

STAR MANUFACTURING COMPANY
2 East Main Street
Carpentersville
Kane
Illinois

HABS No. IL-1260

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

FIELD NOTES

HISTORIC AMERICAN BUILDINGS SURVEY
National Park Service
Midwest Region
601 Riverfront Drive
Omaha, NE 68102

HISTORIC AMERICAN BUILDINGS SURVEY

STAR MANUFACTURING COMPANY

HABS No. IL-1260

Location: The Star Manufacturing Company building is located at 2 East Main Street, Dundee Township, Kane County, Illinois.

The Star Manufacturing Company building is located at latitude: 42.109557, longitude: -88.289054. This coordinate was taken from entering the physical address in Google Maps on August 3, 2020.

Present Owner/

Occupant: Present owners: OTTO Engineering, Inc.
The building is currently home to OTTO Engineering, Inc.

Present Use: The building, constructed as a factory for the Star Manufacturing Company, has housed manufacturing and office functions for OTTO Engineering since 1977.

Significance: The Star Manufacturing Company building is an important building in the history of Carpentersville, representing the town's earliest manufacturing operations tied to water power supplied by the Fox River. Constructed in several stages out of local brick and in varying external configurations, the structure represents the evolution of Carpentersville's industry over its 140-year history.

Historian: Andrew J. Elders, Architectural Historian. Independent contractor.
The completion date of this report is December 14, 2020.

Project

Information: Those involved in preparing the documentation for this report include Andrew J. Elders and Susan S. Benjamin, of Benjamin Historic Certifications, LLC.

Part I. Historical Information

A. Physical History

- 1. Date of erection:** The extant building was constructed in multiple stages between 1880 and 2000. The sections of the building being demolished were built in 1895, 1910, and 1918.
- 2. Architect:** Not known.
- 3. Original and Subsequent Owners:**

The Legal Description for the property at 2 East Main Street is in three parts, described as follows:

Parcel 1:

That part of the Southeast quarter of the Southwest quarter of Section 15 and the Northeast quarter of the Northwest quarter of Section 22, Township 42 North, Range 8 East of the third principal meridian, bounded as follows: on the Southeasterly side by the Northwesterly line of Main Street; on the Northeasterly side by a line parallel with and distant 10' Southwesterly, measured at right angles and radially, from the center line of the main track of the Chicago and Northwestern Transportation Company, as said main track is now located; on the Northwesterly side by the Westerly extension of the centerline of locust street; and on the Southwesterly side by a line parallel with and distant 33' Southwesterly, measured at right angles and radially from the center line of the main track of the Chicago and Northwestern Railway Company (now the Chicago and Northwestern Transportation Company), as said main track center line was originally established across said sections 15 and 22, in the village of Carpentersville, Kane County, Illinois.

Parcel 2:

That part of the Northeast quarter of the Northwest quarter of Section 22, Township 42 North, Range 8 East of the third principal meridian, bounded and described as follows: commencing at a point on the Northwesterly line of Main Street, distant 33' Southwesterly measured at right angles, from the centerline of the main track of the Chicago and Northwestern Railway Company (now the Chicago and Northwestern Transportation Company), as said main track center line was originally located and established across said Section 22; thence Southeasterly parallel with said original main track center line a distance of 160' to the point of beginning of the parcel of land herein

described; thence Northwesterly parallel with said original main track center line a distance of 104.02', more or less, to a point on the Southeasterly line of said Main Street; thence Northeasterly along said Southeasterly line of Main Street to a point distant 10' Southwesterly, measured at right angles, from the center line of the main track of the Chicago and Northwestern Transportation Company, as said main track is now located; thence Southeasterly parallel with said last described main track center line a distance of 104.02', more or less, to a point on a line drawn parallel with the Southeasterly line of said Main Street through the point of beginning; thence Southwesterly along said last described parallel line to the point of beginning; in the village of Carpentersville, Kane County, Illinois.

Parcel 3:

That part of lot 3 of Illinois Iron and Bolt Company's Subdivision and part of the East fraction of the Southwest quarter of Section 15, Township 42 North, Range 8 East of the third principal meridian, all described as follows: beginning at the intersection of the Westerly right of way line of the Chicago and Northwestern railway with the Northerly right of way line, as occupied, of Main Street; thence Westerly, along said Northerly right of way line, 166' to the Easterly shore of the Fox River; thence Northerly, along said Easterly shore line, to the Northerly line, extended Westerly of Maple Avenue; thence Easterly, along the extension of said Northerly line 163' to the Westerly right of way line of the Chicago and Northwestern Railway; thence Southerly, along said Westerly right of way line, being along a curve to the left, the chord of said curve forms an angle 76 degrees 01 minute 49 seconds to the right with the prolongation of the last described course 351.38'; thence Southerly, along said Westerly right of way line, being tangent to the last described curve, 619.32' to the point of beginning; in the village of Carpentersville, Kane County, Illinois.

The original owner of the building was Star Manufacturing Company. Star Manufacturing was founded by Carpentersville's namesake Julius Angelo Carpenter in 1873 for the manufacture of agricultural implements.¹ The company employed many immigrant workers of German extraction, and these men worked long hours: ten hours a day, six days a week.² An early catalog summarized the scope of Star Manufacturing's operations:

¹ Philip A. Aleo, *The Historic Business District of Carpentersville: Illinois Iron & Bolt, Star Manufacturing, OTTO Engineering* (Dundee, IL: Aleo Publications, 2012), 37.

² *Ibid.*, 41.

“The production of our Shops in Steel Shapes meets three different, yet closely allied, distributing demands: first, from the Heavy Hardware Jobbers who require blank shapes for the Blacksmiths, second, from Wholesale Implement Supply Houses who require fitted, bolted and finished shapes for retail Hardware and Implement Dealers; and third, Implement Manufacturers who require steel parts for soil tilling implements which they produce.”³

Star Manufacturing’s physical plant at 2 East Main Street grew in sections as the business grew, encompassing the operation’s foundry and forging and welding activities. In 1912, Star Manufacturing was consolidated with the neighboring Illinois Iron & Bolt Company, capitalized at \$1,850,000.⁴ As the demand for Illinois Iron & Bolt’s and Star’s products declined in the twentieth century, portions of the manufacturing complex were rented out to tenants,⁵ one of whom was the Chicago Railway Signal & Supply Company, which had been founded in 1911 to manufacture and deal in railway signals and apparatus.⁶ The 1922 Sanborn Fire Insurance Map of Carpentersville shows them as sharing 2 East Main Street with Star Manufacturing.⁷

Despite shifting demand as the nature of manufacturing and agriculture sectors became increasingly automated, Star Manufacturing’s business kept evolving through the twentieth century. Star grew to manufacture plow shares and assemble plow bottoms for agricultural leaders International Harvester, John Deere, and Massey Ferguson.⁸ In 1967, the company expanded its footprint in Carpentersville, purchasing land adjacent to its manufacturing facilities to accommodate increasing demand for its product.⁹ After a century in operation, demand was enough to bring an expansion of Star Manufacturing to Freeport, Illinois in 1975.¹⁰ It was this expansion which led to the end of Star Manufacturing Company’s presence in Carpentersville, as by 1977 management announced that it was moving all operations to Freeport, and selling its “obsolete, multi-floor plant.”¹¹ Star Manufacturing Company’s operations have continued into the

³ Aleo, 37.

⁴ “New \$1,850,000 Merger,” *DuPage County Register*, May 3, 1912, <https://www.newspapers.com/image/86125811/> (accessed October 22, 2020).

⁵ Aleo, 50.

⁶ “New Incorporations,” *Chicago Tribune*, November 25, 1911, <https://www.newspapers.com/image/354976495/> (accessed October 22, 2020).

⁷ “Image 13 of Sanborn Fire Insurance Map from Dundee, Kane County, Illinois,” The Library of Congress, accessed December 12, 2020, <https://www.loc.gov/resource/g4104dm.g018311922/?sp=13>.

⁸ “Star Manufacturing Advances Move of Operation to Freeport,” *Freeport (IL) Journal-Standard*, July 2, 1977, <https://www.newspapers.com/image/3171989/> (accessed October 22, 2020).

⁹ “Star Manufacturing Company to Expand,” (*Carpentersville) Cardinal Free Press*, January 11, 1967, <https://www.newspapers.com/image/192205763/> (accessed October 22, 2020).

¹⁰ “Star Manufacturing Advances.”

¹¹ *Ibid.*

twenty-first century in Freeport, and the company was acquired by Forge Resources Group in 2019 and is now known as Star Freeport Company.¹²

OTTO Engineering purchased the property from Star Manufacturing in 1977.¹³ OTTO was founded as OTTO Control by Jack Roeser in 1961 with an initial investment of \$5,000; it was originally located in the basement of his home in Park Ridge, Illinois.¹⁴ Jack Roeser had worked as an engineer and inventor for Illinois Tool Works and decided to form his own switch business.¹⁵ The company's first product was a pushbutton switch designed and qualified to military specifications, for use in aerospace applications.¹⁶ OTTO's range also includes accessories which were used in two-way radios.¹⁷ As Jack Roeser continued to innovate his production processes, the company expanded its focus to include equipment to mix and dispense adhesives.¹⁸ By 1968, the company was large enough to merit a new building, and the operation moved to a former liquor store in Carpentersville.¹⁹ Large contracts had come OTTO's way, including some for manufacturing parts for fighter planes for McDonnell Douglas, General Dynamics, and Rockwell,²⁰ and with Motorola for communications equipment.²¹

Having experienced large gains in sales volumes through the 1970s, OTTO purchased the former Star Manufacturing Company building at 2 East Main Street in 1977. Initially, OTTO was only to occupy a portion of the building, but Jack Roeser intended to restore the entire complex, renting out office space and possibly even including a restaurant in the oldest space at the southeast corner which was built in 1880. OTTO intended to occupy a portion of the northern section of the building for its manufacturing operations.²² By utilizing portions of the large building as rental space, the company realized rental income that paid for building improvements.²³ Over time, vertical integration of the company filled the building at 2 East Main Street, and new additions were constructed and other obsolete sections of the building were removed. Jack

¹² "FRG Acquires Star Manufacturing," Forge Resources Group, July 1, 2019, <https://www.forgeresourcesgroup.com/frg-acquires-star-manufacturing/>.

¹³ "Otto Engineering purchases Star Mfg.," (*Carpentersville*) *Cardinal Free Press*, August 23, 1977, <https://www.newspapers.com/image/186131064/> (accessed October 22, 2020).

¹⁴ Aleo, 200.

¹⁵ "Otto Engineering adds to Carpentersville site as business booms," (*Woodstock, IL*) *Northwest Herald*, December 2, 1998, <https://www.newspapers.com/image/203917541/> (accessed October 22, 2020).

¹⁶ Aleo, 200.

¹⁷ "Otto Engineering adds."

¹⁸ Aleo, 201.

¹⁹ *Ibid.*, 202.

²⁰ Aleo, 203.

²¹ "Otto marks 50 years of progress," (*Woodstock, IL*) *Northwest Herald*, July 7, 2011, <https://www.newspapers.com/image/182327508/> (accessed October 22, 2020).

²² "Otto Engineering purchases Star Mfg.," (*Carpentersville*) *Cardinal Free Press*, August 23, 1977, <https://www.newspapers.com/image/186131064/> (accessed October 22, 2020).

²³ Aleo, 205.

Roeser's son Tom became OTTO Engineering's president in 1987.²⁴ To produce its line of switches, OTTO has expanded its manufacturing capabilities to include injection molding, tool and die, and CNC (Computer Numerical Control) machining. To accommodate further expansion and sealing the company's commitment to Carpentersville, OTTO purchased the former Illinois Iron and Bolt factory at 11 West Main Street in 2005 and renovated and repurposed the building.²⁵ Further expansion in the same vein occurred in 2008, when OTTO completed its manufacturing campus by purchasing and renovating the original Illinois Iron and Bolt building at 11 West Main Street, which dated as far back as 1871.²⁶ Annual sales reached \$100 million by 2012.²⁷

4. **Builder, Contractor, Suppliers:** The various sections of the building were constructed of local brick manufactured by the Haeger Pottery in neighboring East Dundee, which held large clay deposits along the banks of the Fox River.²⁸
5. **Original Plans and construction:** The oldest extant section of the building is at the southeast corner of the current structure, which is labeled as Section 51 and was constructed in 1880. This was a free-standing building with an irregular rectangular footprint measuring 40' x 80' (south wall) and 85' (north wall). It is two-and-a-half stories tall above a basement level, with a gabled roofline oriented on the east-west axis that has extending eaves. A small shed-like belvedere is positioned in the center of the roof. The south wall of the building has three doors at the first floor, resting on stone sills that originally opened onto a wooden platform with stairs to ground level at its eastern edge. A double door at the first floor is centered on the eastern wall, and appears to have been a loading dock. Windows on the first and second stories were six-over-six, double-hung single sashes, under brick segmental arch headers and resting on stone sills. Four smaller double-hung windows are set under a frieze on the east wall, aligned with the window bays below and graduating in size according to the pitch of the roof. This building is among the more detailed sections of the existing structure, featuring a decorative brickwork frieze beneath the eaves, laid to suggest brackets separated by recessed panels. It remains in recognizable form today.
6. **Alterations and Additions:** The building as it stands today is the result of twelve stages of construction, with the oldest section being the southeast corner of the building built in 1880 and the newest being the center of the eastern side, built in 2000.

²⁴ "Otto marks 50 years of progress."

²⁵ Aleo, 98.

²⁶ Ibid., 138.

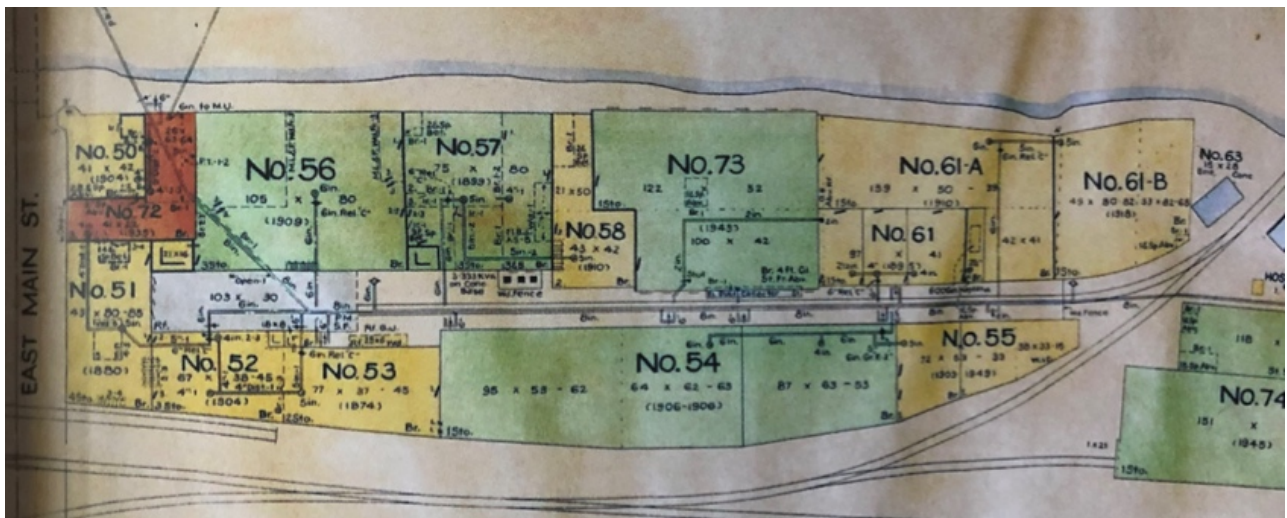
²⁷ Ibid., 208.

²⁸ Ibid., 15.

Extant sections are:

- 50: built 1904
- 51: built 1880
- 52: built 1904
- 56: built 1909
- 57: built 1899
- 58: built 1910
- 61: built 1895 (to be demolished)
- 61a: built 1910 (to be demolished)
- 61b: built 1918 (to be demolished)
- 72: built 1935
- 73: built 1943, rebuilt 1993

Sections 53 and 54 have been demolished, and partially replaced with an addition in 2000.



B. Historical Context:

Factory Architecture

A 1978 article about the role of the Fox River in civic development in the Carpentersville area describes the Star Manufacturing Company building as “the best example in the valley of the architecture brought over by the New England settlers when they occupied the area.”²⁹ The building is indeed rooted in early nineteenth-century industrial architecture of New England

²⁹ “Don’t turn your back on the Fox River,” (*Carpentersville IL*) *Cardinal Free Press*, April 27, 1978, <https://www.newspapers.com/image/186132314/> (accessed December 10, 2020).

factories and mills. Mill towns such as Waltham and Lowell, Massachusetts, employed water power to operate textile operations in a manner which was carried forward to Carpentersville's foundries in the form of water races feeding from the Fox River. Factories in Lowell were generally constructed along uniform lines, five stories tall and built of brick on stone foundations.³⁰ An early roof type was the "monitor roof," a name for a raised structure straddling the ridge of a roof, having windows or louvers for lighting or ventilation.³¹ These mill buildings were large and utilitarian and generally constructed by builders and engineers, and "only for certain details was an architect even considered and only after the work was well advanced."³² Some mills employed minor decorative details in their design, which served to lessen the impact of their sheer size and create an appropriate centerpiece for a company town. The interiors of these masonry buildings were constructed primarily of wood in a post-and-beam application, utilizing large cross-beams and smaller floor joists supported by heavy posts with layers of plank flooring forming part of the structure's stability. This was known as "slow-burning construction," where the timbers were of such size that a fire couldn't easily compromise them in short order.³³ By the 1840s, monitor roofs had fallen out of favor and were replaced by more traditional peaked roofs punctuated by dormers.³⁴

The Star Manufacturing Company building follows the design principles of these early New England mills. The exterior of the building is largely utilitarian in design, except for some minor decorative brickwork on some sections on the Main Street frontage and the Fox River. The section that most resembles the mill buildings of New England is the 1880 building at the southeast corner of the complex. The complex utilizes traditional peaked roofs and flat roofs, with large sections along the railroad spur (now demolished) that employed monitor roofs like the early New England mills of Lowell. The masonry exterior and interior fire walls enclose heavy timber post-and-beam construction with large metal fastening plates at the junctions. Many interior posts are chamfered at the corners, which aids in the "slow-burning construction" as chamfering removes thin corner edges which are susceptible to charring. While the Star Manufacturing Company lacks the overall cohesion of New England's textile mills, it continued to utilize proven construction methods throughout its development.

Carpentersville

The village of Carpentersville, Illinois, was settled in 1837 as Carpenter's Grove at a time when the rising Fox River prevented Charles and Daniel Carpenter from traveling west.³⁵ In 1851 Charles's son Julius Angelo Carpenter platted the land and renamed the town Carpentersville.

³⁰ Richard M. Candee, "Early New England Mill Towns of the Piscataqua River Valley," in *The Company Town: Architecture and Society in the Early Industrial Age* (New York, NY: Oxford University Press, 1992), 113.

³¹ Francis D.K. Ching, *A Visual Dictionary of Architecture* (New York, NY: Van Nostrand Reinhold, 1995), 209.

³² Candee, 124.

³³ *Ibid.*, 125.

³⁴ *Ibid.*, 127.

³⁵ Janice L. Reiff, Ann Durkin Keating, and James R. Grossman, *Encyclopedia of Chicago* (Chicago, IL: Chicago Historical Society, 2005), 121.

Carpentersville's early industrial development began when J.A. Carpenter personally paid to have a wooden bridge erected over the Fox River at the site of the current Main Street bridge.³⁶

The first foundry was established in 1855, when George Marshall & Co. was founded. This enterprise became known as the Illinois Iron & Bolt Company in 1865 when it was purchased by a group of local settlers.³⁷ Carpenter took control of Illinois Iron & Bolt in 1868, and the company manufactured a variety of metal products ranging from decorative garden urns to locomotive jacks.³⁸ This enterprise set Carpentersville on its way to becoming an active industrial settlement. J.A. Carpenter then acquired a dam and a mill, which he converted into a yarn and flannel factory.³⁹ Carpenter also founded a planing mill, sash, door and blind factory, and a lumberyard, bringing wood products to the village.⁴⁰ Carpenter also started the Star Manufacturing Company in 1873, adding yet another factory along the banks of the Fox River.⁴¹

As the industrial center of Carpentersville expanded, German, Swedish, and Polish immigrants came to work in the factories.⁴² As the driving force in what was becoming a "company town," Carpenter provided housing for factory workers, built a church, and held cultural events.⁴³ He persuaded the Chicago & North Western Railway to extend its tracks from East Dundee to the area and built an iron bridge, providing his own funds for construction. Julius Angelo Carpenter died in 1880, but his legacy in his namesake town endured.⁴⁴

The community remained small until the mid-1950s, consisting of a grid of streets centered on Main Street with the Main Street bridge being the only river crossing between the towns of Algonquin and Dundee.⁴⁵ At that time, farmer Leonard W. Besinger established a community named Meadowdale north of Carpentersville. This mixed-use development of residential construction and retail facilities constructed on more than 2,600 acres was soon annexed by Carpentersville.⁴⁶ Meadowdale Shopping Center was built as an early regional mall. Access to Carpentersville was improved when the Northwest Tollway opened in 1958. Also in 1958, Besinger built Meadowdale Raceway (later Illinois International Speedway), attracting as many

³⁶ Aleo, 8.

³⁷ Ibid.

³⁸ Ibid., 9.

³⁹ Reiff, 121.

⁴⁰ Aleo, 8.

⁴¹ Ibid., 18.

⁴² Reiff, 121.

⁴³ Ibid.

⁴⁴ Aleo, 18.

⁴⁵ "History," Carpentersville, IL, accessed December 12, 2020, <https://www.cville.org/315/History>.

⁴⁶ Reiff, 121.

as 200,000 spectators at a time until it closed in 1970.⁴⁷ Between 1950 and 1960, the population of Carpentersville surged from 1,523 to 17,424.⁴⁸

Population held steady at around 23,000 from 1970 to 1990, but further expanded in the 1990s.⁴⁹ Today Carpentersville is the largest community in Dundee Township, with an estimated population of 37,254 in 2019.⁵⁰

Part II. Architectural Information

A. General Statement

- 1. Architectural Character:** The Star Manufacturing Company building is a typical example of a nineteenth-century industrial facility. Its masonry walls reflect the gradual expansion of the complex through its history by virtue of varying applications of brickwork and brick coloration. While not high-style, the building displays fine brickwork and imparts a strong visual presence among the cluster of historic industrial buildings along the Fox River in downtown Carpentersville.
- 2. Condition of Fabric:** The condition of the building is excellent overall, as the building has been consistently improved and maintained since 1979. Some of the historic context of the building has been altered in the ongoing maintenance and alteration to the building that consists of new work being designed to resemble extant features of original construction.

B. Description of Exterior

- 1. Overall Dimensions:** The building is an irregular rectangle in shape, emanating from the multiple additions to the building over the course of its history. Overall, the structure stands one-to-three stories high. Generally, the building is 133' wide x 706' deep. The section to be demolished is an irregularly-shaped rectangle measuring 95' wide x 223' deep.
- 2. Foundations:** The building is set at ground level along its southern and eastern sides, and foundations are not exposed to view. The ground slopes downward to the river along the northern side of the building where the exposed foundation of poured

⁴⁷ Reiff, 121.

⁴⁸ "Carpentersville, Illinois," Wikipedia (Wikimedia Foundation, November 29, 2020), https://en.wikipedia.org/wiki/Carpentersville,_Illinois.

⁴⁹ Ibid.

⁵⁰ Ibid.

concrete is faced with brown, standing seam aluminum cladding. The foundation of the building's west side abuts the Fox River bank and is composed of poured concrete.

- 3. Walls:** The walls throughout the structure are composed of common brick, of local manufacture by the Dundee Brick Company. Most sections of the buildings are light buff in color, but other sections constructed on the west side of the building in 1909-1910 (Sections 56, 58, and 61a) are built of pale pink common brick. The walls of the sections to be demolished are three wythes thick and laid in common bond fashion, with structural pilasters along the east, north, and west facades. Of the sections of the building to be retained, the walls are also laid in common bond. Sections 51 and 52 at the southeast corner have friezes of buff-colored common brick laid in decorative patterns, suggesting brackets separated by recessed panels in the case of Section 51, and a double row of scallops in Section 52. Sections 56 and 57 in the west wall, which were constructed in 1899 and 1909, are marked by inset rectangles containing pairs of windows on the second and third floors. This feature was reproduced on the section of the east wall constructed in 2000.
- 4. Structural System:** The walls are load-bearing masonry supporting a wooden roof structure, aided internally by post-and-beam construction.
- 5. Porches, stoops, balconies, porticoes, bulkheads:** None.
- 6. Chimneys:** None.
- 7. Openings**

 - a. Doorways:** There are a variety of doorways throughout the building. Most doors are topped by a brick arch lintel of two courses for the single doors and three for the wider double doors. The primary building entrance is a glass double door which opens at ground level into Section 50, and has been updated with a segmental-arched limestone surround. A single glass door at ground level into Section 72 is modern, part of the infill of what had been an open access alley. Section 51 at the southeast corner of the building has three doors raised above ground level, resting on stone sills, and one reopened historic portal at ground level, at the east end of the south wall. On the east façade of the sections to be demolished, there are two metal, single doors present, each topped by brick arch lintels composed of two courses of brick. Also present are a metal, double door and a metal overhead garage door, each topped by brick arch lintels consisting of three courses. The west façade contains four metal, single doors opening over the river, with no exterior structure for egress. The northernmost door has been bricked in from a double-door configuration.

- b. Windows and shutters:** Every window in the entire building contains modern, double-glazed Pella sash. The windows are clad in brown aluminum on the exterior and are wood on the inside. Some windows contain integrated mini-blinds set between the panes of glass. Windows in Sections 51, 52, 56, and 57 are configured as one-over-one double-hung single windows. Windows in the rest of the building are arranged with the upper two-thirds as fixed panels above crank-operated awning windows in the lower third of each opening. Of the sections to be demolished, the east façade presents seventeen single windows and one double window. On the north façade, there are seven single windows present. On the west façade, there are twenty-one single windows present. Each window is topped by a brick arch lintel composed of two courses of brick, and rests on a brick sill. Windows are treated in the same manner in the sections of the building being retained.

8. Roofs

- a. Shape, covering:** The roof structure varies throughout the building. Roof sections in the sections being retained are flat roofed and in the case of Section 51 at the southeast corner, gabled with a small shed-like belvedere on top. The roof of the sections to be demolished is a shallow wooden barrel vault configuration with the low sides oriented to the east and west walls. It is covered in thermoplastic polyolefin (TPO) roofing material.
- b. Cornice, eaves:** Cornice and eave configurations are varied throughout the sections of the building. Most of the sections of the building being retained have parapets, with the exception of Section 51 at the southeast corner, which has projecting eaves clad in brown aluminum. Section 50 at the southwest corner has a decorative metal cornice that says "Star Manufacturing Co."; it is flanked by decorative rosettes on the south and west facades of that section. The sections to be demolished have 6" eaves running the length of its east and west walls. The eaves are clad in brown aluminum and support a hanging aluminum gutter system. The north wall of the sections to be demolished is topped by a stepped parapet of either later construction or repair, as it is composed of a pink brick that does not match the color of the main wall structure.
- c. Dormers, cupolas and towers:** None.

C. Description of Interior

- 1. Floor Plans:** (See Appendix II) The floor plan of the Star Manufacturing Company is highly fragmented, reflecting its piecemeal development over the course of 120 years depending on functional needs and current construction methods.

The first floor is below grade at the southern half of the building and contains a grade-level employee entrance, an I.T. office at the southwest corner, facilities maintenance spaces at the southeast corner, plastic-molding rooms along the west wall, a stockroom, and a large warehouse space accessed by a loading ramp. A grade-level rear entrance allows access by a staircase to the sub-grade and grade-level first floor spaces, as well as the upper floors. The northern, single-story portion of the building is at grade level and functions as a machine shop and machine shop office, tool and die rooms, secondary operations spaces, a stamping room, and a long-term storage area. Approximately 60 percent of the single-story, ground-level first floor plan will be demolished in 2020.

The second floor is present only in the southern half of the building and is raised approximately one-third of a story above grade. Accessed at street level from the main entrance, a short flight of stairs leads to the lobby. The front office and accounting suites are arranged at the southwest corner of the building, and a cafeteria occupies the space to the east of the lobby. The southeast corner of the building is given over to training rooms, cubicle space, and "Liberty Hall," a gathering space. Approximately half of the second floor is occupied by manufacturing space. At the northwest corner of the second floor is a suite of operations, scheduling, and purchasing offices. An employee fitness center is positioned at the center of the northern edge of the second floor.

The third floor, like the second floor, is present only in the southern half of the building. It contains most of the office functions of the facility, with engineering functions taking up most of the western half of the floor and a human resources suite at the southwest corner. Sales offices are located at the southeast corner of the floor. A quality assurance office and test labs are positioned at the approximate center of the floor. An employee cafeteria is situated at the center of the eastern wall of the building. The northernmost third of the third floor is occupied by manufacturing areas.

2. **Stairways:** There are no stairs in the section of the building being demolished. Other interior stairs are non-historic, constructed alternately of wood and metal.
3. **Flooring:** Flooring in the sections to be demolished consists of poured, smooth-finished concrete. Some areas are sealed with paint. The bathroom to be demolished has floors of modern vinyl composition tile. Elsewhere, in the sections of the building to be retained, flooring is composed of modern surfaces such as vinyl composition tile, carpet, and oak plank flooring.
4. **Wall and ceiling finishes:** In the Long-Term Storage Area (LTSA), the walls are composed of common brick, and the ceiling has exposed beams and modern insulation and vapor barrier applied to the ceiling members. Rooms A, B, Secondary Operations, and Tool & Die have walls covered in modern textured plastic panels and dropped grid ceilings. Room C has walls of drywall with the west wall being exposed common brick.

The ceiling is a modern dropped grid, except in the westernmost portion, where insulation and vapor barrier are applied to the open roof structure. Elsewhere, in sections of the building to be retained, wall surfaces are exposed common brick or drywall which is used in offices, common areas, and production areas. Ceilings are exposed historic structural members in some common areas, and modern dropped grids elsewhere.

5. Openings

- a. **Doorways and doors:** In the sections to be demolished, a historic steel fire door is present separating the Long-Term Storage Area from Room C. Other doors in the section to be demolished are modern six-panel wood doors, as are doors throughout the sections of the building to be retained.
- b. **Windows:** Windows in the Long-Term Storage Area are set beneath wooden headers and on brick sills, a construction method that likely is carried throughout the structure when obscured by other wall surfaces.

6. **Decorative features and trim:** All decorative features and trim are non-historic, some being historically influenced in design and made of wood.

7. **Hardware:** All hardware is non-historic.

8. Mechanical equipment

- a. **Heating, air conditioning, ventilation:** HVAC equipment throughout the buildings dates from 1979 and later.
- b. **Lighting:** In the sections to be demolished, lighting consists of hanging fluorescent tube fixtures in the Long-Term Storage Area, and integrated fluorescent lighting in the dropped grid ceilings. Elsewhere in the sections to be retained, common areas with exposed ceiling structures are lit by modern pendant lights or track lighting. Areas with dropped ceiling grids include integrated fluorescent lighting.
- c. **Plumbing:** All plumbing dates from 1977 and later.

9. **Original furnishings:** None.

D. Site

- 1. Historic landscape design:** At the northwest corner of the property, a historic steel truss railroad bridge is present. This bridge allowed the railroad spur serving Star Manufacturing Company to cross the Fox River. There are no historic landscape or hardscape treatments associated with the building.
- 2. Outbuildings:** There are no outbuildings.

Part III. Sources of Information

Aleo, Philip A. *The Historic Business District of Carpentersville: Illinois Iron & Bolt, Star Manufacturing, OTTO Engineering*. Dundee, IL: Aleo Publications, 2012.

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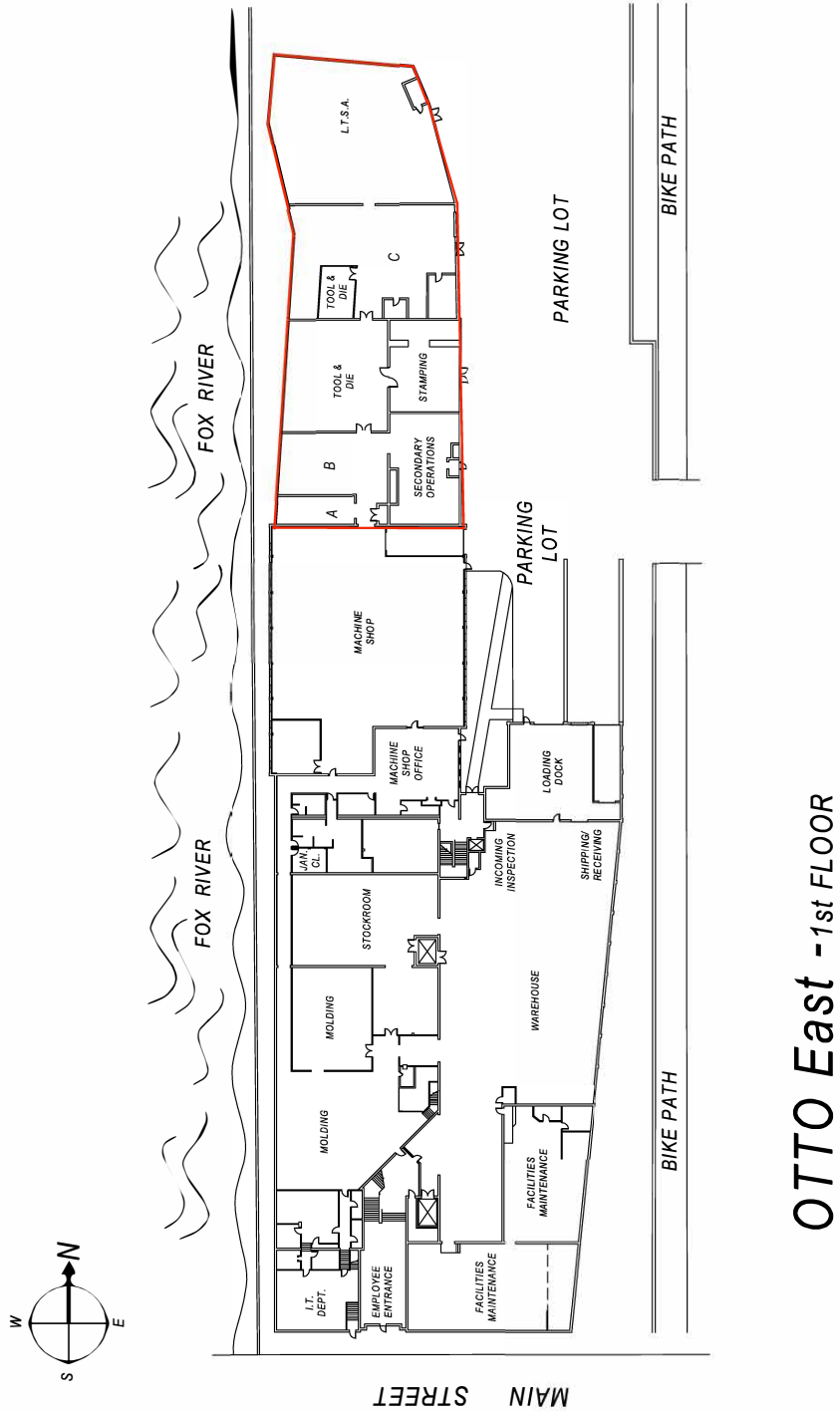
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Appendix I – Site Plan

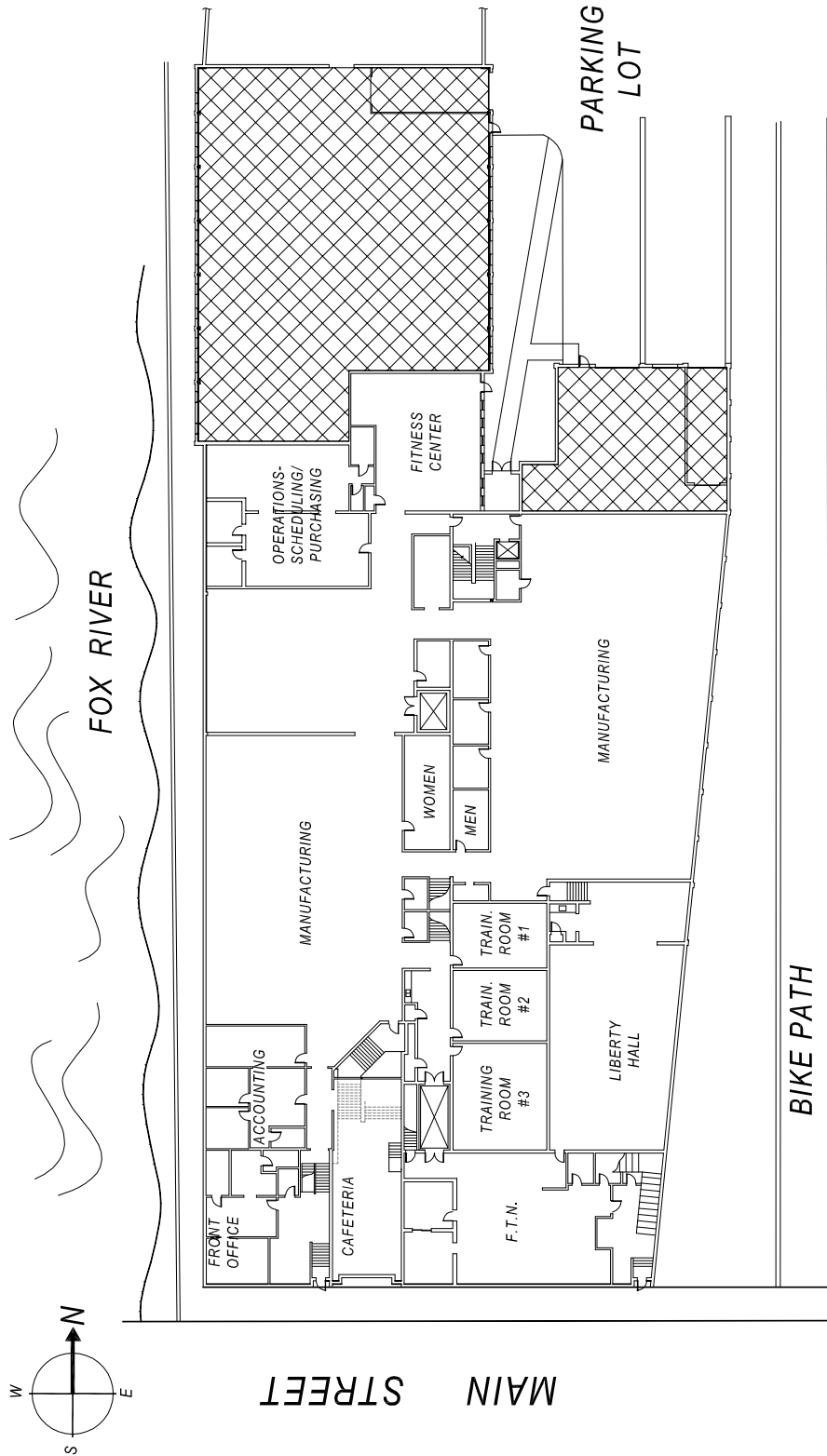


North is at top of page
Source: historicaerials.com

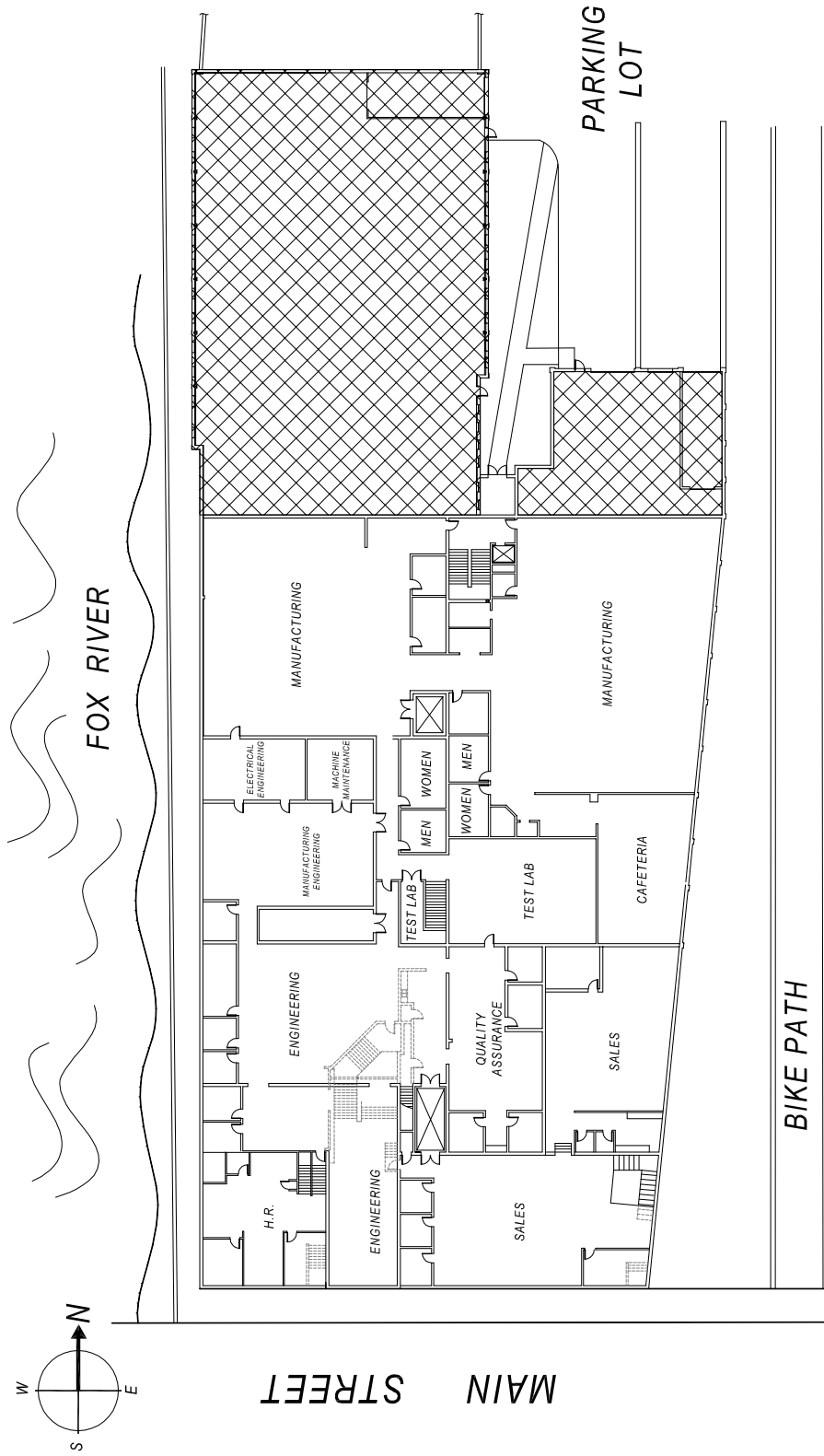
Appendix II – Floor Plans (section to be demolished outlined in red)
Source: OTTO Engineering, Inc.



OTTO East - 1st FLOOR



OTTO East - 2nd FLOOR



OTTO East - 3rd FLOOR

Appendix III - Supporting Images (all photographs taken by Andrew Elders, July 2020)

Room A in Section 61a (to be demolished), looking west



Room C in Section 61a (to be demolished), looking east



Room C in Section 61a (to be demolished), western section looking south



Secondary Operations in Section 61 (to be demolished), looking north



Secondary Operations in Section 61 (to be demolished), looking east



Stamping in Section 61 (to be demolished), showing wall construction of brick, looking east



Tool & Die in Section 61a (to be demolished), looking northeast



Tool & Die in Section 61a (to be demolished), center wall looking northeast



HISTORIC AMERICAN BUILDINGS SURVEY

INDEX TO PHOTOGRAPHS

STAR MANUFACTURING COMPANY
2 East Main Street
Carpentersville
Kane County
Illinois

HABS No. IL-1260

INDEX TO BLACK AND WHITE PHOTOGRAPHS

Leslie Schwartz, Photographer, July 2020

- IL-1260-1 General view of east façade and south (front) façade from south southeast.
- IL-1260-2 General view of south (front) façade from south southwest.
- IL-1260-3 General view of west (river) façade and south (front) façade from southwest.
- IL-1260-4 General view of west (river) façade from west showing one-story building section to be demolished.
- IL-1260-5 General view of north façade from north northeast showing building section to be demolished.
- IL-1260-6 General view of east façade from south southeast showing one-story building section to be demolished.
- IL-1260-7 Interior view of second-floor manufacturing area, showing historic chamfered timber posts and brick wall.
- IL-1260-8 Interior view of Liberty Hall looking south, showing historic timber framing.
- IL-1260-9 Interior view of Sections 61, 61a, and 61b from south, showing progression through building sections to be demolished.
- IL-1260-10 Interior view of Room C in Section 61a looking west, showing historic chamfered timber posts to be demolished.
- IL-1260-11 Interior view of Long Term Storage Area in Section 61b looking south, showing historic fire door between sections to be demolished.

- IL-1260-12 Interior view of Long Term Storage Area in Section 61b looking northwest, showing historic timber framing and brick walls to be demolished.
- IL-1260-13 Interior view of the northwest corner of Long Term Storage Area in Section 61b looking west, showing historic timber window headers to be demolished.
- IL-1260-14 Interior view of the Long Term Storage Area in Section 61b looking south, showing historic timber framing and brick walls to be demolished.



SEE ES

111

OPEN

DITTO

SEE THE
OFFICE
LIVE
25

ROAD
CLOSED
AHEAD

ROAD
AHEAD

NO
LEFT
TURN

STOP



OTTO MANUFACTURING CO.

OTTO

OTTO



OTTO















EXIT







