

SAYBROOK WATER TOWER

HAER No. IL-1201

Near the Southeast Corner of West Lincoln and South Center Streets

Saybrook

McLean County

Illinois

PHOTOGRAPHS
WRITTEN HISTORICAL AND DESCRIPTIVE DATA
SUPPLEMENTAL MATERIALS

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
U.S. Department of Interior
1849 C Street, NW
Washington, DC 20240

HISTORIC AMERICAN ENGINEERING RECORD

SAYBROOK WATER TOWER

HAER No. IL-1201

Location: Near the Southeast Corner of West Lincoln and South Center Streets, Saybrook, McLean County, Illinois.

Present Owner: Village of Saybrook

Present Use: Village water tower

Significance: The Saybrook water tower stands as an example of a disappearing resource in the Midwest. Riveted steel water towers were constructed from the 1920s through the 1950s and are being demolished and replaced with larger state of the art water towers. This tower represents a style of water tower and small town water service that was prevalent in the Midwest during the first half of the twentieth century.

Historians: Christopher Flynn and David Halpin, Public Service Archaeology & Architecture Program, May, 2020.

1. **Research Strategy:** Research undertaken to document the Saybrook water tower included archival, field, and report preparation. Archival research was undertaken prior to, and during, field investigations and included examination of local histories and records to develop an architectural and historical context for the water tower. Since the original drawings were not located, and no structural report was available, architectural drawings of a similar water tower were taken into the field and used for comparative purposes. The field investigations also included photographing and documenting structural elements of the water tower in their present condition.
2. **Actual Research Process:** In addition to the research strategy discussed above, contact was made with individuals in Saybrook. Mayor, Danny Heustis, provided information about the water tower and access to the Village Board Minutes which provided nearly all of the historical background for this report. Records such as county and local histories and photographs were examined at the McLean County Historical Society. Issues of the *Saybrook Gazette* for 1935 and half of 1936 also were consulted, but provided only one article about test well for the Saybrook water tower.

Project

Information:

The 60,000 gallon Saybrook water tower is scheduled to be replaced by a new 75,000 gallon water tower. The project will utilize a Public Water Supply Loan, partially funded by the U.S. Environmental Protection Agency and administered by the Illinois Environmental Protection Agency. The undertaking is subject to review under Section 106 of the National Historic Preservation Act of 1966, as amended, 54 U.S.C. 306108 and its implementing regulations (36 CFR Part 800).

Illinois State Historic Preservation Office determined that the structure was eligible for listing on the National Register of Historic Places and required HAER documentation prior to demolition. The SHPO Log number for this undertaking is #010040919.

David Halpin conducted the fieldwork, some of the historical research, and compiled the report, Christopher Flynn conducted historical research, Susan Brannock-Gaul drafted the graphics, and Dr. Kevin McGowan served as Principal Investigator for the Public Service Archaeology & Architecture Program, University of Illinois Urbana-Champaign.

Ben Halpern, independent professional photographer, took the black and white photography.

PART I. HISTORICAL INFORMATION

A. Physical Information:

1. **Date of Construction:** 1935
2. **Architects:** Chicago Bridge and Iron Works
3. **Builder, contractor, suppliers:** Chicago Bridge and Iron Works, Ostron Realty and Construction Company, Indianapolis, and Kinsey Engineering Company, Pekin.
4. **Original plans and construction:** No original plans were located, but the Saybrook Water Tower configuration is common to many other riveted steel water towers constructed by the Chicago Bridge and Iron Works during the first half of the twentieth century.
5. **Alterations and additions:** The water tower has remained mostly unaltered, aside from necessary painting and repairs, as of 2019. The blowout valve located at the base of the riser has been replaced. The roof vent also has been replaced, and a Civil Defense siren has been bolted to the first strut on the north side of the frame. It is likely that most of the pumping equipment has been replaced as has the electrical service.

B. Historical Context

1. McLean County

McLean County is located just north of the geographical center of Illinois and is the largest in area of all the counties in the state. It borders Woodford and Livingston counties to the north; Livingston, Ford, and Champaign counties to the east; Piatt, DeWitt, and Logan counties to the south; and Logan, Tazewell, and Woodford counties to the west. At the time of Euro-American settlement, the county consisted chiefly of gently rolling prairies with groves of oak, maple, hickory, elm, and walnut timber along the rivers and streams. Much of the prairie lands were seasonally wet and dotted with marshes and ponds and offered little protection from the harsher elements of both winters and summers. The Mackinaw River, with its many tributaries, traverses the county from east to west; Sugar Creek drains much of the southwest; Kickapoo and Salt Creeks drain the south; and the Sangamon River drains the southeast portion of the county. The upland prairies are broken by narrow bottomlands along these streams, as well as by the presence of elevated ridges that make up the Bloomington morainic system.¹

Early settlement in McLean County concentrated near the groves of timber that afforded food, fuel, and shelter from the harsher elements of Illinois winters and summers. The open prairies were not widely settled until the self-scouring plow and improved field draining technology made cultivation of prairie soils more practical. The first settlement in McLean County was made at Keg (later Blooming) Grove in 1822 by John Hendrix and John W. Dawson. William and Thomas Orendorff, and Reverend Ebenezer Rhodes settled there in 1823, as did W. H. Hodge, William Walker, and James Goodheart in 1824. William Wilcox and James and Matthew Adams settled in the Mackinaw Timber in Lexington Township in 1832 and 1833. Numerous smaller settlements were made throughout the county by Isaac Funk and the Stubblefield family at Funk's Grove, by the Randolphs and Stringfields at Randolph's Grove, and by Jonathan Cheney at Cheney's Grove. Dry Grove and Twin Grove west of Blooming Grove, Haven's Grove near Hudson, Old Town Timber east of Blooming Grove, and White Oak Grove in the northwest were early McLean County settlement sites. Many of these early settlers had migrated to Illinois from Kentucky, Tennessee, and Ohio. Even after Government Land Offices opened in 1829 at Vandalia and Danville, however, little land away from the prairie/timber borders was purchased and cultivated because there were few markets and because of transportation remained undeveloped.²

When the State of Illinois was established in 1818 the land now designated McLean County formed a part of Crawford County. From 1827 to 1831 the area was attached to

¹ Bateman, Newton and Paul Selby, Ezra M. Prince, and John H. Burnham, Editors, *Historical Encyclopedia of Illinois and History of McClean County* (Chicago 1908), 617-625. LeBaron, Wm., Jr. *The History of McLean County Illinois*. (Chicago, 1878), 215.

² Bateman et.al., 639-642.

Tazewell County, and in 1831 it was organized as McLean County. The county was named for the Honorable John McLean, a United States Senator who had died a few months after the county resolution passed in 1830. The first Board of County Commissioners met in May 1831 in Blooming Grove, which was chosen as the McLean County seat of government. A post office was established at Blooming Grove in 1832 and was given the name Bloomington. The town government was organized in Bloomington in 1843, and in 1850 the City of Bloomington was incorporated with a Mayor and Board of Aldermen.³ Although township organization was approved by the state legislature in 1848, it was only adopted by McLean County in 1857 due to an increasing influx of settlers from northeastern states where township governments were a common tradition. That same year, the McLean County Justice's Court granted \$70,000 worth of swamp land north of Bloomington to the State Normal University, which became Illinois State University in Normal.⁴

2. Cheney's Grove Township and the Village of Saybrook:

Cheney's Grove Township is located in southeastern McLean County and constitutes congressional Township 23 North, Range 6 East. It is bounded on the south by Bellflower Township, on the west by Arrowsmith Township, on the north by Anchor Township, and on the east by Ford County. The northern portion of the township originally consisted of high rolling prairie, while the lower central portion is drained from the west to the southeast by the Sangamon River. In the center of the township, both north and south of the river, lies Cheney's Grove, originally covering over four square miles in Sections 19, 20, 21, 27, and 28. It was this grove that attracted the township's earliest settlers to the area. Cheney's Grove Township and surrounding townships were settled by many imbued with great evangelical fervor. In addition to large Methodist and Baptist congregations, Cheney's Grove was home, by the 1870s, to the Christian Church, and the United Brethren Church, both with strong roots in the Ohio River valley and the Upland South regions of Kentucky and Tennessee.⁵

The first settler in Cheney's Grove Township was Jonathan Cheney, who arrived from Ohio with his wife and eight children in 1825. The Cheney homestead was established in Section 28, on the edge of the grove that bears his name. The Cheney's' many offspring multiplied and prospered, their daughters marrying into the early pioneer Haines, Prothero, and Stansbury families. The first post office in the township was opened at Cheney's Grove in 1831. One of the most influential of the early settlers was Robert Cunningham, who came from Clarke County, Indiana and cultivated over 400 acres among the groves along the Sangamon. Cunningham built the only water gristmill along the Sangamon in McLean County, and later built a sawmill. The Cunninghams and their fifteen children were of the "Antinomian" or "Hardshell" Baptist sect, the central

³ Bateman et.al., 660-664.

⁴ LeBaron, Wm., Jr. *The History of McLean County Illinois*. (Chicago, 1879), 215.

⁵ Ibid. 536.

doctrine of which was salvation by pre destination.⁶ From Kentucky came Ephraim S. Myers in 1826, Robert Means in 1829, and W. H. Riggs and Henry Pitts in 1830. The latter two were said to have fled Kentucky's pro slavery sentiments to become fervent Methodists in Illinois. Adam and Edward Stansbury arrived from Tennessee in 1832 and settled in Sections 19 and 20. They too were staunch Methodists who promoted the value of education. In 1832 the Stansburys built the first schoolhouse and established a cemetery, around which the village of Saybrook began to grow. From that time Cheney's Grove was rapidly settled by, among others, James Vanscoyoc and Elijah Ellsworth from Ohio, and John and Benjamin Prothero from Canada.⁷

The village of Saybrook was well established when Cheney's Grove Township was formed in 1858. In 1856 Eli Blakesley built a steam sawmill and two residential structures. J. B. and William Beckwith established the first grocery store. Other early businesses were established by Gallagher & Harrison, Burford Brothers, and Beckwith & Warren. The Lafayette, Bloomington & Muncie Railroad was completed through the township in 1871, and a station and post office were established at Saybrook, which became the largest grain shipper along that rail line. The 1870s were prosperous times for Saybrook during which several brick commercial buildings and numerous residences were constructed. The Village of Saybrook was incorporated in 1872 and is today the only community in Cheney's Grove Township. Marked by a water tower and tank above its central business district, the incorporated Village of Saybrook serves as a trading and service center for the farming community of eastern McLean County.⁸

3. Public Water Supply Context

Public water supply systems, employing reservoirs, aqueducts, and gravity, had been developed and utilized by such early and far flung civilizations as pre-Christian Rome and the Aztecs of Meso-America. Early public water supply works were naturally limited by topographical conditions and were dependent upon the principles and effects of gravity. The introduction of artificial or mechanical pumping methods allowed for the development of three general schemes designed to solve the problem of water distribution: the "Gravity", the "Reservoir", and the "Direct" Methods. The Reservoir system, under many designs, involves the mechanical elevation of water from a lower to a higher level, and its storage in basins or reservoirs of sufficient size and elevation to meet all requirements. The Reservoir system ranges in scope from designs for small tanks elevated upon supporting columns to immense reservoirs for the water supply of great cities. In the general scheme of a water supply system, the elevated reservoir serves a dual purpose; providing for a surplus supply to be utilized as required, as well as permitting a temporary suspension of the mechanical operations of the plant. In large cities, reservoirs are developed in topographically elevated regions. In the rural Midwest,

⁶ Ibid. 539.

⁷ LeBaron, Wm., Jr. *The History of McLean County Illinois*. (1879, 550).

⁸ Ibid., 541-542.

small town reservoirs, or water tanks, are first built on elevated land if available, and secondly, raised upon a structure of sufficient height to create adequate pressure required to satisfy community needs.⁹

Municipal water systems were uncommon in nineteenth century United States outside of densely populated urban centers. New York City had created localized reservoir and pumping systems by the 1770s, Philadelphia pumped water from the Schuylkill River into elevated wood storage tanks by 1799, and Chicago began pumping Lake Michigan water into elevated wooden tanks by 1842. The oldest complete water system in the United States is believed to have been installed in Bethlehem, Pennsylvania between 1754 and 1761.¹⁰ For much of the nineteenth century, rural American communities obtained most of their water from private wells and other local water sources such as lakes and rivers. By the 1880s, concerns over the supply and quality of water for drinking, washing, and firefighting, led to the development of municipal water storage systems across the country. Many communities were prompted to install municipal water systems after rampant and destructive fires. Fire insurance companies would not insure businesses in communities without sufficient fire protection.¹¹ Early elevated water storage tanks were usually constructed of iron girded wood with flat bottoms and conical tops. When filled with water, the wooden tanks, or reservoirs, would initially leak. As the wood became saturated, it would swell and effectively seal in the water. Such storage tanks were, and are still, common on rooftops in dense urban settings. Water towers were often constructed of wood, stone, or masonry brick. Several notable examples of early composite elevated water storage tanks are found in Central Illinois. The water tower in Havana, Illinois, constructed in 1889, was designed to create adequate water pressure through gravity flow. It was constructed with a limestone foundation, brick and steel walls, and a metal roof. The 50,000 gallon storage tank was made of steel. The 1887 Paxton Water Tower in Ford County, the 1891 Benson Water Tower in Woodford County, and the 1896 Ransom Water Tower in LaSalle County all used masonry brick for the towers and wood for the storage tanks.¹²

As municipal water systems utilizing elevated storage tanks proliferated and demands became greater, engineers and builders rapidly transitioned to more cost-effective metallic reservoirs and towers constructed with riveted plates and members of iron or steel. Iron was universally employed until about 1890 but with improved manufacturing processes, iron was supplanted by flexible structural steel as the most suitable material

⁹ Hazelhurst, J.N., *Towers and Tanks for Water Works. The Theory and Practice of Their Design and Construction* (New York: Wiley Press, 1907), 1-6; Mathis, Gregory R. and John Chlebeck, PE., *Steel Water Towers Associated with South Dakota Water Systems, 1894-1967*, (South Dakota State Historic Preservation Office/ South Dakota State Historical Society, 2012), 7-10.

¹⁰ Hazelhurst, J.N., 5.

¹¹ National Register of Historic Places, Old Havana Water Tower, National Register #93000325.

¹² Mathis, Gregory R. and John Chlebeck, PE., *Steel Water Towers Associated with South Dakota Water Systems, 1894-1967*, (South Dakota State Historic Preservation Office/ South Dakota State Historical Society, 2012), 15.

for metallic reservoirs and towers. By 1897, there were more than 3,000 complete municipal water supply plants in the United States. About one third of these were equipped with some form of elevated metallic storage tanks, or reservoirs, more than half of which were constructed after 1890. One of the first and best examples of a modern, elevated, riveted steel tower and tank, supported by 100-foot Z-bar columns, stiffened with I beam ties and diagonal tie rods, was constructed in 1898 in Jacksonville, Florida.¹³ The basic riveted steel construction design developed for water towers and storage tanks in the 1890s, and exemplified by the 1898 Jacksonville water tower, changed little over the course of the next fifty years. The most typical water tower erected in towns across the American Midwest in the first half of the twentieth century had a 50,000-gallon capacity storage tank atop a 100-foot high tower, or trestle, and was of riveted steel construction.¹⁴

Since water towers are basically elevated water containment tanks, boilermakers traditionally constructed the storage tanks, ironworkers constructed structural components such as beams, struts, and girders, and pipe fitters assembled components that conveyed fluids in motion. By the middle of the twentieth century, and throughout the boom years of water tower construction from 1946 to 1980, two large companies dominated the industry. Between them, the Chicago Bridge and Iron Works (now CBI, Inc.) and the Pittsburg-Des Moines Steel Company (now PDM, Inc.) erected between eight and eleven thousand water towers in the Midwest and Plains regions of the United States. Both large companies worked on all types of storage tanks and vessels, and water towers were a small part of their businesses.¹⁵

Riveted steel construction remained the standard for water towers until the 1950s, so much so that a tower built in Minnesota in the 1950s might be nearly identical to a tower built in the 1890s in Iowa. Industry leaders, however, were sensitive to criticisms that too many water towers looked monotonously utilitarian. In 1931, Chicago Bridge & Iron Works sponsored a competition to develop designs that would illustrate viable improvements in the appearance of elevated steel tanks and their supporting structures.¹⁶ While many of the submissions represented aesthetic innovations, the most significant change came about in the 1950s with the introduction and widespread use of welding. Weld technology required many changes in construction techniques and expertise, but also made possible expanded forms and designs. The Torospheric Design became popular in the 1950s in populated areas requiring a high capacity water storage system, and featured multi columned towers supporting high capacity tanks, as well as access ladders, catwalks, and handrails. The 1960s saw the introduction of Pedespheres, or Single

¹³ Hazelhurst, J.N., *Towers and Tanks for Water Works. The Theory and Practice of Their Design and Construction* (New York: Wiley Press, 1907), 10.

¹⁴ Spreng, Ronald E., "They Didn't Just Grow There – Building Water Towers in the Post War Era", "Minnesota History" (Winter, 1992). 131.

¹⁵ Mathis, Gregory R., 41-42.

¹⁶ Chicago Bridge & Iron Works, *Elevated Tank Designs: Submitted in a Competition* (Chicago: Chicago Bridge & Iron Works, 1931).

Pedestal design to replace the traditional lattice support of riveted steel. This is the most common type of water tower used today to replace aging riveted steel tanks and towers. The Hydropillar, introduced in 1962, features a large diameter, single enclosed shaft that has become popular for municipal water works because it is considered to be low maintenance.¹⁷

4. The Saybrook Water Tower and System

From the founding of Saybrook in 1858 until the erection of the water tower in the 1935, the city's water needs were met with private wells and cisterns. A note on the 1893 Sanborn-Perris Map states that the village Fire Department included 27 men who were equipped with water and chemicals, and a rubber lined hose.¹⁸ The note also states that there is no water service except private wells and cisterns. The 1899 Sanborn-Perris Map notes that the village's water service included three private wells and pumps.¹⁹ Wells with pumps are depicted on Center Street in front of the General Store, and three other buildings. Another well and pump is depicted on Lincoln Street near a funeral home and a well is depicted at the intersection of Lincoln and Center Streets, near the Livery and other businesses. In 1906 the wells with pumps were still depicted on Center Street and Lincoln Street, but the one associated with the Livery in 1899 was not included.²⁰ The notes on the 1913 map indicate that the village was still served only by private wells and cisterns, but an elevated water tank is depicted on the north side of an alley located between State and Center Streets.²¹ The caption indicates that the base of the tank was constructed of concrete blocks and the tank was elevated 10'-0" off the ground. A gasoline powered pump was employed at this facility. No other wells were depicted in 1913.

By the 1930s the need for a large, safe, and reliable water system to provide clean drinking water and an ample supply for firefighting was evident in Saybrook. An examination of the Saybrook Village Board Minutes established a chronology of events and actions associated with the new water tower.²²

September 27, 1933: The Village Board adopted a resolution to construct and install a water pumping plant and distribution system. Kinsey Engineering Company of Pekin, Illinois was employed to do the engineering for five percent of the contract price, and Attorney J. Ivan Cole was retained to provide legal assistance for three percent of the costs. The resolution also directed the engineering company to prepare plans, specifications, and a cost estimate for the project.

¹⁷ Mathis, Gregory R., 5.

¹⁸ Sanborn-Perris Map Company, *Saybrook, McLean County, Illinois, October 1893*. (New York, 1893).

¹⁹ Sanborn-Perris Map Company, *Saybrook, McLean County, Illinois, February 1899*. (New York, 1899).

²⁰ Sanborn Map Company, *Saybrook, McLean County, Illinois, May 1906*. (New York, 1906).

²¹ Sanborn Map Company, *Saybrook, McLean County, Illinois, July 1913*. (New York, 1913).

²² Minutes of the Saybrook Village Board of Trustees, (1934-1965, Book IV), 26-27, 34, 42-51, 54, 62-63.

February 19, 1934: Attorney Cole explained to the Board why the water works plan had not been accepted by the Government and that new specifications needed for a new program. The Board voted to have the current specifications revised and resubmitted.

August 3, 1934: The Board accepted a resolution that established an agreement between the “Borrowers” (Saybrook) and the Engineers and Legal Counsel. The Kinsey Engineering Company and Attorney Cole were instructed to provide detailed plans, specifications, and a cost estimate for presentation to the Federal Emergency Administration of Public Works. Also provided was \$300.00 for the Engineer, and \$100.00 for the Attorney, to travel to Chicago and Washington D.C for negotiations with the Government. That money was to be provided by the Public Works Administration.

September 7, 1934: The Board approved an August 20, 1934 resolution to adopt the plans and specifications for “Waterworks system for the Village of Saybrook, Illinois, Docket No. 3316” that have been approved by the Federal Emergency Administration of Public Works and C. M. Osborn, State Engineer, Illinois.²³ At that time the Board also adopted “An Ordinance Approving a Loan and Grant Agreement between the Village of Saybrook, McLean County, Illinois, and the United States of America, and Authorizing its execution.” The loan was for \$39,000.00.

October 25, 1934: The Board authorized the solicitation of bids for the waterworks in the *Saybrook Gazette* on October 4 and 11, 1934.

October 26, 1934: The Board accepted bids from eight companies for the waterworks. Among the eight was the selected contractor, Ostron Realty and Construction Company, 625 People’s Bank Building, Indianapolis, Indiana. The other bidders were from St. Louis, Missouri, Keokuk, Iowa, Decatur, Bloomington, Peoria, and two from Chicago, Illinois.

December 7, 1934: The Board proposed an ordinance for fixing the water rates, rules and regulations for fire hydrants and proposing liens for non-payment of water rates. The Board also accepted a \$30,077.00 from the Ostron Realty and Construction Company.

January 4, 1935: The Board created a maintenance position for the waterworks.

January 15, 1935: A motion was placed before the Board to purchase the land for the waterworks for \$295.00, and the purchase of hydrants, meters, pipe, and a pump. The motion was approved on January 23, 1935.

January 23, 1935: The Board accepted as satisfactory the Tank built by Chicago Bridge and Iron Works, and other items such as hydrants, meters, pipe, valves, a pump and

²³ Ibid.

motor. It should be noted that this was the only reference to the water tank found during research of the water tower facility.

September 5, 1935 the Board approved payment of \$900.00 to Kinsey Engineering Company and \$600.00 to Attorney Cole. Also paid were the cost of printing the bonds for the project (\$126.99), title abstract for the pumping plant (\$57.00), advertising, bids, and miscellaneous printing (\$133.20), reimbursement of expenses accrued by Attorney Cole (\$91.13), the cost of the pumping plant land and water contracts (\$416.30), and the Village President's expenses (\$13.00).

April 6, 1936: The Board approved payment of \$2,000.00 for digging test wells and providing a permanent well. The work started on March 19, 1935 and the permanent well was finished on May 8, 1935. The remainder of the money appropriated for the project, \$28,000.00, was provided to Ostrom Realty and Construction Company on July 27, 1935 and construction commenced on August 13, 1934 and was completed on November 1, 1935.

PART II. Structural/Design Information

A. General Statement:

- 1. Character:** The Saybrook water tower was designed by and built by Chicago Bridge and Iron Works (CBI) in 1935, Contract Number 6167. The design of the water tower is common to the early through middle twentieth century in the Midwest. The water tower offers the first glimpse of most communities to travelers in central Illinois and are one of the most recorded and remembered features of each town or village. Each water tower represents the historic moment in the towns when they needed to upgrade water delivery systems to satisfy the needs of a growing community. Many of these iconic structures have reached the end of their functional lives and are being replaced by new, larger, water towers.
- 2. Condition of fabric:** The exterior of the Saybrook water tower has been well maintained and while surface corrosion is evident on some elements no structural failures were observed. Persistent leaks and the repeated cost of repairing them are the reasons the Saybrook water tower is being replaced.

B. Description:

- 1. Materials:** The Saybrook Water Tower is a riveted steel structure with four support columns and a conical roof.

2. Dimensions:

- a. Overall dimensions: Water tower occupies an area of approximately 748 square feet at base. Tank capacity is 60,000 gallons.
- b. Height: 100' to the balcony, 120' to the top.
- c. Diameter of Tank: approximately 21'.
- d. Foundations: The water tower rises from four concrete piers that are 3'-4" square at ground level. While the depth and width of the base of the concrete piers is unknown, based on similar CBI plans it is likely that the piers extend 6'-0" below the ground surface and are approximately 8'-0" wide at the base. 1-3/4" diameter anchor bolts extend through the riveted steel column boots (16 x 28") to secure the columns to the concrete piers.
- e. Structural System and Framing: The four latticed columns are comprised of three approximately 35' long segments. Each segment consists of two 12" wide angled steel beams connected by riveted steel lattice work. Steel sleeves that are 8'-0" x 15" square, guard the columns from being climbed. A shorter sleeve is located on the southwest column below the access ladder.

The columns are connected to each other by two sets of horizontal steel struts, spaced approximately 35' apart, that are spliced and riveted to the posts. Additional support is provided by diagonally installed 1-1/4" round tower rods that are attached to the base, struts, and top of the columns with 14" riveted plates. The tower rods were tightened with 10" turn buckles to add strength to the frame.

Additional support is provided by a 48" diameter steel riser that rests on an octagonal concrete pad that measures 23" on each side. A 16" x 8" access hatch for the riser is located on its north side. The plates for the riser are vertically riveted, and horizontally welded, together.

The original 3" diameter blowout valve is located near the base of the riser on the southeast side and a replacement valve is located on the southeast side. A 3" diameter steel overflow pipe is bolted to the southeast column and the access ladder is located on the southwest leg.

The water tank, also constructed from riveted steel plates, has an elliptical bottom and a conical top. All riveted connections are single lines of rivets. The four columns meet the tank at the base of the balcony. Above the balcony, near the top

of the tank, the name of the town, Saybrook, is painted in large black block letters twice around the tank.

- f. Roof shape, covering: Conical shaped roof includes a roof vent at its center and an interior access hatch.
- g. Decorative feature and trim: The name Saybrook is painted two times around the water tank.

C. Mechanicals/Operations:

An electric powered pump is located within the pumphouse located within the fenced compound. Electrical service is provided from a utility pole located immediately west of the water tower compound. Water is pumped into the tank where it is stored. Water pressure and gravity release the water into the public watermains and is distributed to the community as needed.

D. Site Information:

General setting and orientation: The Saybrook water tower complex is located on an irregularly shaped tract that is located on the southeast corner of West Lincoln Street and South Center Street. The complex is situated in the southeast portion of the tract with an unnamed city park located on the north side of the tract. A Veterans Memorial is located in the northeast corner of the park, a playground is located in the northeast corner of the park, and a 48' square open sided picnic shelter occupies the center of the park.

The gravel covered tower complex is surrounded by a chain link fence that has a pedestrian gate on the west side and a vehicle gate on the east side. A 16'-8" x 16'-8" brick pump house is located south of the water tower. The building has been sheathed in metal siding and is accessed by a pedestrian door on the west. Pumps and other mechanical equipment occupy the north side of the building and a workshop occupies the rest. Two sets of double hung windows are located on the south and north sides of the building.

PART III. SOURCES OF INFORMATION

A. Primary Sources:

Saybrook Gazette, Vol. XXXVIII No. 23 – Vol. XXXIX No. 30, Saybrook
1935-1936.

Minutes of the Saybrook Village Board of Trustees, Book IV, 1934-
1965.

B. Secondary Sources:

- Bateman, Newton, and Paul Selby, Ezra M Prince, and John H. Burnham, *Historical Encyclopedia of Illinois and History of McLean County*. Chicago: Munsell Publishing Company, 1908.
- Chicago Bridge and Iron Works. *Elevated Tank Designs: Submitted in a Competition*, Chicago: 1931. . Hathi Trust Digital Library, <https://catalog.hathitrust.org/>.
- LaBaron, William Jr. *The History of McLean County, Illinois*, Chicago, 1878.
- LaBounty, William P., *McLean County Combined Indexed Atlases, 1856-1914*, Bloomington: McLean County Historical Society, 2006.
- DeLorme, *Illinois Atlas and Gazetteer: Yarmouth; Maine*, 2003. Internet Archive: Digital Library of Free & Borrowable Books, Movies, Music & Wayback Machine. <https://www.archive.org/>.
- Drury, John, *This is McLean County, Illinois*. Chicago: The Loree Company, 1955. Illinois Genealogical Trails, Illinois. <https://genealogytrails.com>.
- Faragher, John Mack, *Sugar Creek: Life on the Illinois Prairie*. New Haven CT, Yale University Press, 1986.
- Hazelhurst, J.N., *Towers and Tanks for Water Works. The Theory and Practice of Their Design and Construction*. New York: Wiley Press 1901, 1904, 1907. Hathi Trust Digital Library, <https://catalog.hathitrust.org/>.
- Mathis, Gregory R. and John Chlebeck, PE., *Steel Water Towers Associated with South Dakota Water Systems, 1894-1967*. Pierre, South Dakota State Historical Society, 2012, <https://history.sd.gov>.
- National Register of Historic Places, Old Havana Water Tower, Havana, Mason County, Illinois, National Register #93000325. Illinois Architectural Resources Geographic System, <http://gis.hpa.state.il.us/hargis>.
- “Projects in Illinois,” The Living New Deal, <https://livingnewdeal.org/us/il/>

Sanborn Map and Publishing Company, *Saybrook, McLean County Illinois*, New York, May 1906, July 1913. Library of Congress Digital Collections Sanborn Maps,
<https://www.loc.gov/collections/sanborn-maps>.

Sanborn-Perris Map and Publishing Company, *Saybrook, McLean County Illinois*, New York: October 1893, February 1899, Library of Congress Digital Collections Sanborn Maps,
<https://www.loc.gov/collections/sanborn-maps>.

Spreng, Ronald E., "They Didn't Just Grow There – Building Water Towers in the Post War Era," *Minnesota History*, Winter, 1992.
<https://www.mnhs.org/market/mhspress/minnesotahistory/xml/v53i04.xml>



Service Layer Credits: Copyright © 2013
National Geographic Society, i-cubed

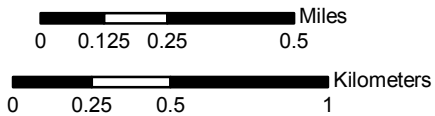
SAYBROOK WATER TOWER

Near the Southeast Corner of
West Lincoln and
South Center Streets

Saybrook
McLean County
Illinois

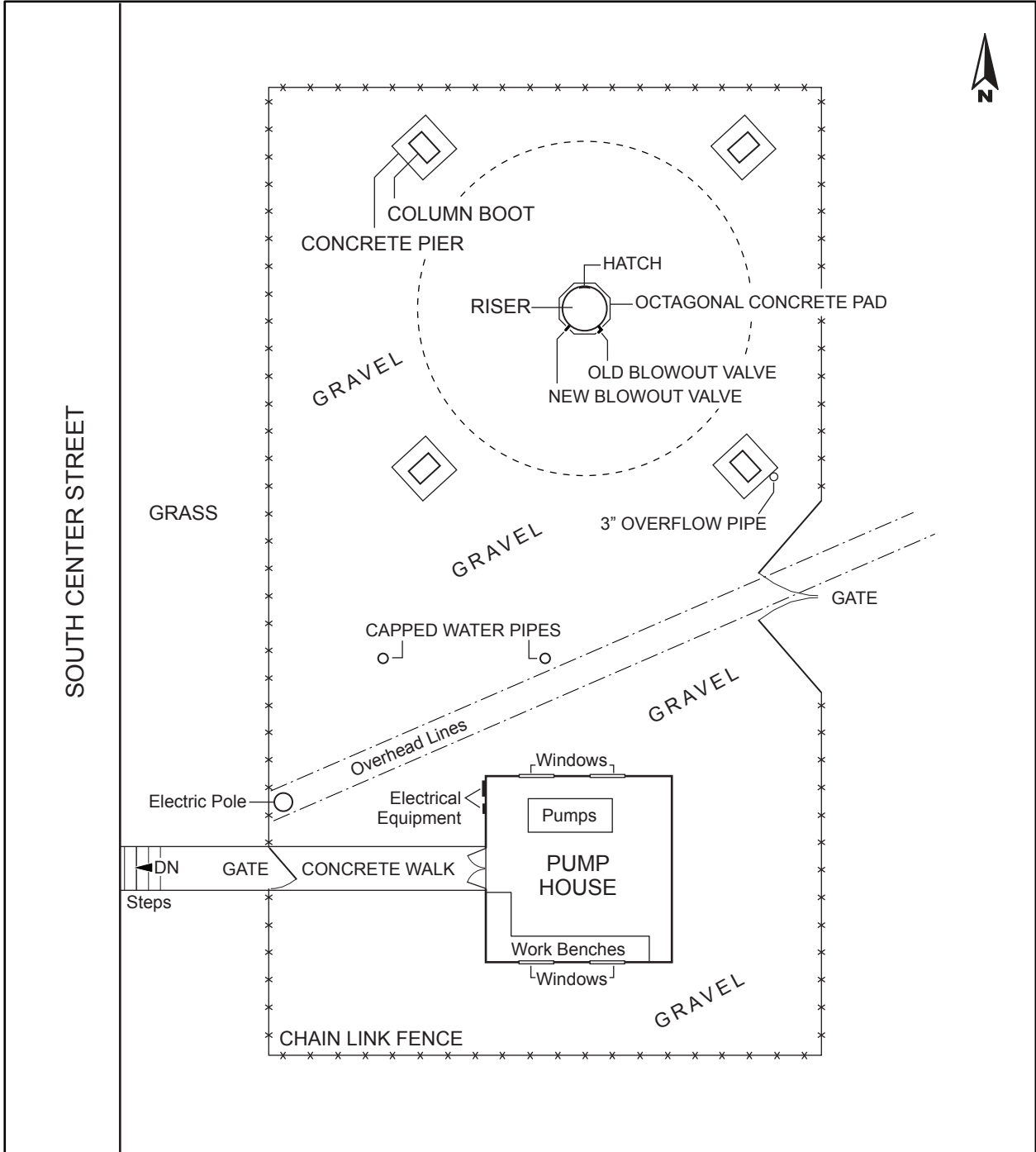


SAYBROOK QUADRANGLE
MCLEAN COUNTY - ILLINOIS
7.5 MINUTE SERIES (TOPOGRAPHIC)1983



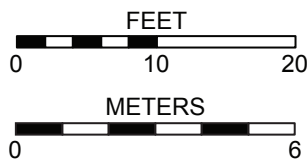
HAER No. IL-1201

Sheet 1 of 1

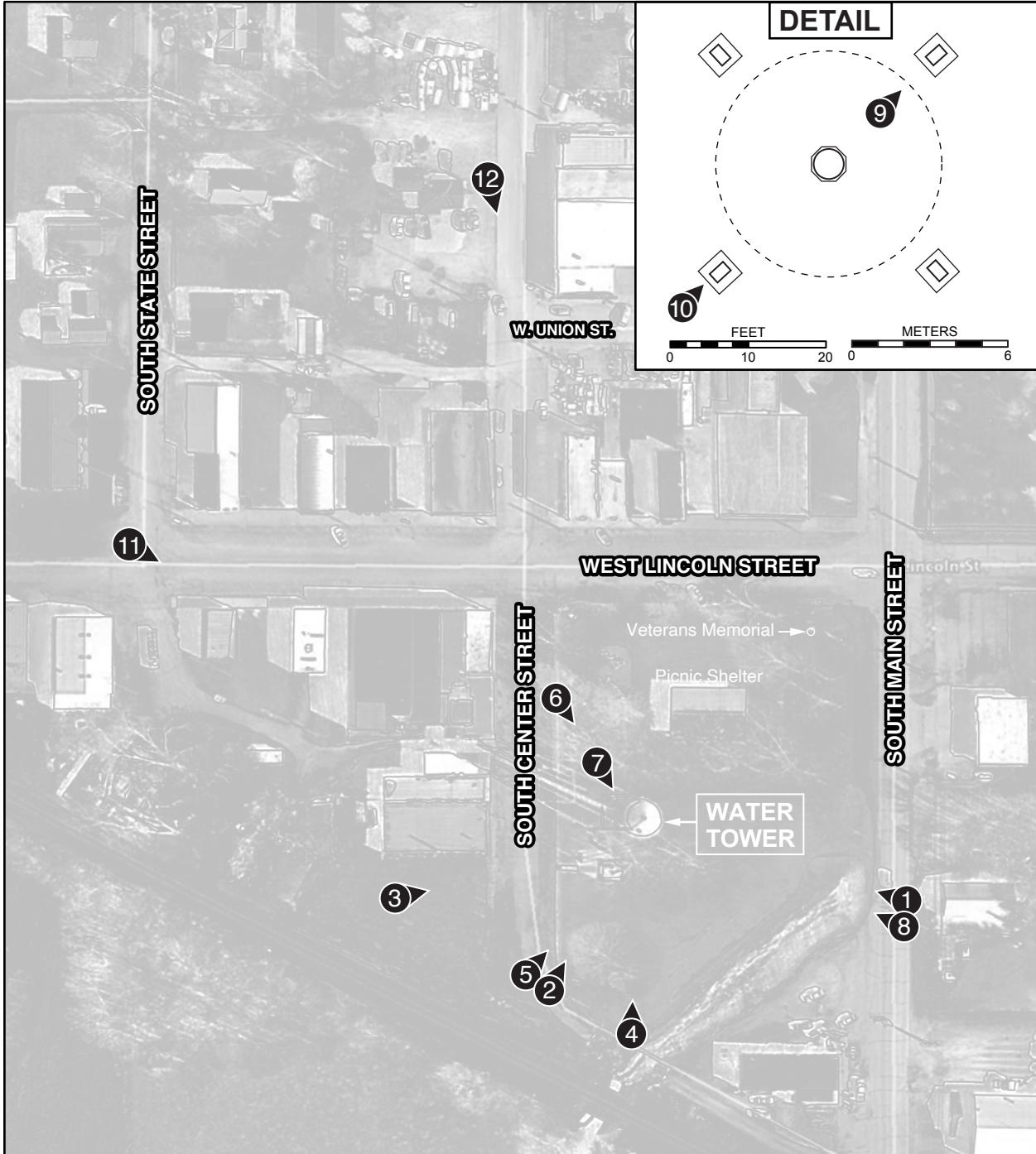


SAYBROOK WATER TOWER
 Near the Southeast Corner of
 West Lincoln and
 South Center Streets
 Saybrook
 McLean County
 Illinois

SITE PLAN



HAER No. IL-1201

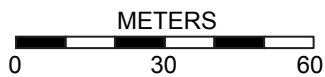
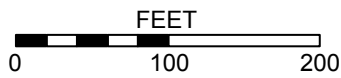


SAYBROOK WATER TOWER

Near the Southeast Corner of
West Lincoln and
South Center Streets

Saybrook
McLean County
Illinois

① = LOCATIONS OF
PHOTOGRAPHS



HAER No. IL-1201

Sheet 1 of 1

HISTORIC AMERICAN ENGINEERING RECORD

INDEX TO PHOTOGRAPHS

SAYBROOK WATER TOWER

HAER No. IL-1201

Near the Southeast Corner of West Lincoln and South Center Streets
Saybrook
McLean County
Illinois

INDEX TO BLACK AND WHITE PHOTOGRAPHS

Benjamin Halpern, Photographer, September 2019

- IL-1201-1 General view of water tower, facing northwest, tower, compound, and pumphouse
- IL-1201-2 General view of water tower, facing north from South Center Street
- IL-1201-3 General view of water tower, facing east
- IL-1201-4 Detail view of water tower, facing north, upper portion, overflow pipe
- IL-1201-5 Detail view of water tower, facing northeast, upper portion of tower
- IL-1201-6 Detail view of water tower, facing southeast, water tank, upper structure, and roof vent
- IL-1201-7 Detail view of water tower, facing southeast, water tank, upper structure, and balcony
- IL-1201-8 Detail view of water tower, facing northwest, water tank and support structure
- IL-1201-9 Detail view of water tower, facing northeast, column struts and tower rods
- IL-1201-10 Detail view of water tower, facing northeast, southwest column, column boot, anchor bolt, concrete foundation, tower rods and turnbuckle, column guard, and manufacture's plate
- IL-1201-11 General view of water tower, facing southeast from West Lincoln Street business district
- IL-1201-12 General view of water tower, facing southeast from South Center Street

HISTORIC AMERICAN ENGINEERING RECORD

INDEX TO SUPPLEMENTAL MATERIALS

SAYBROOK WATER TOWER
Near the Southeast Corner of West Lincoln
and South Center Streets
Saybrook
McLean County
Illinois

HAER No. IL-1201

All field images were taken by
David Halpin on 4/11/2019

- IL-1201-13 Pumphouse
- IL-1201-14 Pumphouse interior 1
- IL-1201-15 Pumphouse interior 2
- IL-1201-16 Pumphouse interior 3
- IL-1201-17 14" Pumphouse wall
- IL-1201-18 Pumphouse brick
- IL-1201-19 10" Turnbuckle
- IL-1201-20 12" Column
- IL-1201-21 14" Plate connecting tower rod to base of column
- IL-1201-22 Octagonal riser foundation, 23" on each side
- IL-1201-23 Base of riser with blowout valves
- IL-1201-24 Capped water pipes
- IL-1201-25 Column boot and anchor bolt
- IL-1201-26 Side view of column boot and tower rod

IL-1201-27 Column guard
IL-1201-28 Connection of column to balcony and tank
IL-1201-29 Riser hatch
IL-1201-30 Column detail
IL-1201-31 Siren on strut
IL-1201-32 Picnic shelter northeast of water tower
IL-1201-33 Veterans memorial
IL-1201-34 1913 Sanborn Map with elevated water tank
IL-1201-35 Field notes



HAER No. IL-1201-13: Pumphouse



HAER No. IL-1201-14: Pumphouse interior 1



HAER No. IL-1201-15: Pumphouse interior 2



HAER No. IL-1201-16: Pumphouse interior 3



HAER No. IL-1201-17: 14" Pumphouse wall



HAER No. IL-1201-18: Pumphouse brick



HAER No. IL-1201-19: 10" Turnbuckle



HAER No. IL-1201-20: 12" Column



HAER No. IL-1201-21: 14" Plate connecting tower rod to base of column



HAER No. IL-1201-22: Octagonal riser foundation, 23" on each side



HAER No. IL-1201-23: Base of riser with blowout valves



HAER No. IL-1201-24: Capped water pipes



HAER No. IL-1201-25: Column boot and anchor bolt



HAER No. IL-1201-26: Side view of column boot and tower rod



HAER No. IL-1201-27: Column guard



HAER No. IL-1201-28: Connection of column to balcony and tank



HAER No. IL-1201-29: Riser hatch



HAER No. IL-1201-30: Column detail



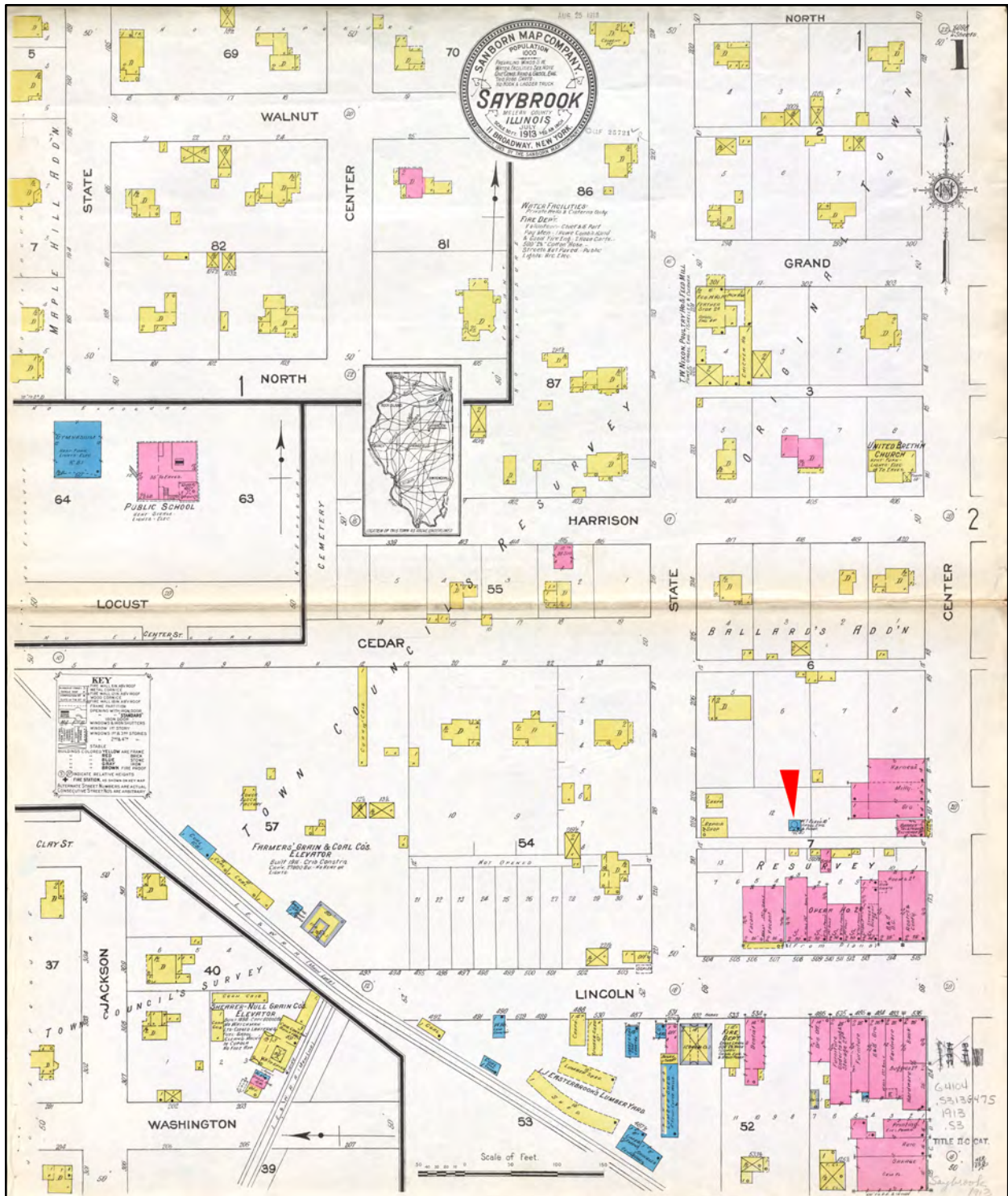
HAER No. IL-1201-31: Siren on strut



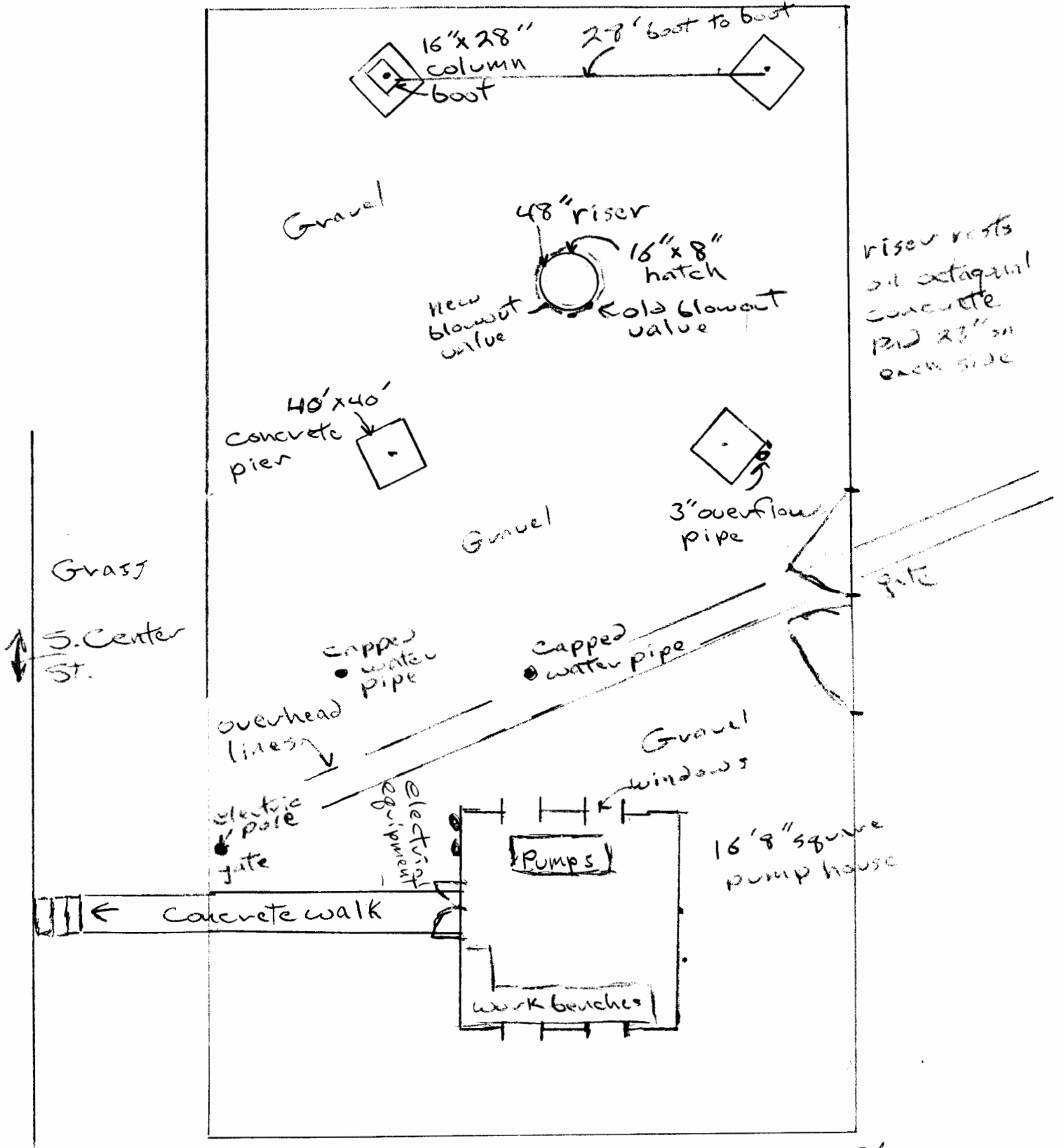
HAER No. IL-1201-32: Picnic shelter northeast of water tower



HAER No. IL-1201-33: Veterans memorial



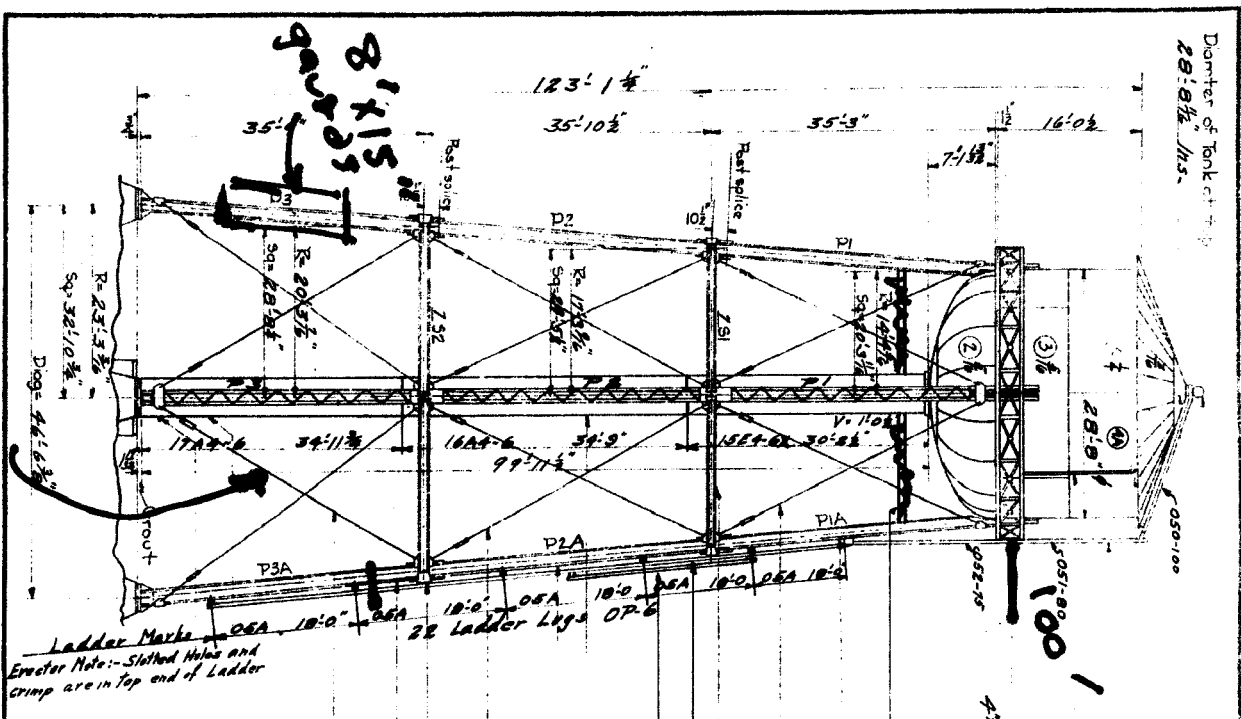
HAER No. IL-1201-34: 1913 Sanborn Map with elevated water tank



11/4/19 JSH
 0 5 10'
 Scale approximate
 N

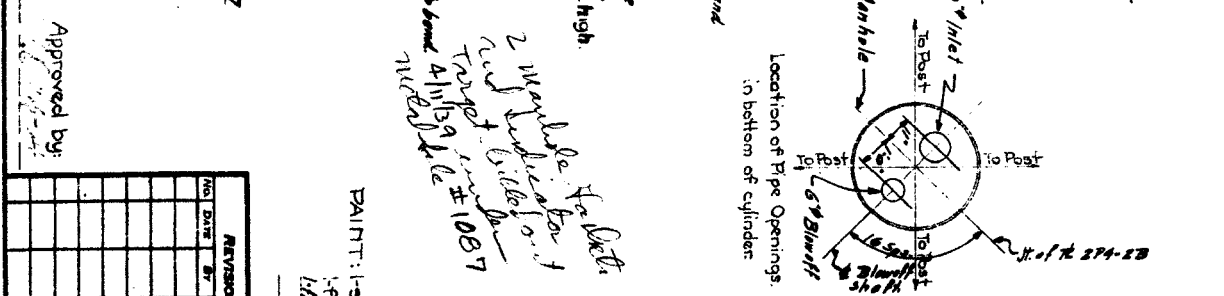
48'
 Chain link fence
 19-157
 Saybrook

Saybrook 19-167 11/14/19



1 1/2" round

- Std. (2) Final Patt. No. 501
- Std. Conical Steel Roof (Order in rest to right of ladder)
- Sta. 4" CI Overflow Post No. 501 7th Fl.
- Std. Revolving Ladder
- Std. 100,000 Gallon Tank
- 28'-0" Diam. x 16'-0" High
- Std. 24" Boloney and Handrail
- 4" CI. 24" Overflow Pipe down Post. We. Furnish.
- Electric Panel
- Special Platform Platform.
- 4 Posts = 2 1/2" Dia. 20' x 35' 10"
- 1 Cm. 14' x 14' x 35'-0"
- 8 Tower Rods = 1/2" x 37'-5" B7B
- 4 Struts = 2 1/2" x 20' x 20' x 20' to hand
- SM. Post Ladder
- Std. Indicator, C & I Wts. in Serial & Conn. Type to present line.
- Std. 4" Cylinder 4'-0" diam. 35' 1/2" high
- 4 Posts = 2 1/2" Dia. 20' x 35'-0"
- 1 Cm. 14' x 14' x 35'-0"
- 8 Tower Rods 1/2" x 37'-5" B7B
- 4 Struts = 2 1/2" x 20' x 20' x 20' to hand
- 4 Posts = 2 1/2" Dia. 20' x 35'-0"
- 1 Cm. 14' x 14' x 35'-0"
- 8 Tower Rods = 1/2" x 37'-5" B7B
- Inlet Pipe 10" Dia. We. Furnish.
- Outlet Pipe None - Furnish
- Std. 1/2" x 1/2" Manhole Cover Patt. No. 397
- Foundations Std. We. Furnish
- 4 Anchor Bolts 1/2" x 6'-0"
- 2" Bored hole in ctr. of shoe.
- Mill. No.
- Inspection/Shop No.
- Field No.



PAINT: 1-Shop coat Pat. Guide Paint
2-Field coat of Std. Black Graphite Inside
Middle Coat of Aluminum Zinc - Outside.

NO.	DATE	BY	REVISIONS

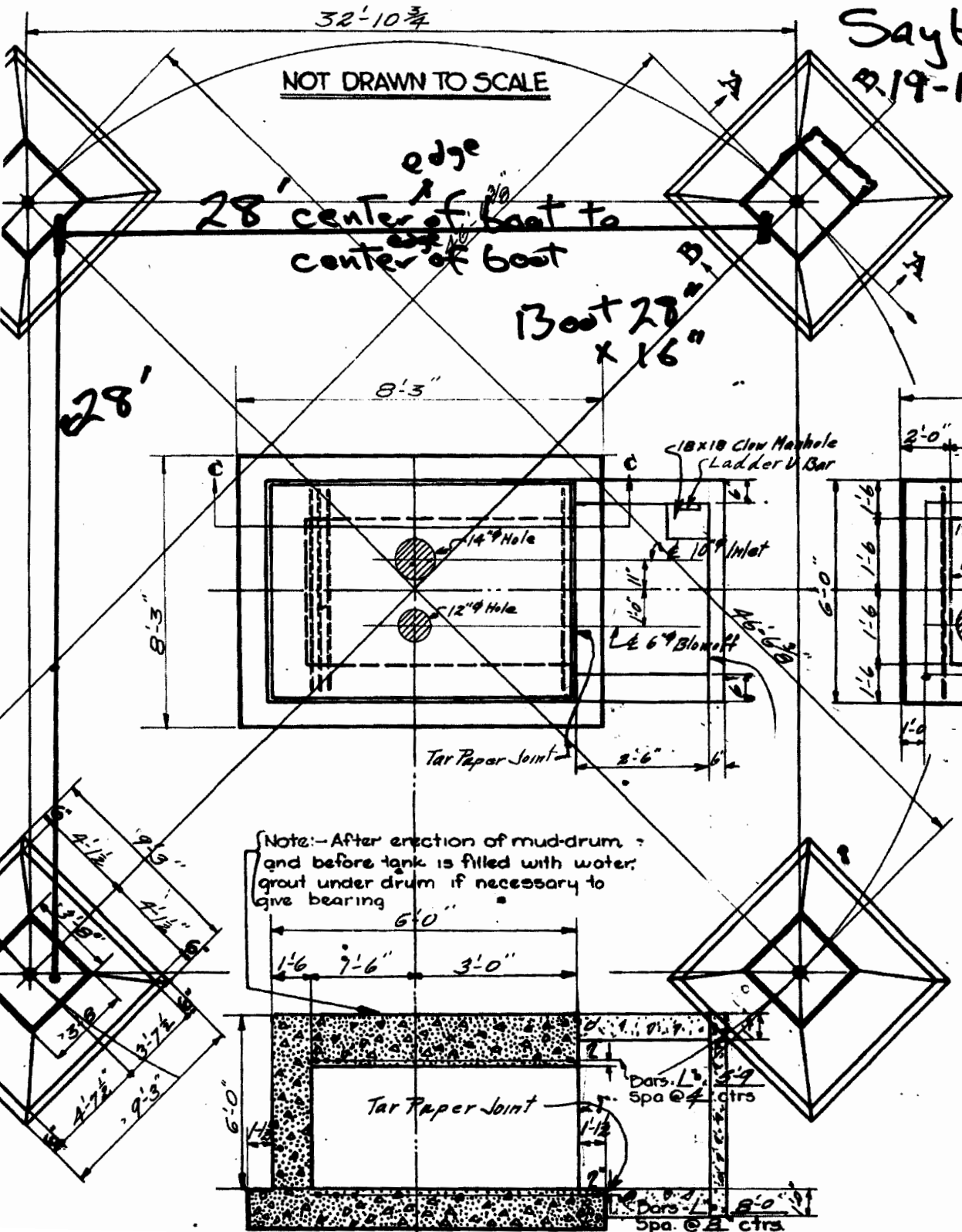
CHICAGO BRIDGE & IRON WORKS
CHICAGO, ILLINOIS

GENERAL PLAN

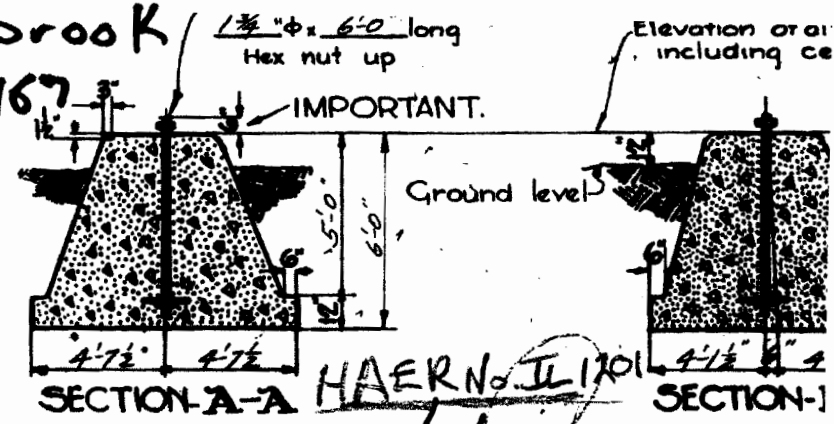
100002 GA. BLEWETT TANK 125' dia top
FOR CITY of CARROLLTON, TEX.
LOCATION: Carrollton, Tex.

DESIGNED BY: H.E. DUNLAP
CHECKED BY: J.L. ...
CONTRACT NO. 3027

LIST OF DRAWINGS	Folio Index	Description
100-1227A	100E1	General Plan
100-1227B	21A100	Foundation, Dog
100-1227C	22A100	Roof
100-1227D	23A100	Figure sheet for tower
100-1227E	24A100	Bolecons & Handr.
100-1227F	25A100	Bottom
100-1227G	15E4	Cylinder - Top Sect. 50' Long
100-1227H	16A4	Cylinder - Inter. Section
100-1227I	17A4	Cylinder - Bottom Section
100-1227J	18D4	Cylinder - Head Plate
100-1227K	25A100	Top Post
100-1227L	27A100	Inter Post
100-1227M	28A100	Bottom Post
100-1227N	29A100	Struts
100-1227O	30A100	Revolving Ladder
100-1227P	31A100	Overflow Tank
100-1227Q	32A100	Indicator
100-1227R	33A100	Indicator
100-1227S	34A100	Indicator
100-1227T	35A100	Indicator
100-1227U	36A100	Indicator
100-1227V	37A100	Indicator
100-1227W	38A100	Indicator
100-1227X	39A100	Indicator
100-1227Y	40A100	Indicator
100-1227Z	41A100	Indicator
100-1227AA	42A100	Indicator
100-1227AB	43A100	Indicator
100-1227AC	44A100	Indicator
100-1227AD	45A100	Indicator
100-1227AE	46A100	Indicator
100-1227AF	47A100	Indicator
100-1227AG	48A100	Indicator
100-1227AH	49A100	Indicator
100-1227AI	50A100	Indicator



Saybrook
9.19-167



11/4/19

JSA

[Handwritten signature]

NOTE CAREFULLY:

BE SURE THAT THE BOTTOMS OF THE CONCRETE UPON FIRM SOIL THAT WILL SAFELY SUSTAIN A LOAD OF 4000 LBS.

BE SURE THAT THE BOTTOMS OF ALL PIERS ARE BELOW 7'

The foundation piers shown on this drawing have been the assumption that the above conditions will be strict. Make piers deeper than shown if necessary to obtain Extra expense involved in increasing the depth or size over size indicated on this plan to be paid for at an item to be agreed upon.

Piers to be built of concrete consisting of one part Cement, three parts good quality sand and five parts stone or clean screened gravel. Tops of piers to be given

THE CHICAGO BRIDGE & IRON WORKS GUARANTEE DOES NOT COVER

REVISIONS			
NO.	DATE	BY	REMARKS

CHICAGO BRIDGE & IRON WORKS
CHICAGO, ILL.

FOUNDATION
For 10000 Gallon Tank with 6' dia. Height to Top
City of Carroll

Drawn By H.P.L. DATE 11-22-29
Checked By
Checked By N.P.T.





SAYBROOK



SAYBROOK





SAYBROOK

SAYBROOK

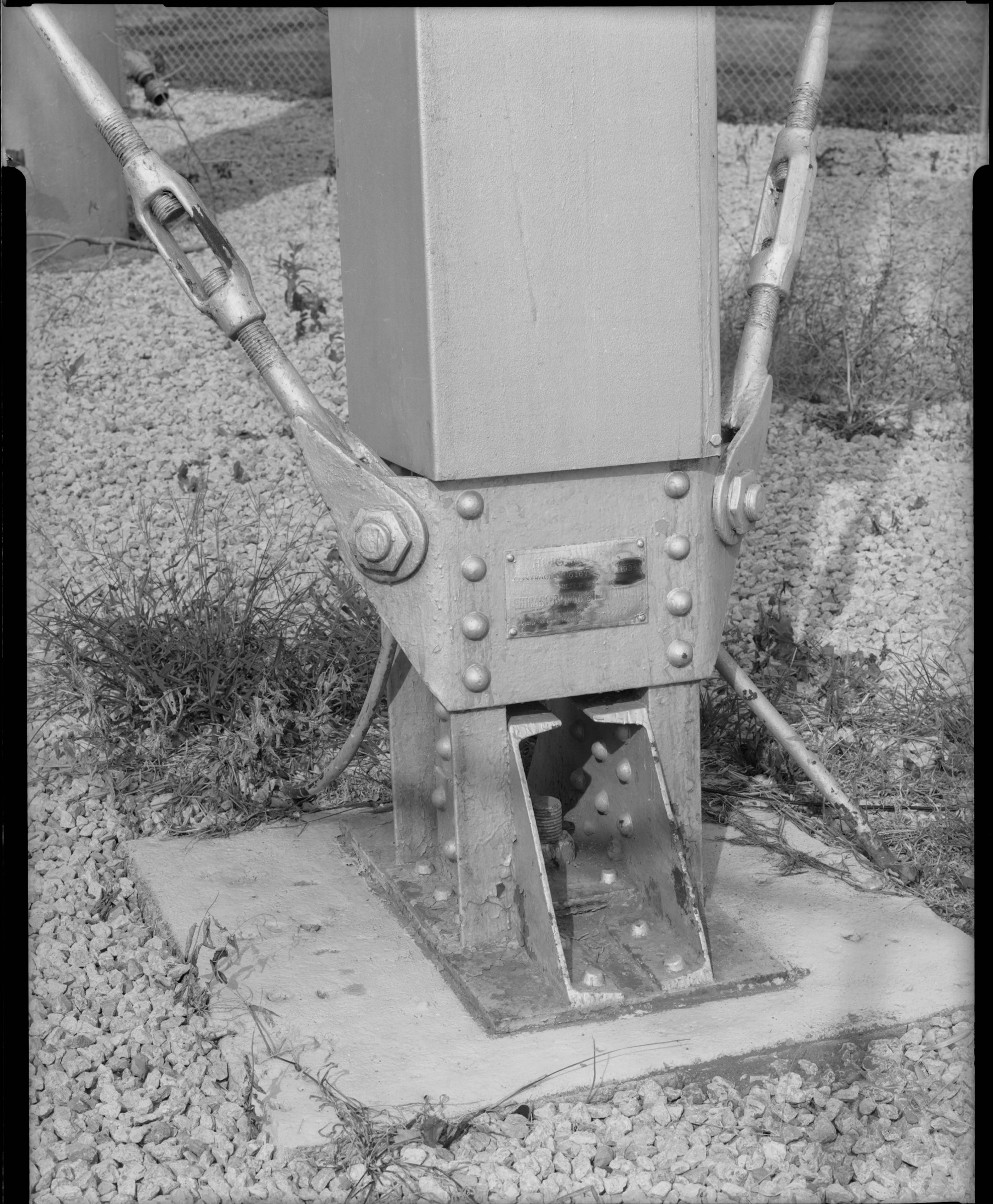




BROOK









SAYBROOK VILLAGE HALL
MCLEAN COUNTY
SHERIFF'S OFFICE
SUBSTATION

Heart
of
the
Community





1920

PARTS

FASSCO

SAYBROOK

STOP