 1900

UTM: Ottawa Quad. 16 E.345560 N.4578600

DESCRIPTION: This two-story brick building measures approximately 60' x 25' and consists of a rubble limestone foundation, common-bond, red brick, load-bearing walls, and a timber post-and-beam interior. A medium-pitched gable roof is covered with asphalt shingles. The primary (south) facade features a red brick, stepped gable, false front. All of the original six-over-six-light, wooden double-hung, sash windows at the second-story level and the two-over-two-light, wooden double-hung, sash windows at the first-story level remain. Limestone sills and lintels frame the first- and second-story window openings, and brick segmental arches span the basement window openings. An enclosed wooden stairway, the exterior walls of which are covered with asphalt siding, is located along the east facade. The north facade contains a one-story shed with corrugated metal cladding.

HISTORY: This two-story brick building is all that remains of the once sprawling Sanders Brothers Mfg. Company, producers of furniture and building supplies. The factory complex was located across the street from the Carpenter Shop, on Main and Walker streets, along the Hydraulic Basin. Sanders Brothers operated two large three-story factory buildings, one of which contained a turreted water tower. The Ottawa Lateral Canal, running south from the I&M Canal into the Hydraulic Basin, was located just east of the Carpenter Shop. The building retains much of its original appearance. By 1913 it was occupied by the F.L. Jones Garter Factory. Currently, Jobst Monument Company, a manufacturer of stone memorials, occupies the old Carpenter's Shop.

SOURCES:

Sanborn Map Co., Ottawa, LaSalle County, Illinois (New York: Sanborn Map Co., 1888, 1891, 1898, 1907, 1913, 1925).

Standard Atlas of LaSalle County, Illinois (Chicago: Brock & Co., 1929), 120.

Ottawa, Old and New: A Complete History of Ottawa, Illinois, 1823-1914 (Ottawa: The Republican Times, 1912-1913, reprinted by Bireline Publishing Co., Newell, Iowa, 1984), 130.

Steel Sales Corporation

Pulaski Avenue, Chicago

RATING: 2

Construction Date: 1920

UTM: Englewood Quad 16 E.439720 N.4631120

DESCRIPTION: This site comprises several buildings belonging to steel-fence manufacturers. Most notable is a two-story, brick-veneered building with a concrete foundation, a steel frame, and an exterior of bands of glass-block windows with continuous concrete sills. Three warehouse buildings form a U-shape behind the office building. One of these is a three-story building and is covered with corrugated metal. It measures 300' x 40'. Adjoining this is a two-story, corrugated metal building with central truck loading bays in the rear. It measures 450' x 100'. The third warehouse is a two-and-one-half-story corrugated metal building with a flat roof, measuring 300' x 40', and with rail loading bays in the rear. There are also three adjoining post-1940 Butler buildings.

HISTORY: Originally, this factory housed the Steel Sales Corporation (founded in 1915), a steel fabrication company specializing in wire fencing. The office and warehouse buildings were erected in 1920, although numerous additions have since been made. The same product has been manufactured at this site for over 65 years.

SOURCES:

Nameplate on building.

Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1919).

Western Clock Company (Westclox)

Fifth Street, Peru

RATING: 1

Construction Date: 1902-1960

UTM: LaSalle Quad. 16 E.323450 N.4577180

DESCRIPTION: This is a large factory complex with buildings of brick, steel, and reinforced concrete construction. The oldest extant building dates from 1902; however, the Western Clock Company continually expanded its factory complex through the 1950s. Major additions occurred during the years 1907, 1909, 1912-20, 1923-29, 1937, 1940-41, and 1955-58. By 1960 the factory complex contained an area of over 755,000 square feet. The factory buildings are located on a sloping hillside and are bordered to the north by Fifth

Manufacturing

Avenue and to the south by the Rock Island Railroad tracks. Particularly noteworthy structures include the main office building, a concrete-framed structure with exterior walls of brick veneer built in 1923. Its two-and-a-half stories rise from a rusticated base. Brick pilasters divide the facades into bays; the pilasters are ornamented with stylized terra-cotta capitals and bases. These architectural elements are evident elsewhere in the factory complex.

The factory buildings date from 1902 through the 1960s and are generally reinforced concrete frames with brick veneers and steel roof trusses supporting gable and sawtooth monitors. The factory contains numerous multi-light windows. Buildings dating from early 1900s were enclosed by later additions. Interestingly, the former gable end of the 1902 factory, now part of an interior wall, contains a terra-cotta panel with the inscription "Western Clock Co." along with several rectangular areas of decorative brickwork. The adjacent power house appears to be the earliest remaining structure, possibly dating from the late 1890s. It is built of brick, with pilastered walls, a steel roof truss with monitor, and circular-arch window openings. The 1950s turbine-generator units were recently removed. The turbines were steam driven with steam provided in the adjacent boiler room, presently under demolition. Tall reinforced concrete stacks, considered by locals a visual landmark, are also threatened with demolition.

HISTORY: The Western Clock Company was originally founded in 1885 as the United Clock Company in Peru, Illinois. That year a German mechanic from Waterbury, Connecticut arrived in LaSalle and persuaded several of the town's merchants to invest in an automatic clock-making process that he had invented. A small plant was established in Peru, but within two years it was forced to shut down. Lack of adequate capital, poorly skilled labor, and disgruntled stockholders contributed to the collapse of the venture. Despite the difficulties, local zinc magnate Frederick W. Matthiessen, reorganized the United Clock Company under the name Western Clock Company. Matthiessen expended additional capital to mechanize more completely the clock-making process.



Photo 64. Western Clock Co. (Westclox), factory entrance (1920s), Peru. Photo by Jet Lowe, HAER.

Though the onset of the 1893 depression stymied development, the return of economic prosperity at the end of the decade enabled the firm to grow. New buildings were constructed, and by 1910 the Western Clock Company, or Westclox as it came to be called, was the largest producer of alarm clocks in the United States. The factory employed 950 men and women, and produced about 8,000 clocks daily. The years 1912-20 and 1923-29 saw ever greater expansion of the factory complex. In 1923 a three-story headquarters building was erected across the street from the plant. Though the company suffered through the depression of the 1930s, it recovered during the Second World War, producing time delayed fuses for the armaments industry.

By the late 1940s Westclox employed as many as 3,500 people turning out its much publicized "Big Ben", "Baby Ben", and "Pocket Ben" watches. At its peak, 35,000 clocks were produced each day. Competition from other clock companies and relatively high labor costs in Illinois eventually brought about the demise of Peru's Westclox factory. In 1980, a new management moved the remaining operation to the South. All of the plant's machinery was removed and for a few years the sprawling factory complex remained vacant. A group of local investors has purchased the property and leased sections to light industrial concerns. A number of structures, including the old power house and the concrete chimney stacks, are threatened with demolition.

Manufacturing

SOURCES:

Twentieth Anniversary Edition, The LaSalle Tribune, July, 1911: "The Twin Cities, LaSalle and Peru in 1911" (LaSalle, IL: LaSalle Tribune, 1911), 77-8.
Sanborn Map Co., Peru, LaSalle County, Illinois (New York: Sanborn Map Co., 1926).
Interview with Mr. Jerome Oberholz, plant engineer of Peru Development Trust, August, 1985.

Western Steel Company

3640 South Kedzie Avenue, Chicago

RATING: 3

Construction Date: 1892

UTM: Englewood Quad. 16 E.441300 N.4630560

DESCRIPTION: Several buildings occupy this site, all of which have brick walls with arcades and various roof types, including flat roofs, gable roofs, and monitor roofs. The buildings contain various window types, although all of the openings are spanned by segmental arches. Most of the windows have been infilled with brick, corrugated metal, or glass block. The complex includes three buildings west of Kedzie Avenue, one building located on the east side of Kedzie, and one warehouse building standing south of the main complex.

HISTORY: Founded in 1892, the Western Foundry Company initially occupied two acres along Kedzie Avenue. The foundry specialized in light gray-iron castings, called "Western Castings." The complex included seven large foundries, a pattern shop, and a fireproof pattern storage facility. This was the largest plant in the United States devoted to the manufacture of light castings. Annual output was 25,000 tons in 1918. By the late 1910s, the company occupied twenty buildings on twenty acres, and produced 25,000 tons of castings each year. In addition, Western Steel erected workers' housing adjacent to the foundry. The foundry complex was purchased by the Accurate Perforating Company in 1953. This company presently manufactures perforated metals and subleases portions of the buildings to five tenants.

SOURCES:

Manufacturing and Wholesale Industries of Chicago (Chicago: Thomas Poole Company, 1918.)
Interview with the president of Accurate Perforating Company, August, 1986.

IRON, STEEL AND METALS INDUSTRIES

American Steel and Wire Company Rockdale Works

303 Mound Road, Rockdale

RATING: 3

Construction Date: ca. 1890s-1930s

UTM: Joliet Quad. 16 E.407260 N.4595040

DESCRIPTION: This industrial complex is made up of twenty-two buildings, many of which served as warehouses. Nineteen of these are one-story structures and three contain two stories. These structures are largely brick buildings with concrete foundations. Most of the roofs are supported by wood and iron roof trusses. The earliest of these buildings dates from 1892, the most recent from 1930.

HISTORY: This site was originally developed in 1892 by the Joliet Enterprise Wire Company. During its brief existence, the Joliet Enterprise Wire Company contributed greatly to the initial development of Rockdale, building both workers' housing as well as a hotel. In 1898 John Lambert of the American Steel and Wire Company acquired the works. Concentrating on wire and wire fencing, the American Steel and Wire Company became Rockdale's largest employer and remained so throughout the first half of the twentieth century. The steel rod for the fencing was produced by the Illinois Steel Company of Joliet (U.S. Steel) and was transported to Rockdale by the Elgin, Joliet & Eastern railroad. During World War II, this site was used by the U.S. Navy as a storage yard.

SOURCES:

For a list of sources see entry of U.S. Steel Corporation: Joliet Works.

Hansell-Elcock Steel Company Melting and Casting Plant

3151 California Avenue, Chicago

RATING: 3

Construction Date: ca. 1919

UTM: Englewood Quad. 16 E.442370 N.4631530

DESCRIPTION: The electrographite melting and casting plant consists of two historic buildings. The first building, housing the company offices and the finishing shop, has a one- and two-story section. It contains a brick veneer and glass-block windows. The other building, the foundry, measures 240' x 57' and is two stories tall. A new foundry composed of a five-story steel-framed building and measuring 700' x 130' was built in 1976.

Iron, Steel & Metals Industries

HISTORY: The Hansell-Elcock Steel Company developed this site on California Avenue along the South Branch of the Chicago River in 1919. It consists of a foundry and warehouse. The property was subsequently acquired by the Schimett Company, which added two long sheds along the Chicago River. The California Steel Company purchased the works in 1972 and converted it into a rolling mill. The rear portion of the plant has belonged to Polarized Scrap Metal Company since the 1960s. In 1976 the Charter Electric Melting Company assumed ownership and installed a melting factory with furnaces and casting equipment. Charter Electric continues to operate the foundry.

SOURCES:

Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1919-1951).
Interview with Nick Ferdeck, plant manager, Charter Electric Melting Co., August, 1986.

Harrison Iron Works

3445 Lawndale Avenue, Chicago

RATING: 2

Construction Date: ca. 1920

UTM: Englewood Quad. 16 E.440450 N.4631900

DESCRIPTION: The office and warehouse is a two-story, brick structure with a symmetrical facade and central doorway. The main facade is embellished with brick dentils and ornamental brick pilasters with stylized Classical concrete capitals. The building measures 80' x 80' and contains a warehouse addition along the north facade.

HISTORY: Originally developed by the Harrison Iron Works in the early 1900s, the office and warehouse building dates from about 1920. The machine shop was located to the rear of the original foundry, which no longer exists. Only the steel frame of the machine shop remains. The present foundry is housed in a modern steel-framed building. The M.W. Powell Company, present owners of the property, established a foundry in Chicago as early as 1847.

SOURCES:

Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1919-1951.)

Illinois Zinc Company Peru Zinc Works

Brunner Street east of Water Street, Peru

RATING: 2

Construction Date: ca. 1900

UTM: LaSalle Quad. 16 E.323400 N.4576900

DESCRIPTION: The two-story office building has a stone foundation and load-bearing brick walls, with the exterior walls painted brown and white. Nearly square in plan and measuring approximately 70' x 60', it contains a hipped roof covered with asphalt shingles, and eight-over-five-light, wooden double-hung sash windows. Brick segmental arches span the window openings. Two windows contain pedimented arches and concrete lintels. The main (north) facade contains a recently constructed vestibule. The building features a number of ornamental elements, including a frieze with floral designs, bull's-eye windows, and a brick scroll belt course extending between the first and second floors. An eyebrow dormer is located on north facade. The design of the office building exhibits an Italianate influence. Its physical setting is a heavily industrialized area of LaSalle-Peru, between the Rock Island and the Chicago, Burlington and Quincy Railroad lines. A recently constructed one-story factory building of brick extends to the west and south of the office. This factory presently manufactures radiators and gaskets.

Illinois Zinc Company's last remaining rolling mill is located about 500 feet east of the office building. It has a concrete foundation and brick load-bearing walls, measures approximately 110' x 50', and is one-and-one-half and two stories in height. The gable roof is covered with asphalt shingles. Large loading doors are located at the east and west facades and feature large arched windows. The wood-framed second story along the eastern section of the rolling mill was originally a car park shelter at the Westclox factory. It was moved and erected on top of the rolling mill. Also associated with the zinc works are two large, steel-framed sheds, partially demolished, located south of rolling mill.

HISTORY: Following the pioneering works of the Matthiessen and Hegeler Zinc Company, which opened in 1858, the Illinois Zinc Company was the second zinc producing concern established in the LaSalle-Peru area. Illinois Zinc was incorporated in 1870. The company eventually became a major producer of sheet zinc, spelter (zinc slabs), sulfuric acid, and acid phosphate. The smelting and refining operation, located near the junction of the Illinois River and the Steamboat basin, grew to cover an area of sixty acres. The Illinois Zinc Company employed some 125 persons and produced 225,000 tons of spelter annually.

By 1907, the company constructed a new imposing office building to house its administrative operations. Little information on this structure exists. At its peak in 1918 Illinois Zinc had 2,700 employees. Over the next two decades the zinc industry declined in

Iron, Steel & Metals Industries

LaSalle-Peru. By 1947 only a small portion of the sprawling industrial complex was in use. In the early 1960s Foster Grant, a plastics manufacturer, purchased the property of Illinois Zinc, and as a consequence, many of the older buildings, including the smelter, rolling mills, and railroad roundhouse, have been torn down. Only the office building and a single rolling mill survive from the Illinois Zinc operation.

SOURCES:

Isabel Katherine Billings, "The LaSalle-Peru-Oglesby Industrial Area as a Type Unit Study in Geography," unpublished master's thesis, Illinois State Normal University, 1945, 32-4.
John W. Huett, "The Geology of LaSalle County," in The Past & Present of La Salle County, Illinois (Chicago: H.F. Kett & Co., 1887.)
Twentieth Anniversary Edition, The LaSalle Tribune, July, 1911: The Twin Cities, LaSalle and Peru in 1911 (LaSalle, IL: LaSalle Tribune, 1911), 59-61.
U.S. Department of the Interior, Census Office, Report on the Manufactures of the United States at the Tenth Census (Washington, D.C.: Government Printing Office, 1883), p. 216.
Interview with Mr. Walter Menning, a LaSalle resident, August, 1985.

Matthiessen and Hegeler Zinc Works

Sterling and Ninth streets, LaSalle

RATING: 1

Construction Date: 1857-1920s

UTM: LaSalle Quad. 16 E.325400 N.4578100

DESCRIPTION: Located east of Sterling Street, the former Matthiessen and Hegeler Zinc Works, now the Carus Chemical Company, retains several buildings from the early twentieth century. These include the ornate two-story company office building (ca. 1910), a brick structure measuring about 40' x 30' and containing a hipped roof covered with terra cotta tile, ornate windows with brick round arches and keystones, and a projecting arched entrance of brick and terra cotta. The zinc works structures that survive include the Rolling Mill on 9th Street, a two-and-one-half-story brick and steel-framed building with sawtooth monitors; the Machine Shop, a two-and-one-half-story steel-framed building with corrugated metal siding and a full-length monitor roof; the Furnace Building, a steel-framed structure ranging in height from one to three stories; and remnants of a coal mine and acid plant.

HISTORY: In 1857 Herman Hegeler and William Matthiessen moved to LaSalle to establish the state's first zinc operation. These two German immigrants had originally settled in the Pittsburgh area, but had been unable to obtain the capital necessary to establish a zinc works there. Hegeler and Matthiessen chose to locate in LaSalle because of the town's willing labor force, excellent transportation facilities (both water and rail), close proximity to

Chicago, and abundant quantities of coal. Since two to three tons of coal are required to smelt a tone of zinc, Matthiessen and Hegeler considered the abundance of coal a major factor in locating their plant in LaSalle, even more important than the city's proximity to zinc mines. The company imported its zinc ore from Mineral Point, Wisconsin and Joplin, Missouri. Demand for zinc grew slowly at first, and in the early 1860s production at the LaSalle plant was suspended altogether. After 1862, however, the increased production of armaments for the Civil War pumped new life into the zinc industry, and ushered in a period of expansion at Matthiessen and Hegeler, which culminated in the construction of new rolling mills and in the company's incorporation in 1870. Four years later the Matthiessen and Hegeler Zinc Company opened a coal mine.

The success of Matthiessen and Hegeler invited competition, and a number of rival zinc companies began operating in the LaSalle-Peru area beginning in the 1870s. Though challenged by many formidable competitors--most notably the Illinois Zinc Company--Matthiessen and Hegeler became the largest zinc company in the United States by 1877 and one of the most productive in the world. In 1882, Matthiessen and Hegeler became the first plant in America to make sulfuric acid--a byproduct of the zinc smelting process. By 1911 between twenty and thirty tons of acid a day were being shipped from the plant. In addition to sulfuric acid and spelter (zinc slabs), the company also produced zinc ribbon, wire, sheet zinc, and acid phosphates. Matthiessen and Hegeler sold its zinc products to such steel producing areas as Cleveland, Ohio, Youngstown, Ohio, Stuebenville, Ohio, and Wheeling, West Virginia, as well as supplying zinc to such local industries as the National Sheet Metal Company, the W.H. Maze Company (for zinc-coated nails), and the American Nickeloid Company (nickel-plated zinc). In 1929, the Carus Chemical Company, organized by the grandson of Edward C. Hegeler, acquired the Matthiessen and Hegeler zinc works. Carus continues to produce permanganate at the plant.

Among the buildings surviving from the Matthiessen and Hegeler works is the company office, designed by Victor A. Matteson. Matteson, a designer of a number of railroad stations in Illinois, including the LaSalle Street terminal in Chicago, also designed LaSalle's city hall and the city's Carnegie Library. Other zinc works structures to survive are the Rolling Mill (ca. 1900), the Machine Shop (ca. 1910), Acid Storage Buildings (1900-1920s), as well as remnants of the Furnace Building, Acid House, and Coal Mine.

SOURCES:

Isabel Katherine Billings, "The LaSalle-Peru-Oglesby Industrial Area as a Type Unit Study in Geography," unpublished master's thesis, Illinois State Normal University, 1945, 32-4.

John W. Huett, "The Geology of LaSalle County," in The Past & Present of La Salle County, Illinois (Chicago: H.F. Kett & Co., 1887).

Twentieth Anniversary Edition, The LaSalle Tribune, July, 1911: The Twin Cities, LaSalle and Peru in 1911 (LaSalle, IL: LaSalle Tribune, 1911), 56-9.

Iron, Steel & Metals Industries

U.S. Department of the Interior, Census Office, Report on the Manufactures of the United States at the Tenth Census (Washington, D.C.: Government Printing Office, 1883), p. 216.
American Institute of Architects, Chicago Chapter Bulletin, April, 1951, 26.

American Steel and Wire Company Wire Mill #1

705 Scott Street, Joliet

RATING: 2

Construction Date: ca. 1890

UTM: Joliet Quad. 16 E. 409880 N.4598720

DESCRIPTION: This two-and-one-half-story brick building measures 160' x 60' and rests on a stone foundation. The gable roof and monitor are supported by combination wood and iron Howe trusses.

HISTORY: During the late nineteenth century, wire companies underwent a series of consolidations that paralleled those of the steel industry. This wire mill was originally part of the Lambert and Bishop Wire Company. In 1892 John Gates, head of the nearby Joliet Works of the Illinois Steel Company, formed a wire trust under the name of Consolidated Wire Company. In one of Consolidated's first mergers, the Lambert and Bishop Wire Company was absorbed into Consolidated, and John Lambert was made manager of the Joliet steel plant. In 1898 Gates reorganized the wire trust to accommodate some new acquisitions. This firm, American Steel and Wire Company, included the Scott Street works and other facilities on Bluff Street, Mound Road, and Collins Street. American Steel and Wire and Illinois Steel were both merged into the U.S. Steel Corporation in 1901. U.S. Steel demolished much of the wire works in the 1930s during its pre-war expansion period. Although presently used as a warehouse, the original function of this structure appears to have been as a wire mill.

SOURCES:

For list of sources see entry of U.S. Steel Corporation: Joliet Works.

American Steel and Wire Company Wire Mill #2

705 Scott Street, Joliet

RATING: 2

Construction Date: ca. 1890

UTM: Joliet Quad. 16 E.409880 N.4598600

DESCRIPTION: This two-and-one-half-story brick building measures 80' x 30' and features segmental arches over the windows and doors. It contains a gable roof and monitor covered with corrugated metal and supported by combination wood and iron Howe roof trusses.

HISTORY: This structure is one of two remaining wire mills from the American Steel and Wire Company's Scott Street plant in Joliet. The property was originally owned by the Lambert and Bishop Wire Company, which probably erected the building. It has changed hands several times, but is currently owned by U.S. Steel. Used for many years as a warehouse, the old mill retains much of its original appearance.

SOURCES:

For list of sources see entry of U.S. Steel Corporation: Joliet Works.

U.S. Steel Corporation: Joliet Works

west of Collins Street, north of State Street, Joliet

RATING: 1

Construction Date: 1869-1970s

UTM: Joliet Quad. 16 E.410200 N.4598800

HISTORY and DESCRIPTION: The Joliet Works of U.S. Steel encompasses nearly 170 acres and extends along a wide stretch of land bounded by Collins Street to the east and the Des Plaines River to the west. There are about sixty buildings within the steel works as well as a large battery of coke ovens. The buildings are constructed of various materials, from limestone, brick and wood, to steel and reinforced concrete.

The Union Coal, Iron & Transportation Company developed an iron works on Collins Street in 1869. The company erected two coke-fired blast furnaces and two rod mills. By 1873, this concern was reorganized as the Joliet Iron and Steel Company, which constructed a Bessemer steel plant designed by Alexander Holley, the nation's ninth operating Bessemer plant. In 1889 Joliet Iron and Steel merged with the Illinois Steel Company, the Midwest's largest steel maker, with plants in Chicago and Cleveland. The works were further reorganized in 1898 when it was absorbed by the newly-formed Federal Steel Company.

Iron, Steel & Metals Industries

Finally in 1901, with the formation of U.S. Steel Corporation, the Joliet Works passed into the hands of the nation's largest steel maker. The Joliet Works remained active through the 1970s. In the early 1980s U.S. Steel dramatically reduced its Joliet operations; most of the buildings are presently abandoned.

The earliest buildings date from the 1870s and include the Machine Shop (1872), Blacksmith Shop (1873), the Pattern Shop (1873), and the Company Office (1873). All of these structures were erected by the Joliet Iron and Steel Company.



Photo 65. Joliet Iron and Steel Company. Machine Shop (1872), Joliet. Photo by Martin Stupich, HAER.

The **Machine Shop** is a two-and-one-half-story building with random-range limestone walls and a gable roof. Measuring 300' x 130', it features large circular windows at the gable ends and has numerous additions and alterations, including glass-block windows, and adjoining brick and concrete-block buildings. Originally, the Machine Shop served the iron works in the repair of a wide range of machinery and rolling mill equipment. It housed a Moore roll lathe, two W.H. Sellers planers, a Hewes & Phillips Company drilling and boring machine, a W.H. Sellers sixty-inch slotting machine, a Bement fourteen-inch shaping machine, a bolt cutter, four screw cutting lathes, two drill presses, and an overhead crane. The various lathes, planers, shapers, and boring mills were belt-driven by a central shaft which was powered by a steam engine. None of this early equipment survives in the Machine Shop.

The **Blacksmith Shop** is a one-and-one-half-story building with random-range limestone walls. It measures approximately 70' x 60' and features brick circular arches spanning the window and door openings. The Blacksmith Shop originally contained a W.H. Sellers Company of Philadelphia steam-powered hammer with a 1,000-pound capacity. The building is currently abandoned. It is attached to a large three-story steel-framed addition erected in the early 1900s.

The **Pattern Shop** is a two-and-one-half-story building with random-range limestone walls and a gable roof. It measures 85' x 45'. Originally, the building served as a small pattern and carpenter shop. A large carpenter shop was located just to the south which has now been demolished. The pattern shop housed various types of machinery, including a Daniel's planer, an arc saw, a scroll saw, and two lathes, all powered by overhead belting. None of this machinery survives.



Photo 66. Joliet Iron and Steel Company. Pattern Shop (1872-1873), Joliet.
Photo by Martin Stupich, HAER.

The **Company Office** is an impressive two-and-one-half-story limestone building measuring 90' x 60'. It features ornate quoins and dentils, a massive stone arch spanning the main entrance, and a gable roof containing a large pedimented gable end. The Company Office was one of the most architecturally outstanding buildings erected by the Joliet Iron and Steel Company soon after its acquisition of the Joliet Works.



Photo 67. Joliet Iron and Steel Company. Office (1873), Joliet. Photo by Martin Stupich, HAER.

During the decade that the newly formed Illinois Steel Company operated the Joliet Works, a few additions were made to the plant including the Electric Lighting and Power Plant (ca. 1890), the Roll Shop (ca. 1890), and the Stores building (ca. 1890).

Around 1890 Illinois Steel undertook the electrification of the Joliet Works, constructing a large central powerhouse. The powerhouse was built with brick walls and a steel frame supporting riveted-steel roof trusses. Measuring 120' x 63', this building features a stone foundation and brick segmental arches with limestone sills. By the mid-1890s a large addition was constructed to the east, it being a two-and-one-half-story brick building with a steel frame and steel roof trusses supporting a gable roof and full-length monitor. It

measures approximately 110' x 60'. By 1897 this expanded powerhouse contained three generators and six dynamos and provided electric power for ten motors throughout the works, as well as 133 arc lights and 957 incandescent lamps. None of this equipment survives and the building was most recently used as a repair shop for electric motors.

Also erected in the early 1890s was the **Roll Shop**, a large three-story brick building measuring 260' x 70'. The Roll Shop was erected on the site of the old "Sundry mill," which had been erected by the Joliet Iron and Steel Company in the 1870s. The "Sundry mill" contained a steam-powered roll train, five heating furnaces and a steam-powered horseshoe-manufacturing machine. The "Sundry mill" was closed in 1886 and demolished in the early 1890s. The new Roll Shop contained lathes for the manufacture and repair of rolls which were used in the company's rolling mills. It contains common-bond brick walls and pilasters encasing steel columns. Riveted steel roof trusses support the gable roof.



Photo 68. Joliet Iron and Steel Company. Powerhouse (1890), Joliet. Photo by Martin Stupich, HAER.

Adjacent to the Roll Shop is the **Stores Building** which was erected on top of the old "B" Mill. (The Joliet Iron and Steel Company built the "B" Mill in the 1870s, and it probably was operated as a merchant mill or a producer of specialty rolled iron products.) One of the striking features of the Stores building is the use of the original limestone arched walls for the first story and common-bond red-brick walls for the second story. Measuring 140' x 110', the two-and-one-half-story building contains a steel-framed and riveted-steel roof trusses supporting a gable roof.

In 1895 the Illinois Steel Company erected a new **Merchant Mill**. Measuring about 115' x 40', the Merchant Mill contains a stone foundation, brick walls, and a steel frame. This building was greatly expanded over the next fifty years. It presently adjoins a large steel-framed building to the north and east. In fact, the northern addition, a four-and-one-half-story structure measuring 390' x 145', dwarfs the old Merchant Mill.



Photo 69. Joliet Iron and Steel Company. Stores Building (1870s, 1897), Joliet.
Photo by Martin Stupich, HAER.

When it commenced operations, the Merchant Mill housed a Belgian train with two stands of eighteen-inch roughing rolls and seven stands of twelve-inch finishing rolls. All rolls were driven by one horizontal Wheelock steam engine. Six steam boilers occupied a small lean-to on the south side of the mill. Two Crane steam-powered double reversing engines ran the roller table. Billets were brought from the adjacent billet mill on an elevated conveyor and made into merchant sizes of round, flat and square shapes. The mill also produced bolts and spikes, before this operation was moved into a separate building. None of this machinery survives. The greatly expanded facility remains in good condition and is currently serving as a billet grinding mill.

Other significant buildings erected by U.S. Steel include: Rod Mill No.1, No. 2, and No. 3, erected in the 1930s, all of which are large steel-framed buildings covered with corrugated metal; the Fence and Barbed Wire Department, a large steel-framed building erected in the 1950s; the Nail Department, erected in the 1920s-1950s, which adjoins the Fence and Barbed Wire Department; the Wire Department, a steel-framed building clad with corrugated metal, erected in the 1930s; the Annealing and Galvanizing Department, located in two steel-framed buildings which stand adjacent to each other, and were erected in the 1930s-1950s; and finally, the huge warehouse building, a steel-framed structure erected along State Street in the 1960s.

During the early 1900s the Joliet Works boasted of four modern blast furnaces. These have been torn down. Also, nothing remains of the historic Bessemer steel plant. During the 1960s and 1970s, the last two decades of extensive operations at the Joliet Works, the steel works no longer ran as an integrated mill. Coke, pig iron, and steel were produced in other U.S. Steel facilities, and steel for making rods, wire, and nails at Joliet, was obtained from the elsewhere.

SOURCES

- "The Works of the Joliet Iron and Steel Company," Iron Age (May 8, 1873), 5.
- "The Illinois Steel Company's Joliet Extensions," Iron Age (November 15, 1906), 1294.
- Sanborn Map Co., Joliet, Illinois (New York: Sanborn Map Co., 1886).
- William T. Chambers, "A Geographical Study of Joliet, Illinois: An Urban Center Dominated by Manufacturing," unpublished Ph.D. dissertation, University of Chicago, 1926.
- Hasbrouck and Hunderman, Architects. Building Inventory at the Joliet Works, U.S. Steel Corporation (Chicago: U.S. Steel Realty Development and the National Trust for Historic Preservation, August, 1985).
- Walther Mathesius, "Iron and Steel Production, 1851-1951," Transactions of the American Society of Civil Engineers, (1953), 1249-1266.
- Real Estate Research Corporation, et al., Joliet Works Reuse Strategy, prepared for U.S. Steel Realty Development and the National Trust for Historic Preservation, May, 1985.
- "The Illinois Steel Company's Joliet Extensions," Iron Age, v. 78 (November 15, 1906), 1287-1295.
- Working Conference on the National Heritage Corridor Revitalization, et al., Joliet, Illinois: City of Stone and Steel (Columbus, Ohio: Council of Educational Facility Planners International, 1984).

Wyckoff Steel Company Truck Terminal and Warehouse

Kedzie Avenue, Chicago

RATING: 2

Construction Date: ca. 1937

UTM: Englewood Quad. 16 E.441540 N.4631400

DESCRIPTION: This site consists of several buildings ranging in age from the late 1930s through the 1970s. The manufacture of specialty steel products is carried out in a large brick building containing a monitor roof. To the south stand three brick buildings serving as fabricating facilities and warehouses. The most outstanding building architecturally is the 1930s truck terminal, measuring 200' x 50'. It features ornamented brick pilasters and decorative concrete string courses. The company office is housed in a 1950s, two-story, buff-colored brick building with metal awning windows. It measures 100 x 40'. A Butler building is located between the truck terminal and the office.

HISTORY: The Wyckoff Steel Company, a producer of specialty steel goods, developed this site in the 1930s. The plant is relatively unchanged with the exception of an office addition, built in the 1950s, and the recent construction of a Butler building. Wyckoff has manufactured steel fasteners and paper clips since the late 1930s. It is one of several producers of specialty steel goods in this part of Chicago.

SOURCES:

Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1919-1951).

EXTRACTIVE INDUSTRIES

Adam Groth & Company Cut Stone Works

717 East Cass Street, Joliet

RATING: 2

Construction Date: 1897

UTM: Joliet Quad. 16 E.41 1369 N.4597820

DESCRIPTION: Grinding and Stone Saw Building: erected ca. 1897, this one-and-one-half-story brick building measures 165' x 45'. It contains brick pilasters and a steel roof truss.

Stone Building: erected in 1909, this two-story building measures 150' x 75'. It contains common-bond brick walls, brick pilasters, and a steel roof truss, and rests on a random-range limestone foundation.

Office: erected ca. 1897, this one-and-one-half-story building measures 60' x 30'. It contains bearing walls of locally quarried limestone and a number of original windows with six-over-one, four-over-one, and one-over-one lights. The flat roof contains a stepped gable end along the east facade.

HISTORY: Founded in 1897 by Adam Groth, this cut stone works originally covered four acres and employed 100 men. Stone was brought here by rail from quarries as far away as Indiana and Minnesota. Several major buildings in Joliet were built with stone cut by Groth, including the Public Library, Joliet High School, Union Station, and the Guardian Angel Home.

SOURCES:

August Maue, History of Will County Illinois, v. 2 (Topeka-Indianapolis: Historical Publications Company, 1928).

Chicago Gravel Company Rockdale Quarry

RATING: 3

quarry on north bank of Des Plaines River, (Illinois Waterway mile 282.5),
Rockdale

Construction Date: 1935

UTM: Channahon Quad. 16 E.403660 N.45918640

DESCRIPTION: A steel trestle resting on concrete footings was originally 500 feet long and 15 feet wide and contained a single standard gauge railroad track. Sand and gravel were dumped from rail cars on the trestle into concrete bins. A concrete-lined tunnel beneath the trestle leads to a screening and washing plant located at the edge of the Des Plaines River. A conveyor measuring 1150 feet long and 36 inches wide extends through the tunnel. The conveyor carries sand and gravel to a 20' x 20' steel-framed screening and washing tower 40 feet in height. Between the tunnel portal and washing tower, the conveyor is supported by a 60-foot long, 5-foot wide steel truss bridge. After washing and screening, gravel was loaded directly into barges on this navigable stretch of the Des Plaines River.

HISTORY: Operated by the Chicago Gravel Company, this quarry produces gravel used as aggregate in concrete as well as for railroad ballast. The storage, washing, and loading area was rebuilt in 1935 after the opening of the Illinois Waterway enabled the company to ship larger quantities of gravel.

SOURCES:

"Tunnel and Screening Plant Recently Built for Shipment of Sand and Gravel by Water," Rock Products, November 1935, 22-23.

Daniel Jerome Fisher, Bulletin No. 51: Geology and Minerals of the Joliet Quadrangle (Urbana, Illinois: Division of the State Geological Survey, 1925).

Consumer Quarry Company Joliet Road Quarry

RATING: 2

Joliet Road, McCook

Construction Date: ca. 1840

UTM: Berwyn Quad. 16 E.442600 N.4630500

DESCRIPTION: This is a large, forty-acre open-pit quarry currently operated by the Vulcan Materials Company which produces limestone blocks and crushed stone. A series of conveyors move the stone to the crushing operation. The oldest structure at the quarry is the one-story Powerhouse. It contains brick walls and pilasters and measures 20' x 15'.



Photo 70. Consumer Quarry Company: Joliet Road Quarry (originally opened ca. 1840); this photograph was taken in 1932 by the U.S. Army Corps of Engineers.

HISTORY: This quarry was developed in the mid-nineteenth century by the U.S. Crushed Stone Company. It is the oldest continuously operated quarry in the Chicago vicinity and the principle industry in McCook Township. In its early days of operation, railroad spur lines and horse teams were used to remove the stone. Workers lived in a company-owned boarding house on nearby Joliet Road; however, nothing remains of this building. The Consumer Quarry Company acquired the property in the early 1900s, and in 1968 it was purchased by the Vulcan Materials Company. The quarry remains in operation producing crushed stone and aggregate for concrete. Vulcan Materials now ships its products by truck.

SOURCES:

Village of McCook, History and Progress, 1926-1976 (McCook, IL: The McCook History Committee, 1976).
Industrial History of Chicago: The Building Interests (Chicago: Goodspeed Publishing Co., 1891).

LaSalle County Carbon Coal Company Blacksmith Shop

Union and Canal streets, LaSalle

RATING: 3

Construction Date: ca. 1906

UTM: LaSalle Quad. 16 E.325350 N.4577080

DESCRIPTION: The one-and-one-half-story Blacksmith Shop, now partially demolished, contains rubble limestone foundation walls, common-bond, red-brick, load-bearing walls, and a steeply-pitched gable roof composed of riveted steel roof trusses, steel purlins (angle sections), and corrugated metal roofing. The window openings have been infilled with brick; however, the dolomite limestone window sills and brick segmental arches spanning the window openings remain. The northern one-third of the Blacksmith Shop is in ruins; the roof is exposed and sections of the brick wall have been removed. The building is located on the corner of Canal and Union streets, one-half block from the LaSalle County Carbon Coal Company office building (see other entry). Prior to its demolition, the headframe of the LaSalle shaft was located on the south side of Canal Street, across from the Blacksmith Shop.

HISTORY: Prior to the 1850s, coal from LaSalle County was obtained by digging it from outcrops located near Split Rock. The first coal shaft in the area was sunk in 1855. Operated by the LaSalle Coal Mining Company, this mine (called the LaSalle shaft) was situated on the corner of Canal and Union streets in LaSalle and overlooked the I&M Canal. By 1882, the company was employing 200 workers and producing 200,000 tons of bituminous coal annually, making this operation the sixth largest in LaSalle County.

In 1906, a fire at the mine resulted in the reconstruction of the LaSalle shaft and the addition of a new blacksmith shop. The LaSalle Coal Mining Company subsequently changed its name to the LaSalle County Carbon Coal Company, and by 1910 it was one of the largest coal-mining concerns in Illinois. The company operated five mines, employing some 1,700 men. Coal mining in LaSalle County declined sharply in the 1930s, and in the 1940s LaSalle County Carbon Coal Company was merged with the Union Coal Company of Peru. Deep shaft mining was abandoned almost entirely in the county by the 1940s. Presently the only surviving structure associated with the LaSalle shaft is the Blacksmith Shop.

SOURCES:

Sanborn Map Co., LaSalle, Illinois (New York: Sanborn Map Co., 1888, 1892, 1898, 1906, 1911, 1926).

A. Berle Clemensen, Illinois and Michigan Canal, National Heritage Corridor, Illinois: Historical Inventory, History, and Significance (Denver: National Park Service, 1985), 67-9.

Twentieth Anniversary Edition, The LaSalle Tribune, July, 1911: The Twin Cities, LaSalle and Peru in 1911 (LaSalle, IL: LaSalle Tribune, 1911), 69.

Second Biennial Report of the Bureau of Labor Statistics of Illinois (Springfield, IL: H.W. Rokker, 1883), 34-5.
Isabel Katherine Billings, "The LaSalle-Peru-Oglesby Industrial Area as a Type Unit Study in Geography,"
unpublished master's thesis, Illinois State Normal University, 1945, 22-7.
Interview with Mr. Walter Menning, a LaSalle resident, August 1985.

LaSalle County Carbon Coal Company Office

northeast corner of Union and First streets, LaSalle

RATING: 2

Construction Date: ca. 1900

UTM: LaSalle Quad. 16 E.325350 N.4577130

DESCRIPTION: This one-and-one-half-story building contains a concrete foundation and brick load-bearing walls as well as a pyramidal roof with a hipped roof dormer and a pyramidal-roof dormer. Glazed coat, buff-colored, stretcher bond, brick walls are located above a stippled, dark-red brick skirting. The building features a bay window along the south facade and oval windows along the east facade. The main entrance contains wooden double doors. The original company sign "LaSalle County Carbon Coal Co." remains along the east facade. Located on the corner of Union and First streets, one block west of Illinois Central Railroad tracks, a brick paved driveway circles around the west side of the building and leads to a weighing scale adjacent to the bay window at the south facade.

HISTORY: This office building of the LaSalle County Carbon Coal Company was erected about 1900 when the company was becoming one of the largest coal producers in Illinois. Coal mining in LaSalle County steeply declined in the 1930s, and by the 1960s the LaSalle County Carbon Coal Company had ceased mining. Now abandoned, the turn-of-the-century office building retains much of its original appearance. (See entry of LaSalle County Carbon Coal Company: Blacksmith Shop.)

SOURCES:

See entry of LaSalle County Carbon Coal Company: Blacksmith Shop.

Extractive Industries

M.T. Linskey Coal Company Coal Yard

northeast corner of Canal and Creve Coeur streets, LaSalle

RATING: 3

Construction Date: ca. 1914

UTM: LaSalle Quad. 16 E.324080 N.4576990

DESCRIPTION: The site of the M.T. Linskey Coal Co. contains three concrete silos, three corrugated steel coal bins, a frame cottage (ca. 1920) containing a hip roof and cedar-shingle siding, a trailer (ca. 1950), and one shed covered with corrugated steel. A fence surrounds the site.

HISTORY: M.T. Linskey Co. first began a coal distributorship here during the 1910s. Still remaining from the original operation are the conveyor and the drop chute used for unloading coal from the cars of the Chicago, Burlington & Quincy Railroad. The last business to operate a coal distributorship at this site was Uranich Coal & Oil Co. of LaSalle. The property is now abandoned.

SOURCES:

Sanborn Map Co., LaSalle, Illinois (New York: Sanborn Map Co., 1888, 1892, 1898, 1906, 1911, 1926).

Leshnick's LaSalle and Peru Directory (Peoria, IL: Leshnick Directory Co., 1914, 1917-18, 1919-20, 1921, and 1930).

Chicago, Burlington & Quincy Railroad Co., blueprint of "Station Map, LaSalle and Peru, LaSalle County," dated December 11, 1928, (available at the I&M Canal State Trail Archives, Morris, Illinois).

Material Service Corporation

west bank of Des Plaines River north of 9th street, Lockport

RATING: 3

Construction Date: 1929

UTM: Joliet Quad. 16 E.410780 N.4605480

DESCRIPTION: This property contains several structures dating from the late 1920s through the 1960s. The oldest structures include an abandoned gravel and sand elevator, several storage buildings, and a railroad bridge. It also contains a steel-framed elevator, still in operation, used to store gravel and a number of adjacent buildings. Probably dating from the late 1920s, the abandoned elevator, located on the eastern portion of the property, is a reinforced concrete and steel frame structure with metal siding. It adjoins a series of one- and two-story buildings. An elevated railroad track extends along the north side of this abandoned facility. An Elgin, Joliet & Eastern Railroad bridge connects the eastern and western portions of the quarry, spanning a tributary of the Des Plaines River. The four-span

bridge is a steel plate girder structure containing a single track and resting on concrete abutments. Its overall length is approximately 120 feet.

HISTORY: Located in what was originally a sand and gravel quarry, the Material Service Corporation produced pre-cast concrete pipes at this location since 1929. Material Service shipped its products on company-owned barges through the Chicago Sanitary and Ship Canal, as well as by rail on the Elgin, Joliet & Eastern Railroad and by truck. The facility shut down in 1995.

SOURCES:

U.S. Army Corps of Engineers, Aerial Photographs, 1939

"Revamping a New Gravel Pit for Efficiency and Output", Rock Products, v. 33 (June 21, 1930), 49-54.

"Lockport (Ill.) Gravel Plant to Use Gulf Waters", Rock Products, v. 32 (May 25, 1929), 95.

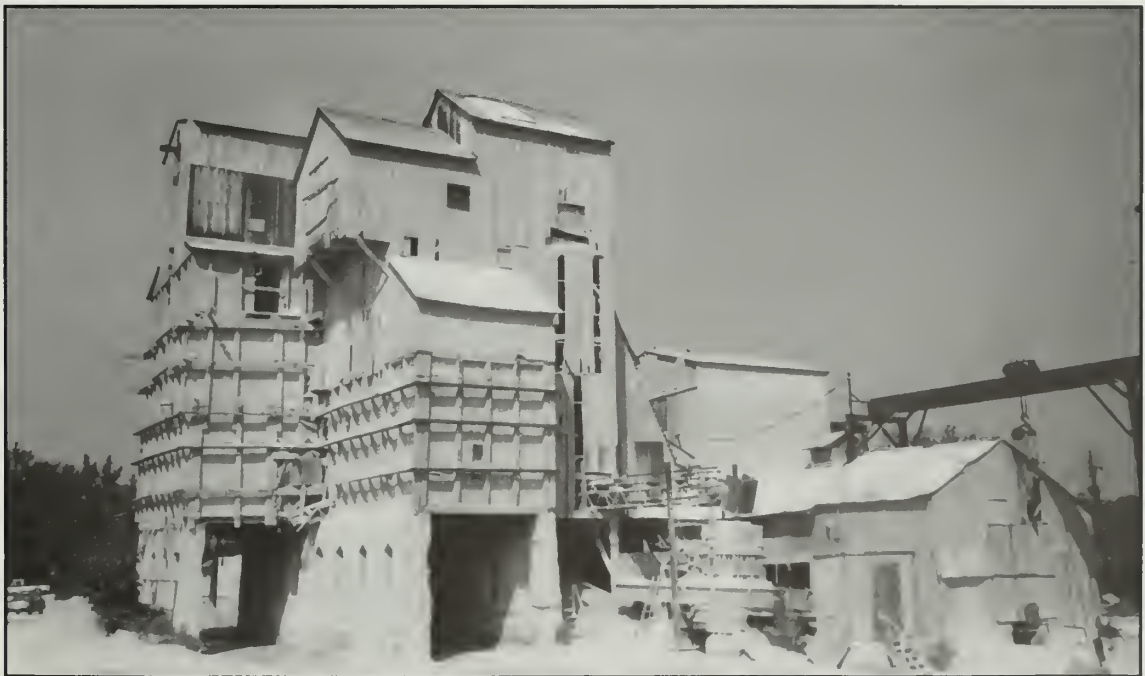


Photo 71. National Stone Company's Stone Crushing and Sorting Plant (ca. 1910s), Joliet.
Photo by Joseph DeRosa, HAER.

Extractive Industries

National Stone Co. Quarry

Mills Rd. and Route 53, Joliet

RATING: 3

Construction Date: ca. 1910s

UTM: Joliet Quad. 16 E.409440 N.4594810

DESCRIPTION: This stone crushing and sorting plant features several buildings three and four stories in height. Dating from the 1910s, these buildings rest on concrete foundations and contain steel and wood framing, wood and corrugated metal siding, and gable roofs.

HISTORY: Originally developed by the National Stone Company (now Vulcan Materials Company), this limestone quarry once covered approximately thirty acres and produced 1200-1500 tons of crushed stone per day. National Stone transported its limestone from this quarry via the nearby Chicago and Alton Railroad (now the Illinois Central Gulf). Stone quarried from this site was used for railroad ballast, road paving material, and as an agricultural soil conditioner.

SOURCES:

Daniel Jerome Fisher, Bulletin No. 51: Geology and Minerals of the Joliet Quadrangle (Urbana, Illinois: Division of the State Geological Survey, 1925).

Frank Krey and J.E. Lamar, Limestone Resources of Illinois (Urbana, IL: Geological Survey, State of Illinois, 1925).

Ottawa Silica Company Mill "C" Sand-Sorting Building

south of Dee Bennett Road west of Ottawa

RATING: 1

Construction Date: 1917, 1928

UTM: Starved Rock Quad. 16 E.341440 N.4576780

DESCRIPTION: This pyramid-shaped building consisted of a steel frame resting on concrete foundation walls. At its base it measured 130' x 72' and it rose to a height of approximately 120 feet. The distinctive pyramidal roof contained numerous gable roof dormers. The roof was composed of lead and zinc sheets with welded joints, covering tongue-and-groove wood sheathing. The Sand-Sorting Building contained a central conveyor and electrically-powered vibrating screens. A conveyor connecting the Sand-Sorting Building with the Sand-Draining and Drying Building was located at the third story level at the northeast corner of the Sorting Building. The conveyor contained a steel frame and corrugated asbestos cladding. Another external conveyor extending up to the fourth floor level was located at the south facade. The Sand-Sorting building, situated on top

of a rich vein of silica sand, was a prominent visual landmark in the Upper Illinois River Valley. The Saint Peter's sandstone anticline rises to the surface in the vicinity of Ottawa, Illinois.

HISTORY: In 1894, the United States Silica Sand Company established the first large-scale silica sand pits near Ottawa on the south side of the Illinois River. The silica sand was obtained by blasting and hydraulic mining. In its early years, the company shipped just one rail car of sand each day, but by 1912, U.S. Silica was shipping about 100 cars daily, or 3,300 tons of sand. U.S. Silica's most important customers were the glass manufacturers of Indiana. In 1917, U.S. Silica expanded its operation by constructing a new silica sand plant on the north side of the river. This plant, later called Mill "C", consisted of a concrete and steel, washing, draining, and drying building, and a concrete and steel, sand-sorting building (See Appendix A).

In 1927, U.S. Silica constructed a Sand-Draining-and-Drying Building, but washing of the sand was continued in the older building adjacent to the new structure. In the meantime, the Ottawa Silica Company, established in 1900 by Edmund B. Thornton, had become the chief



Photo 72. Ottawa Silica Sand Company's Mill "C" Sand-sorting Building (1917, 1928), Ottawa.
Photo by Jet Lowe, HAER.

Extractive Industries

competitor of U.S. Silica. In 1928 Ottawa Silica acquired U.S. Silica and renamed the U.S. Silica plant Mill "C". Just one year after taking it over, Ottawa Silica rebuilt the 1917 Sand-Sorting Building, adding three stories along with a distinctive pyramidal roof. Shortly after expanding the plant, Ottawa Silica ceased operating Mill "C" due to the declining market of the 1930s. It has been abandoned ever since. Ottawa Silica demolished Mill "C" in order to mine the rich silica sand deposit located beneath the mill complex.

SOURCES:

Ottawa, Old and New: A Complete History of Ottawa, Illinois, 1823-1914 (Ottawa, IL: The Republican Times, 1912-1914, reprinted by Bireline Publishing Co., Newell, Iowa, 1984), 114, 152.
The Silica Sands of Ottawa (Ottawa, IL: The Ottawa Silica Company, 1960).
Interview with Edmund B. Thornton, Chairman of the Ottawa Silica Foundation, August 1983.
Carl O. Sauer, Geography of the Upper Illinois Valley and History of Development, State Geological Survey, Bulletin No. 27 (Urbana, IL: University of Illinois, 1916), 191.
Sanborn Map Co., Ottawa, LaSalle County, Illinois (New York: Sanborn Map Co., 1913, 1925).
"Silica Sand Plants at Ottawa, Ill.," Rock Products, v. 31 (February 18, 1928), 54-60.
Ottawa Daily Republican-Times, December 31, 1929.

Ottawa Silica Company Mill "C" Sand-Draining-and-Drying Building **RATING: 1**
south of Dee Bennett Road west of Ottawa, Construction Date: 1927

UTM: Starved Rock Quad. 16 E.341400 N.4576800

DESCRIPTION: The Sand-Draining-and-Drying Building of the Mill "C" complex was erected in 1927 and contained a reinforced concrete foundation, a massive concrete slab supported by concrete mushroom columns and large concrete bins (See Appendix A). On top of the slab rested a steel frame containing curtain walls of corrugated asbestos siding. The building measured approximately 175' x 60'. The concrete bins were three stories tall, and the steel frame was two-and-one-half stories tall. A gable roof and full length monitor were composed of riveted steel trusses covered with corrugated metal; the riveted Warren roof trusses spanned 60 feet and were fabricated by Illinois Steel Company of Joliet. An overhead traveling crane, manufactured by Harnschefer Corporation of Milwaukee, ran the length of the building and was rated to 10,600 lbs. A steel-framed bridge running from the Draining-and-Drying Building to the Sand-Sorting Building contained a conveyor belt. The foundations and concrete bins of the original (1917) Sand-Washing-Draining-and-Drying building were located to the south of the 1927 building.

HISTORY: See entry of Ottawa Silica Company: Mill "C" Sand-Sorting Building.

SOURCES:

See entry of Ottawa Silica Company: Mill "C" Sand-Sorting Building.

Singer and Talcott Stone Company Lemont Quarries**RATING: 2**

along I&M Canal, the Sanitary and Ship Canal,

and along the western stretch of Main Street and New Avenue, Lemont

Construction Date: ca. 1870s

UTM: Romeoville Quad. 16 E.414650 N.4613220

DESCRIPTION: These are several open-pit quarries, ranging in size from five to about 200 acres. In addition, Locust Farm, located on the west side of Lemont off New Avenue, contains one of the more intact small-scale quarries in the area, as well as the Nathaniel J. Brown residence, built ca. 1834 with additions ca. 1850 and in the 1870s. Brown had considerable land holdings in Lemont in the 1840s and 1850s, and leased a number of quarries, including the one adjacent to his home. The Brown residence, containing one-, two-, and two-and-one-half-story sections, is a timber-framed building with a gable roof. Adjacent to it is a two-and-one-half-story stone barn, erected ca. 1834, and containing a gable roof. Also located on the property is a second residence, a two-and-one-half-story timber-framed building with a gable roof, erected ca. 1850, and a long narrow two-and-one-half-story timber-framed barn, erected ca. 1840. All of these structures were likely associated with the surrounding limestone quarries.

HISTORY: Vast deposits of limestone in the Lemont area were first discovered in the 1830s during excavation of the canal. Among the first to exploit the stone as a building material was Nathaniel J. Brown, a canal contractor and entrepreneur who settled in Lemont, and leased his extensive landholdings to various stone companies. The limestone industry quickly became the area's primary employer, and one Lemont company, Singer and Talcott, established in 1854, became the largest limestone producing company in the world by 1865. By the 1870s over 2,000 men were employed in thirteen quarries in the Lemont area. Building stone from these quarries was used for structures in Chicago and, later, in Lemont. Consolidation of competing companies occurred over the next two decades, by 1891 the Singer and Talcott Stone Company, along with five other local concerns, were merged into the Western Stone Company.

Throughout the 1880s and 1890s, the quarry industry from Lemont to Joliet was confronted with labor unrest over low wages, poor working conditions, and the seasonal nature of the work. Two major strikes took place at the Lemont quarries, one in 1885, and another in

Extractive Industries

1893. However, by the turn of the century the demand for limestone as a building material had dropped dramatically, and Lemont's stone-quarrying industry quickly declined. Many quarries were closed and those that remained open increasingly produced crushed stone for road beds and for aggregate in concrete. One former quarry of Singer and Talcott is currently owned by the Austeel Corporation. There is a small frame building adjacent to this quarry. This modest, one-story structure, once used to house Polish quarry men in the nineteenth century, is currently in poor condition.

SOURCES:

Lemont Observer, 23 January 1897, 27 March 1897 and 25 June 1897.

The Lemont Press, 20 August 1887.

Sonia Kallick, "Lemont and the Labor Movement, A Comparison of Two Strikes," unpublished mss., July 1984, (copy available at the Lemont Area Historical Society.)

Howard Louis Conrad, Nathaniel J. Brown: Biographical Sketch and Reminiscences of a Noted Pioneer (Chicago: Byron S. Palmer Printing Co., 1892).

HIGHWAY BRIDGES

COOK COUNTY BRIDGES

INTRODUCTION

There were many factors which made the Chicago River the "central field thus far of the development of the bascule type of movable bridges," including the central location of the river itself, the utilization of the river by lake vessels as well as barges, the high cost of bridge maintenance, and increasingly heavy pressure on bridges by both pedestrians and vehicles. In 1899, the Chicago Bridge Division organized a Board of Consulting Engineers to examine alternatives to the center pier swing spans which were being used to cross the river. The Board, composed of E.L. Cooley, Ralph Modjeski, and Byron B. Carter, determined that the most suitable bridge design for the Chicago River was the trunnion bascule, a bridge which pivots vertically on a fixed horizontal axle (trunnion) rather than on a roller (track) such as the Scherzer Rolling Lift Bridge Company rolling lift.

The trunnion bascule, with its short counterweight arm dropping down into the counterweight pit contained within the pier or abutment, and its minimum number of moving parts, offered an advance in speed and efficiency over horizontal swing and vertical rolling lift bridges. The fact that the counterweights were within a pit below a gate house also made the abutments more easily adapted to the site. In 1908 Alexander von Babo, a city engineer specializing in bridge design, further improved this style of bridge by patenting an internal rack which increased the lift to eighty degrees without having the truss members interfere with the lift.

The development of the Chicago trunnion bascule bridge represents one of the most significant engineering achievements within the I&M corridor. In Chicago as well as in other cities, the Chicago trunnion bascule bridge was able to accommodate the heavy demands both of land and water traffic in the early twentieth century. In addition to their practicality, the many embellishments on these bridges, particularly on the downtown bridges, harmonize with the numerous turn-of-the-century buildings along the Chicago River.

Highway Bridges

SOURCES:

- "A Double-Deck Bascule Bridge," Engineering News, v. 70 (July 17, 1913), 116-117.
- "Aesthetic Design for Drawbridges," Engineering News, v. 70 (November 6, 1913), 926.
- "Chicago Bascule Bridge - Design and Operating Features," Engineering News-Record, v. 85 (September 9, 1920), 508-514.
- "Coffer Dam Experience at a Bridge in the Chicago River," Engineering News-Record, v. 83 (August 7, 1919), 268-269.
- "Rubber Paving and High Curb Guards on Chicago Bridges," Engineering News-Record, v. 93 (November 13, 1924), 795.
- "Six Years' Experience With Rubber Pavement in Chicago," Engineering News-Record, v. 107 (November 19, 1931) 803-804.
- "Substructure of Michigan Avenue Bascule Bridge, Chicago," Engineering News-Record, v. 83 (July 31, 1919), 210-213.
- Hugh E. Young, "The Michigan Boulevard Improvement," Journal of the Western Society of Engineers, v. 26 (October 1921), 360-368.
- Donald N. Becker, "Development of the Chicago Type Bascule Bridge," Transactions of the American Society of Civil Engineering, v. 109 (1944), 995-1046.
- Donald N. Becker, "The Story of Chicago's Bridges," Midwest Engineer, 2 (January 1950), 3-9.
- Chicago Department of Public Works, Chicago Public Works: A History (Chicago: Rand McNally, 1973).
- "The Chicago Type of Bascule Bridge," Engineering Record, v. 42 (July 21, 1900), 50-52.
- "The Lift or Bascule Type of Movable Bridges," Engineering Record, v. 42 (July 28, 1900), 73.
- J.A.L. Waddell, Bridge Engineering (New York: John Wiley and Sons, 1916).
- C. Arch Williams, The Sanitary District of Chicago: History of its Growth and Development (Chicago: The Sanitary District of Chicago: 1919).

W. Adams Street: Chicago River Bridge

W. Adams Street crossing the Chicago River (South Branch), Chicago

RATING: 1

Construction Date: 1926

UTM: Chicago Loop Quad. 16 E.447050 N.4636360

DESCRIPTION: This is a single-deck, double-leaf trunnion bascule bridge. The bridge measures 199'-0" from center to center of the trunnions and has a clear span of 173'-0". The superstructure is a steel deck truss with riveted gusset-plate connections. The width measures 64'-0" which accommodates four lanes for vehicular traffic and two pedestrian sidewalks. The guard rails contain decorative ironwork. The concrete abutments are rusticated and contain several small glass-block windows. Bridge tender's houses, designed in the Beaux-Arts style, are on each side of a lift span; they are identical in design and feature: a lightly scored concrete veneer with chamfered corners and ornamental pilasters; a sopraporta (overdoor) containing a decorative arch; numerous multi-light windows along the facade of the pylons; and large, one-over-one-light, double-hung, sash windows below a mansard-like tin roof containing a raised diamond pattern.

HISTORY: The substructure was constructed by the FitzSimons & Connell Dredge and Dock Company, and the superstructure by the Strobel Steel Construction Company. Due to congestion at Adams Street, a different design for the lifting machinery was required on the ends of each bridge. The machinery on the east side bears directly on the masonry, with the outermost trunnions resting on steel columns, and the inner trunnions resting on steel S-girders. On the west side, however, the outermost trunnions support the machinery and rest on longitudinal girders spanning from the front to the rear of the piers, whereas the inner trunnions rest on S-girders. The presence of a railroad track on the west side prevented any great extension of machinery; thus the arm is quite short, necessitating only a shallow pit, and the volume of the counterweight box has been reduced below the most desirable dimensions.

SOURCES:

See INTRODUCTION to Cook County Bridges.



Photo 73. W. Adams Street: Chicago River Bridge (1926), Chicago. Photo by Jet Lowe, HAER.

Highway Bridges

S. Ashland Avenue: Chicago River Bridge

S. Ashland Avenue crossing the Chicago River (South Branch), Chicago

RATING: 2

Construction Date: 1938

UTM: Englewood Quad. 16 E.444500 N.4632540

DESCRIPTION: This is a single-deck, double-leaf trunnion bascule bridge. The bridge measures 224'-8" from center to center of the trunnions and has a clear span of 192'-0". The superstructure contains three lines of steel pony trusses with riveted gusset-plate connections. It is 90'-0" wide. Its reinforced concrete abutments have a rusticated concrete veneer. A bridge tender's house, showing influences of the Art-Deco style, stands on each side of the lift span; both are identical in design and feature octagonal brick pylons on a concrete foundation. The bridge tender's cabin is octagonal in plan and has a continuous band of windows, several of which contain mottled glass, and a cast metal, pierced oak and acorn motif, framed and set above each door. The concrete veneers are lightly scored to give the appearance of coursed stone; a relief figure depicts the opening of a bascule bridge. Each cabin has a continuous band of one-over-one-light, double-hung, sash windows and a flat metal roof.

HISTORY: This bascule bridge replaced the city's first double leaf trunnion type bascule bridge, erected across Ashland Avenue in 1902. This bridge used the same plans as the South Halsted Street Bridge, not because local conditions were identical, but because delays could be avoided and because of the jobs created for this project under the "New Deal's" Works Progress Administration.

SOURCES:

See INTRODUCTION to Cook County Bridges.

California Avenue: Sanitary and Ship Canal Bridge

California Avenue crossing the Sanitary and Ship Canal, Chicago

RATING: 2

Construction Date: 1926

UTM: Englewood Quad. E.442300 N.4631450

DESCRIPTION: This is a single-deck, double-leaf trunnion bascule bridge. The bridge measures approximately 190'-0" from center to center of the trunnions and is approximately 60'-0" wide. The all-steel superstructure is a pony truss with riveted gusset-plate connections and has concrete abutments.

HISTORY: A trunnion bascule bridge was originally planned for this site in 1915. By 1920, however, funds had become scarce, with the result that between 1923 and 1925 no more bascule bridges were built in Chicago. After the approval of several bond issues, bridge construction resumed in 1926. The California Avenue Bridge is nearly identical to the 100th Street Bridge over the Calumet River.

SOURCES:

See INTRODUCTION to Cook County Bridges.

Cermak Road: Chicago River Bridge

Cermak Road crossing the Chicago River (South Branch), Chicago

RATING: 1

Construction Date: 1906

UTM: Englewood Quad. 16 E.446830 N.4633400

DESCRIPTION: This single-leaf, Scherzer rolling lift bridge is approximately 200 feet long. The all-steel superstructure consists of a through truss with riveted gusset-plate connections. The bridge is approximately 60'-0" wide. Concrete abutments exist on both sides. A bridge tender's house stands on either side of the bridge; the exteriors have been greatly altered and contain recently installed wood siding topped by a flat metal roof.

HISTORY: This bridge was designed by the Scherzer Rolling Lift Bridge Company and erected by the Chicago Sanitary District in 1906 with Isham Randolph as Chief Engineer. Placed in operation on November 1, 1906, this bridge replaced a jackknife bridge at the same location. It remains the only surviving William Scherzer patented and designed bridge across either the Chicago River or the Sanitary and Ship Canal. The rolling lift bridge design was once common across Chicago-area waterways, but it was gradually replaced by the trunnion bascule bridge type.

SOURCES:

Nameplate on bridge.

see also INTRODUCTION to Cook County Bridges.

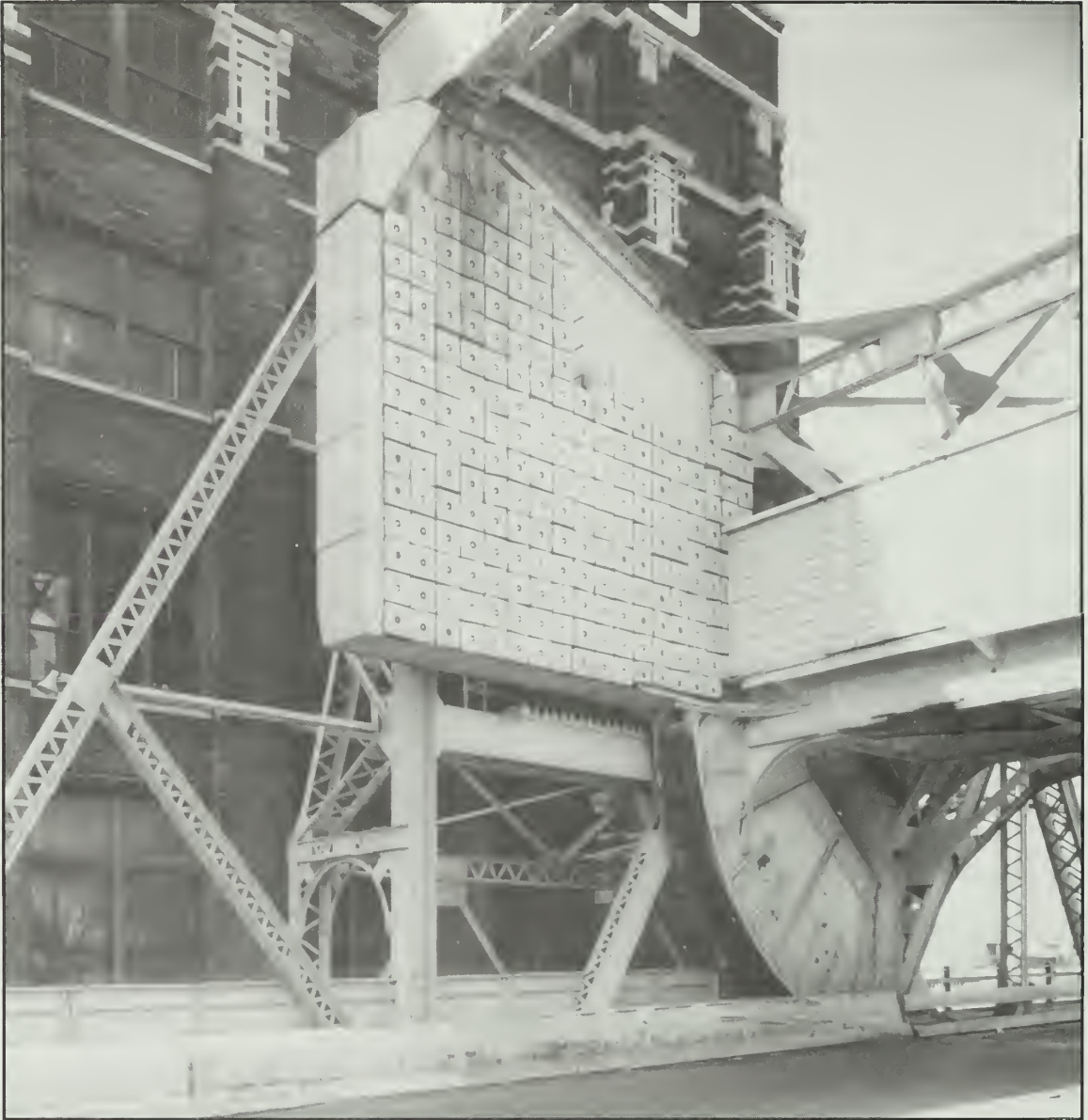


Photo 74. Cermak Road: Chicago River Bridge (1906), detail of counterweight, Chicago.
Photo by Jet Lowe, HAER.

S. Cicero Avenue: Sanitary and Ship Canal Bridge

South Cicero Avenue crossing the Sanitary and Ship Canal, Chicago

RATING: 3

Construction Date: 1927

UTM: Englewood Quad. 16 E.438250 N.4629800

DESCRIPTION: This is a single-deck, double-leaf trunnion bascule bridge and measures approximately 220'-0" from center to center of the trunnions; it has a clear span of approximately 180'-0". The superstructure contains three lines of steel pony trusses with riveted gusset-plate connections. It is approximately 90'-0" wide and has concrete abutments.

HISTORY: In 1915 the General Assembly of the State of Illinois mandated that the Chicago Sanitary District pay for the construction of this bascule bridge and then give it to the City of Chicago. The substructure was built by the FitzSimons & Connell Dredge and Dock Company, and the superstructure was constructed by the Ketler-Elliot Company. Walter Rasmus was Chief Engineer. In 1966 this bridge was widened and modernized.

SOURCES:

See INTRODUCTION to Cook County Bridges.

N. Clark Street: Chicago River Bridge

N. Clark Street crossing the Chicago River, Chicago

RATING: 1

Construction Date: 1929

UTM: Chicago Loop Quad. E.447640 N.4637250

DESCRIPTION: This single-deck, double-leaf trunnion bascule bridge measures 245'-0" from center to center of the trunnions and has a clear span of 215'-0". The superstructure is a steel pony truss with riveted gusset-plate connections and is 72'-0" wide. It has reinforced concrete abutments with a rusticated concrete veneer. A bridge tender's house, designed to evoke the Beaux-Arts style, is on each side of the lift span. Both are identical in design and feature: a lightly scored concrete veneer with chamfered corners and ornamental pilasters; a sopraporta (overdoor) containing a decorative arch; numerous multi-light windows along the facade of the pylons; and large, one-over-one-light, double-hung, sash windows below a mansard-like tin roof containing a raised diamond pattern.

HISTORY: A bascule bridge was originally planned for Clark Street in 1916. However, the span was not erected until 1929. Fabricated by the American Bridge Company and erected by the Ketler-Elliot Company, this bridge is virtually identical to the LaSalle Street Bridge.

Highway Bridges

SOURCES:

"Dredge Wrecks Drawbridge," Engineering News-Record, v. 102 (May 9, 1929), 769.

"Rapid Erection of Chicago Bascule Bridge in Emergency," Engineering News-Record, v. 103 (October 3, 1929), 527.

see also INTRODUCTION to Cook County Bridges.

S. Crawford Avenue: Sanitary and Ship Canal Bridge

RATING: 2

S. Crawford (now Pulaski) Avenue

crossing the Sanitary and Ship Canal, Chicago

Construction Date: 1929

UTM: Englewood Quad. 16 E.439870 N.4630480

DESCRIPTION: This is a double-leaf trunnion bascule bridge, with its span measuring approximately 200'-0" from center to center of the trunnions. The bridge itself is approximately 70'-0" wide and has concrete piers and abutments. The bridge tender's houses are of rusticated concrete resembling stone, designed in the Beaux-Arts style. The two concrete-girder approach spans date from the 1960s.

HISTORY: The Ketler-Elliot Company of Chicago built the superstructure, and the bridge was completed in 1929. This bascule bridge is representative of those bridges designed during a transition period (1930s) between the Beaux-Arts Classicism of the earlier bridges, and the purely utilitarian design of many of the post-1940s bridges.

SOURCES:

See INTRODUCTION to Cook County Bridges.

S. Damen Avenue: Chicago River Bridge

RATING: 2

S. Damen Avenue the crossing Chicago River (South Branch), Chicago

Construction Date: 1929

UTM: Chicago Loop Quad. 16 E.443770 N.4641820

DESCRIPTION: The bascule span is a single-deck, double-leaf trunnion measuring 243'-10" from center to center of the trunnions and has a clear span of 212'-0". Its superstructure is constructed of steel (a pony truss with riveted gusset-plate connections). The bridge is 66'-0" wide and has reinforced concrete abutments with a rusticated concrete

veneer. The bridge tender's house on each side of the bascule span, designed in the Beaux-Arts tradition, contains a band of single-light windows, a decorative frieze, and a hipped roof topped by a decorative vent. The through truss span is a riveted-steel Pratt through truss, approximately 120'-0" long; it has concrete abutments.

HISTORY: This combination bascule and through truss bridge, crossing the South Branch of the Chicago River near its junction with the Chicago Sanitary and Ship Canal, was erected in 1929. That year witnessed the completion of four other bascule bridges in Chicago including the N. Clark Street span, which is nearly identical to the S. Damen Avenue bascule span.

SOURCES:

See INTRODUCTION to Cook County Bridges.

N. Franklin-Orleans Street: Chicago River Bridge

RATING: 1

N. Franklin-Orleans Street crossing the Chicago River (South Branch), Chicago Construction Date: 1920

UTM: Chicago Loop Quad. 16 E.447250 N.4637250

DESCRIPTION: This single-deck, double-leaf trunnion bascule bridge measures 251'-10" from center to center of the trunnions and has a clear span of 220'-0". Its steel superstructure is a steel pony truss with riveted gusset-plate connections. The bridge is 62'-0" wide and has reinforced concrete abutments with a rusticated concrete veneer. A stylized sunburst motif is used on the interstices of the pedestrian guard rail. The two granite-faced bridge tender's houses (one on each side of the bridge) contain an octagonal plan, with a row of one-over-one-light, double-hung, sash windows beneath the cornice and a denticulated cornice. The hipped roof of simulated tile (the material is tin) and the crown has a shell motif. A concrete staircase gives access to the building from a parking deck just above water level.

HISTORY: This bridge was erected in 1920 as part of the Chicago River improvements, the work for which was renewed after the First World War. The Great Lakes Dredge and Dock Company of Chicago erected the substructure and the Ketler-Elliot Company, also of Chicago, erected the superstructure. The N. Franklin-Orleans Bridge is virtually identical to the Monroe Street Bridge.

SOURCES:

See INTRODUCTION to Cook County Bridges.

Highway Bridges

S. Halsted Street: Chicago River Bridge

S. Halsted Street crossing the Chicago River (South Branch), Chicago

RATING: 2

Construction Date: 1933

UTM: Englewood Quad. 16 E.446360 N.4633000

DESCRIPTION: This single-deck, double-leaf trunnion bascule bridge measures 224'-8" from center to center of the trunnions and has a clear span of 192'-0". The superstructure contains three lines of steel pony trusses with riveted gusset-plate connections. The bridge is 90'-0" wide and has reinforced concrete abutments with a rusticated concrete veneer. A bridge tender's house sits atop a pylon on each side of the lift span and combines neo-Classical and Art-Deco elements. Both houses are identical in design and feature: a lightly scored concrete veneer, to give the appearance of coursed stone; a relief figure depicting the opening of a bascule bridge; a continuous band of one-over-one-light, double-hung, sash windows; and a flat metal roof.

HISTORY: This bridge was designed at a time when the U.S. War Department was urging higher river clearances. To fulfill this requirement while avoiding overly steep grades on the bridge approaches, the engineers employed a very shallow floor system, the total depth of the deck being only three-and-a-half feet from the roadway grade to the underside of the bridge. Unlike the older three-truss bridges with roadways measuring only 18 feet, this bridge is more spacious with two three-lane roadways. The FitzSimons & Connell Dredge and Dock Company and the Mount Vernon Bridge Company served as contractors for the span, which was completed in 1933.

SOURCES:

See INTRODUCTION to Cook County Bridges.

S. Harlem Avenue: Sanitary and Ship Canal Bridges

S. Harlem Avenue crossing the Sanitary and Ship Canal, Chicago

RATING: 3

Construction Date: 1933, 1968

UTM: Berwyn Quad. 16 E.433400 N.4627780

DESCRIPTION: This single-deck, double-leaf trunnion bascule bridge measures approximately 230'-0" from center to center of the trunnions and has a clear span of approximately 190'-0". The all steel superstructure consists of a deck truss with riveted gusset-plate connections. Scored concrete piers house all of the lifting machinery, including

trunnion bearings, counterweights, electric motors and gears. The bridge, which has two approach spans, is approximately 90'-0" wide and has concrete abutments. This bascule bridge now carries four lanes of northbound traffic. A single-deck, double-leaf bascule bridge, erected in 1968, carries four lanes of southbound traffic. This newer bridge has a clear span of approximately 160'-0" and rests on concrete piers.

HISTORY: After a lull in bascule bridge construction in Chicago between 1923 and 1925, a series of successful bond measures reinvigorated bridge building beginning in 1926. The years between 1926 and 1941, termed the "Refinement Period" of bridge building in Chicago by city engineer Donald Becker, saw few of the innovations in design and construction which had characterized the previous two decades. The Harlem Avenue bridges present an interesting contrast, with a 1933 design sitting next to a modern, yet very similar, design.

SOURCES:

See INTRODUCTION to Cook County Bridges.

W. Jackson Boulevard: Chicago River Bridge

RATING: 1

Jackson Boulevard crossing the Chicago River (South Branch), Chicago

Construction Date: 1916

UTM: Chicago Loop Quad. 16 E.447080 N.4636220

DESCRIPTION: This single-deck, double-leaf Strauss trunnion bascule bridge measures 202'-4" from center to center of the trunnions and has a clear span of 173'-6". The superstructure consists of a steel pony truss with riveted gusset-plate connections. The bridge is 64'-0" wide. Reinforced concrete abutments house the lifting machinery and counterweights. A bridge tender's house, with Beaux-Arts styling, is on each side of the lift span. They are identical in design and rise above lightly scored concrete pylons; each contains a pebble aggregate veneer and is octagonal in plan. A band of single-light windows and ornamental molding extends below a decorative cornice line. Each bridge tender's house is topped by a mansard-like metal roof.

HISTORY: Steel for this structure was fabricated by the Mount Vernon Steel Company, Mount Vernon, Ohio, and erected by the Strobel Steel Construction Company. This bridge replaced a 280-foot long through truss center pier swing span built in 1888. The design of this bridge was the result of close cooperation between city engineers and the Chicago Plan Commission. Calling attention to the placement of the truss work below the deck and the

Highway Bridges

use of curved bottom chords, the Commission noted that this arrangement "gives a fine open appearance to the bridge."

SOURCES:

- "Failure of a Derrick on Bridge Erection," Engineering News, v. 74 (September 9, 1915), 511-512.
"Improving the Appearance of Chicago River Bridges," Engineering News, v. 76 (August 10, 1916), 282-283.
"Progress on the Jackson St. Bascule Bridge, Chicago," Engineering News, v. 74 (July 22, 1915), 186.
"Rapid Rebuilding of Steel Viaduct in a Busy Chicago Street," Engineering News-Record, v. 92 (April 10, 1924), 621.
"Strengthening Truss Bridge Over Tracks at Chicago," Engineering News-Record, v. 89 (October 12, 1922), 621-623.
"Cutting Down Old Swing-Span Bridge with Blowpipes," Engineering Record, v. 69 (June 27, 1914), 725-726.
"Substructure for the Jackson Street Bridge over the Chicago River," Engineering News, v. 73 (March 18, 1915), 550-552.

W. Lake Street: Chicago River Bridge

RATING: 1

W. Lake Street (at Wacker Drive) crossing the
Chicago River (South Branch), Chicago

Construction Date: 1916

UTM: Chicago Loop Quad. 16 E.447100 N.4637080

DESCRIPTION: This double-deck, double-leaf, fixed trunnion bascule bridge measures 245'-3" from center to center of the trunnions and has a clear span of 209'-3". It carries the double-tracked Chicago Elevated Railway on the upper level. Roadway and sidewalks on the lower level have a combined width of 70'-0". The superstructure consists of a through truss with riveted gusset-plate connections. It has lead slag counterweights. Two bridge tender's houses, identical in appearance, are located on either side of the bascule span. They contain a band of one-over-one-light, double-hung, sash windows and have hipped roofs of tin topped with a small vent stack.

HISTORY: This bridge was planned in 1912, a notice for bids was issued in 1913, and construction began in 1914. It was designed by John Ericson, the Chicago City Engineer. The substructure was built by FitzSimons & Connell Dredge and Dock Company. Steel was fabricated by the American Bridge Company and the superstructure was erected by the Ketler-Elliott Company. This bridge replaced a through truss center pier swing span.

SOURCES:

- "Putting a Bascule Bridge Into Service," Engineering News, v. 75 (April 20, 1916), 756.
"Renewing a Drawbridge Across the Chicago River," Engineering News, v. 74 (December 30, 1915), 1267.

Hugh E. Young, "Double-Deck Bascule Bridge Over Chicago River," Engineering News, v. 74 (November 4, 1915), 876-879.

Hugh E. Young, "Substructure of the Lake St. Bascule Bridge at Chicago," Engineering News, v. 74 (November 11, 1915), 934-936.

N. LaSalle Street: Chicago River Bridge

N. LaSalle Street crossing the Chicago River, Chicago

RATING: 1

Construction Date: 1928

UTM: Chicago Loop Quad. 16 E.447100 N.4636080

DESCRIPTION: This single-deck, double-leaf trunnion bascule bridge measures 242'-0" from center to center of the trunnions and has a clear span of 220'-0". The superstructure is a steel pony truss with riveted gusset-plate connections. The bridge is 86'-0" wide and has reinforced concrete abutments with a rusticated concrete veneer. The bridge tender's houses, one on each side of the lift span, display an eclectic (if not eccentric) combining of neo-Classical and Second Empire styles. They are identical in design and feature: a lightly scored concrete veneer with chamfered corners and ornamental pilasters; a sopraporta (overdoor) containing a decorative arch; numerous multi-light windows along the facade of the pylons; and large, one-over-one-light, double-hung, sash windows below a mansard-like tin roof containing a raised diamond pattern and a large stylized cartouche with swags.

HISTORY: The superstructure of the bridge was built by the Strobel Steel Construction Company. Thomas Pihlfeldt was the engineer and Donald Becker was the designer. It is virtually identical to the Clark Street Bridge.

SOURCES:

See INTRODUCTION to Cook County Bridges.

W. Madison Street: Chicago River Bridge

W. Madison Street crossing the Chicago River (South Branch), Chicago

RATING: 1

Construction Date: 1922

UTM: Chicago Loop Quad. 16 E.447040 N.4636660

DESCRIPTION: This single-deck, double-leaf trunnion bascule bridge measures 221'-4" from center to center of the trunnions and has a clear span of 188'-9". The superstructure is a

Highway Bridges

steel pony truss with riveted gusset-plate connections. The bridge is 72'-0" wide and accommodates three lanes for vehicular traffic and two sidewalks. The guard rails contain decorative ironwork. The lone bridge tender's house, on the western side of the bridge and designed in the Beaux-Arts tradition, is constructed of reinforced concrete. The concrete is scored to resemble coursed stone. Octagonal in plan, the house contains paired, four-over-four-light casement windows on each side beneath the cornice line. The tin roof is simulated to represent tile and has a shell motif and a crown cap. On the eastern bank is a truncated pier without a bridge tender's house.

HISTORY: The substructure was constructed by the FitzSimons & Connell Dredge and Dock Company, and the superstructure was erected by the Ketler-Elliott Company. This trunnion bascule bridge was originally scheduled for construction in 1915. Because there was not sufficient distance on the west side of the river to accommodate the machinery and the superstructure truss, the "railing height truss" was designed. In this bridge, the top chord is at the same height as the hand rail.

SOURCES:

"Improving the Appearance of Chicago River Bridges," Engineering News, v. 76 (August 10, 1916), 282-283.

N. Michigan Avenue: Chicago River Bridge

N. Michigan Avenue crossing the Chicago River, Chicago

RATING: 1

Construction Date: 1920

UTM: Chicago Loop Quad. 16 E.448200 N.4637400

DESCRIPTION: This double-deck, double-leaf, fixed-counterweight trunnion bascule bridge measures 256'-0" between trunnions with a clear span of 220'-0" between the piers. The superstructure consists of steel trusses with riveted gusset-plate connections. The bridge is 91'-9" wide and has an upper and lower deck (lower deck was designed for heavier truck loads). It has reinforced concrete piers and the abutments are faced with granite and Bedford limestone. The upper deck has six lanes, two sidewalks, and a narrow median. The bridge tender's house rises three-and-a-half stories above the water level. neo-Classical influences on the house feature bas relief figures, bull's-eye windows, a denticulated frieze, and a stepped parapet roof topped by a highly ornate decorative urn. The substructure extends 100 feet below water level. A reinforced concrete counterweight for each leaf is housed in each pier in a counterweight pit measuring 95' x 67', with a depth of 40'; in the counterweight pit a trunnion girder supports four trunnion bearings. In the open position, each trunnion supports a load of 800 tons. Each leaf is operated by four 100 horsepower DC electric motors, which open the bridge in one minute.

HISTORY: This bridge opened in May 1920. It was designed by the Bureau of Engineering, Chicago Department of Public Works, with plans prepared by Alexander von Babo. Built as two parallel bridges normally operating together, these bridges are also capable of being operated individually. During the 1920s, the bridge deck was covered by an experimental rubber tile pavement. When this bridge was completed, it was the principal traffic route between the central business district (The Loop) and the north side of the City of Chicago. This bridge is built on the site of the former Fort Dearborn, and sculptural reliefs depict allegorical settlement themes.

SOURCES:

"A Double-Deck Bascule Bridge," Engineering News, v. 70 (July 17, 1913), 116-117.

"Chicago Bascule Bridge - Design and Operating Features," Engineering News-Record, v. 85 (September 9, 1920), 508-514.

"Cofferdam Experience at a Bridge in the Chicago River," Engineering News-Record, v. 83 (August 7, 1919), 268-269.

"Rubber Paving and High Curb Guards on Chicago Bridges," Engineering News-Record, v. 93 (November 13, 1924), 795.

"Substructure of Michigan Avenue Bascule Bridge, Chicago," Engineering News-Record, v. 83 (July 31, 1919), 210-213.

Hugh E. Young, "The Michigan Boulevard Improvement," Journal of the Western Society of Engineers, v. 26 (October 1921), 360-368.

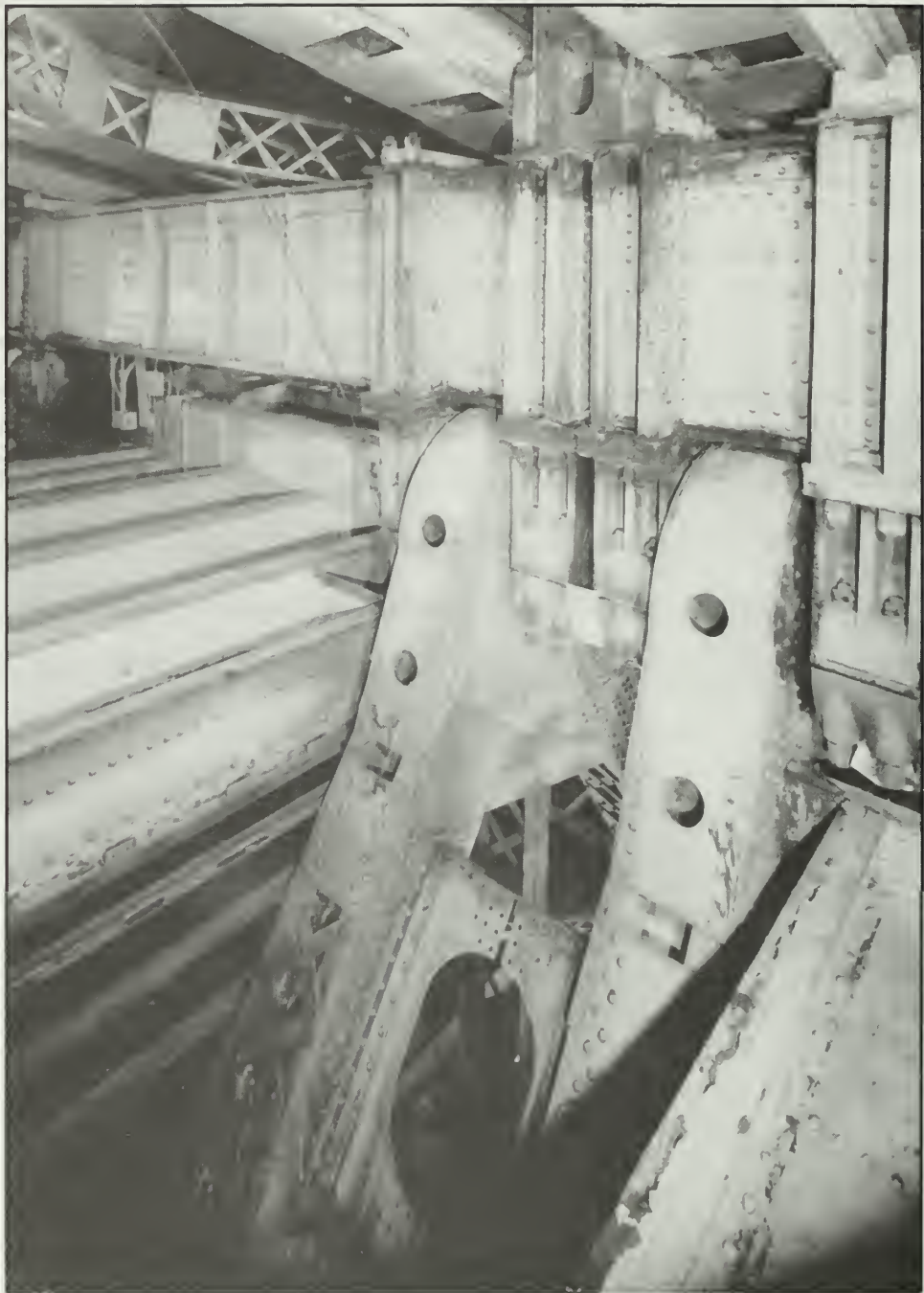


Photo 75. Michigan Avenue: Chicago River Bridge (1920), detail of trunnion girder, Chicago. Photo by Jet Lowe, HAER.

W. Monroe Street: Chicago River Bridge

RATING: 1

W. Monroe Street crossing the Chicago River (South Branch), Chicago

Construction Date: 1919

UTM: Chicago Loop Quad. 16 E.447040 N.4636500

DESCRIPTION: This single-deck, double-leaf trunnion bascule bridge measures 192'-9" from center to center of the trunnions and has a clear span of 165'-6". The superstructure is a steel pony truss with riveted gusset-plate connections. The bridge is 60'-0" wide and has reinforced concrete abutments with a rusticated concrete veneer. A stylized sunburst motif is used on the interstices of the pedestrian guard rail. The two granite-faced bridge tender's houses (one on each side of the bridge) contain an octagonal plan, with a row of one-over-one-light, double-hung, sash windows beneath the cornice and a denticulated cornice. The hipped roof is of simulated tile (the material is tin), and the crown has a shell motif. At the base is a service door filled in with concrete. The original glass-block light over the door is still exists.

HISTORY: The substructure was constructed by FitzSimons & Connell Dredge and Dock Company, and the superstructure was erected by the Ketler-Elliott Company of Chicago. It is virtually identical to the Franklin Street Bridge.

SOURCES:

See INTRODUCTION to Cook County Bridges.

Outer (Lake Shore) Drive: Chicago River Bridge

RATING: 2

Outer (Lake Shore) Drive crossing the Chicago River, Chicago

Construction Date: 1929, 1937

UTM: Chicago Loop Quad. 16 E.449060 N.4637380

DESCRIPTION: This is a double-deck, double-leaf, fixed-counterweight trunnion bascule bridge with the main span measuring 264'-0" between the trunnions; it has a clear span of 220'-0". The bridge is 108'-0" wide. The superstructure is of steel construction and trusses contain riveted gusset-plate connections. The bridge contains four bridge tender's houses rising above the pylons. Each is identical in design, measuring 28'-0" x 24'-0", with ornamental pilasters. The concrete piers and abutments are faced with stone. The southern approach is a 2,500- foot long viaduct. The northern approach is a 1,200-foot long viaduct and features a bascule bridge over the Michigan Canal (Ogden Slip). The span crossing the

Highway Bridges

Michigan Canal is a double-deck, single-leaf bascule, measuring 96'-6" between trunnions and has a clear span of 70'-0". Its width is also 108'-0". The superstructure of the viaducts is supported on steel bents.

HISTORY: This bridge was planned by the Chicago Plan Commission, designed by the Strauss Engineering Company, fabricated by the American Bridge Company, and erected by the Ketler-Elliot Company. After the bridge foundation was built and the steel delivered, construction was stopped because of a lack of funds. The bridge was finished and placed in operation in 1937 after the Works Progress Administration contributed the funds to complete the construction. Upon completion, the Outer Drive bascule bridge was the longest and widest double-leaf bascule bridge in the world. The trusses were fabricated with silicon steel sections, and the bridge decking contained carbon steel. With the addition of a lower deck, each 6,240 ton leaf was to be heavier than any bascule in existence. In describing the Outer Drive bascule bridge, the Engineering News-Record declared, "In both its design and construction it is a notable structure."

SOURCES:

"A Record Size Bascule," Engineering News-Record, v. 118 (April 22, 1937), 583-587.

"Chicago Gets Added PWA Funds for Outer Drive Completion," Engineering News-Record, v. 115 (December 5, 1935), 795-796.

"Continuous Girders Top Rigid Frame Viaduct Bents," Engineering News-Record, v. 118 (May 6, 1937), 671-673.

"Lakefront Boulevard Link Forms Milestone in Chicago Plan," Engineering News-Record, v. 118 (April 15, 1937), 546-548.

W. Roosevelt Road: Chicago River Bridge

Roosevelt Road (12th Street) crossing the
Chicago River (South Branch), Chicago

RATING: 1

Construction Date: 1929

UTM: Englewood Quad. 16 E.447350 N.4635020

DESCRIPTION: This single-deck, double-leaf trunnion bascule bridge measures 204'-0" from center to center of the trunnions and has a clear span of 170'-0". The trunnion bearings are supported by a steel plate cross girder housed in the 71' x 29' reinforced concrete counterweight pit. The superstructure is a steel deck truss with riveted gusset-plate connections. The bridge is 90'-0" wide and accommodates six lanes for vehicular traffic and two sidewalks. The concrete abutments are rusticated and contain several small glass-block windows. Bridge tender's houses, designed in the Beaux-Arts tradition, sit on each side of the lift span. Identical in appearance, they feature a lightly scored concrete veneer with

ornamental pilasters framing paired casement windows and a stepped cylindrical parapet wall topped by a decorative urn and festoon.

HISTORY: This bridge was designed by the Department of Public Works under the direction of Thomas Pihlfeldt, Engineer of Bridges, Donald A. Becker, Engineer of Bridge Design, and John Ericson, City Engineer. The substructure was constructed by FitzSimons & Connell Dredge and Dock Company, and the superstructure was fabricated by the American Bridge Company and erected by the Ketler-Elliot Company. Constructed over dry land before the new South Branch channel of the Chicago River was excavated, this bridge is part of a mile-long reinforced concrete and concrete-encased steel viaduct constructed in 1925 to allow Roosevelt Road to cross the extensive west side railroad yards.

SOURCES:

"Chicago Bascule Bridge Erected Over Railroad Tracks," Engineering News-Record, v. 101 (October 11, 1928), 546-550.

"Viaduct Is Built of Reinforced Concrete and Encased Steel," Engineering News-Record, v. 95 (August 20, 1925), 297-299.

N. Wabash Avenue: Chicago River Bridge

N. Wabash Avenue crossing the Chicago River, Chicago

RATING: 1

Construction Date: 1930

UTM: Chicago Loop Quad. 16 E.447980 N.4637300

DESCRIPTION: This single-deck, double-leaf trunnion bascule bridge has a clear span of 232'-0" and measures 269'-0" between trunnions. The superstructure is a steel deck truss with riveted gusset-plate connections. The bridge is 90'-0" wide. A bridge tender's house is on each side of lift span. They are identically designed and feature a lightly scored concrete veneer with chamfered corners and ornamental pilasters, one-over-one-light, double-hung, sash windows, and are topped with a stylized "Moorish" dome.

HISTORY: This bridge was erected by the Ketler-Elliot Company at a cost of over one million dollars, with design and construction supervised by Thomas Pihlfeldt, Engineer of Bridges. In 1930 the American Institute of Steel Construction awarded this bridge its annual prize for the "most beautiful" bridge in the United States or Canada.

Highway Bridges

SOURCES:

"Wabash Ave. Bascule and Viaduct, Chicago," Engineering News-Record, v. 105 (September 4, 1930), 393.



Photo 76. W. Washington Street: Chicago River Bridge (1913), Chicago. Photo by Jet Lowe, HAER.

W. Washington Street: Chicago River Bridge

RATING: 1

W. Washington Street crossing the Chicago River (South Branch), Chicago

Construction Date: 1913

UTM: Chicago Loop Quad. 16 E.447060 N.4636800

DESCRIPTION: This single-deck, double-leaf trunnion bascule bridge has a clear span of 170'-6" and measures 197'-4" between trunnions. The steel superstructure consists of a pony truss with riveted gusset-plate connections. The bridge is 57'-4" wide. The two bridge tender's houses have been greatly altered and have been recently sided with wooden paneling. Each contains a single one-over-one-light window and a hipped roof of tin. To the west, a riveted Warren through truss span carries W. Washington Street over the Chicago, Milwaukee, and St. Paul Railroad; this span measures approximately 80'-0" in length and 40'-0" in width.

HISTORY: The W. Washington Street Bridge was built during the so-called "Improvement Period" of Chicago bridge building, in which the city became increasingly conscious not only of mechanical innovations, but also of the appearance of its bridges. Following the bond issue of 1911, five double-leaf bascule bridges and a single-leaf bascule were built in rapid succession. Of the city's many double-leaf bascule spans, the W. Washington Street Bridge was one of most ornate. It features a bridge tender's house clad in sheet copper.

SOURCES:

See INTRODUCTION to Cook County Bridges.

N. Wells Street: Chicago River Bridge

RATING: 1

N. Wells Street across Chicago River (South Branch), Chicago

Construction Date: 1922

UTM: Chicago Loop Quad. 16 E.447400 N.4637250

DESCRIPTION: This double-deck, double-leaf, fixed trunnion bascule bridge measures 268'-0" from center to center of the trunnions and has a clear span of 231'-0". The superstructure consists of a through truss with riveted gusset-plate connections. The bridge carries the double-tracked Chicago Elevated Railway on the upper level. The roadway and sidewalks on the lower level have a combined width of 72'-0". Each leaf has a concrete counterweight pit 48' x 48' and 31 feet below the water level, supported by six concrete piers. The two granite-faced bridge tender's houses (one on each side of the bridge) contain an

Highway Bridges

octagonal plan, with a row of one-over-one-light, double-hung, sash windows beneath the cornice, and a denticulated cornice. The hipped roof is of simulated tile (the material is tin) and the crown has a shell motif.

HISTORY: This bridge was designed by the City Engineer and was the twenty-third bascule bridge constructed across the Chicago River. In order to minimize disruption to railroad traffic using the swing span which this bridge was designed to replace, this structure was erected in the open position. The substructure was built by the FitzSimons & Connell Dredge and Dock Company, and the steel was fabricated by the Fort Pitt Bridge Company. It was erected by the Ketler-Elliott Company and placed in operation on December 4, 1921. Of the three double-deck double-leaf bascule bridges built across the Chicago River before 1922, (including the Michigan Avenue, Lake Street, and Wells Street), the Wells Street bridge was the longest.

SOURCES:

"Chicago Double-Deck Drawbridge with Elevated Railway," Engineering News-Record, v. 88 (April 6, 1922), 567-571.

"Handling Traffic on Chicago `L' During Bridge Replacement," Electric Railway Journal, v. 58 (December 24, 1921), 1113-1115.

"Putting Large Bascule in Service," Engineering News-Record, v. 87 (October 13, 1921), 606-607.

Western Avenue: Sanitary and Ship Canal Bridge

Western Avenue crossing the Sanitary and Ship Canal, Chicago

RATING: 2

Construction Date: 1940

UTM: Chicago Loop Quad. 16 E.442960 N.4642700

DESCRIPTION: This is a vertical lift bridge, with the main lift span measuring 160'-0" in length and being approximately 90'-0" in width. The all-steel superstructure consists of riveted steel plate girders supported on concrete piers. The lifting mechanisms, including the concrete counterweights, DC electric motors, and rack and pinion gears, have been removed. The two bridge tender's houses remain in place. The bridge has steel plate girder approach spans; the decorative railing and pylons exhibit Art-Deco influence.

HISTORY: Built by the City of Chicago as a Works Progress Administration project in 1940, the substructure was constructed by M.J. McDermott & Company and the superstructure was erected by the Strobel Steel Construction Company of Chicago. This bridge replaced a center-pier swing bridge erected about 1900. It was placed in its closed position and the lifting machinery and counterweights were removed.

SOURCES:

Nameplate on bridge.

Also see INTRODUCTION to Cook County Bridges.

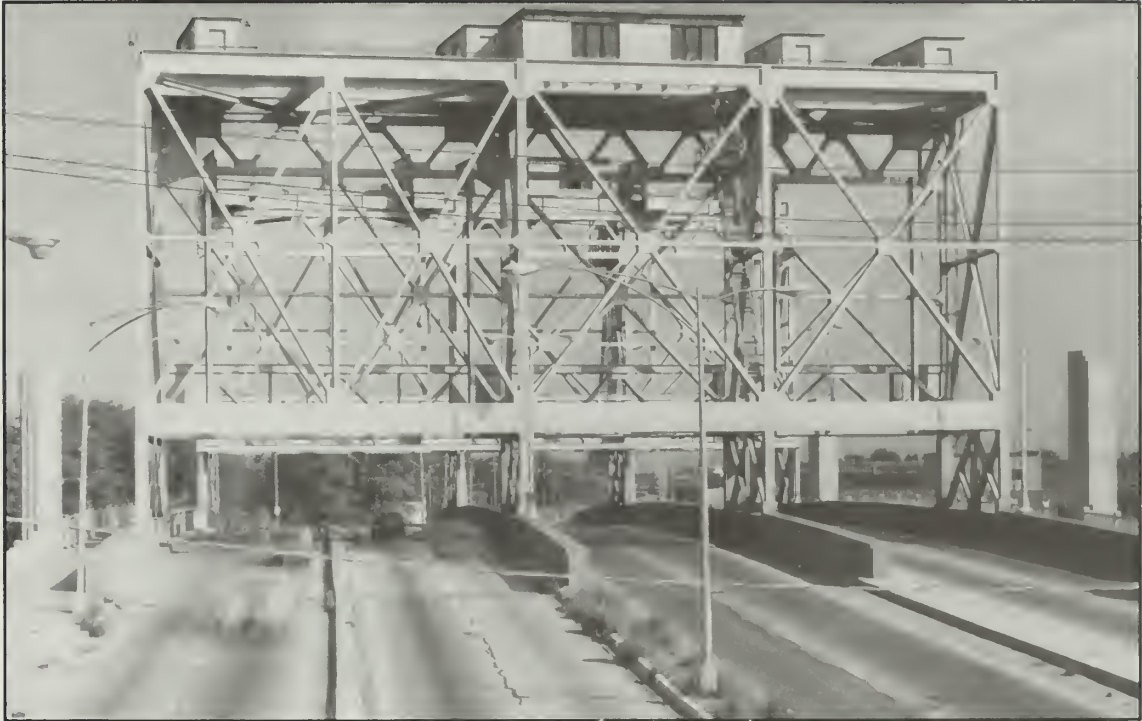


Photo 77. Western Avenue: Sanitary and Ship Canal Bridge (1940), showing the vertical lift towers--the counterweights have been removed, Chicago. Photo by Jet Lowe, HAER.

Highway Bridges

State Street: I&M Canal Bridge

State Street crossing the I&M Canal, Lemont

RATING: 3

Construction Date: date unknown

UTM: Romeoville Quad. 16 E.416550 N.4613950

DESCRIPTION: This riveted steel Warren pony half-deck truss carried old State Street over the I&M Canal. The recently completed State Street Bridge, a multi-span high-level continuous steel box-girder bridge, is adjacent to the older span. The superstructure of the truss bridge contained trussed floor beams and steel I-beam stringers. The bridge was approximately 70 feet long and about 16 feet wide. It rested on random-range limestone abutments. It was replaced in 1991 by a pre-cast prestressed concrete I-beam structure with poured concrete deck slab.

HISTORY: A bridge carrying State Street across the I&M Canal was erected as early as the 1880s. A half-deck pony truss with upright portals and one of its kind in the Heritage Corridor, it spans the Canal at this location. It may have been moved to this site from another location. The Illinois Steel Company supplied the steel sections for the superstructure. It was totally replaced in 1991 with a concrete bridge.

SOURCES:

Sanborn Map Co., Lemont, Illinois (New York: Sanborn Map Co., 1886, 1911, 1911-1949).

Ashland Avenue: Cal-Sag Channel Bridge

Ashland Avenue crossing the Cal-Sag Channel, Calumet Park

Construction Date: 1932, 1967

DESCRIPTION: The main span consists of a steel Pratt through truss with a polygonal upper chord, riveted gusset-plate connections, and two reinforced concrete girder approach spans. The bridge has concrete pile bents and abutments.

Cicero Avenue: Cal-Sag Channel Bridge

Cicero Avenue crossing the Cal-Sag Channel, Robbins (vic.)

Construction Date: 1938, 1966

DESCRIPTION: The main span consists of a steel Warren through truss with a polygonal upper chord, riveted gusset-plate connections, and two reinforced concrete girder approach spans. The bridge has concrete pile bents and abutments.

Crawford Avenue: Cal-Sag Channel Bridge

Crawford Avenue crossing the Cal-Sag Channel, Robbins

Construction Date: 1932, 1967

DESCRIPTION: The main span consists of a steel Pratt through truss with a polygonal upper chord, riveted gusset-plate connections, and two reinforced concrete girder approach spans. The bridge has concrete pile bents and abutments.

WILL COUNTY BRIDGES

INTRODUCTION

The bridges over the Des Plaines River in Joliet were reconstructed between 1932 and 1935 to accommodate water traffic for the newly created Chicago Sanitary and Ship Canal and the Illinois Waterway. A dam was originally considered for the waterway at Jackson Street in Joliet, but those plans were abandoned, leaving Brandon Road as the site of the next lock and dam on the Waterway. The water level in Joliet was raised considerably, requiring the construction of retaining walls along the river and the construction of new bridges. A new type of bridge appropriate for the anticipated traffic along the Waterway was developed and patented by the Scherzer Rolling Lift Bridge Company for the City of Chicago. It was used for several crossings along the Canal and the Waterway between Chicago and Brandon Road. This trunnion type bascule bridge was used at the Ruby Street and Brandon Road crossings, while Scherzer rolling lift bascule bridges were used at McDonough, Cass, and Jackson streets.

SOURCES:

Illinois Department of Transportation, Joliet Office, "General Bridge Information" cards.

Letter F. Filson, "From Whence Came a City: The Story of Joliet and Will County, Illinois", unpublished mss, 1957, available in the Joliet Public Library.

Brandon Road: Des Plaines River Bridge

Brandon Road crossing the Des Plaines River, Joliet

RATING: 2

Construction Date: 1932

UTM: Joliet Quad. 16. E.407900. N.4594700

DESCRIPTION: This is a double-leaf trunnion bascule bridge measuring 199 feet long and approximately 22 feet wide. It has steel grate decking and reinforced concrete abutments. The lifting machinery includes two DC electric motors of 25 horsepower each. A one-story bridge tender's house of reinforced concrete is about 20' x 10' and contains one-over-one-light, double-hung sash windows. The style of the bridge tender's house suggests Art-Deco influence; horizontal bands extend around the upper story, with circle ornamentation below the roof line.

HISTORY: Erected in conjunction with the Brandon Road Lock and Dam, one of several locks and dams constructed as part of the Illinois Waterway project, the Brandon Road Bridge was designed by Harrington-Cortelyou of Kansas City, Missouri, and constructed in 1932 by the Independent Bridge Company. The bridge features a double-leaf trunnion bascule, spanning nearly 200 feet, and a concrete bridge tender's house, the style of which was influenced by the period's Art-Deco craze.

SOURCES:

See INTRODUCTION to Will County Bridges.

Cass Street: Des Plaines River Bridge

Cass Street crossing the Des Plaines River, Joliet

RATING: 2

Construction Date: 1932

UTM: Joliet Quad. 16 E.409380 N.4597600

DESCRIPTION: The main span is a double-leaf Scherzer Rolling Lift Bridge Company rolling-lift bridge of steel construction (Pratt-type, although the polygonal upper chord carries the tensile forces). It has steel grate decking over the lift spans and reinforced concrete piers and abutments. The span is approximately 220 feet long. The lifting machinery consists of four DC electric motors of 50 horsepower each. It has reinforced concrete approach spans, the east one being 29'-6" in length, whereas the west one is 28'-8" long. The bridge is 280'-9" long and 67 feet wide. The roadway is 44 feet wide. The bridge tender's house at the south side of the bridge is of reinforced concrete and has a hipped roof and paired one-over-one-light, double-hung sash windows.

HISTORY: The Cass Street Bridge spanning the Des Plaines River was designed by the Scherzer Rolling Lift Bridge Company and erected in 1932 by the Independent Bridge Company. Completed at a cost of nearly \$165,000, the Cass Street Bridge project was part of the Illinois Waterway construction carried out by the U.S. Army Corps of Engineers in the early 1930s. It is one of four Scherzer rolling lift bridges in Joliet.

SOURCES:

See INTRODUCTION to Will County Bridges.

Highway Bridges

Division Street: Chicago Drainage Canal Bridge

Division Street crossing the Sanitary and Ship Canal, Lockport

RATING: 2

Construction Date: 1906

UTM: Joliet Quad. 16 E.410860 N.4608700

DESCRIPTION: This was a steel Pratt through truss "bobtail" swing bridge with a steel grid deck. The main span was 30 feet wide and 240 feet long. A pivot gear wheel was located under the bridge atop a concrete pier located slightly west of the center of the canal channel. A three span steel through truss bridge crosses the Des Plaines River a short distance to the west. This bridge was also financed by the Chicago Sanitary District at the time the Division Street bridge crossing the Sanitary and Ship Canal was built.

HISTORY: This bridge was constructed in 1906. It was one of the few extant bridges constructed across the Chicago Drainage Canal under the auspices of the Chicago Sanitary District between 1898 and 1906. It was removed by 1986 after several years of non-service after it was damaged by a barge.

SOURCES:

"Bridges Over the Chicago Drainage Canal," Engineering Record, v. 36 (June 19, 1897), 53.

"Railway Drawbridges Over the Chicago Drainage Canal," Engineering News, v. 38 (December 2, 1897), 363-366.

Isham Randolph, "The Salient Features of the Chief Engineer's Annual Report of the Drainage Canal of the Sanitary District of Chicago for 1898," Journal of the Western Society of Engineers, v. 4 (August 1899), 317-334.

"Swing Bridges on the Chicago Drainage Canal," Engineering Record, v. 36 (October 2, 1897), 378; v. 36 (October 30, 1897), 469; v. 37 (December 25, 1897), 71-73; v. 37 (March 19, 1898), 338-339.

C. Arch Williams, The Sanitary District of Chicago: History of its Growth and Development (Chicago: The Sanitary District of Chicago: 1919).

Jackson Street: Des Plaines River Bridge

Jackson Street crossing the Des Plaines River, Joliet

RATING: 2

Construction Date: 1932

UTM: Joliet Quad. 16 E.409520 N.4598040

DESCRIPTION: This is a double-leaf Scherzer rolling lift bridge of steel construction (Pratt-type, although the polygonal upper chord carries the tensile forces). The two bascule



Photo 78. Jackson Street; Des Plaines River Bridge (1932), Joliet. Photo by Martin Stupich, HAER.

leaves each measures 107 feet in length; the lifting machinery consists of four DC electric motors of 30 horsepower each. The bridge has steel plate girder approach spans, the west one being 57 feet long, whereas the east one measures 109 feet long.

The bridge has a steel grate decking and reinforced concrete piers and abutments. It is 376 feet long and 40 feet wide. The bridge tender's house, located on the southeast side of the span atop a pier, measures 20' x 10'. It is one-and-a-half stories and contains one-over-one-light, double-hung sash windows with arched windows at the first floor levels on the east and west facades. It has concrete scored to look like stone. The house's overall treatment is classical in the Beaux-Arts tradition.

HISTORY: The Jackson Street Bridge spanning the Des Plaines River was designed by the Scherzer Rolling Lift Bridge Company and erected in 1932 by the Mississippi Valley Structural Steel Company of Chicago. Its cost was slightly over \$100,000. The bridge is one of four Scherzer rolling lift spans in Joliet.

SOURCES:

See INTRODUCTION to Will County Bridges.

Highway Bridges

Jefferson Street: Des Plaines River Bridge

Jefferson Street crossing the Des Plaines River, Joliet

RATING: 2

Construction Date: 1932

UTM: Joliet Quad. 16 E.409520 N.4597300

DESCRIPTION: This is a double-leaf Scherzer rolling-lift bridge of steel construction (Pratt-type, although the polygonal upper chord carries the tensile forces) with the span being approximately 220 feet long and having a steel grate deck on each lift span. The lifting machinery consists of four DC electric motors of 50 horsepower each. Each of the two steel plate girder approach spans is 55'-6" long. The roadway is 40 feet wide, while the sidewalks are 13 feet wide on either side of the bridge. The bridge sits on reinforced concrete abutments and piers. A one-and-one-half-story bridge tender's house at the southeast pier measures approximately 20' x 10'; the concrete is scored to look like stone. The building contains one-over-one-light, double-hung sash windows with arched windows at the first floor levels on the east and west facades. Overall treatment is in the Beaux-Arts tradition.

HISTORY: This bridge carrying Jefferson Street across the Des Plaines River was designed by the Scherzer Rolling Lift Bridge Company, and constructed in 1932 by the Mississippi Valley Structural Steel of Chicago. Its cost was about \$160,000. Built in conjunction with the construction of the Illinois Waterway, this bridge was one of several built in Joliet between 1932 and 1935. Joliet's Des Plaines River bridges were an integral part of the master plan developed for the construction of the Chicago Sanitary and Ship Canal and the Illinois Waterway in the early twentieth century. The City of Joliet chose the bridges designed by the Scherzer Rolling Lift Bridge Company, one of the nation's leading bridge engineering concerns. The Jefferson Street Bridge is one of four Scherzer rolling lift bridges in Joliet.

SOURCES:

See INTRODUCTION to Will County Bridges.

McDonough Street: Des Plaines River Bridge

McDonough Street crossing the Des Plaines River, Joliet

RATING: 2

Construction Date: 1934

UTM: Joliet Quad. 16 E.409160 N.4596360

DESCRIPTION: This double-leaf Scherzer rolling lift bridge with steel deck grating is approximately 200 feet long and of steel construction (Pratt-type, although the polygonal upper chord carries the tensile forces). The lifting machinery consists of four DC electric motors of 40 horsepower each. The bridge has steel plate girder approach spans and reinforced concrete piers and abutments. The one-and-one-half-story bridge tender's house on the southeast side of a span sits atop a pier and measures 20' x 10'. It has concrete scored to look like stone and contains one-over-one-light, double-hung sash windows. The decorative treatment is in the Beaux-Arts tradition.

HISTORY: The McDonough Street Bridge spanning the Des Plaines River was designed by the Scherzer Rolling Lift Bridge Company and erected in 1932 by the Mississippi Valley Structural Steel Company of Chicago. The decking over the bascule span was originally wooden, and in 1953 the Illinois State Highway Department replaced it with a steel grate. Other than the decking the bridge has remained virtually unaltered. It is one of four Scherzer rolling lift spans in Joliet.

SOURCES:

See INTRODUCTION to Will County Bridges.

Old Route U.S. Rte. 6: DuPage River Bridge

old U.S. Rte. 6 crossing the DuPage River, Channahon

RATING: 3

Construction Date: 1920, 1933

UTM: Channahon Quad. 16 E.397510 N.4585940

DESCRIPTION: This two-span steel Pratt pony truss bridge carries "Old Route 6" over the DuPage River and has reinforced concrete abutments and piers, the latter of which originally consisted of stone. Each span is 80 feet long and 18 feet wide and contains riveted connections. A cantilevered sidewalk with wooden planks and a chain link fence are on the bridge's north side. Utility pipes hang from beneath the truss. The reinforced concrete deck is supported on steel I-beam stringers and floor beams.

Highway Bridges

HISTORY: This two-span, Pratt pony truss bridge, formerly carrying U.S. Route 6 across the DuPage River, was erected about 1920. The Inland Steel Company supplied the fabricator (probably the Continental Bridge Company of Peotone, Illinois) with the steel. Just over a decade after its completion, the bridge was re-aligned by the Civilian Conservation Corps (CCC), in conjunction with a program of lowering all bridges spanning the I&M Canal. The CCC also installed new piers and abutments. The use of CCC labor in this project created a controversy, with a local labor confederation objecting that regular civilian labor should be employed instead. Though the bridge is a standard 1920s pony-truss type, and has in the interim been greatly altered, it is listed on the National Register of Historic Places.

SOURCES:

Continental Bridge Company, "Station 512+19, SBI Rte. 7, Section F-1, Will County," on file at the Illinois Department of Transportation, District 1, Elgin, Illinois.

State of Illinois, Department of Transportation, Historic Bridges File, 1985, (a computerized listing of the State's historic bridges available at Illinois Department of Transportation, District 1, Elgin, Illinois).

"Resolution of May 24th 1934, Will County Board of Labor Union Business Representatives, Erwin Butzke, Secretary," (available at I&M Canal State Trail Archives, Morris, Illinois)

Old U.S. Rte. 6: I&M Canal Bridge

old U.S. Rte. 6 crossing the I&M Canal, Channahon

RATING: 3

Construction Date: 1918

UTM: Channahon Quad. 16 E.397430 N.4585900

DESCRIPTION: This bridge is a single span, steel Pratt pony truss with riveted gusset-plate connections and reconstructed reinforced concrete abutments, the latter of which were originally stone piers. The span is 77 feet long and 24 feet wide. The concrete deck is supported by I-beam stringers and floor beams. A cantilevered walkway exists on the north side of the bridge. Truss members are composed of riveted steel angle and channel sections with steel lacing bars.

HISTORY: This single span, Pratt pony truss bridge originally carried U.S. Route 6 across the I&M Canal. Route 6 was the main highway between Chicago and LaSalle-Peru until Interstate 80 was completed in the 1950s. The Continental Bridge Company of Peotone, Illinois, designed and fabricated this bridge, which was erected under the aegis of Will County in 1918. Originally supported by stone piers, the bridge now rests on

concrete abutments. It continues to carry vehicular traffic across the I&M and is located just west of the old U.S. Route 6, DuPage River Bridge.

SOURCES:

Continental Bridge Company, "Station 512+19, SBI Rte. 7, Section F-1, Will County," on file at the Illinois Department of Transportation, District 1, Elgin, Illinois.

State of Illinois, Department of Transportation, Historic Bridges File, 1985, (a computerized listing of the State's historic bridges available at Illinois Department of Transportation, District 1, Elgin, Illinois).

Romeo Road: Chicago Drainage Canal Bridge

RATING: 2

Romeo Road crossing the Sanitary and Ship Canal, Romeoville (vic.)

Construction Date: 1899

UTM: Romeoville Quad. 16 E.411720 N.4610200

DESCRIPTION: This 306'-2" long Warren through truss "bob-tailed" swing bridge contains one main span and two approach spans. The bridge is 20 feet wide and carries two lanes of traffic; the one sidewalk is on the south side. It has a 205'-9" long arm (six truss panels) crossing the Sanitary and Ship Canal and a 100'-5" long (three truss panels) counterweight arm. An overhead pilot house is located within the truss. There are two piers, one of which is the off-center pivot. The limestone piers and abutments have dressed limestone lintels.

HISTORY: In 1892 the Chicago Sanitary District "embarked on the largest single earth moving project in the history of municipal public works." The Sanitary and Ship Canal, extending twenty-eight miles from the South Branch of the Chicago River at Damen Avenue to the Des Plaines River at Lockport, reversed the flow of the Chicago River and discharged water drawn from Lake Michigan into the Des Plaines River at Lockport. Work on the Sanitary and Ship Canal was completed on January 2, 1900. As part of this extraordinary civil engineering project, fifteen bridges were initially constructed across the Canal. The Sanitary District of Chicago (now called the Metropolitan Water Reclamation District of Greater Chicago) supervised the design and construction of these bridges. This bridge was fabricated by the Elgin Iron Works, Chicago, Illinois, erected by the Strobel Steel Construction Company, and placed in operation, without turning machinery, in August, 1899. By 1906 one fixed truss and fourteen swing bridges crossed the Sanitary and Ship Canal. This bridge is the oldest of the remaining highway swing spans across the Sanitary and Ship Canal. Citing maintenance concerns, the District closed the bridge in 1992. Access is no longer possible. Plans call for moving the superstructure to a nearby trail and preserving it.

Highway Bridges



Photo 79. Romeo Road: Chicago Drainage Canal Bridge (1899), detail of center pier L and bridge tender's house, Romeoville (vicinity). Photo by Martin Stupich, HAER.

SOURCES:

"Bridges Over the Chicago Drainage Canal," Engineering Record, v. 36 (June 19, 1897), 53.

"Railway Drawbridges Over the Chicago Drainage Canal," Engineering News, v. 38 (December 2, 1897), 363-366.

Isham Randolph, "The Salient Features of the Chief Engineer's Annual Report of the Drainage Canal of the Sanitary District of Chicago for 1898," Journal of the Western Society of Engineers, v. 4 (August 1899), 317-334.

"Swing Bridges on the Chicago Drainage Canal," Engineering Record, v. 36 (October 2, 1897), 378; v. 36 (October 30, 1897), 469; v. 37 (December 25, 1897), 71-73; v. 37 (March 19, 1898), 338-339.

C. Arch Williams, The Sanitary District of Chicago: History of its Growth and Development (Chicago: The Sanitary District of Chicago, 1919).

Ruby Street: Des Plaines River Bridge

Ruby Street crossing the Des Plaines River, Joliet

RATING: 2

Construction Date: 1935

UTM: Joliet Quad. 16 E.409720 N.4598580

DESCRIPTION: This is a double-leaf trunnion bascule bridge, with each leaf measuring 156'-4" in length; each leaf of the bascule is a truss with riveted gusset-plate connections. The lifting machinery consists of four DC electric motors of 50 horsepower each. It has reinforced concrete approach spans and abutments piers. The original asphalt plank floor was replaced in 1953 with steel-grate decking. The one-and-a-half story bridge tender's house on the north side of the span sits atop a pier and measures 20' x 10'. It has concrete scored to look like stone. In addition to one-over-one-light, double-hung sash windows, it has a smaller arched window on the east facade. The abutments are also rusticated to match the bridge house. The overall treatment is classical in the Beaux-Arts tradition. The Ruby Street bridge tender's house is identical to those at the Jefferson Street and McDonough Street spans.

HISTORY: As with two other 1930s movable bridges in Joliet, the Ruby Street Bridge crossing the Des Plaines River was designed by Scherzer Rolling Lift Bridge Company of Chicago. The Milwaukee Bridge Company completed construction of the bridge in 1935, making it the last of Joliet's bridges built in conjunction with the Illinois Waterway. Interestingly, the Ruby Street Bridge is one of two double-leaf trunnion bascule bridges in Joliet. However, unlike the Brandon Road Bridge, which has a superstructure composed of riveted steel plate girders, the Ruby Street Bridge lift spans are steel trusses.

SOURCES:

Illinois Department of Transportation, Joliet Office, "General Bridge Information" cards.

Letter F. Filson, "From Whence Came a City: The Story of Joliet and Will County, Illinois", unpublished mss, 1957, available in the Joliet Public Library.

GRUNDY COUNTY BRIDGES

Aux Sable: I&M Canal Bridge

RATING: 3

local road crossing I&M Canal at Aux Sable, Morris (vicinity)

Construction Date: ca. 1920

UTM: Minooka Quad. 16 E.388560 N.4583290

DESCRIPTION: This bridge is a single span, steel pony Pratt truss with riveted gusset-plate connections. The span is 75 feet long and 20 feet wide. It has an asphalt pavement on a wooden deck and reconstructed reinforced concrete abutments, the latter of which were originally stone piers. The truss members are composed of riveted steel angle and channel sections with steel lacing bars.

HISTORY: In the early 1920s several Pratt pony truss bridges were erected across the last operating sections of the I&M Canal (between Joliet and LaSalle), including this span at Aux Sable. The Continental Bridge Company, with offices in Chicago and a bridge fabrication plant in Peotone, Illinois, created both the plans and fabricated these spans. Each bridge had a clearance of around eight to ten feet and rested on ashlar stone piers. After the I&M ceased operations in the early 1930s, the Civilian Conservation Corps lowered the canal bridges to afford motorists greater visibility when crossing the spans. The pony truss at Aux Sable, connecting Dellos and Cemetery roads, remained in service until 1985 when Grundy County bridge inspectors deemed it unsafe for carrying vehicular traffic. Nearly identical to two other pony truss bridges crossing the I&M, this span was damaged by an automobile collision and the County has no plans to repair it.

SOURCES:

Continental Bridge Company, "Station 512+19, SBI Rte. 7, Section F-1, Will County," on file at the Illinois Department of Transportation, District 1, Elgin, Illinois.
Civilian Conservation Corps, National Park Service, U.S. Department of the Interior, "Bimonthly Report for April 1934," (available on microfilm, Roll #2, I&M Canal State Trail Archives, Morris, Illinois).

Dellos Road: Aux Sable Creek Bridge

RATING: 3

Dellos Road crossing Aux Sable Creek, Morris (vicinity)

Construction Date: 1873, 1967

UTM: Minooka Quad. 16 E.388780 N.4583420

DESCRIPTION: This three span, limestone arch bridge is clad in concrete, with each span measuring approximately 20 feet. The bridge is 122 feet long and 22 feet wide. The bridge was built in 1873, with concrete facing added by the Illinois Department of Transportation in 1967. The bridge has stone abutments, concrete fender piers, and steel guard rails.

HISTORY: Erected in 1873, this once impressive three-span arch bridge crossing Aux Sable Creek was originally a limestone structure. Located just north of the I&M Canal and Aux Sable Creek Aqueduct, the bridge was on an old stage road between Morris and Joliet. During rehabilitation in 1967, the Illinois Department of Transportation greatly altered the appearance of the bridge by facing it with concrete. However, the stone remains visible.

SOURCES:

Illinois Department of Transportation, Historic Bridges File, 1985.

Five Mile Bridge

RATING: 3

Stage Coach Road crossing I&M Canal five miles west of Morris

Construction Date: ca. 1920

UTM: Seneca Quad. 16 E.372890 N.4577300

DESCRIPTION: This is a single span Pratt pony truss bridge with riveted gusset-plate connections and random range limestone abutments. The span is approximately 75 feet long and 20 feet wide. A wooden deck with an asphalt surface is supported on steel I-beam stringers. The truss members are composed of riveted steel angle and channel sections with steel lacing bars. A pipeline crosses the canal on the west side of the bridge.

HISTORY: The Five Mile Bridge, so-named because it is five miles west of Morris on the Old Stage Road, was probably designed and fabricated by the Continental Bridge Company of Peotone, Illinois. The design of this bridge matches Continental Bridge's standard Pratt pony truss design for bridges with span lengths of about 75 feet. The Five Mile Bridge was erected about 1920 when the I&M Canal was undergoing its last improvements prior to its closing in 1933. Subsequently, the Civilian Conservation Corps lowered the canal bridges in

Highway Bridges

1933 and 1934. The Five Mile Bridge is one of only three pony trusses crossing the I&M that still carry vehicular traffic. The County has removed the superstructure, leaving only the abutments, and built another bridge just east of this one.

SOURCES:

State of Illinois, Division of Waterways, I&M Canal photo surveys of 1957 and 1967; (available at the I&M Canal State Trail Archives, Morris, Illinois).

Continental Bridge Company, "Station 512+19, SBI Rte. 7, Section F-1, Will County," on file at the Illinois Department of Transportation, District 1, Elgin, Illinois.

Hoge's Bridge

Hatcher Road crossing the I&M Canal, Morris (vicinity)

RATING: 3

Construction Date: ca. 1900

UTM: Morris Quad. 16 E.378250 N.4578700

DESCRIPTION: This bridge is a Pratt pony truss with riveted gusset-plate connections. The truss is constructed of riveted steel angle sections. It has coursed sandstone abutments, and I-beam stringers support a wooden deck. The vertical clearance of the bridge from its underside to the canal is 15 feet.

HISTORY: This pony truss bridge was indicated on the 1902 U.S. Army Corps of Engineers map of the Illinois and Des Plaines River as "steel bridge." It is the only canal-era bridge crossing the I&M that was not lowered in the 1930s when the canal ceased operations. At that time, the Civilian Conservation Corps lowered by nearly 10 feet virtually all of the bridges across the I&M. The bridge lowering effort was done to improve the lines of sight for oncoming motorists.

SOURCES:

"Map of the Illinois and Des Plaines Rivers, Corps of Engineers, U.S. Army, Sheet #54.

Illinois State Rte. 47: Illinois River Bridge

State Rte. 47 crossing the Illinois River, Morris

RATING: 2

Construction Date: ca. 1933

UTM: Morris Quad. 16 E.381060 N.45785700

DESCRIPTION: This is a five-span truss bridge with several steel girder and reinforced concrete girder approach spans along with reinforced concrete piers and abutments. The main span is a Pennsylvania through truss with a length of 362'-10". It is flanked by two Parker through truss spans to the north and two Parker through truss spans to the south, with each Parker through truss measuring 200 feet in length. All trusses contain riveted gusset-plate connections. The bridge is 1,724 feet long and 22 feet wide. An asphalt pavement over concrete is supported on steel I-beam stringers and floor beams.

HISTORY: According to the builder's plate, this bridge was erected in 1933 by the McClintic Marshall Corporation, a bridge fabricator and builder located in Pottstown, Pennsylvania. A State bond issue provided funds for the structure, and the Illinois Department of Public Works and Buildings administered and maintained the structure. The bridge construction was part of the Illinois Waterway project, carried out by the U.S. Army Corps of Engineers in the early 1930s. Bridges crossing the Illinois River in the towns of Morris, Seneca, and Marseilles had to be rebuilt to accommodate barge traffic on the newly navigable waterway. As part of this navigation project, McClintic Marshall was also involved in the construction of a new main span for the Illinois Central Railroad Bridge in LaSalle. The State Route 47 Bridge at Morris continues in service and retains much of its original fabric.

SOURCES:

State of Illinois, Division of Waterways, "General Bridge Information," 1944.

T. Allan Comp and Donald C. Jackson, "Technical Leaflet No. 95: Bridge Truss Types: A Guide to Dating and Identifying," (Nashville, Tenn: American Association for State and Local History, 1977).

Nameplate on bridge.

Highway Bridges

McLinden Road: I&M Canal Bridge

McLinden Road crossing the I&M Canal, Minooka (vicinity)

RATING: 3

Construction Date: ca. 1920

UTM: Minooka Quad. 16 E.392150 N.4584290

DESCRIPTION: This bridge is a single span, steel pony Pratt truss with riveted gusset-plate connections. The span is 77 feet long and 20 feet wide. The asphalt pavement on the wooden deck is supported by I-beam stringers and floor beams. Stone abutments are faced with concrete; they were originally stone piers. Two timber pier bents with I-beam pile caps have been added so that the bridge no longer spans its full length. Truss members are composed of riveted steel angle and channel sections with steel lacing bars.

HISTORY: The Continental Bridge Company, of Peotone, Illinois, fabricated several Pratt pony truss bridges that were erected across the I&M Canal in the early 1920s, including this span south of Minooka. The last major overhaul of the I&M began in 1918 and concentrated on the Joliet to LaSalle section, the only remaining operable stretch of the Canal. In 1934, one year after the I&M was abandoned, the Civilian Conservation Corps lowered a number of canal crossings including the McLinden Road Bridge. Recently, the Highway Department of Grundy County closed the span and erected a new reinforced concrete slab bridge just to the east of the pony truss bridge. The Illinois Department of Conservation then acquired the older span for use as a pedestrian bridge.

SOURCES:

Continental Bridge Company, "Station 512+19, SBI Rte. 7, Section F-1, Will County," on file at the Illinois Department of Transportation, District 1, Elgin, Illinois.

LASALLE COUNTY BRIDGES

Illinois State Rte. 170: Illinois River Bridge

State Rte. 170 crossing the Illinois River, Seneca

RATING: 2

Construction Date: 1933

UTM: Seneca Quad. 16 E.365320 N.4572400

DESCRIPTION: This is a four-span truss bridge with several reinforced concrete girder approach spans as well as reinforced concrete piers and abutments. The main span is a Pennsylvania through truss with a length of 362'-10". It is flanked by one Parker through truss span to the north and two to the south, with each Parker through truss measuring 200 feet in length. All trusses contain riveted gusset-plate connections. The bridge is 1,510 feet long and 22 feet wide. The vertical clearance over the Waterway measures 47 feet at low-water stage. The asphalt pavement overlies concrete with all of it supported on steel I-beam stringers and floor beams.

HISTORY: This bridge was completed in 1932 as a part of the Illinois Waterway project. It was built by the Wisconsin Bridge & Iron Company for the Illinois Department of Public Works and Buildings, Division of Highways. Similar to the 1930s truss bridges across the Illinois River at Morris and Marseilles, the multi-span structure at Seneca was designed with tall piers and non-movable truss spans rather than shorter piers and a movable main span. The bridge remains virtually unchanged from its original appearance.

SOURCES:

T. Allan Comp and Donald C. Jackson, "Technical Leaflet No. 95: Bridge Truss Types: A Guide to Dating and Identifying," (Nashville, Tenn: American Association for State and Local History, 1977).
Nameplate on bridge.

Highway Bridges

Main Street: Illinois River Bridge

Main Street across Illinois River, Marseilles

RATING: 2

Construction Date: 1932

UTM: Marseilles Quad. 16 E.365870 N.4575700

DESCRIPTION: This is a multi-span through truss highway bridge with several steel stringer and reinforced concrete approach spans. The trusses span the Illinois River and the Marseilles Navigation Canal, which leads to the Marseilles lock. All four main spans are Parker through trusses with riveted gusset-plate connections. Each span measures approximately 200 feet in length and the bridge is about 32 feet wide. The steel channel, angle, and wide-flange sections for the bridge were produced by the Illinois Steel Company of Joliet. Information on the nameplate is as follows: "Marseilles Bridge, built 1932 by State of Illinois, County of LaSalle, City of Marseilles; State Aid Route 15."

HISTORY: Since the late nineteenth century an iron truss bridge has spanned the Illinois River at Marseilles. However, the construction of the Illinois Waterway at its northern end rendered the bridge obsolete. The costs for constructing and maintaining a new bridge was hotly debated by the city of Marseilles, LaSalle County, and the State of Illinois, each trying to avoid financial responsibility for the structure. The state proposed a so-called "cork-screw bridge" that would direct vehicles over ramps leading in three directions. A settlement was finally reached, and in September, 1933, the new bridge, costing \$190,000 was dedicated. A sidewalk, 5 feet wide, was constructed along the east side of the bridge in 1936; a ramp, of timber construction, leading to Bell's Island was removed sometime in the 1950s. The bridge is presently in fair condition.

SOURCES:

State of Illinois, Division of Waterways, "General Bridge Information," 1944.

T. Allan Comp and Donald C. Jackson, "Technical Leaflet No. 95: Bridge Truss Types: A Guide to Dating and Identifying," (Nashville, Tenn: American Association for State and Local History, 1977).

Historical Booklet Committee, Marseilles Sesquicentennial, 1835-1985 (Coal City, IL: Bailey Printing Co., 1985).

State of Illinois, Division of Waterways, 19th Annual Report (1935-1936).

Nameplate on bridge.

City of Peru: Pedestrian Overpass

pedestrian overpass crossing the Rock Island RR, Peru

RATING: 3

Construction Date: ca. 1900

UTM: LaSalle Quad. 16 E.323180 N.4576980

DESCRIPTION: This is a Warren through truss pedestrian bridge over railroad sidings and tracks. The main span is approximately 60 feet long and about 10 feet wide. The steel truss members have riveted gusset-plate connections; the portal members, as well as the upper and lower chords, and the diagonal members are all constructed with double angle sections. The bridge's decking is wood 2 x 8s. Floor beams consist of two back-to-back channel sections; fascia stringers are channel sections, other stringers are timber 3 x 8s. The through truss is simply supported, the supports consisting of steel bents. There is one stringer approach span to the north and one stringer approach span to the south, with each being approximately 30 feet long. A steel stairway is located at the south side of the overpass; the north end of the overpass is situated on the bluff. The overpass features a lattice steel handrail.

HISTORY: The City of Peru constructed this overpass about 1900 so that the numerous workers of the Peru-La Salle industrial area could have easy and safe access across the busy Rock Island Line and the Chicago, Burlington and Quincy Railroad tracks. At the turn of the century, workers in Peru lived in housing perched on the bluffs overlooking the Illinois River, and many walked across the pedestrian overpass en route to their jobs at such industrial establishments as Peru Plow and Wheel, Illinois Zinc, Brunner Foundry and La Salle Pressed Brick. All of these industries have subsequently closed and the overpass is seldom used.

SOURCES:

Twentieth Anniversary Edition, The LaSalle Tribune, July, 1911: The Twin Cities, LaSalle and Peru in 1911 (LaSalle, IL: LaSalle Tribune, 1911), 95.

Shippingsport Bridge

State Rte. 51 crossing the Illinois River, LaSalle

RATING: 2

Construction Date: 1929

UTM: LaSalle Quad. 16 E.324980 N.4575520

DESCRIPTION: This seven span bridge crosses the Illinois River connecting LaSalle with Oglesby. Six spans are fixed, with one being a vertical lift span of the Waddell and Harrington type. The fixed spans consist of riveted steel Parker through trusses, each spanning approximately 180 feet and each having a width of about 25 feet. The vertical lift

Highway Bridges

is approximately 200 feet in length and is powered by two DC General Electric motors (the original gasoline engine used for powering the lift span remains in place). Iron counterweights are located in each tower. The timber-frame, one-story hoist house is located on the upper chord in the center of the lift span. Concrete piers support each span, and concrete abutments with wing walls are located on each side of the river.

HISTORY: The Shippingsport Bridge, completed in the fall of 1929, was officially opened on November 7th of that year by Illinois Chief Highway Engineer Frank Sheets. The construction of the Waddell and Harrington-type vertical lift span was carried out in conjunction with the channelization of the Illinois River; the Illinois Waterway was completed in 1933.

SOURCES:

"Dedication of the New Shippingsport Bridge," November 7, 1929; (available in the "Clippings" scrapbook file, LaSalle County Historical Society, Utica, Illinois).



Photo 80. Shippingsport Bridge over the Illinois River (1929), LaSalle. Photo by Martin Stupich, HAER.

INTERURBAN RAILWAYS

Chicago & Joliet Electric Railway Company: Lemont Substation and Car Barn

RATING: 3

W. Main Street, between Joliet and Lockport streets, Lemont

Construction Date: ca. 1904

UTM: Romeoville Quad. 16 E.416500 N.4613750

DESCRIPTION: This two-story brick building measures approximately 75' x 35' and contains riveted steel Warren roof trusses--the roof trusses rest on brick pilasters--supporting steel I-beam purlins, common-bond brick walls and a combination ashlar limestone and random-range limestone foundation. The gable roof extends farther on the west side of the building--this is the section that housed the car barn--and a series of metal vents are located at the gable ridge. Low parapet walls with sandstone coping extend along the gable ends as well as along the length of the building. Nothing remains inside the building; it has been abandoned for many years. The remnants of a small transformer yard are located to the west.

HISTORY: In 1901, the Chicago & Joliet Electric Railway completed its line from Chicago to Joliet. The double-track railway extended thirty-one miles south from Chicago at Archer Avenue, through Summit, Lemont, Lockport, and into Joliet. In addition, a double-track branch ran from Summit, Illinois to Lyons, Illinois. From Joliet, connections could be made with the line of the Joliet & Southern Traction Company, or the Chicago, Ottawa & Peoria Railway Company.

The line through Lemont was opened with great fanfare in September 1901. Constructed about the same time, this brick building, located on the west side of Lemont, housed an electric substation, a battery storage facility, an office, and a car barn. In later years it served as a transformer yard and office, possibly for Commonwealth Edison. The building has been vacant for many years.

SOURCES:

Barbara Buschman (editor-in-chief), Lemont, Illinois: Its History in Commemoration of its Incorporation, 1873-1973 (Lemont, IL: Lemont Area Historical Society, reprint, 1894), 28.

"Electric Interurban Lines Serving the City of Chicago," Electric Railway Journal, v. 40 (October 5, 1912), 592-8.

"Extensions of the Joliet & Southern Traction Company," Electric Railway Journal, v. 33 (March 6, 1909), 404-6.
Sanborn Map Co., Lemont, Illinois, v. H, in the series Chicago, Cook County, Illinois
(New York: Sanborn Map Co., 1911 and 1949).

Interurban Railways

Illinois Traction System:

RATING: 2

Canal Street: Little Vermillion River Bridge

Canal Street crossing the Little Vermillion River, LaSalle

Construction Date: ca. 1890

UTM: LaSalle Quad. 16 E.325640 N.4577040

DESCRIPTION: The superstructure of this bridge consists of a wrought iron, pin-connected, Pratt deck truss; the truss members, including eyebars and channel sections, were produced by the Cambria Iron Company of Johnstown, Pennsylvania. The three-span structure is approximately 120 feet long and 25 feet wide. With the exception of the east pier which is of ashlar sandstone construction, the abutments and the west pier are of mass concrete. The deck consists of reinforced concrete and dates from the 1960s. This former wagon and interurban railway bridge is located next to the Little Vermillion River crossings of the Rock Island Line and the I&M Canal.

HISTORY: A bridge carrying a wagon road across the Little Vermillion at this location was probably built as early as the 1830s. Prior to the construction of the present iron bridge, spans were erected with wood resting on stone abutments. This pin-connected, Pratt deck truss, erected about 1890, was originally used for wagons until about 1902 when the Illinois Traction System adapted the structure for its interurban line. In the 1910s and 1920s automobiles began sharing the bridge with the interurban railroad. Later known as the Chicago, Ottawa & Peoria Railway, the interurban operated until about 1934. The bridge presently carries Canal Street across the Little Vermillion. It is both one of the earliest extant metal truss bridges and one of the few surviving interurban railroad bridges in the Heritage Corridor.

SOURCES:

"McKinley Syndicate Properties of Northern Illinois," Street Railway Review, v. 15 (March 15, 1905), 131-5.
Sanborn Map Company, LaSalle, Illinois (New York: Sanborn Map Co., 1888, 1892, 1898, 1906, 1911, 1926).
State Public Utilities Commission of Illinois, Railroad Map of Illinois, 1916.

Illinois Traction System: Douglas Passenger Shelter

RATING: 3

on south side of I&M Canal, Ottawa (vicinity)

Construction Date: ca. 1910-1920

UTM: Ottawa Quad. 16 E.352840 N.4577490

DESCRIPTION: This one-story passenger railway shelter measures about 12' x 12' and contains rubble masonry walls resting on a concrete foundation. The masonry used for this

shelter consists of boulders from the river. Its distinctive pyramidal roof with overhanging eaves is supported by the stone walls.

HISTORY: In 1902 the Illinois Traction System began construction of a line from Ottawa to Spring Valley, Illinois. By 1909, this interurban railway extended east as far as Morris, a distance of nearly 50 miles, and two years later connections were made to Joliet. Called the Chicago, Ottawa & Peoria Railway, the interurban built combination passenger stations and electrical substations using a standard design. For smaller towns or in rural areas, Illinois Traction built numerous wood-framed passenger shelters, also based on a standard design. Unfortunately, none of these shelters is known to have survived. The only remaining interurban passenger shelter in the Heritage Corridor is located east of Ottawa and is unlike the traction company's standardized buildings. Called the Douglas Passenger Shelter, it was built in the 1910s and used by the occupants of the Douglas farm. The stone structure may have been erected by the local farmer. By 1912 the interurban line connected with Joliet, permitting through electric rail service to Chicago. By the early 1930s passenger traffic had declined, and on May 14, 1934, the interurban made its final run. The line was subsequently abandoned and left to decay.

SOURCES:

See entry of Illinois Traction System: Minooka Passenger Station.

Illinois Traction System: Fox River Bridge

abandoned interurban line crossing the Fox River, Ottawa

RATING: 2

Construction Date: 1903

UTM: Ottawa Quad. 16 E.347060 N.4579280

DESCRIPTION: This bridge has rough-cut, coursed limestone piers and abutments, capped with poured concrete. With seven piers and two abutments, it is approximately 500 feet long. The superstructure consists of riveted steel plate girders which supported a single track.

HISTORY: As part of the Illinois and Michigan Canal, a timber aqueduct resting on stone piers was erected across the Fox River at Ottawa in about 1846-48. The tow path bridge, a timber structure supported on stone piers, extended along the south side of the aqueduct. In 1903, the stone piers were extended to the south to support the multiple steel plate girder spans of the Illinois Traction System's interurban line. It is likely that the concrete presently encasing sections of the piers was added at this time. Following the closing of the canal in 1933, the Civilian Conservation Corps carried out further work on the piers installing brick,

Interurban Railways

stone, and additional concrete to the wing walls and river piers. The interurban line ceased operation in 1934, and the bridge has been abandoned since. The aqueduct and interurban spans are presently in poor condition, the limestone of the piers has greatly deteriorated, and sections of the concrete have spalled. The Illinois Department of Conservation has begun to rehabilitate the old interurban bridge for use as a pedestrian walkway and as part of the I&M Canal State Trail.

SOURCES:

- A. Berle Clemenson, Illinois and Michigan Canal, National Heritage Corridor, Illinois: Historical Inventory, History, and Significance (Denver: National Park Service, 1985), 1-24, 38.
- "McKinley Syndicate Properties of Northern Illinois," Street Railway Review, v. 15, (March 15, 1905), 131-5.
- Mary Yeater Rathbun, The Illinois and Michigan Canal (State of Illinois, Department of Conservation, Division of Historic Sites, 1981), 35-7.
- State Public Utilities Commission of Illinois, Railroad Map of Illinois, 1916.
- U.S. Department of the Interior, Office of National Parks, Buildings and Reservations, State Park Emergency Conservation Work, Monthly Reports for Year 1934, prepared by Theo. M. Kingsbury, Project Superintendent, (available on microfilm, Roll #3, I&M Canal State Trail Archives, Morris, Illinois).

Illinois Traction System: Minooka Passenger Station

Minooka

RATING: 2

Construction Date: ca. 1916

UTM: Minooka Quad. 16 E.394530 N.4589750

DESCRIPTION: This brick building with a concrete foundation measures 73' x 23'. It contains brick load-bearing walls--rock-faced brick up to window-sill level, smooth-faced brick above window-sill level. A projecting bay at the north facade contains three windows. The low-pitched, hipped roof is covered with clay tile and contains decorative ridge tiles. Supported by a steel truss that spans about 23 feet, the roof has overhanging eaves, decorative brackets and cast iron molded gutters. The central tower has a hipped roof and is covered with tile; the east and west walls contain six circular openings originally constructed for receiving cables of the transmission line. This station was one of many substations in which electric power was converted from 33,000 volts to 600 volts for use on the traction system. Recent additions on the north side of the building include a concrete-block structure. The "Minooka" station sign on the south side of the building is now obscured by a "Dresden Machine Co." sign.



Photo 81. Illinois Traction System: Minooka Passenger Station (ca. 1916), Minooka.
Photo by Jet Lowe, HAER.

HISTORY: Construction of the Illinois Traction System's electrified rail line from Ottawa to Spring Valley, Illinois commenced about 1902. By 1909, the interurban reached eastward from Ottawa to Morris, a distance of nearly 30 miles. Interurban service to Chicago was established three years later when the line was extended to Joliet through Minooka and Rockdale. As with other passenger stations that were part of the Illinois Traction System, this one in Minooka was built according to a standard design. The Minooka passenger station also included a two-story section that contained a substation. Presently, only the Morris, Minooka, and Rockdale interurban stations remain standing. The Minooka Station has been occupied since the late 1950s by a light industrial firm.

SOURCES:

Brill Magazine, July 1915 (reprinted by the electric Railway Historical Society, ca. 1950).

"Building, Bridge and Track Standards of the Illinois Traction System," Engineering News, v. 65 (June 1, 1911), 648-52.

Interurban Railways

Chicago and Illinois Valley Railroad, Timetable, December, 1933.

Hilton, George W., and Due, John F., The Electric Interurban Railway in America (Stanford, CA.: The Stanford University Press, 1960).

"Joliet Extension of the Chicago, Ottawa & Peoria Railway," Electric Railway Journal, v. 38 (December 39, 1911).

Middleton, William, The Interurban Era (Milwaukee: The Kalmbach Publishing Company, 1961).

"Maintenance and Improvements on the Illinois Traction System," Electric Railway Journal, v. 33 (April 17, 1909), 716-23.

"McKinley Syndicate Properties of Northern Illinois," Street Railway Review, v. 15 (March 15, 1905), 131-5.

Sanborn Map Company, Joliet, Illinois (New York: The Sanborn Map Co., 1924).

State Public Utilities Commission of Illinois, Railroad Map of Illinois, 1916.

Illinois Traction System: Morris Passenger Station

Benton and Liberty streets, Morris

RATING: 2

Construction Date: ca. 1908

UTM: Morris Quad. 16 E.380880 N.4579900

DESCRIPTION: Measuring 73'-4" x 22'-6", this former interurban railroad passenger station and electric substation contains brick load-bearing walls and a concrete foundation. Its exterior is painted yellow (not its original color), and it has rock-faced brick up to the window sill level and smooth-faced brick above the window-sill level. The smooth-faced brick was originally buff-colored. A projecting bay at the north elevation contains three windows. The low-pitched, hipped roof is covered with clay tile and contains decorative ridge tiles. Supported by a steel truss that spans about 23 feet, the roof has overhanging eaves, decorative brackets and cast iron molded gutters. The central tower has a hipped roof and is covered with tile; the east and west walls contain six circular openings originally constructed for receiving cables of the transmission line. This station was one of many substations in which electric power was converted from 33,000 volts to 600 volts for use on the traction system. The station name "MORRIS" is enameled on the north side of the building. Two brick chimneys sit on the south slope of the roof.

HISTORY: As with other passenger stations that were part of William McKinley's Illinois Traction System, the one in Morris was built according to a standard design which included a passenger station and an electric substation. Stations similar to this one were also built in Ottawa, Marseilles, Seneca, Minooka and Rockdale. Presently, only the Morris, Minooka, and Rockdale interurban stations remain standing.

SOURCES:

See entry of Illinois Traction System: Minooka Passenger Station.



Photo 82. Illinois Traction System: Morris Passenger Station (ca. 1908), Morris.
Photo by Jet Lowe, HAER.

Illinois Traction System: Rockdale Passenger Station

Midland and Mound streets, Rockdale

RATING: 2

Construction Date: 1911

UTM: Joliet Quad. 16 E.407020 N.4594240

DESCRIPTION: This brick building with a concrete foundation measures 73' x 23'. It contains brick load-bearing walls--rock-faced brick up to window-sill level, smooth-faced brick above window-sill level. A projecting bay at the north facade contains three windows. The low-pitched, hipped roof is covered with clay tile and contains decorative ridge tiles. Supported by a steel truss that spans about 23 feet, the roof has overhanging eaves, decorative brackets and cast iron molded gutters. The central tower has a hipped roof and is covered with tile; the east and west walls contain six circular openings originally built for receiving cables of the transmission line. This station was one of many substations in which

Interurban Railways

electric power was converted from 33,000 volts to 600 volts for use on the traction system. Most of the original three-over-three-light double-hung sash windows are now covered with boards.

HISTORY: The Illinois Traction System erected this passenger station at Rockdale in 1911 as part of its line extension from Morris to Joliet. Serving the small industrial town of Rockdale, the station, like others on Illinois Traction's line, was constructed following a standard design and contained an electrical substation in the central three-story section. The interurban line crossed the Des Plaines River into Joliet just north of Rockdale. From Joliet the interurban ran to Chicago via Lockport, Lemont and Summit. Subsequently called the Chicago, Ottawa & Peoria Railway, the line continued in operation until about 1934 when it was abandoned. Presently two other passenger stations, identical to the one at Rockdale, remain standing.

SOURCES:

See entry of Illinois Traction System: Minooka Passenger Station.

Illinois Traction System: Utica Substation

Vine Street, west of Mill Street, Utica

RATING: 3

Construction Date: ca. 1904

UTM: LaSalle Quad. 16 E.331920 N.4578170

DESCRIPTION: This one story structure measures 15' x 15' and has a concrete foundation and brick load-bearing walls. The exterior contains textured, burgundy-colored brick walls topped by a cast stone water table and tan pressed brick walls. The flat roof is probably made of concrete. The building has two-over-two-light windows; a segmental brick arch forms lintels above each window opening. There is a metal door on the west side of the elevation. Parapet walls along the east and west facades contain cast stone coping. Ceramic insulators run through the east and west walls.

HISTORY: Around 1902 the Illinois Traction System, owned and operated by the McKinley syndicate, constructed an interurban line from Ladd, Illinois, south to Spring Valley, Illinois, then east to LaSalle-Peru and terminating in Marseilles. This substation building in Utica was probably erected about 1903. When the line was completed from Marseilles to Joliet via Seneca, Morris, and Minooka in 1911, the Illinois Traction System was reorganized as the Chicago, Ottawa & Peoria Railway. Many of the towns served by the line had passenger stations patterned along a standard design and employing electrical

substations. The substation in Utica is the only remaining interurban building of its kind in the Heritage Corridor. The interurban continued to run until 1934 when, faced with decreasing revenues and deteriorating facilities, the CO&P shut down its operations. The interurban buildings and structures were either razed, converted to other uses, or left to decay. Presently the substation in Utica is vacant.

SOURCES:

See entry of Illinois Traction System: Minooka Passenger Station.

Dellwood Park: Dams and Bridges

State Street and Park View Lane, Lockport

RATING: 2

Construction Date: 1906

UTM: Joliet Quad. 16 E.411300 N.4602700

DESCRIPTION: Dellwood Park in Lockport contains two reinforced concrete Ambersen dams and two reinforced concrete arch bridges. The lower dam is the larger of the two, measuring about 60 feet in length and 16 feet in height. The upper dam is about 40 feet long and 12 feet high. The bridges consist of three-centered concrete arch spans. One of them crosses a ravine and contains a single span of about 30 feet; the other bridge contains three spans, each about 30 feet in length, and crosses the reservoir created by the lower dam.

HISTORY: The Chicago & Joliet Electric Railway developed Dellwood Park at Lockport in 1904-1907, during the heyday of the traction company's operations in northern Illinois. A site along Fraction Run near its junction with the I&M Canal was acquired by the Chicago & Joliet Electric and construction commenced in 1906. The Ambersen Hydraulic Construction Company of Boston designed and built two small reinforced concrete Ambersen dams, the upper and lower dams, across Fraction Run. Created solely for recreational purposes and not for water supply, the artificial lakes were used for boating and skating. The larger of the two dams, the lower, featured a passageway for visitors to walk beneath the spillway. Electric lights, chairs, and plantings lined the passageway. In addition to the dams, the park contained a pavilion, a restaurant, and two reinforced concrete arch bridges. The American Railways Company designed the bridges, which were constructed by the Ambersen Company.

Interurban Railways

Dellwood Park was extremely popular in its early years, attracting on a summer weekend as many as 10,000 people from throughout the region. After the Chicago & Joliet Electric Railway was abandoned in the 1930s, the park was threatened by developmental schemes. However, the local government created the Lockport Township Park District to purchase and preserve the park. The park and several of its early structures remain intact.

SOURCES:

Howard S. Knowlton, "A Remarkable Dam at Dellwood Park, Ill.," Engineering Record, 55 (New York: 9 February 1907), 164-65.
"Lockport, Illinois: A Collective Heritage" (Lockport, IL: Bank of Lockport, 1980), 31.

UTILITIES

City of Chicago, Department of Public Works

3150 South Sacramento Avenue at Sanitary and
Ship Canal Collateral Channel, Chicago

RATING: 3

Construction Date: 1916

UTM: Englewood Quad. 16 E.441880 N.4631320

DESCRIPTION: The **Foundry** is a steel frame building with brick pilasters measuring 190' x 87'. It features twelve-over-eight lights, and the massive windows divide this structure into two distinct levels. A gabled ventilator shed rises above the flat roof and runs the length of the building. On the front facade is a concrete belt course just below the roof line.

The **Machine Shop** measures 190' x 150' and features large blocks of glass windows. It is currently used by the Fire Department to service and store equipment.

The **Warehouse** is a four-story structure which measures 280' x 80'. A concrete foundation supports a reinforced concrete frame and running bond brick curtain walls. There are two elevator shaft towers, placed asymmetrically, rising another story. The right front facade contains nine pairs of windows, glass blocked over, with a small cantilevered window in the center, while the left front facade has twenty-seven horizontal windows, also with glass-block and cantilevered window insets.

The **Water Meter Building** measures 200' x 60' and formerly served as the carpenter, pattern, and paint shop. A concrete foundation supports a four-story reinforced concrete frame with running bond brick curtain walls and a concrete belt course above the one-and-one-half-story main floor. It has a single elevator shaft in the southeast corner.

HISTORY: These facilities allowed the City of Chicago to consolidate the shops of the water, sewer, fire, police, and other service departments. All machine, carpenter, paint, and foundry work was performed at this location, and space was available for storage and administrative offices. The city was able to use these facilities to manufacture manhole covers, steel curbs, hydrants, and valves, and to repair fire, police, and public works construction machinery. The Collateral Channel allowed the city to dock and repair fireboats, tugs, scows, and other marine equipment.

Utilities

SOURCES:

City of Chicago, Bureau of Construction and Operation Division, Archives, (available at 320 Clark Street, Chicago).

C.C. Saner, "Chicago Has New Shop Plant for All Public Works," Engineering News, v. 75 (June 1, 1916), 1017-19.

City of Chicago,
Department of Public Works: Chicago Waterworks
South Ashland Avenue, Chicago

RATING: 3

Construction Date: 1923

UTM: Englewood Quad. 16 E.441890 N.46315302322

DESCRIPTION: The site consists of two steel-framed buildings, each two-and-one-half-stories in height. The two structures are connected by a one-story building. The facades are entirely opened by vertical windows, infilled with brick and glass block on the north and south facades. There are six-over-three lights, paired by mullions, on the east and west facades. Each building measures approximately 120' x 60' and rests on concrete foundations. The entrance door to the south building is framed with massive concrete surrounds with glass-block masonry rising to the architrave. Set in the cornice is a concrete block letter "Y" in a cartouche. Other ornamentation includes a series of belt courses and brick patterning.

HISTORY: While William Thompson was mayor of Chicago in the late 1920s, the city undertook a massive public works building program including the construction of this waterworks on Ashland Avenue. The buildings associated with the waterworks were designed by Charles W. Kallal, the City Architect, and supervised by Charles R. Francis, Commissioner of Public Works.

City of Chicago,
Department of Public Works: Machine and Repair Shop
3150 South Sacramento Avenue at the Sanitary and
Ship Canal Collateral Channel, Chicago

RATING: 3

Construction Date: 1914-1916

UTM: Englewood Quad. 16 E.441880 N.4631320

DESCRIPTION: The Machine and Repair Shop of the Department of Public Works comprises five buildings and several sheds located on a 950' x 505' lot along the Sanitary and

Ship Canal (to the south) and the former Sanitary and Ship Canal Collateral Channel, now a docking slip (to the west). All of the buildings are of reinforced concrete construction with brick walls. Among the most architecturally outstanding, the **Warehouse** (Building #4) contains four floors and a basement, and measures approximately 280' x 80'. A concrete foundation supports a reinforced concrete frame. The walls are of brick construction, and two elevator shaft towers rise five stories. The front and rear of the building have large service doors. A concrete belt course delineates the building above the first floor, and the building is lightly ornamented with horizontal and vertical bands of brick. The entrance to the administrative offices is on the west side. It contains starkly detailed brick pilasters and a projecting pediment.

HISTORY: These buildings were designed by Charles W. Kallal, Chicago City Architect, John Ericson, City Engineer, and M.R. Reynolds, Engineer of Waterworks Design. Building #1 continues to serve its original function as the **Foundry**, while Building #2, originally the **Machine Shop**, is currently used by the Fire Department. An adjacent **Blacksmith Shop** (Building #3) to the southeast of this structure has been torn down. Building #4, the **Warehouse**, continues to perform its original function with some space currently dedicated to offices. Originally serving as a **Carpenter, Pattern, and Paint Shop**, Building #5 now serves as the water meter building. Heat and electric power for the shop facility was originally furnished by a powerhouse of the House of Corrections, located on the west side of the Collateral Channel. (The Collateral Channel once linked the West Fork of the South Branch of the Chicago River to the Sanitary and Ship Canal. With the West Fork filled in, the Collateral Channel terminates at West 31st Street but continues to serve as a docking slip by agencies such as the fire department.)

The newest building on the site, a steel and brick structure, was erected in 1967. This facility has allowed the City of Chicago to consolidate the shops of the water, sewer, fire, police, and other service departments. All machine, carpenter, paint, and foundry work is performed at this location, with space available for storage and administrative offices. The city uses these facilities to manufacture manhole covers, steel curbs, hydrants, and valves, and to repair fire, police, and public works construction machinery. The Collateral Channel allows the city to dock and repair fireboats, tugs, scows, and other marine equipment.

SOURCES:

- City of Chicago, Bureau of Construction and Operation Division, Archives, (available at 320 Clark Street, Chicago, Illinois).
 C.C. Saner, "Chicago Has New Shop Plant for All Public Works," Engineering News, v. 75 (June 1, 1916), 1017-1019.

Utilities

Citizens Lighting Company: Powerhouse & Gas Works

200 River Street, LaSalle

RATING: 2

Construction Date: ca. 1900

UTM: LaSalle Quad. 16 E.324110 N.4576850

DESCRIPTION: Now occupied by the National Metalwares Company (a division of United States Steel Corporation), these one-, two-, and three-story brick buildings originally were part of the Powerhouse and Gas Works of the Citizens Lighting Company, a utility controlled by the Illinois Valley Railway Company.

The two-story **Office Building**, built ca. 1900, has a rectangular plan and contains: rubble limestone foundation walls; common-bond, load-bearing brick walls with iron tie-rods and star plates; a flat roof; brick parapet walls with terra cotta tile coping; and a corbeled brick cornice. The windows have been highly modified (largely infilled with brick), and brick arches span the window openings.

The old **Generator Room**, also built ca. 1900, contains a two- and three-story section (the third story was probably added in ca. 1920). The ca. 1900 sections are comprised of rubble limestone foundations and common-bond, load-bearing, brick walls. Several of the windows are covered with corrugated metal; two windows along the south facade, however, retain much of their original appearance, including steel frames and mullions, multi-light windows with large fanlights, and circular brick arches above the windows. The third-story section contains unornamented window openings framed by steel lintels, projecting brick belt courses at the base of the parapet walls, and a flat roof.

In addition, the remains of the old Gas Works, consisting of concrete pads which held the purifier tanks, are located east of the generator room.

A recently constructed one-story steel-framed building, long and rectangular in shape, extends off the west facade of the original office building. This addition houses much of the manufacturing equipment of National Metalwares.

HISTORY: Edward C. Hegler, one of LaSalle's zinc magnates, operated a glassworks on this site as early as the 1880s. To the north was the M. DeSteiger Glass Company, a bottle glass-making factory, begun about 1892. Nothing remains from these two early industrial concerns. Around 1903-04, the Illinois Valley Railroad Company, part of the McKinley syndicate, constructed a steam plant and a gas works on the site of the glassworks. Operated by the Citizens Lighting Co., a subsidiary of McKinley's Illinois Traction System, the Powerhouse consisted of a two-story red-brick building, and housed two steam engines and

generators, and one steam-turbine and generator unit. The largest engine and generator consisted of a vertical cross-compound Corlis steam engine driving a 1,000 kilowatt generator. The second was a cross-compound Williams steam engine and a 750 kilowatt generator. The turbine-generator unit had a much smaller capacity of 300 kilowatts. The company used the larger generators for the electric railway and the smaller one for commercial lighting in LaSalle. Interestingly, unlike its neighbor Peru, which had a municipally-owned powerhouse by the early 1900s, the City of LaSalle relied on the privately-controlled Citizens Lighting Company for its street-lighting needs.

By 1911, the Illinois Valley Railway Company (reorganized as the Chicago, Ottawa and Peoria Railway) had completed construction of a new hydroelectric plant in Marseilles. The Powerhouse of the Citizens Lighting LaSalle Company was retained as a standby plant for the interurban and also provided electric power for homes and businesses in LaSalle. Following the abandonment of the interurban railroad in the 1930s, the Powerhouse and Gas Works were operated by the Illinois Power & Light Corporation of Chicago. Presently, the site is occupied by National Metalwares Company, a subsidiary of U.S. Steel. Unfortunately, none of the steam engines or generators survives.

SOURCES:

Twentieth Anniversary Edition, The LaSalle Tribune, July, 1911: The Twin Cities, LaSalle and Peru in 1911 (LaSalle, IL: LaSalle Tribune, 1911), 83-5.

"McKinley Syndicate Properties of Northern Illinois," Street Railway Review, v. 15 (April 15, 1905), 230-31.

"Illinois Power & Light Corporation, Chicago, Illinois Valley Division, LaSalle Gas Plant & Power Station," blueprint dated 8 August 1925 (revised 22 December 1944), on file at I&M Canal State Trail Archives, Morris, Illinois.

Coal Products Manufacturing Company By-Products Plant

RATING: 2

north of Caton Farm Road, east of Route 53, Crest Hill (vicinity)

Construction Date: 1911

UTM: Joliet Quad. 16 E.409520 N.4602220

DESCRIPTION: Formerly a producer of coal by-products, this plant features four early 1910s buildings. This includes the original by-products building, a powerhouse, a pumping station, and an office.

Utilities

The former **By-products Building** is of steel frame construction with common-bond brick walls and measures 250' x 60'. It is two-and-one-half stories in height and contains a steel-truss monitor-roof. The windows feature segmental brick arches; however, many of the window openings have been infilled with brick or covered with corrugated fiberglass.

The two-and-one-half-story **Powerhouse** measures 220' x 80' and contains a steel frame, brick walls, and a concrete floor and foundation. The gable roof and monitor are composed of a riveted steel truss.

The one-story **Pump House** measures 25' x 25'. It is of brick construction and contains a double gable roof. The windows and doors feature concrete keystones.

The one-and-one-half-story **Office** measures 60' x 40' and contains brick walls and a hipped roof. One-over-one-light, double-hung sash windows are spanned by segmental brick arches.

HISTORY: The Coal Products Manufacturing Company began producing coke and coal gas (with by-product coke ovens) at this site in 1911. This plant was one of the first to build and use Koppers Company's by-product ovens in the United States, following the example set by Illinois Steel, located on the opposite side of the Des Plaines River. Bituminous coal from mines in central and southern Illinois was brought in by rail. About 1933 the Coal Products Manufacturing Company was reorganized as the Western United States Gas & Electric Company. The plant became the property of Northern Illinois Gas in 1956 and remained so until the mid- 1960s, when the property was acquired by the Commonwealth Edison Company. In the early 1970s Inter-Continental Alloys purchased the plant, and subsequently it was taken over by Alcan-Toyo American, the present owner.

SOURCES:

William T. Chambers, "A Geographical Study of Joliet, Illinois: An Urban Center Dominated by Manufacturing," unpublished Ph.D. dissertation, University of Chicago, 1926.

C.D. King, Seventy-five Years of Progress in Iron and Steel (New York: American Institute of Mining and Metallurgical Engineers, 1948).

Commonwealth Edison Company:
Crawford Avenue Electric Generating Station

RATING: 1

3501 South Pulaski Road at the Chicago Sanitary and Ship Canal, Chicago Construction Date: 1924-1925

UTM: Englewood Quad. 16 E.439950 N.4630730

DESCRIPTION: The largest structure at this seventy-two acre site is the **Powerhouse and Boiler Building**. This steel-frame and brick building measures 455' x 363' and is six stories high. The exterior walls are of common-bond brick construction, and the interior walls contain glazed, decorative white tile. The columns are encased in brick, and arched windows span between each bay. The building features a series of decorative motifs designed in an eclectic Gothic style. The 34.5 kv transmission towers are of reinforced concrete construction.

The **Switch House and Administration Building** adjoin the Powerhouse to the south. The Administration Building has a projecting main entrance framed by pilasters and a pedimented gable above the door. It is a brick and concrete building measuring 80' x 30' and containing a gable roof. (The original Administration Building, a one-story structure located at the main entrance to the plant, is currently being used as an employee lounge, but it is scheduled for demolition to provide additional parking space.)

To the east, the **Synchronous Condenser House**, constructed in 1939, has a steel frame, brick walls, and a concrete foundation. This two-and-one-half-story building measures 50' x 13' and contains a small one-and-one-half-story attached wing. It is lightly ornamented with a double belt-course of concrete above the windows. This building is no longer used.

The **Inlet Channel, Pumping Station, and Water Treatment Plant** draw water from the Chicago Sanitary and Ship Canal and are located south of the Powerhouse. There are several other small brick and block buildings nearby. A concrete-block shed housing a winch used for docking coal barges stands along the slip. In addition, a five-story coal crusher and inclined conveyor stands near the slip. It contains a steel frame with corrugated metal cladding.

A one-story **Guardhouse**, measuring 30' x 20' and constructed of brick, stands at the entrance to the site. This building also contains decorative motifs of terra cotta.

Since the 1940s there have been numerous alterations to the site. Major additions include a steel-frame coal-barge unloading crane, conical-shaped experimental garbage incineration structures, and emission control equipment mounted atop the Boiler Building.

HISTORY: The Crawford Avenue Electric Generating Station was designed by the prominent Chicago architectural firm of Graham, Anderson, Probst and White. The Powerhouse has two operating steam-turbine units with a capacity of 234 megawatts, and the adjacent boilers burn high-grade western coal. This plant generates approximately five percent of the total Commonwealth Edison output in Chicago. It and the Fisk Street Powerhouse are the last two major steam plants operating in Chicago. (The oil burning Ridgeland Ave. Electric Generating Station, built in the early 1950s, was located just south of the Metropolitan Sanitary District West-Southwest Treatment Plant on the Sanitary and Ship Canal. It has been demolished.)



Photo 83. Commonwealth Edison Co. Crawford Electric Generating Station (1924-1925), Chicago.
Photo by Jet Lowe, HAER.

SOURCES:

Crawford Station Archives, (available at Crawford Avenue Station, Chicago, Illinois).

"Crawford Station: One of the Great Electric Generating Plants that Serve Chicago," Commonwealth Edison Company, Chicago, Illinois, 1948, (not published).

"General Plan of Buildings and Property, Crawford-Station 13," Commonwealth Edison Company, Chicago, Illinois, June 13, 1965, (Drawing CR-21).

**Commonwealth Edison Company:
Fisk Street Electric Generating Station**

RATING: 1

1111 West Cermak Avenue, Chicago

Construction Date: 1903

UTM: Englewood Quad. 16 E.445720 N.4633000

DESCRIPTION: The Fisk Street Electric Generating Station consists of four large buildings, all of which contain reinforced concrete foundations, steel frames, and common-bond brick walls. The present **Powerhouse**, a seven-story building which measures 600' x 200', was constructed in 1959. Importantly, the original Powerhouse, erected in 1903, is attached to this newer building.

A pedimented gable rises from the parapet at the entrance to this building. The interior is white enameled tile adorned with decorative brass lamps. To the west is the **Administration Building**. This structure measures approximately 300' x 80', is three stories tall, has concrete belt courses at the foundation with two parallel belts at the architrave, and a gabled facade against a flat roof. It is flanked by a one-story building on each side. The detailing includes rusticated quoins, small two-over-two paired lights, and a large segmental arch door on the north face with concrete keystones. A large portion of the south elevation of the 1903 building was severely damaged in the early 1970s by a coal fire beneath the building. The structural steel is exposed, but the ruins do not appear to be in any danger of collapsing. This building has slightly canted corners and such decorative elements as rusticated quoins and pilasters and embellished pendrils. Large arched windows rise from the base for two-thirds of the building's height. A concrete foundation, above which is a wide concrete belt course, is broken by the windows, and a wide concrete line is below the cornice.

On the northernmost portion of the site is the 1940 **Switch House #2** and transmission terminal. This four-story structure measures 120' x 50' and is laid in rusticated red brick upon a 3-foot high concrete foundation with two oversized concrete entrances having

Utilities

rusticated concrete pilasters. The ornamentation refers to Classical design, but the motifs are stylized and the size is exaggerated. The building is symmetrical in plan with a slightly projecting central section. The doors are metal. The concrete cornice has a row of roof drains in square concrete orifices set 12" down. The building is of reinforced concrete construction. The maintenance building is directly behind the Switch house. This three-story building measures 200' x 80' and has a rusticated one-story base with a concrete belt course above the base. There is also a concrete cornice above the main block of windows. The main massing has tall arched vertical lights. All windows are broken by a wide concrete band. Directly behind the maintenance building are the 1903 buildings, all of which have been modified.

Switch Station #1 was built in 1920. The main massing is approximately 250' x 40' with an eastern attached brick barn measuring 30' x 15'. The building also has had projecting porticoes added as well as serial additions to the main plan. A rusticated base is defined by a concrete belt course. The facade is broken by segmental arch windows.

Windows from the top of the base rise in slender vertical columns to the top of this six-story structure. Windows are the same as the maintenance building, although the configuration varies with the use of single vertical segmentally arched windows. The top one-third of the building is defined by a wide steel beam which appears as a wide window transom. A thin concrete course is set across the brick facade on the base of the top story. The southern end rises an additional story which is broken by pairs of double hung sash windows. An elevator shaft rises above this line. A concrete cornice projects slightly from the building. Four of the arched windows have a concrete keystone. Attached to the southeast corner and extending forward is a four-story street-railway car barn. The pilasters are internalized to support an overhead traveling crane. This car barn contained a frequency changer which converted the 25 cycle direct current used by the railway to 60 cycle alternating current. The No. 1 Switch House contains some of the original electric equipment. Although no longer used, the building is in excellent condition. The grounds contain other smaller structures, including the original water intake system and filtration plants.

HISTORY: The Fisk Avenue Steam Plant was designed to contain fourteen turbo-generator units, each with a 5,000 kw rating. Only three units were initially installed. Electrical World identified the original vertical Curtis steam turbine as the "most powerful steam turbine in the world" and concluded that the installation of these turbines at the Fisk Avenue plant "marked a revolution in powerhouse design." These Curtis vertical shaft steam turbine generators were the first of this type used in the United States. They were 29 feet high and 16'-6" in diameter. (One of the original vertical Curtis turbines, designated an American Society of Mechanical Engineers landmark, is now in the Smithsonian Institution.) Eight boilers, arranged perpendicular to the turbines, provided the Curtis turbines with steam. This

turbine-boiler arrangement represented a departure from the conventional method of setting the boilers in a line parallel to the turbines. Each pair of boilers contains a stack 205 feet high. Coal brought in by railroad cars (barges are now used) was dumped into a hopper and fed directly to crushers and to each boiler. Three-phase AC current was generated at 9,000 volts, 25 cycles. The switch house was "divided into sections corresponding to the generating units, each section combining the bus bars, switch transformers, and recording instruments for the unit it served."

SOURCES:

American Society of Mechanical Engineers, Chicago: A Selection of Facts about the Metropolis of the West (Chicago, ASME, 1904), 43-47.

Richard S. Hartenberg, ed., National Historic Mechanical Engineering Landmarks (New York: ASME, 1979), 28-31.

"Commonwealth Electric Company's New Station," The Iron Age, v. 78 (July 26, 1906), 1999-205.

"Edison Service in Chicagoland," Fisk Street Station Operators Training Manual, Commonwealth Edison Company, Chicago, Illinois, Jan. 1976 (not published).



Photo 84. Commonwealth Edison Co. Fisk Street Electric Generating Station (1903), Chicago.

Photo by Jet Lowe, HAER.

Utilities

Samuel Insull, "Chicago Central Station Development 1892-1922 and Thereafter," Journal of the Western Society of Engineers, v. 28 (February 1923).

"Power Generation for the Electric Railways of Chicago," Electric Railway Journal, v. 40 (October 5, 1912), 567-569.

"Practical Operation of Fisk Street and Quarry Street Stations in Chicago," Electrical World, v. 53, (May 27, 1909), 1289-1294.

"20,000-KW Generators," Electrical World, v. 55 (March 17, 1910), 659-660.

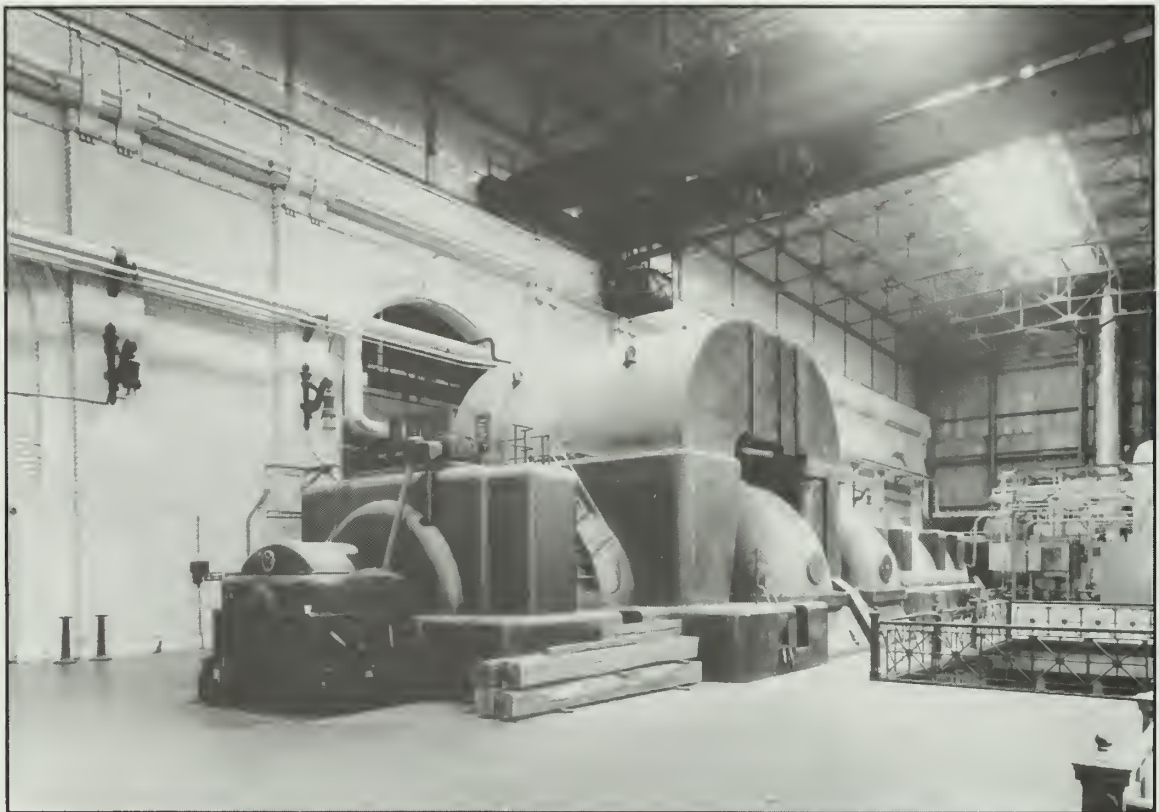


Photo 85. Commonwealth Edison Co. Fisk Street Electric Generating Station Interior (1903), Chicago.
Photo by Jet Lowe, HAER.

Commonwealth Edison Company: Office

2211 Throop Street, Chicago

RATING: 1

Construction Date: 1925

UTM: Englewood Quad. 16 E.445250 N.4633250

DESCRIPTION: This large building, facing Throop Street, was built in sections. Its most noticeable feature is the twelve-story tower, measuring 30' x 30', with Gothic detailing in the top lancet windows, which are framed by concrete bands. The main mass of the building measures 120' x 50' and is nine-and-one-half stories tall. It is used as an administration building. There is also a two-story, 60-foot wide, three-bay garage with bowstring truss roof; a three-and-one-half story, 40-foot wide work and maintenance shop; and a 180-foot wide, two-story, three-bay garage. The garage sections have a stepped parapet on the facades with bowstring truss roofs. Garage doors are flanked by pilasters capped by two heavy concrete cornices; the top makes reference to the Gothic detailing on the main facade. The total complex has a common-bond brick veneer on a concrete foundation. The building is of reinforced concrete construction. The walls have large banks of cantilevered windows.

HISTORY: Commonwealth Edison Company constructed this building to have a centralized location from which to handle the construction of new lines as well as the maintenance of existing services. The garages housed vehicles and supplies. The administration building was used for service related to electric lines.

SOURCES:Sanborn Map Co., Chicago, Illinois (New York: Sanborn Map Co., 1919-1951).

Interview with John Hogan, Commonwealth Edison, Chicago, Illinois, August, 1986.

Cosmopolitan Electric Company: Powerhouse

South Canal Street, Chicago

RATING: 3

Construction Date: ca. 1890

UTM: Englewood Quad. 16 E.446480 N.4633600

DESCRIPTION: This four-story brick building measures approximately 150' x 120' and has a concrete foundation that falls to the river line on the north side. The river side has canal ports and water intake structures (no longer used). The design is simple with little ornamentation. There is a brick parapet defined by projecting brick stringcourses and supported by brick corbeling. The windows have segmental arches with rows of headers

Utilities

above the arches. There are both two-over-two and three-over-three double hung steel sash windows, many of which have been infilled or altered. What appears to have been the original entrance was obviously modified to permit truck loading bays. These have been infilled with brick. There is one Tuscan column remnant, however, where the original entrance was located. A modern, one-story brick office building has been built on the east elevation. A one-and-one-half-story, triangular shaped building with a canted end has been built adjacent to an Illinois Central Railroad spur line. This is used for the storage and shipment of aluminum/zinc ingots.

HISTORY: Cosmopolitan Electric was one of a multitude of small electric companies in existence prior to the consolidation of these concerns by Samuel Insull's Commonwealth Edison Company in the 1920s. Cosmopolitan may have served as an independent electric power producer to Commonwealth Edison under Insull's ownership. By the 1930s the powerhouse was gutted and served as a warehouse. In 1969 the Allied Metals Company converted the building into a foundry.

SOURCES:

Chicago Guaranty Survey, 1966, (property of Allied Metals).

Interview with Marvin Fink, president, Allied Metals Co., August, 1986.

Manufacturing and Wholesale Industries of Chicago (Chicago: Thomas B. Poole Co., 1918).

Illinois Power Company:

RATING: 2

Marseilles Hydroelectric Plant

on north bank of Illinois River, ¼ mile west of Main Street, Marseilles

Construction Date: ca. 1911

UTM: LaSalle Quad. 16 E.356500 N.4576200

DESCRIPTION: The powerhouse measures approximately 210' x 50', with a transformer room to the north being approximately 70' x 50'. The two-and-one-half-story building contains a steel frame and brick walls, riveted steel Warren roof trusses, a concrete floor, and concrete foundations. The building features a hipped roof with terra cotta tiles, wide eaves, and multi-light, double-hung sash windows. The power plant houses four Westinghouse AC generator and James Leffel Company turbine units (three of the generators operated at 25 cycles per second, and one operated at 60 cps, all of which were rated at 256 kilowatts), operating under a maximum head of 15 feet. These generator-turbine units date from the original construction of the powerhouse.

In 1938, a fifth unit was installed consisting of a General Electric AC generator and Leffel turbine; the generator is rated at 300 kw and operated at 60 cps. The following year a sixth General Electric Company AC generator and Leffel turbine unit was added (the generator is rated at 250 kw, 60 cps). Finally, in 1942, a seventh General Electric AC generator and Leffel turbine unit was installed (the generator is rated at 450 kw, 60 cps). In addition, two DC Westinghouse exciters (dating from about 1911) and one motor-driven DC exciter (date unknown) remain in place. The power plant also houses a Westinghouse Company 60-cycle frequency changer that was operated in conjunction with the original turbine-generator units. Water was conducted from the Illinois River (at an intake above the Marseilles Dam) through a 2,400 foot-long canal to a forebay which measures 200' x 150' and is about 18 deep. Each turbine handled a maximum flow of 3,539 cubic-feet per second. The water was then discharged into the Illinois River. The powerhouse had a total output of two megawatts.

HISTORY: Beginning in 1902-3 the Illinois Traction System, owned and operated by the McKinley syndicate, constructed an interurban line that extended from Ladd, Illinois, south to Spring Valley, Illinois and east to LaSalle-Peru, Utica, Ottawa, and Marseilles. Operated as the Illinois Valley Railway Company, this electrified line was completed to Marseilles around 1905. The railway company obtained electric power from a steam plant in LaSalle that was operated by the Citizens' Lighting Company, another subsidiary of the Illinois Traction System.

When the line was completed from Marseilles to Joliet via Seneca, Morris, and Minooka in 1911, the Illinois Traction System operated this property as the Chicago, Ottawa & Peoria (CO&P) Railway. This early 1910s expansion of the CO&P included the construction of a low-head hydroelectric plant at Marseilles. Completed in 1911, this powerhouse superseded the LaSalle steam plant, although the latter facility was retained by the traction company as a standby plant. The original four AC Westinghouse Company generators and James Leffel Company turbine units operated at 25 cycles per second, under a maximum head of 15 feet. The plant generated power for both interurban and city lighting. The interurban railway remained in service until 1934 when, faced with decreasing revenues and deteriorating facilities, the CO&P shut down its operations. The Illinois Power & Light Company, originally a subsidiary of the Illinois Traction System, operated the plant, producing power for residences and businesses in Marseilles.

In the late 1930s Illinois Power & Light expanded the powerhouse by constructing an addition to the west and installing two AC General Electric generator and Leffel turbine units. A seventh AC General Electric Company and Leffel turbine unit was added in 1942, bringing the total capacity of the plant to about two megawatts. Three of the four original generator-turbine units remain in place (unit #7 has the original AC Westinghouse Company generator; however, it contains a newer Leffel turbine), as does the original Westinghouse frequency changer.

Utilities

Deeming it too antiquated for contemporary power generation needs, Illinois Power shut down the Marseilles Hydroelectric Plant in 1988. In June of the following year, the Department of the Interior, in conjunction with the Illinois Historic Preservation Agency, listed the structure on the National Register of Historic Places. A museum feasibility analysis is currently under way.

SOURCES:

Sanborn Map Co., Marseilles, Illinois (New York: Sanborn Map Co., 1898, 1907, 1913, 1929).

Historical Booklet Committee, Marseilles Sesquicentennial, 1835-1985 (Coal City, IL: Bailey Printing Co., 1985).

"McKinley Syndicate Properties of Northern Illinois," Street Railway Review, v. 15, (March 15, 1905), 131-135.

"Maintenance and Improvements on the Illinois Traction System," Electric Railway Journal, v. 33, (April 17, 1909), 716-723.

"Building, Bridge and Track Standards of the Illinois Traction System," Engineering News, v. 65, (June 1, 1911), 649-652.

George W. Hilton and John F. Due, The Electric Interurban Railways in America (Stanford, California: Stanford University Press, 1964).

State Public Utilities Commission of Illinois, Railroad Map of Illinois, 1916.

"Marseilles Hydro Plant," National Register of Historic Places Registration Form, (March 16, 1989).



Photo 86. Illinois Power Company: Interior of the Marseilles Hydroelectric Plant (ca. 1911). Photo by Joseph DeRose, HAER.

Joliet Gas Light Company: Office

101 Ingalls Avenue, Joliet

RATING: 3

Construction Date: 1903

UTM: Joliet Quad. 16 E.409740 N.459970

DESCRIPTION: This two-story limestone building measures 90' x 70' and has a flat roof. The windows have segmental arches and some have stone while others have concrete sills. Some windows have been blocked in while other are rectangular with awnings of glass blocks.

HISTORY: Stone for this building came from the Joliet State Penitentiary on Collins Street. The Joliet Gas Light Company started production of coal gas at this site in 1903 and continued producing until 1911. During the next 47 years, this company changed hands numerous times. Owners included Western United States Gas and Electric Company, Commonwealth Edison, and Northern Illinois Gas Company. In 1960 the Cowels Chemical Company bought the site. Stauffer Chemicals purchased the property in 1968.

SOURCES:

Stauffer Chemical Company, "Employee Handbook."

City of Lemont: Pumping Station

43 Stephen Street, Lemont

RATING: 2

Construction Date: 1891

UTM: Sag Bridge Quad. 16 E.416800 N.4614150

DESCRIPTION: The pumping station is a one-and-one-half-story building measuring about 50' x 30'. Constructed of ashlar limestone walls, it features a tall round-arched door and windows (now boarded up) and a corbeled limestone cornice with a limestone parapet wall.

HISTORY: Constructed in 1891, this building housed the city's pumping equipment as well as the two electric dynamos of the Lemont Electric Light & Power Company. The city operated two steam-powered Smith & Vaile compressors and one steam-powered Worthington pump. Water for domestic consumption was obtained from two wells, one 1,310 feet deep, the other 850 feet deep. By 1911, the electric power company had vacated the building, and the city was operating two electric-powered Fairbanks-Morse pumps, each with a capacity of 160 gallons per minute. The steam-powered Worthington pump was retained for emergency use, as were the adjacent boilers that provided it with steam. By

Utilities

1949 the village was operating a single electric-powered pump manufactured by the Peerless Machine Company of Racine, Wisconsin. This pump had a capacity of 265 gallons per minute and provided the city's reservoir, situated some 125 feet above the elevation of Main Street, with water. The reservoir had a capacity of 260,000 gallons. The city had removed the old boilers, the brick stack and, presumably, the old Worthington pump. In recent years the building has served as a storage facility for a private medical business.

SOURCES:

Sanborn Map Co., Lemont, Illinois (New York: Sanborn Map Co., 1886 and 1894).

Sanborn Map Co., Lemont, Illinois, v. H, in the series Chicago, Cook County, Illinois (New York: Sanborn Map Co., 1911 and 1949).

Lemont Area Historical Society, "[Lemont] Walking/Driving Tour," n.d., available at the Lemont Area Historical Society Museum, Lemont.

Metropolitan Sanitary District of Chicago: Lockport Hydroelectric Plant

RATING: 1

west side of Sanitary and Ship Canal adjacent to Lockport Lock, Lockport Construction Date: 1905-1907

UTM: Lockport Quad. 16 E.409880 N.4602240

DESCRIPTION: This rectangular building of concrete, steel, concrete block, and tile construction is 385 feet long, 70 feet wide, and 48 feet high. The front (south) elevation is divided into ten bays separated by rusticated pilasters with stylized Ionic capitals. Three arched factory windows with wire-glass and fan light are set in each bay. Three smaller square windows with a continuous sill are above each of the larger ones. The north elevation of the building faces the forebay and has only the smaller square windows exposed. The building's main entrance is centered at the west facade, and stairs at both sides of the structure lead to the north elevation. The hipped roof is clad with red tile. Architecturally, the building is formally treated in the classical Beaux-Arts tradition: concrete blocks give the appearance of limestone, dentils are set at the cornice line, and rusticated pilasters, as well as other architectural embellishments, adorn the building. The generating station also includes a triangular forebay, with a submerged fender wall consisting of concrete arches. The interior of the powerhouse has a steel truss roof, white glazed tile walls, and a concrete floor. Two vertical turbines connected directly to the vertical shaft generators still operate; three of the seven original horizontal shaft turbine generator units remain as back-ups. To the east of the plant are two movable dams. The first dam, built to control the level of the water in the forebay, is 48 feet wide and has a vertical oscillation of 12 feet. The second smaller dam

was used to dispose of ice. East of the two dams is the unused 130-foot long, 22-foot wide, and 34-foot deep Sanitary and Ship Canal lock with wooden gates.

HISTORY: The Lockport Hydroelectric Generating Station was completed in 1907 and placed in operation in 1908. The plant, built at the southern end of a 10,7000 foot extension of the Sanitary and Ship Canal, utilized the fall of approximately 34 feet between the original controlling works at Lockport and Joliet. The forebay supplied nine 65-foot long turbine chambers. The center chamber contained three 30" diameter, 300 rpm, 350 kw direct current exciters. Initially, only four horizontal turbine generator units were installed. Each turbine generator set included: a six runner, 54" diameter, Jolly McCormick Turbine Company horizontal turbine attached to a 163 rpm, 60 cycle, 3 phase, 4,000 kw Crocker-Wheeler Electric Company generator.

By 1910 two additional units had been added, bringing the station's generating capacity to 24,000 kw. Ultimately seven turbine generators were installed with two of the horizontal units subsequently replaced by direct-connected vertical shaft turbine generators operating at 163.5 rpm. The electricity generated at Lockport was originally transmitted thirty miles to a transformer house on the south side of the Sanitary and Ship Canal at Western Avenue in Chicago. A 44,000-volt transmission line was carried by galvanized steel towers, 60 feet high and spaced 350 feet apart. A U.S. Supreme Court ruling in the early 1930s reduced the diversion of Lake Michigan water from 10,000 to 3,000 cubic feet per second and, as a consequence, the number of turbines was reduced from seven to three. This reduction in electrical output precluded electrical service to Chicago, and instead, power was sold locally to Commonwealth Edison in Joliet. This powerhouse also generated power for the Illinois State Penitentiary at Joliet.

SOURCES:

"A New Lockport-Chicago Transmission Circuit," Electrical World, v. 55 (April 14, 1910), 923.

"Chicago Drainage Canal Power," Electrical World, v. 61 (January 18, 1913), 130.

"Chicago Sanitary District Hydroelectric Power," Electrical World, v. 55 (February 17, 1910), 391-392.

Interview with Michael P. Heiderscheidt, Metropolitan Sanitary District of Greater Chicago, Powerhouse Supervisor, Lockport, Illinois, July, 1986.

J. Seymour Currey, Chicago: Its History and Its Builders (Chicago: S.J. Clarke Publishing Co., 1912).

Description, Lockport Hydroelectric Generating Station, Metropolitan Sanitary District of Greater Chicago, (no date, not published).

T.T. Johnston, "Hydro-Electric Power Development At and Near Joliet," Journal of the Western Society of Engineers, (October, 1910), 295-325.

"Movable Crest Dams at the Water Power Development of the Chicago Drainage Canal," Engineering Record, v. 56 (August 24, 1907), 194-196.

"Power Plant of the Chicago Drainage Canal," Engineering News, v. 55 (January 18, 1906), 52-56.

"Proposed Additional Water-Power for Sanitary District of Chicago," Electrical World, v. 55 (March 31, 1910),

Utilities

800.

Isham Randolph, "The Sanitary District of Chicago A Review of 20 years of Engineering Work," Engineering News, v. 62 (July 22, 1909), 90-94.

Isham Randolph, "The Work of the Sanitary District of Chicago; Below the Controlling Works at Lockport," Journal of the Western Society of Engineers, (June, 1907), 514-534.

"Sanitary-District Electrical Service for Joliet Penitentiary," Electrical World, v. 60 (March 3, 1910), 508.

"The Central Station Business," Engineering Record, v. 62 (July 16, 1910), 59.

"The Movable Dams and Lock at the Power Plant on the Chicago Drainage Canal," Engineering News, v. 60 (November 12, 1908), 512-515.

"Utilization of Power from the Chicago Drainage Canal," Engineering Record, v. 58 (July 25, 1908), 89-90.

"Water Power Development on the Chicago Drainage Canal," Engineering News, v. 53 (January 12, 1905), 25-27.

"Water Power Development on the Drainage Canal at Lockport, Ill.," Engineering News, v. 50 (September 10, 1903), 212.

C. Arch Williams, The Sanitary District of Chicago: History of its growth and Development (Chicago: The Sanitary District of Chicago: 1919), 129-150.



Photo 87. Metropolitan Sanitary District of Chicago: Lockport Hydroelectric Plant (1905-1907), Lockport.
Photo by Jet Lowe, HAER.

**Metropolitan Sanitary District
of Chicago: Racine Pumping Station**

RATING: 1

east of 35th Street at the end of the South Fork
of the South Branch of the Chicago River, Chicago

Construction Date: 1930

UTM: Englewood Quad. 16 E.445380 N.4630350

DESCRIPTION: This large, rectangular brick building is approximately 200' x 100' and two-and-one-half to three-and-one-half stories high. Having the same design as the Southwest plant, it has a symmetrical facade on a concrete base three feet high. Flanked by two-story wings, the center portion projects three stories. There are concrete belt courses and brick pilasters with concrete caps rounded at the top. It has six-over-six light double-hung sash windows, with decorative metal spandrels between the windows. Above the top floor windows are decorative brick window hoods. There is a simple wood and glass door with flat concrete door surrounds. The side elevations have numerous cantilevered factory windows and unadorned spandrels between the windows. There is one service door. The building has a glazed yellow brick interior. A small powerhouse southwest of the main building measures about 20' x 10'. It has a simple exterior, with glass-block windows, and a recessed door. The east (river) side is lined with water intake and discharge valves.

HISTORY: This facility was built to control the flow of storm sewers and to prevent pollution of the South Fork of the South Branch of the Chicago River from the adjacent (and no longer existing) Chicago Union Stockyards. The Racine plant now connects to the deep tunnel reservoir system. When construction of the reservoir system is complete, this plant will be closed.

**Chicago Sanitary District
West and Southwest Sewage Treatment Works**

RATING: 1

Central Avenue and Pershing Road
north of Sanitary and Ship Canal, Stickney

Construction Date: 1927-1928, 1930s

UTM: Englewood Quad. 16 E.435300 N.4630080

DESCRIPTION: Western Plant: All of the structures at the Western plant contain a great deal of architectural ornamentation and are visually unified through the use of consistent motifs.

Utilities

The four-story **Pumping Station** measures 400' x 100' and contains a foundation walls, a steel frame, and brick walls. The pumping station receives raw sewage, then skims and pumps it into the adjacent Imhoff tanks. The building features a central projecting section, flanked by two symmetrical wings, each three stories in height. The main entrance contains decorative concrete surrounds and the main facade contains large multi-light windows.

There are three batteries of **Imhoff Tanks**, each of which has a central ejector house and two valve houses. The two-and-one-half-story ejector houses measure 60' x 30'. Battery "A" and "B" valve houses measure 100' x 30' and are two-and-one-half stories in height. The valve houses for Battery "C" measure 40' x 20' and are also two-and-one-half stories in height. The design motifs, materials, and form are the same as the pumping station. The houses have glass-block windows, with some being smaller than the original ones. The interiors of the three houses are yellow glazed brick and they have metal doors. The ejector house pneumatically ejects sludge. The Imhoff tank batteries pump the sewage to settling tanks in the field behind them. Gravity separates the heavy sludge from the water.

The **Grit Chamber** is a two-story brick building with a steel frame and measures 250' x 120'. In the grit chamber, suspended materials are removed by a series of rotating screens on a conveyor system. The building is not as ornate as the adjacent pumping station. It features glass-block windows and projecting central doors on the front and east facades.

The **Transformer House** is a two-story brick building, flanked by two wings. It retains much of its original appearance with multi-light glass-block windows, a wooden double-door with six-over-six-light windows, and lamp pendants.

The **Railway Terminal and Shop** is a large two-story brick building with eight bays and a one-and-one-half-story wing. It measures 150' x 60' and features large multi-light windows and starkly ornamented brick pilasters.

The **Polymer Injection Tower** is octagonally shaped and is four-and-one-half-stories tall. Small plastic pellets are gravity fed and mixed with the sludge from the settling tanks in order to give a thicker consistency to the sludge prior to pumping to adjacent drying fields. Sludge is then removed by train to fields adjacent to the Stevenson Expressway (I-55) at Justice, Illinois.

Southwest Plant: The Southwest plant differs from the Western plant in that the processing is centralized in one building.

The Southwest plant is a large processing building approximately ten to twelve stories in height and measuring approximately 1,500' x 500'. The aerobic fields are located at this site,

and the building houses gas-fired dryers for sludge processing. The cost proved excessive and now air drying is used entirely. The section of the building housing the gas dryers is to be torn down. The design of the plant is visually unified with streamlined Art-Moderne motifs. The plant features wide concrete belt courses and rows of short cantilevered factory windows. A two-story brick addition, erected in the 1950s, adjoins the plant and serves as administrative offices. Two tank batteries, also featuring a streamlined brick and concrete design, each measures 1,200' x 100', and are 15 feet high.

HISTORY: The Chicago Sanitary District was created in 1889 to stop the pollution of Chicago's source of drinking water: Lake Michigan. The Sanitary and Ship Canal, opened in 1900, diluted sewage and channeled it away from Lake Michigan into the Des Plaines and, ultimately, the Mississippi rivers. As the volume of sewage increased, the Chicago Sanitary District tested, developed, and built treatment plants. Built to centralize Chicago's sewage treatment, this far-sighted development created plants capable of handling Chicago's sewage and waste water for the next eighty years. Today the district serves 860 square miles, six million people, and an industrial load equal to 4.5 million people, processing 1.3 billion gallons of waste per day (1973). The effluent waste processed by the 1930 addition is ninety-eight percent pure. To prevent overflow from Chicago's combined storm drain and sanitary sewer system from escaping treatment, 120 miles of conveyance tunnels, covering a 375 square mile drainage area, are being bored 250 feet beneath the surface. During heavy rainfall, these tunnels hold the storm drain and sanitary sewer overflow until it can be pumped to the West and Southwest treatment plants for processing.

SOURCES:

- Louis Cain, Sanitary Strategy for a Lakefront Metropolis - The Case of Chicago (DeKalb, IL: Northern Illinois Press, 1986).
- Chicago Department of Public Works, Chicago Public Works: A History (Chicago: Rand McNally Co., 1973).
- "New Trends in Sludge Disposal," Engineering News-Record, v. 115 (October 10, 1935), 519.
- William H. Trinkaus, "The Southwest Sewage Treatment Works," Civil Engineering, v. 9 (May, 1939), 285-288.
- "West Side Sewage-Works Construction at Chicago," Engineering News-Record, v. 100 (March 1, 1928), 344-350.
- L.C. Whittemore, "Chicago Starts Work on Fourth Largest Sewage Plant," Engineering News-Record, v. 115 (August 8, 1935), 186-88.
- C. Arch Williams, The Sanitary District of Chicago: History of its Growth and Development (Chicago: Sanitary District of Chicago, 1919).

Utilities

Ottawa Gas Light & Coke Company: Gas Works

south of Main Street east of the C B & Q RR tracks, Ottawa

RATING: 3

Construction Date: ca. 1885

UTM: Ottawa Quad. 16 E.345530 N.4578440

DESCRIPTION: Only part of one building survives, a two-story brick structure with a gable roof and terra-cotta tiles (covered with tar), and a stone foundation. None of the gas holders is extant.

HISTORY: Formerly L-shaped, the Ottawa Gas Light & Coke Company building once housed three steam engines, the retorts of which were used for cooking the coal. A wood-framed building, located south of the L-shaped building, was used for storing coal. The company operated two cylindrically-shaped steel gas holders, one located north and the other located south of the L-shaped building. The Chicago, Burlington & Quincy Railroad had a spur line running off its main tracks into the gas plant. Located east of the Ottawa Gas Light & Coke Company was the large Ottawa Hydraulic Basin and the factory of the Pioneer Fireproof Construction Company. A 1927 Ottawa Chamber of Commerce publication noted that the Public Service Company of Northern Illinois was operating a carburetted water gas manufacturing plant (this operation probably superseded the Ottawa Gas Light & Coke Co.) and was producing gas for Marseilles, Seneca, and Morris.

SOURCES:

Ottawa Industrial Survey (Ottawa, IL: Ottawa Chamber of Commerce, 1927), 21.

Sanborn Map Co., Ottawa, LaSalle County, Illinois (New York: Sanborn Map. Co., 1888, 1891, 1989, and 1907).

Interview with Mr. Leonard Lock, an Ottawa resident, July, 1985.

City of Ottawa: Waterworks

East Norris and Champlain Road, Ottawa

RATING: 2

Construction Date: ca. 1892

UTM: Ottawa Quad. 16 E.346980 N.4579750

DESCRIPTION: The pumping station is a one-and-one-half story brick building measuring 65' x 50' and featuring a one-story oriel with a conical roof at the south (main) facade. The pumping station houses three electric-powered compressors. Adjacent to the pumping station are two covered reservoirs; the north reservoir has a 400,000 gallon capacity, and the south reservoir has a 675,000 gallon capacity.

HISTORY: Prior to the construction of this pumping station and the adjacent reservoirs, the City of Ottawa maintained a reservoir in Washington Square supplied by an artesian well. The reservoir had a capacity of 4,500 bushel barrels, and water was distributed with a Worthington steam-forced pump which was housed in a small pumping plant on Jackson Street. About 1892, a new pumping station and reservoir were constructed near the Fox River, at the corner of East Norris and Champlain Road. This pumping station housed one Ingersoll Rand air compressor and two Worthington duplex compound pumps. The compressor and pumps were steam powered. Water for the adjacent reservoir was obtained from six artesian wells. By 1913 a second reservoir, just south of the existing one, had been constructed. A 16" pipe served as the city's domestic supply. The original steam-powered pumps and compressor have been replaced with electric-powered pumps. The pumping station, however, retains its 1890s appearance.

SOURCES:

Sanborn Map Co., Ottawa, Illinois (New York: Sanborn Map Co., 1891, 1898, 1913, and 1925).

Peoples Gas Light & Coke Company: Gasification Plant

RATING: 2

Crawford and Pulaski avenues

north of the Sanitary and Ship Canal, Chicago

Construction Date: 1921

UTM: Englewood Quad. 16 E.439230 N.4630510

DESCRIPTION: These four buildings were once part of the Peoples Gas Light and Coke Company and gasification plant.

Transformer House: This one-and-one-half-story brick building measures 40' x 20' and has large glass-block windows.

Pumping Station: This one-and-one-half-story brick building measures 30' x 30'.

Two other buildings include a four-story steel-framed structure with brick walls and a monitor roof, and a three-story steel-framed and brick building measuring 40' x 20'.

HISTORY: In 1921 the Koppers Company built this combination coal and water gasification plant on a 200-acre site. Its cost was \$18 million. Though Peoples Gas Company acquired the plant in 1928, Koppers continued to operate it as the Chicago By-

Utilities

Products Coke Corporation. About ten years later Peoples Gas assumed direct operation. When natural gas piped in from the south and southwest became available in the 1930s, coke oven gas became less important. By 1956 the coal gasification plant was discontinued. The original installation consisted of two batteries of fifty Koppers ovens, each with a capacity of 12.5 tons of coal. The water gas plant had a capacity of twenty-six million cubic feet of gas per day, while the coal gas plant produced fourteen million cubic feet each day.

SOURCES:

Peoples Gas Club News (Chicago: Peoples Gas Company, various issues from the 1920s; available at Peoples Gas Light and Coke Company headquarters, Chicago, Illinois).
J.I. Thompson, "Engineering Features of Chicago's New Gas Plant," Journal of the Western Society of Engineers, v. 27 (September, 1922), 267-278.

City of Peru: Powerhouse

1415 Water Street, Peru

RATING: 2

Construction Date: ca. 1924

UTM: Spring Valley Quad. 16 E.322150 N.4576680

DESCRIPTION: The powerhouse is comprised of three sections. The west (1924) and central (1926) sections have brick, load-bearing walls set in common bond, upon a raised foundation. The main facade of each section has three, large, semi-circular arches set with multi-paned industrial windows. Each section contains a flat roof with parapet walls and concrete coping. East of the central section, the city erected a large addition in 1958. This steel and brick building replaced an earlier powerhouse erected about 1888.

HISTORY: The first electric plant on this site was built in 1883 and expanded in the late 1880s. By 1924 the City of Peru Department of Public Works was operating a municipal plant and extended the existing powerhouse to the west. A third section was erected two years later. The late 1880s wing of the powerhouse was torn down in 1958 and a new building constructed. This addition was designed by Minneapolis engineers, Pfeiffer and Schultz.

SOURCES:

Sanborn Map Co., Peru, Illinois (New York: Sanborn Map Co., 1888, 1892, 1897, 1909, 1916, and 1926).
Twentieth Anniversary Edition, The LaSalle Tribune, July, 1911: The Twin Cities, LaSalle and Peru in 1911 (LaSalle, IL: LaSalle Tribune, 1911).

City of Peru: Water Plant No. 1

1401 Water Street, Peru

RATING: 2

Construction Date: 1933

UTM: Spring Valley Quad. 16 E.322150 N.4576680

DESCRIPTION: This one-story structure built for the City of Peru waterworks consists of a steel and brick building resting on a concrete foundation. It contains a flat roof and a pedimented parapet with the inscription "1933" set into a circular concrete panel. The three-bay south (main) facade has three large, multi-light windows with awnings. Lettering above the door reads: "PERU WATER PLANT NO.1". A second story rises to the rear (north). A water tank of clay tile construction and containing a steel frame adjoins the east facade. A steel-framed, corrugated-metal-clad utility building adjoins the Peru Municipal Electric Department to the west. Both of these facilities are located in Peru's earliest commercial area overlooking the Illinois River.

HISTORY: Housing the controls for the City of Peru waterworks and water softening plant, this structure was erected in 1933 and remains in service. It is located in an industrial area along Water Street, near the city's electric powerhouse.

SOURCES:

Sanborn Map Co., Peru, Illinois (New York: Sanborn Map Co., 1888, 1892, 1897, 1909, 1916, and 1926).

**Public Service Company of Northern Illinois:
Electric Generating Station No. 9**

Patterson Road south of Brandon Road, Joliet

RATING: 2

Construction Date: 1916

UTM: Elwood Quad. 16 E.406350 N.4593250

DESCRIPTION: The powerhouse is of steel-frame construction, rises eight stories high, and measures approximately 350' x 240'. It contains concrete-block walls and a common-bond red-brick exterior. The building is lightly ornamented with decorative pilasters and capped with parapet walls, a brick string-course trimmed with limestone, and a number of windows framed by large circular arches. The interior houses the original turbines, generators, and exciters, and is lined with glazed white brick. A number of steel-framed additions adjoin the powerhouse.

Utilities

A locomotive shed, constructed in 1927, stands near the powerhouse. It is a two-story building measuring approximately 85' x 25' and containing a steel-frame, brick walls, and a concrete foundation. It was used by the company-owned locomotive which hauled coal and heavy machinery within the plant.

HISTORY: Constructed by the privately-owned Public Service Company of Northern Illinois in 1916, the original powerhouse at Station No. 9 was the first central steam plant in the Joliet area. These buildings were designed by Von Holyst and Fyfe, Chicago architects. Although no longer used, the original horizontal turbine-generator units are still in place. The Public Service Company eventually merged into Commonwealth Edison.

SOURCES:

Interview with Willard O. Hiles, Commonwealth Edison Station No. 9, August, 1986.
Public Service Company of Northern Illinois, original engineering and architectural drawings of Station No. 9, dated April 20, 1916. (available at the Commonwealth Edison Station No. 9, Joliet, Illinois).

Public Service Company of Northern Illinois: Jackson Street Substation

50 Jackson Street, Joliet

RATING: 3

Construction Date: 1939

UTM: Joliet Quad. 16 E.409900 N.4598880

DESCRIPTION: This three-story building measures 90' x 75'. Of steel-frame construction, it contains brick walls with decorative brickwork and tile panels. The building rests on a concrete foundation.

HISTORY: In 1939 the Public Service Company of Northern Illinois erected this substation on Jackson Street in Joliet. The three-story brick building retains much of its original appearance. The Commonwealth Edison Company acquired Public Service in the early 1960s and continues to operate the Jackson Street Substation.

SOURCES:

William T. Chambers, "A Geographical Study of Joliet, Illinois: An Urban Center Dominated by Manufacturing," unpublished Ph.D. dissertation, University of Chicago, 1926.
"Electric Service in Chicago Suburbs," Electrical World, v. 61 (June 7, 1913), 1243-54.

APPENDIX A

During its fieldwork in the Illinois & Michigan Canal National Heritage Corridor, the Historic American Engineering Record made measured drawings of four structures. These drawings are included in this Appendix as a part of the record.

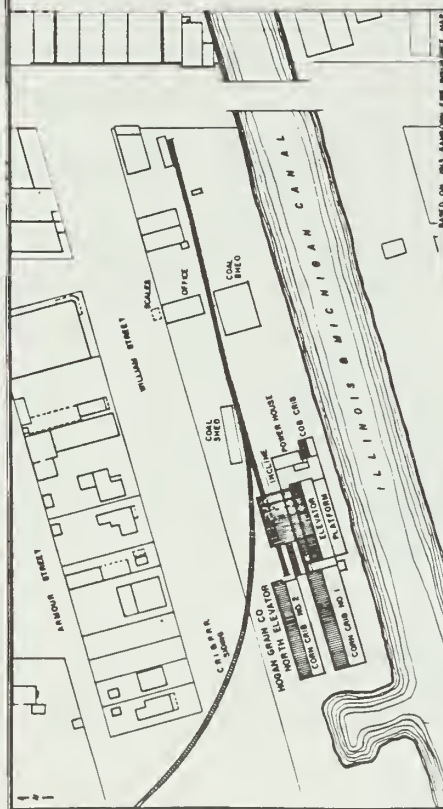
The four structures are:

Armour's Warehouse (Hogan Grain Elevator), Seneca, Illinois, pp. 376-381.

Illinois Central Railroad: 1857 Freight Depot, LaSalle, Illinois, pp. 382-384.

Ottawa Silica Company Mill "C" Complex, Ottawa, Illinois, pp. 385-395.

Rutherford Barn, Minooka, Illinois, pp. 396-399.

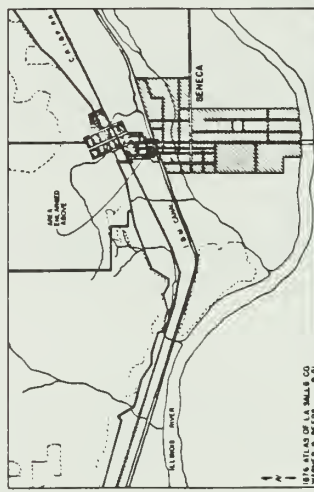


ARMOUR'S WAREHOUSE

(HOGAN GRAIN ELEVATOR)

DOCUMENTATION OF THREE STRUCTURES IN THE ILLINOIS AND MICHIGAN CANAL NATIONAL HERITAGE CORRIDOR WAS UNDERTAKEN BY THE HISTORIC AMERICAN BUILDINGS SURVEY/HISTORIC AMERICAN ENGINEERING RECORD (HABS/HAER), A DIVISION OF THE NATIONAL PARK SERVICE, IN THE SUMMER OF 1987. THESE CANAL-RELATED STRUCTURES WERE IDENTIFIED AS SIGNIFICANT BY PREVIOUS SURVEYS CONDUCTED BY HABS/HAER IN THE I.O.M. CANAL CORRIDOR. UNDER THE GENERAL DIRECTION OF ROBERT KAPSCH, CHIEF OF HABS/HAER, THE PROJECT WAS MANAGED BY HISTORIAN ALISON A. HOAGLAND AND DIRECTED BY ARCHITECT JOHN A. BURNS, AIA. THE FIELD WORK WAS UNDERTAKEN BY ARCHITECTURE TECHNICIANS SUSAN E. KEIL (UNIVERSITY OF HOUSTON), FOREMAN ELLEN F. STONER (UNIVERSITY OF ILLINOIS), OLBERT E. WITTE (UNIVERSITY OF ILLINOIS), AND HISTORIAN DAWN E. DENSING (UNIVERSITY OF NORTHERN ILLINOIS).

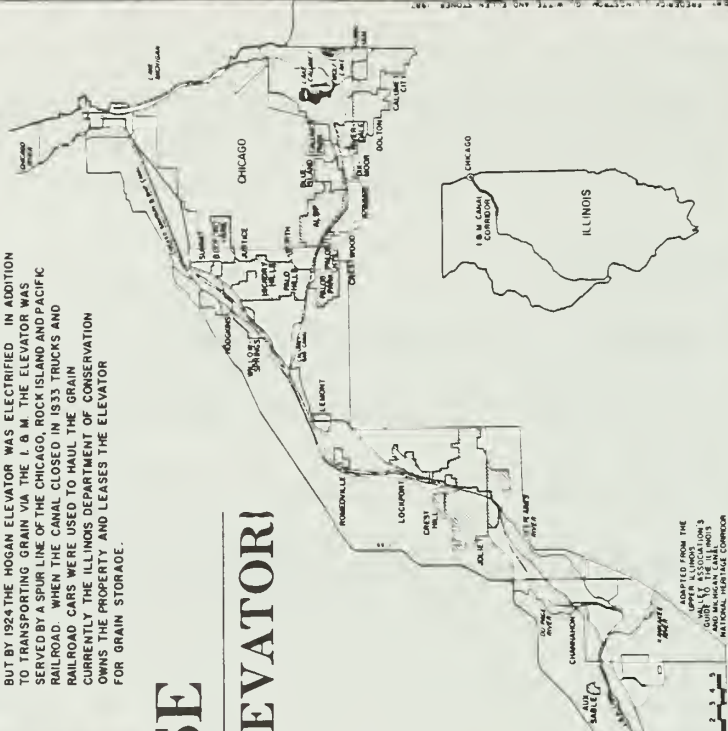
THE DRAWINGS WERE EDITED BY FREDERICK J. LINDSTROM (VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY)

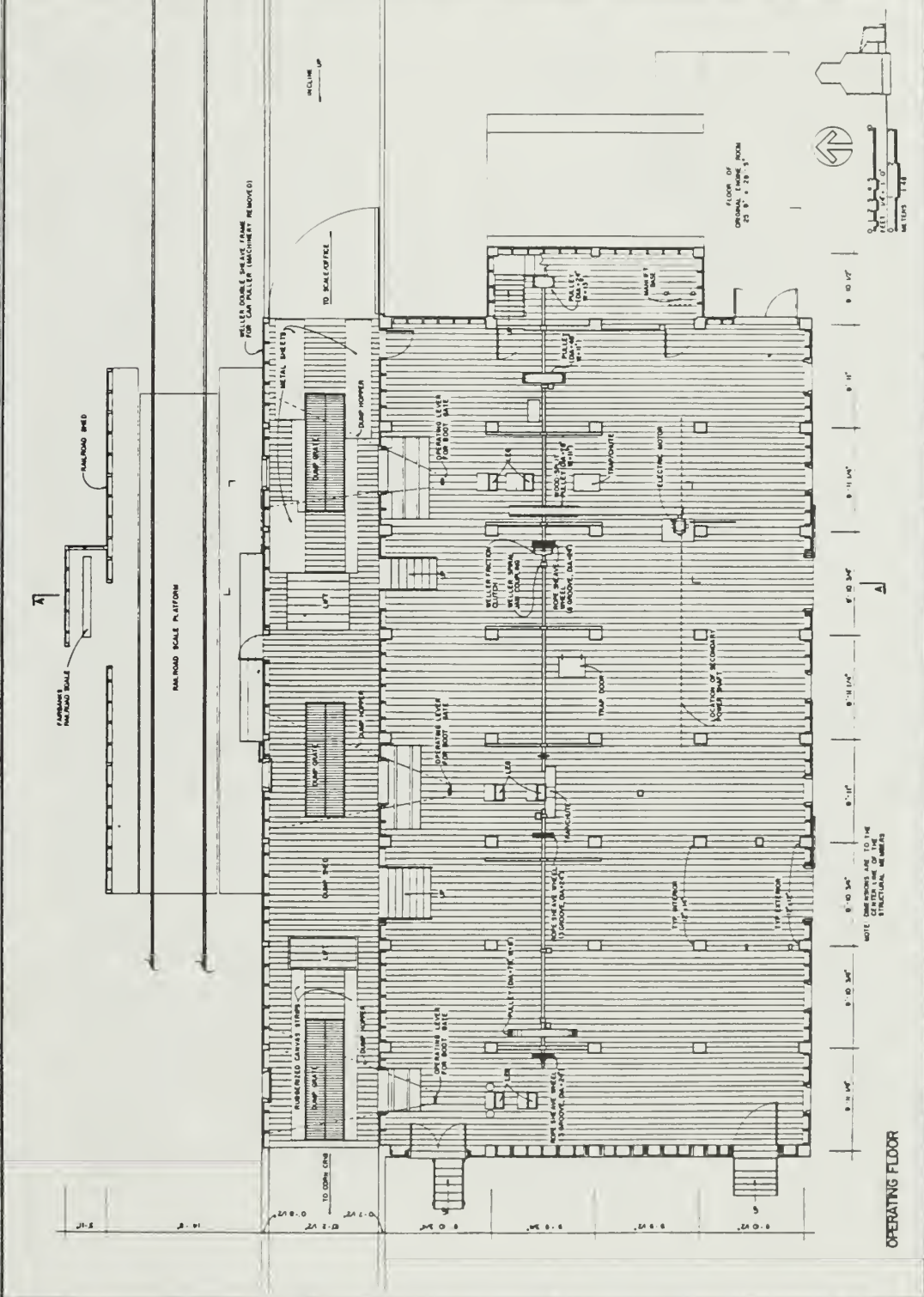


UPON THE COMPLETION OF THE ILLINOIS AND MICHIGAN CANAL IN 1848, THE MAJOR PRODUCTS SHIPPED ALONG THE WATERWAY INCLUDES LUMBER, LIVESTOCK, WHISKEY AND GRAIN. FROM CHICAGO TO PERU, ILLINOIS, WAREHOUSES AND GRAIN ELEVATORS WERE ERRECTED ALONG THE I.O.M. - PRIMARILY IN THE CANAL TOWNS. MUCH OF THE CANAL'S GRAIN TRAFFIC WAS DIRECTED TO CHICAGO WHICH WAS SOON TO BECOME THE MIDWEST'S COMMERCIAL CENTER BY THE 1870S GRAIN ELEVATORS LINED THE BANKS OF THE CHICAGO RIVER'S SOUTH BRANCH ELEVATORS ALONG THE I.O.M. STORED LOCALLY PRODUCED GRAIN WHICH WAS SHIPPED TO CHICAGO'S TERMINAL ELEVATORS, THEN TRANSPORTED BY BOAT VIA THE GREAT LAKES OR BY RAIL TO EASTERN MARKETS.

ARMOUR'S WAREHOUSE, ERRECTED IN 1861-62, IS THE EARLIEST REMAINING GRAIN ELEVATOR ALONG THE CANAL. JOHN ARMOUR, ITS BUILDER, AND THE ARMOUR FAMILY OPERATED OR LEASED THE ELEVATOR UNTIL 1873. AFTER PASSING THROUGH SEVERAL HANDS, THE BUSINESS WAS PURCHASED BY MARTIN HOGAN IN 1886. AS WAS COMMON IN MOST OF THE ILLINOIS VALLEY'S ELEVATORS, THE HEAVY TIMBER FRAME STRUCTURE CONTAINED A STEAM-POWERED CORN SHELLER AND CLEANER. THE HOGAN FAMILY APPEARS TO HAVE DEALT PRIMARILY IN CORN AND OATS, OPERATING A VACTOR CORN SHELLER AND CLEANER AND AN EXCELSIOR OAT CLIPPER AND SEPARATOR THROUGHOUT THE LATE 19TH AND EARLY 20TH CENTURY. THIS MACHINERY AND CONVEYING MECHANISMS WERE STEAM-POWERED.

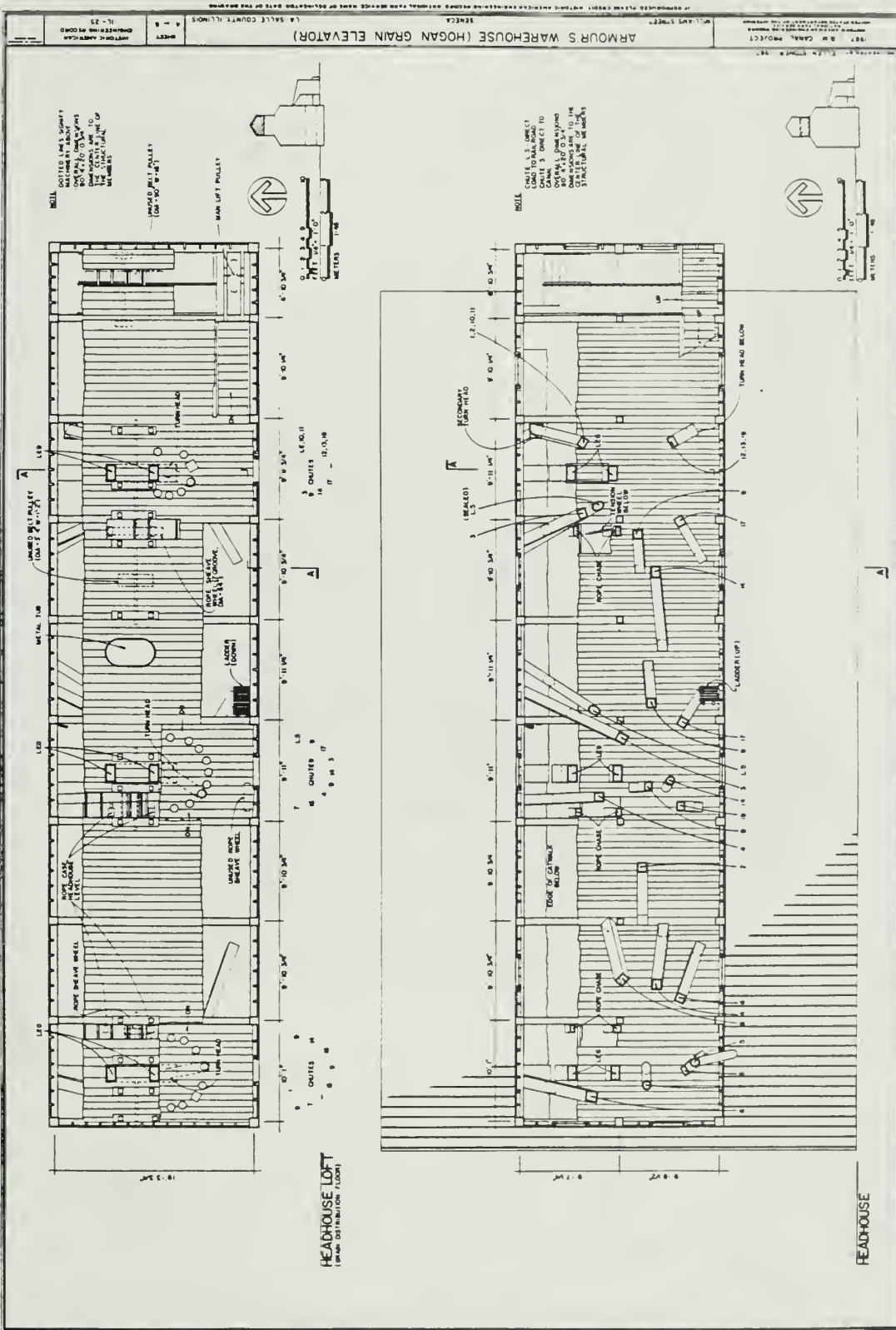
BUT BY 1924 THE HOGAN ELEVATOR WAS ELECTRIFIED. IN ADDITION TO TRANSPORTING GRAIN VIA THE I.O.M. THE ELEVATOR WAS SERVED BY A SPUR LINE OF THE CHICAGO, ROCK ISLAND AND PACIFIC RAILROAD. WHEN THE CANAL CLOSED IN 1933 TRUCKS AND RAILROAD CARS WERE USED TO HAUL THE GRAIN. CURRENTLY THE ILLINOIS DEPARTMENT OF CONSERVATION OWNS THE PROPERTY AND LEASES THE ELEVATOR FOR GRAIN STORAGE.





HISTORIC AMERICAN CONSTRUCTION RECORD 17 - 25	3 - 6 6-27
---	---------------

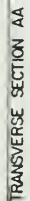




APPROVED FOR RELEASE BY NSA

60" x 7 1/2" | HEADHOUSE DRIVE SHAFT 4

- NOTES:

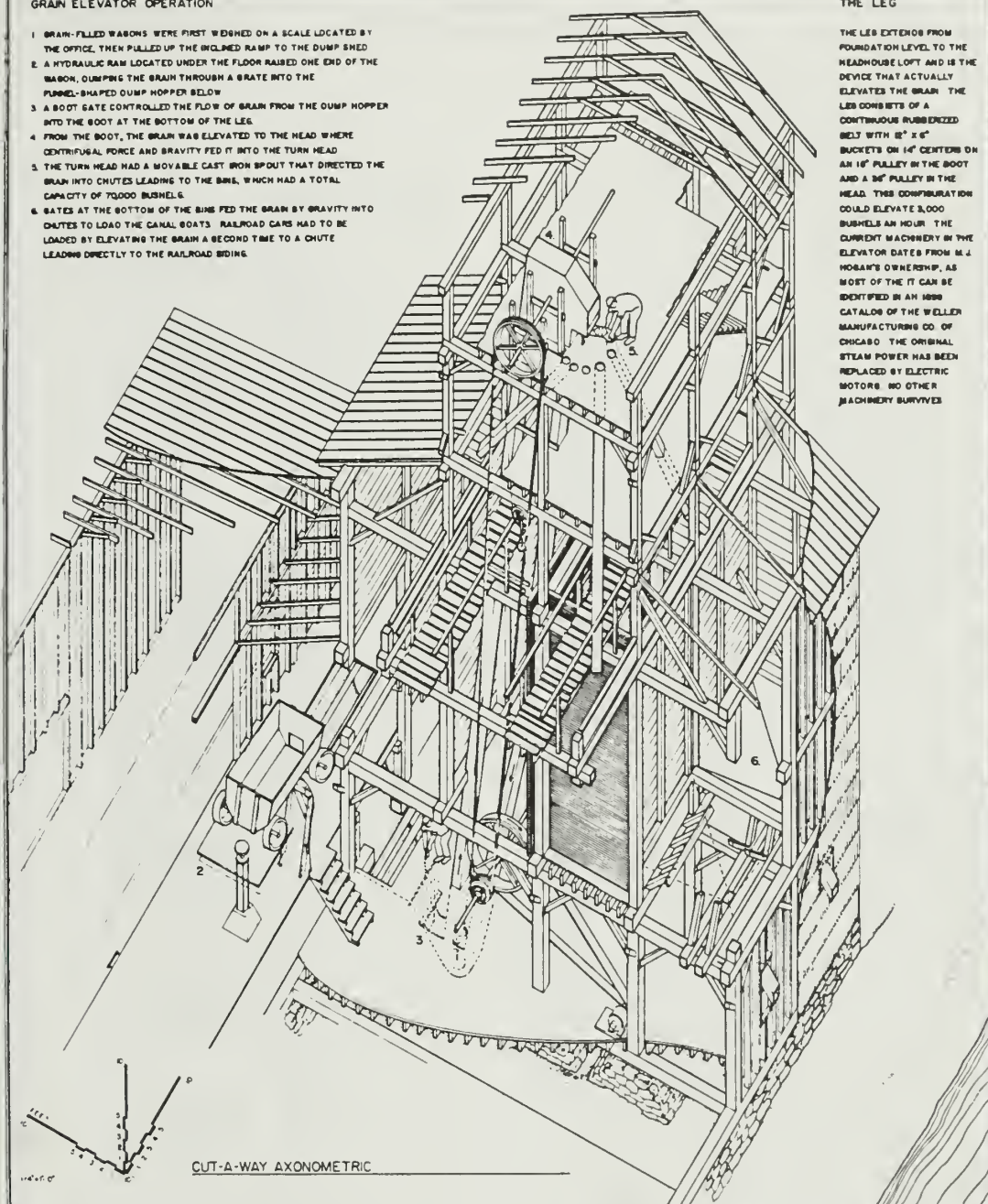


GRAIN ELEVATOR OPERATION

- 1 GRAIN-FILLED WAGONS WERE FIRST WEIGHED ON A SCALE LOCATED BY THE OFFICE, THEN PULLED UP THE INCLINED RAMP TO THE DUMP SHED
- 2 A HYDRAULIC RAM LOCATED UNDER THE FLOOR RAISED ONE END OF THE WAGON, DUMPING THE GRAIN THROUGH A GRATE INTO THE FUNNEL-SHAPED DUMP HOPPER BELOW
- 3 A BOOT GATE CONTROLLED THE FLOW OF GRAIN FROM THE DUMP HOPPER INTO THE BOOT AT THE BOTTOM OF THE LEG
- 4 FROM THE BOOT, THE GRAIN WAS ELEVATED TO THE HEAD WHERE CENTRIFUGAL FORCE AND GRAVITY FED IT INTO THE TURN HEAD
- 5 THE TURN HEAD HAD A MOVABLE CAST IRON SPOUT THAT DIRECTED THE GRAIN INTO CHUTES LEADING TO THE BINS, WHICH HAD A TOTAL CAPACITY OF 70,000 BUSHEL
- 6 GATES AT THE BOTTOM OF THE BINS FED THE GRAIN BY GRAVITY INTO CHUTES TO LOAD THE CANAL BOATS. RAILROAD CARS HAD TO BE LOADED BY ELEVATING THE GRAIN A SECOND TIME TO A CHUTE LEADING DIRECTLY TO THE RAILROAD SIDING

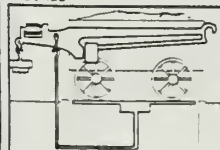
THE LEG

THE LEG EXTENDED FROM FOUNDATION LEVEL TO THE HEADHOUSE LOFT AND WAS THE DEVICE THAT ACTUALLY ELEVATED THE GRAIN. THE LEG CONSISTED OF A CONTINUOUS RUBBERIZED BELT WITH 12" x 6" BUCKETS ON 14" CENTERS ON AN 18" PULLEY IN THE BOOT AND A 36" PULLEY IN THE HEAD. THIS CONFIGURATION COULD ELEVATE 3,000 BUSHEL AN HOUR. THE CURRENT MACHINERY IN THE ELEVATOR DATES FROM M.J. HOGAN'S OWNERSHIP, AS MOST OF IT CAN BE IDENTIFIED IN AN 1899 CATALOG OF THE WELLEN MANUFACTURING CO. OF CHICAGO. THE ORIGINAL STEAM POWER HAS BEEN REPLACED BY ELECTRIC MOTORS. NO OTHER MACHINERY SURVIVES.

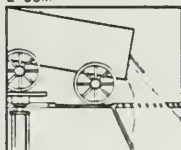


CUT-A-WAY AXONOMETRIC

1 SCALE



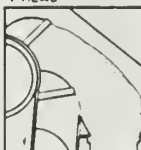
2 DUMP



3 BOOT



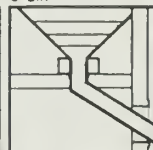
4 HEAD



5 TURN HEAD



6 BIN



DES. BY: SUSAN ELL. PROJECT: HOGAN'S WAREHOUSE - 1987

1987 B.M. CANAL PROJECT
HOGAN'S WAREHOUSE AND OTHER HISTORIC
BUILDINGS IN THE DISTRICT OF THE WAREHOUSE

ARMOUR'S WAREHOUSE (HOGAN GRAIN ELEVATOR)

WILLIAMS STREET

GENEVA

LA SALLE COUNTY, ILLINOIS

SHEET

8-5

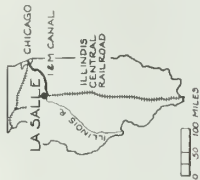
HISTORIC AMERICAN
ENGINEERING RECORD
ILL. 85

IF REPRODUCED PLEASE CREDIT: HISTORIC AMERICAN ENGINEERING RECORD, NATIONAL PARK SERVICE, NAME OF DELINEATOR, DATE OF THE ORIGINAL

ILLINOIS CENTRAL RAILROAD :

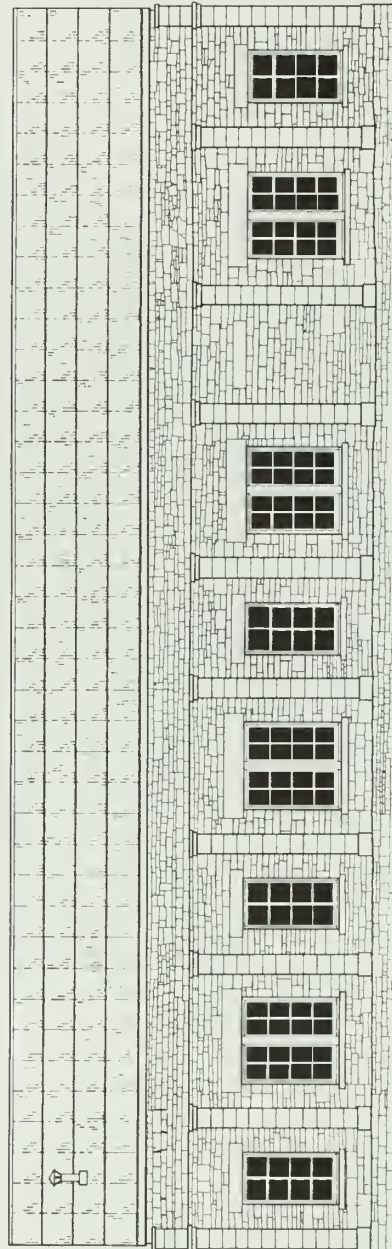
FREIGHT DEPOT • 1857

LA SALLE, ILLINOIS



In 1857, the Illinois Central Railroad built a freight depot at La Salle, Illinois, near the intersection of the railway with the western terminus of the Illinois and Michigan Canal. In its early years, the depot played an important role in the development of the region between local grain and coal, and other goods transferred from the I-M Canal. La Salle was the largest generator of freight on the Illinois Central Line between its endpoints in Chicago and Cairo, Illinois.

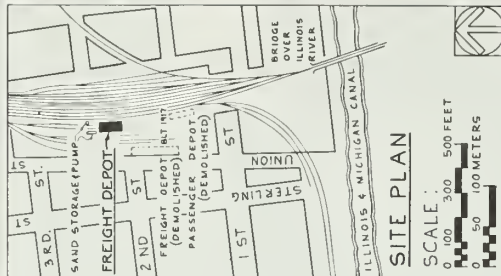
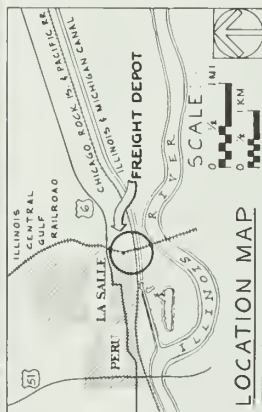
In 1919, the building was converted to an engine house to replace a two-slab brick engine house built in 1872. The concrete, door frame and large doors, tracks into the building and pits beneath the tracks were added at the time of the conversion. The Illinois Central Gulf Railroad returned the building in 1982.



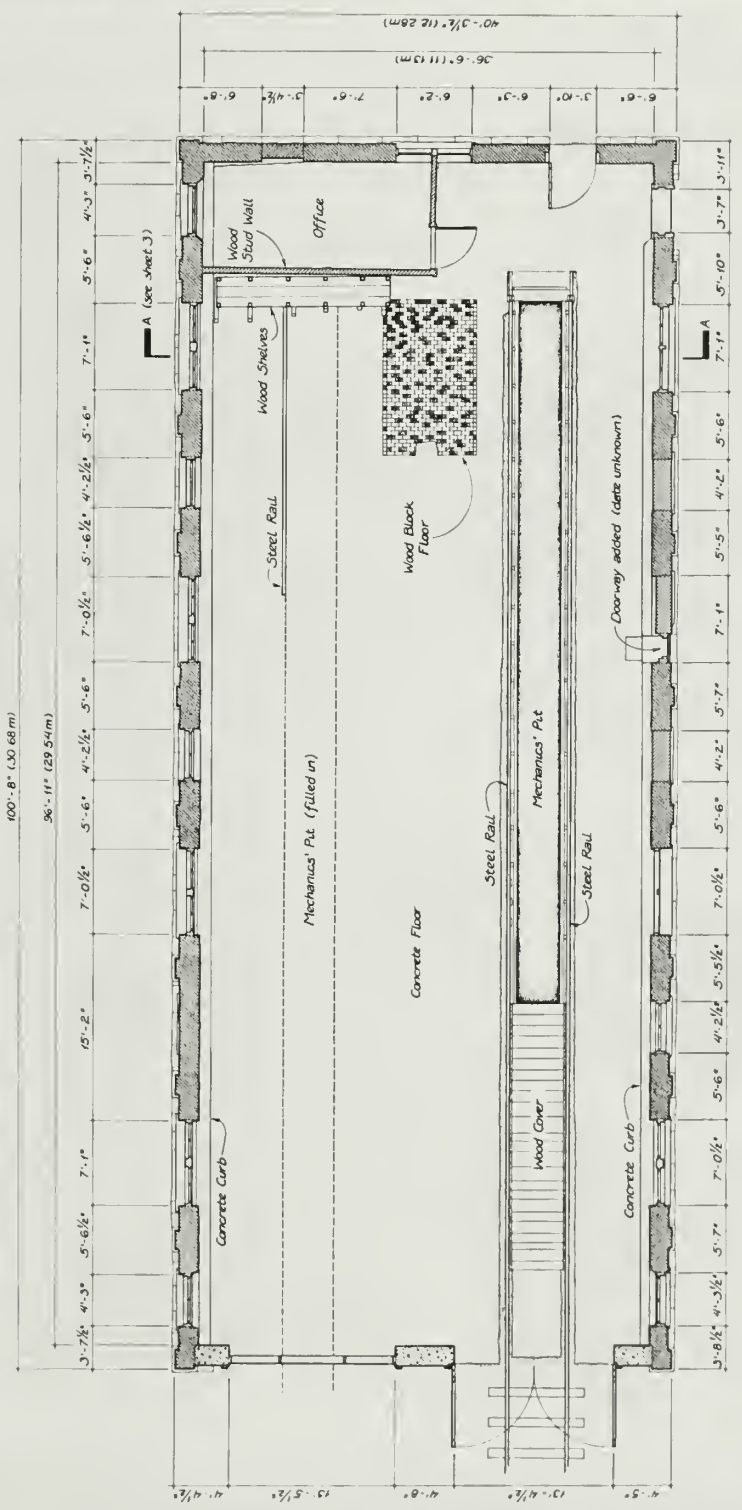
East Elevation

5m/s: $\frac{1''-1''-0''}{0\ 1\ 2\ 3\ 4\ 5}$ 10 feet

11



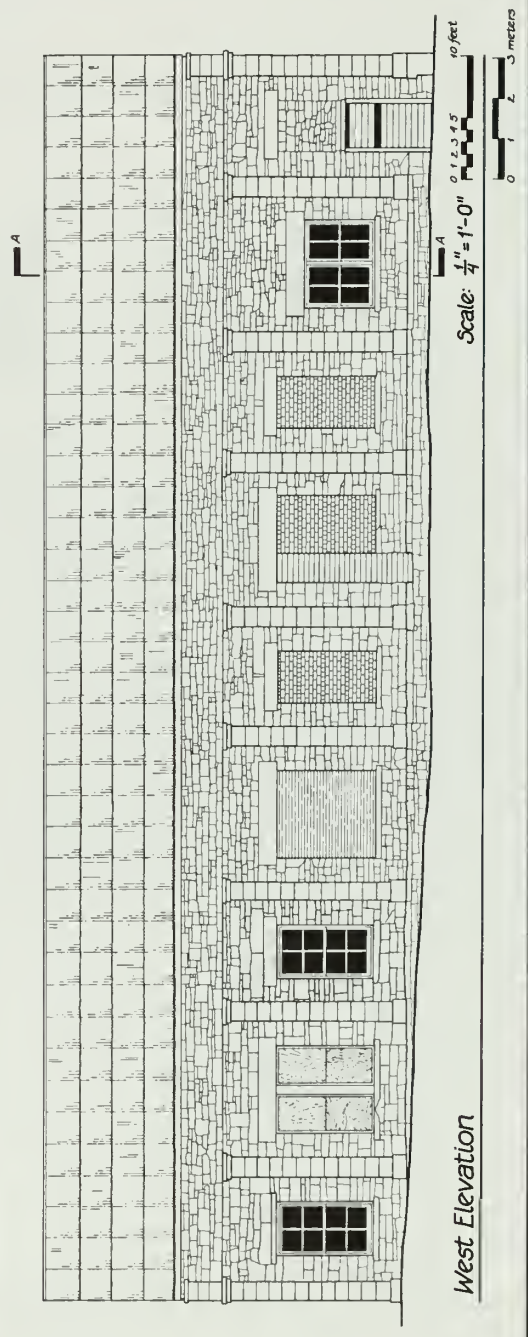
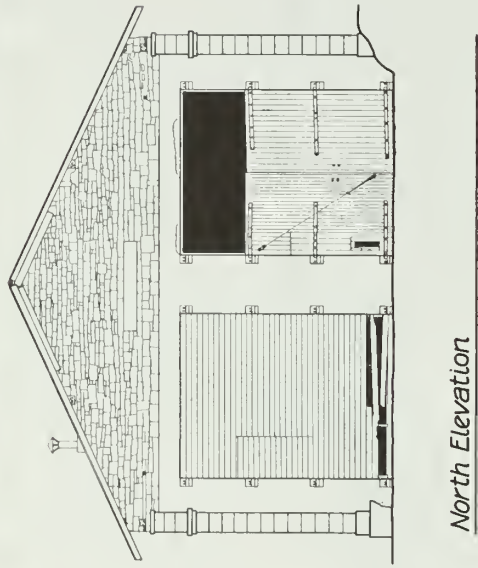
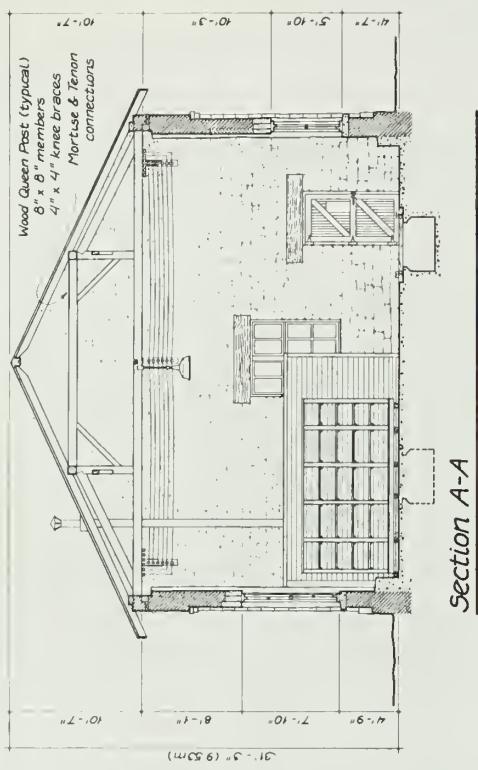
This recording project is part of the Historic American Engineering Record (HAER), a long-range program to document historically significant engineering and industrial works in the United States. The HAER program is administered by the National Park Service, a division of the U.S. Department of the Interior. Documentation of the Illinois Central Railroad Freight Depot is part of an overall historic survey of the Illinois and Michigan Canal National Heritage Corridor. The recording team consisted of Cliff Goodhart, supervising architect; Kelly Sarver and Michael Drasin, project architects; and Charles Scott, project historian. The director of Gary Hutzimom, NEK historian, and Photographer, John H. Hutzimom, NEK photographer. This project was funded by the National Park Service, Midwest Region, Jim O'Toole, Supervisor.



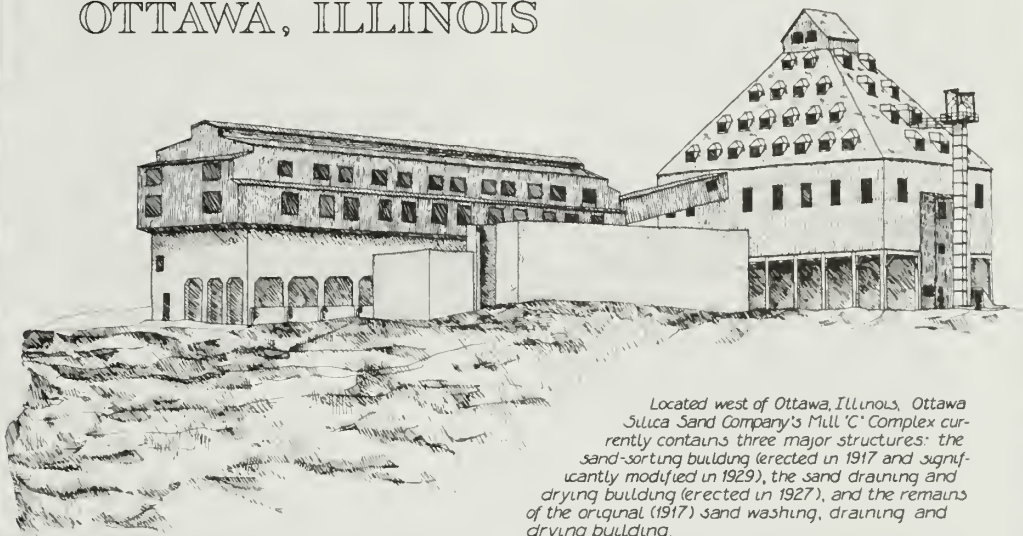
Scale: $\frac{1}{4}" = 1'-0"$

10 feet
 0 1 2 3 4 5
 0 1 2 3 meters

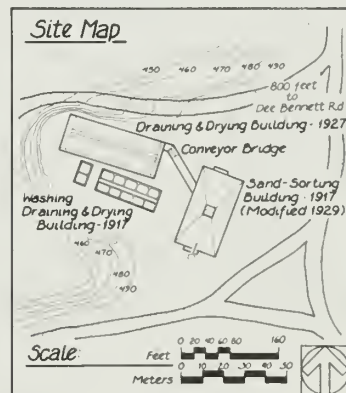
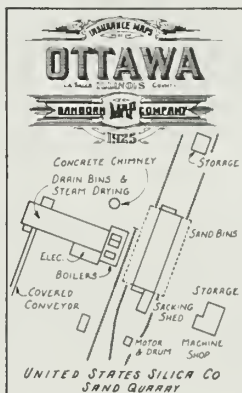
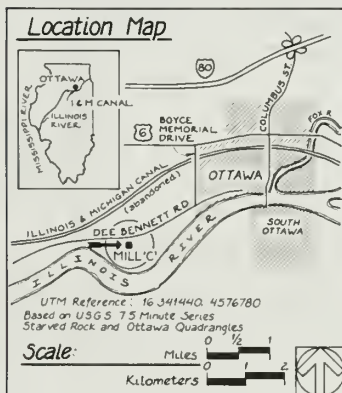
Plan



OTTAWA SILICA COMPANY MILL 'C' COMPLEX 1917 • 1927-1929 OTTAWA, ILLINOIS



Located west of Ottawa, Illinois, Ottawa Silica Sand Company's Mill 'C' Complex currently contains three major structures: the sand-sorting building (erected in 1917 and significantly modified in 1929), the sand draining and drying building (erected in 1927), and the remains of the original (1917) sand washing, draining and drying building.



This recording project is part of the Historic American Engineering Record (HAER), a long range program to document historically significant engineering and industrial works in the United States. The HAER program is administered by the National Park Service, a division of the U.S. Department of the Interior. Documentation of the Ottawa Silica Company Mill 'C' Complex is part of an overall historical survey of the Illinois and Michigan Canal National Heritage Corridor. Funding was provided by the National Park Service, Midwest Region.

The recording team consisted of:

Cliff Goodhart, supervising architect,
Kelly Server, architect,
Michael Drasun, architect,
Charles Scott, project historian

The recording project was under the general direction of Gray Fitzsimons, I&M Canal Project Supervisor. Photographic documentation was conducted by JT Lowe III.

DELINEATED BY: Kelly Server, Cliff Goodhart, Michael Drasun, 1986

ILLINOIS & MICHIGAN CANAL SURVEY
HISTORIC AMERICAN ENGINEERING RECORD
UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

OTTAWA SILICA COMPANY
WEST OF OTTAWA OFF DEE BENNETT ROAD
LA SALLE COUNTY

ILLINOIS

SHEET
1 - 31

HISTORIC AMERICAN
ENGINEERING RECORD
IL-24

IF REPRODUCED PLEASE CREDIT HISTORIC AMERICAN ENGINEERING RECORD NATIONAL PARK SERVICE NAME OF DELINEATOR DATE OF THE DRAWING

MILL 'C' SAND-SORTING BUILDING



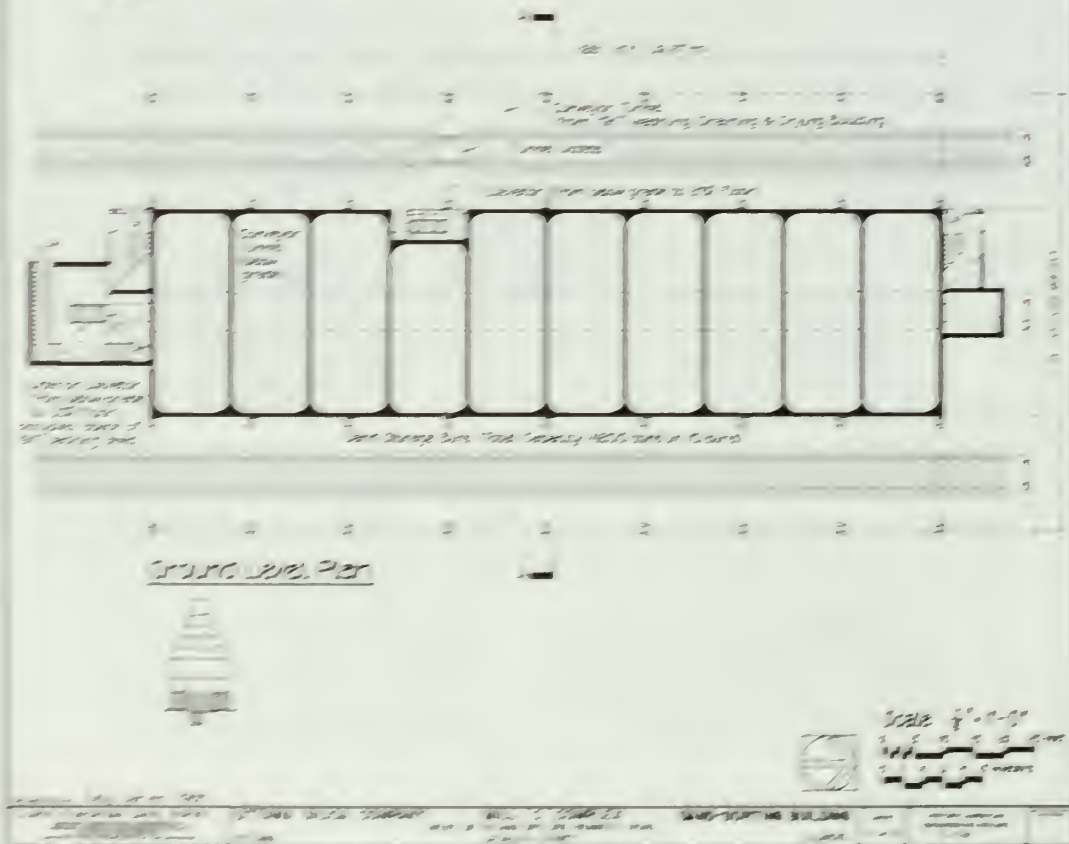
The 1967 renovation structure forms the shaft and also covers the entrance of the Illinois River valley west of Ottawa, Illinois. The structure is 100 to 125 feet high, variable layer of heavy sandstone covered by a thin layer of overburden. It covers the new material for sand sorting processing. The structure's thick walls consist of structural concrete walls, and uniformly high walls which make it an excellent source of sand for glass making, fertilizer production, and sand blasting.

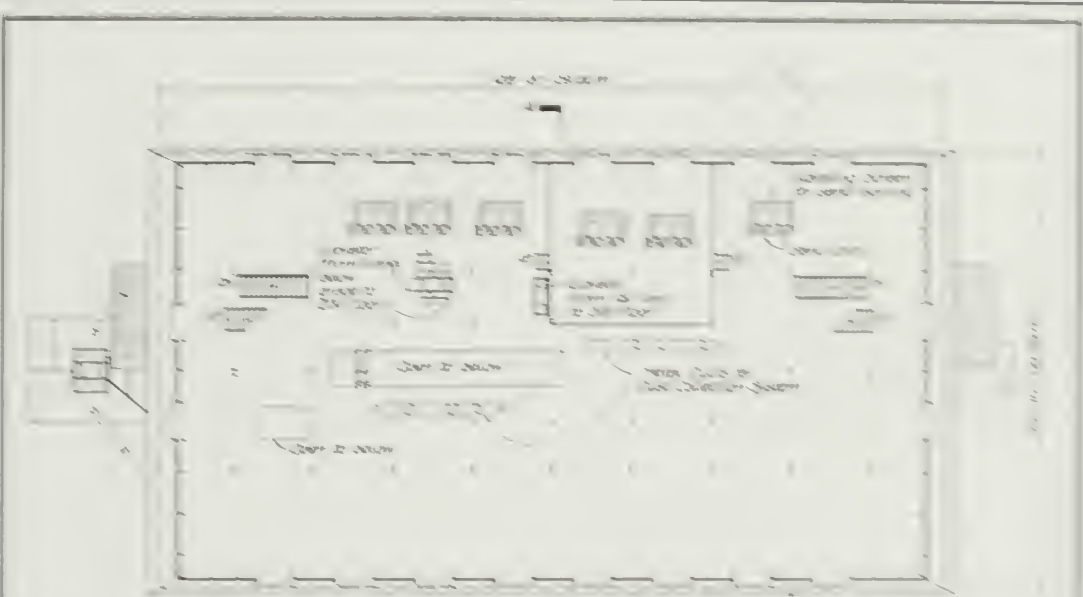
Illinois Sand Sorting Company's sand sorting building, Illinois Sand Sorting Company developed the idea in 1967. The original structure included an open air area, a washing, draining and drying building with three sand-filled columns for separating the sand and material used for sand processing. A three-story rectangular sand-sorting building with a sand-sorting shaft in the center and two rectangular columns along the east and west elevations, and a wide frame office structure, shed, and storage building.

The washing, draining, and drying building had two washing and drying buildings with a rectangular structure and a steel deck material roof. The sorting building had the rectangular structure with a steel deck material roof. A three-story structure with two rectangular shafts.

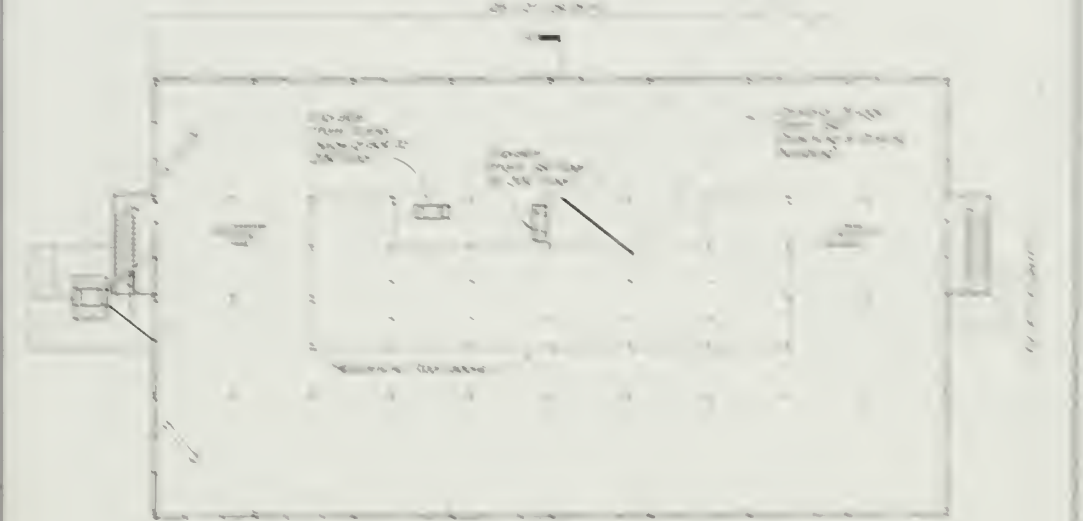
In 1967 United States Sand Sorting Company adjacent to the original washing, draining and drying building, a state-of-the-art sand sorting and drying building designed by the Chicago engineering firm of Mueser and Gerke. The new facility, with four train cars and space for an office, was designed to increase the output of washed sand from 120,000 to 180,000 tons per day. Only two projects were installed, however, and United States Sand Sorting Company resumed processing sand using the two original washing and drying buildings and the original sand-sorting building.

The following year Illinois Sand Sorting Company, Illinois Sand Sorting Company, and having two other sand-sorting plants, designed "Mill C" and "B" named the new building after "Mill C". In 1968 Illinois Sand Sorting Company renovated the sand-sorting building, extending the "B" shaft and the two rectangular columns and creating a 20-story steel frame on top of the rectangular concrete storage and with a new cylindrical sand sorting column. Several years later, the sand-sorting building became a major structure in the local Illinois River valley. "Mill C" is currently abandoned and will most likely be demolished.

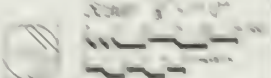




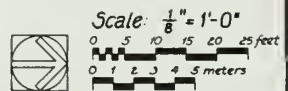
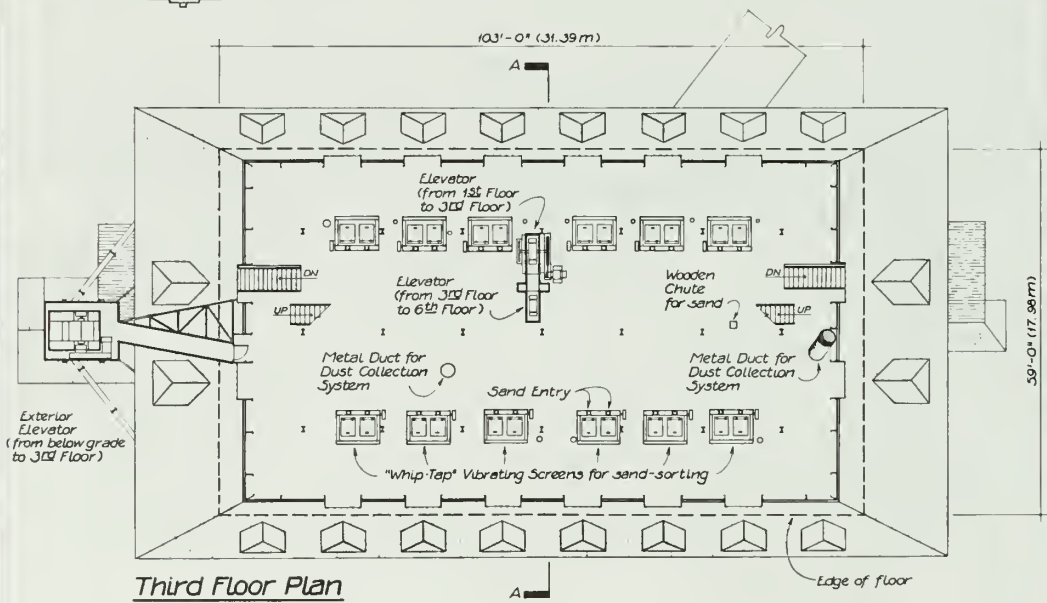
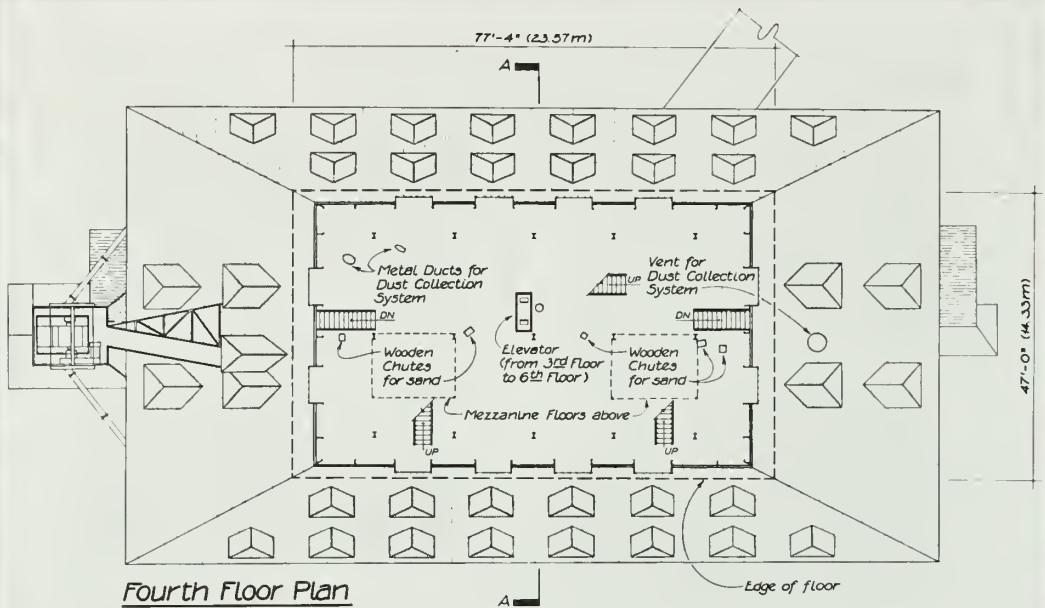
SECOND FLOOR PLAN



FIRST FLOOR PLAN



Architectural drawing of a building facade, showing a gabled roof and a central entrance.



DESIGNED BY: Kelly Server, 1986

ILLINOIS & MICHIGAN CANAL SURVEY

UNITED STATES DEPARTMENT OF THE INTERIOR

OTTAWA SILICA COMPANY

OTTAWA

MILL 'C' COMPLEX

WEST OF OTTAWA OFF DEE BENNETT ROAD

LA SALLE COUNTY

SAND-SORTING BUILDING

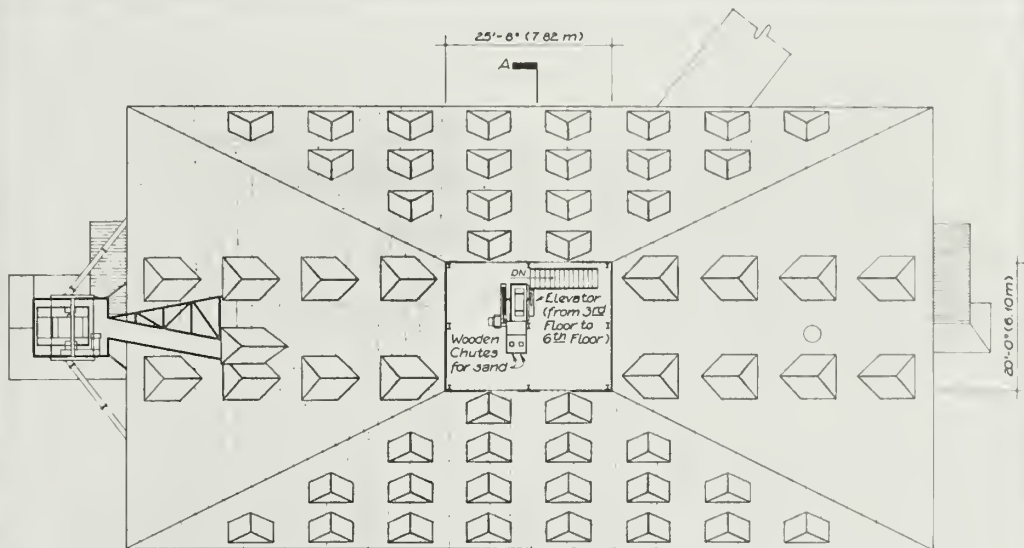
ILLINOIS

SHEET 4-11

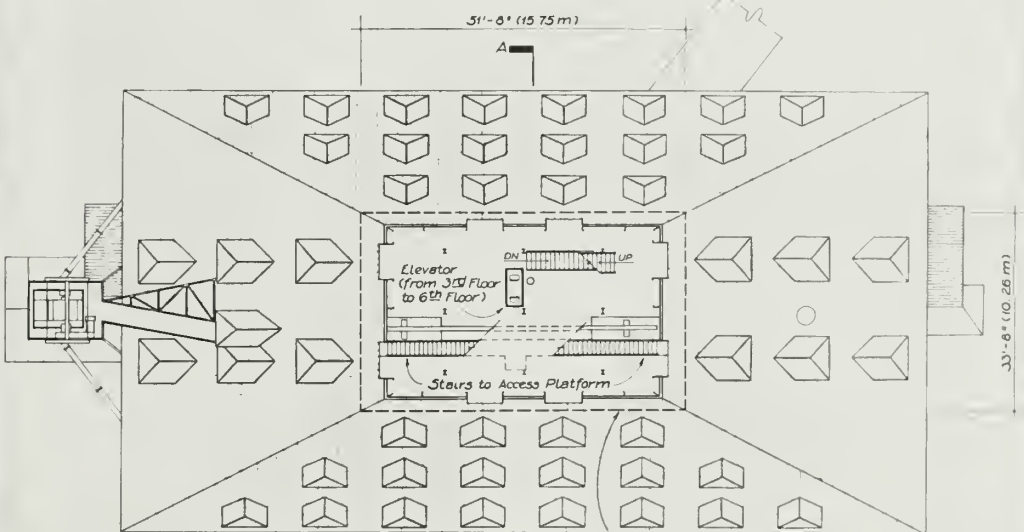
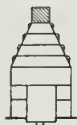
HISTORIC AMERICAN ENGINEERING RECORD

IL-24

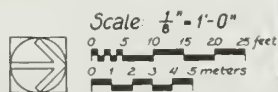
IF REPRODUCED, PLEASE CREDIT: HISTORIC AMERICAN ENGINEERING RECORD NATIONAL PARK SERVICE, NAME OF DELINEATOR, DATE OF THE DRAWING



Sixth Floor Plan



Fifth Floor Plan



DESIGNED BY: Kelly Sarver, 1906
ILLINOIS & MICHIGAN CANAL SURVEY
UNITED STATES DEPARTMENT OF THE INTERIOR

OTTAWA SILICA COMPANY
OTTAWA

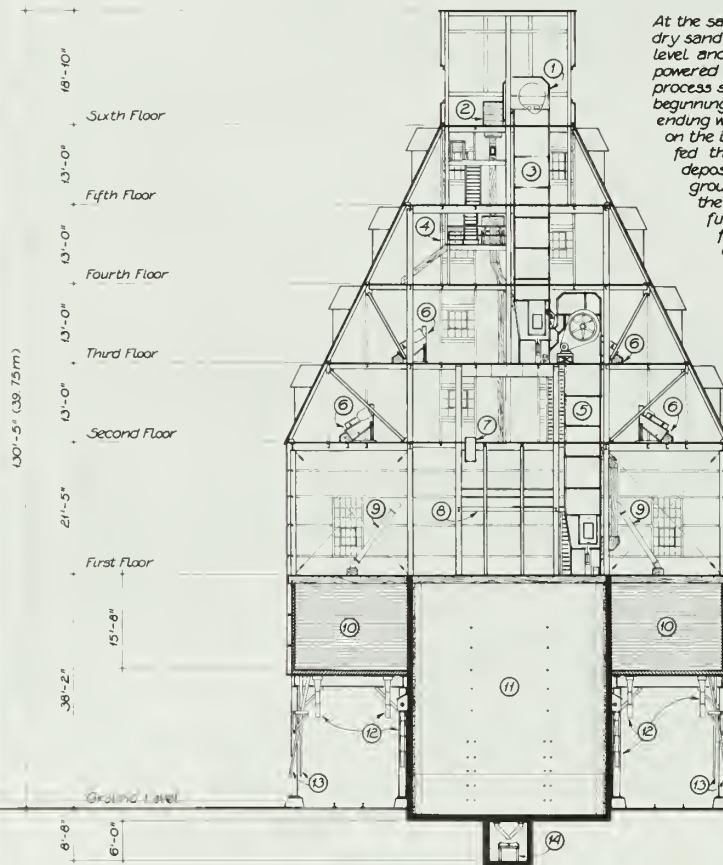
MILL 'C' COMPLEX
WEST OF OTTAWA OFF DEE BENNETT ROAD
LA SALLE COUNTY

SAND-SORTING BUILDING
ILLINOIS

SHEET
5-11
HISTORIC AMERICAN
ENGINEERING RECORD
IL-24

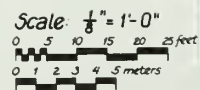
IF REPRODUCED PLEASE CREDIT HISTORIC AMERICAN ENGINEERING RECORD NATIONAL ARCHIVE SERVICE NAME OF REPRODUCER DATE OF THE DRAWING

- 1 Highest Point of Elevator System
(sand begins descent by force of gravity)
- 2 Wooden Bin
(for dispersing sand into wooden chutes)
- 3 Elevator (from Third Floor to Sixth Floor)
- 4 Access Platform
(allows operator to control direction of sand flow)
- 5 Elevator (from First Floor to Third Floor)
- 6 "Whip-Tap" Vibrating Sand Screen
manufactured by W.S. Tyler Company,
Cleveland, Ohio
- 7 Metal Duct for Allis Chalmers
Dust Collection System
- 8 Mezzanine Level
(for servicing Dust Collection System)
- 9 Metal Duct
(from Exterior Elevator to Wooden Storage Bins (10))
- 10 Wooden Storage Bin
(for loading sand into railroad cars)
- 11 Concrete Storage Bin
(for loading sand into railroad cars
and Underground Conveyor (14))
- 12 Metal Spouts
(for loading sand into railroad cars)
- 13 Wooden Control Arms
(for operating Metal Spout (12))
- 14 Underground Conveyor
(leads to Exterior Elevator,
formerly to the 1917 sacking shed)



At the sand-sorting building, the washed dry sand was elevated to the uppermost level and gravity-fed to electrically powered vibrating screens. The sorting process separated sand into three grades beginning with the coarsest grains and ending with the finest. Sand retained on the inclined screens was gravity-fed through wooden chutes and deposited into storage bins on the ground level. Sand falling through the screens was spouted to a finer screen on the next level for further sifting. An Allis Chalmers dust collection system captured stray particulate released into the air during the sifting process. Also, a magnetic separator removed iron found in the sand both naturally and as a result of its abrasion with steel conveyors, dryers, and screens. This yielded a sand pure enough to be used for glass making. Once collected in the storage bins, sand was either loaded directly into railroad cars or conveyed to the sacking shed located at the south end of the building.

Section A-A



DELINEATED BY: Cliff Goodhart, 1906
ILLINOIS & MICHIGAN CANAL SURVEY
HISTORIC AMERICAN ENGINEERING RECORD
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

OTTAWA SILICA COMPANY
OTTAWA

MILL 'C' COMPLEX
WEST OF OTTAWA OFF DEE BENNETT ROAD
LA SALLE COUNTY

SAND-SORTING BUILDING
ILLINOIS

SHEET
6 of 11

HISTORIC AMERICAN
ENGINEERING RECORD
IL-24

IF REPRODUCED PLEASE CREDIT: HISTORIC AMERICAN ENGINEERING RECORD, NATIONAL PARK SERVICE, NAME OF DELINEATOR, DATE OF THE DRAWING



East Elevation

Scale $\frac{1}{8}" = 1'-0"$
 0 5 10 15 20 25 feet
 0 1 2 3 4 5 meters

DEVELOPED BY: Michael Drasun, 1986
 ILLINOIS & MICHIGAN CANAL SURVEY
 HISTORIC AMERICAN ENGINEERING RECORD
 NATIONAL PARK SERVICE
 UNITED STATES DEPARTMENT OF THE INTERIOR

OTTAWA SILICA COMPANY
 OTTAWA

MILL 'C' COMPLEX
 WEST OF OTTAWA OFF DEE BENNETT ROAD
 LA SALLE COUNTY

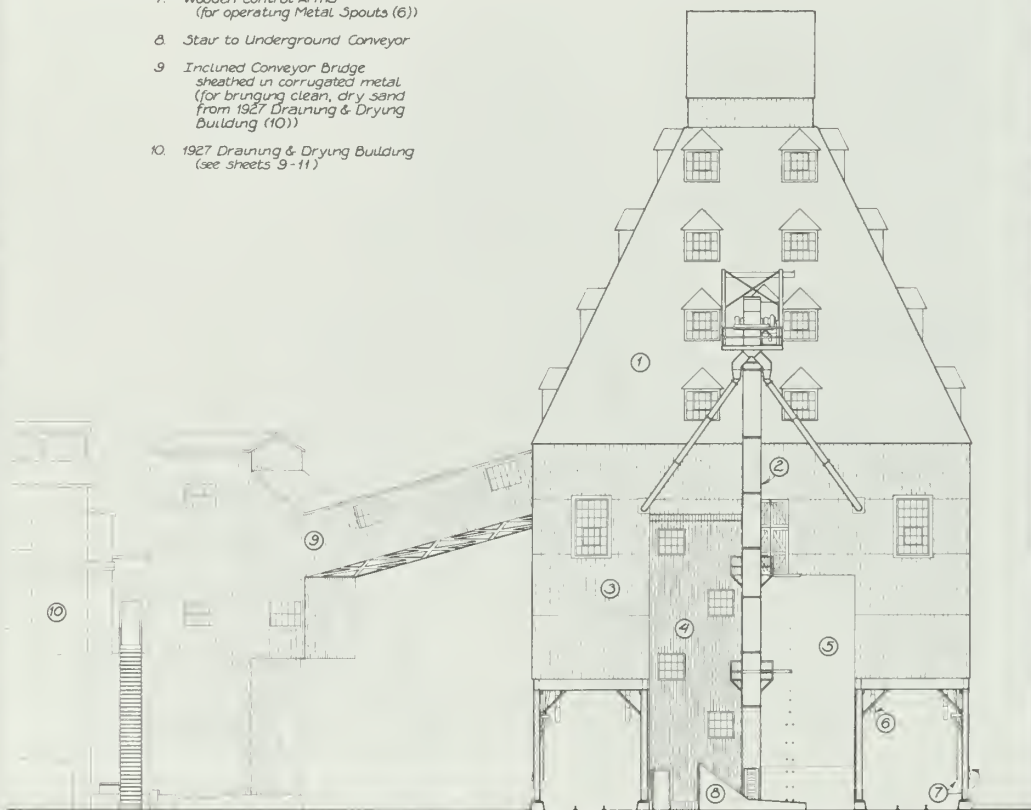
SAND-SORTING BUILDING
 ILLINOIS

SHEET
 7 of 14

HISTORIC AMERICAN
 ENGINEERING RECORD
 IL-24

IF REPRODUCER PLEASE CREDIT HISTORIC AMERICAN ENGINEERING RECORD NATIONAL PARK SERVICE NAME OF DELINEATOR DATE OF THE DRAWING

1. Zinc sheets with soldered joints over tongue and groove wooden sheathing
2. Exterior Elevator (for transporting sand to wooden storage bins over railroad sidings)
3. Corrugated Asbestos Siding
4. Exterior Wooden Frame Stairwell covered with corrugated metal siding
5. Cast-in-place Reinforced Concrete Storage Bins
6. Metal Spout (for loading sand into railcars)
7. Wooden Control Arms (for operating Metal Spouts (6))
8. Stair to Underground Conveyor
9. Inclined Conveyor Bridge sheathed in corrugated metal (for bringing clean, dry sand from 1927 Drying & Drying Building (10))
10. 1927 Drying & Drying Building (see sheets 9-11)



South Elevation

Scale: $\frac{1}{8}'' = 1'-0''$
 0 5 10 15 20 25 feet
 0 1 2 3 4 5 meters

DESIGNED BY: Michael Drasner, 1966

ILLINOIS & MICHIGAN CANAL SURVEY
 HISTORIC AMERICAN ENGINEERING RECORD
 NATIONAL PARK SERVICE
 UNITED STATES DEPARTMENT OF THE INTERIOR

OTTAWA SILICA COMPANY
 OTTAWA

MILL 'C' COMPLEX
 WEST OF OTTAWA OFF DEE BENNETT ROAD
 LA SALLE COUNTY

SAND-SORTING BUILDING
 ILLINOIS

SHEET
 8-11

HISTORIC AMERICAN
 ENGINEERING RECORD
 1L-24

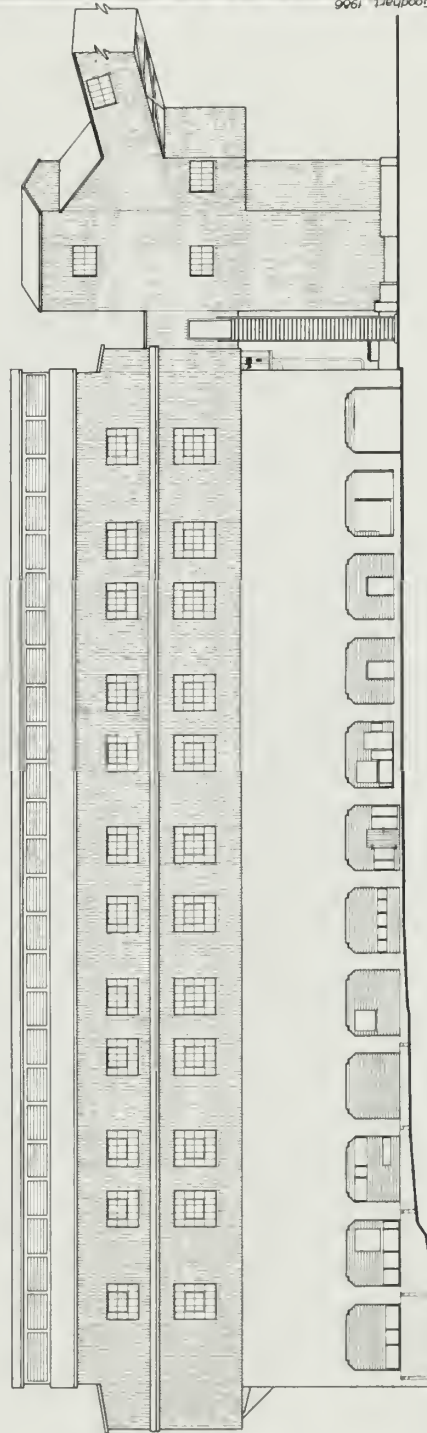
IF REPRODUCED, PLEASE CREDIT: HISTORIC AMERICAN ENGINEERING RECORD, NATIONAL PARK SERVICE, NAME OF DELINEATOR, DATE OF THE DRAWING

MILL 'C': SAND DRAINING & DRYING BUILDING

Prior to processing in the draining and drying building the hydraulically mined sand was moved by a conveyor from the quarry pit to the plant's two wash bins. Upon reaching the wash bins the raw materials were cleaned in a two-step process: First, scalping screens, mounted on top of the wash bins, removed large debris and unusable lumps of sand. Second, after passing through the screens, the material, comprised largely of sand and clayey sand, was sprayed with a strong jet of water. The clay and waste water flowed over the top of an adjustable waste discharge gate (built into the side of the wash bin) while the clean sand accumulated at the bottom of the bin.

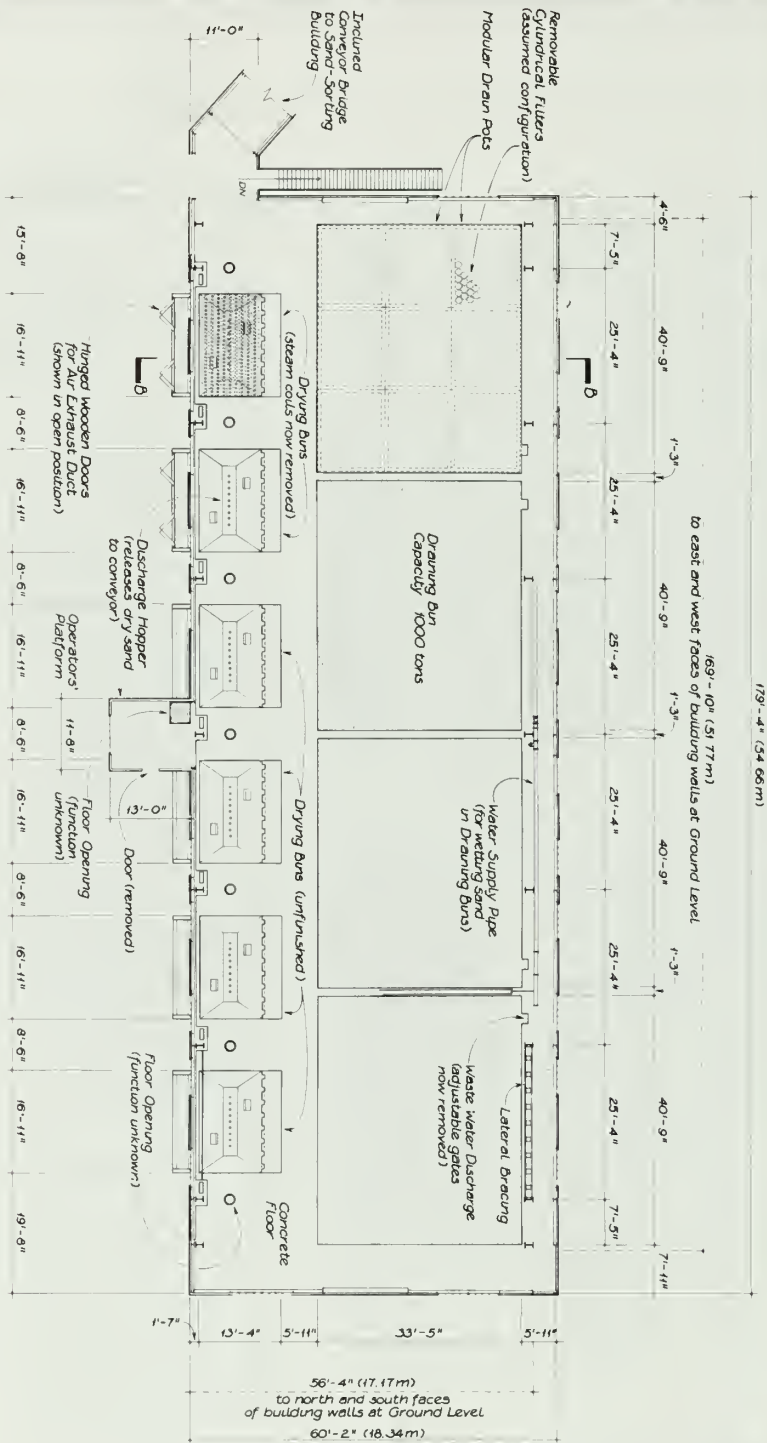
After washing, the sand was pumped into a drain bin in the draining and drying building, where it received a final rinsing with water. An innovative filtration system installed by U.S. Silica in its 1927 draining operation helped alleviate the problem of clogged drain bins. Instead of placing 2x4s over a layer of gravel, as in the old operation, the new system featured nine modular drain pots in each drain bin. Each of these drain pots held numerous gravel- and under-packed cylinders that could easily be removed. In addition, filtering screens extended along the top and bottom of the drain pots. Water drained through the system of filters and exited through a valve embedded in the concrete floor.

After the draining process was completed, an overhead crane with a clamshell bucket moved the sand from the draining bins to the drying bins. The 1927 draining and drying building contained two state-of-the-art dryers that combined conventional steam heat units with innovative air circulation systems. As in the original drying operation, the steam heat units contained several rows of steam pipes transversing each drying bin, the sand dried as it dropped through the network of pipes. Each bin also featured the newly devised air circulation system that prevented the recondensation of moisture in the drying bin, a phenomenon that inhibited the thorough drying of the sand. An aerofun heater, mounted on the side wall of each bin, heated the air which then flowed through a grid of small openings in the wall. The air circulated through the steam coils and the falling sand and then exited through another grid of small openings in the exterior wall. A large duct containing dampers, mounted on the outside of the building, covered these exterior outlets. The moist, warm air was thereby exhausted from the drying bins. To prevent the expulsion of dried sand with the moist air, the circulation system relied on natural convection regulated by the dampers. Dried sand collected in discharge hoppers located in the bottom of the drying bins. Below the hoppers a conveyor moved the sand from the bins to an elevator, which in turn fed into an inclined belt conveyor. From there, clean, dry sand was transported to the adjacent sand-sorting building.



South Elevation

Scale: 1" = 10'
0 5 10 15 20 25 feet
0 1 2 3 4 5 meters



Scale: $\frac{1}{8}'' = 1'-0''$

COLLEGEATORY *Michael Drasnu, 1986*
ILLINOIS & MICHIGAN CANAL SURVEY
HYDROGRAPHIC & MICHIGAN CANAL SURVEY
UNITED STATES ARMY ENGINEERING RECORDS
UNITED STATES DEPARTMENT OF THE INTERIOR

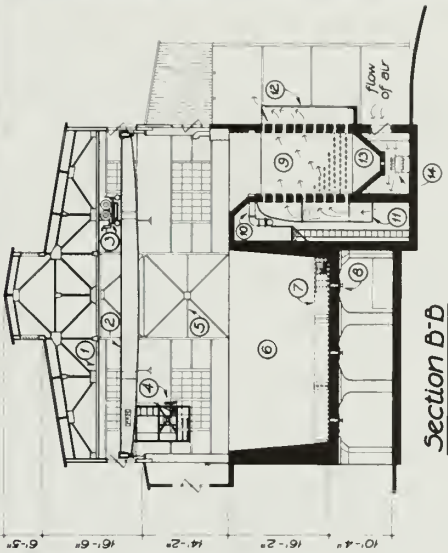
OTTAWA SILICA COMPANY
OTTAWA

Y MILL 'C' COMPLEX
WEST OF OTTAWA OFF DEE BEN
LASALLE COUNTY

DRAINING & DRYING BUILDING
AD ILLINOIS

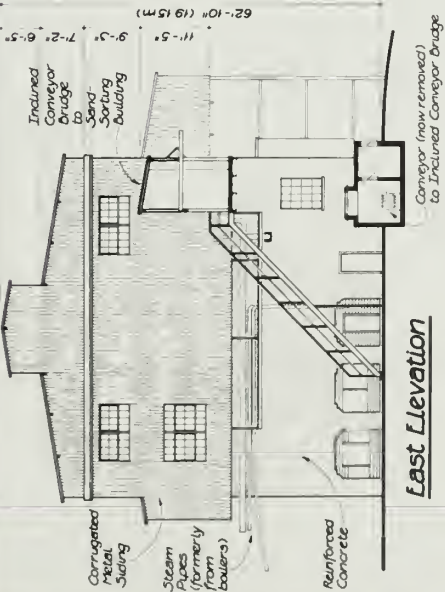
SHEET
10 of 14

HISTORIC AMERICAN
ENGINEERING RECORD
IL-24

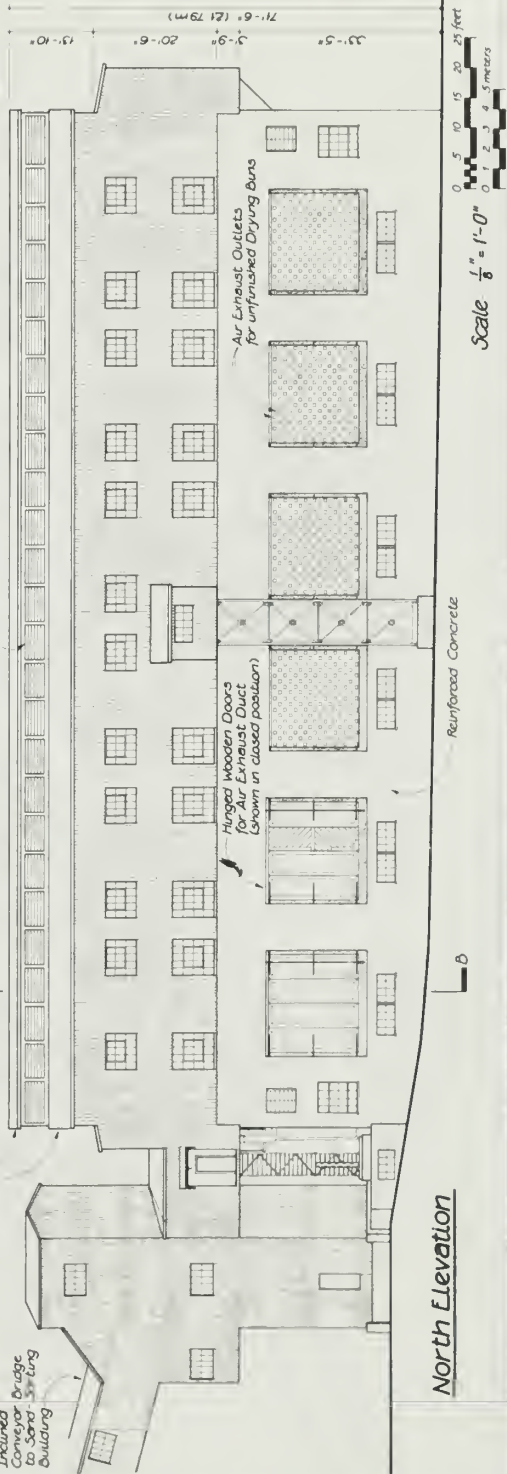


Section B-B

- 1 Steel Warren Roof Truss
- 2 P&H Overhead Crane manufactured by P&H Harries & Co. Corp. Milwaukee, Wisconsin Capacity 10,600 pounds
- 3 Motors (for operating clamshell bucket - now removed - on P&H Crane)
- 4 Operator's Control Booth (for P&H Crane)
- 5 Lateral Bracing
- 6 Drawing Bin - Capacity: 1000 tons
- 7 Modular Drain Rot (with removable cylindrical filters)
- 8 Drain Valve
- 9 Drying Bin - Capacity: 25 tons/hour (steam coils now removed)
- 10 Main Steam Line
- 11 Aerofin Air Heater
- 12 Air Exhaust Duct (with damper)
- 13 Discharge Hopper
- 14 Conveyor (now removed) to Inclined Conveyor Bridge



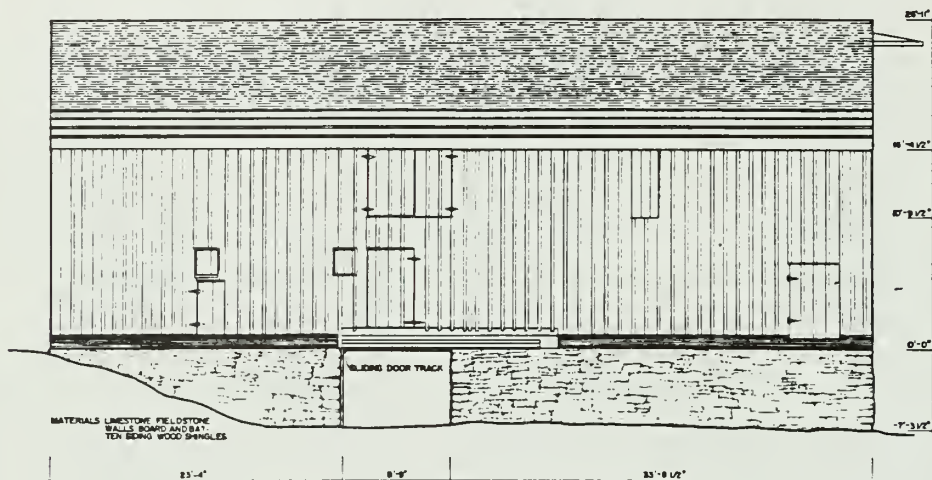
East Elevation



North Elevation

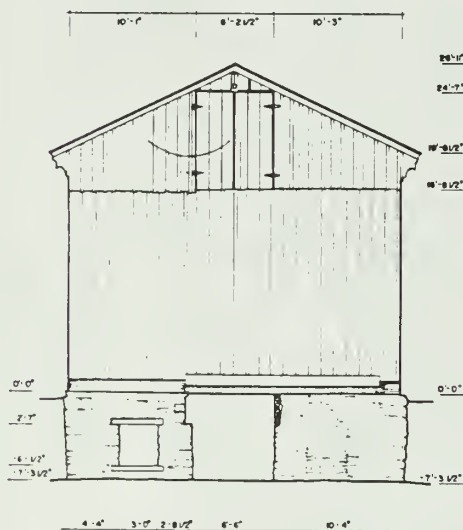
DOCUMENTATION OF THREE STRUCTURES IN THE ILLINOIS AND MICHIGAN CANAL NATIONAL HERITAGE CORRIDOR WAS UNDERTAKEN BY THE HISTORIC AMERICAN BUILDINGS SURVEY/HISTORIC AMERICAN ENGINEERING RECORD (HABS/HAER), A DIVISION OF THE NATIONAL PARK SERVICE, IN THE SUMMER OF 1987. THESE CANAL-RELATED STRUCTURES WERE IDENTIFIED AS SIGNIFICANT BY PREVIOUS SURVEYS CONDUCTED BY HABS/HAER IN THE I.B. CANAL CORRIDOR UNDER THE GENERAL DIRECTION OF ROBERT KAPICKA, CHIEF OF HABS/HAER. THE PROJECT WAS MANAGED BY HISTORIAN ALISON K. JOHANN AND DIRECTED BY ARCHITECT JOHANN A. BURNS, AIA. THE FIELD WORK WAS UNDERTAKEN BY ARCHITECTURE TECHNICIANS SUSAN E. KELL (UNIVERSITY OF HOUSTON), FOREMAN ELLEN F. STOMER (UNIVERSITY OF ILLINOIS), GLEBERT E. WHITE (UNIVERSITY OF ILLINOIS), AND HISTORIAN DAWN E. DUESSING (UNIVERSITY OF NORTHERN ILLINOIS). THE DRAWINGS WERE EDITED BY FREDERICK J. LINDSTROM (VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY).

THIS HEAVY TIMBER BARN IS ONE OF THE FEW REMAINING MID-NINETEENTH CENTURY STRUCTURES BUILT DIRECTLY ON THE CANAL. THE NORTH SECTION OF THE BARN DATES FROM THE 1830s OR '40s, AND WAS PROBABLY THE ORIGINAL STRUCTURE OF THE SOUTH SECTION, WHICH SPREADS DIRECTLY ONTO THE CANAL, MIGHT HAVE BEEN ADDED TO HOUSE THE BOAT-TOWING MULES THAT WORKED THE CANAL. CHANGES TO THE BARN'S INTERIOR, INCLUDING THE REMOVAL OF THE NORTH END, WERE MADE BY THE BENTLEY INDICATE TWO CONSTRUCTION PERIODS. SAMUEL RUTHERFORD BUILT THIS BARN AND AN INN ACROSS THE ROAD, WHICH SERVED AS THE CENTER OF THE SMALL COMMUNITY OF DRESDEN.



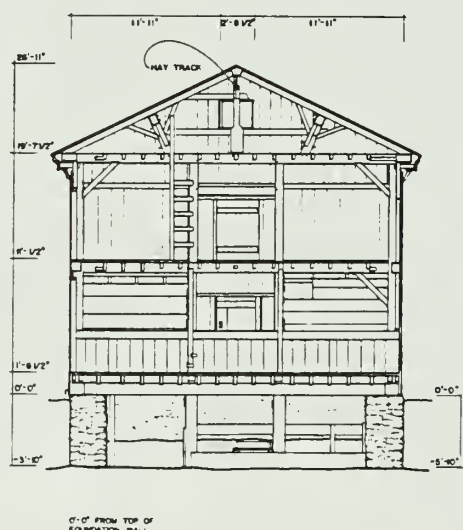
EAST
ELEVATION

0 1 2 3 4 5 6
FEET 0 1/2 1 1 1/2 2
METERS 1 48



NORTH
ELEVATION

0 1 2 3 4 5 6
FEET 0 1/2 1 1 1/2 2
METERS 1 48



SECTION
A-A

0 1 2 3 4 5 6
FEET 0 1/2 1 1 1/2 2
METERS 1 48

DESIGNED BY: GIL WITTE 1987	1987 I & M CANAL PROJECT ALL RIGHTS RESERVED LIMITED LIABILITY AND NO WARRANTY FOR THE FUTURE	EAST HANSEL ROAD	RUTHERFORD BARN VICINITY OF MINOOKA	BRANDY COUNTY, ILLINOIS	SHEET NO. 1151	HISTORIC AMERICAN BUILDINGS SURVEY SHEET 3 OF 4 SHEETS
-----------------------------	---	------------------	--	-------------------------	-------------------	--

UNPUBLISHED FIELD PHOTO: HISTORIC AMERICAN BUILDINGS SURVEY; MATERIALS: ROSS BRIDGES, EAST OF ILLINOIS RIVER, EAST OF THE BRIDGE.

- the H^+ ions with e^- and make H_2 gas
- the H^+ ions with OH^- and make H_2O
- the H^+ ions with O^{2-} and make H_2O
- the H^+ ions with O^{2-} and make H_2O and O_2
- the H^+ ions with O^{2-} and make H_2O and O_2 and H_2



INDEX

- A.H. Weiss Company , 241
- Accurate Perforating Company, 266
- Acme Barge Cleaners, 187
- Adam Groth & Company, 67, 281
- Advance Aluminum Castings Corporation, 227
- Albert Dickinson Seed Company, 161
- Albert Pick Company, 258-259
- Alcan-Toyo American, 352
- Alderman, W.N., 234
- Allen Paper Car Wheel Company, 193
- Allied Metals Company, 360
- Alpha Portland Cement Company, 206-207
- Alschuler, Alfred, 259
- Aluminum Products Company, 227-228
- Ambersen Hydraulic Construction Company, 345
- American Aluminum, 228
- American Bridge Company, 90, 93, 95, 100-101, 107-108, 113-114, 121-123, 126, 129-130, 133, 299, 304, 310-311
- American Can Company, 228-229
- American Car, 197
- American Cyanamid, 221
- American Hardware Mfg. Company, 238
- American Hoescht, 232
- American Institute of Steel Construction, 311
- American Nickeloid Company, 271
- American Railways Company, 345
- American Ruberoid, 229-230
- American Silica Sand Company, 212
- American Steel and Wire Company, 267, 272-273
- American Steel Products, 220
- American Tar Products Company, 219
- American Wire Company, 221
- Amstar, 248
- Architecture, 158, 184, 296
 - Art-Deco, 302, 314, 318-319
 - Art Moderne, 233, 236, 369
 - Beaux-Arts, 66-71, 294, 299-300, 303, 306, 310, 321-323, 327, 364
 - Classical, 66, 224, 268, 356
 - Gothic, 170, 217, 353, 359
 - neo-Classical, 161, 199, 217, 250, 302, 305-306
 - Second Empire, 305
- Armour & Company, 155-156, 215
- Armour Dial Company, 215
- Armour, James, 135
- Armour, John, 135
- Armour's Warehouse, 135, 376-381
- Artcrest Company, 180
- Ashland Oil Company, 215-216
- Atlas Company, 259
- Aux Sable, 5, 14, 20, 24-26, 328-329
- B.A. Railton Company, 175
- Baker, Wignall & Company, 155-156
- Baldwin, A.S., 132
- Ball Metal Decorating Company, 234
- Barber, W.H., 216
- Barrows Lock Company, 34
- Bates, A.J., 231
- Bates-Corliss steam engine, 231
- Bates Machine Company, 231
- Beatty Lumber Company, 149-150
- Becker, Donald, 294, 303, 305, 311
- Behrend & Kitzenger, 173
- Bessemer Process, 3, 273, 279
- Bethlehem Steel Company, 129
- Blackball Mines, 210
- Blue Island, Illinois, 39, 111, 188
- Bodie, George, 217
- Bodie-Hoover Company, 217
- Bohemian Brewing Company, 164
- Bricks, Inc., 175
- bridge, 5, 14, 25, 29-30, 32, 39-40, 42, 45, 78, 91-130, 132-136, 222, 250, 255, 282, 286-287, 290, 293-336, 338-341, 345, 362
- Bridgeport, Illinois, 2-4, 12-16, 96
- Brooklyn, New York, 245
- Brown, Dan H., 163
- Brown, Nathaniel J., 291
- Brown Mill, 163
- Bruce and Jamieson., 141, 151
- Bruce Grain Company, 141
- Brunner, Charles, 232
- Brunner Foundry, 232, 335
- Bryden Neverslip Company, 258
- Buckman Iron & Metal Company, 208-209
- California Steel Company, 268
- Calumet Chemical Company, 218, 221
- Calumet District, 40-41, 204, 242
- Calumet Feeder, 39
- Calumet Harbor, 39
- Calumet River, 39, 297
- Calumet-Sag Channel, 1, 39-41, 111, 317
- Cambria Iron Company, 338
- Carnegie, Andrew, 219
- Carnegie Steel Company, 91, 107, 112, 125, 219
- Carpenter, A.P., 23, 143
- Carroll Company, 235

Carroll, Phil F., 235
 Carson, Pirie, Scott Company, 132, 156-157, 233
 Carus Chemical Company, 270-271
 Cary, Norman J., 212
 Caspers, Raymond, 234
 Caspers Tin Plate Co., 233-234
 Castle, Alfred M., 198
 Catasauqua, Pennsylvania, 258
 Caterpillar Corporation, 126
 Centex Corporation, 206
 Central Manufacturing District, 161, 184, 199, 204, 215, 218, 234
 Central Pattern and Foundry Company, 234-235
 Certain-teed Roofing Company, 183
 Certified Grocers of Illinois, Inc., 157-158
 Chalston, John E., 190
 Champion Manufacturing Company, 235
 Channahon, Illinois, 3, 7, 13-14, 17-23, 34, 37, 50, 107, 122, 143, 282, 323-324
 Charter Electric Melting Company, 268
 Chicago, Illinois, 1-6, 8, 12, 14, 34, 37, 39-42, 45-46, 54, 58-62, 67-68, 78, 83, 87, 89-92, 94-95, 97-101, 104-107, 112-113, 116-121, 123, 129-130, 132-133, 136-138, 155-157, 161-164, 175-176, 178-181, 184-185, 187-189, 192-194, 197-200, 204, 215-217, 220-221, 227, 233-234, 236, 239-240, 242, 244, 248, 250, 252-255, 258-259, 261, 263, 266-268, 271, 273, 280, 283, 291, 293-315, 318, 322-325, 327-328, 337, 339, 341, 344, 347-349, 351, 353-355, 357-359, 365, 367, 369, 371, 374
 Chicago Barge Terminal, 54
 Chicago Bridge & Iron Works, 5, 117
 Chicago Butchers & Packers Company, 159
 Chicago By-Products Coke Corporation, 371
 Chicago Carton Company, 184
 Chicago Department of Public Works, 41-42, 307, 311, 347-348, 369
 Chicago Drainage Canal (see Sanitary and Ship Canal)
 Chicago Fruit and Produce Supply Company, 156, 177
 Chicago Gravel Company, 282
 Chicago Metal Fabricating Company, 236
 Chicago Plan Commission, 41, 303, 310
 Chicago Portage, 1
 Chicago River, 1, 12, 41-42, 99-101, 119-120, 132-133, 136, 179, 185, 198, 248, 250, 258, 268, 293-297, 299-314, 325, 349, 367
 Citgo Company, 217-218
 Citizens' Lighting Company, 350-351, 361
 Civilian Conservation Corps, 12-15, 18, 22, 24, 29-32, 324, 328, 330, 332, 340
 Clark Cement Company, 132
 Clark, James, 160, 210-211
 Clark, John L., 211-212
 Clark, Mary Cary, 212
 Clark Warehouse, 159-160
 Cleveland, Ohio, 67, 102, 271, 273
 Cleveland Rolling Mill, 3
 Coal City, Illinois, 68, 107
 Coal Products Manufacturing Company, 351-352
 Coleman Hardware Company, 125, 237
 Coleman, J.G., 237
 Columbia Straw Paper Company, 169
 Columbian Exposition, 94, 113
 Commonwealth Edison, 245, 337, 352-355, 357-360, 363, 365, 374
 Conrad Diesel, 228
 Consolidated Water & Light Company, 168
 Consolidated Wire Company, 272
 Consumer Quarry Company, 282-283
 Continental Bridge Company, 324-325, 328-330, 332
 Continental Can Company, 240
 Continental Paper Grading Company, 157, 233
 Continental Steel Corporation, 258
 Cooley, E.L., 293
 Corlis steam engine, 351
 Cosmopolitan Electric Company, 359-360
 Cowels Chemical Company, 363
 Crawford Industrial Park, 184, 199, 234
 Crest Hill, Illinois, 351
 Crocker-Wheeler Electric Company, 365
 Cudahy Packing Company, 156
 Cuneo, John F., 185
 Cuneo Press, 185
 Curtis steam turbine, 356-357
 Cushman Foundry and Machine Shop, 243
 Dayton Dam, 30
 DeSoto, Inc., 201
 Des Plaines River, 13, 18, 21, 43, 46, 49, 51, 92, 94, 107-108, 121-122, 218, 225, 230, 247, 256, 258, 273, 282, 286-287, 318-323, 325, 327, 330, 344, 352, 369
 DeValls' Bluff, Arkansas, 121
 Dickinson, Albert, 161
 Dickinson Industrial Site, Inc., 161
 Dillman Foundry, 249
 Don's Public Warehouse, 180
 Double "D" Express, 177
 Dresbach Beer Distributors, 178

Dresden Inn, 33-34
 Dresden Island Lock & Dam, 50-51
 Dresden Machine Company, 340
 Dresden Mule Barn, 37, 396-399
 Dresden, Illinois, 33-34, 37, 51
 Drover Packing Company, 159
 Dubbs, Jesse A., 224-225
 Duffy, Joseph, 45
 Dunaway Ruckrigel & Company, 146
 DuPage River Feeder, 18, 22-23
 DuPage River, 13-14, 21-22, 51, 122, 323-325
 DuPont Company, 129, 240-241
 E.W. Bliss Company, 245-246
 East Joliet Shops and Freight Yard, 68
 Economy Light & Power Company, 253
 Economy Motor Buggy Company, 241
 Elgin Iron Works, 325
 Eliel Brewery, 206
 El Milagro Tortillas Company, 248
 engineer, 12, 18, 22, 30, 32, 39, 41, 55, 62, 71, 92,
 99, 101, 104, 116, 119, 129, 132, 136, 210, 219,
 234, 255, 266, 293, 297, 299, 303-305, 310-311,
 314, 336, 349, 372
 Epstein, A., 184
 Epstein, Lewis, 234
 Ericson, John, 304, 311, 349
 F.L. Jones Garter Factory, 262
 Farmers' Square Deal Cooperative, 138-139
 Farrell, Clayton S., 242
 Farrell-Kemp-Gushe Company, 242
 Farrell Manufacturing Company, 242
 Fay, William E., 235
 Federal Match Company, 218
 Federal Paper Board Company, 5, 169, 193
 Federal Plate Glass Company, 194-195
 Federal Steel Company, 274
 feeder canal, 18, 22-23, 30-31, 39
 Ferro Construction Company, 133
 Fisher Body Company, 194-196
 FitzSimons & Connell Dredge and Dock Company,
 295, 298, 302, 304, 306, 309, 311, 314
 Forschner, Thomas J., 40
 Fort Pitt Bridge Company, 314
 Foster Grant, 232, 270
 Fox River Aqueduct, 28-30, 339
 Fox River Feeder, 30-31
 Fox River, 28-31, 123, 339, 371
 Freeman, Henry C., 210-211
 GAF, 230
 Gardner, C.J., 146
 Gardner Warehouse Company, 249
 Gary, Indiana, 107
 Gates, John, 221, 272
 Gay, Joshua G., 243
 Gaylord, George, 34-35
 Gebhard Brewery, 162-163
 Gebhard, Louis, 163
 Gebhard, William, 163
 General Electric Company, 173, 336, 361
 General Motors Corporation, 196
 General Refractories Company, 203-205
 General Roofing Mfg. Company, 183
 Gerlach-Barkow Company, 186
 Gerlach, Theodore R., 186
 German-American Portland Cement Company,
 205-207
 Gilbert & Company, 146-148
 Gilman, King & Hamilton Company, 252
 Globe Oil Company, 5
 Gooding, William, 3, 12, 22, 32
 Goodwill Industries, 259
 Graham, Anderson, Probst and White, 354
 Graphic Paper of Joliet, Inc., 241
 Graves, P.H., 151
 Great Lakes Dredge and Dock Company, 41, 301
 Green & Sons Co., 40
 Griffin, A.T., 127, 146
 Griswold, G.C., 135, 143
 Groth, Adam, 281
 Grosskrutz, George A., 176
 Gushe, H.C., 242
 Hacker-Sime Company, 187-188
 Hacker Mill and Lumber Yard, 188
 Hansell-Elcock Steel Company, 267-268
 Harnschefer Corporation, 290
 Harrington-Cortelyou, 319
 Harrison Iron Works, 268
 Harry Alter Heating and Air Conditioning
 Company, 259
 Hartford, Connecticut, 257
 Hastings, William A., 228
 Hauf, George, 236
 Hebel & Brunner, 173
 Heggie Manufacturing Company, 261
 Hegeler, Edward C., 271
 Hegeler, Herman, 270
 Heinze, August, 197
 Henneberry Company, 185
 Hennepin Canal, 255
 Hering, Rudolph, 39-40
 Hewes & Phillips Company, 274
 Hines, Edward, 189
 Hines Lumber Yard, 188
 Hoerner, Henry, 177

Hogan Grain Company, 135, 376-381
 Holley, Alexander, 273
 Hoover, Seifert, 217
 Howe bridge, 25, 28, 32, 76, 110, 127, 130
 Howe & Davidson Company, 169, 184
 Hoyt, W.M., 164, 185
 Hughes, William M., 101
 Humphrey & Sons, 244
 Hunt, Jarvis, 67
 Hunt, Richard, 67
 Hyland Plumbing Supply, 34
 Illinois Cement Company, 206-207
 Illinois Department of Conservation, 16, 24, 29, 32, 135, 332, 340
 Illinois Department of Public Works and Buildings, 331, 333
 Illinois Department of Transportation, 32, 318, 323-325, 327, 329
 Illinois, Division of Waterways, 12, 17, 19-20, 22-25, 27, 42, 47, 49, 51, 53, 55, 125-126, 140, 224, 330-331, 334
 Illinois Millwork Corporation, 197
 Illinois Power & Light Corporation, 351, 360-362
 Illinois Pure Aluminum Company, 4-5, 228, 244-246
 Illinois River, 1, 5, 17, 23, 50-52, 102-103, 109-110, 127, 129, 166, 169, 183, 194-195, 208, 269, 289, 331, 333-336, 360-361, 373
 Illinois State Highway Department, 323
 Illinois Steel Company, 3-4, 68, 108-109, 124, 267, 272-273, 276, 278-279, 290, 316, 334, 352
 Illinois Valley Grain Company, 146
 Illinois Valley Mfg. Company, 197
 Illinois Valley Milling and Shipping Company, 166
 Illinois Valley Sash and Door Company, 197
 Illinois Waterway, 8-9, 13, 39-40, 47-53, 102, 108, 110, 121, 129, 282, 318-319, 322, 327, 331, 333-334, 336
 Illinois Zinc Company, 4, 323, 269-271, 335
 Independent Bridge Company, 319
 Indianapolis, Indiana, 242
 Indian Refining Company, 218
 Industrial Color, Inc., 219
 Ingersoll Rand, 371
 Inland Iron Works, 247
 Inland Steel Company, 324
 Insilco, 178
 Insull, Samuel, 360
 Inter-Continental Alloys, 352
 International Harvester Corporation, 3, 218, 248
 interurban
 Chicago & Joliet Electric Railway, 67, 337, 345-346
 Chicago, Ottawa & Peoria Railway, 337-339, 342, 344-345, 361
 Illinois Traction System, 29, 67, 338-345, 350, 361-362
 Illinois Valley Railway Company, 350-351, 361
 Joliet & Southern Traction Company, 337
 Ivex Corporation, 189-190
 Jerome, William, 30
 J.F. Clark Paper Company, 169
 J. Harrington & Company, 140-141
 J.W. Sefton Manufacturing Company, 198-199
 James G. Heggie and Sons Company, 261
 James Leffel Company, 360-361
 Jenkins & George Company, 185
 Jobst Monument Company, 262
 Johnstown, Pennsylvania, 338
 John Gillespie Lumber Company, 187,
 John S. Metcalf Company, 136
 John VanRange Company, 259
 Joliet, Illinois, 2-8, 11-13, 16, 20, 24, 29, 32, 34, 45, 47, 49-50, 62-63, 66-71, 73-75, 77-78, 88-90, 92-95, 102, 107-109, 112-116, 121-122, 124, 131, 155, 164-165, 179, 186-187, 189-191, 193, 200-201, 203-209, 212-213, 218, 220, 229-231, 235, 241-242, 244, 247, 249, 256-258, 260-261, 267, 272-279, 281, 287-288, 290-291, 318-319, 327-329, 332, 334, 337, 339, 341, 344-345, 361, 363, 365, 373-374
 Joliet Bottling Company, 164
 Joliet Citizen's Brewing Company, 164
 Joliet Enterprise Wire Company, 267
 Joliet Gas Light Company, 363
 Joliet Industrial District, 218, 220, 229-230
 Joliet Iron and Steel Company, 4, 273-279
 Joliet Manufacturing Company, 249
 Joliet Wallpaper Company, 189-190, 201
 Joliet Warehouse and Transfer Company, 165
 Jolly McCormick Turbine Company, 365
 Joplin, Missouri, 271
 Justice, Illinois, 368
 Kaiser, Fred, 177
 Kallal, Charles W., 348-349
 Kankakee Company, 18
 Kankakee Feeder, 18
 Kankakee River, 18, 51
 Kansas City, Missouri, 67, 179, 225, 319
 Kedzie Development, 199
 Keith & Schmieding, 148

Keith Lumber, 187
 Kellogg Corporation, 172
 Kelly, Maus & Company, 198
 Kelly's Bar, 183
 Kelly & Atkinson Company, 101
 Ketler-Elliott Construction Company, 121, 250,
 299-301, 304, 316, 309-311, 314
 Kemp, William B., 242
 Keystone Bridge Company, 91
 Kickapoo Creek Culvert, 27-28
 King & Hamilton Company, 250-252
 King Bridge Company, 102
 Klasing Hand Brake Company, 260
 Knapp, Almeron, 143
 Kokomo, Indiana, 195, 258
 Koppers-Krupp, 219
 Koppers Company, 219-220, 352, 371-372
 Koppers, Heinrich, 209, 219
 L. Barth & Company, 259
 Ladd, Illinois, 344
 Lake Michigan, 1, 6, 8, 12, 39, 41, 325, 365, 669
 Lambert and Bishop Wire Company, 272-273
 Lambert, John, 267, 272
 Lanvin & Sons Company, 252-253
 Lanvin, Bennett, 253
 LaSalle, Illinois, 2-8, 13, 16, 20, 24, 29, 32, 50, 74-
 76, 78-81, 83, 87, 109-110, 123, 129-131, 146,
 155-156, 176, 205, 207-208, 264, 269-271, 284,
 285-286, 324, 328, 331-332, 335-336, 338, 344,
 350-351, 361, 382-384
 LaSalle Coal Mining Company, 284
 LaSalle County Carbon Coal Company, 284-285
 LaSalle County Historical Society, 160
 LaSalle Pressed-Brick Company, 208
 LaSalle Pressed-Face Company, 208
 Lasker Boiler and Engineering Company, 253
 Lasker, Thomas, 253
 Lassig Bridge Company, 130
 Lateral Canal (Ottawa), 30-31, 36, 238, 262
 Lemont, Illinois, 4-5, 8, 40, 62, 91-92, 217, 227-
 228, 244-246, 291-292, 316, 337, 344, 363
 Lemont Electric Light & Power Company, 363
 Lennon Wallpaper Company, 190-191
 Libby-Owens Ford Company, 4, 194-196
 Linde, 173
 Lindsey Light and Chemical Company, 163
 Little Calumet River, 39
 Little Vermillion Aqueduct, 32
 Little Vermillion River, 32, 129-130, 205-206, 338
 Lockport, Illinois, 2-8, 11-13, 20, 34-35, 42-43, 45-
 49, 61-62, 89, 102, 142, 169-171, 210, 221, 223-
 224, 286, 320, 325, 337, 344-346, 364-366
 Lockport Lock & Dam, 46-49
 lock, 5, 12-21, 26, 30-31, 45, 47-54, 94, 210, 238,
 318-319, 334, 364-365
 locktender's house 13-16, 119-20, 24
 Lord Bushnell Lumber, 187
 Lorimer & Gallagher Company, 45
 Luce, G.P., 228
 Lyons, Illinois, 337
 M. DeSteiger Glass Company, 350
 M&M Grain and Farm Supply Company, 141
 M.J. McDermott & Company, 314
 M.N. Hull & Sons Company, 138-139
 M.T. Linskey Coal Company, 286
 M.W. Powell Company, 268
 Mall Iron Company, 14
 Marseilles, Illinois, 2, 4-7, 14-15, 26-29, 52, 81-82,
 124, 127, 30, 140-141, 166, 168-169, 183-184,
 331, 333-334, 342, 344-345, 351, 359-361, 370
 Marseilles Grain and Supply Company, 141
 Marseilles Hydroelectric Power Plant, 351, 360-362
 Marseilles Lock & Dam, 52, 334, 361
 Marseilles Manufacturing Company, 166
 Marseilles Power Canal, 130, 166, 168-169
 Marseilles Roller Mill, 166
 Marseilles Variety and Liquor, 183
 Marseilles Wrapping Paper Company, 169
 Martin, George B., 34-35
 Material Service Corporation, 286-287
 Matteson, Victor A., 271
 Matthiessen and Hegeler Zinc Company, 4, 6, 269-
 271
 Matthiessen, Frederick W., 264
 Matthiessen, William, 270-271
 Maze, Samuel Nesbit, 191-192
 McCarthy Foundry, 254
 McClintic Marshall Corporation, 109, 331
 McClure, Dr. C.F., 228
 McClure, E.P., 228
 McCormick Reaper Company, 248
 McKinley, William, 342, 344, 350, 361
 Metropolitan Sanitary District (see also: Sanitary
 District of Chicago), 354, 364, 366-367
 Metropolitan Water Reclamation District (see also:
 Sanitary District of Chicago), 325
 Meyer Furnace Company, 232
 Michigan City, Indiana, 244
 Midwest Supply Company, 194
 Midwest Wallpaper Company, 189-190
 Milles, Charles H., 235
 Milles Supply Company, 254
 Milwaukee Bridge Company, 327
 Milwaukee, Wisconsin, 242, 291

Milwaukee, Wisconsin, 242, 291
 Mineral Point, Wisconsin, 271
 Minooka, Illinois, 33, 107, 143, 332, 340-342, 345, 361, 396-399
 Minooka Grain, Lumber & Supply Company, 143
 Mississippi Valley Structural Steel Company, 321-323
 Mobile Builder's Supply, 187
 Modjeski, Ralph, 293
 Mogan-David Wine Corporation of America, 235
 Monarch Brewing Company, 165, 255
 Montzheimer, A., 71
 Morris, Illinois, 3-7, 26, 82-83, 124-125, 138-139, 144-145, 149-151, 162-163, 175-176, 192-193, 237, 328-331, 339, 341-345, 361, 370
 Morris Grain Company, 144-145, 149
 Morris Elevator Company, 144
 Morris Milling Company, 163
 Morris Oatmeal Company, 144, 149-150
 Morris Paper Mill Company, 125, 192-193
 Morton Salt Company, 229
 Mount Vernon Bridge Company, 302
 Mount Vernon, Ohio, 303
 Mount Vernon Steel Company, 303
 Mundie, George W., 232
 Nash, Wright & Company, 146-148
 National Biscuit Company, 4, 166, 168-169, 184
 National Carton Company, 193-194
 National Hydrocarbon Company, 224
 National Metalwares Company, 350-351
 National Plate Glass Company, 4, 196-198
 National Refining Company, 191
 National Sheet Metal Company, 271
 National Stone Company, 287-288
 National Straw Company, 241
 Neosehs Brick & Tile Co., 81
 Nettle Creek Aqueduct, 26
 Newark, New Jersey, 239
 Newrson Iron Company, 159
 Nimmons, George, 164
 Northern Illinois Cereal Company, 4, 169-171
 Northern Illinois Gas, 352, 363
 Norton & Company, 3-4, 7, 170-171
 Norton, Hiram, 2-3, 7, 34
 Norton, William, 12, 210
 O'Neil Implement Company, 166, 168
 Ottawa, Illinois, 2-7, 15, 28, 30-31, 36, 64-65, 84-85, 102-103, 108, 123, 159, 195-196, 238, 242-243, 250-251, 262, 288-290, 338-339, 341-342, 361, 370-371, 385-395
 Ottawa Bottle Mould Company, 238
 Ottawa Gas Light & Coke Company, 370
 Ottawa Silica Company, 288-290, 385-395
 P.F. Vodland Company, 186
 Pacific Coast Borax, 220
 Page Engineering Company, 255-256
 Page, John, 255
 Palmer, William, 243
 Paper Chase Exchange, 240
 Parnell Ornamental Iron Works, 250
 Parret Tractor Company, 238
 Peerless Machine Company, 364
 Pennsylvania Steel Company, 119
 Peoples Gas Light and Coke Company, 371-372
 Peru, Illinois, 1-4, 12, 16-17, 29, 32, 50, 81, 85, 129, 172-174, 177, 191, 196-197, 232, 263-265, 269-271, 284, 324, 335, 344, 351, 361, 372-373
 Peru Beer Company, 172-174
 Peru Department of Public Works, 372-373
 Peru Planing Mill, 193, 196-197
 Peru Plow and Wheel, 335
 Pfeiffer and Schultz, 372
 Phoenix Horseshoe Company, 218, 256-258
 Phoenix Manufacturing Company, 258
 Pioneer Fireproof Construction Company, 370
 Pittsburgh Plate Glass, 195
 Pittsburgh, Pennsylvania, 91-92, 270
 Pitts Mfg. Company, 183
 Plainfield, Illinois, 107, 249
 Plochman's Inc., 227
 Poirot, E.J., 184
 Polarized Scrap Metal Company, 268
 Portland Cementfabrick, 206
 Postle and Fisher, 199
 Postle and Mahler, 199
 Poughkeepsie, New York, 257
 Prairie Box Board Company, 193
 Prairie State Paper Mill Company, 189-190
 Pratt bridge, 45, 91-92, 102, 104-106, 109-112, 119, 127, 300, 316-317, 319-320, 322-324, 328-330, 332, 338
 Pressed Steel Car Company, 261
 Prussig, Carl, 206
 Public Service Company of Northern Illinois, 370 373-374
 Pullman, George, 193
 Pulsifier, E.F., 148
 Pure Oil Company, 5
 Quaker Oats Company, 144, 149-150, 229
 Racine, Wisconsin, 364

railroads

- AMTRAK, 66-67, 120, 233
- Atchison, Topeka & Santa Fe, 67-68, 87-89, 91-97, 102, 105-108, 112-114, 136-138, 142, 170
- Baltimore & Chicago Terminal, 111
- Baltimore & Ohio, 99-100
- Burlington Northern, 103
- Chessie, 84, 123, 129, 139, 143
- Chicago & Alton, 8, 58-64, 67-68, 87, 95-98, 101-102, 108, 112-115, 143, 168, 213, 228, 288
- Chicago & Illinois Western, 97, 104
- Chicago Junction, 199, 218
- Chicago & Northern Pacific, 116, 118-119
- Chicago & Western Indiana, 106
- Chicago, Burlington & Quincy, 64-65, 79, 81, 102-103, 156, 176, 208, 269, 285, 335, 370
- Chicago, Madison & Northern, 95-97, 104-105
- Chicago, Milwaukee and Gary, 67
- Chicago, Milwaukee and St. Paul, 313
- Chicago Outer Belt Line (see Elgin, Joliet & Eastern)
- Chicago, Rock Island & Pacific, 79, 81, 83-87, 110, 115, 123, 127, 129-131, 176, 211
- Chicago, St. Louis & Western, 8
- Chicago, Santa Fe and California, 89
- Chicago Terminal Transfer, 64, 99-100, 111
- Conrail, 78
- Elgin, Joliet & Eastern, 8, 67-74, 107-109, 114, 189-190, 200, 247, 261, 267, 286-287, 324
- Grand Trunk Western, 111
- Gulf, Mobile & Ohio, 62, 113
- Illinois Central, 8, 62, 74-77, 79, 81, 109-110, 112, 132, 156, 182, 285, 331, 360, 382-384
- Illinois Central Gulf, 58-60, 62, 76, 88, 95, 97-98, 104, 108, 110, 113, 143, 165, 212, 227, 235-236, 250, 253-254, 289
- Illinois Northern, 112
- Illinois Stock Yards & Transit, 116, 118
- Indiana Harbor Belt, 64, 111
- Kankakee and Seneca Railroad, 86, 129
- METRA, 66-67
- Michigan Central, 8, 67-68, 77-78, 112, 115-116, 260
- New York Central, 78
- Ottawa, Oswego & Fox River Valley, 102
- Penn-Central, 78
- Pennsylvania, 119
- Pittsburgh, Cincinnati, Chicago & St. Louis, 116, 118-119
- Rock Island, 21, 33, 64, 67-68, 73, 78-87, 112, 114-116, 121-132, 135, 139, 141, 143-144, 149-151, 156, 159, 175-176, 188, 193, 200, 206, 210-211, 228, 232, 238, 249, 260, 264, 269, 335, 338
- Rock Island & LaSalle, 8, 79
- St. Charles Air Line, 132-133
- Santa Fe, 8, 54-55, 88-90, 93, 95-97, 113, 115, 217, 240, 252
- Ramenofsky, Hyman, 232
- Randolph, Isham, 39, 92, 296
- Randolph Perkins Co., 55
- Rasmus, Walter, 299
- Rausch, William, 173
- Raymond, George, 208
- Reynolds, M.R., 349
- Reynolds Metals Company, 228
- Richardson, Ralph, 184
- Rockdale, Illinois, 13, 49, 124, 126, 203-205, 228-229, 267, 282, 341-344
- Rodi Marine, 197-198
- Romanofsky's Scrap Iron, 208
- Rutherford, Salmon, 33, 37
- Rutherford Barn, 37, 396-399
- S.G. Gay & Son, 243
- S.G. Gay Carriage Co., 242-243
- S.R.H. Robinson & Son Contracting Co., 40
- S.S. Connelly Company, 239
- Sag Bridge, 39, 11
- St. John, Van R., 148
- Sanders Brothers Mfg. Company, 262
- Sanitary and Ship Canal, 4, 39, 42-43, 45-46, 54-55, 91-92, 104-108, 112, 116, 136, 140, 175, 215-216, 239-240, 288, 292, 296-298, 300-302, 314-315, 318, 320, 322, 325, 347-349, 353-354, 364-365, 367, 369, 371
- Sanitary District of Chicago, 39-42, 45-46, 92, 106, 112, 117, 140, 297-298, 320, 325, 367, 369
- Scherzer Rolling Lift Bridge Company, 116-117, 293, 297, 318-323, 327
- Scherzer, William, 297
- Schiebe, Julius, 34
- Schimett Company, 268
- Schoenhofen Brewing Company, 176-177
- Schuller International, Inc., 126
- Scott, J.G., 140
- Scully, Alexander, 198
- Scully-Castle Company, 198
- Scully Steel and Iron Company, 197-198
- Seaman Bag Company, 181
- Seeler Industries, 203
- Sefton Manufacturing Corporation, 199
- Seneca Farmers' Company, 151
- Seneca, Illinois, 5-6, 86, 127-129, 135, 151, 331,

333, 342, 345, 361, 370
 Seneca Stockdale Fertilizer Company, 151
 Sheets, Frank, 338
 Sherwood School Furniture Company, 237
 Shreffler, A.H., 249
 Simmons, I.L., 129
 Singer and Talcott Stone Company, 291-292
 Smith & Adams Grocers, 156
 Smith & Vaile, 363
 Spiegel Company, 259
 Sprague, Ephraim, 169
 Spring Horseshoe Company, 257
 Spring Valley, Illinois, 339, 341, 344, 361
 Standard Paint Company, 229-230
 Star-Peerless Wallpaper Company, 190, 200-201
 Star Union Brewing Company, 173-174, 177
 Stauffer Chemicals, 363
 Steel Sales Corporation, 263
 Sieberling, Monroe, 195
 Stein-Hirsh Company, 178
 Stickney, Illinois, 219, 367
 Stratton Grain Company, 137
 Strauss Engineering Company, 99, 132-133, 303, 310
 Streator, Illinois, 102
 Steinmayer, Charles, 208
 Strobel Steel Construction Company, 129, 133, 295, 303, 305, 314, 325
 Stuebenville, Ohio, 271
 Summit, Illinois, 2, 12, 22, 64, 98, 105, 337, 344
 Superior Chemical Company, 218, 220-221
 Superior Copper Company, 253
 Superior Wallpaper Company, 200-201
 Swift & Company, 155, 179
 Swift Adhesives, 250
 Swiss Oil Corporation, 216
 T.J. Nertny Company, 238
 Taintor Gate, 49-53
 Texaco Petroleum Refinery, 4-5, 221-223
 Thiffault, Alphonse, 234
 Thomas Manly Livery, 160
 Thompson & Taylor Spice Company, 179-180
 Thompson, William, 348
 Thornton, Edmund B., 290
 Toledo Bridge Company, 104
 Toni Company, 158
 Towpath Walker's House, 31
 Trenter Oil Company, 151
 Tri-Central Marine Terminal, 5
 U.S. Army Corps of Engineers, 20, 40, 48, 51, 53, 283, 319, 330-331
 U.S. Navy, 267
 U.S. Steel Corporation, 4, 68, 94, 107-109, 198, 204, 209, 234, 267, 272-274, 279, 350-351
 Union 76, 5
 Union Beer Company, 177
 Union Coal, Iron & Transportation Company, 3, 273
 Union Coal Company, 284
 Union Liquor Company, 158
 Union Station, Joliet, 66-67, 73, 112-113, 281
 Union Stockyards, 3, 100, 176, 367
 Union Tank Car Company, 258
 United Biscuit Company of America, 184
 United Clock Company, 264
 United Felt Company, 181
 United Iron and Wire Company, 182
 United National Industries, 182
 United States Silica Company, 195
 United States Silica Sand Company, 290
 Universal Lockport Corporation, 261
 Utica, Illinois, 4, 6, 12, 16, 31, 53-54, 87, 127, 130-132, 146-148, 152-153, 159, 210-211, 344-345, 361
 Utica Hydraulic Cement Company, 127, 132, 211-212
 Utica Sewer Pipe & Terra Cotta Company, 127
 Vacca Memorial Company, 83
 Viscosity Oil Company, 217-218
 von Babo, Alexander, 293, 307
 Von Holyst and Fyfe, 374
 Vulcan Materials Company, 282-283, 288
 W.D. Boyce Company, 183
 W.E. Pratt Mfg. Company, 260
 W.H. Barber Company, 216
 W.H. Maze Company, 191-192, 197, 271
 W.H. Sellers Company, 274-275
 W.M. Hoyt Company, 163, 185
 Waddell and Harrington, 102, 119, 129, 335-336
 Walker, Edwin P., 246
 Walker, George S., 246
 Warner's Landing, 18
 Waterbury, Connecticut, 264
 Waukegan, Illinois, 68, 107
 Weitz, G.H., 176
 Welsch Red-E-Mix, Inc., 213
 Welsch Waterproof Block Company, 212-213
 Western Clock Company, 263-265
 Western Foundry Company, 266
 Western Metal Company, 158
 Western Steel Company, 266
 Western Stone Company, 291
 Western United States Gas & Electric Company, 352, 363

Westinghouse Company, 360-361
Weyerhaeuser Corporation, 189
Wheeling, West Virginia, 271
Wheelock steam engine, 279
Widewater Basin, 23, 26
Williams steam engine, 351
William Colwell's Plow Works, 238
William E. Pratt Manufacturing, 260
William Foley Livery, 160
Wilmington, Illinois, 18, 68, 107, 244
Winston Bros. Company, 40
Wisconsin Bridge & Iron Company, 106, 333
Woelfel Tannery Company, 125
Works Progress Administration, 296, 310, 314
Worthington pump, 363-364, 370-371
Wright, Benjamin, 12
Wyckoff Steel Company, 280
Young, Hugh E., 41
Youngstown, Ohio, 271

3 1604 011 364 538



DATE DUE

[illegible]

