Milwaukee Industrial Properties Intensive Survey

Prepared for

Wisconsin Historical Society

Prepared by

www.meadhunt.com

October 2016

THIS PAGE INTENTIONALLY LEFT BLANK

Table of Contents

Appendices

Tables

THIS PAGE INTENTIONALLY LEFT BLANK

Executive Summary

Milwaukee has historically been Wisconsin's largest industrialized city. As industry left the city, scores of industrial buildings were left behind, vacant and underutilized. The availability of federal and state historic tax credits has made these buildings attractive candidates for rehabilitation and reuse. However, an impediment to the use of the tax credits has been the limited information on which buildings meet National Register criteria, one of the requirements of the tax credit program. To address this need, the Wisconsin Historical Society undertook a comprehensive architectural and historical study of Milwaukee's historic industrial buildings. The intent was to create a record of Milwaukee's industrial heritage as embodied in the remaining industrial buildings that would serve as an incentive for building owners and developers to reinvest in Milwaukee's historic building stock, thereby increasing property values, creating new retail or housing opportunities, promoting green architecture, and attracting people back to devalued areas of Milwaukee.

Following a successful private fundraising effort to underwrite the study in the summer and fall of 2015, the Wisconsin State Historic Preservation Office (SHPO) retained Mead & Hunt, Inc. (Mead & Hunt) to complete a study of industrial architecture in the city of Milwaukee to identify individual industrial properties, manufacturing complexes, and historic industrial districts that may be eligible for listing in the National Register of Historic Places (National Register). The results of the survey provide a comprehensive look at Milwaukee's industrial heritage and will be used to assist in identifying industrial properties suitable for redevelopment using state and federal tax credit programs.

The project scope was defined in consultation with SHPO staff to include all pre-1975 buildings currently identified on City of Milwaukee zoning maps as industrial (Industrial Office, Industrial Light, Industrial Mixed, and Industrial Heavy), excluding properties already individually listed in the National Register or identified as "contributing" properties in a National Register-listed historic district and thus, already eligible for tax credits. Previously identified industrial properties on parcels that are not currently zoned for industrial use were also included within the project scope. Standard methodologies for this type of study were modified to include additional information useful to developers during an initial assessment of the redevelopment potential of historic properties to encourage the adaptive reuse of vacant or underutilized buildings. The methodology for research, survey, and documentation is presented in Section 1 of this report. Following the fieldwork, two historic districts and 39 individual properties were identified as potentially eligible for the National Register.

In addition to the study, database records in the Wisconsin Historic Preservation Database (WHPD) were either created or updated. Mead & Hunt also studied the historic development of Milwaukee industry and conducted site-specific research for properties identified as potentially eligible for the National Register. The historic context created by this research includes an overview of each type of industry represented by recorded buildings in Milwaukee; the context is presented in Section 2 of this report. Additional research was used to prepare statements of significance for those properties recommended as potentially eligible for listing in the National Register, included in Section 3 of this report. Mead & Hunt's project team consisted of Emily Pettis, Angela Hronek, Katie Kaliszewski, Sebastian Renfield, Shannon Dolan, and Dusty Nielsen.

Special thanks to the generous donors who made this study possible. Thanks also to Carlen Hatala, City of Milwaukee preservation staff, and the Milwaukee Public Library, for generously sharing background research material.

THIS PAGE INTENTIONALLY LEFT BLANK

1. Methodology

A. Introduction and objectives

In December 2015 the Wisconsin SHPO retained Mead & Hunt to complete a study of historic industrial properties within the city of Milwaukee. The objective of the study was to provide a complete understanding of historic industrial properties in Milwaukee, identify individual buildings and districts in the city that may be eligible for listing in the National Register, and to provide preliminary evaluations that will serve as a basis for redevelopment efforts using state and federal tax credits.

B. Methods and research design

(1) Research

In order to establish a city-wide historic understanding of industrial development in Milwaukee, Mead & Hunt began by reviewing *Cultural Resource Management in Wisconsin*, as well as existing neighborhood survey reports and historic contexts for areas that include concentrations of industrial buildings, such as Bay View, the Menomonee Valley, Central Business District, and South Side. Mead & Hunt conducted additional research using materials in the collection of the Milwaukee County Historical Society and Milwaukee Public Library, in conjunction with Sanborn fire insurance maps, historic aerial photography, and lecture material by Thomas Fehring, Milwaukee-based engineer and Chair of the American Society of Mechanical Engineers, to develop a framework for understanding Milwaukee's industrial development, both spatially and thematically. Through the research process, Mead & Hunt identified a number of significant manufacturers and areas of industrial development throughout the city; this, in turn, informed both context development and fieldwork efforts. Period trade and technical publications, along with Betsy Hunter Bradley's *The Works*, provided additional information on industrial architecture and building typology.

(2) Preliminary identification of industrial properties

In order to appropriately refine the scope of fieldwork to those properties that are industrial in nature, Mead & Hunt obtained WHPD records for previously recorded properties in the city of Milwaukee and worked with SHPO to develop a list of applicable "historic use" categories. These categories were then used to filter the available WHPD records and determine which properties fell within the project scope and would be included in the field survey. Listed or previously determined eligible industrial buildings were excluded from the pool, as were contributing buildings within listed districts (although non-contributing properties were retained and recorded). Database records for properties that were unevaluated or had no formal determination were reviewed to confirm a historic industrial use, and 546 such properties were ultimately identified for resurvey.[1] In order to focus efforts to identify additional industrial buildings that had not yet been recorded, Mead & Hunt used zoning and parcel data from the City of Milwaukee to flag parcels within the city limits that are currently zoned for industrial use. These parcels were reviewed in the field to determine if any buildings were present that met the project criteria. Additional historic-age

[1] A number of properties recorded in WHPD with a historic use as "garage" are residential garages; these were removed from the survey pool, along with 46 garages that were associated with small neighborhood filling stations, public schools, or demonstrated other non-industrial uses.

industrial properties that are not currently zoned for industrial use were recorded by surveyors if they were identified during fieldwork efforts. Mead & Hunt used ArcGIS Collector to produce tablet-based field maps with the locations of industrial parcels and previously recorded properties to be resurveyed.

C. Survey and documentation

In the field, teams reviewed previously recorded properties within one of the predetermined historic use categories. Of 546 properties reviewed in the field, 315 previously recorded properties were updated, 153 were found to be nonextant at the time of the study, and update photographs were provided for 78 properties that no longer retain sufficient historic appearance to warrant documentation. The team also recorded 364 additional industrial buildings and structures that were located on zoned industrial parcels, appeared to be 40 years of age or older, and retained a sufficiently intact physical appearance. Database records were updated in WHPD, and a list of properties is included in the table in Appendix A. Properties in the table are grouped by industry when known, although a number of properties' historic industry was not apparent at the time of survey; the industry type for these properties is indicated as "unknown."

In order to identify potentially eligible industrial buildings, field teams flagged any properties that displayed an unusually high degree of historic appearance or architectural interest, or that appeared to be associated with important Milwaukee manufacturers identified through research efforts and historic research. Further research focused on these properties, as well as those that were previously identified as potentially eligible in WHPD, and site files were reviewed where applicable. Where context research identified significant manufacturers, Mead & Hunt used city directories and Sanborn fire insurance maps to determine whether any buildings associated with these manufacturers were extant. The list of properties recommended eligible (presented in Appendix B) includes those buildings that were identified either in the field or through context research, demonstrate significance under National Register *Criteria A* and/or *C*, and retain sufficient historic appearance. Eligibility recommendations were confirmed through a series of in-person meetings with SHPO staff and reviewed in the field during a joint site visit in August 2016.

A number of properties displayed a high degree of historic appearance, but research did not yield evidence of significant associations under *Criteria A* or *B*, nor do these properties represent significant examples of a property type under *Criterion C*. These properties are presented in Table 2 on page 105; further research may yield significance at a future date.

As a result of this study 39 historic buildings and two historic districts were identified as potentially eligible for listing in the National Register and therefore eligible for Historic Tax Credits.

It is hoped that this study will prove useful to Milwaukee's development community and lead to the reinvestment and adaptive reuse of additional historic buildings in Milwaukee. Due to the generosity of Milwaukee's development community, additional opportunities now exist to rehabilitate and retain potent symbols of Milwaukee's industrial past.

2. Historic Context

A. Introduction

Milwaukee is widely known as one of the leading industrial centers of late-nineteenth- and twentieth-century America. The city became prominent for its iron works, tanneries, lumberyards, brickyards, manufacturing, and, of course, breweries. This widespread industry led to the large-scale development of areas such as Bay View, Walker's Point, and the Menomonee River Valley.[2] Figure 1 shows an undated view of the industrial streetscape in Milwaukee.

Figure 1. Undated Milwaukee industrial streetscape. Image courtesy of the Wisconsin Historical Society, J. Robert Taylor, "Industrial Streetscape," Image ID 33040.

As the city grew into an industrial metropolis, it exhibited an unusual breadth of industries and areas of production. In 1880, the city's Chamber of Commerce reported:

> Our manufacturing interests are in a prosperous condition. Every establishment in the city, great and small...[is] constantly kept busy, and in the manufacture of iron and other stable commodities it [is] found impossible to fully supply the demand. The activity in our local industries of every kind is exemplified in the consumption of coal which [is] unprecedented.[3]

[2] "The Mystery of Milwaukee Feeds and Supplies the World," *Milwaukee Public Library*, January 13, 2016, http://www.mpl.org/blog/now/the-mystery-of-milwaukee-feeds-and-supplies-the-world.

[3] Milwaukee Chamber of Commerce, *Annual Report 1879* (Milwaukee, Wis., 1880), 47–48.

The Chamber of Commerce report suggests that the rising demand for iron, which was used to make engines, tools, and other parts for a variety of manufacturers, and coal, a predominant early energy source, reflects the thriving nature of industry in the city. It also reveals the diverse and interconnected nature of local manufacturing. As opposed to other cities that became known for producing a single product, Milwaukee maintained a booming economy through a variety of different industries, one example of which is tanneries (see Figure 2)

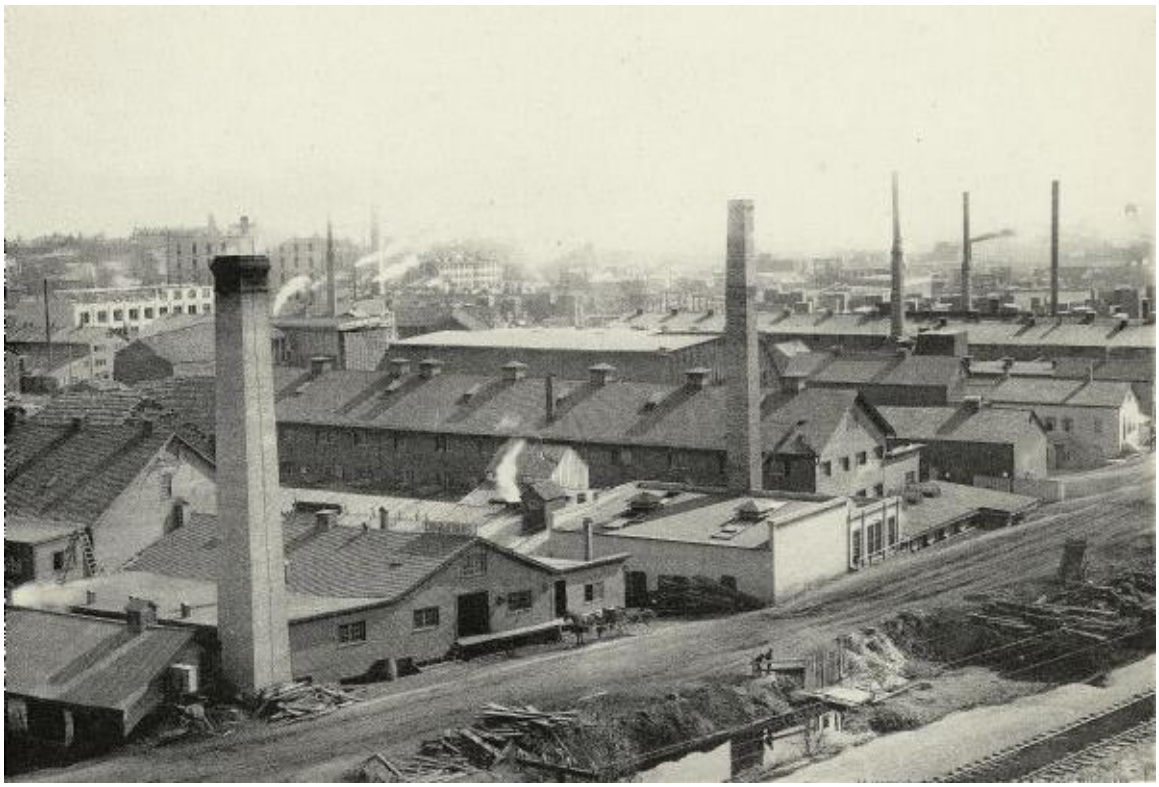


Figure 2. Undated view of Milwaukee tanneries. Image courtesy of the Wisconsin Historical Society, Simon Leonard Stein, "Tanneries," Image ID 68185.

These areas of production broke down into three general categories. First, the city proved a fertile environment for companies that processed crops and natural resources, such as saw mills and stone masons that fashioned building materials; foundries and forges that shaped iron and steel; flour mills that refined wheat; breweries that utilized barley and hops; and tanneries that made leather from livestock hides. Other local industries demonstrated the second category, in which processed materials were used to create various products. These included clothing and textile companies; furniture makers; bakeries and confectioners; carriage and wagon (and later, automobile) producers; and machine shops. A final type of product emerged when technological innovations in the fields of chemicals and electrical controls transformed industrial practices and new, advanced methods of manufacturing prevailed.[4] The city also

[4] These three categories (processing, manufacturing, and integrated components) were originally used in a 1980 evaluation of structures in the Menomonee River Valley and they extrapolate well to industrial trends in the larger city. Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites* (Milwaukee, Wis.: prepared for the National Architectural and Engineering Record, U.S. Department of Interior, 1980), vii–viii.

fostered a supplementary category of businesses that sustained industry; storage and transportation firms offered infrastructure for shipping, while power plants generated the energy needed to run factories. These processes were all intertwined. For example, as statewide agricultural production spiked to meet increasing demand for products like flour, beer, and leather, the need for farm machinery also grew, which in turn buoyed manufacturing.

A number of factors influenced Milwaukee's industrial ascendance. Beginning in the 1840s, the city became a prominent port on Lake Michigan, featuring a harbor where the Menomonee and Milwaukee Rivers met and provided freight transportation inland. Evolving farming practices across Wisconsin meant that while the city's earliest industries were devoted to the processing and shipping of wheat, by the post-Civil War era other agricultural products and their corresponding industries were flourishing. Railroad construction throughout the 1860s and 1870s further drove industrial growth; by 1873, 10 different railway lines ran through the city, providing for easy transportation of materials and finished products. During the 1870s and 1880s, Milwaukee experienced a boom in population largely due to European immigration; the population increased from 71,440 in 1870 to 115,587 in 1880. By 1890, the city's population was 204,468, and the proportion of foreign-born residents hovered around 40 percent.[5] Early industries thrived due to the large number of immigrants looking for jobs, many of whom were trained craftsman, mechanics, and engineers. By the turn of the twentieth century, the value of the city's manufactured products was more than $200 million and Milwaukee was firmly established as a regional center of heavy industry.[6] The city took on a new importance during World Wars I and II, when many of the major local manufacturers received government contracts to produce military supplies. By the 1970s and 1980s, however, a number of industrial firms had closed or relocated outside the city, marking the end of the Milwaukee's industrial peak.

Throughout the era of big manufacturing, Milwaukee contained four main zones of industrial growth as characterized by local engineering historian Thomas Fehring: the Menomonee River Valley (Menomonee Valley), the Milwaukee River through the northern part of the city, the central and downtown portions of the city encompassing the Third Ward and Walker's Point, and the 30th Street Industrial Corridor along what is now the Canadian Pacific Railroad, formerly the Milwaukee Road.[7] Each of these regions has contributed in its own way to industry; the Milwaukee River was the center of much of the city's early manufacturing, the central downtown area fostered the intersection of industry and commercial growth, the 30th Street Industrial Corridor saw a significant amount of railroad-based development, and the Menomonee Valley became the heart of manufacturing in the city.

The Menomonee Valley, which stretches approximately 4.5 miles from its confluence with the Milwaukee River to N. 39th Street, is located south and west of downtown Milwaukee. The area was originally an impassable marsh, but starting in 1869, 13,700 linear feet of dockage was constructed and grading

[5] Landscape Research, *Built in Milwaukee: An Architectural View of the City* (Prepared for the City of Milwaukee, 1981), 2, 7–9.

[6] The Merchants' and Manufacturers' Association of Milwaukee, *Industrial Milwaukee: The Great Manufacturing Heart of the Northwest* (Milwaukee, Wis.: J.H. Yewdale & Sons Co., 1903), 5.

[7] Thomas Fehring, "Milwaukee's Industrial Heritage" (American Society of Mechanical Engineers Milwaukee Chapter, Grohmann Museum, May 18, 2016).

facilitated transferring products for shipping by rail and water.[8] Through the 1860s and 1870s, the marshland continued to be filled, and by the late 1870s the Chicago, Milwaukee, and Saint Paul Railroad passed through the valley so frequently that the company constructed the large "West Milwaukee Shop" for the care and construction of railcars at the west side of the valley.[9] Through the 1870s and 1880s, Milwaukee's core industries such as brewing, meat processing, lumber, brick, and coal yards moved to the valley due to its location within the city, and the area became known as the "Machine Shop of the World."[10] The Menomonee Valley continued to grow as the industrial center of Milwaukee into the 1920s. Today, though many manufacturers have left the valley, it is an area of considerable commercial and residential development.

Milwaukee manufacturers often occupied multiple industrial zones as they grew, establishing nineteenth-century factories closer to the city center and eventually moving to the outskirts of the city after the turn of the century. Areas such as North Milwaukee and Williamsburg Heights saw increased industrial growth in the early twentieth centuries as companies sought larger lots that could accommodate newer facilities. One company that began in the Menomonee Valley exemplifies this particularly well. Cutler-Hammer, a significant electrical controls manufacturer in Milwaukee, was founded in the late 1890s in two rented floors of a loft building along St. Paul Avenue, gradually expanding to occupy the entire building and, by 1916, taking up a full city block (AHI No. 232285, 1215 W. St. Paul Avenue). The company constructed a new plant (AHI No. 232268, 4011 W. Greenfield Avenue) along the western city limits during World War I to produce heavy guns, and expanded its original St. Paul Avenue facilities during World War II and the postwar period. When it came time to build a new facility, Cutler-Hammer chose a site in the north party of the city. The company constructed a massive 265,000-foot building (AHI No. 232369, 2060 W. Hope Avenue) on W. Hope Avenue off N. 30th Street. Many other firms followed a similar pattern, expanding from original, central facilities to satellite locations throughout Milwaukee and beyond.

B. Milwaukee industries

This context offers histories of Milwaukee's prominent industries identified as a result of the survey, from grain milling to tanning to heavy manufacturing, tracing the history of each from the city's founding through the late twentieth century. It then describes the major types of industrial architecture found throughout the city. Through the context, readers will come to better understand Milwaukee's role as a center of diverse manufacturing interests in the nineteenth and twentieth centuries.

(1) Brewing and bottling

Milwaukee's celebrated brewing industry began in the 1840s. Driven by an influx of German immigrant laborers who were familiar with the brewing process and provided a local market for the product, numerous small breweries emerged throughout the city by the mid-1850s. Through the late nineteenth

[8] Roger D. Simon, "The City Building Process: Housing and Service in New Milwaukee Neighborhoods 1880-1910," *Transactions of the American Philosophical Society* 68, no. 5 (1978): 19–20.

[9] John Gurda, "The Menomonee Valley: A Historical Overview," n.d., http://www.renewthevalley.org/media/mediafile_attachments/04/4-gurdavalleyhistory.pdf; John Gurda, *The West End: Merrill Park, Pigsville, Concordia* (Milwaukee, Wis.: Milwaukee Humanities Program, 1980), 12.

[10] Roger D. Simon, "Foundation for Industrialization, 1835-1880," in Thomas J. Jablonsky, ed., *Milwaukee Stories* (Milwaukee, Wis.: Marquette University Press, 2005), 308.

century, these establishments consolidated into large breweries that, by the late 1870s, collectively generated over $4 million in beer and malt beverage products per year.[11]

Several factors influenced the growth of the industry in Milwaukee, including a Civil War-era tax on hard liquor that decreased its popularity, and the 1871 Great Chicago Fire, which destroyed many of that city's breweries and created a new market for Milwaukee beer. Wisconsin's thriving agriculture and expansive natural resources provided ample barley, hops, and fresh water, as well as timber for barrels and casks. Brewery owners adopted innovative technologies for refrigeration, pasteurization, and bottling, and employed savvy marketing campaigns that began to make Milwaukee synonymous with beer. Additionally, Milwaukee's expanding infrastructure made it easy to make, store, and transport beer in large quantities.[12] By the 1890s, brewing was Milwaukee's most valuable industry, and three of the nation's largest breweries were based in the city: Blatz (AHI No. 17134, 1101-1147 N. Broadway Street, individually listed as National Register No. 86000793), Pabst (AHI No. 122368, 1217 10th Street, individually listed as NR no. 03001165), and Schlitz (AHI No. 117080, 213 Galena Street, individually listed as National Register No. 99001632, see Figure 3).[13]

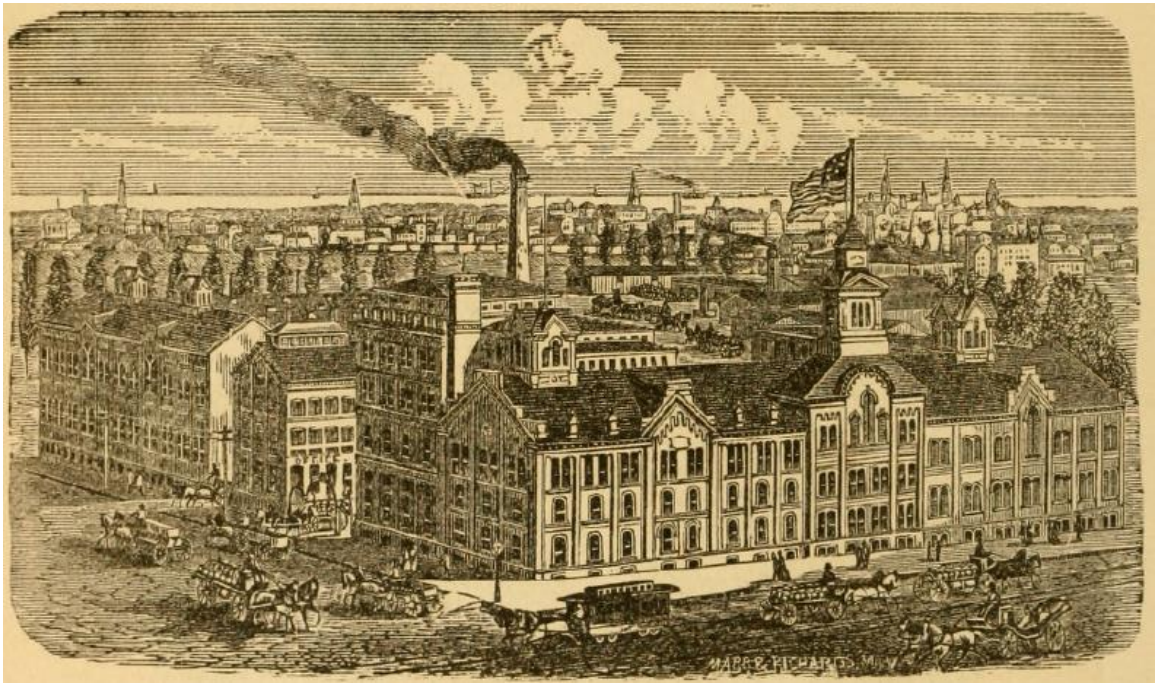


Figure 3. Illustration of the Schlitz Brewery c.1877.[14]

[11] National Register of Historic Places, Pabst Brewing Company Complex, Milwaukee, Milwaukee County, Wisconsin, National Register #03001165, 8–5, 8–6.

[12] Barbara Wyatt, ed., *Cultural Resource Management in Wisconsin*, vol. 1–3 (Madison, Wis.: State Historical Society of Wisconsin, 1986), Industry 9-3, 9-4.

[13] National Register of Historic Places, Pabst Brewing Company Complex, Milwaukee, Milwaukee County, Wisconsin, 8–6, 8–7.

[14] Charles B. Harger, *Milwaukee Illustrated. Its Trade, Commerce, Manufacturing Interests, and Advantages as a Residence City...* (Milwaukee, Wis.: W. W. Coleman, 1877).

Beer production continued to rise through the early-to-mid-twentieth century, albeit with a hiatus during Prohibition when breweries manufactured soda, malt tonics and syrups, and food items. By the late twentieth century, however, as the national beer industry consolidated and automated technology changed the manufacturing process, many of Milwaukee's breweries closed or moved.[15] The exception is Miller, which still produces beer at its Miller Valley headquarters in the Menomonee Valley (AHI No. 42078, 4000 W. State Street).[16]

The city also housed a number of industries related to brewing. Through the nineteenth century, beer was stored in wooden barrels and kept cool in icehouses, and the coopering and ice harvesting businesses thrived in Milwaukee and the surrounding areas. With the advent of pasteurization in the 1870s, bottling also became a widespread method of packaging and storing beer, and many breweries contracted with outside companies to bottle their products. By the turn of the twentieth century, growing breweries began to use metal kegs instead of barrels for large-scale storage, and opened their own on-site bottling facilities, including Blatz (AHI No. 16655, 1015 N. Broadway Street) and the Jung Brewing Company (AHI No. 115472, 515 W. Cherry Street).[17] Improved refrigeration technology curbed the need for ice harvesting, and innovative cold storage buildings began to dot the industrial landscape (see *Section 2.B(5), Storage and transportation*).

(2) Textile and clothing production

Milwaukee's clothing industry was established when what had previously been wholesale stores selling goods from the East Coast and dressmakers custom-sewing clothing garnered enough business and capital to mass produce their own garments. This shift took place in the 1840s and 1850s as the regional population grew and technology improved; in particular, widespread usage of the sewing machine allowed for mass production of ready-to-wear clothing.[18] During these decades Milwaukee manufactured two-thirds of Wisconsin's garments.[19] The early textile industry was centered in the city's Third Ward.[20]

Clothing production experienced its greatest period of growth in the 1860s, driven by the availability of raw materials, including wool, fur, and leather, as well as the city's expanding population of German and Polish immigrants who frequently worked in garment manufacturing. In 1886, the local textile industry used about 2 million pounds of wool, which was processed at local facilities. By 1892, garment production employed about 5,000 people, the most of any industry in Milwaukee, and by 1900 the city housed almost 400 clothing manufacturing companies.[21]

---

[15] National Register of Historic Places, Pabst Brewing Company Complex, Milwaukee, Milwaukee County, Wisconsin, 8–8, 8–9.

[16] John Gurda, *The Making of Milwaukee* (Milwaukee, Wis.: Milwaukee County Historical Society, 2008), 419–20.

[17] Wyatt, *Cultural Resource Management in Wisconsin*, 1986, 1–3: Industry 7-6, 7-7, 9-6.

[18] City of Milwaukee Department of City Development, *Central Business District Historic Resources Survey* (Milwaukee, Wis., March 1986), 12–13.

[19] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 69.

[20] City of Milwaukee Department of City Development, *South Side Neighborhood Historic Resources Survey: Final Report* (Milwaukee, Wis., July 1987), 26.

[21] City of Milwaukee Department of City Development, *Central Business District Historic Resources Survey*, 13; Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 69.

Within the clothing industry Milwaukee had several niches. Early on the city specialized in men's clothing, typified by establishments like Cohen Brothers Men's Clothing (AHI No. 96384, 239 E. Chicago Street, in the Historic Third Ward District National Register No. 84003724), which manufactured lumberjack and miner's attire; other companies made more formal wear such as suits and overcoats.[22] As the industry evolved, companies began to manufacture accessories. Felt and straw hats, like those produced at Slocum Straw Works (AHI No. 103893, 1400-1426 W. National Avenue), as well as gloves from Milwaukee Glove (AHI No. 94743, 1419 W. National Avenue) and others, were mass produced across the city.[23] Boots and shoes were another specialty due to the city's large tanning facilities (see *Section 2.B(7), Tanning and leather products*); Milwaukee was the leading shoe producer outside of New England, manufacturing 8,000 pairs per day in 1892.[24] F. Kuehn Boot and Shoe (AHI No. 108484, 1134 S. 1st Street), Weyenberg Shoe Company (AHI No. 114890, 232 E. Reservoir Street), F. Mayer Boot and Shoe (AHI No. 16744, 100 E. Pleasant Street, individually listed as National Register No. 84003728, Figure 4), and Bradley and Metcalf Company Shoes (AHI No. 71331, 414 W. Water Street, in the Historic Third Ward District National Register No. 84003724) were all large shoe manufacturers that utilized mechanized production.

Figure 4. F. Mayer Boot & Shoe Company letterhead, showing AHI No. 16744 at left, c.1916.[25]

[22] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 70; City of Milwaukee Department of City Development, *Central Business District Historic Resources Survey*, 13.

[23] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 71.

[24] City of Milwaukee Department of City Development, *Central Business District Historic Resources Survey*, 20.

[25] F. Mayer Boot & Shoe Co., "F. Mayer Boot & Shoe Co. Bill," 1916, Printed Ephemera, Columbia Digital Library Collections [Columbia University Libraries].

The shoe industry suffered from falling demand after World War I. By this point, however, knitwear and hosiery had risen to prominence. Knitting companies such as Eagle Knitting (AHI No. 56661, 507 S. 2nd Street) and Van Dyke Knitting (AHI No. 81024, 2102 W. Pierce Street, individually listed as National Register No. 04000714), which produced ribbed underwear, expanded through the 1910s and 1920s. By 1925, Milwaukee was the leading U.S. producer of silk hosiery through two leading businesses, Phoenix Knitting (AHI No. 96392, 311 E. Chicago Street in the Historic Third Ward District, National Register No. 84003724) and Holeproof Hosiery (AHI No. 111482, 400 N. 5th Street), which manufactured lingerie and hosiery from 1882 to 1958 in various Milwaukee facilities. Both of these companies left the city in the 1950s, signaling the end of Milwaukee as a leading clothing producer.[26]

(3) Food industries

Milwaukee has been a leader in food processing industries ranging from flour production and meat packing to baking, candy, and dairy. These prominent trades arose due to the availability of Wisconsin's agricultural products, including grains, dairy, and livestock. It follows that one of the city's earliest industries was flour milling, reflecting the importance of wheat as the state's first major cash crop.[27]

The city's first flour mills were situated along the Milwaukee River and used dam-generated power that also drove nearby sawmills. In the 1850s, Milwaukee became a commercial milling center, and by the Civil War the city was the leading flour miller in the western part of the country, as well as the primary national exporter of wheat, shipping 10.5 million bushels in 1865 via an expanding rail network.[28] Another early food industry was meat packing, which began to expand between 1840 and 1860, as small butchers grew their operations to accommodate increasing local and regional demand. The Menomonee River Valley, which had ample land and proximity to growing rail lines, became a center for stockyards and meat packing. The industry greatly expanded during the Civil War as southern trade was cut off and the Union began to rely on products from western cities. Milwaukee became particularly well known for pork production due to its location as an ideal shipping point for Midwestern hog producers and the establishment of prominent meat packing firms under the leadership of Frederick Layton and John Plankinton.[29]

As Milwaukee's commercial food industries grew in the late nineteenth century, they confronted challenges beyond the availability of raw agricultural materials. These factors included the advent of new technologies, sanitation concerns, and the need to market and package products. In addition, companies had to adhere to fluctuating state and national legislation and faced consolidation as they grew to serve regional and national markets beyond the city. During these years Milwaukee boasted expanding

[26] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 72–74; City of Milwaukee Department of City Development, *Central Business District Historic Resources Survey*, 16–19.

[27] Wyatt, *Cultural Resource Management in Wisconsin*, 1986, 1–3:Agriculture 1-1.

[28] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 34.

[29] Paul E. Geib, "'Everything But the Squeal': The Milwaukee Stockyards and Meat-Packing Industry, 1840-1930," *Wisconsin Magazine of History* 78, no. 1 (Autumn 1994): 4–9; Wyatt, *Cultural Resource Management in Wisconsin*, 1986, 1–3:Industry 10-1-10-3.

commercial baking and candy enterprises. Both depended on other local and regional industries including flour, dairy, sugar beets, and yeast, which was a byproduct from the city's breweries and distilleries. Milwaukee had 36 commercial bakeries in 1880 that began to consolidate by the turn of the century, forming conglomerates like the American Biscuit and Manufacturing Company (AHI No. 98274, 214-228 E. Erie Street in the Historic Third Ward District, National Register No. 84003724) that mass produced easily distributed products like crackers, biscuits, and cookies.[30] Confectioners such as the George Ziegler Company (AHI No. 113830, nonextant) produced $1.2 million in candy by 1891.[31] Flour milling and meat packing also continued to grow. The city's peak flour production came in 1892 at over 2 million barrels, and the vast Milwaukee meat packing company, Cudahy Brothers (AHI No. 98329, 302 N. Jackson Street), opened a new 15-acre facility in the Third Ward in 1893.[32]

During the twentieth century some Milwaukee food industries fizzled while others flourished. Between 1880 and 1890, wheat production slowed in Wisconsin due to failing agricultural practices and migrated to the northern plains, where new milling technology had taken hold. Minneapolis rose as the national center of milling by 1900.[33] Meanwhile baking, which had consolidated around the turn of the century, again grew in number of establishments as new businesses, such as the Quality Biscuit Company (AHI No. 104699, 1506 W. Pierce Street), were formed.[34] Confectioners also continued to prosper in this era; Milwaukee was the fourth largest producer of candy in the nation by 1920 due to popular manufacturers like the Sperry Candy Company (AHI No. 111430, 1400-1426 W. National Avenue in the South First and Second Street Historic District, National Register No. 87002092), which made the popular Chicken Dinner Bar.[35] Several commercial dairies appeared at this time including Gridley Dairy (AHI No. 232363, 1351 W. North Avenue), formed in 1903, which expanded to accommodate several plants around the city and manufactured a range of products including milk, cream, cheese, and butter.[36] Finally, the meat packing industry remained prominent through the early part of the century with the new Milwaukee Stockyards opening in the Menomonee Valley in 1929 and production booms during World Wars I and II. This sustained growth spurred subsidiary industries that used the byproducts from meat processing like soap;

---

[30] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 33, 42.

[31] City of Milwaukee Department of City Development, *Central Business District Historic Resources Survey*, 27–28.

[32] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 35; Patrick Cudahy originally worked at the Plankinton and Armour slaughterhouse and Plankinton passed on the business to Cudahy and his brother John upon retirement; however, Plankinton's son William interfered after his death and the Cudahys left to establish their own business; Geib, "'Everything But the Squeal': The Milwaukee Stockyards and Meat-Packing Industry, 1840-1930," 15–16.

[33] Barbara Wyatt, *Cultural Resource Management in Wisconsin*, vol. 1–3 (Madison, Wis.: State Historical Society of Wisconsin, 1986), Industry 8-6.

[34] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 43.

[35] City of Milwaukee Department of City Development, *Central Business District Historic Resources Survey*, 27, 29.

[36] City of Milwaukee Department of City Development, *South Side Neighborhood Historic Resources Survey: Final Report*, 97–98.

for example, the Palmolive Soap Company in Milwaukee (AHI No. 109051, 424 N. 4th Street).[37] The later part of the century witnessed the waning of commercial food production, and today it is no longer a major industry in Milwaukee.

(4) Lumber milling and wood products

Timber is one of Wisconsin's most bountiful natural resources, and it follows that a solid proportion of Milwaukee industry relied on wood. Lumber processing and manufacturing had a slow start before the advent of infrastructure that allowed large shipments of raw timber to reach the city. By the 1870s, improved railroads, shipping vessels, and a streamlined method of floating logs south from timber producing areas along Lake Michigan meant that lumber was readily available to Milwaukee companies.[38] A milling district developed in the Menomonee Valley, where lumberyards such as the M. Hilty Lumber Company (AHI No. 78964, 1127 St. Paul Avenue) managed wood sawing, planing, and storage. Meanwhile, companies including Sanger, Rockwell & Co. (AHI No. 99030, 1016-1037 W. Bruce Street, Figure 5) and Cream City Sash and Door (AHI Nos. 104616 and 104617, 1200-1236 W. Pierce Street) made sash, doors, blinds, and finished building materials. These products were needed as the city experienced a building boom from roughly 1870 to 1930 that kept the expanding lumber industry in business.[39]

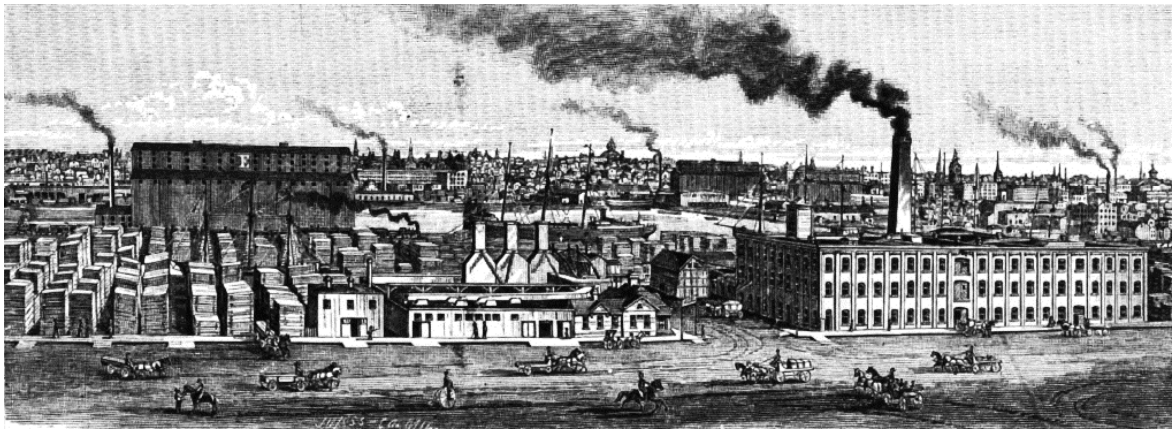


Figure 5. Sanger, Rockwell & Co. lumber yard and millwork factory, c.1890.[40]

In addition to supporting a sizable milling sector, Milwaukee was at the center of Wisconsin's prominent furniture manufacturing industry, which peaked at the turn of the twentieth century. The state sustained many furniture makers due to the availability of wood, skilled labor, and access to growing markets in the east, west, and southern parts of the country.[41] A surviving remnant of this industry is the Kiel Furniture

[37] Wyatt, *Cultural Resource Management in Wisconsin*, 1986, 1–3:Industry 10-5; Geib, "'Everything But the Squeal': The Milwaukee Stockyards and Meat-Packing Industry, 1840-1930," 23.

[38] Wyatt, *Cultural Resource Management in Wisconsin*, 1986, 1–3:Industry 5-11.

[39] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 24–26.

[40] *An Illustrated Description of Milwaukee*, 1890, 38.

[41] Wyatt, *Cultural Resource Management in Wisconsin*, 1986, 1–3:Industry 7-1-7-2.

Company (AHI No. 111591, 2600 N. 32nd Street), which operated two Milwaukee plants starting in 1910, including one that still stands today in Metcalfe Park as part of what is now the Master Lock complex.[42]

One offshoot of the furniture industry was casket manufacturing. The Milwaukee Casket Company (AHI No. 78969, 422 N. 15th Street) became a well-known name in that specialty.[43] In addition to furniture and casket making, Milwaukee also led Wisconsin in cooperage, which is the production of wood barrels and containers. This was due to the prominence of the brewing and meat packing industries in the city, both of which required considerable storage, as well as Milwaukee's role as a shipping port.[44] By 1910, wood-related industries in the city also included box and trunk companies and musical instrument makers.[45] Tanneries also relied on timber since the main tanning agents were derived from tree bark. Wisconsin's ample supply of hemlock trees buoyed the leather industry (see *Section 2.B(7), Tanning and leather products*).[46]

Wisconsin's native lumber industry shrank during the 1920s and into the Great Depression. Large timber companies moved further west, which diminished the amount of raw product available for milling and the manufacture of various wood products.[47] When building resumed following World War II, many construction companies restructured and relocated out of the city center, ending the era of large-scale lumber production in Milwaukee.[48]

(5) Storage and transportation

Storage and warehousing made an important contribution to Milwaukee industry starting with the grain elevators and lumber yards that stowed the city's earliest products. Coal yards were also important as they stowed large quantities of the material that powered trains and steamships, as well as generators that were used in manufacturing. By 1890, the city had the capacity to store approximately 1 million tons of coal each year, a number that grew to 5 million by 1908. Much of these rudimentary early storage facilities were located in the Menomonee Valley.[49]

As Milwaukee grew as a commercial and transportation hub in the late nineteenth and early twentieth centuries, storage and freight companies constructed large warehouses in several areas of the city near rail corridors and major highways. Between 1895 and 1900, records indicate that the city had less than

[42] "Our Timeline," *A.A. Laun Furniture Company*, n.d., http://aalaun.com/timeline/.

[43] Wyatt, *Cultural Resource Management in Wisconsin*, 1986, 1–3:Industry 7-7.

[44] Wyatt, *Cultural Resource Management in Wisconsin*, 1986, 1–3:Industry 7-6.

[45] Franklin H. Smith, *A Study of the Wisconsin Wood-Using Industries* (Madison, Wis.: Democrat Printing Co., 1910), 46–47, 50, 53.

[46] Wyatt, *Cultural Resource Management in Wisconsin*, 1986, 1–3:Industry 12-1.

[47] Wyatt, *Cultural Resource Management in Wisconsin*, 1986, 1–3:Industry 7-5.

[48] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 26.

[49] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 88–89.

half a dozen warehouses.[50] As of 1905, the number of storage companies doubled to 10 firms with 13 buildings.[51] Some warehouses were specifically designed as cold storage facilities, such as Milwaukee Cold Storage (AHI No. 108538, 100 S. 2nd Street in the South First and Second Street Historic District, National Register No. 87002092). Most, however, were associated with general freight or moving businesses. By the 1910s, while a number of enterprises in Milwaukee continued to cater to merchants and wholesalers (such as Suelflohn and Seefeld, AHI No. 71350, 413 N. 2nd Street, and Godfrey and Sons Wholesale Groceries, AHI No. 113485, 324 N. Jackson Street), others focused their attention on household goods and individual clients. These businesses offered services that included packing and shipping, and emphasized the private, protected nature of their facilities, with individual lockable rooms and private watchmen on duty.[52]

Fire was an ever-present concern in large, industrial cities like Milwaukee. Storage companies took advantage of new fireproof building methods in the early twentieth century and began constructing and advertising fireproof warehouses. By 1920, 20 storage firms operated in the city, and several, such as the Coakley Brothers Warehouse (AHI No. 113797, 3742-3800 W. Wisconsin Avenue, Figure 6) and the United Fire Proof Warehouse (AHI No. 117291, 2100 block of N. Farwell), offered fireproof facilities.[53] Others appeared in the early 1920s, including the Boulevard Fire Proof Storage Building (AHI No. 113898, 2620 W. Wisconsin Avenue). By the late 1920s, nearly 30 storage and moving companies were active in the city, including six with "fireproof" proudly advertised in the company's name.[54]

[50] *Wright's Milwaukee City Directory, 1900* (Milwaukee, Wis.: Wright Directory Co., 1900), 1293.

[51] *Wright's Milwaukee City Directory, 1905* (Milwaukee, Wis.: Wright Directory Co., 1905), 1556–57.

[52] *Wright's Milwaukee City Directory, 1910* (Milwaukee, Wis.: Wright Directory Co., 1910), 1887–89.

[53] *Wright's Milwaukee City Directory, 1920* (Milwaukee, Wis.: Wright Directory Co., 1920), 2014–15; Michael Timm, *Coakley Brothers: Moving Milwaukee Since 1888* (Hartland, Wis.: OneTouchPoint, 2013), 79.

[54] *Wright's Milwaukee City Directory, 1924* (Milwaukee, Wis.: Wright Directory Co., 1924), 2572–73; *Wright's Milwaukee City Directory, 1928* (Milwaukee, Wis.: Wright Directory Co., 1928), 2971.

Figure 6. Coakley Brothers' fireproof warehouse on W. Wisconsin Avenue (AHI No. 113797).

Some storage facilities were specifically tied to transportation; for example, the Marine Terminal Building (AHI No. 98278, 120 N. Broadway Street, listed in the Third Ward Historic District, National Register No. 84003724) was first used to store freight for the Chicago, Racine, and Milwaukee line, a Lake Michigan steamer service. Many utilitarian warehouses were constructed adjacent to Milwaukee's railroads by storage and transfer companies such as the Walsh Transfer Storage Company (AHI No. 111534, 1952 N. 31st Street). Throughout the twentieth century, truck depots in the city have served a similar purpose of freight shipping. These facilities contain multiple loading bay docks where trucks can load, unload, and transfer various goods. They include SAIA Freight (AHI No. 232579, 4939 S. 6th Street) and Mayfield Freight Transfer (AHI No. 232580, 1011 W. Layton Avenue).

(6) Machinery and manufacturing

Machine manufacturing in Milwaukee began with the city's earliest milling industries—grain and lumber. As milling grew and expanded, so too did the need for larger and more complex equipment to process the raw materials. Prior to the 1840s, these mills relied on machinery from the eastern U.S., instigating a shipping process that was inefficient and led to significant delays in production while the firms waited for parts and repairs. The development of metal foundries in Milwaukee starting in 1842 (see *Section 2.A(8), Metal production*) allowed for local machinery production, which streamlined the manufacturing process. In addition to mill equipment, these early machine shops cast boilers, steam engines, and locomotive pieces to power the city's growing industrial base (see Figure 7).[55] As the city grew, several types of manufacturing developed, including the production of large and small engines, machinery and equipment, hardware and appliances, and electrical controls.

[55] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 57–58.

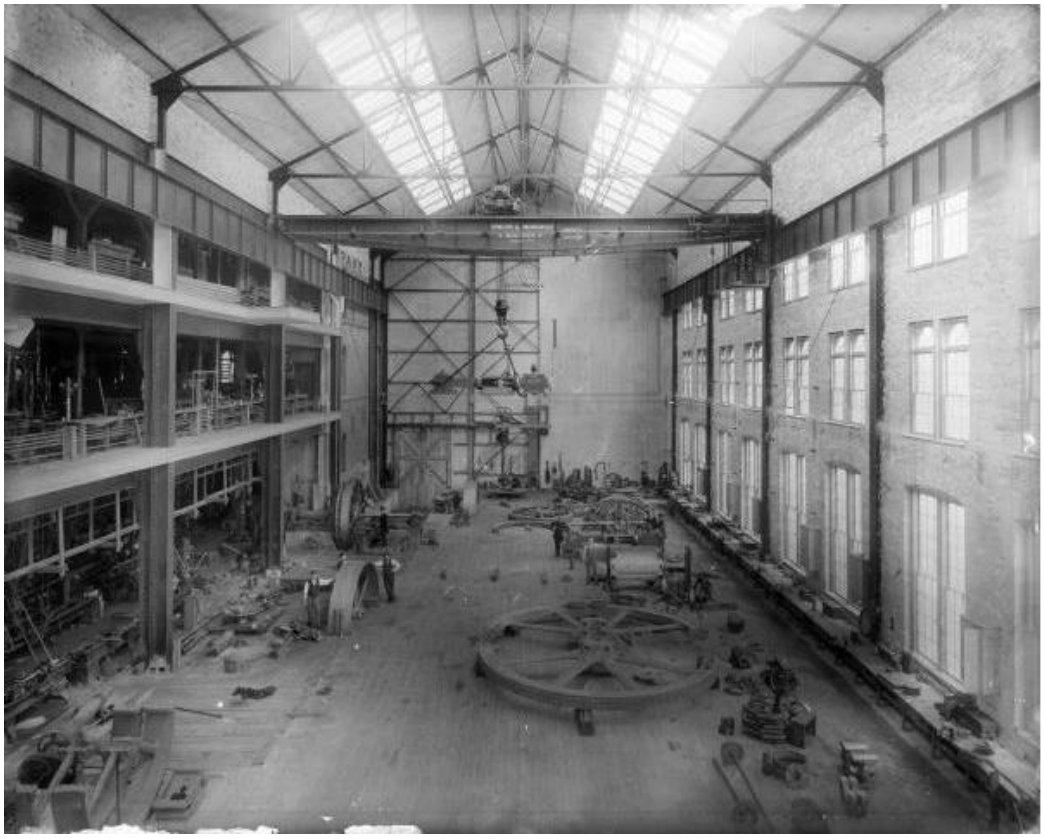


Figure 7. View of a crane inside Nordberg Manufacturing Co. Image courtesy of the Wisconsin Historical Society, Creator unknown, "P&H 20-Ton Traveling Crane in Machine Shop," Image ID 60453.

Many of Milwaukee's manufacturing firms were national leaders in innovation and design. Some of the city's biggest names started by producing the large engines needed to power industrial machines. Several made Corliss steam engines (see the "Corliss Engine" sidebar), which represented the most cutting-edge industrial technology of the mid-to-late-nineteenth century. For example, Filer & Stowell (AHI No. 232596, 147 E. Becher Street) manufactured engines for saw milling machinery that complemented its line of saws.[56] Vilter (AHI No. 232599, 2217 S. 1st Street) specialized in refrigeration and cooling machinery, including a variety of Corliss engines that provided cooling for the food and brewing industries. E.P. Allis Reliance Works (later Allis-Chalmers of West Allis), which constructed Milwaukee's early pipes and water pumps, also became known as a leading steam engine producer. After the Corliss, the next breakthrough in engine technology was the diesel engine. Nordberg Manufacturing (AHI No. 230651, 3073 S. Chase Avenue, see the "Nordberg Manufacturing" sidebar) became the first American company to produce diesel engines in 1914, and Allis-Chalmers soon diversified to make a variety of diesel products as well.[57]

[56] City of Milwaukee, *Bay View Neighborhood Historic Resources Survey: Volume II* (Milwaukee, Wis., July 1990), 87.

[57] "Serving the World's Major Industries since 1886," *Nordberg Progress* 20, no. 2 & 3 (Third Quarter 1961): 4–5.

The Corliss Engine

Advances in the use of steam power in the mid-nineteenth century had a profound impact on transportation, industry, and agriculture, greatly increasing productivity and allowing manufacturers to locate factories along convenient transportation corridors rather than at waterpower sites. As steam engine technology advanced, inventors introduced new designs and components, and George Corliss made some of America's most valuable contributions during this period of transition from water to steam power. Widely hailed as the country's great pioneer in steam engine technology, Corliss received patents in 1849 for a number of innovations that optimized engine performance. He founded his own company in Providence, Rhode Island, and his improved engine soon became the industry standard. His installation of twin 700-ton, 2,500-horsepower steam engines was one of the centerpieces of the Philadelphia Centennial Exposition in 1876. Corliss's patents expired in 1870, and other manufacturers began to build Corliss engines, in some cases adding their own improvements (such as the Reynolds-Corliss Engine manufactured by Allis-Chalmers). The Corliss engine dominated the industry for the remainder of the nineteenth century, providing motive power for factories, generating electricity, and powering refrigeration machinery for industries such as brewing and meat packing. The engine's popularity extended into the early twentieth century, as several dozen companies in the U.S. continued to produce Corliss engines. Of the 24 companies listed making Corliss engines nationwide in 1916, four were located in Milwaukee: Vilter, Nordberg, Allis-Chalmers, and Filer & Stowell. Other types of engines eventually eclipsed the Corliss, but it was once one of Milwaukee's most important products, both to the handful of companies who produced the engines for sale and to the many who relied on the engines to power their own manufacturing interests.

Corliss steam engine at International Harvester's Milwaukee Works, c.1907. Image courtesy of the Wisconsin Historical Society, International Harvester Company, "Corliss Steam Engine at Milwaukee Works," Image ID 7593.

Sources: Richard L. Hills, *Power from Steam: A History of the Stationary Steam Engine* (Cambridge, England: Cambridge University Press, 1993), 178–180; Maury Klein, *The Genesis of Industrial America, 1870–1920* (Cambridge, England: Cambridge University Press, 2007), 88; American Society of Mechanical Engineers, *Condensed Catalogues of Mechanical Equipment* (New York: American Society of Mechanical Engineers, 1916), 421.

The Nordberg Manufacturing Company

Bruno V. Nordberg moved to Milwaukee in 1880 and began work as a draftsman at the E.P. Allis Company, quickly rising through the ranks to become a designer and chief assistant. While at E.P. Allis, Nordberg focused on improving the design and manufacturing of Corliss steam engines. He developed and filed a patent for a poppet valve engine and cut-off governor that increased the Corliss model's efficiency. In 1886, Nordberg left to start his own company, and by 1900, Nordberg Manufacturing had grown to over 300 employees.

In the 1910s, Nordberg became the first American manufacturer to construct diesel-patented and designed engines. The company received its first government commission for steam and diesel engines at the outbreak of World War I. After the war the company continued to innovate, designing the first single acting, two-cycle diesel engine; the first turbo-charged four-cycle engine; and the first inherently balanced heavy duty radial engine.

From the founding of the company in 1886 until his death in 1924, Bruno Nordberg remained chief engineer and filed over 58 patents. After his death, the company continued as a leader in the engine field; in 1941, it was awarded a large contract to manufacture torpedo tubes for the United States Navy through World War II. In 1970, the firm merged with another Milwaukee-based manufacturing company, Rex Chainbelt, Inc., and continued production as Rexnord. Industrial production at the plant ceased in 2004. The plant was determined eligible for the National Register in 2016 as part of a transportation compliance project.

Sources: Andrew J. Aikens, *Men of Progress, Wisconsin: A Selected List of Biographical Sketches and Portraits of the Leaders in Business* (Milwaukee, Wis.: Evening Wisconsin Co., 1897), 138-139; *Nordberg, Men and Machines: The Story of Nordberg Manufacturing Company* (N.p.: Wisconsin Regional Writers Association, 1958), 3; "Serving the World's Major Industries Since 1886," *Nordberg Progress* 20, no. 2 & 3 (Third Quarter 1961): 4–5; *Bruno Nordberg: 2014 Pit & Quarry Hall of Fame Inductee* (PitandQuarry.com, 2014), https://www.youtube.com/watch?v=niScMJq0xYo; Rich Rovito, "Metso to Close Former Nordberg Plant," *Milwaukee Business Journal*, September 29, 2003, http://www.bizjournals.com/milwaukee/stories/2003/09/29/daily5.html.

After the turn of the twentieth century, many industrial processes transitioned from using large motors that powered multiple machines via belts and shafts to smaller motors that attached to each separate machine. Several Milwaukee companies took on the production of small motors and engines and, in time, helped to revolutionize the industry. The city's leaders included Louis Allis (AHI No. 101693, 427 E. Stewart Street), which was particularly well known for its alternating-current electric motors, and Briggs and Stratton (AHI No. 111593, 2748 N. 32nd Street), which produced a variety of air-cooled gas engines.[58]

A number of Milwaukee's late-nineteenth- and early-twentieth-century manufacturers produced machinery and equipment, from general parts such as large industrial gears (Falk Corporation, AHI No. 117759) and hydraulic pumps (Oilgear, AHI No. 99039, 1403 W. Bruce Street) to products for more specified industries. Farm implements were particularly prominent due to the importance of agriculture throughout the state and beyond. Demand for products such as threshing machines, seeders, reapers, and mowers remained high from the 1860s, when demand spiked during a Civil War labor shortage, through the mid-twentieth century. International Harvester (AHI Nos. 232271, 232276, and 232277; 1875 W. Bruce Street) was Milwaukee's biggest producer of agricultural equipment—particularly tractors—for a national market and, at its peak, employed 4,000 people.[59] By the end of World War I, Milwaukee was known as

[58] City of Milwaukee, *Bay View Neighborhood Historic Resources Survey: Volume II*, 83.

[59] City of Milwaukee Department of City Development, *South Side Neighborhood Historic Resources Survey: Final Report*, 33.

an international tractor manufacturing center, and by 1922, farm implements generated more than $9.5 million in annual revenue for the city.[60]

Hardware and appliances represented another subset of manufacturing in Milwaukee. This specialty was represented by companies such as Perlick (AHI No. 116583, 3108-3110 W. Meinecke Avenue), which produced brassworks and hardware for the brewing industry, and Geuder, Paeschke, and Frey (AHI No. 78392, 1700 W. St. Paul Avenue, Figure 8), which manufactured household goods including stamped, pressed, and enameled metal products. The latter evolved from making items such as tin bathtubs and mailboxes in the 1880s to the production of parts for vacuum cleaners and washing machines in the 1910s, following consumer needs through several generations.[61]

Figure 8. Geuder & Paeschke (later Geuder, Paeschke & Frey) factory on W. St. Paul Avenue (AHI No. 78392) shown in 1892.[62]

[60] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 55–56, 65; City of Milwaukee Department of City Development, *South Side Neighborhood Historic Resources Survey: Final Report*, 35.

[61] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 65–67.

[62] *Milwaukee's Great Industries*, 1892, 323.

A vital portion of the city's manufacturing revenue came through the production of electrical controls. The first electrical shops in the Menomonee Valley emerged in the 1890s and the industry grew with the advent of the rheostat, a variable resistor that controls the amount of electric power directed to a given implement. This drove the development of products that allowed consumers to, for example, set the temperature on an oven or control the speed of a motor. Cutler-Hammer (AHI No. 78898, 272-274 N. 12th Street) pioneered the automatic motor starter and later produced controls for elevators, cranes, and hoists. Johnson Service Company (AHI No. 106694, 507 E. Michigan Street) pioneered automated temperature controls, and Allen Bradley (AHI No. 99286, 136 W. Greenfield Avenue) also became an internationally known manufacturer of electrical controls. Many of these companies fared better than traditional manufacturers as the twentieth century wore on and they transitioned into the production of sophisticated electronic controls and aerospace technology.

With the advent of electric power came a new, supplementary industry devoted to the production and repair of electrical equipment and controls.[63] The Square D Company, a manufacturer of protected electrical switches and other control devices, constructed a state-of-the-art facility (AHI No. 232408, 4037-4041 N. Richards Street) in the northern part of Milwaukee in 1940 to supplement their existing Walker's Point plant (AHI No. 41964, 710 S. 3rd Street, individually listed as National Register No. 14000878).[64] Meanwhile, TMER&L consolidated into the Wisconsin Electric Power Company, now WE Energies, which oversees power generation in Milwaukee and around the region.

One subsidiary trade that developed out of Milwaukee manufacturing was that of tool and die shops such as the Lutter and Gies Machine Shop (AHI No. 115137, 114 E. Pittsburgh Avenue) and Medved Tool and Die (AHI No. 106837, 325 W. Florida Street). Larger firms were often contracted to create pieces such as molds, dies, and cutting and machine tools in order to complete their manufacturing contracts. Indeed, for more than a century machinery and manufacturing dominated the city and created employment and revenue throughout the local economy. By the late twentieth century, many of these companies had either gone out of business, moved out of Milwaukee, or consolidated to form larger corporations.

[63] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 85–86.

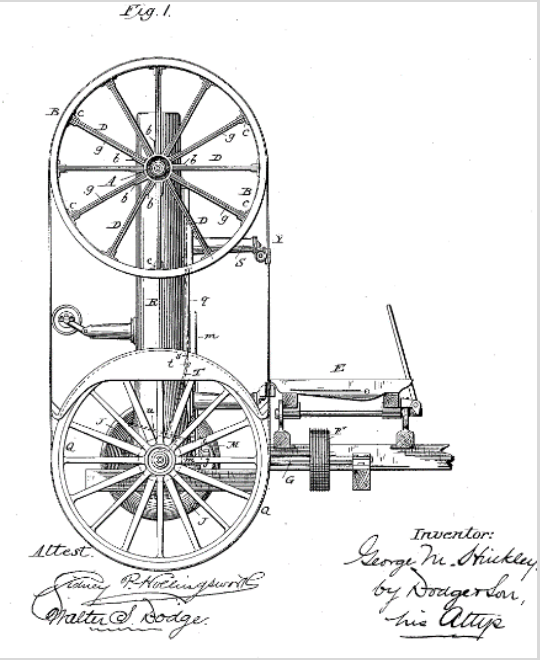
[64] Harry H. Anderson and Frederick I. Olson, *Milwaukee at the Gathering of the Waters*, American Portrait Series (Tulsa, Okla.: Continental Heritage Press, Inc., 1981), 215.

Allis, Hinkley, Gray, and Reynolds: The minds behind the machines

Edward P. Allis entered the iron-making business in 1861 with little knowledge of heavy machinery design and engineering. Instead, he possessed a talent for identifying innovators and encouraging them to do their best work. The success and growth of Allis's enterprise from a smaller manufacturer into a national giant is due in large part to his ability to forecast growth areas and recruit the best minds of the time. In the 1870s, Allis expanded his Reliance Works to capitalize on the market for transforming Wisconsin's raw products into commodities, focusing on three areas: grain milling, lumber milling, and power equipment. Between 1873 and 1877, Allis recruited three men who brought his company to the forefront in the fields of saw milling, flour milling, and steam engine production.

George M. Hinkley

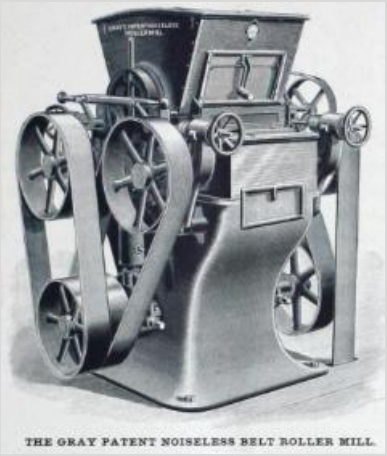
A Milwaukee-based inventor, Hinkley established his own sawmill machinery company in 1870. When Allis offered him a position in 1873, Hinkley became the head of the sawmill machinery division. The division initially produced only circular saws, but with improvement of blade technology, band saws began to come into common use in the mid-1870s. Improvements to band saw technology are among Hinkley's many contributions to the lumber milling industry, and the 1885 installation of a band saw mill in Prentice, Wisconsin, marked the beginning of Allis-Chalmers' rise to dominance in the field during the boom years of the logging industry.



An improved band saw, patented in 1886, one of Hinkley's many designs for lumber milling machinery. Source: George M. Hinkley, "Band Saw Mill," August 31, 1886, http://www.google.com/patents/US348280, 1.

William D. Gray

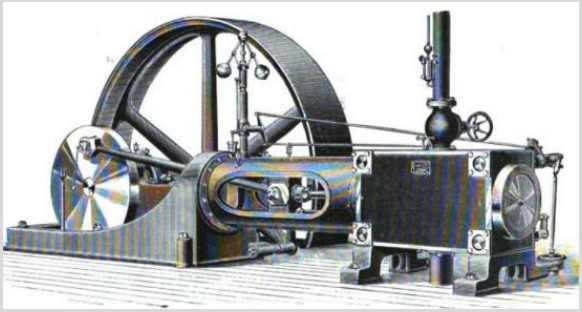
Prior to the 1870s, flour milling utilized grindstones, but the successful introduction of metal rollers revolutionized the milling industry. In 1877, Edward Allis recruited Gray to expand the Reliance Works' flour milling division. Gray's innovations in roller milling technology were incorporated into the reconstruction of the Washburn-Crosby "A" mill in 1878, credited as the first large-scale use of roller technology in the United States. Gray invented the first belted roller mill, as well as the first gradual-reduction flour mill, and in just over a decade more than 26,000 pairs of Gray's rollers had been installed in flour mills around the world, setting the industry standard. Gray continued to develop additional machinery for the various processes associated with flour milling and Allis's company became a leader in flour milling equipment manufacture.



W.D. Gray's patented "Noiseless belt roller mill," 1889. Source: Edward P. Allis Co., The Kind of Mills We Build, 3.

Edwin Reynolds

In 1877, recognizing that engine manufacture was key to his company's success, Allis lured Reynolds to Milwaukee from Providence, Rhode Island, where he was the general superintendent of the Corliss Steam Engine Company. Rather than providing a higher salary, Allis offered Reynolds the time, space, and financing to develop improvements to the Corliss engine. Known as the Reynolds Corliss engine, Edwin Reynolds's improved designs soon became a leader in the market for large steam engines. Available in a variety of configurations, Reynolds Corliss engines could power a range of industrial milling and pumping applications. One notable example is the engine and pump installed to purify the Milwaukee River, the largest water pump in the world at the time it was installed in 1888. An enormous engine at the 1893 Columbian Exposition provided the power to the generators that illuminated the Great White Way, further cementing the reputations of Reynolds and the E.P. Allis Company.



Edwin Reynolds' 1890 improved Corliss steam engine. Source: "American Inventors," 68.

Sources: Robert C. Nesbit, *The History of Wisconsin, Volume III: Urbanization and Industrialization* (Madison, Wis.: State Historical Society of Wisconsin, 1985), 167, 169, 170; A.E. Hall, "The Milling Machinery Department: Its History and Contributions to Allis-Chalmers Manufacturing Company," October 8, 1935, 2-3; Manfred Powis Bale, *Woodworking Machinery, Its Rise, Progress and Construction*, 1880, http://archive.org/details/woodworkingmach00balegoog, 121–122; Jeremy Wayne Hubbell, "Minneapolis: Urban-Environmental Change in the Upper Mississippi, 1824-1924" ([Stony Brook, NY]: Stony Brook University, 2007), 180; Edward P. Allis Co, *The Kind of Mills We Build* (N.p.: Edward P. Allis Co., 1889), 2; "William D. Gray," *The Weekly Northwestern Miller* 31, no. 20 (May 22, 1891): 695; "American Inventors," *The National Magazine* 18, no. 1 (1893): 66; Walter Geist, *Allis-Chalmers: A Brief History of 103 Years of Production* (New York: Newcomen Society of North America, 1950), 11.

(7) Tanning and leather products

Leather was one of Milwaukee's earliest industries, beginning in 1842 with the founding of the city's first tannery. Tanning grew exponentially over the next several decades, including during the 1860s, when the Civil War increased demand for leather harnesses, shoes, and packs. During that decade, production more than quadrupled, and by the 1870s, Milwaukee was the preeminent tanning city in the region with 30 leather production facilities within the city limits. These were concentrated along the upper Milwaukee River, eastern part of the Menomonee Valley, and the Third Ward.[65]

Several circumstances combined to make Wisconsin a center of leather production. These included the state's ample supply of hides, both from inland and shipped north from Chicago; timber for tanning barks, used to treat the animal hides; and water, which was needed during the tanning process and also provided energy for the factories and transportation for the finished product.[66] Milwaukee had easy access to these resources as well as a significant population of German-born laborers familiar with leather tanning. Finished leather was either shipped east or used to manufacture related products in

[65] National Register of Historic Places, Wisconsin Leather Company Buildings, Milwaukee, Milwaukee County, Wisconsin, National Register # 05000250, 8-1-8-2. Wyatt, *Cultural Resource Management in Wisconsin*, 1986, 1–3: Industry 12-2-12-3; City of Milwaukee Department of City Development, *South Side Neighborhood Historic Resources Survey: Final Report*, 29.

[66] National Register of Historic Places, Wisconsin Leather Company Buildings, Milwaukee, Milwaukee County, Wisconsin, 8-2.

Milwaukee, including boots and shoes, harnesses, and trunks; many of those industries located facilities around the tanneries.[67] As demand for leather continued to grow, small companies consolidated so that by 1890, the industry, now represented by 12 tanneries in Milwaukee, was valued at more than $11 million. The city's largest leather facilities included Pfister and Vogel, Star Tannery (AHI No. 16446, 1661 N. Water Street), and A.F. Gallun and Sons Tannery (AHI No. 70208, 1818 N. Water Street, listed as the Gallun Tannery Historic District, National Register No. 84003721, partially demolished).[68]
Milwaukee's tanning industry showed no signs of slowing as it entered the twentieth century. By 1910, the city was processing two million hides per year, which amounted to over $27 million in leather, and Milwaukee had officially become the largest tanning center in the world. Pfister and Vogel had grown into a tanning giant with facilities across Wisconsin, the United States, and Europe.[69] The company's headquarters in the Menomonee Valley covered 38 buildings and 15 acres, and the company boasted five subsidiary tanneries including a large complex in Bay View (see Figure 9).[70]

[67] Wyatt, *Cultural Resource Management in Wisconsin*, 1986, 1–3: Industry 12-1, 12-2, 12-8.

[68] Extant Pfister and Vogel complexes include the Bay View tannery (AHI No. 111590, 1977 S. Allis Street) and the Menomonee tannery, comprised of six other resources located in the Walker's Point Historic District, National Register No. 78000120: AHI No. 16467, 624 West Oregon Street; AHI No. 42007, 647 West Virginia Street; AHI No. 16474, 706 West Oregon Street (noncontributing to Walker's Point Historic District); AHI No. 16010, 710 West Oregon Street; AHI No. 16208, 720 West Oregon Street; and AHI No. 16449, 730 West Oregon Street.

[69] Landscape Research, *Built in Milwaukee: An Architectural View of the City* (Prepared for the City of Milwaukee, 1981), 192; Wyatt, *Cultural Resource Management in Wisconsin*, 1986, 1–3: Industry 12-5.

[70] John Gurda, "The Menomonee Valley: A Historical Overview," n.d., http://www.renewthevalley.org/media/mediafile_attachments/04/4-gurdavalleyhistory.pdf.

Figure 9. 1892 engraving of Pfister & Vogel's Milwaukee tanneries; the center view depicts the Menomonee Tannery at W. Oregon and S. 6th Streets (AHI Nos. 16463, 16474), while the early portion of the Bay View Tannery (AHI No. 111590) is inset in the upper right.[71]

The need for leather during World War I buoyed the industry through the 1910s; however, it began to decline when foreign tariffs were lifted and American tanning faced international competition after 1920. Furthermore, alternative materials were replacing leather in its various uses. By the Great Depression the industry had significantly diminished, though several of Milwaukee's most prominent tanneries remained in production through the 1990s.[72] Pfister and Vogel Tannery and Star Tannery, both recognized in this survey, stand as some of the last remaining vestiges of what was once a leading industry in Milwaukee.

(8) Metal production

Milwaukee's first foundry opened in 1842, and by the late 1860s, the city had established itself as a major steel and iron producer.[73] This was, in part, due to the advent of the Bessemer process in 1868, which streamlined the removal of impurities from raw materials to create steel. Iron ore was shipped to Milwaukee from deposits around Lake Superior and in Dodge County, Wisconsin, and processed at foundries, forges, and roller mills around the city. The Milwaukee Iron Company in Bay View (nonextant),

[71] Harger, *Milwaukee Illustrated. Its Trade, Commerce, Manufacturing Interests, and Advantages as a Residence City...*, 95.

[72] Wyatt, *Cultural Resource Management in Wisconsin*, 1986, 1–3:Industry 12-5.

[73] Wyatt, *Cultural Resource Management in Wisconsin*, 1986, 1–3:Industry 4-1.

founded in 1867, was at one time the second largest rolling mill in the country.[74] By 1882, the Northwestern Malleable Iron Company (AHI No. 99048, 1640 W. Bruce Street) was established in the Menomonee Valley. It became one of Milwaukee's major foundries, producing castings for railroads, farm machinery, and wagons.[75] Overall, the city's iron companies produced several different types of castings. These included malleable iron, which has good tensile strength and ductility and is used in hand tools, machine parts, and farm equipment, and grey iron, which is applied where stiffness is the most important quality, such as in engine blocks and pump housings.

The city also accommodated many smaller shops involved in metal fabrication, which peaked between the 1880s and the 1920s and included establishments focused on patternmaking (such as Utility Pattern Works, AHI No. 104718, 1638 W. Pierce Street and Siebers and Raisch Pattern Works, AHI No. 103900, 1500-1504 W. National Avenue), metal treating, brass and bronze working, stamping, and sheet iron. By 1928, the city's metal industries totaled 423 factories including 212 that produced iron, steel, and heavy machinery (see *Section 2.B(6), Machinery and manufacturing*).[76] Included in this number were the city's bridge manufacturing companies, including Lakeside Bridge and Steel (AHI No. 232546, 5300 33rd Street), Wisconsin Bridge and Iron (AHI No. 232477, 5141 N. 35th Street), and the Milwaukee Bridge Company (AHI No. 232308, 3282 N. 35th Street). It was common for these firms to diversify into more general structural steel fabrication once they were well established.

As manufacturing continued to grow throughout the city, so, too, did the demand for metal. A.E. Martin's Central Foundry (AHI No. 99042, 1521 W. Bruce Street) and Milwaukee Forge (AHI No. 104919, 1532 E. Oklahoma Avenue), both constructed in the 1910s, represent the ongoing importance of metal production. Milwaukee Forge and other drop forging firms used powered hammers to form large specialty components for various uses. Some larger manufacturers had their own foundries and provided castings for other companies; for example, Milwaukee Malleable and Grey Iron Works (AHI No. 232556, 2773-2776 S. 29th Street) was owned by the same corporation as Milwaukee Hay Tool and supplied it and other clients with both malleable and grey iron. As heavy manufacturing waned in the mid-to-late twentieth century, many iron and steel producers closed and their facilities were either demolished or repurposed for new industries. Some, such as Northwestern Malleable Iron, are now used for the processing and storage of scrap metal.

(9) Power generation and transfer

The generation and transfer of power, and in particular electricity, became its own industry in Milwaukee by the turn of the twentieth century. The city's earliest manufacturing was powered via coal-burning steam engines, which also provided the means for shipping via water or rail. Because coal does not occur naturally throughout the region, it was transported to Milwaukee and stored in Menomonee Valley coal yards. By 1914, the city had 28 receiving plants to store and distribute the massive volume of coal

[74] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 56–58.

[75] City of Milwaukee Department of City Development, *South Side Neighborhood Historic Resources Survey: Final Report*, 37.

[76] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 64.

arriving in the city each year.[77] The Milwaukee Gas Light Company (AHI No. 16452, 2122 W. Mt. Vernon Avenue) also provided natural gas for some industrial use beginning in the mid-nineteenth century, although it mainly served residential clients.

Coal-powered electricity arrived in Milwaukee in the 1880s, and by 1896, several early electric companies had consolidated as the Milwaukee Electric Railway and Light Company (TMER&L, AHI No. 83374, 1872 North).[78] TMER&L ran the city's electric rail service and sold excess electricity to various industrial clients. The company constructed two significant power plants at the turn of the twentieth century: the Oneida Street Power Plant (AHI No. 16648, 108 E. Wells Street, individually listed as National Register No. 84000701) in 1900 and the Commerce Street Plant (AHI No. 88120, individually listed as National Register No. 99000761) in 1903. The Wisconsin Electric Power Company (AHI No. 73330, 218 W. McKinley Avenue) building housed generators and turbines for the Commerce Street Plant, which boosted TMER&L's production exponentially. After a 1912 expansion, the complex was producing an amount of electricity 15 times greater than the company's capacity had been in 1896.[79] This helped it to expand service to a variety of industrial clients. While many manufacturing complexes drew electricity from common power plants, others had their own on site. For example, Louis Allis maintained its own powerhouse (AHI No. 232594, 427 E. Stewart Street) within the company complex.

(10) Carriages, wagons, automobiles, and motor bikes

Milwaukee's vehicle industry began with carriage and wagon shops established during the city's early history. By the 1870s, what would become two of the region's major wagon manufacturers, the Charles Abresch Company (nonextant) and Herman Barkow Company (AHI No. 110926, 153 N. Milwaukee Street, in the Historic Third Ward District, National Register No. 84003724), were founded. The Charles Abresch Company was known for producing specialty wagons such as those used to transport oil and beer; it patented designs for vehicles that carried kegs and bottles and manufactured them for sale around the country.[80] Similarly, the Herman Barkow Company held the patent for a special axle and other features representing innovative wagon technologies.[81] By the turn of the century, Milwaukee's wagon and carriage industry was described as "extensive" and included many small and mid-sized shops, such as Joseph Heinl and Sons Carriage and Wagon (AHI No. 116095, 1421 N. Water Street) and George Grady and Brothers Carriage Factory (AHI No. 97912, 524 S. 2nd Street).[82] With the rise of the automobile in the twentieth century, however, the business changed dramatically.

As motor vehicles replaced their horse-drawn counterparts, many companies transitioned to accommodate the new industry. The Herman Barkow Company began making motorized trucks in 1910

[77] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 89.

[78] National Register of Historic Places, Blatz Brewery Complex, National Register #86000793, 8-1.

[79] National Register of Historic Places, Commerce Street Power Plant, Milwaukee, Milwaukee County, Wisconsin, National Register #99000761 , 8-5.

[80] *Milwaukee: A Half Century's Progress, 1846-1896*, 210.

[81] *Milwaukee: A Half Century's Progress, 1846-1896*, 156.

[82] *Milwaukee: A Half Century's Progress, 1846-1896*, 210.

and ceased all wagon production by 1923, continuing as an auto body manufacturer well into the twentieth century.[83] The Milwaukee Spoke and Bending Company (AHI No. 99995) and the Gustav Raetz Carriage Factory (AHI No. 107884, 607 S. 6th Street, in the Walker's Point Historic District, National Register No. 78000120) similarly evolved from carriage manufacturing to automobile production and repair.[84] Though Milwaukee was never a center of auto manufacturing, the Detroit-based Ford Motor Company constructed a state-of-the-art production plant (AHI No. 107185, 1925 E. Kenilworth Place) on the Lower East Side in 1915 and La Fayette (later a division of Nash) Motors Company, a now-defunct luxury car producer, relocated to a new plant in Bay View in 1923 (AHI No. 232587, 3280 S. Clement Avenue, now a Chrysler parts distribution center, Figure 10).[85] Meanwhile, a number of Milwaukee's prominent general manufacturers produced automobile parts, including A.O. Smith (AHI No. 16200, 3533 N. 27th Street), a leading car frame manufacturer, and Seaman Body (nonextant, Figure 11), which made vehicle bodies for companies including Nash Motors. By 1926, A.O. Smith and Seaman Body were among the city's largest employers, each with approximately 5,000 personnel, and both of their facilities remained in active production through the late twentieth century.[86]

Figure 10. Nash Motors plant (AHI No. 232587) on S. Clement Avenue.

[83] Wisconsin Historical Society, "AHI No. 110926 - Herman Barkow Co.," http://wisahrd.org/AHI/Properties/Primary.aspx?id=110926, *Wisconsin Historic Preservation Database*, (n.d.).

[84] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 63.

[85] City of Milwaukee, *Lower East Side Neighborhood Historic Resources Survey* (Milwaukee, Wis., February 1988), 7–10; The Milwaukee Association of Commerce, "Main Plant of La Fayette Motors Corporation to Milwaukee," *Milwaukee: A Magazine for Her Business Leaders*, January 1923.

[86] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 63; Seaman Body was absorbed by American Motors in 1954, but its Milwaukee production facility remained active until 1987; Mark Theobald, "W.S. Seaman Co.," *Coachbuilt*, 2004, http://www.coachbuilt.com/bui/s/seaman/seaman.htm.

Figure 11. Interior of Seaman Body, 1913. Image courtesy of the Wisconsin Historical Society, Unknown creator, "Body Production," Image ID 36533.

When it comes to motor vehicles, Milwaukee is perhaps best known as a worldwide center of motorcycle production. Industry leader Harley-Davidson (AHI No. 27894, 3700 W. Juneau Avenue, individually listed as National Register No. 86003850; see the "Harley-Davidson" sidebar) was established in the city by engineer Bill Harley, pattern maker Arthur Davidson, and machinist Walter Davidson. Construction started on their Washington Park headquarters on Juneau Avenue in 1910 and it still stands today as a major center of company operations.[87]

[87] National Register of Historic Places, Harley-Davidson Motorcycle Company, Milwaukee, Milwaukee County, Wisconsin, National Register # 86003850, 4.

Harley-Davidson

In 1903, Arthur Davidson, a pattern maker, and Bill Harley, an engineer, became acquainted while working at the Barth Manufacturing Company in what was then North Milwaukee. Along with Davidson's brother Walter, a machinist, they began to develop plans for a motorized bicycle. Their unique design provided for a more reliable engine, and by 1907 they had brought on William Davidson, another brother, and officially incorporated. The company mass produced 450 bikes the following year, and by the late 1910s, they were making 18,000 vehicles annually from a massive, modern facility on Juneau Avenue (AHI No. 27894, individually listed as National Register No. 27894). At this time the company was recognized as the largest motorcycle manufacturer in the world.

Harley-Davidson enjoyed considerable success due to its dedicated marketing strategies, worldwide distribution, and ongoing technological innovations. Its product was known to be reliable, outlasting many of the company's competitors. The company received significant government contracts to build both motorcycles and engines during World Wars I and II. In 1969, Harley-Davidson merged with New York-based American Machine and Foundry; however, in 1981, top executives bought the company back and re-established its independence. Today, Harley-Davidson remains one of Milwaukee's most iconic manufacturers.

Original shop where Harley-Davidson motorcycles were assembled, c.1905. Image courtesy of the Wisconsin Historical Society, Unknown creator, "First Harley-Davidson Shop," Image ID 43394.

Sources: National Register of Historic Places, Harley-Davidson Motorcycle Company, Milwaukee, Milwaukee County, Wisconsin, National Register #86003850; John Gurda, *The Making of Milwaukee* (Milwaukee, Wis.: Milwaukee County Historical Society, 2008), 167–168.

(11) Chemicals

Milwaukee maintained a modest chemical industry beginning in the 1880s. The manufacture of materials including rubber, glass, paint, and oil grew out of the needs of the city's largest corporations in the areas of tanning, food processing, and machinery. These industries required chemical and allied products for processes such as cleaning, disinfecting, coloring, finishing, and lubrication. Sometimes chemical

divisions were located within these companies; for example, commercial food plants hired scientists to develop coloring, flavoring, and preservatives, while Pfister and Vogel housed a department that produced chemicals needed for tanning and leather production.[88]

Chemical manufacturing experienced an early boom in the late nineteenth century, when the number of companies citywide rose from just three in 1882 to 21 in 1900. Early chemical firms included American Hair Felt, later Ozite (AHI No. 117998, 900 N. 46th Street), which originated in the 1880s and used byproducts from the tanning industry to produce insulation, felt, and carpet padding. The Fiebing Chemical Company (AHI No. 63420, 516 S. 2nd Street) was founded in 1897 by a Pfister and Vogel chemist for the manufacture of leather dyes, waxes, and soaps.[89] The Patton Paint Company, predecessor to the Pittsburgh Plate Glass Company (AHI No. 116218, 201 E. Pittsburg Street; individually listed as National Register No. 09000851), was founded in the 1850s and then expanded significantly around the turn of the century. By 1910, the business had an expansive complex in Walker's Point, where it produced paint, varnish, and oil under the popular brand, "Sunproof."[90] These represent just a few of the diverse chemical products made in Milwaukee at the turn of the century.

The chemical industry hit a peak in the 1910s and then slowly declined. Many companies followed the path of Palmolive Soap (AHI No. 109051,424 N. 4th Street), which began as a local brand, Johnson Soap, in the 1860s. In the early twentieth century, it became an international brand, moved its headquarters, and finally ended its Milwaukee operations completely in 1934. Meanwhile, some of the city's chemical firms prospered into the twentieth century. Kolmar Laboratories (AHI No. 110921, 228 N. Broadway Street; in the Historic Third Ward District, National Register No. 84003724), a major worldwide cosmetic producer, manufactured products in Milwaukee from 1945 through the 1980s.[91]

(12) Masonry, stone, and cement

The production of building materials comprised one of Milwaukee's earliest industries as the city began to build and expand. The first brick kiln was recorded in 1835, and by 1840, three kilns had been established throughout the city. In 1844, the Burnham Brothers founded what would become Milwaukee's dominant brick business, though many smaller firms also prospered.[92] Milwaukee brick was unique because local clay deposits had a high concentration of lime and sulphur. This made the bricks a light yellow color, instead of red, and also significantly increased their durability. "Cream bricks," as they became known, were in high demand by the mid-1850s, at which point the city boasted eight brickyards

[88] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 80, 84.

[89] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 83, 81, 84.

[90] City of Milwaukee Department of City Development, *Central Business District Historic Resources Survey*, 40.

[91] City of Milwaukee Department of City Development, *Central Business District Historic Resources Survey*, 41, 43.

[92] City of Milwaukee Department of City Development, *South Side Neighborhood Historic Resources Survey: Final Report*, 77–81.

that employed 300 people.[93] By the Civil War, Milwaukee was manufacturing more than 20 million bricks per year and had earned its nickname of the Cream City.[94]

Milwaukee also supported a moderate stone industry in the late nineteenth century. A fair amount of limestone was quarried just west of the Menomonee River Valley in Wauwatosa. Milwaukee became a state leader in lime production, which involves burning limestone down to make a substance that can be used for nutrients in fertilizer, or alternatively for mortar, plaster, and whitewash in construction.[95] Marble was not endemic to the region; however, the stone was imported to several Milwaukee companies such as Grant Marble (AHI No. 78309, 2615 W. Greves Street) and Walter Salmon Marble (AHI No. 104706, 1536 W. Pierce Street) that cut, dressed, and polished it before shipping it on for use as a building material.[96]

In 1875, deposits of natural hydraulic cement were discovered beneath the Milwaukee River in the north part of the city. This variety of the material, commonly known as Portland cement, is valuable for its ability to harden while underwater. It was mined until its depletion around the turn of the twentieth century. This, however, was only the beginning of the cement industry in Milwaukee; while production declined, the city became an important central point for storage and distribution at a time when cement was overtaking timber as a preferred construction material.[97] Starting in large quantities in the 1910s, raw cement shipped from the Upper Peninsula of Michigan to Milwaukee where it was received, sometimes processed, and then distributed by truck or rail around the region.[98] Prominent bulk shipping and receiving firms included the Huron Portland Cement Company (AHI No. 109840, 470 S. 11th Street), Petoskey Cement (AHI No. 99037, 1304 W. Bruce Street), and Universal Atlas Cement (AHI No. 118704, 712 W. Canal Street).[99]

Milwaukee's building materials industry waned in several stages. Brick production was in decline by the early twentieth century as local clay deposits dwindled. Though brickyards supported an important construction industry, not much of their infrastructure remains around the city. Meanwhile, the city's stone operations ended in phases throughout the mid-twentieth century. Lime production slowed with the Great Depression in the 1930s, while some stone fabricators lasted through the postwar era.[100] Cement shipping continued to expand into the 1950s, and the city maintains several cement companies to this day.

---

[93] City of Milwaukee Department of City Development, *Central Business District Historic Resources Survey*, 4–5.

[94] Wyatt, *Cultural Resource Management in Wisconsin*, 1986, 1–3: Industry 2-12; Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 29.

[95] Wyatt, *Cultural Resource Management in Wisconsin*, 1986, 1–3:Industry 2-9-2-11.

[96] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 29–31.

[97] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 31.

[98] Wyatt, *Cultural Resource Management in Wisconsin*, 1986, 1–3:2–12.

[99] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 31–32.

[100] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 29, 31–32; Wyatt, *Cultural Resource Management in Wisconsin*, 1986, 1–3: Industry 2–12.

Henry Harnischfeger

Henry Harnischfeger arrived in Milwaukee in 1881 and became a machinist and patternmaker at the Whitehill Sewing Company, where he met Alonzo Pawling. In 1884, Harnischfeger and Pawling entered into a partnership to establish a tool and pattern shop. Initially they worked under contract with other local industrial companies, and the first years were difficult. However, after successful deals with the Edward P. Allis Company and others, they began to turn a profit. By 1887, Pawling & Harnischfeger was able to expand its small business; it soon became known for its fine craftsmanship and innovation. In that same year, the company constructed its first three-motor electric crane, and after 1900, it exclusively built cranes.

Pawling left the business in 1911 and sold his share of the company to Harnischfeger. After his departure the company began to diversify into other large-scale machinery, such as excavation tools. The company experienced a boom in demand during World War I, and by 1924, its plant covered 13 acres and the company employed more than 1,450 workers. Under Harnischfeger's leadership the corporation continued to grow into an international powerhouse.

During his lifetime Harnischfeger was active in Milwaukee's business community and played a role in the Merchants & Manufacturer's Association, Milwaukee Association of Commerce, and Associated Charities of Milwaukee. After his death his son Walter took over the business and led the company until the 1970s. In the early 2000s, the company reorganized as Joy Global, Inc.

Sources: Henry Harnischfeger, *Autobiography of Henry Harnischfeger* (Milwaukee, Wis.: n.p., 1929), 3-6, 14; Harnischfeger Corporation, *Forty Years of Progress, 1884-1924* (Milwaukee, Wis.: Harnischfeger Corp., 1924), 8; Ellis Baker Usher, *Wisconsin, Its Story and Biography, 1848-1913*, vol. 8 (Chicago & New York: The Lewis Publishing Company, 1914), 2,144; Milwaukee Historic Preservation Commission, *Historic Designation Study Report: Henry Harnischfeger House*, Winter 1990-1991, http://www.city.milwaukee.gov/ImageLibrary/Groups/cityHPC/DesignatedReports/vticnf/HarnischfegerHouse.pdf, 3; "Walter Harnischfeger Ends Executive Role With Firm," *The Milwaukee Sentinel*, August 26, 1970, https://news.google.com/newspapers?nid=1368&dat=19700826&id=6l80AAAAIBAJ&sjid=ShEEAAAAIBAJ&pg=5665,5299445&hl=en.

C. Architecture

(1) Introduction and general characteristics

Milwaukee's industrial architecture follows the trends seen across the United States as manufacturers and builders sought to increase productivity. The design of factory buildings evolved in response to changes in the physical space of the city, as well as technological changes in motive power, construction materials, lighting, and freight transportation. Most buildings prioritize function over aesthetics and display modest architectural detail, although a small number (typically offices rather than production facilities) may embody specific architectural styles. The characteristics of industrial properties vary according to both the period of construction and the type of industry housed, but follow several general trends in location, lighting, and specialization.

Manufacturing involves the transformation of raw materials into finished products; thus, transportation access plays a key role in the location and design of facilities. The location and siting of industrial buildings was primarily dictated by the dominant method of transportation at the time of construction. Early manufacturing interests in Milwaukee were located along waterways, which served multiple functions in the mid-nineteenth century. Power canals were used to drive machinery in adjacent factories, while rivers and canals also carried freight. The earliest industrial buildings were located close

to the water and incorporated one or more oversize doors to accommodate freight, which could be hoisted from a wagon or barge. The expansion of the railroad and advances in the stationary steam engine after the Civil War reduced dependence on water for power and transportation, allowing manufacturers to locate a factory anywhere that was easily supplied with fuel and raw materials. As a result, much of Milwaukee's industrial development in the later nineteenth century was served by steam and electric power and was organized along the rail corridors that radiated out from the city center. Many of these facilities were designed to accommodate rail-based freight, which entered and exited the factory along a rail spur. In the post-World War II (postwar) period, the movement of industry to the outer city and surrounding suburbs coincided with the shift to truck-based freight transportation. Later facilities typically incorporated vehicle loading docks, and most of the earlier buildings that retained their industrial use were modified or expanded to facilitate the use of truck freight.

Prior to the twentieth century, the layout and organization of industrial buildings was confined by the need to maximize available daylight. Early buildings featured load-bearing masonry walls, which limited the size and number of windows. Interior spaces were arranged so that workstations that required the best light were located closest to the windows, while the darker central spaces were used for storage and movement of products. In multi-story buildings that relied solely on windows, this effectively limited the width of the building to a maximum of 60 feet, even with higher ceilings to allow larger windows.[101] Despite the introduction of various types of gas and electric factory lighting, daylight remained the primary source of illumination in industrial buildings until World War II. In the late nineteenth and early twentieth century, construction using reinforced concrete and steel skeletons allowed for much larger expanses of windows (and thus larger building footprints), and designers employed a wide variety of skylights and glazed monitors (raised portions of the roofline with windows along their length) to bring in additional light. Despite these advances, the limited penetration of side lighting in multi-story buildings meant that into the 1910s, it was often impractical to exceed a width of 50 or 60 feet.[102] With the World War II-era shift to total artificial lighting, however, factory design was no longer confined or constrained by the need to maximize daylight. Built largely without windows, later industrial buildings were designed to solely to maximize space and efficiency. Many of Milwaukee's older buildings that remained in use have been altered to reflect this trend as well, and windows were in-filled or covered as artificial lighting and climate control were introduced.

The arc of industrial building development from the early nineteenth century through the mid-twentieth century also reflects overall trends from generalized design to specialized design, followed by a return to generalized design.[103] In the early nineteenth century, the buildings that housed manufacturing interests were often generic spaces that could be used by a variety of different types of industry. The earliest small manufacturers operated out of commercial and residential buildings, and as Milwaukee developed along the riverfront and canals, industrial activities were housed in multi-story loft buildings that shared many

[101] Betsy H. Bradley, *The Works: The Industrial Architecture of the United States* (Oxford University Press, 1999), 27, 32.

[102] H. G. Tyrrell, *A Treatise on the Design and Construction of Mill Buildings and Other Industrial Plants* (Chicago, New York: The Myron C. Clark Publishing Co.; [etc., etc.], 1911), 31, https://catalog.hathitrust.org/Record/001613438.

[103] Bradley, *The Works*, 83.

similarities in construction method and appearance. As some industries, such as brewing and heavy machinery production, expanded in the second half of the nineteenth century, buildings and complexes became more specialized to accommodate specific types of equipment and processes. The increasing size of these operations led to the establishment of numerous sprawling complexes, each of which required multiple specialty buildings. This trend continued until after World War II, when new construction again shifted in favor of large, single-story, windowless structures that could be easily reconfigured.

(2) Industrial buildings, 1840-1940

(a) Building types

Milwaukee's pre-World War II industrial buildings generally exemplify the two main categories of building type: the multi-story industrial loft and the single-story production shed. Offices, drafting rooms, and pattern storage facilities were also important elements of many industrial facilities that could be accommodated by a variety of spaces and do not share specific characteristics. While powerhouses represent a third distinct category, the industrial loft and production shed are the two dominant types that encompass the range of buildings that housed the breadth of Milwaukee's industries. Lofts and production sheds could be used separately or grouped together to form a complex. The appearance of both types varied over time, reflecting advances in materials and construction technology, but the principles remained essentially the same for over a century.

i. Industrial loft

Many of Milwaukee's first industries were located in industrial lofts, a type of building characterized by multiple stories with open floor plans, which were easily suited for a wide variety of functions. This type of building was common in many American port cities of the mid-nineteenth century. The earliest examples of these multi-story buildings included commercial space at street level and several un-partitioned floors above, which could be used for storage or manufacturing by multiple tenants. Later and larger examples were devoted exclusively to manufacturing. Despite the constraints imposed by the need for natural light, the open floor plan made it relatively easy to configure the space as necessary. Into the late nineteenth century, industrial engineers continued to advocate for universal, generic designs that could be used by a variety of industries rather than one specific business.[104]

Industrial lofts used an open plan with vertical circulation and service areas such as stairs, elevators, and freight hoists grouped to minimize their intrusion into the workspace. Power transmission machinery (shafting and belting) could be affixed to the interior framework of the loft, and carried vertically through shafts in the floors. In some cases, these circulation areas and vertical power transmission lines were housed in an attached tower instead. Windows were arranged in a regular pattern, although those on the uppermost story could be taller. Skylights or roof monitors could be used to increase the amount of available light on the top floor, and roofs were otherwise typically flat, supporting water towers and elevator bulkheads. Loading bays and vehicle access doors were located at street level, and could include raised platforms adjacent to rail spurs or streets (see Figure 12).

[104] Bradley, *The Works*, 29, 30, 33.

Figure 12. The Milwaukee Casket Company factory, c.1890, occupied a four-story industrial loft located on St. Paul Avenue (nonextant); loading platforms are depicted at right.[105]

The vertical arrangement of the loft separated various activities in the manufacturing process (see Figure 13). Workflow within the loft varied from one business to another, although the operations requiring the heaviest machinery or equipment were typically located on the lowest floor.[106] Upper floors could be used for lighter work and storage, or for the most detailed work requiring the maximum amount of daylight.

[105] *An Illustrated Description of Milwaukee*, 116.

[106] Bradley, *The Works*, 34.

Figure 13. This c.1900 industrial loft housed a portion of the Romadka Brothers' Co. suitcase factory, later part of Briggs & Stratton's West Side plant (AHI No. 111593, 2748 N. 32nd Street). Staining, varnishing, and blacksmithing departments were located at ground level, with the main factory floor above and warehousing on the uppermost level.[107]

ii. Production shed

While lofts were well suited for manufacturing a wide range of products, single-story buildings were required for production and assembly of heavy items, such as railroad cars and locomotives, bridge and structural steel manufacture, or heavy castings.[108] Similarly, processes that required large ovens or furnaces, such as hardware or sheet metal goods manufacture, were better suited to high-ceilinged, open spaces that could be easily ventilated. The production shed is a generic term used to describe the single-story buildings that housed these functions. The overall dimensions of production sheds varied based on the nature of the processes within, but are generally characterized by their rectangular plan; wide, open bays; and sturdy construction. Heavy manufacturing required much larger tools and machinery, as well as equipment for lifting large components and products. Machinery and lifting equipment occupied the floor space of production sheds, and taller structures could include galleries or mezzanine levels in the side bays, which were used for storage or lighter assembly work.[109]

Materials-handling methods evolved over the course of the late nineteenth and early twentieth century, and these technologies in turn affected the layout and design of factory buildings. Early cranes used a jib mounted on a stationary pole, but by the late nineteenth century the traveling overhead crane was also a standard feature of many manufacturing facilities. These cranes

[107] "Sanborn Fire Insurance Company, Milwaukee, 1910, Volume 4" (New York: Sanborn Map Company, 1910), Sheet 138.

[108] Tyrrell, *A Treatise on the Design and Construction of Mill Buildings and Other Industrial Plants*, 23.

[109] Bradley, *The Works*, 39.

required a structure that could support the weight of the crane and rails high above the shop floor and provided a clear space free of columns that would impede its movement. This type of crane made it more practical to build long, narrow shops with a raised central crane-way, and gave the building type its distinctive form.[110] Service rails also facilitated the movement of materials and finished products within the production shed, and more sophisticated factory layouts could employ a single rail line that traveled through the various buildings in each stage of the manufacturing process (see Figure 14).[111]

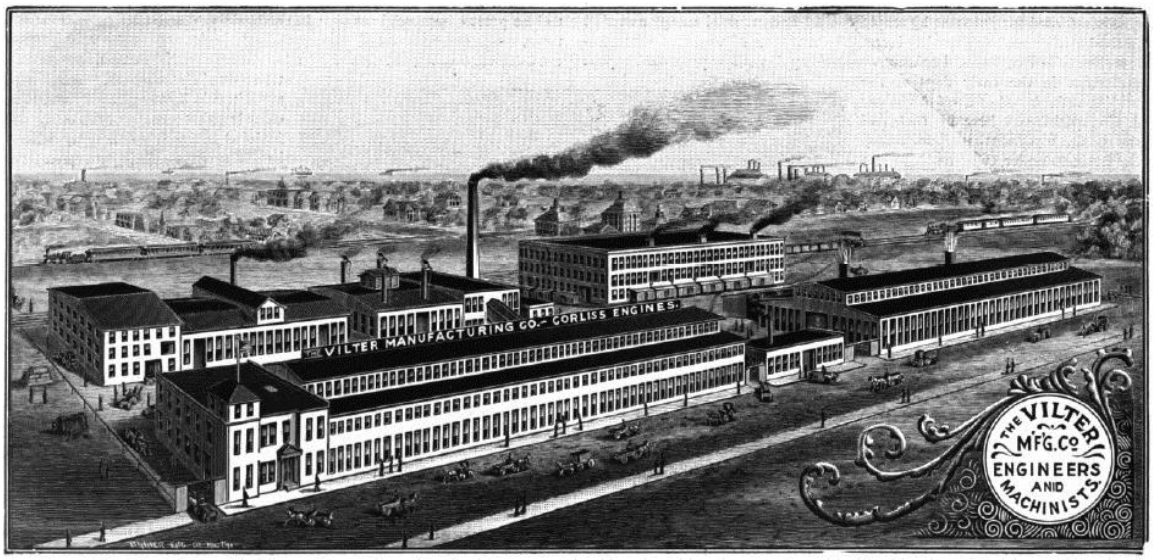


Figure 14. The Vilter Manufacturing Company's plant on S. 1st Street at Becher Street (AHI No. 232599), c.1895. The large production shed on the right housed the foundry (note the furnace flames in both chimneys), while the one in the left foreground contained the machine shop; a service rail connected both buildings.

The production shed housed a variety of different operations, including machine shops, blacksmith or forge shops, erecting shops, and foundries. Forge shops and foundries were typically constructed separately from the other buildings in a complex, and can be distinguished by the chimneys used to vent cupola furnaces and forges, as well as the large roofline monitors required to exhaust heat and smoke. Forge shops were also sometimes built with moveable panels or doors for added ventilation, which further aided updraft into roof monitors.[112] A service rail from the main casting floor of the foundry moved castings to the machine shop, where they could be refined into their final shape before assembly. Erecting shops in some complexes provided a single large, open space in which large products, such as bridge trusses or large engines, could be assembled prior to shipping (see Figure 15).

[110] Bradley, *The Works*, 47.

[111] Tyrrell, *A Treatise on the Design and Construction of Mill Buildings and Other Industrial Plants*, 5–11.

[112] Tyrrell, *A Treatise on the Design and Construction of Mill Buildings and Other Industrial Plants*, 35.

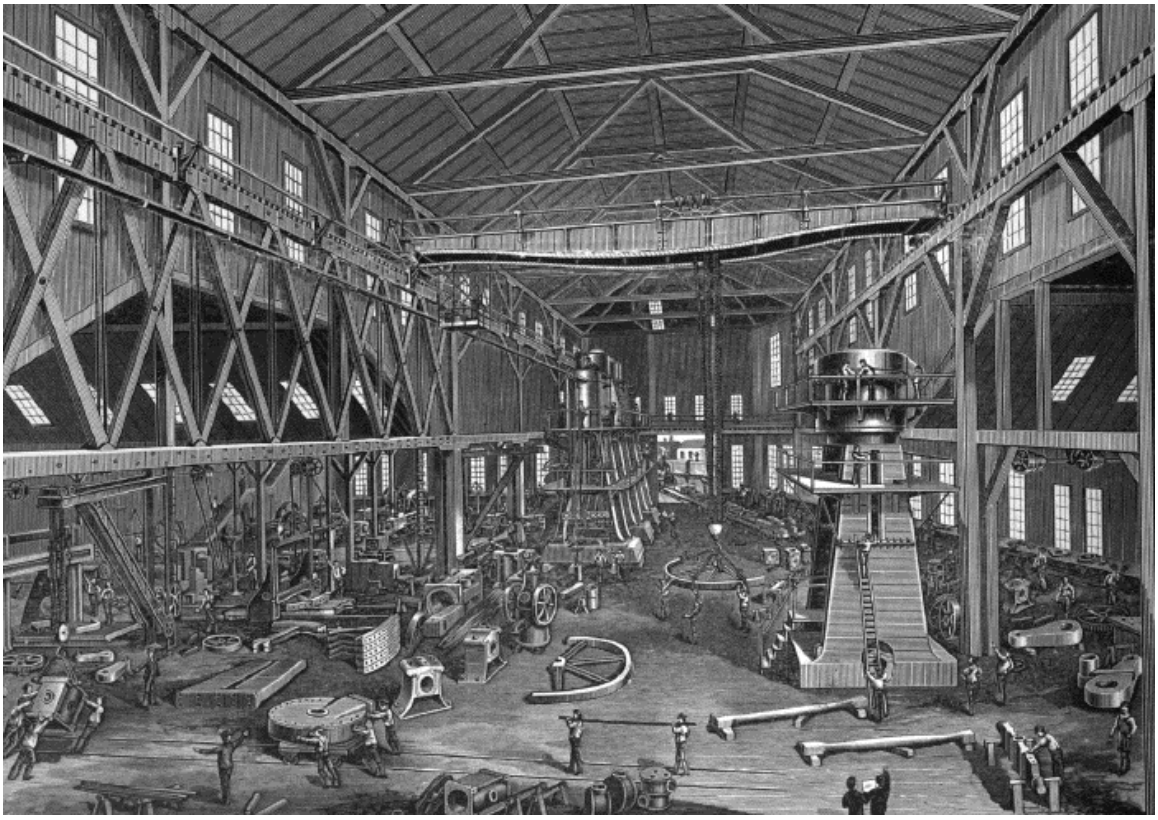


Figure 15. Illustration of massive Corliss engines during assembly in the erecting shop at the Allis & Co. Reliance Works (nonextant). This production shed had a raised monitor roofline, traveling crane, and central assembly bay.

iii. Powerhouse

The power plant, engine house, or powerhouse represents the third important building type found in industrial properties. Powerhouses supplied motive power to mill machinery, and despite the availability of centrally produced electricity in cities, many manufacturers continued to produce their own power well into the twentieth century.[113] Early powerhouses used steam-powered engines to generate motive power that was transferred directly to machinery by belts, gearing, and shafting, while later powerhouses used steam-powered generators to produce electricity, which was in turn supplied to individual motors attached to each machine. The shift in power type did not substantially affect the design of industrial powerhouses, which retained their essential characteristics—physical separation, large windows, and tall chimney stacks—throughout the nineteenth and early twentieth centuries.

To avoid the risk of damage and injury due to a boiler explosion, the powerhouse was typically a free-standing structure and built of a sturdy, noncombustible material such as brick or concrete. Engineers found that careful maintenance and frequent inspection proved to be the most effective way to prevent boiler explosions; thus, boiler and engine rooms also required large windows to

[113] Bradley, *The Works*, 49.

admit as much natural light as possible.[114] Later steam-electric plants often displayed a stepped massing, with the boiler house rising above the adjoining engine room. Chimneys provided the necessary draft for the boilers, and ranged from 75 to 150 feet in height. Prior to 1900, brick stacks could be square or octagonal, and with the subsequent introduction of radial brick (wedge-shaped rather than rectangular units), round brick stacks also became popular. Tubular sheet-metal stacks were an inexpensive early option, and reinforced-concrete chimneys began to appear after the turn of the century as well.[115]

iv. Office/drafting/pattern shop

Industrial loft buildings often contained company offices, drafting rooms, and pattern storage rooms, but larger complexes, particularly those of heavy manufacturing concerns that did not include factory lofts, frequently included separate buildings to serve these purposes. Offices were frequently the only building in a complex to receive substantial architectural embellishment (see Figure 16), and a number of examples in Milwaukee were designed by local architects. The clerical and administrative offices and drafting rooms were generally combined in a single building, and were separated from the manufacturing buildings to reduce noise, dust, and the risk of fire. The drafting room, where the best light was required, was generally on the second floor of multi-story offices, although some drafting departments shared a building with template or pattern shops.[116]

Figure 16. The office building at the A.O. Smith complex (AHI No. 16202, 3533 N. 27th Street) shows greater level of architectural detail and ornament found on office buildings within manufacturing complexes.

[114] Tyrrell, *A Treatise on the Design and Construction of Mill Buildings and Other Industrial Plants*, 368; Bradley, *The Works*, 49.

[115] Bradley, *The Works*, 51–52.

[116] Tyrrell, *A Treatise on the Design and Construction of Mill Buildings and Other Industrial Plants*, 431.

After the turn of the century, offices grew larger to accommodate increased executive and administrative staff and provide more modern drafting rooms. Although fireproof vaults were frequently employed, designers of industrial buildings recommended that the entire building be made fireproof to protect valuable drawings and records.[117] Purpose-built pattern storage buildings were typically fireproof storehouses with iron doors and few, if any, windows, and were not well suited to be combined with drafting offices.[118]

(b) Facility layout

A wide range of industries in Milwaukee occupied industrial lofts, either as a single facility or as part of a complex. Tenants might occupy one or more floors, or a manufacturer might erect a large building or group of buildings to house a single company. Particularly large manufacturing concerns generally required multiple loft buildings, which could be arranged in a linear fashion or grouped in an open square, T, L, E, U, or H formation.[119] Historic illustrations and Sanborn fire insurance maps show the variety of industries that could be accommodated solely by loft buildings, such as printing, textile manufacture, cigar making, furniture and wood products, and some smaller food product manufacturing operations. Some industries required additional specialty buildings; breweries included facilities for bottling, washing, grain drying, and fermenting, while tanneries included bark mills, tanning vats, and drying lofts, as well as docks and storage areas for receiving bark.

The bulk of the various activities of most light manufacturing could be housed in industrial loft space, including machine shops for some manufacturing operations, although production sheds used for this function were larger and heavier. Where necessary, several production sheds could be sited adjacent to lofts in order to isolate processes that required increased ventilation or carried a higher risk of fire. Industries such as hardware manufacture or metal stamping and enameling tended to separate metal casting, heating, and coating operations in this manner, although much of the remaining work could be performed in loft buildings (see Figure 17).

[117] Tyrrell, *A Treatise on the Design and Construction of Mill Buildings and Other Industrial Plants*, 431.

[118] Bradley, *The Works*, 37–38.

[119] Bradley, *The Works*, 66.

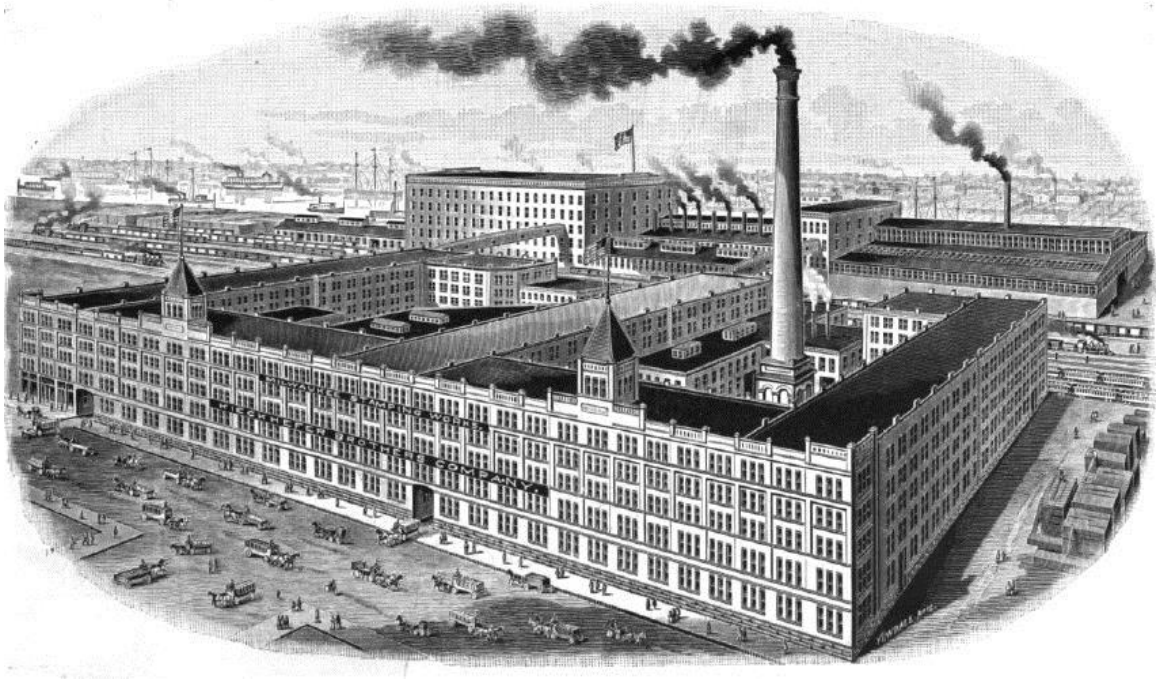


Figure 17. Kieckhefer Brothers metal stamping plant (nonextant) on St. Paul Avenue at 10th Street, showing an E-plan grouping of five-story industrial lofts in foreground with a coal-fired power plant and smokestack in the courtyard; the chimneys of the enameling department and annealing ovens are visible on production sheds in the background, along with a five-story warehouse.[120]

Where the majority of a company's operations involved casting, foundry, or large assembly work, the bulk of the complex would be formed of production sheds (see Figure 18). Heavy machinery production and structural steel fabrication were two of Milwaukee's industries that required this type of facility. The Milwaukee Bridge Company complex (located at 3282 N. 35th Street) consists of two large production sheds arranged in an L-plan. The shorter leg served as a storage area for the steel stock prior to assembly into bridge trusses, while the larger leg contained the erecting shop where the trusses were laid out and assembled. The side bays and mezzanine levels of the erecting shop contained pattern storage, blacksmith and carpentry shops, and the machine shop, and a small free-standing building housed the office and drafting department.[121]

[120] *Milwaukee: A Half Century's Progress, 1846-1896*, 109.

[121] "Sanborn Fire Insurance Company, Milwaukee, 1910-Revised 1951, Volume 8" (New York: Sanborn Map Company, 1951), 851.

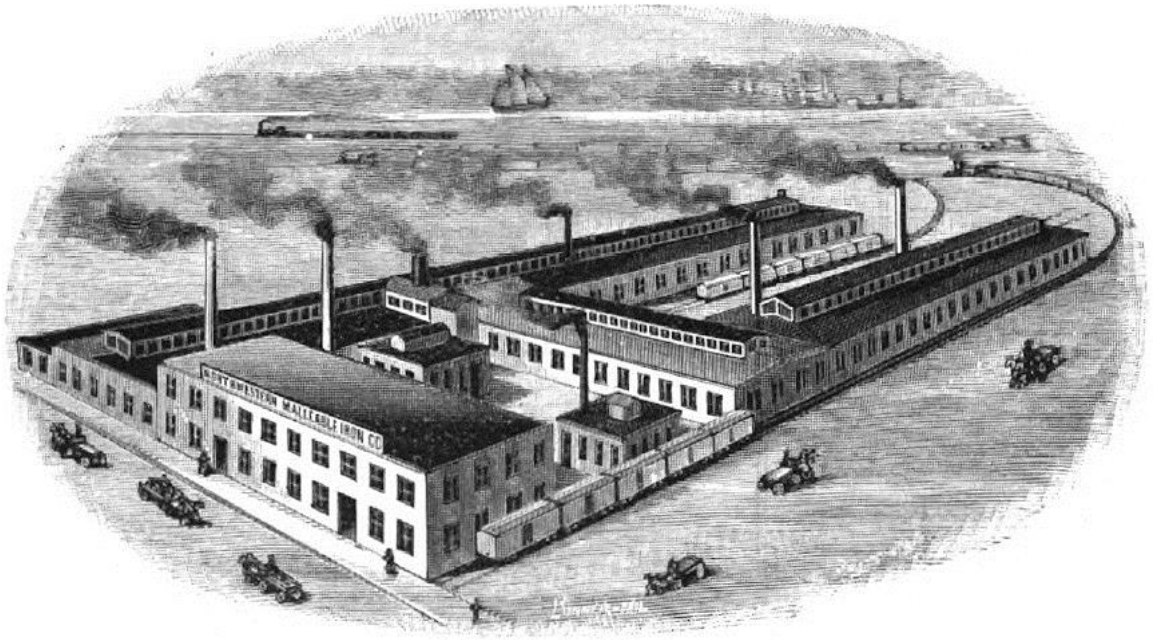


Figure 18. North-Western Malleable Iron Company's plant (nonextant) on W. Bruce Street in the Menomonee Valley c.1890, showing the arrangement of several foundry buildings housed in production sheds with a powerhouse in the central courtyard.[122]

The concept of the "consolidated plan" emerged at the turn of the century, as advances in steel framing and truss technology made it possible to create larger open spans with improved roof lighting. The flexibility and reduced expense afforded by a single building appealed to some engineers, who offered designs for factories in which all the various processes and departments were housed by a single, large, one-story building with roof lighting. Multi-building complexes remained common into the twentieth century, however, although the consolidated plan became more popular after World War I.[123] Several of Milwaukee's industrial complexes built during the interwar period include this type of large, open-plan factory under a single saw-tooth roof. Examples include the northern portion of the Nash automotive factory at S. Clement and Euclid Avenues (AHI No. 232587, 3280 S. Clement Avenue) and the Wisconsin Gun Company at 4107 W. Orchard Street (AHI No. 232268, 4011 W. Greenfield Avenue). The advantages of this type of factory space, including ease of supervision, material transport, rearrangement, and repurposing by subsequent occupants, carried over into the subsequent phase of industrial facility design in the years leading up to World War II and continued to drive plant design into the postwar period (discussed further in *Section 2.C(3), Industrial buildings, 1940-1976*).

(c) Materials

The primary function of an industrial building is to house the workers, materials, and equipment necessary to produce finished goods. Buildings were simply required to support the weight of equipment and provide as much unobstructed space as was feasible, but the risk of fire also influenced the choice of materials and construction methods. The structural limitations of materials such as brick and timber were

[122] *An Illustrated Description of Milwaukee*, 76.

[123] Bradley, *The Works*, 74–75.

gradually overcome through improvements in materials technology, as the use of iron truss framing eventually allowed for much larger, open spans. With the introduction of steel and reinforced concrete at the turn of the twentieth century, buildings could be even larger, better lit, and more resistant to fire. The period from 1840 to 1940 is generally characterized by the evolution from load-bearing masonry structures with timber interior framing and small windows to steel- or reinforced-concrete-framed buildings with brick, tile, or glass spandrel walls and large expanses of windows (see Figure 19).

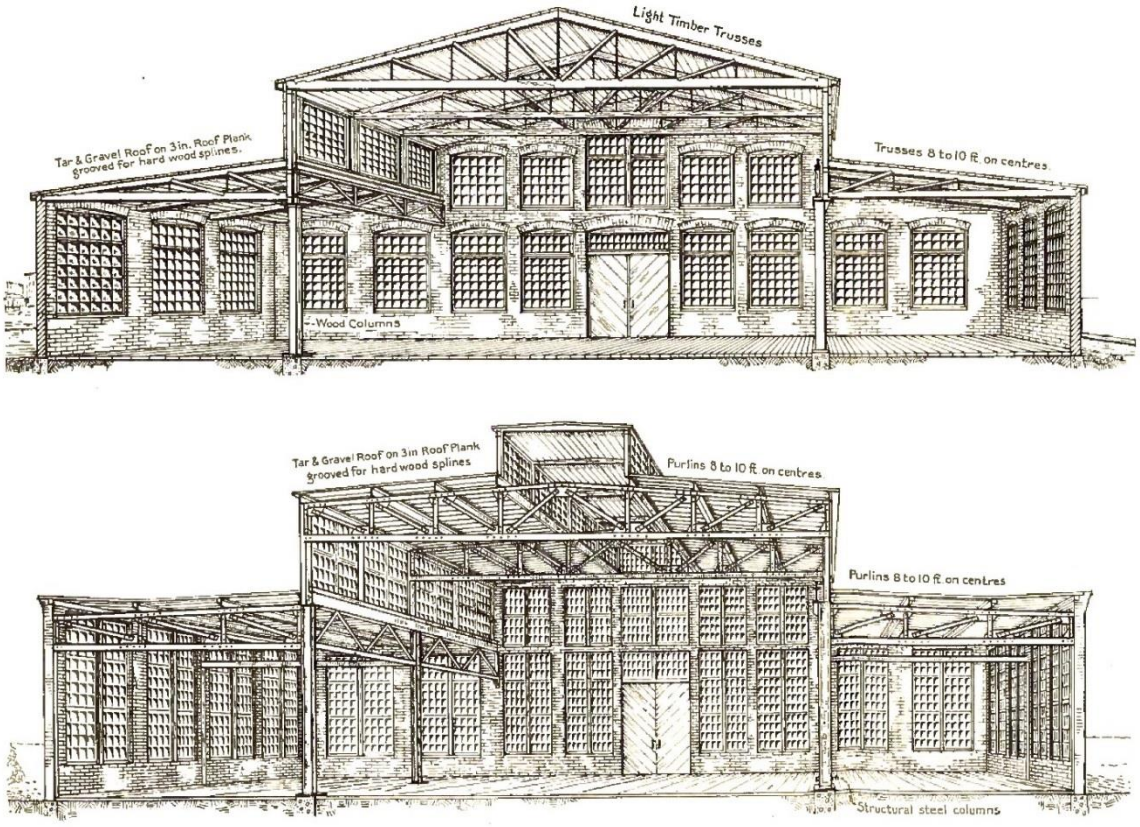


Figure 19. Example of c.1900 production shed construction using masonry walls and timber framing (top) and steel frame construction (bottom).[124]

Production sheds of the nineteenth century often featured solid masonry walls with masonry pilasters for added strength, although steel columns could be inserted in the piers or pilasters for additional bearing capacity.[125] Later examples used curtain wall construction, supporting the roof trusses and overhead framing using masonry, steel, or concrete columns. The non-bearing walls between each column could then be made of lighter masonry or larger expanses of windows. Most of the nineteenth-century examples found in Milwaukee utilize brick masonry, and while the use of brick continued into the twentieth

[124] Insurance Engineering Experiment Station Boston Manufacturers Mutual Fire Insurance Company, *Report No. 5: Slow Burning or Mill Construction*, 3rd ed. (Boston: Boston Manufacturers Mutual Fire Insurance Company, 1908), Sheet 8.

[125] Tyrrell, *A Treatise on the Design and Construction of Mill Buildings and Other Industrial Plants*, 34.

century, the early 1900s saw the introduction of concrete block as well.[126] Concrete block had a number of advantages over brick; the hollow center of each block meant that it did not conduct heat or cold, and the inexpensive blocks could be produced at the building site. Larger than brick masonry units, concrete blocks could be laid more quickly and with less mortar.[127] Many of Milwaukee's twentieth-century industrial buildings have walls of plain or rock-faced concrete block, reserving cream or red brick for the primary facade alone.

In single-story buildings such as production sheds, fire separation could be achieved by the use of non-combustible end-walls or simply by isolating individual buildings, but multi-story buildings required more complex solutions. The general technique referred to as "mill construction" first developed during the Industrial Revolution and persisted into the early decades of the twentieth century. This term refers to the methods of constructing slow-burning or fire resistant buildings using separation of spaces by non-combustible materials and avoiding the creation of hollow pockets that could serve as a flue, drawing fire from one part of the building to another.[128] Nineteenth-century examples featured load-bearing masonry walls, and wood floors and framing utilize heavy timbers and thick planking to retard the spread of fire as much as possible. Reinforced-concrete skeletons with masonry spandrel walls became more common in the early twentieth century, and various patented methods included the use of haunched concrete girders or mushroom-headed columns to support floor slabs (see Figure 20). While the concrete columns and girders are sometimes visible from the exterior, other examples enclosed the concrete framing entirely with masonry cladding.

[126] Henry Grattan Tyrrell, *Engineering of Shops and Factories* (New York: McGraw-Hill Company, 1912), 188, https://catalog.hathitrust.org/Record/100308163.

[127] Tyrrell, *A Treatise on the Design and Construction of Mill Buildings and Other Industrial Plants*, 211.

[128] Boston Manufacturers Mutual Fire Insurance Company, *Report No. 5: Slow Burning or Mill Construction*, 14–15.

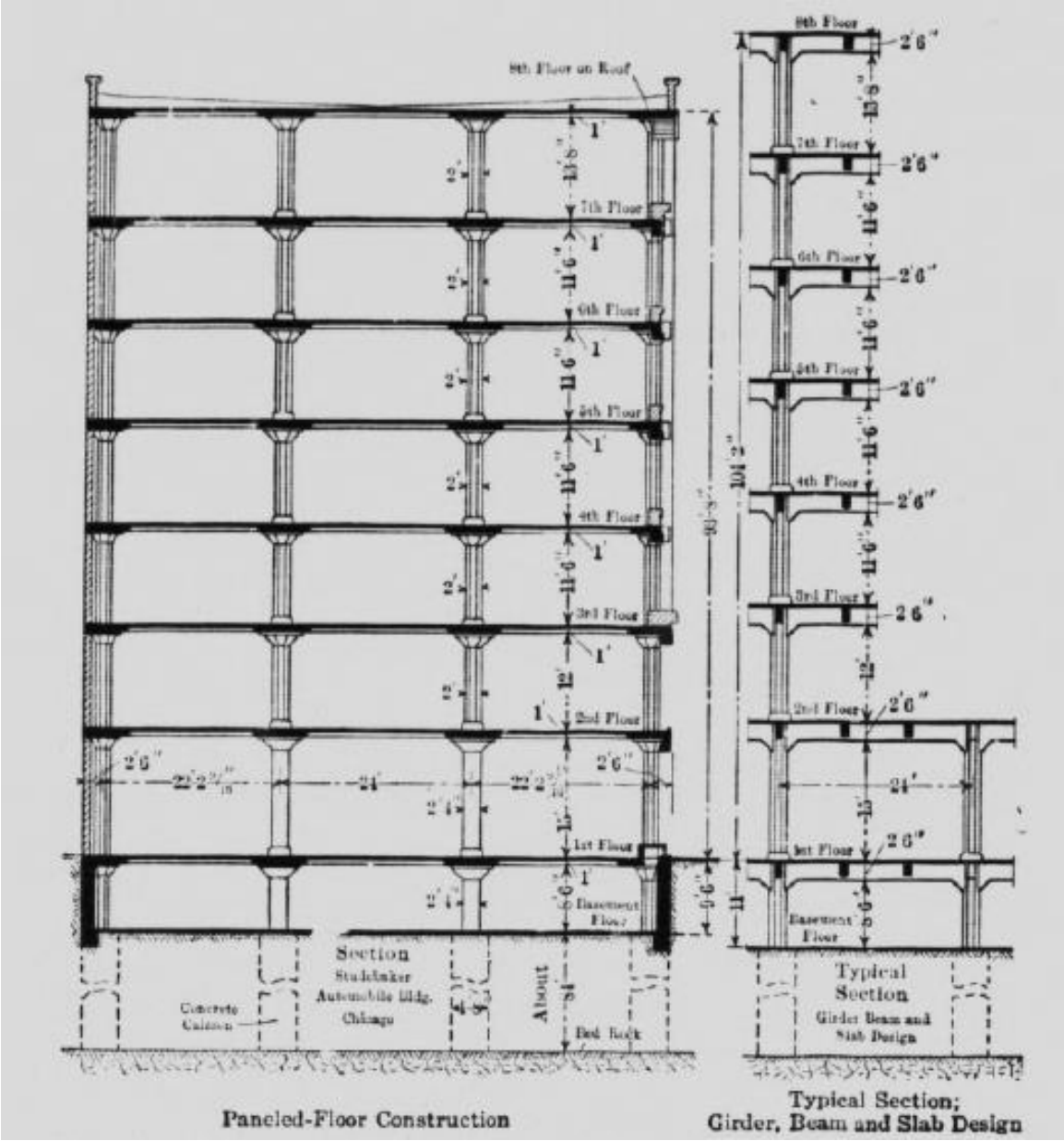


Figure 20. Cross-section of two types of reinforced-concrete construction for multi-story industrial buildings, showing mushroom-head columns (left) and haunched girders (right), 1912.[129]

Nineteenth-century builders were forced to balance light with strength, limiting windows to areas not necessary for structural strength. The shift away from load-bearing masonry wall construction allowed builders to substantially increase the amount of natural light that entered factory buildings. Steel- or concrete-framed buildings could have up to 80 percent of their exterior surface covered with window glass, admitting three to four times as much light as older masonry examples.[130] By the turn of the century, the use of wood windows had declined in favor of steel frames and sash, many of which

[129] Tyrrell, *Engineering of Shops and Factories*, 186.

[130] Tyrrell, *Engineering of Shops and Factories*, 196.

incorporated pivoting sections for added ventilation.[131] Different types of glass helped to diffuse light and avoid eye strain; rough or ribbed glass was sometimes selected for upper sash, and glass block became widely available in the United States in the 1930s as well (see the "Glass block" sidebar). Many industrial buildings used glass with an embedded wire netting; in the event of breakage or fire, the wire held the broken glass in place to keep it from falling or providing a draft to fuel the flames. In the 1910s, experts advocated window sizes based on a percentage of the total wall area, ranging anywhere from 20 to 50 percent depending on the type of work to be performed within. Daylight penetration was limited in the central areas of buildings over 80 feet wide, and it was further recommended that these receive half of their light from the roof, requiring 25 to 50 percent of the roof area to be glazed.[132] "Northern light" roofs, also known as saw-tooth roofs (see Figure 21), were first introduced in American cotton mills in the 1870s, but came into common use for other industries in the 1890s. Due to the added expense, this roof type was recommended primarily for the wide, one-story buildings of consolidated plants where other forms of lighting were impractical. Constructed using a series of right-triangle trusses with glazed sash on the shorter leg only, the glazing was oriented to admit daylight from the north, where it was indirect and would not cause shadows or glare.[133]

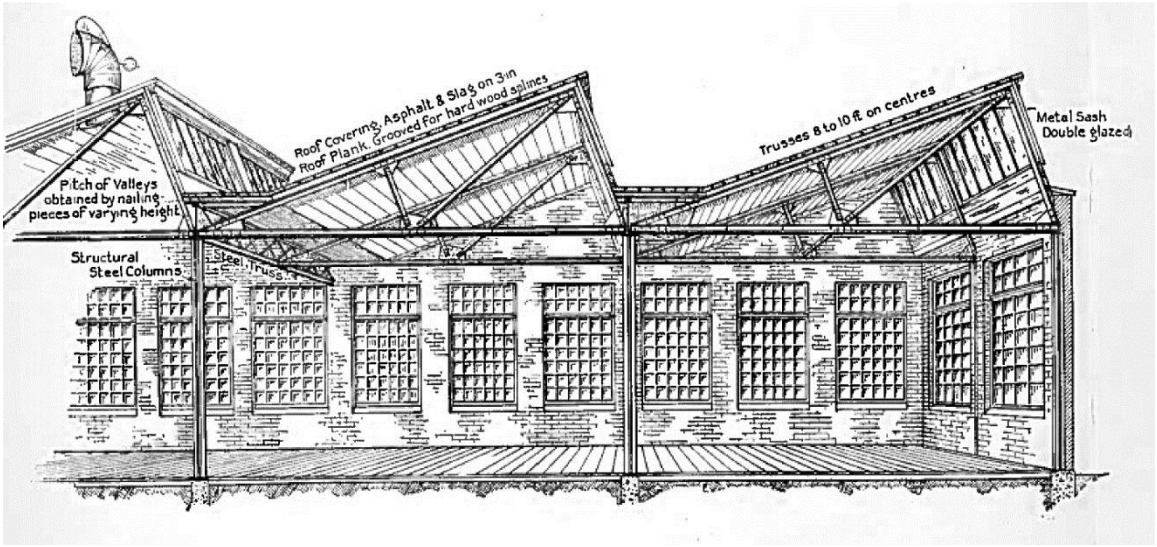


Figure 21. Cross-section of a shop with a "northern light" or sawtooth roof.[134]

While industrial lofts generally had flat roofs with box skylights to provide additional light to the uppermost floor, production sheds exhibited a wide array of roof truss forms and glazing patterns to address issues of lighting and ventilation (see Figure 22). The substantial heat differential between the inside and outside temperatures could cause condensation to accumulate on the underside of the roof and drip onto the floor below, a particular concern for machine shops, power houses, dynamo rooms, or any building where materials or products could be damaged by water. Designers alleviated this problem through

[131] Tyrrell, *Engineering of Shops and Factories*, 196–97.

[132] Tyrrell, *A Treatise on the Design and Construction of Mill Buildings and Other Industrial Plants*, 81–82.

[133] Tyrrell, *A Treatise on the Design and Construction of Mill Buildings and Other Industrial Plants*, 179.

[134] Boston Manufacturers Mutual Fire Insurance Company, *Report No. 5: Slow Burning or Mill Construction*, Sheet 7.

improved roof ventilation. A variety of metal ventilators could be installed along the ridgeline of the shop roof, and narrow monitors with louvers or movable windows could also be used for this purpose.[135]

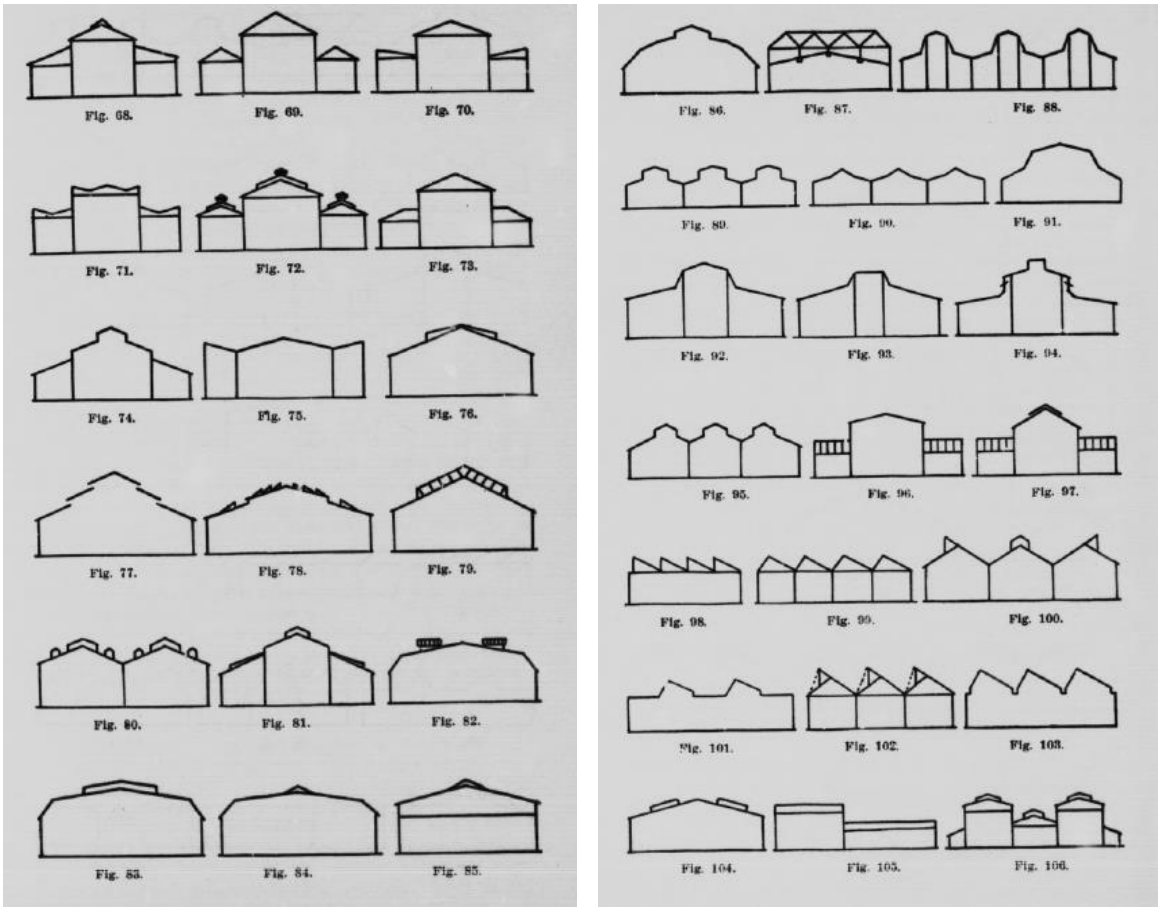


Figure 22. 1911 diagrams showing the wide range of roof forms employed to increase light and ventilation in production sheds.[136]

The improvement of technologies suited for one-story facilities, such as production sheds and consolidated-plan factories, continued in the years leading up to World War I and was further refined during the interwar period. As defense production ramped up again during World War II, companies sought maximum efficiency in materials handling and facility design. With the introduction of complete climate control and artificial light in the years after World War II, Milwaukee's industrial buildings followed national trends toward the fully enclosed, horizontally oriented industrial architecture that typifies the modern manufacturing facility.

[135] Tyrrell, *A Treatise on the Design and Construction of Mill Buildings and Other Industrial Plants*, 69–70, 83.

[136] Tyrrell, *A Treatise on the Design and Construction of Mill Buildings and Other Industrial Plants*, 74–75.

Glass block

The glass block windows seen in many of Milwaukee's industrial buildings were introduced in the interwar period and quickly became popular in new construction and retrofitting older buildings. Although the concept originated earlier in Europe, the Pittsburgh Corning Corporation and Owens-Illinois Glass Company began producing glass blocks in the United States in the late 1930s. By the early 1940s, Pittsburgh Corning and Owens-Illinois offered over a dozen varieties of ribbed, prismatic, and wave-patterned block. Made of two halves fused together with a hollow space inside, the blocks provided greater heat insulation than single glazed windows and their sound insulating properties reduced noise. In addition, the blocks were easy to clean and were translucent without transparency, thus offering added privacy and helping to diffuse light in interior spaces. These properties made it particularly useful in industrial buildings, which often had vast expanses of window sash that required cleaning and were subject to condensation and heat gain or loss. More durable than regular window glass, glass blocks were easy to install in any existing opening; laid up in mortar much like brick, they also eliminated the need for sash that could corrode due to humidity or chemical vapor. From the 1940s onward, many industrial buildings had their older sash replaced with glass block, and as industrial facility design moved toward complete climate control in the postwar period, architects often employed glass block in new construction as well.

Owens-Illinois Glass Company promotional image showing the benefits of replacing metal industrial sash with glass block. Source: Owens-Illinois Glass Company, Insulux: Subject Heating...Answer, Insulux Glass Block (Owens-Illinois Glass Company, 1941), http://archive.org/details/InsuluxSubjectHeating...AnswerInsuluxGlassBlock, 1.

Sources: Pittsburgh Corning Corporation, *PC Glass Block and Carrara Structural Glass Open up New Vistas of Beauty and Utility in Your Home* (N.p.: Pittsburgh Corning Corp, 1940), http://archive.org/details/PittsburghCorningCorpCarraraGlassCCA90B2591, 1; Owens-Illinois Co, *Owens-Illinois Insulux Glass Blocks* (N.p.: Owens-Illinois Co., 1936), http://archive.org/details/Sweets1936Cat08, 7; Pittsburgh Corning Corporation, *The Glass Age Arrives: Pittsburg Corning Glass Blocks* (N.p.: Pittsburgh Corning Corp., 1938), http://archive.org/details/TheGlassAgeArrivesPittsburgCorningGlassBlocks, 11; Pittsburgh Corning Corporation, "PC Glass Blocks Help Industry Cut Costs and Improve Plant Efficiency," *Glass in Architecture*, 1958, http://archive.org/details/GlassInArchitecture, 3; Owens-Illinois Glass Company, *Insulux: Subject Heating...Answer, Insulux Glass Block* (N.p.: Owens-Illinois Glass Company, 1941), http://archive.org/details/InsuluxSubjectHeating...AnswerInsuluxGlassBlock, 1.

(3) Industrial buildings, 1940-1976

Modern American factory design has its origins in the consolidated plants that took shape in the years between the World Wars. The booming defense industry of World War II and the postwar period (with its accompanying need for security) led to the increasing popularity of the windowless, climate-controlled box. This type of building freed designers from the constraints of having to maximize natural light, which had previously limited the span and length of the production buildings, and gave rise to the current incarnation of the "modern" factory.[137] Milwaukee's postwar industrial architecture mirrors national trends, with an emphasis on horizontal layout, suburban expansion, and the reduction or elimination of natural lighting.

Prior to World War II, few, if any, factories relied entirely on artificial light, and into the early 1950s, 60 percent of new factory construction still incorporated some type of roof lighting (e.g., sawtooth, monitor, etc.).[138] With many manufacturers continuing the wartime practice of running multiple shifts rather than a single daytime shift, plant designers were advised to meet the minimum lighting requirements without relying on natural lighting.[139] By 1960, only 15 percent of American industrial buildings utilized natural light to illuminate production areas.[140]

Postwar industrial construction also saw the increased emphasis on horizontal transport (rather than the vertical transport seen in nineteenth-century loft buildings), and one-story construction became virtually universal. The availability of large tracts of land on city outskirts and in the surrounding suburbs helped to fuel this trend as manufacturers sought sites where the larger lot size made it possible to plan assembly lines as needed, without the constraints of limited horizontal space.[141]

In Milwaukee, many postwar industrial facilities were constructed in suburbs and in newly annexed areas of the city, 5 or more miles from the historic downtown core.[142] A suburban location combined the best aspects of both urban and rural plant sites, providing the existing infrastructure and large workforce of the urban area with the lower taxes and larger available land tracts of a formerly rural area.[143] New urban construction continued as well, and manufacturers who elected to remain in the Menomonee Valley and other older industrial sectors razed some earlier buildings to erect more modern facilities in their footprints. Restricted to the available lot size, these were often multi-story buildings with large windows arranged in bands, and may feature shipping and receiving entrances at street level (see Figure 23).

---

[137] James F. Munce, *Industrial Architecture: An Analysis of International Building Practice* (New York: F.W. Dodge Corporation, 1960), 41, http://hdl.handle.net/2027/wu.89018321356.

[138] Munce, *Industrial Architecture: An Analysis of International Building Practice*, 50.

[139] Ruddell Reed, *Plant Layout: Factors, Principles, and Techniques*, Irwin Series in Management (Homewood, Ill.: R. D. Irwin, 1961), 238, //catalog.hathitrust.org/Record/001044836.

[140] Munce, *Industrial Architecture: An Analysis of International Building Practice*, 50.

[141] Munce, *Industrial Architecture: An Analysis of International Building Practice*, 41, 45.

[142] The City of Milwaukee annexed surrounding communities, including North Milwaukee, between 1920 and 1940, more than doubling the total land area.

[143] Reed, *Plant Layout*, 349.

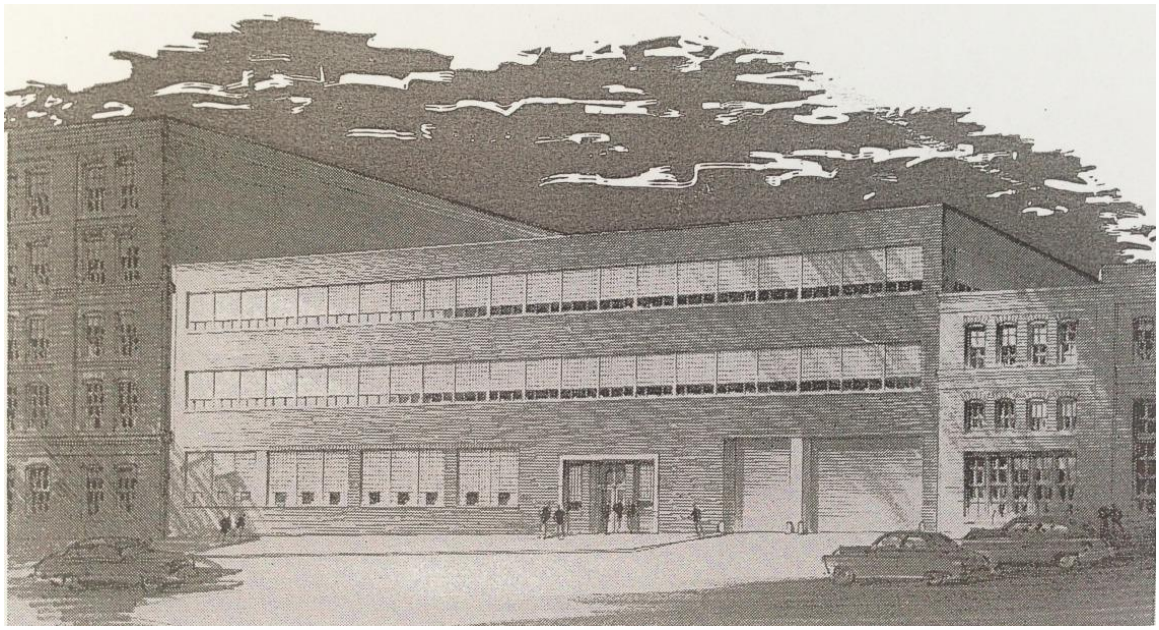


Figure 23. 1951 addition to the Cutler-Hammer motor switch plant, constructed at 1101 W. St. Paul Avenue (AHI No. 232286), located between two turn-of-the-century factory buildings.[144]

Industrial architects and manufacturers alike showed a preference for highly similar, generic facilities that could be easily repurposed and sold, or adapted as new methods of production were adopted.[145] Generally rectangular in plan, these low, wide facilities are characterized by large, open, uninterrupted floor spaces with 18- to 20-foot-high roof trusses, and could be laid out based on the flow of production.[146] Restrooms and locker rooms were often located on a mezzanine level, and many facilities also featured a more elaborate and impressive main entrance, in contrast to the more generic appearance of the manufacturing portion.[147]

The plant typically contained not only the production facility, but also shipping/receiving areas and office space under a single roof. Larger facilities might include conference rooms, medical clinics, cafeterias, and vending machine areas. General offices became more common by the 1960s, housing a department or even an entire staff in a single open area rather than many separate office spaces, and this period saw the introduction of cubicle partitions.[148] Power plants are not commonly seen, as most manufacturers increasingly purchased electricity directly from the utility grid. Large parking areas surround many postwar plants, particularly those constructed in newly developed areas away from downtown. By this time, complete off-street parking was considered essential, and as car ownership soared in the postwar

[144] Cutler-Hammer, Inc., "Annual Report, 1950," 1951, 12.

[145] Reed, *Plant Layout*, 6.

[146] Reed, *Plant Layout*, 188–89; Munce, *Industrial Architecture: An Analysis of International Building Practice*, 47.

[147] Munce, *Industrial Architecture: An Analysis of International Building Practice*, 41.

[148] Reed, *Plant Layout*, 288–89, 296–97.

years, manufacturers had to find sufficient space to accommodate employees' cars in the parking area, which proved difficult in an urban setting (see Figure 24).[149]

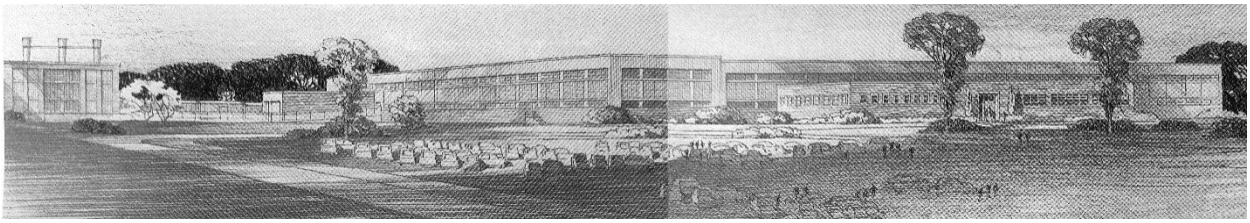


Figure 24. Cutler-Hammer's 256,000-square-foot controller assembly plant, constructed in 1952 at 4255 N. 30th Street (AHI No. 228477); the office entrance is at right, with large adjacent parking lot.[150]

Construction methods in the postwar period continued the use of steel framing with masonry cladding. Glass block windows became increasingly popular, and were often used in lieu of clear window glass. In the 1960s, the typical industrial plant had a steel frame with brick or hollow clay tile walls up to 5 feet in height, with the remaining wall height clad in light sheeting, often of ribbed aluminum affixed to a light frame with insulation behind. Concrete block continued to be used as well, although tilt-up construction using precast concrete panels also became available during this period. Steel frame roof trusses were the most common, and were generally flat unless dictated otherwise by the need to accommodate an overhead crane or large ventilation unit. Roofing materials included welded steel decking or a 1-inch concrete slab, either of which was then covered with tar and gravel atop asphalt.[151]

Despite the shifts in technology and patterns of development and expansion, Milwaukee retains industrial buildings spanning nearly a century and a half. As manufacturers left the city or moved to larger facilities, industries and commercial businesses have continued to occupy many older buildings. The flexibility that characterized early loft buildings has lent itself to repurposing for a variety of uses. While production sheds are generally used by industry or for storage, a number of manufacturers still occupy turn-of-the-century facilities, continuing the industrial heritage of what was once Wisconsin's manufacturing powerhouse.

[149] Munce, *Industrial Architecture: An Analysis of International Building Practice*, 46.

[150] Cutler-Hammer, Inc., "Annual Report, 1950," 12–13.

[151] Munce, *Industrial Architecture: An Analysis of International Building Practice*, 47–48.

THIS PAGE INTENTIONALLY LEFT BLANK

3. Recommendations

This study identified 39 historic buildings and two historic districts as potentially eligible for listing in the National Register and therefore eligible for Historic Tax Credits. In addition, a boundary expansion was recommended for one existing National-Register listed district. Statements of Significance for these individual properties and districts are included below. A complete listing of these resources, including resources in historic districts, is included in Appendix B.

Four properties that were previously determined eligible and met the survey methodology were reviewed in the field and retain sufficient integrity to convey their significance. They are also recommended eligible and are included in the listing in Appendix B.

This study also identified a number of properties that displayed a high degree of historic appearance, but research did not yield evidence of significant associations under *Criteria A* or *B*, nor do these properties represent significant examples of a property type under *Criterion C*. However, further research may yield significance at a future date. These properties are detailed in Table 2 on page 105.

A. Individual Properties

A.D. Meiselbach Manufacturing Company
5088-5110 and 5070 N. 35th Street
AHI Nos. 112689, 232634

The A.D. Meiselbach Manufacturing Company, located in North Milwaukee, consists of two industrial loft buildings. The complex is significant under *Criterion A: History* for its important association with bicycle manufacturing in Milwaukee. German-American industrialist August D. Meiselbach entered the bicycle business in 1890, and was associated with firms in Chicago and Columbus before relocating to Milwaukee.[152] Meiselbach founded a bicycle company under his own name in 1895, and his first factory was located in the Menomonee Valley on St. Paul Avenue. The company was highly successful during the peak years of the bicycling craze, and outgrew the plant within a year. Unable to keep up with demand in such a limited space, Meiselbach acquired property in North Milwaukee and constructed a new facility. Completed in 1896, the new factory complex occupied a 5-acre lot and included two large brick loft buildings with a combined total area of 150,000 square feet as well as an outdoor testing track.[153] The company was Wisconsin's largest bicycle manufacturer in the late

[152] Jerome Anthony Watrous, *Memoirs of Milwaukee County: From the Earliest Historical Times Down to the Present, Including a Genealogical and Biographical Record of Representative Families in Milwaukee County* (Western Historical Association, 1909), 1004.

[153] *Milwaukee: A Half Century's Progress, 1846-1896*, 96.

1890s.[154] After increasing the workforce from 180 to 400 employees at the new site, the company reported a greater annual production capacity than any other bicycle factory in the northwest.[155] Meiselbach sold his interest in the business in 1898 and the company was acquired by the American Bicycle Company the following year.[156] Formed in 1899, the American Bicycle Company absorbed nearly 60 percent of all bicycle manufacturers in the U.S. and Canada, although with the advent of the automobile, the bicycle craze soon waned and the market collapsed.[157] The subject property is significant as the flagship factory of the A.D. Meiselbach Company throughout the period of peak production. Although two smaller wings have been removed from the south building, the property retains sufficient overall integrity to the period of significance and is therefore potentially eligible under *Criterion A: History*.

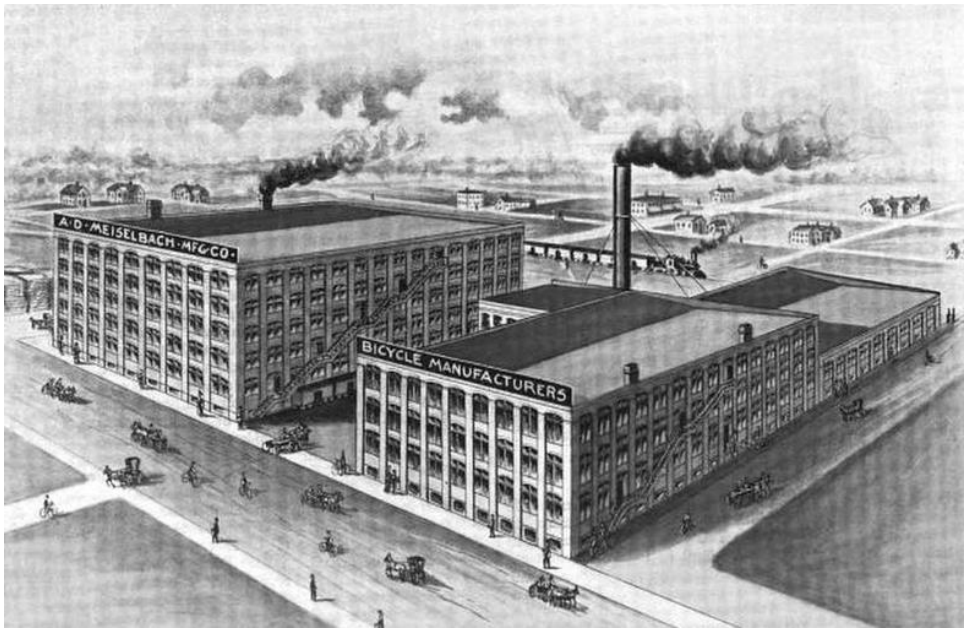


Figure 25. A.D. Meiselbach's North Milwaukee factory in 1896.[158]

[154] Jesse J. Gant and Nicholas J. Hoffman, *Wheel Fever: How Wisconsin Became a Great Bicycling State* (Wisconsin Historical Society, 2013), 139.

[155] *Milwaukee: A Half Century's Progress, 1846-1896*, 96.

[156] "Miscellaneous," *Iron Age*, May 5, 1904, 42; Watrous, *Memoirs of Milwaukee County*, 1004.

[157] Horace Greeley Wadlin, *Labor and Industrial Chronology of the Commonwealth of Massachusetts* (Boston: Wright & Potter Printing Co., 1901), 63.

[158] *Milwaukee: A Half Century's Progress, 1846-1896*, 96.

A.O. Smith Corporation
3533 N. 27th Street, 3420-3600 N. 35th Street
AHI Nos. 16200, 16202, 16206, 232295, 232296

The A.O. Smith Corporation, located along the N. 31st Street industrial corridor, is a complex that includes the office (AHI No. 16202), research and engineering building (AHI No. 16200), the South Shop assembling and erecting building (AHI No. 16206), and several additional factory buildings on the west side of the CM&SP rail corridor (AHI Nos. 232295 and 232296). Founded in 1904, A.O. Smith entered the market at the dawn of the automotive industry and quickly became a leader in high-volume, pressed-steel automobile frame production.[159] From 1910 to 1997, A.O. Smith was the world's largest manufacturer of automobile frames, supplying General Motors and other auto manufacturers, and developed steel-to-glass fusing techniques that the company incorporated into its line of water heaters, brewery tanks, and the iconic Harvestore silo.[160] By 1919 the company had outgrown its south side plant and moved to the site of the subject property, where its facilities expanded over the next several decades to encompass more than 140 acres. In 1921, A.O. Smith constructed a groundbreaking automated plant capable of producing one complete frame every eight seconds, for a total capacity of 10,000 frames per day, requiring only 180

[159] "Remembering an Era: 1921-1958" (American Society of Mechanical Engineers, 1979), 11, https://www.asme.org/getmedia/5d725794-06d2-4873-82e2-c4bbe25ced72/37-AOSmith-Automatic-Frame-Plant.aspx.

[160] Oliver E. Williamson and Sidney G. Winter, *The Nature of the Firm: Origins, Evolution, and Development* (Oxford University Press, 1993), 71–72; John Gurda, "Motown West," *Milwaukee Journal Sentinel*, July 4, 2009, http://www.jsonline.com/news/opinion/49747522.html.

employees to supervise production.[161] Changes in technology and automobile construction eventually rendered the "Mechanical Marvel" obsolete, and it was decommissioned in 1958 and subsequently demolished.[162] The research and engineering building, designed by Chicago architect John Wellborn Root, was completed in 1931. This excellent early example of the International style in Wisconsin includes a number of innovative features, including multi-story curtain wall construction, hollow framing to enclose mechanical systems, welded steel plate floors, flexible interior partitions, and a U-shaped form enclosing an exhibition hall.[163] The remaining extant buildings were constructed between 1920 and c.1935. The subject property is associated with the company throughout the majority of its existence, serving as the company headquarters and auto frame manufacturing facility from 1920 until 1997, when it was sold and subsequently closed. Since that time, many of the additional factory buildings have been razed, but the remaining buildings retain sufficient integrity to the period of significance and the complex is therefore potentially eligible under *Criterion A: History*. A Part I evaluation in 1987 found that the research building is individually eligible under *Criterion C* as an example of the International style and as the work of a master, although a formal nomination was not pursued.

[161] "Remembering an Era: 1921-1958," 8–9.

[162] "Remembering an Era: 1921-1958," 9.

[163] David J. Framberger, *Landmark Inventory - Nomination Form: A.O. Smith Research and Engineering Building* (Milwaukee, Wis: Milwaukee Landmarks Commission, 1977), 2.

Allen-Bradley Company
1201 S. 2nd Street
AHI Nos. 41968, 99286, 99287,

The Allen-Bradley Company, located in Walker's Point, consists of a grouping of large interconnected industrial loft buildings and occupies four city blocks bounded by Greenfield Avenue, S. 3rd Street, Scott Street, and S. 1st Street. The facility is significant under *Criterion A: History* for its important association with electrical control manufacturing in Milwaukee. Entrepreneur Lynde Bradley first began to develop electric controllers and motor starters in the early 1900s, and the fledgling Allen-Bradley Company moved into rented space in the Pfeiffer & Smith Company's machine shop in 1909.[164] The company grew, acquired Pfeiffer & Smith in 1917, and continued to occupy the loft building at 495-497 Clinton Avenue (S. 1st Street, the site of the subject property), constructing a three-story addition at the rear in 1918.[165] In 1927, Allen-Bradley added four floors to the earlier rear addition and expanded the original loft to the south, with a seven-story addition at the northwest corner of Clinton Avenue and Greenfield Avenue.[166] The company enjoyed great success with rheostat controls, including the Bradleystat, developed in 1920, which saw unprecedented sales as radios became widespread.[167] Allen-Bradley introduced several revolutionary motor control products in the early 1930s, including the solenoid starter and double break control relay, which made machine automation possible and placed the company at the

[164] Harry L. Bradley, "Allen-Bradley: An American Story," 1957, 38, Rockwell Automation, http://www.rockwellautomation.com/resources/downloads/rockwellautomation/pdf/about-us/history/Harry_L_Bradley_manuscript.pdf; "Sanborn Fire Insurance Company, Milwaukee, 1910, Volume 4," Sheet 424.

[165] *Milwaukee City Directory, 1910* (Wright Directory Co., 1910), 109; "Addition for Allen-Bradley," *Chilton's Automotive Industries* 38, no. 20 (May 16, 1918): 980; Bradley, "Allen-Bradley: An American Story," 53.

[166] "Changing With the Times" (Allen-Bradley Company, 1987), 34, http://www.rockwellautomation.com/resources/downloads/rockwellautomation/pdf/about-us/history/1987ChangingwithTimes_Ch01-04.pdf.

[167] "Changing With the Times," 27–29.

forefront of this technology.[168] Allen-Bradley's controls were in high demand during World War II, and the company expanded the factory to the north in 1944 and again in 1949.[169] In the 1950s, the company pioneered thin-film resistor technology, an important component of the Minuteman missile guidance system and other computer and instrument applications, and by the early 1960s, Allen-Bradley had become a leader in the use of ceramic magnets for DC motors as well. [170] The eight-story factory and office had been expanded north to W. Madison Avenue, and in 1962, the company completed a massive office and research building on the west side of S. 2nd Street connected to the factory by a six-story bridge. The 1962 addition included a four-faced clock tower, known locally as the "Polish Moon," which was the largest such tower in the world until 2010, when it was eclipsed by a larger one in Saudi Arabia.[171] The subject property is associated with the company during the period when these innovations occurred, serving as both the headquarters and manufacturing facility from 1909 to the present, although the company is now a division of Rockwell Automation. The property retains sufficient integrity to the period of significance and is therefore potentially eligible under *Criterion A: History*.

[168] "Changing With the Times," 41.

[169] "Sanborn Fire Insurance Company, Milwaukee, 1910-Revised 1951, Volume 4" (New York: Sanborn Map Company, 1951), Sheet 424.

[170] "Changing With the Times," 64–65.

[171] Thomas H. Fehring, *Mechanical Engineering: A Century of Progress* (NorCENergy Consultants, LLC, 1980), 47; Meg Jones, "Keeping Allen-Bradley Clock Running Is On His Watch," *Milwaukee Journal Sentinel*, January 28, 2016, http://www.jsonline.com/greensheet/keeping-allen-bradley-clock-running-is-on-his-watch-b99653997z1-366862831.html.

Ben-Hur Manufacturing Company
600 E. Keefe Avenue
AHI No. 232391

The Ben-Hur Manufacturing Company complex, located in the Williamsburg Heights neighborhood, is a large industrial complex of approximately 10 interconnected factory buildings that include a warehouse, materials shed, machine shop, factory, and two Contemporary offices. The complex is significant under *Criterion A: History* for its association with World War II manufacturing in Milwaukee and its role in the advancement of postwar refrigeration. Originally known as the Lavine (or Lavigne) Gear Company, it began in Racine in 1911 and manufactured automobile steering gears. Herman Uihlein, son of the Schlitz Brewing Company president, served as the first president of the company.[172] By the late 1930s, the company designed and manufactured the Ben-Hur Trailer, which was widely used by the U.S. Army through World War II.[173] The success of the trailer appears to have prompted the company to change its name to Ben-Hur Manufacturing by 1941. After the war, Ben-Hur Manufacturing moved to developing at-home refrigeration units, including models designed by the well-known industrial designer Brooks Stevens.[174] Ben-Hur Manufacturing eventually became the third-leading producer of residential freezers by the mid-1950s. In 1961, it was reorganized by Herman Uihlein's son, Henry, and became known as the U-Line Corporation. The subject property is associated with the company during its period of development and manufacturing of the Ben-Hur Trailer to its reorganization in 1961.[175] Although some of the original windows have been replaced, the complex retains sufficient integrity to the period of significance and is therefore potentially eligible under *Criterion A: History.*

[172] Fanny S. Stone, ed., *Racine, Belle City of the Lakes, and Racine County, Wisconsin: A Record of Settlement, Organizations, Progress and Achievement*, vol. 1 (Chicago: The S.J. Clarke Publishing Company, 1916), 334, https://archive.org/stream/racinebellecity02ston#page/333/mode/2up.

[173] "Army Trailer Order for Lavine Gear Co.," *The Milwaukee Journal*, November 10, 1939; "'E' Flag Unfurled at Ben-Hur Plant," *The Milwaukee Journal*, May 1, 1943.

[174] Carroll Gantz, *Refrigeration: A History* (Jefferson, NC: McFarland & Company, 2015), 177, https://books.google.com/books?id=0UgjCgAAQBAJ&source=gbs_navlinks_s.

[175] "Henry Holt Uihelin Sr.," *JSOline Legacy*, n.d., http://www.legacy.com/obituaries/jsonline/obituary.aspx?pid=153421274.

Briggs & Stratton, West Plant
2748 N. 32nd Street
AHI No. 111593, 232635, 232636, 232637, 232638, 232639

The Briggs & Stratton Company's West Plant, located along the N. 31st Street industrial corridor, consists of a large group of industrial buildings constructed from the late nineteenth through the mid-twentieth century. The property is significant under *Criterion A: History* for its important association with gasoline engine manufacture in Milwaukee. Founded in 1909, Briggs & Stratton initially produced automobile ignitions, and through the 1920s and early 1930s, auto-industry electrical specialties made up much of the company's business. The company soon outgrew a rented space in the Third Ward and constructed a new facility known as the East Plant (nonextant; 2711 N. 13th Street). After a brief success with a gasoline-powered "third wheel" designed to be mounted on bicycles, scooters, and other unpowered devices, the company began to explore other uses for the small, four-cycle gasoline engine, including washing machines and lawn mowers.[176] In order to expand production facilities, in 1936 the company purchased the former Westinghouse lamp factory (originally the Romadka Brothers Trunk and Bag Company factory) at 2748 N. 32nd Street. Soon known as the West Plant, this facility became the primary production facility for the company's cast iron engine manufacture.[177] By the late 1940s Briggs & Stratton was one of the nation's largest manufacturers of small gasoline engines of this type, and the company continued to acquire adjacent factory buildings on both sides of N. 32nd Street between Center and Locust Streets. Briggs & Stratton built or acquired additional facilities in Wauwatosa (1955), Glendale (1973), and Menomonee Falls (1981), and the corporate headquarters is now in Wauwatosa.[178] The East Plant was demolished in 1976, and the West Plant is the sole remaining facility associated with the company during its rise to dominance in the first half of the twentieth century.[179] The property retains sufficient integrity to the period of significance and is therefore potentially eligible under *Criterion A: History*.

[176] Briggs & Stratton Corporation, "The History of Briggs & Stratton" (Briggs & Stratton Corporation, 1985), 1–5, Briggs & Stratton Company Collection, Milwaukee County Historical Society.

[177] Jeffrey L. Rodengen, *The Legend of Briggs & Stratton* (Write Stuff Syndicate, 1995), 79–80.

[178] Briggs & Stratton Corporation, "The History of Briggs & Stratton," 6, 20.

[179] Briggs & Stratton Corporation, "The History of Briggs & Stratton," 20.

C.B. Cottrell & Sons, Claybourn Division
3713 Humboldt Boulevard
AHI No. 232372

Located in the Williamsburg Heights neighborhood, the subject property consists of a central office, factory buildings, and a warehouse of the C.B. Cottrell Company, a national printing press manufacturer. The building is significant under *Criterion C: Architecture* as an example of an early-twentieth-century industrial complex with a consolidated plan. The first factory and warehouse were constructed in 1922, and the Classical Revival main office was constructed in 1927.[180] In the 1950s and 1960s, the plant expanded at the rear; however, the complex retains the character-defining features of the form including the large expanses of original window sash, roof lighting, and a consolidated plan. The C.B. Cottrell & Sons buildings retain a high degree of integrity and are therefore potentially eligible under *Criterion C: Architecture.*

[180] "Sanborn Fire Insurance Company, Milwaukee, 1910-Revised 1951, Volume 8," 931.

Cleaver-Brooks Company
3637 N. Holton Street
AHI No. 232390

The Cleaver-Brooks Company building, located in the Williamsburg Heights neighborhood, consists of the main office, factory, and warehouse buildings. The complex is significant under *Criterion A: History* for the company's work in boiler innovation, which included the design of the first packaged boiler, and efforts in distillation and desalination for the U.S. Army Corps of Engineers. The company was founded by John C. Cleaver in 1929, and in 1931, he partnered with Raymond Brooks to form the Cleaver-Brooks Company and quickly became a leader in boiler manufacturing.[181] The company first found success with the development of the first packaged boiler, which required no additional parts for easy installation. In 1940 a division of the company, Aqua-Chem, won a contract with the U.S. Army Corps of Engineers to develop a water purification, or desalination, system to be used for by the Army during military campaigns. After the war, Aqua-Chem continued its work, culminating in the development of the long-tube, multi-stage, flash evaporator for large-scale desalination efforts for use in water purification plants across the world.[182] The subject property is associated with the company from its incorporation in 1931 to the height of the desalination work around 1960. The property retains sufficient integrity to the period of significance and is therefore potentially eligible under *Criterion A: History.*

[181] "Cleaver-Brooks Company Facts," *Cleaver-Brooks*, 2011, http://www.cleaver-brooks.com/Copyright.aspx.

[182] Fehring, *Mechanical Engineering*, 30.

Dairy Distributors, Inc.
1617 E. North Avenue
AHI No. 232378

The Dairy Distributor, Inc. building was constructed in 1946 by a local dairy cooperative. At one time the property to the west of the office (1613 E. North Avenue) was associated with the dairy, but has since been highly altered. The office, however, retains a high degree of integrity and is a good example of the Art Moderne style applied to a small office and factory building. The building displays character-defining features of the style such as an irregular plan, emphasis on horizontality, metal frame windows and metal door surrounds, and minimal decoration and ornamentation. Although some windows have been replaced with glass block, the original metal entrance surround, central dock, and garage bay of the building retain a high degree of integrity and the building is therefore potentially eligible under *Criterion C: Architecture.*

E.C. Kropp Company Building
300 N. Jefferson Street
AHI No. 113515

The E.C. Kropp Company Building, located in the Third Ward, is a four-story vernacular warehouse and office building constructed in 1906. The building is significant under *Criterion A: History* for its pioneering role in the development and manufacturing of postcards in the United States. The E.C. Kropp Company began in 1898 after the founder, Emil C. Kropp, observed the postcard concept in Germany. Kropp is credited as being one of the first publishers of postcards in the United States. The company incorporated in 1907, a year after moving into the subject property.[183] Although the building has downsized and boarded-up windows, it retains sufficient integrity to the period of significance and is therefore potentially eligible under *Criterion A: History*

[183] "Obituary: Emil C. Kropp," *The American Stationer* 63, no. No. 2 (January 11, 1908): 22, https://books.google.com/books?id=r2VYAAAAYAAJ&dq=emil+c+kropp&q=kropp#v=snippet&q=kropp&f=false.

E.R. Wagner Company
4611 N. 32nd Street
AHI No. 111595

Located along the N. 31st Street corridor in North Milwaukee, the subject property consists of the office and manufacturing facility of the E.R. Wagner Company, a Milwaukee-based manufacturer of stamped metal products. The E.R. Wagner Company facility is significant under *Criterion C: Architecture* as an early example of the "consolidated plan" factory concept that came into use at the turn of the twentieth century. Constructed c.1905, the property consists of a large, one-story factory with fireproof steel and iron framing, raised roofline monitors and large windows to maximize daylight, and an open floor plan that combined the various manufacturing processes in a single building. The c.1920 office also displays some architectural interest as an unusual example of a residential-scaled, Colonial Revival, industrial office. Adjacent c.1905 buildings housed raw materials and shipping and receiving areas, and a small factory addition was added on the east elevation c.1940. E.R. Wagner continues to occupy the complex, which retains original metal sash and brick wall cladding throughout and illustrates the adaptation and expansion of turn-of-the-century consolidated plan construction to accommodate new manufacturing processes in the postwar period. The E.R. Wagner Company facility retains good integrity and is therefore potentially eligible under *Criterion C: Architecture*.

Eagle Knitting Mills
507 S. 2nd Street
AHI No. 56661

Located in Walker's Point, this four-story building housed the office and production facilities of Eagle Knitting Mills. The property is significant under *Criterion C: Architecture* as an example of a reinforced-concrete industrial loft building. Constructed in 1928 and expanded in 1947 and 1953, the imposing property features Gothic Revival details, including stone sills and accents and an ornate entrance on the east facade with a pointed arch stone entryway and large carved eagle, flanked by buttress-like pilasters. The walls are clad in brick veneer and display recessed brick panels in the spandrel walls.[184] The building has a reinforced-concrete frame with concrete floors, interior mushroom-head columns, and large expanses of original metal window sash. The property retains its rear loading docks and historic open floorplan, and correspondence with the owner indicates that the hardwood floors and many original interior finishes remain.[185] Despite replacement windows in the original openings on the first story, the Eagle Knitting Mills factory retains good integrity and is therefore potentially eligible under *Criterion C: Architecture*.

[184] "Site File - AHI No. 56661" (Wisconsin Historical Society, n.d.), Site Files, Wisconsin State Historic Preservation Office.

[185] "Site File - AHI No. 56661."

Evinrude Division, Outboard Motor Company
4143 N. 27th Street
AHI No. 232370

The Evinrude Division of the Outboard Motor Company, located in North Milwaukee, consists of an office and consolidated-plan factory constructed c.1930 and expanded through the early 1960s. The property is significant under *Criterion A: History* for its important association with outboard marine motor manufacturing. Norwegian immigrant Ole Evinrude developed one of the first commercially successful marine outboard motors in the 1900s, and formed the Evinrude Detachable Rowboat Motor Co. in 1911. Evinrude sold the company in 1914, and after a brief retirement formed the ELTO Outboard Motor Company in 1921.[186] In 1929 ELTO acquired several competitors, including the original Evinrude Company, and the new firm was known as the Outboard Motor Company. By 1941 the Outboard Motor Company produced approximately 60 percent of all outboard motors sold in the United States, marketed under the ELTO, Evinrude, and Johnson trademarks.[187] The subject property is associated with the company during its period of expansion; while Ole Evinrude operated a variety of locations in the 1910s and early 1920s, by 1930 the subject property served as the manufacturing facility and headquarters of the new Outboard Motors Corporation and its Evinrude division.[188] Following bankruptcy proceedings in 2001, manufacturing operations were relocated to Sturtevant, Wisconsin.[189] The property retains sufficient integrity to the period of significance and is therefore potentially eligible under *Criterion A: History*.

[186] Kenneth E. Hendrickson III, *The Encyclopedia of the Industrial Revolution in World History* (Rowman & Littlefield, 2014), 310.

[187] Kenneth Bjork, "Ole Evinrude and the Outboard Motor," *Norwegian-American Studies* 12 (1941): 177.

[188] *Milwaukee City Directory, 1930* (Wright Directory Co., 1930), 567, 1309.

[189] Rick Barrett, "BRP Shows off Sturtevant Evinrude Plant," *Milwaukee Journal Sentinel*, August 21, 2012, http://www.jsonline.com/business/brp-shows-off-sturtevant-evinrude-plant-ld6iqv7-166962576.html.

F. Kuehn Boot & Shoe Company
1134 S. First Street
AHI No. 108484

Located in Walker's Point, the F. Kuehn Boot & Shoe Company factory is a three-story brick industrial loft with a raised stone basement. The property is significant under *Criterion C: Architecture* as an example of a small, late-nineteenth-century industrial loft building. German immigrant Ferdinand Kuehn opened a cobbler's shop in Milwaukee in 1865, and formed the F. Kuehn Boot & Shoe Company in 1893. The company constructed the subject property in 1894-1895, and promotional literature described the new building as a "model structure, consisting of a fine four-story brick building, fully equipped with the latest improved machinery and ample steam power."[190] The property displays brick masonry walls with timber interior posts, a dentilled brick cornice with decorative front parapet, regularly spaced windows, and freight doors on the south elevation.[191] While the rear chimney stack has been shortened and most window openings contain replacement sash, the F. Kuehn Boot & Shoe Company factory retains good integrity and is therefore potentially eligible under *Criterion C: Architecture*.

Figure 26. F. Kuehn Boot & Shoe Company factory in 1896.[192]

[190] *Milwaukee: A Half Century's Progress, 1846-1896*, 221.

[191] "Sanborn Fire Insurance Company, Milwaukee, 1910, Volume 4," Sheet 436.

[192] *Milwaukee: A Half Century's Progress, 1846-1896*, 221.

Filer & Stowell
147 E. Becher Street
AHI Nos. 232596, 232648, 232649, 232650, 232651, 232652, 232653, 232654, 232655

The Filer & Stowell Comp any, located in the Bay View neighborhood, is a factory complex located on the east side of the Chicago, Milwaukee & St. Paul rail corridor between E. Becher and E. Lincoln Streets. The property is significant under *Criterion A: History* for its important association with woodworking machinery and engine manufacture in Milwaukee. Established as the Cream City Iron Works in 1856 at S. 1st Street and W. Florida Street (nonextant), the company took its later name from founders Delos Filer and John Stowell and became a nationwide leader in the manufacture of sawmill and logging equipment.[193] Filer & Stowell relocated to the present site in the early 1890s and the company continued to grow after the turn of the century, manufacturing Corliss engines and a range of band saws and other milling machinery. As the volume of business increased, the company doubled the length of the machine shop and foundry sheds between 1895 and 1910 and added a substantial office building c.1930.[194] One of the longest continuously operating manufacturers in Milwaukee, Filer & Stowell remained at the subject property into the 1990s, and appears to have closed permanently within the past several years.[195] The subject property is associated with the company for the majority of its existence, serving as the company headquarters and manufacturing facility for nearly 100 years. The property retains sufficient integrity to the period of significance and is therefore potentially eligible under *Criterion A: History*. In addition, the property is significant under *Criterion C: Architecture* as a highly intact example of a late-nineteenth- and early-twentieth-century heavy machinery manufacturing complex. Constructed between c.1890 and c.1940, the complex retains a three-story office, a three-story industrial loft that contained a small

[193] Harger, *Milwaukee Illustrated. Its Trade, Commerce, Manufacturing Interests, and Advantages as a Residence City...*, 90.

[194] Harger, *Milwaukee Illustrated. Its Trade, Commerce, Manufacturing Interests, and Advantages as a Residence City...*, 90; "Sanborn Fire Insurance Company, Milwaukee, 1894, Volume 4" (New York: Sanborn Map Company, 1894), Sheet 352.

[195] City of Milwaukee, *Bay View Neighborhood Historic Resources Survey: Volume II*, 87.

machine shop and the pattern shop, long production sheds housing the main machine shop and foundry, the boiler/engine house and large brick smokestack, and a number of smaller buildings including a woodworking shop and forge shop. The extant resources represent a complete collection of the various individual buildings that constitute such a complex, and the buildings themselves retain good overall integrity. The property is therefore potentially eligible under *Criterion C: Architecture*.

Globe-Union, Inc.
910 E. Keefe Avenue
AHI No. 232400

Globe-Union, Inc., located in Williamsburg Heights, consists of a conglomeration of large one-story production sheds and a four- and five-story office and factory building at the southwest corner. The office and portions of the production sheds fronting E. Keefe Avenue have pilastered brick walls with stone sills and accents. The property is significant under *Criterion A: History* for its important association with automotive battery manufacture. Established in 1911, the Globe Electric Company of Milwaukee initially produced batteries for streetcars, rural electric light plants, and switchboards. Following a merger with Union Battery of Chicago in 1920, the company was headquartered in the subject property at 900 E. Keefe Avenue.[196] Under the name Globe-Union, the company began producing automotive batteries for Sears Roebuck in the late 1920s and grew to become the national leader in automotive batteries in the decades that followed.[197] The company's position was further cemented in the late 1950s and early 1960s with the development and introduction of the first thin-wall polypropylene battery container, an innovation that substantially reduced battery weight and remains the industry standard.[198] Globe-Union became a division of Johnson Controls in 1978.[199] Constructed c.1925 and expanded in the 1940s, the subject property is associated with Globe-Union, Inc. as its headquarters during its rise to dominance and into the late 1950s.[200] The property retains sufficient integrity to the period of significance and is therefore potentially eligible under *Criterion A: History*.

[196] Kevin Desmond, *Innovators in Battery Technology: Profiles of 95 Influential Electrochemists* (McFarland, 2016), 161.

[197] Ron Wood, *Into the Value Zone: Gaining and Sustaining Competitive Advantage* (University Press of America, 2008), 145.

[198] Desmond, *Innovators in Battery Technology*, 161.

[199] Wood, *Into the Value Zone*, 145.

[200] *Milwaukee City Directory, 1958*, n.d., 348.

Hummel & Downing Paper Company
1514 E. Thomas Avenue
AHI Nos. 103565, 105775, 103564, 104267

The Hummel & Downing Paper Company consists of a c.1912 factory, powerhouse, and office; a 1917 printing building; a 1920 warehouse; and a 1950 office. It was founded in 1900 as a paper and cardboard box manufacturer and moved to the present location in 1912.[201] The Hummel & Downing Paper Company is significant under *Criterion C: Architecture* as an example of an intact twentieth-century paper manufacturing complex. It retains the buildings necessary for paper production, including the attached power plant, large open factory buildings, and large warehouses used to store the products. Although some window openings have been altered, the buildings retain a high degree of integrity and is therefore potentially eligible under *Criterion C: Architecture.*

[201] City of Milwaukee, *Northeast Side Comprehensive Plan*, July 21, 2009, 35.

Johnson Service Company Building
507 E. Michigan Street
AHI No. 106694

The Johnson Service Company Building, located in downtown Milwaukee's Central Business District, is a seven-story Twentieth Century Commercial building. The property is significant under *Criterion A: History* for its important association with electric control manufacturing in Milwaukee. Warren Johnson first founded the Milwaukee Electric Manufacturing Company in 1883 to market his inventions, including the first practical thermostat capable of regulating individual room temperatures. His completely mechanical, automatic, multi-zone temperature control system revolutionized climate control and many of its principles are still employed today.[202] Later known as the Johnson Electric Service company, the business occupied several locations in the city before constructing its permanent headquarters, designed by Milwaukee architect Herman J. Esser in 1902 and expanded in 1924. Johnson played a prominent role in the development of commercial wireless telegraphs, automobiles, and large pneumatic tower clocks, but by the early 1910s, the company focused on automatic climate controls for large public and commercial buildings. In subsequent decades, the company diversified into controls for air conditioning, fire, and security systems, including instrument controls for a variety of applications in energy and industrial use. The company changed its name to Johnson Controls Inc. in 1974, and remains a world leader in computerized controls for large building automation.[203] The subject property is associated with the company throughout much of its existence, serving as the first permanent company headquarters, office, and manufacturing facility of one of Milwaukee's most significant manufacturers; the property remained the main office until 1980.[204] It retains sufficient integrity to the period of significance and is therefore potentially eligible under *Criterion A: History*. In addition, the property is significant under *Criterion C: Architecture* as an important, early example of a large, reinforced-concrete office building. The Johnson Service Company Building is believed to be the first such building in the city of Milwaukee. Utilizing the Ransome system of reinforced concrete construction, it was built contemporaneously with Cincinnati's Ingalls Building, recognized as the first tall office building to be constructed wholly of reinforced concrete.[205] The building retains good overall integrity and is therefore potentially eligible under *Criterion C: Architecture*.

---

[202] "Johnson Controls Automatic Temperature Control System: A Historic Mechanical Engineering Landmark" (American Society of Mechanical Engineers, May 28, 2008), 7, https://www.asme.org/getmedia/740f9feb-07c3-4d09-aea0-d4b0138792e5/244.aspx.

[203] City of Milwaukee Department of City Development, *Central Business District Historic Resources Survey*, 56–57.

[204] Historic Preservation Commission City of Milwaukee, *Historic Designation Study Report: Johnson Service Company Building*, November 16, 1998, 2, http://www.city.milwaukee.gov/ImageLibrary/Groups/cityHPC/StudyReports/vticnf/JohnsonServiceCoBuilding1998.pdf.

[205] City of Milwaukee, *Historic Designation Study Report: Johnson Service Company Building*, 3.

The Louis Allis Company
427 E. Stewart Street
AHI Nos. 101691, 101692, 101693, 232594

The Louis Allis Company, located in Bay View, is a factory complex that occupies an entire city block between S. Allis and S. Aldrich Streets and includes two offices (AHI Nos. 101691, 101692), a manufacturing facility (AHI No. 101693) comprised of numerous adjoining production sheds, and a powerhouse (AHI No. 232594). The property is significant under *Criterion A: History* for its important association with small motor manufacture. Louis Allis, son of Milwaukee industrialist Edward P. Allis, acquired an interest in the fledgling Mechanical Appliance Company in 1901, and by 1906 the company relocated to the site of the subject property.[206] In the years that followed, the company developed groundbreaking small, compact, alternating-current, industrial motors that could be used to power individual machines. Previously, factories typically used a single large engine to power all machines by means of belting and shafting. In 1908 the Mechanical Appliance Company pioneered the use of individual electric motors to replace this costly, dangerous, and inefficient practice, known as "line shafting."[207] Formally renamed the Louis Allis Company in 1922, the company continued to grow and innovate in the electric motor field, expanding the Stewart Street facility repeatedly from the 1930s through the late 1950s.[208] The subject property is associated with the company during the period when these innovations occurred, serving as the headquarters and manufacturing facility from 1906 until 1998, when the company filed for bankruptcy.[209] The property retains sufficient integrity to the period of significance and is therefore potentially eligible under *Criterion A: History*.

[206] "The Louis Allis Company," n.d., Louis Allis Company - Mss-1670, Box 3, Folder 33, Milwaukee County Historical Society.

[207] "Louis Allis News" (Louis Allis Company, January 1957), 6, Louis Allis Company - Mss-1670, Box 3, Folder 30, Milwaukee County Historical Society.

[208] Louis Allis Company, "Welcome to Our Guests," 1957, 3, Louis Allis Company - Mss-1670, Box 3, Folder 33, Milwaukee County Historical Society.

[209] Robert Mullins, "Louis Allis: What Happened?," *Milwaukee Business Journal*, December 6, 1998, http://www.bizjournals.com/milwaukee/stories/1998/12/07/focus1.html.

Logemann Bros. Office
3232 W. Burleigh Street
AHI No. 232313

Located along the 31st Street Industrial Corridor, this building functioned as a bottling works in the early 1950s. The property was later acquired by Logemann Bros., manufacturers of hydraulic presses for baling scrap materials, who occupied the factory complex immediately to the east. The Logemann Bros. office building is significant under *Criterion C: Architecture* as an example of the Streamline Moderne style. Constructed c.1940, the building displays the rounded corners, glass brick windows, continuous horizontal stone bands, flat roof, and smooth wall planes typical of the Moderne style. Moderne buildings are relatively uncommon in Milwaukee, and the Logemann Bros. office is a good representative of the style. The building retains excellent integrity and is therefore potentially eligible under *Criterion C: Architecture*.

Luick Ice Cream Company
505 E. Capitol Avenue
AHI No. 232404

The Luick Ice Cream Company buildings, located on the edge of the Williamsburg Heights neighborhood, include the 1952 main office and the 1954 milk plant building, both of which are in the Contemporary style. The property is significant under *Criterion C: Architecture* as an example of the style applied to an industrial complex. The building displays character-defining features of the style including the off-center entrance, glassblock windows, and long ribbons of windows. Although some of the windows have been replaced, the property retains a high degree of integrity and is therefore potentially eligible under *Criterion C: Architecture.*

Miller Brewery Complex
4300 W. State Street
AHI Nos. listed in Table 1 below

The Miller Brewery Complex, which spans both sides of W. State Street, is a large, multi-building complex with buildings that date from c.1855 to c.1976 (see Table 1). The facility is significant under *Criterion A: History* for its prominent role in the history of brewing in the city of Milwaukee. Frederick J. Miller was born in Riedlingen, Germany, in 1824 and began studying brewing in 1848. By 1854 he immigrated to the United States and chose Milwaukee as his final destination, most likely due to its large German population. In 1855 Miller took over the Plank Road Brewery in the Menomonee River Valley. By 1887 he incorporated the business as the Fred Miller Brewing Company.[210] For much of the brewery's history, it struggled to be considered one of the "Big Four"—the leaders of Milwaukee's national brewing companies. Following Prohibition the company began its rise to prominence.[211] By the 1940s the company started a large building program that continued into the 1970s.[212] Since its founding in the mid-nineteenth century, the complex has grown and evolved to respond to the changing market of beer consumption, resulting in alterations such as replacement siding and replacements windows. However, the property retains sufficient integrity to the period of significance and is therefore potentially eligible under *Criterion A: History*.

Table 1. Miller Brewery Complex buildings

AHI No.	Name	Address
18088	Miller Inn Visitor's Center	3931 W. State Street
29269	Building 41	4103 W. State Street
31787	Building 1	4003 W. State Street
31788	Building 26	4036 W. State Street
31789	Building 29	4036 W. State Street

[210] John Gurda, *Miller Time: A History of Miller Brewing Company, 1855-2005* (Milwaukee, Wis: Miller Brewing Company, 2005), 1, 15, 50.

[211] Gurda, *Miller Time: A History of Miller Brewing Company, 1855-2005*, 24–25, 76.

[212] Jim Draeger and Mark Speltz, *Bottoms Up: A Toast to Wisconsin's Historic Bars & Breweries* (Madison, Wis.: State Historical Society of Wisconsin, n.d.), 188.

Table 1. Miller Brewery Complex buildings

AHI No.	Name	Address
31791	Miller Brewing Garage	4103 W. State Street
115103	Building 30	4000 W. State Street
42078	Miller Brewing Company	4000 W. State Street
113523	Miller Brewing Company	3939 W. Highland Boulevard
115099	Replica of Frederick Miller's Plank Road Brewery	N/A
115100	Building 9	4001 W. State Street
115101	Building 39	4103 W. State Street
115102	Building 50	4103 W. State Street
115104	Building 34	4001 W. State Street
115255	Building 56 & 57	4400 W. State Street
115256	Building 54 &55	4300 W. State Street
115257	Miller Brewing Tourist Center	4251 W. State Street
115259	Building 61 & 58	4135 W State Street
115260	Miller Brewing Company	4122 W. State Street
115261	Building 15,16,17,& 18	4025 W. State Street
115262	Building 35	3930 W. State Street
116380	Building 33	925 N. 40th Street

Milwaukee Bridge Company
3282 N. 35th Street
AHI No. 232308

The Milwaukee Bridge Company, located along the N. 31st Street corridor in North Milwaukee, consists of two brick production sheds arranged in a T-plan with an exterior overhead crane-way on the north elevation. The property is significant under *Criterion A: History* for its important association with bridge fabrication in Milwaukee. Milwaukee was the center of bridge manufacturing in the state; of the five major bridge fabricators located in Wisconsin, four were located in the greater Milwaukee area.[213] Formed in 1902, the Milwaukee Steel Structural Company changed its name to the Milwaukee Bridge Company the following year.[214] The Milwaukee Bridge Company developed the prototype for one of the first simple trunnion bascule bridges in the United States for the Muskego Avenue/Emmber Lane Bridge in 1904. This bridge type became known nationwide as the "Milwaukee Type Bascule," and in the years prior to World War II, the Milwaukee Bridge Company went on to fabricate a number of similar bascule bridges in Milwaukee, including the Kilbourn Avenue and State Street bridges.[215] The subject property is associated with the company during this period, serving as the production facility until the company ceased operation in the early 1960s. The property retains sufficient integrity to the period of significance and is therefore potentially eligible under *Criterion A: History*.

[213] These include Worden-Allen Company (AHI No. 232727, located in Glendale), Milwaukee Bridge & Iron Company (later part of the American Bridge Company; nonextant), and Wisconsin Bridge & Iron Company (AHI No. 232477, 5141 N. 35th Street).

[214] *Historic Highway Truss Bridges in Wisconsin*, 2:97, 106.

[215] Historic Preservation Commission City of Milwaukee, *Historic Designation Study Report, State Street Bridge*, 3, accessed August 15, 2016, http://www.city.milwaukee.gov/ImageLibrary/Groups/cityHPC/DesignatedReports/vticnf/StateStBridge.pdf.

Milwaukee Electric Tool Company
5316 W. State Street
AHI No. 232351

The Milwaukee Electric Tool Company building, located in the western Menomonee Valley, consists of a two-story office with Moderne stylistic details and a one-story factory that extends at the rear (north). The facility is significant under *Criterion A: History* for its important association with power tool manufacturing in Milwaukee. Established in 1924, the Milwaukee Electric Tool Company soon became a nationwide leader in the development of handheld power tools, initially supplying the tools needed for production of automobiles and aircraft. From 1949 to 1951 the company introduced several innovations that had a notable impact on the power tool industry, including the first half-inch right-angle drill; sanders and grinders with a spring clutch for smoother operation; and the Sawzall, the first portable hacksaw, which used a reciprocating blade. The subject property is associated with the company during the period when these innovations occurred, serving as both the headquarters and manufacturing facility from 1947 until 1965, when the company relocated to Brookfield.[216] The property retains sufficient integrity to the period of significance and is therefore potentially eligible under *Criterion A: History*.

[216] Milwaukee Electric Tool Corporation, "About Us", 2016, http://www.milwaukeetool.eu/header/about-us/milwaukee-story/history/; Wright's City Directory of Milwaukee, (Milwaukee, Wis.: n.p., 1947), 2405.

Milwaukee Gas Light Company, West Side Works
2122 W. Mount Vernon Avenue
AHI No. 16452, 232656, 232657, 232658, 232659

Located in the Menomonee Valley, the Milwaukee Gas Light Company's West Side Works consists of a group of two- and three-story brick buildings adjacent to the Menomonee River's north bank. The facility is significant under *Criterion A: History* for its important association with coal gas production in Milwaukee.

The Milwaukee Gas Light Company completed its first production facility in 1852, located in the Third Ward, which produced the coal gas used to illuminate the city.[217] Although the Third Ward facility was later destroyed by fire in 1892, the company rebuilt and continued to provide gas for both residential use and for the city's street lights. In order to increase production capacity, Milwaukee Gas Light constructed the subject property in 1902-1903. The state-of-the-art facility soon became a major supplier to the manufacturers in the Menomonee Valley, including International Harvester Company, which used more than one million cubic feet per year.[218] With the introduction of natural gas and electric illumination, demand eventually waned, and the property was decommissioned and used for storage. The West Side Works played a vital role in gas production for the industrial heart of Milwaukee in the early twentieth century, and retains sufficient integrity to the period of significance, and is therefore potentially eligible under *Criterion A: History*.

The West Side Works is also significant under *Criterion C: Architecture* as an example of a coal gas production facility, and as the work of renowned Milwaukee architect Alexander Eschweiler. The property displays the octagonal control tower, retort furnace building, black smith and machine shop, condenser house, and purifier building. Although the Tax Credit process was never completed, a Part I application was approved and renovations to the main furnace building in the late 2000s preserved the character of the facility. The gas storage tanks, smokestack, and a small office and laboratory building have been removed; however, the property otherwise retains good integrity and is therefore potentially eligible under *Criterion C: Architecture*.

[217] *History of Milwaukee, Wisconsin: From Prehistoric Times to the Present Date ...* (Milwaukee Genealogical Society, 1881), 425–26.

[218] Raymond H. Merritt and Carol L. Snook, *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*, 15.

Nash/LaFayette Automotive Plant
3280 S. Clement Avenue
AHI No. 232587

The Nash/LaFayette Automotive Plant, located in the Bayview neighborhood, consists of three interconnected factory buildings that occupy a large city block bounded by the Chicago & North Western rail corridor, S. Clement Avenue, and E. Euclid Avenue. The property is significant under *Criterion A: History* for its important association with automobile manufacture in Milwaukee. In order to expand manufacturing capacity beyond his existing Kenosha plant, in 1921, Wisconsin automotive giant Charles W. Nash constructed a new facility in Milwaukee to manufacture the company's four-cylinder Nash Four. Nash laid out the plant to accommodate "straight line" production methods, minimizing lost motion.[219] The following year, the company decided to construct a three-story addition to the plant, located immediately to the north of the earlier portion, and expected to double its capacity and equal the output of the Kenosha plant, which produced the six-cylinder model.[220] Intending to create a luxury car line, Nash also founded the LaFayette Motors Corporation in 1919 and relocated the manufacturing facility from Indianapolis to Milwaukee in 1923.[221] Built specifically for LaFayette, the new facility occupied the northern portion of the subject property and typified the consolidated-plan factory of the early twentieth century.[222] Nash subsidiary Ajax Motors acquired LaFayette in 1924, and the Milwaukee plant continued to manufacture four-cylinder passenger cars.[223] By the mid-1920s, Nash was Wisconsin's largest taxpayer and its production value eclipsed the dairy industry.[224] Nash Motors struggled during the Depression, and by 1937, the machinery had been removed from the Bay View plant, which continued to serve as storage for new vehicles. The former LaFayette plant and the 1922

[219] "Milwaukee Plant of Nash Motors Co. Model of Its Kind," *Milwaukee* 1, no. 5 (January 1922): 21.

[220] "Nash Increases Floor Space" 1, no. 11 (July 1922): 18; "Nash Enlarging Plants for Production of 300 Cars a Day," *Motor Age* 52, no. 2 (July 13, 1922): 32; "Nash Factory Has Shipped Over $20,000,000 Products," *Motor Age* 52, no. 20 (November 16, 1922): 35.

[221] Charles K. Hyde, *Storied Independent Automakers: Nash, Hudson, and American Motors* (Detroit: Wayne State University Press, 2009), 47.

[222] "Main Plant of La Fayette Motors Corporation to Milwaukee," *Milwaukee* 2, no. 4 (January 1922): 5.

[223] Hyde, *Storied Independent Automakers*, 48.

[224] Hyde, *Storied Independent Automakers*, 51.

Nash addition housed the company's motor parts and service department into the 1950s.[225] The subject property is associated with the company during the period of early expansion and success in the 1920s. Aerial imagery indicates that the driveway between the south and central buildings was enclosed c.1955 and a one-story rear (east) addition was constructed c.1965; however, the primary factory buildings retain sufficient integrity to the period of significance. The complex is therefore potentially eligible under *Criterion A: History*.

[225] "Sanborn Fire Insurance Company, Milwaukee, 1910-Revised 1951, Volume 6" (New York: Sanborn Map Company, 1951), Sheet 614; "Sanborn Fire Insurance Company, Milwaukee, 1910-Revised 1937, Volume 6" (New York: Sanborn Map Company, 1937), Sheet 614.

Northwestern Malleable Iron Company
1640 W. Bruce Street
AHI Nos. 99048, 99049

The Northwestern Malleable Iron Company, located in the Menomonee Valley, consists of a c.1900 office and two c.1895 production sheds. The office (AHI No. 99049) features Neoclassical influences, including a central portico with a classical pediment, and the production sheds (AHI No. 99048) are of brick masonry with timber framing. The property is significant under *Criterion A: History* for its important association with Milwaukee's foundry industry. Established in 1882, Northwestern Malleable was one of Milwaukee's most important producers of malleable iron, and was one of the first established as a foundry in its own right, rather than as part of a machinery manufacturing plant.[226] The company soon grew into one of the largest corporations on the south side of the Menomonee Valley; the number of employees more than doubled in the 1890s, growing from 225 in 1890 to 500 by 1896.[227] Sanborn fire insurance maps show that the complex itself more than tripled in size between 1894 and 1910, expanding east towards the 16th Street Viaduct. The subject properties were part of this expansion, and were associated with the company until c.1930, when the complex was taken over by neighboring International Harvester. Although International Harvester subsequently razed most of the buildings in the Northwestern Malleable complex, the surviving buildings include the main office, which also contained the pattern shop, pattern storage, and machine shop; and the two foundry sheds that contained the annealing ovens (the annealing process is the crucial phase in which a controlled cooling process creates malleable iron).[228] The property therefore continues to convey its most essential functions and retains sufficient integrity to the period of significance. It is therefore potentially eligible under *Criterion A: History*.

[226] D.M. Avey, "Milwaukee Foundries Serve All Industry," *The Iron Trade Review* 63, no. 14 (October 3, 1918): 112.

[227] City of Milwaukee Department of City Development, *South Side Neighborhood Historic Resources Survey: Final Report*, 37–38.

[228] "Sanborn Fire Insurance Company, Milwaukee, 1910, Volume 4," Sheet 385.

Perlick Corporation
8300 Good Hope Road
AHI No. 232603

The Perlick Corporation building was constructed in 1963 in the Contemporary style. The property is significant under *Criterion C: Architecture* as an example of the style applied to an industrial complex. Like a typical postwar industrial complex, it contains the main office, a production facility, and shipping and receiving areas. The building displays character-defining features of the Contemporary style, including the emphasis on the horizontal, the off-center entrance, and long ribbons of windows, as well as a large parking lot for employees. The building appears to retain a high degree of integrity and retains the original glass entrance doors, windows, and original parking lot light standards. It is therefore potentially eligible under *Criterion C: Architecture.*

Pfister & Vogel, Bay View Tannery
1977 S. Allis Street
AHI No. 111590

Located on the south side of the Kinnickinnick River, Pfister & Vogel's Bay View tannery was devoted to the production of sole leather for shoes and boots in the late nineteenth and early twentieth century.

German immigrants Guido Pfister and Fred Vogel entered Milwaukee's tanning and leather industry in the 1850s, and the company's first tannery was established in Walker's Point by the 1870s.[229] Incorporating as the Pfister & Vogel Leather Company in 1872, the partners constructed three additional facilities over the next several decades, including the Bay View tannery, constructed between c.1890 and c.1910.[230] By the end of the nineteenth century Milwaukee's tanning industry was one of the most profitable industries in the city, and Pfister & Vogel was the city's largest producer.[231] Milwaukee's tanning industry reached peak production during World War I, but soon declined. With the onset of the Great Depression, the Pfister & Vogel Leather Company was liquidated, and while limited leather production continued at the Walker's Point facility, the Bay View tannery became the P&V Atlas Industrial Center, and rented portions of the complex to a variety of other manufacturers.[232] The subject property is significant for its association with one of Milwaukee's leading leather producers during the later peak phase of the city's tanning industry. It retains sufficient integrity to the period of significance and is therefore potentially eligible under *Criterion A: History*.

[229] Harger, *Milwaukee Illustrated. Its Trade, Commerce, Manufacturing Interests, and Advantages as a Residence City...*, 95.

[230] *Milwaukee's Great Industries*, 304; National Register of Historic Places, Walker's Point Historic District, Milwaukee, Milwaukee County, Wisconsin, National Register #19781219, 7:18.

[231] The Merchants' and Manufacturers' Association of Milwaukee, *Industrial Milwaukee: The Great Manufacturing Heart of the Northwest*, 29; *Milwaukee's Great Industries*, 225.

[232] National Register of Historic Places, Walker's Point Historic District, Milwaukee, Milwaukee County, Wisconsin, 7:18.

The Pfister & Vogel Bay View Tannery is also significant under *Criterion C: Architecture* as a highly intact example of a tannery complex. The property retains its waterfront setting and adjacent slip, although the bark sheds at the river's edge have been removed. With the exception of the bark mill and leach house at the south side of the complex and several storage buildings, the complex retains the other primary buildings typical of a tannery, including the hide house, tanning buildings, powerhouse, and the four linearly arranged, seven-story loft buildings that housed the various departments responsible for shaving, splitting, drying, and finishing leather.[233] The extant buildings of the Pfister & Vogel Bay View Tannery retain good integrity and the complex is therefore potentially eligible under *Criterion C: Architecture*.

[233] "Sanborn Fire Insurance Company, Milwaukee, 1894, Volume 4," Sheets 353, 354, 357; "Sanborn Fire Insurance Company, Milwaukee, 1910, Volume 4," 528; "Sanborn Fire Insurance Company, Milwaukee, 1910-Revised 1951, Volume 5" (New York: Sanborn Map Company, 1951), 528.

R. Perlick Brass Company/Perlick Company, Inc.
3110 W. Meinecke Avenue
AHI No. 116583

The R. Perlick Brass Company, located along the N. 31st Street industrial corridor, consists of a c.1900 three- and four-story L-plan industrial loft; c.1940 one-story factory; and several additional storage and loading facilities. The property is significant under *Criterion A: History* for its important association with the manufacture of beer dispensing equipment. Established in 1917, the R. Perlick Brass Company was initially located in Walker's Point at 194-198 Reed Street (334-338 S. 2nd Street, nonextant). The small brass foundry initially produced automobile parts, but soon began to specialize in taps and fittings for the brewing industry. After the repeal of Prohibition in 1933, Perlick became the exclusive supplier for the glass-lined beer tanks produced by A.O. Smith.[234] In the mid-1930s the company relocated to 1825 W. St. Paul Avenue and continued to specialize in beer dispensing equipment.[235] The company relocated to the subject facility on W. Meinecke Avenue by 1940; initially consisting of an L-plan grouping of industrial lofts and associated buildings that had formerly housed a furniture factory, Perlick rebuilt the south facade of the loft and replaced many of the adjoining buildings between 1940 and 1951.[236] The company developed a number of innovative beer-dispensing products that were soon put to widespread use in taverns nationwide. In 1941 company president Hilbert R. Perlick was granted a patent for a beverage dispenser consisting of a beer tap mounted on a raised tower, the first such unit that could keep the conduit cool between the keg and tap.[237] Rebranding as the Perlick Company, Inc., the company continued to manufacture saloon and brewery fittings, becoming a leading name in the North American brewing and hospitality industries. In addition to beer-dispensing equipment, Perlick produced

[234] Garrett Oliver, *The Oxford Companion to Beer* (Oxford University Press, USA, 2011), 647.

[235] *Milwaukee City Directory, 1936* (Wright Directory Co., 1936), 948.

[236] "Sanborn Fire Insurance Company, Milwaukee, 1910, Volume 2" (New York: Sanborn Map Company, 1910), Sheet 171; *Milwaukee City Directory, 1940* (Wright Directory Co., 1940), 891.

[237] Perlick Hilbert R, "Beverage Dispenser," November 11, 1941, http://www.google.com/patents/US2262043.

refrigerated cabinets, glass-washing equipment, and display cabinets.[238] In 1962 the company introduced the Century Beer System, a glycol-cooled beer dispensing system that could transport beer up to 100 feet away, enabling barkeepers to store pressurized kegs in the basement rather than on the main floor or directly beneath the bar.[239] The subject property is associated with the company throughout this period of innovation; it served as Perlick's research and design, foundry, and finishing facility from c.1940 until 1963, when Perlick Industries relocated to a new facility on W. Good Hope Road.[240] The property retains sufficient integrity to the period of significance and is therefore potentially eligible under *Criterion A: History*.

[238] Oliver, *The Oxford Companion to Beer*, 646.

[239] "History | Perlick Corporation," accessed September 20, 2016, http://www.perlick.com/about/history/.

[240] "History | Perlick Corporation."

Slocum Straw Works/Northwestern Straw Works
1400-1426 W. National Avenue
AHI No. 103893

The Slocum Straw Works/Northwestern Straw Works factory, located in in Walker's Point, is a two-story Twentieth Century Commercial brick factory. The property is significant under *Criterion A: History* for its important association with straw hat manufacture in Milwaukee. Established in 1872 on Mason Street, Albert Slocum's straw hat company was reportedly the first straw hat manufacturer west of New York; by 1892, the firm was known as the Northwestern Straw Works.[241] The company moved three times before constructing a new factory in 1909, designed by Milwaukee architect Charles Keller.[242] Several additions were made in the 1910s, and the factory included offices, a powerhouse, and spaces for the various processes including dyeing, bleaching, steaming, sewing, trimming, and in-house manufacture of paper boxes.[243] Last known as the Slocum Hat Corporation, the company produced women's hats into the 1950s. The subject property is the company headquarters and manufacturing facility with the longest association to one of Milwaukee's most important hat makers. The property retains sufficient integrity to the period of significance and is therefore potentially eligible under *Criterion A: History*.

[241] *Milwaukee's Great Industries*, 109; City of Milwaukee Department of City Development, *South Side Neighborhood Historic Resources Survey: Final Report*, 26–27.

[242] City of Milwaukee Department of City Development, *South Side Neighborhood Historic Resources Survey: Final Report*, 26–27.

[243] "Sanborn Fire Insurance Company, Milwaukee, 1910, Volume 4," Sheet 400.

Sperry Candy Company
127-133 W. Pittsburgh Avenue
AHI No. 111430

The Sperry Candy Company factory, located in Walker's Point, consists of a five-story factory and office building with Moderne stylistic details. The property is significant under *Criterion A: History* for its important association with Milwaukee's candy industry. Previously located in an older building nearby at 200 S. 2nd Street, in 1929, Sperry constructed its own headquarters on Pittsburgh Street. The Sperry Candy Company is best known for its Chicken Dinner candy bar; introduced in 1923, the popular bar was a chocolate-covered nut roll that included no chicken or poultry products.[244] Sperry's unusual marketing tactics associated the bar with a meal rather than a snack, and the Chicken Dinner was among the first to be marketed as nutritious, prefiguring the twenty-first century meal bar.[245] Unlike other bars that merely alluded to other foods, Sperry's Chicken Dinner bar evoked the wholesome pleasure of a hot, hearty meal, and the bar was highly successful.[246] Sperry continued its unconventional advertising approach, and soon launched a number of other bars with names including the Club Sandwich and Denver Sandwich.[247] Sold for 50 years, the bars were popular in Milwaukee and regionally, and the company employed a fleet of Model A trucks in the shape of chickens to promote their flagship product.[248] Although discontinued in the 1960s, TIME Magazine recently included the Chicken Dinner as one of the 13 most influential candy bars of all time.[249] The subject property is associated with the company for the majority of the Chicken Dinner's period of popularity, and served as the factory and headquarters for the company until 1962, when Sperry was acquired by Minneapolis confectioners Pearson's Candy Company.[250] The property retains sufficient integrity to the period of significance and is therefore potentially eligible under *Criterion A: History*.

[244] Ray Broekel, *The Chocolate Chronicles* (Wallace-Homestead Book Co., 1985), 13.

[245] Samira Kawash, *Candy: A Century of Panic and Pleasure* (Macmillan, 2013).

[246] Kawash, *Candy*.

[247] William H. Young and Nancy K. Young, *The Great Depression in America: A Cultural Encyclopedia* (Greenwood Publishing Group, 2007), 79.

[248] Richard W. Hartel and AnnaKate Hartel, *Candy Bites: The Science of Sweets* (Springer Science & Business Media, 2014), 255.

[249] Sarah Begley et al., "The 13 Most Influential Candy Bars of All Time," *Time*, accessed August 30, 2016, http://newsfeed.time.com/2014/02/18/13-most-influential-candy-bars-of-all-time/slide/chicken-dinner/.

[250] Hartel and Hartel, *Candy Bites*, 94.

Vilter Manufacturing Corporation
2217 S. 1st Street
AHI No. 232599, 232640, 232641, 232642, 232643, 232644, 232646, 232647

The Vilter Manufacturing Corporation, located in the Bay View neighborhood, is a factory complex located on both sides of S. 1st Street between Becher and Lincoln Streets. The complex includes machine sheds, an erecting shed and pattern shop, blacksmith shop, engine room, and pattern storage on the east side of S. 1st Street and the main office and large pipe shop are located on the west side. The property is significant under *Criterion A: History* for its important association with refrigeration machinery and engine manufacture in Milwaukee. Established as a small machine shop in 1867, the company later known as Vilter Manufacturing Corporation began producing Corliss engines and steam-driven refrigeration compressors in the 1880s.[251] After its first facility in the Third Ward was destroyed by fire in 1892, the company selected a new, larger site on what is now S. 1st Street and production began at the extant facility the following year. Prompted by the nationwide failure of the natural ice crop in 1890, the next decades saw a huge demand for cooling and freezing equipment and artificially produced ice, particularly for the meat packing and brewing industries and for use in refrigerated rail cars.[252] Vilter soon became a national leader in this type of cooling equipment, supplying engines and compressors to breweries nationwide, including Milwaukee's own Pabst, Blatz, and Schlitz breweries.[253] One of the oldest continuously operating manufacturers in Milwaukee, the company continued to innovate and provide solutions for extreme cooling needs. Some high-profile installations of Vilter's cooling equipment include General Motors' extreme-cold test tunnels

[251] A.A. Silverman, "Special 125th Anniversary Issue on the History of Vilter Manufacturing Corporation," *Vilter Booster* 45, no. 2 (Summer 1992): 3.

[252] Silverman, "Special 125th Anniversary Issue on the History of Vilter Manufacturing Corporation," 4.

[253] *Milwaukee: A Half Century's Progress, 1846-1896*, 121.

(1940s) and the experimental sealed habitat known as Biosphere II (1989).[254] The subject property is associated with the company during its greatest growth phase in the late nineteenth and early twentieth centuries, serving as the company headquarters and manufacturing facility for over 100 years until Vilter's recent relocation to Cudahy. The property retains sufficient integrity to the period of significance and is therefore potentially eligible under *Criterion A: History*.

[254] Silverman, "Special 125th Anniversary Issue on the History of Vilter Manufacturing Corporation," 11, 18.

Wadhams Oil Company Headquarters
907 S. 1st Street
AHI No. 108473

The Wadhams Oil Company office building, located in Walker's Point, is a two-story, Twentieth Century Commercial building with brick walls, stone accents, and ribbed metal spandrel wall panels. The property is significant under *Criterion A: History* for its important association with Milwaukee's oil and lubricant industry. Founded as Wadhams Oil and Grease Company in 1888, the company initially specialized in machinery oil for local and regional industries. With the advent of the automobile, Wadhams became one of Milwaukee's best-known purveyors of gasoline and motor oil, and their iconic pagoda-like filling stations proliferated throughout the upper Midwest. The subject property is associated with the company throughout the automobile era. The main office, designed by Milwaukee architect H.P. Schnetzky, was completed in 1917, and continued to function as the company headquarters after Wadhams became a division of the Socony-Vacuum Oil Company in 1930. Milwaukee architect Hugo Haeuser designed additions in 1931 and 1941, and the company headquarters remained at this location until the early 1960s, when it was vacated by Mobil Oil (successor to Socony).[255] The property retains sufficient integrity to the period of significance and is therefore potentially eligible under *Criterion A: History*.

[255] Historic Preservation Commission City of Milwaukee, *Historic Designation Study Report, Clinton Street Filling Station*, 5–6, accessed August 15, 2016, http://www.city.milwaukee.gov/ImageLibrary/Groups/cityHPC/StudyReports/vticnf/ClintonStFillingStation1999.pdf.

We Energies South Service Center
2425 S. 35th Street
AHI No. 232550

Located near the west city limits, the We Energies South Service Center serves as an office and garage for a utility company. The property is significant under *Criterion C: Architecture* as an example of Contemporary architecture. Constructed in 1960, the property displays numerous character-defining features of the style, including horizontal massing, decorative concrete block screen walls, an undulating roof, glazed tile walls, plate glass windows, and cantilevered awnings over the main entrance and carport area. The We Energies South Service Center retains good integrity and is therefore potentially eligible under *Criterion C: Architecture*.

Western Leather Company
904 E. Pearson Street
AHI Nos. 105478, 117199

The Western Leather Company consists of an 1889 four-story warehouse, 1889 one-story powerhouse, 1898 six-story office, and 1898 two-story warehouse and dressing room. All are constructed of cream brick and the office features restrained Neoclassical influences such as the decorative cornice featuring dentils along the second story and the arched main entrance. The property is significant under *Criterion A: History* for its association with Milwaukee's tanning industry. Tanning was one of Milwaukee's earliest industries, and by the 1870s it was the preeminent tanning city in the Midwest. The Western Leather Company was founded in 1886 as a cooperative with capital contributions by "nearly all the principal tanners in Milwaukee and Chicago."[256] The first president of the company was Charles F. Pfister of the Pfister and Vogel Tannery.[257] The business began as a way to collect the "leather skiving and scrap pieces" from unworkable, smaller pieces of leather to create merchantable products such as shoe soles and heels and shoe brush backs.[258] The company moved to the subject location in 1889 and constructed the four-story warehouse and one-story powerhouse, designed by well-known local architect H.P. Schnetzky. In 1898 the company added the six-story office and two-story warehouse, both designed by the prominent local architect Eugene R. Liebert.[259] In 1961 the company was sold to a group of Western Leather Company

[256] "Milwaukee, Wis.," *Shoe and Leather Reporter* 43 (June 30, 1887): 1266, https://books.google.com/books?id=Wfg-AQAAMAAJ&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false.

[257] City of Milwaukee, *Lower East Side Neighborhood Historic Resources Survey*, 6–5.

[258] "Milwaukee, Wis.," 1266.

[259] City of Milwaukee, *Lower East Side Neighborhood Historic Resources Survey*, 6-5-6–6.

employees, who continued operating the plant under the name Western Leather Products Company.[260] The buildings continued to be used in the tanning and leather business until the early 1990s. They were converted to condos in 1997.[261]

The four buildings are also eligible under *Criterion C:* Architecture as good examples of industrial loft spaces. Although they have been converted into condominiums and have replacement windows, the overall original design of the buildings are intact, including the decorative exterior details and industrial layout. The property retains sufficient integrity to the period of significance and is therefore potentially eligible under *Criterion A: History* and *Criterion C: Architecture.*

[260] City of Milwaukee, *Lower East Side Neighborhood Historic Resources Survey*, 6–6.

[261] Tom Daykin, "Leather Goods," *Chicago Tribune*, June 8, 1997, http://articles.chicagotribune.com/1997-06-08/business/9706080205_1_leather-goods-apartments-zoning-appeals.

William P. Froehlich Paper Warehouse
419 W. Vliet Street
AHI No. 115918

Located just north of downtown Milwaukee, this building was constructed in 1888 by William P. Froehlich as a paper warehouse. It was later used by Wood's Steam Laundry for the manufacturing of soap and laundry services.[262] The building is a small, Second Empire-style warehouse, an extremely rare style for the city of Milwaukee. The Froehlich Paper Warehouse is significant under *Criterion C: Architecture* as a rare example of a small, Second Empire style warehouse that retains a very high degree of integrity, which uncommon in regards to city's many warehouses. The building retains character-defining features of the property type including the open layout and multiple loading openings with the original dock doors. Additionally, the building retains original windows, entrance doors, and decorative ornamentation, and is therefore potentially eligible under *Criterion C: Architecture.*

[262] Wisconsin Historical Society, "William P. Froehlich Paper Warehouse - AHI #115918," *Wisconsin Historic Preservation Database*, n.d., http://wisahrd.org/AHI/Properties/Primary.aspx?id=115918.

Wisconsin Bridge & Iron Company
514 N. 35th Street
AHI No. 232477, 232664

The Wisconsin Bridge & Iron Company complex, located in North Milwaukee, occupies a full city block and consists of the main office, drafting room, machine shop, and multiple connected factory buildings. The complex is significant under *Criterion A: History* for its important association with bridge fabrication in Milwaukee. Milwaukee was the center of bridge manufacturing in the state; of the five major bridge fabricators located in Wisconsin, four were located in the greater Milwaukee area.[263] The company was incorporated in 1891 by German brothers Friederich and Berthold Weinhagen in Wauwatosa. By 1892, the company moved to the present site in the new village of North Milwaukee, establishing itself as an anchor business for the new suburb.[264] Throughout the late nineteenth and early twentieth centuries, it was an important and influential truss bridge, iron, and steel manufacturer. The subject property is associated with the relocation of the company to North Milwaukee, and it occupied the site until it closed in the 1980s. Although the most of the windows have been removed or covered and the buildings have been re-sided, the property retains sufficient integrity to the period of significance and is therefore potentially eligible under *Criterion A: History* for its association with bridge manufacturing in the city of Milwaukee.

[263] These include Worden-Allen Company (AHI No. 232727, located in Glendale), Milwaukee Bridge & Iron Company (later part of the American Bridge Company; nonextant), and Milwaukee Bridge Company (AHI No. 232308). *Historic Highway Truss Bridges in Wisconsin*, 2:97.

[264] *Historic Highway Truss Bridges in Wisconsin*, 2:110–11.

Wisconsin Cold Storage Warehouse
334 E. Florida Street
AHI No. 113220

The Wisconsin Cold Storage Warehouse, located near the south bank of the Milwaukee River, is significant under *Criterion C: Architecture* as an example of a cold-storage facility. Constructed in 1892 as part of the Milwaukee Malt and Grain Company facility, the earlier south portion included an engine room, two malt kilns, and one of three malt houses. The property was subsequently renovated and repurposed as a cold-storage facility; the malt kilns were removed and in 1928, an adjacent grain elevator was demolished to accommodate the construction of a new fireproof cold-storage warehouse on the north side.[265] The property displays the thick-walled, pilastered masonry construction typical of cold-storage warehouses, has few windows, and some portions are believed to retain interior cork insulation.[266] The eight-story, 1928 portion features a brick facade with Art Deco stone accents, and the property retains its loading docks and service rail on the south facade. The Wisconsin Cold Storage Warehouse retains good integrity and is therefore potentially eligible under *Criterion C: Architecture*.

[265] "Sanborn Fire Insurance Company, Milwaukee, 1894, Volume 3" (New York: Sanborn Map Company, 1894), Sheet 244; "Sanborn Fire Insurance Company, Milwaukee, 1910-Revised 1951, Volume 3" (New York: Sanborn Map Company, 1951), Sheet 394.

[266] Based on a conversation with Jim Draeger in 2016; interior access was not possible at the time of survey.

Wisconsin Gun Company
4107 W. Orchard Street
AHI No. 232268

The Wisconsin Gun Company, located at the edge of West Milwaukee, consists of a consolidated-plan, one-story factory building with a sawtooth roof, an adjoining one-story office, and a small hip-roof time clock office at the main gate on Orchard Street. The facility is significant under *Criterion A: History* for its important association with the World War I defense industry. At the outbreak of World War I, the United States had four plants capable of manufacturing artillery weapons. The federal government began a program to construct an additional 15 facilities across the country, including six completely new plants. The Wisconsin Gun Company was one of two such plants built in Wisconsin (the other was Northwestern Ordnance, located in Madison).[267] At the government's request, Cutler-Hammer and four other Milwaukee companies (Bucyrus-Erie, Worthington Pump Company, Northwestern Malleable Iron Company, and Kearney & Trecker) formed the Wisconsin Gun Company in 1917 and construction began on a new facility at Orchard Street and Greenfield Avenue.[268] The new factory was one of two plants in the nation to produce finished 75-millimeter guns for the war effort.[269] After the signing of the Armistice in November 1918, the facility was converted to peacetime use as Cutler-Hammer's Orchard Street Plant, and several small, c.1940, one-story factory additions were constructed on the west side and rear elevations; however, the 1917 structures are extant despite some replacement siding and windows.[270] The property retains sufficient integrity to the period of significance and is therefore potentially eligible under *Criterion A: History*.

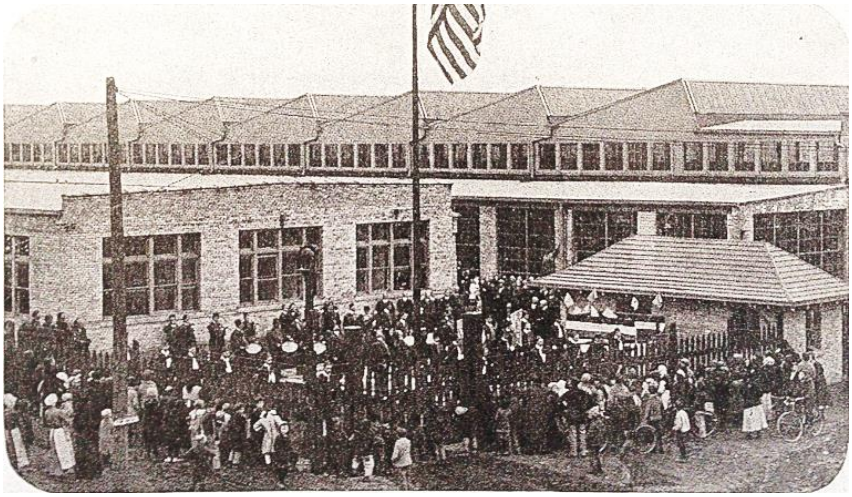


Figure 27. Wisconsin Gun Company, 1917.[271]

[267] Benedict Crowell and Robert Forrest Wilson, *The Armies of Industry* (Yale University Press, 1921), 49–54.

[268] Cutler-Hammer, Inc., *50 Years Ago* (Milwaukee, Wis.: Cutler-Hammer, Inc., 1942), 31.

[269] Crowell and Wilson, *The Armies of Industry*, 49–54.

[270] "Sanborn Fire Insurance Company, Milwaukee, 1927, Volume 9" (New York: Sanborn Map Company, 1927), Sheet 951; "Sanborn Fire Insurance Company, Milwaukee, 1910-Revised 1951, Volume 9" (New York: Sanborn Map Company, 1951), Sheet 951.

[271] Cutler-Hammer, Inc., *50 Years Ago*, 31.

Blatz Brewery Complex
1101-1147 N. Broadway
AHI Nos. 16249, 104594, 16655

The Blatz Brewery Complex was listed in the National Register in 1986 for both its historic and architectural significance as "an important example of brewery architecture by an innovative company that was of national importance in the brewery industry."[272] During fieldwork, three other intact Blatz Brewery buildings were identified adjacent to the complex, outside the historic boundary: the Valentin Blatz Brewing Company Office Building (AHI No. 16249, 1120 N. Broadway, listed individually in the National Register in 1983), the Valentin Blatz Brewing Company Wash House (AHI No. 104594, 1101 E. Highland Avenue), and the Blatz Brewery Bottling House (AHI No. 16655, 1015 N. Broadway). It recommended that the current boundary of the National Register-listed Blatz Brewery Complex be expanded to include these three buildings as contributing resources.

Blatz Company Office, AHI No. 16249.

Blatz Brewing Company Wash House, AHI No. 104594.

Blatz Brewery Bottling House, AHI No. 16655.

[272] National Register of Historic Places, Blatz Brewery Complex.

Table 2. Properties that may yield significance in the future

AHI No.	Historic Name	Other Name	Address	Image
74250	The North American Press	Sickroom Service National Headquarters	728 N. James Lovell	
78293	Cream City Bedding Co.	Compo Corporation	3220 W. Fond Du Lac Avenue	
79209	Seidel Leather	Milwaukee Lace Paper Co.	1306 E. Meinecke Avenue	

Table 2. Properties that may yield significance in the future

AHI No.	Historic Name	Other Name	Address	Image
109244 & 115917	E.L. Husting Co.	Badger Exposition Service	N. 5th Street east side between W. Cherry Street and W. Vliet Street	 
109985	Goll And Frank Clothing Factory	Holsbach Corporation	1748 N. 13th Street	
110428	Weyenberg Shoe Co.		1924 N. Hubbard Street	

Table 2. Properties that may yield significance in the future

AHI No.	Historic Name	Other Name	Address	Image
114890	Weyenberg Shoe Co.		234 E. Reservoir Street	
232387	Industrial Loft		3210 N. Pierce Street	
232405	Industrial Building		4355 N. Richards Street	

Table 2. Properties that may yield significance in the future

AHI No.	Historic Name	Other Name	Address	Image
232464 & 232465	Industrial Office and building		5151 N. 32nd Street	 
232535	Milwaukee Metal Products, Co.		8000 W. Florist Avenue	
232546	Lakeside Bridge & Steel		5300 33rd Street	

Table 2. Properties that may yield significance in the future

AHI No.	Historic Name	Other Name	Address	Image
232551		Acker Millwork	3300 W. Pabst Avenue	
232607		Nature Tech	5400 W. Good Hope Road	
232630		La Lune Furniture	930 E. Burleigh Street	

THIS PAGE INTENTIONALLY LEFT BLANK

B. Historic districts

District Survey Form

District: **Layton Park Industrial Historic District**
City: **Milwaukee**
County: **Milwaukee**
Survey: **Milwaukee Industrial Intensive Survey**
Date: **August 2016**

Address	Property Name	Construction Date	Status
2844 S. 29th Street	Heil Factory	c.1940	Contributing
3000 W. Montana Street	Heil Company Office	c.1920	Contributing
2773 S. 29th Street	Milwaukee Hay Tool Company	1893	Contributing
2773 S. 29th Street	Milwaukee Malleable and Milwaukee Tool Company Office	c.1930	Contributing
2776 S. 29th Street	Milwaukee Malleable & Grey Iron	1899	Contributing

Architectural Description

The proposed Layton Park Industrial Historic District consists of five industrial properties located along the Chicago & North Western rail corridor in Milwaukee's Layton Park neighborhood. All of these properties are contributing elements within the proposed district, located on both sides of S. 29th Street between Dakota Street and the rail corridor. Buildings in the district include three astylistic utilitarian factory buildings and two associated offices. The late-nineteenth-century factory of the Milwaukee Hay Tool Company consists of a group of production sheds with timber frames, clapboard walls, and brick firewalls separating the adjoining shops. A c.1930 office displays modest Moderne influences in its black stone surround with fluted aluminum trim and cylindrical sconces. The Milwaukee Malleable & Grey Iron Company complex on the opposite side of S. 29th Street consists of several turn-of-the-century production sheds with cream brick walls. The Heil Company Office is a two-story Neoclassical office building and displays brick walls with corner quoins, windows with blind round arch headers, and a central entry portico on the south facade with a round-arch entrance and fanlight. The Heil factory is a c.1940 production shed with a raised central monitor, large metal window expanses, and modest Moderne stone accents. The properties display limited changes or alterations and retain good integrity.

Significance

The Layton Park Industrial Historic District is potentially eligible under *Criterion C: Architecture* as an intact grouping of late-nineteenth and early-twentieth-century factory buildings. The period of significance spans the dates of construction, 1893-c.1940. Industrial development in the Layton Park neighborhood of Milwaukee began in the late nineteenth century, and the Milwaukee Hay Tool Company's factory is one of the earliest in the area.[273] Brothers William and Charles Gutenkunst formed the Milwaukee Hay Tool Company in the 1880s and constructed the Layton Park facility in 1893, adding the Milwaukee Malleable

[273] "Sanborn Fire Insurance Company, Milwaukee, 1910, Volume 6" (New York: Sanborn Map Company, 1910).

& Grey Iron Works complex in 1899 to supply castings for the hay tool firm.[274] The Heil Company, founded in 1901, established a factory in Layton Park by 1910.[275] The company produced the first welded steel milk truck in 1927 and continued to produce truck bodies, becoming one of the largest manufacturers of refuse collection trucks.[276] Although much of the Heil factory complex has been converted into part of Aurora Health Care's corporate campus and is altered beyond recognition (and is thus excluded from the district), the office and subject factory retain a high degree of integrity. The buildings in the proposed district represent the most intact industrial resources in the Layton Park area, and illustrate the complete arc of local industrial development from the 1890s through World War II.

Boundary Description

The boundary for the proposed district encompasses the current legal lots associated with the parcels for 3000 W. Montana Street and 2773, 2776, and 2844 S. 29th Street. A proposed boundary map is included on page 44.

Boundary Justification

The district boundary corresponds to the historic area associated with these properties and provides an appropriate setting.

Figure 28. Milwaukee Malleable and Milwaukee Tool Company office, 2773 S. 29th Street, view facing northwest.

[274] Ellis Baker Usher, *Wisconsin: Its Story and Biography, 1848-1913* (Lewis publishing Company, 1914), 1449–50.

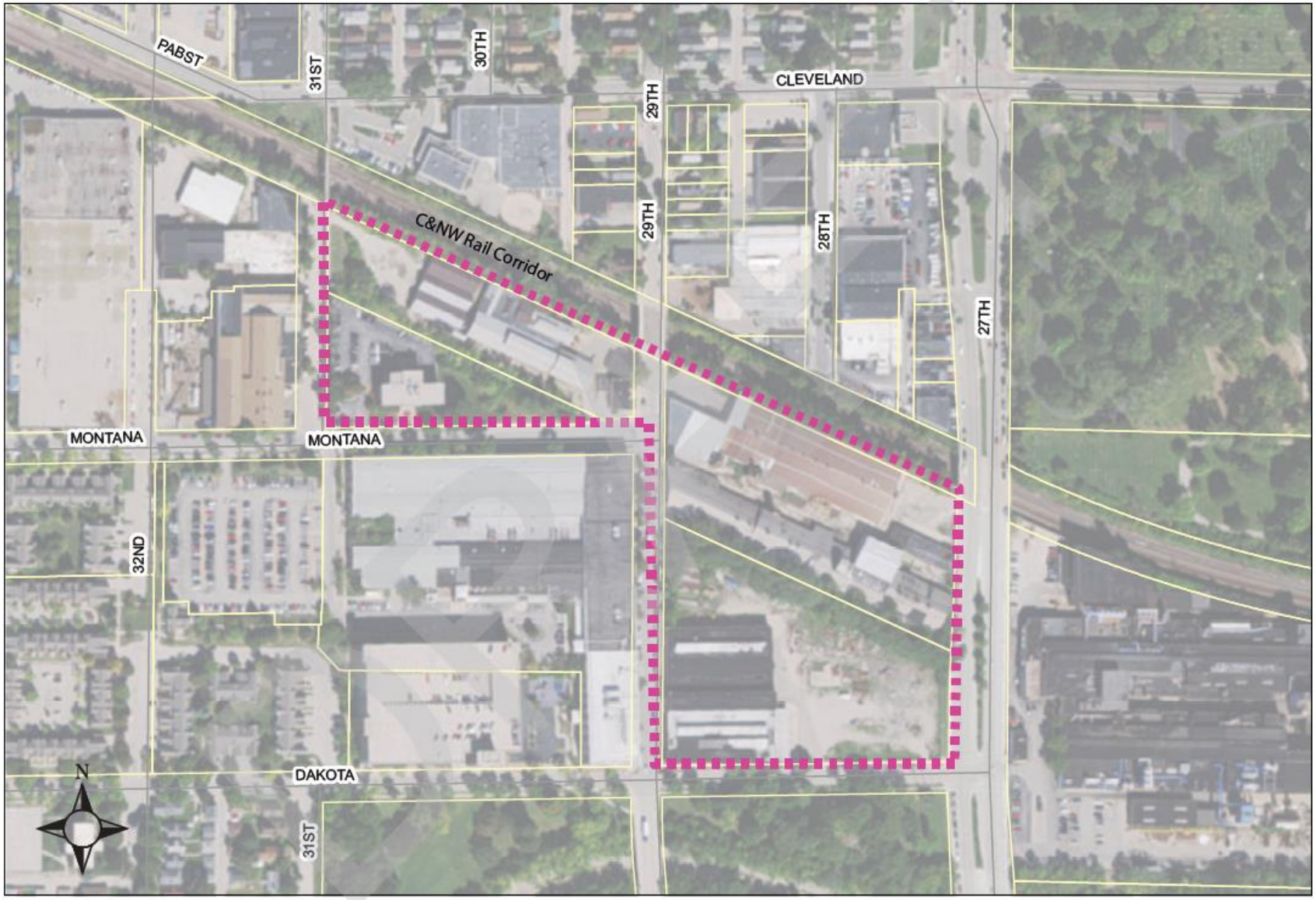
[275] "Sanborn Fire Insurance Company, Milwaukee, 1910, Volume 6," Sheet 570.

[276] Harold M. Cobb, *The History of Stainless Steel* (ASM International, 2010), 281.

Figure 29. Milwaukee Hay Tool Company factory, 2773 S. 29th Street, view facing northwest.

Figure 30. Heil Company Office, 3000 W. Montana Street, view facing north.

Figure 31. Heil Company factory, 2844 S. 29th Street, view facing southeast.



Proposed Boundary Map
Layton Park Industrial Historic District
Milwaukee, Milwaukee County

THIS PAGE INTENTIONALLY LEFT BLANK

District Survey Form

District: **West St. Paul Avenue Industrial Historic District**
City: **Milwaukee**
County: **Milwaukee**
Survey: **Milwaukee Industrial Intensive Survey**
Date: **August 2016**

Address	Property Name	Construction Date	Status
2045 W. St. Paul Avenue	Bayley Heating Company	1923	Contributing
2015 W. St. Paul Avenue	National Radiator Corporation	1930	Contributing
1925 W. St. Paul Avenue	Conway Cabinet Company	1913	Contributing
1906 W. St. Paul Avenue	Bay View Packing Co.	c.1920	Contributing
1900 W. St. Paul Avenue	Schlitz Brewery Bar	1889	Contributing
1819 W. St. Paul Avenue	Milwaukee Structural Steel Co.	1910	Contributing
1818 W. St. Paul Avenue	Airgas Dry Ice	c.1990	Noncontributing
c.1755 W. St. Paul Avenue	American Radiator Company	c.1945	Contributing
1739 W. St. Paul Avenue	Bill Doran Wholesale Florist	c.1925	Contributing
1719 W. St. Paul Avenue	Garnet Abrasive	c.1925	Contributing
1701 W. St. Paul Avenue	House of Stone	c.1920	Contributing
1700 W. St. Paul Avenue	National Blower Works / Geuder, Paeschke & Frey Co.	c.1940	Contributing
1635 W. St. Paul Avenue	Geuder, Paeschke & Frey Co.	1924	Contributing
1505-1601 W. St. Paul Avenue	Geuder, Paeschke & Frey Co. Enameling Department	c.1910	Contributing
1500 W. St. Paul Avenue	Geuder, Paeschke & Frey Co.	c.1940	Contributing
422 N. 15th Street	Milwaukee Casket Company	1901	Contributing
1418 W. St. Paul Avenue	Milwaukee Casket Company	1929	Contributing
324 N. 15th Street	Geuder & Paeschke Mfg. Co.	1890	Contributing
1316 W. St. Paul Avenue	Cutler-Hammer, Inc.	1949	Contributing
405 N. 12th Street	Materion Advanced Chemicals	c.1990	Noncontributing
1215 W. St. Paul Avenue	Cutler-Hammer, Inc.	c.1890	Contributing
1127 W. St. Paul Avenue	M. Hilty Lumber Co.	1912	Contributing
1133 Mt. Vernon Avenue	Northwestern Fuel Company Office	c.1915	Contributing
272-274 N. 12th Street	Cutler-Hammer Inc. Administration Building	1929	Contributing
1101 W. St. Paul Avenue	Cutler-Hammer Motor Switch Plant Addition	1951	Contributing

Architectural Description

The proposed West St. Paul Avenue Industrial Historic District consists of 24 industrial properties and one tavern, located in Milwaukee's Menomonee Valley along W. St. Paul Avenue. With the exception of two modern industrial buildings, all of these properties are contributing elements within the proposed district, which is located along a rail corridor between the Menomonee River and Interstate 94 and extends on either side of the 16th Street Viaduct. With industrial buildings constructed between c.1890 and 1951, the district displays a mixture of astylistic utilitarian building types, some of which display modest ornamentation typical of the period in which they were constructed. The district also retains a Queen Anne tavern that would have historically served workers in the nearby factories. The setbacks are minimal, and facades are immediately behind the sidewalk. Most properties feature cream or red brick walls, and several feature stone accents. While many buildings have altered windows and portions of several larger complexes have been demolished (the Geuder, Paeschke & Frey; Milwaukee Casket Company; and Cutler-Hammer complexes have each lost at least one historic-age building), overall the properties display limited changes or alterations and retain good integrity.

Significance

The West St. Paul Avenue Industrial Historic District is potentially eligible under *Criterion C: Architecture* as an intact grouping of industrial buildings from the late-nineteenth through mid-twentieth centuries. The period of significance spans the dates of construction, c.1890-1951. While Milwaukee's Menomonee Valley still possesses many industrial buildings, modern infill and demolition have been prevalent. The proposed district represents a large cohesive collection of historic industrial resources along a corridor that extends the equivalent of 12 city blocks. With resources associated with several important manufacturers, including Geuder, Paeschke & Frey and Cutler-Hammer, the proposed district reflects Milwaukee's industrial development from the late-nineteenth through the World War II-era of expansion.

Boundary Description

The boundary for the proposed district encompasses the current legal lots associated with the parcels along the south side of W. St. Paul Avenue from 2045 to 1101 W. St. Paul Avenue, and excludes a vacant lot and modern office at the southwest corner of W. St Paul and N. 13th Street. The boundary also encompasses the current legal lots associated with the parcels along the north side of W. St. Paul Avenue from 1906 W. St. Paul Avenue to N. 13th Street. A proposed boundary map is included on page 49.

Boundary Justification

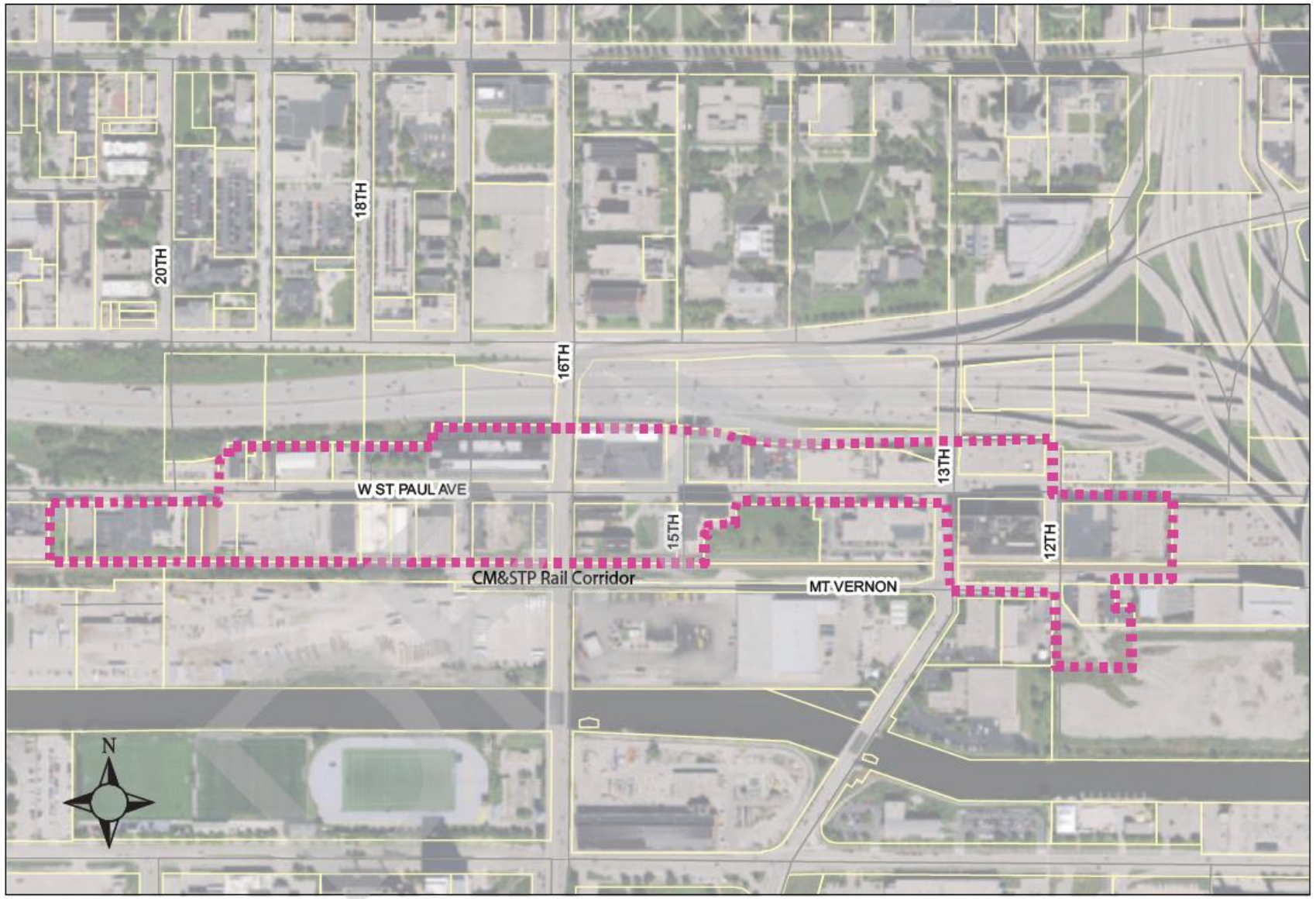
The district boundary corresponds to the historic area associated with these properties and provides an appropriate setting.

Figure 32. 1819-1739 W. St. Paul Avenue, view facing southeast.

Figure 33. View along W. St. Paul Avenue from 16th Street viaduct, facing southwest.

Figure 34. View from W. St. Paul Avenue and N. 15th Street, facing northwest.

Figure 35. Geuder, Paeschke & Frey factory, 324 N. 15th Street, view facing southeast.



Proposed Boundary Map
West St. Paul Avenue Industrial Historic District
Milwaukee, Milwaukee County

THIS PAGE INTENTIONALLY LEFT BLANK

Bibliography

"Addition for Allen-Bradley." *Chilton's Automotive Industries* 38, no. 20 (May 16, 1918): 980.

Aikens, Andrew J. *Men of Progress, Wisconsin: A Selected List of Biographical Sketches and Portraits of the Leaders in Business*. Milwaukee, Wis.: Evening Wisconsin Co., 1897.

"American Inventors." *The National Magazine* 18, no. 1 (1893).

American Society of Mechanical Engineers. *Condensed Catalogues of Mechanical Equipment*. New York: American Society of Mechanical Engineers, 1916.

An Illustrated Description of Milwaukee, 1890.

Anderson, Harry H., and Frederick I. Olson. *Milwaukee at the Gathering of the Waters*. American Portrait Series. Tulsa, Okla.: Continental Heritage Press, Inc., 1981.

"Army Trailer Order for Lavine Gear Co." *The Milwaukee Journal*, November 10, 1939.

Avey, D.M. "Milwaukee Foundries Serve All Industry." *The Iron Trade Review* 63, no. 14 (October 3, 1918): 109–15.

Barrett, Rick. "BRP Shows off Sturtevant Evinrude Plant." *Milwaukee Journal Sentinel*, August 21, 2012. http://www.jsonline.com/business/brp-shows-off-sturtevant-evinrude-plant-ld6iqv7-166962576.html.

Begley, Sarah, By Sarah Begley, By Sarah Begley, By Sarah Begley, By Sarah Begley, By Sarah Begley, By Sarah Begley, By Sarah Begley, By Sarah Begley, and By Sarah Begley. "The 13 Most Influential Candy Bars of All Time." *Time*. Accessed August 30, 2016. http://newsfeed.time.com/2014/02/18/13-most-influential-candy-bars-of-all-time/slide/chicken-dinner/.

Bjork, Kenneth. "Ole Evinrude and the Outboard Motor." *Norwegian-American Studies* 12 (1941).

Boston Manufacturers Mutual Fire Insurance Company, Insurance Engineering Experiment Station. *Report No. 5: Slow Burning or Mill Construction*. 3rd ed. Boston: Boston Manufacturers Mutual Fire Insurance Company, 1908.

Bradley, Betsy H. *The Works: The Industrial Architecture of the United States*. Oxford University Press, 1999.

Bradley, Harry L. "Allen-Bradley: An American Story," 1957. Rockwell Automation. http://www.rockwellautomation.com/resources/downloads/rockwellautomation/pdf/about-us/history/Harry_L_Bradley_manuscript.pdf.

Briggs & Stratton Corporation. "The History of Briggs & Stratton." Briggs & Stratton Corporation, 1985. Briggs & Stratton Company Collection. Milwaukee County Historical Society.

Broekel, Ray. *The Chocolate Chronicles*. Wallace-Homestead Book Co., 1985.

"Changing With the Times." Allen-Bradley Company, 1987. http://www.rockwellautomation.com/resources/downloads/rockwellautomation/pdf/about-us/history/1987ChangingwithTimes_Ch01-04.pdf.

City of Milwaukee. *Bay View Neighborhood Historic Resources Survey: Volume II*. Milwaukee, Wis., July 1990.

———. *Lower East Side Neighborhood Historic Resources Survey*. Milwaukee, Wis., February 1988.

———. *Northeast Side Comprehensive Plan*, July 21, 2009.

City of Milwaukee, Historic Preservation Commission. *Historic Designation Study Report, Clinton Street Filling Station*. Accessed August 15, 2016. http://www.city.milwaukee.gov/ImageLibrary/Groups/cityHPC/StudyReports/vticnf/ClintonStFillingStation1999.pdf.

———. *Historic Designation Study Report: Johnson Service Company Building*, November 16, 1998. http://www.city.milwaukee.gov/ImageLibrary/Groups/cityHPC/StudyReports/vticnf/JohnsonServiceCoBuilding1998.pdf.

———. *Historic Designation Study Report, State Street Bridge*. Accessed August 15, 2016. http://www.city.milwaukee.gov/ImageLibrary/Groups/cityHPC/DesignatedReports/vticnf/StateStBridge.pdf.

City of Milwaukee Department of City Development. *Central Business District Historic Resources Survey*. Milwaukee, Wis., March 1986.

———. *South Side Neighborhood Historic Resources Survey: Final Report*. Milwaukee, Wis., July 1987.

"Cleaver-Brooks Company Facts." *Cleaver-Brooks*, 2011. http://www.cleaver-brooks.com/Copyright.aspx.

Cobb, Harold M. *The History of Stainless Steel*. ASM International, 2010.

Crowell, Benedict, and Robert Forrest Wilson. *The Armies of Industry*. Yale University Press, 1921.

Cutler-Hammer, Inc. *50 Years Ago*. Milwaukee, Wis.: Cutler-Hammer, Inc., 1942.

———. "Annual Report, 1950," 1951. Milwaukee County Historical Society.

Daykin, Tom. "Leather Goods." *Chicago Tribune*. June 8, 1997. http://articles.chicagotribune.com/1997-06-08/business/9706080205_1_leather-goods-apartments-zoning-appeals.

Desmond, Kevin. *Innovators in Battery Technology: Profiles of 95 Influential Electrochemists*. McFarland, 2016.

Draeger, Jim, and Mark Speltz. *Bottoms Up: A Toast to Wisconsin's Historic Bars & Breweries*. Madison, Wis.: State Historical Society of Wisconsin, n.d.

"'E' Flag Unfurled at Ben-Hur Plant." *The Milwaukee Journal*, May 1, 1943.

F. Mayer Boot & Shoe Co. "F. Mayer Boot & Shoe Co.. Bill.," 1916. Printed Ephemera. Columbia Digital Library Collections [Columbia University Libraries].

Fehring, Thomas. "Milwaukee's Industrial Heritage." presented at the American Society of Mechanical Engineers Milwaukee Chapter, Grohmann Museum, May 18, 2016.

Fehring, Thomas. *Mechanical Engineering: A Century of Progress*. NorCENergy Consultants, LLC, 1980.

Framberger, David J. *Landmark Inventory - Nomination Form: A.O. Smith Research and Engineering Building*. Milwaukee, Wis: Milwaukee Landmarks Commission, 1977.

Gant, Jesse J., and Nicholas J. Hoffman. *Wheel Fever: How Wisconsin Became a Great Bicycling State*. Wisconsin Historical Society, 2013.

Gantz, Carroll. *Refrigeration: A History*. Jefferson, NC: McFarland & Company, 2015. https://books.google.com/books?id=0UgjCgAAQBAJ&source=gbs_navlinks_s.

Geib, Paul E. "'Everything But the Squeal': The Milwaukee Stockyards and Meat-Packing Industry, 1840-1930." *Wisconsin Magazine of History* 78, no. 1 (Autumn 1994): 3–23.

Gurda, John. *Miller Time: A History of Miller Brewing Company, 1855-2005*. Milwaukee, Wis: Miller Brewing Company, 2005.

———. "Motown West." *Milwaukee Journal Sentinel*, July 4, 2009. http://www.jsonline.com/news/opinion/49747522.html.

———. *The Making of Milwaukee*. Milwaukee, Wis.: Milwaukee County Historical Society, 2008.

———. "The Menomonee Valley: A Historical Overview," n.d. http://www.renewthevalley.org/media/mediafile_attachments/04/4-gurdavalleyhistory.pdf.

———. "The Menomonee Valley: A Historical Overview," n.d. http://www.renewthevalley.org/media/mediafile_attachments/04/4-gurdavalleyhistory.pdf.

———. *The West End: Merrill Park, Pigsville, Concordia*. Milwaukee, Wis.: Milwaukee Humanities Program, 1980.

Harger, Charles B. *Milwaukee Illustrated. Its Trade, Commerce, Manufacturing Interests, and Advantages as a Residence City...* Milwaukee, Wis.: W. W. Coleman, 1877.

Hartel, Richard W., and AnnaKate Hartel. *Candy Bites: The Science of Sweets*. Springer Science & Business Media, 2014.

Hendrickson III, Kenneth E. *The Encyclopedia of the Industrial Revolution in World History*. Rowman & Littlefield, 2014.

"Henry Holt Uihelin Sr." *JSOline Legacy*, n.d. http://www.legacy.com/obituaries/jsonline/obituary.aspx?pid=153421274.

Historic Highway Truss Bridges in Wisconsin. Vol. 2. Madison, Wis.: Wisconsin Department of Transportation, 1998.

"History | Perlick Corporation." Accessed September 20, 2016. http://www.perlick.com/about/history/.

History of Milwaukee, Wisconsin: From Prehistoric Times to the Present Date ... Milwaukee Genealogical Society, 1881.

Hyde, Charles K. *Storied Independent Automakers: Nash, Hudson, and American Motors*. Detroit: Wayne State University Press, 2009.

"Johnson Controls Automatic Temperature Control System: A Historic Mechanical Engineering Landmark." American Society of Mechanical Engineers, May 28, 2008. https://www.asme.org/getmedia/740f9feb-07c3-4d09-aea0-d4b0138792e5/244.aspx.

Jones, Meg. "Keeping Allen-Bradley Clock Running Is On His Watch." *Milwaukee Journal Sentinel*, January 28, 2016. http://www.jsonline.com/greensheet/keeping-allen-bradley-clock-running-is-on-his-watch-b99653997z1-366862831.html.

Kawash, Samira. *Candy: A Century of Panic and Pleasure*. Macmillan, 2013.

Landscape Research. *Built in Milwaukee: An Architectural View of the City*. Prepared for the City of Milwaukee, 1981.

———. *Built in Milwaukee: An Architectural View of the City*. Prepared for the City of Milwaukee, 1981.

Louis Allis Company. "Welcome to Our Guests," 1957. Louis Allis Company - Mss-1670, Box 3, Folder 33. Milwaukee County Historical Society.

"Louis Allis News." Louis Allis Company, January 1957. Louis Allis Company - Mss-1670, Box 3, Folder 30. Milwaukee County Historical Society.

"Main Plant of La Fayette Motors Corporation to Milwaukee." *Milwaukee* 2, no. 4 (January 1922): 5.

Milwaukee: A Half Century's Progress, 1846-1896. Milwaukee, Wis.: Consolidated Illustrating Co., 1896.

Milwaukee Chamber of Commerce. *Annual Report 1879*. Milwaukee, Wis., 1880.

Milwaukee City Directory, 1910. Wright Directory Co., 1910.

Milwaukee City Directory, 1930. Wright Directory Co., 1930.

Milwaukee City Directory, 1936. Wright Directory Co., 1936.

Milwaukee City Directory, 1940. Wright Directory Co., 1940.

Milwaukee City Directory, 1958, n.d.

"Milwaukee Plant of Nash Motors Co. Model of Its Kind." *Milwaukee* 1, no. 5 (January 1922): 21.

"Milwaukee, Wis." *Shoe and Leather Reporter* 43 (June 30, 1887). https://books.google.com/books?id=Wfg-AQAAMAAJ&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false.

Milwaukee's Great Industries, 1892.

"Miscellaneous." *Iron Age*, May 5, 1904, 41–42.

Mullins, Robert. "Louis Allis: What Happened?" *Milwaukee Business Journal*, December 6, 1998. http://www.bizjournals.com/milwaukee/stories/1998/12/07/focus1.html.

Munce, James F. *Industrial Architecture: An Analysis of International Building Practice*. New York: F.W. Dodge Corporation, 1960. http://hdl.handle.net/2027/wu.89018321356.

"Nash Enlarging Plants for Production of 300 Cars a Day." *Motor Age* 52, no. 2 (July 13, 1922): 32.

"Nash Factory Has Shipped Over $20,000,000 Products." *Motor Age* 52, no. 20 (November 16, 1922): 35.

"Nash Increases Floor Space" 1, no. 11 (July 1922): 18.

National Register of Historic Places, Pabst Brewing Company Complex, Milwaukee, Milwaukee County, Wisconsin. National Register #03001165.

———, Wisconsin Leather Company Buildings, Milwaukee, Milwaukee County, Wisconsin. National Register # 05000250.

———, Blatz Brewery Complex. National Register #86000793.

———, Commerce Street Power Plant, Milwaukee, Milwaukee County, Wisconsin. National Register #99000761.

———, Harley-Davidson Motorcycle Company, Milwaukee, Milwaukee County, Wisconsin. National Register # 86003850.

———, Walker's Point Historic District, Milwaukee, Milwaukee County, Wisconsin. National Register #19781219.

"Obituary: Emil C. Kropp." *The American Stationer* 63, no. No. 2 (January 11, 1908). https://books.google.com/books?id=r2VYAAAAYAAJ&dq=emil+c+kropp&q=kropp#v=snippet&q=kropp&f=false.

Oliver, Garrett. *The Oxford Companion to Beer*. Oxford University Press, USA, 2011.

"Our Timeline." *A.A. Laun Furniture Company*, n.d. http://aalaun.com/timeline/.

Perlick, Hilbert R. "Beverage Dispenser," November 11, 1941. http://www.google.com/patents/US2262043.

Raymond H. Merritt, and Carol L. Snook. *Milwaukee's Menomonee Valley: An Inventory of Historic Engineering and Industrial Sites*. Milwaukee, Wis.: prepared for the National Architectural and Engineering Record, U.S. Department of Interior, 1980.

Reed, Ruddell. *Plant Layout: Factors, Principles, and Techniques*. Irwin Series in Management. Homewood, Ill.: R. D. Irwin, 1961. //catalog.hathitrust.org/Record/001044836.

"Remembering an Era: 1921-1958." American Society of Mechanical Engineers, 1979. https://www.asme.org/getmedia/5d725794-06d2-4873-82e2-c4bbe25ced72/37-AOSmith-Automatic-Frame-Plant.aspx.

Rodengen, Jeffrey L. *The Legend of Briggs & Stratton*. Write Stuff Syndicate, 1995.

"Sanborn Fire Insurance Company, Milwaukee, 1894, Volume 3." New York: Sanborn Map Company, 1894.

"Sanborn Fire Insurance Company, Milwaukee, 1894, Volume 4." New York: Sanborn Map Company, 1894.

"Sanborn Fire Insurance Company, Milwaukee, 1910, Volume 2." New York: Sanborn Map Company, 1910.

"Sanborn Fire Insurance Company, Milwaukee, 1910, Volume 4." New York: Sanborn Map Company, 1910.

"Sanborn Fire Insurance Company, Milwaukee, 1910, Volume 6." New York: Sanborn Map Company, 1910.

"Sanborn Fire Insurance Company, Milwaukee, 1910-Revised 1937, Volume 6." New York: Sanborn Map Company, 1937.

"Sanborn Fire Insurance Company, Milwaukee, 1910-Revised 1951, Volume 3." New York: Sanborn Map Company, 1951.

"Sanborn Fire Insurance Company, Milwaukee, 1910-Revised 1951, Volume 4." New York: Sanborn Map Company, 1951.

"Sanborn Fire Insurance Company, Milwaukee, 1910-Revised 1951, Volume 5." New York: Sanborn Map Company, 1951.

"Sanborn Fire Insurance Company, Milwaukee, 1910-Revised 1951, Volume 6." New York: Sanborn Map Company, 1951.

"Sanborn Fire Insurance Company, Milwaukee, 1910-Revised 1951, Volume 8." New York: Sanborn Map Company, 1951.

"Sanborn Fire Insurance Company, Milwaukee, 1910-Revised 1951, Volume 9." New York: Sanborn Map Company, 1951.

"Sanborn Fire Insurance Company, Milwaukee, 1927, Volume 9." New York: Sanborn Map Company, 1927.

"Serving the World's Major Industries since 1886." *Nordberg Progress* 20, no. 2 & 3 (Third Quarter 1961): 2–7.

Silverman, A.A. "Special 125th Anniversary Issue on the History of Vilter Manufacturing Corporation." *Vilter Booster* 45, no. 2 (Summer 1992).

Simon, Roger D. "The City Building Process: Housing and Service in New Milwaukee Neighborhoods 1880-1910." *Transactions of the American Philosophical Society* 68, no. 5 (1978): 1–64.

"Site File - AHI No. 56661." Wisconsin Historical Society, n.d. Site Files. Wisconsin State Historic Preservation Office.

Smith, Franklin H. *A Study of the Wisconsin Wood-Using Industries*. Madison, Wis.: Democrat Printing Co., 1910.

Stone, Fanny S., ed. *Racine, Belle City of the Lakes, and Racine County, Wisconsin: A Record of Settlement, Organizations, Progress and Achievement*. Vol. 1. 2 vols. Chicago: The S.J. Clarke Publishing Company, 1916. https://archive.org/stream/racinebellecity02ston#page/333/mode/2up.

"The Louis Allis Company," n.d. Louis Allis Company - Mss-1670, Box 3, Folder 33. Milwaukee County Historical Society.

The Merchants' and Manufacturers' Association of Milwaukee. *Industrial Milwaukee: The Great Manufacturing Heart of the Northwest*. Milwaukee, Wis.: J.H. Yewdale & Sons Co., 1903.

The Milwaukee Association of Commerce. "Main Plant of La Fayette Motors Corporation to Milwaukee." *Milwaukee: A Magazine for Her Business Leaders*, January 1923.

"The Mystery of Milwaukee Feeds and Supplies the World." *Milwaukee Public Library*, January 13, 2016. http://www.mpl.org/blog/now/the-mystery-of-milwaukee-feeds-and-supplies-the-world.

Theobald, Mark. "W.S. Seaman Co." *Coachbuilt*, 2004. http://www.coachbuilt.com/bui/s/seaman/seaman.htm.

Timm, Michael. *Coakley Brothers: Moving Milwaukee Since 1888*. Hartland, Wis.: OneTouchPoint, 2013.

Tyrrell, H. G. *A Treatise on the Design and Construction of Mill Buildings and Other Industrial Plants*. Chicago, New York: The Myron C. Clark Publishing Co.; [etc., etc.], 1911. https://catalog.hathitrust.org/Record/001613438.

Tyrrell, Henry Grattan. *Engineering of Shops and Factories*. New York: McGraw-Hill Company, 1912. https://catalog.hathitrust.org/Record/100308163.

Usher, Ellis Baker. *Wisconsin: Its Story and Biography, 1848-1913*. Lewis publishing Company, 1914.

Wadlin, Horace Greeley. *Labor and Industrial Chronology of the Commonwealth of Massachusetts*. Boston: Wright & Potter Printing Co., 1901.

Watrous, Jerome Anthony. *Memoirs of Milwaukee County: From the Earliest Historical Times Down to the Present, Including a Genealogical and Biographical Record of Representative Families in Milwaukee County*. Western Historical Association, 1909.

Williamson, Oliver E., and Sidney G. Winter. *The Nature of the Firm: Origins, Evolution, and Development*. Oxford University Press, 1993.

Wisconsin Historical Society. "AHI No. 110926 - Herman Barkow Co." Http://wisahrd.org/AHI/Properties/Primary.aspx?id=110926. *Wisconsin Historic Preservation Database*, n.d.

———. "William P. Froehlich Paper Warehouse - AHI #115918." *Wisconsin Historic Preservation Database*, n.d. http://wisahrd.org/AHI/Properties/Primary.aspx?id=115918.

Wood, Ron. *Into the Value Zone: Gaining and Sustaining Competitive Advantage*. University Press of America, 2008.

Wright's Milwaukee City Directory, 1900. Milwaukee, Wis.: Wright Directory Co., 1900.

Wright's Milwaukee City Directory, 1905. Milwaukee, Wis.: Wright Directory Co., 1905.

Wright's Milwaukee City Directory, 1910. Milwaukee, Wis.: Wright Directory Co., 1910.

Wright's Milwaukee City Directory, 1920. Milwaukee, Wis.: Wright Directory Co., 1920.

Wright's Milwaukee City Directory, 1924. Milwaukee, Wis.: Wright Directory Co., 1924.

Wright's Milwaukee City Directory, 1928. Milwaukee, Wis.: Wright Directory Co., 1928.

Wyatt, Barbara, ed. *Cultural Resource Management in Wisconsin*. Vol. 1–3. Madison, Wis.: State Historical Society of Wisconsin, 1986.

———. *Cultural Resource Management in Wisconsin*. Vol. 1–3. Madison, Wis.: State Historical Society of Wisconsin, 1986.

Young, William H., and Nancy K. Young. *The Great Depression in America: A Cultural Encyclopedia*. Greenwood Publishing Group, 2007.

Appendix A. List of Surveyed Properties

THIS PAGE INTENTIONALLY LEFT BLANK

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
29269	-	BUILDING 41 - MILLER BREWING CO.	703 N 39TH ST	BREWING
16451	ZINN MALTING	KURTH MALTING CO.	300-350 S WATER ST	BREWING
16655	BLATZ BREWERY BOTTLING HOUSE	PABST BREWING CO. CORPORATE HEADQUARTERS/MSOE CAMPUS CENTER	1015 N BROADWAY	BREWING
31787	BREWHOUSE	BUILDING 1	4003 W STATE ST	BREWING
31788	EAST PACKAGING CENTER	BUILDING 26	4036 W STATE ST	BREWING
31789	QUALITY CONTROL LAB AND NORTH PACKAGING PLANT	BUILDING 29	4036 W STATE ST	BREWING
42078	MILLER BREWING CO.	MILLER BREWERY	4000 W STATE ST	BREWING
112470	GOES & FALK BREWERY/FALK, JUNG, & BORCHERT BREWERY	-	639-641 S 29TH ST	BREWING
113523	-	MILLER BREWING COMPANY	3939 W HIGHLAND BLVD	BREWING
115099	-	REPLICA FREDERICK MILLER'S PLANK ROAD BREWERY	MILLER BREWING COMPANY	BREWING
115100	-	BUILDING 9 - MILLER BREWING CO.	MILLER BREWING COMPANY	BREWING
115104	-	BUILDING 34 - MILLER BREWING CO.	MILLER BREWING COMPANY	BREWING
115255	GETTLEMAN BREWING CO. (MVIS, 1980)	BUILDING 56 & 57 - MILLER BREWING CO.	4400 W STATE ST	BREWING
115256	GETTLEMAN BREWING CO. (MVIS, 1980)	BUILDING 54-55 - MILLER BREWING CO.	4300 W STATE ST	BREWING
115262	MILLER BREWING CO. ADMINISTRATION BUILDING	BUILDING 35 - MILLER BREWING CO.	3930 W STATE ST	BREWING
115472	JUNG BREWING COMPANY BOTTLING HOUSE	HEIN ELECTRIC SUPPLY COMPANY	W CHERRY ST	BREWING
116380	-	BUILDING 33 - MILLER BREWING COMPANY	925 N 40TH ST	BREWING
119412	BLATZ BREWERY WAREHOUSE	-	1101 N MARKET ST	BREWING

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
232361	-	MILLER BREWERY TRAINING CENTER	4101 W BLUEMOUND RD	BREWING
115101	-	BUILDING 39 - MILLER BREWING CO.	MILLER BREWING COMPANY	BREWING
115102	-	BUILDING 50 - MILLER BREWING CO.	MILLER BREWING COMPANY	BREWING
115103	-	BUILDING 30 - MILLER BREWING CO.	MILLER BREWING COMPANY	BREWING
115259	-	BUILDING 61 & 58 - MILLER BREWING CO.	4135 W STATE ST	BREWING
115260	-	MILLER BREWING CO.	4122 W STATE ST	BREWING
115261	-	BLDG. 15,16,17,18 - CORP. QLTY. CTR. MILLER BREWING CO.	4025 W STATE ST	BREWING
116533	-	BUILDINGS 43, 20 - MILLER BREWING COMPANY	850 N 41ST ST	BREWING
97912	GEO. GRADY & BROS. CARRIAGE FACTORY	MILWAUKEE TOOL & MACHINE	524 S 2ND ST	CARRIAGE AND WAGON WORKS
109249	CRYSTAL SOAP CO.	STONE CREEK CO.	422 N 5TH ST	CHEMICAL PRODUCTION
232341	MILWAUKEE SOAP	LARKIN BROS. FOODS	1526 N 31ST ST	CHEMICAL PRODUCTION
232346	BADGER PAINT & HARDWARE	NAPA AUTO PARTS	5001 W STATE ST	CHEMICAL PRODUCTION
108650	RICKER, MCCULLOUGH & DIXON SOAP FACTORY	SOAPWORKS LOFTS	418 N 3RD ST	CHEMICAL PRODUCTION
56661	EAGLE KNITTING	EAGLE KNITTING MILLS	507 S 2ND ST	CLOTHING PRODUCTION
94743	MILWAUKEE GLOVE CO.	EKAY KNITTING MILL/GREAT LAKES PRINTING/DIENAMES	1419 W NATIONAL AVE	CLOTHING PRODUCTION
98767	NATL. STRAW WORKS CO. (SANBORN 1910)	-	1223 S 23RD ST	CLOTHING PRODUCTION
101565	EAGLE KNITTING	SHERWIN WILLIAMS PROFESSIONAL & INDUSTRIAL SALES	113 W VIRGINIA ST	CLOTHING PRODUCTION
103230	ALBERT G. SEEBOTH CO.	-	212 E MINERAL ST	CLOTHING PRODUCTION
103893	SLOCUM STRAW WORKS (NORTHWESTERN STRAW WORKS)	ASTRONAUTICS CORP. OF AMERICA - PLANT 4.	1400-1426 W NATIONAL AVE	CLOTHING PRODUCTION

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
108484	F. KUEHN BOOT AND SHOE CO.	WALKER'S POINT ANTIQUE CENTER	1134 S 1ST ST	CLOTHING PRODUCTION
109985	GOLL AND FRANK CLOTHING FACTORY	HOLSBACH CORPERATION	1748 N 13TH ST	CLOTHING PRODUCTION
111482	HOLEPROOF HOSIERY	IRON MOUNTAIN RECORDS MANAGEMENT	400 N 5TH ST	CLOTHING PRODUCTION
113223	GEM HAMMOCK & FLY NET CO.	EVERITT KNITTING MILL OUTLET STORE	234 W FLORIDA ST	CLOTHING PRODUCTION
115986	WEST SIDE MFG. CO./SASH, DOOR & BLIND	CONTINENTAL TEXTILE	3100 W WALNUT	CLOTHING PRODUCTION
118182	MILWAUKEE WOOL CARDING MILLS	FRIENDSHIP CLUB	2245 W FOND DU LAC AVE	CLOTHING PRODUCTION
232364	AMERICAN LINEN	ALSCO	1003 W NORTH AVE	CLOTHING PRODUCTION
232467	MACHINE & THREAD COMPANY	-	3110 W VILLARD AVE	CLOTHING PRODUCTION
114890	WEYENBERG SHOE CO.	-	234 E RESERVOIR	CLOTHING PRODUCTION
232414	SIMPLEX SHOE MANUFACTURERS	MEDOVATIONS	102 E KEEFE AVE	CLOTHING PRODUCTION
103561	STANDARD OIL CO.	NATIONAL RECYCLING INC.	228 E NATIONAL AVE	COAL AND PETROLEUM PRODUCTS
79250	NORTHWESTERN FUEL COMPANY OFFICE	VEHICLE TOWING	1133 MT VERNON	COAL AND PETROLEUM PRODUCTS
99276	MILWAUKEE COKE & GAS CO.	-	311 E GREENFIELD AVE	COAL AND PETROLEUM PRODUCTS
99279	MILWAUKEE COKE & GAS CO.	-	311 E GREENFIELD AVE	COAL AND PETROLEUM PRODUCTS
232534	LALLEMAND BIOFUELS AND DISTILLED SPIRITS	-	6120 W DOUGLAS AVE	COAL AND PETROLEUM PRODUCTS
108473	WADHAMS OIL CO.	AUSTRONAUTICS CORP. OF AMERICA	907 S 1ST ST	COAL AND PETROLEUM PRODUCTS
108822	STANDARD OIL CO. INC.	-	840 S BARCLAY ST	COAL AND PETROLEUM PRODUCTS

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
232656	MILWAUKEE GAS LIGHT COMPANY, WEST SIDE PLANT, CONTROL TOWER AND ENGINE HOUSE	-	2122 W MT VERNON AVE	COAL AND PETROLEUM PRODUCTS
232657	MILWAUKEE GAS LIGHT COMPANY, WEST SIDE PLANT, CONDENSER HOUSE	-	2122 W MT VERNON AVE	COAL AND PETROLEUM PRODUCTS
232658	MILWAUKEE GAS LIGHT COMPANY, WEST SIDE PLANT, MACHINE SHOP	-	2122 W MT VERNON AVE	COAL AND PETROLEUM PRODUCTS
232659	MILWAUKEE GAS LIGHT COMPANY, WEST SIDE PLANT, PURIFIER BUILDING	-	200 N 25TH ST	COAL AND PETROLEUM PRODUCTS
16196	-	GEISER'S POTATO CHIPS, INC.	3113 W BURLEIGH ST	FOOD AND MEAT PRODUCTION
16747	USINGER SAUSAGE CO. ADDITION	-	C.1036 N 3RD ST	FOOD AND MEAT PRODUCTION
63421	PETER BARTH LIQUOR CO.	FORESEES PRODUCTS INC.	529 S 2ND ST	FOOD AND MEAT PRODUCTION
98329	CUDAHY BROS. BUILDING	PLANNED PARENTHOOD OF WISCONSIN, INC.	302 N JACKSON ST	FOOD AND MEAT PRODUCTION
98983	KRAUS-MERKEL MALTING CO.	NATIONAL WAREHOUSE CORP. BUILDING # 3	408 E BRUCE ST	FOOD AND MEAT PRODUCTION
98984	KRAUS-MERKEL MALTING CO.	FOX RIVER TRUCKING COMPANY & ROGERS CARTAGE	428-430 E BRUCE ST	FOOD AND MEAT PRODUCTION
98985	KRAUS-MERKEL MALTING CO.	NATIONAL WAREHOUSE CORP. HOUSE # 1 & # 2	448-468 E BRUCE ST	FOOD AND MEAT PRODUCTION
103124	AMERICAN MALTING CO. / E. KRAUSE	NATIONAL WAREHOUSE CORP. / FRESNO WINE	525-531 S WATER ST	FOOD AND MEAT PRODUCTION
103872	GRIDLEY DAIRY CO., S. SIDE MILK DEPOT	RVS-R-US	1123-1125 W NATIONAL AVE	FOOD AND MEAT PRODUCTION
103892	-	MILWAUKEE SAUSAGE CO.	1334 W NATIONAL AVE	FOOD AND MEAT PRODUCTION
104699	QUALITY BISCUIT CO.	SUNLITE PLASTICS, INC.	1506 W PIERCE ST	FOOD AND MEAT PRODUCTION
104701	QUALITY BISCUIT CO.	SUNLITE PLASTICS	1512 W PIERCE ST	FOOD AND MEAT PRODUCTION
104704	QUALITY BISCUIT CO.	TOOLS AND ABRASIVES INC.	1528 PIERCE ST	FOOD AND MEAT PRODUCTION

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
107214	CUDAHY BROS. CO. MEAT MARKET	STANDARD ROOFING	1804-1814 S KINNICKINNIC AVE	FOOD AND MEAT PRODUCTION
108474	SCHULTE AND CO.	SCHULTE POULTRY	918 S 1ST ST	FOOD AND MEAT PRODUCTION
109272	FIEBRANTZ & BENZ	KISSINGER MEATS AND POULTRY	1149 N 5TH ST	FOOD AND MEAT PRODUCTION
110930	-	CITY DRESSED BEEF, INC.	560 E ERIE ST	FOOD AND MEAT PRODUCTION
111430	SPERRY CANDY COMPANY	MAINSTAGE THEATRICAL SUPPLY CO.	127-133 W PITTSBURGH AVE	FOOD AND MEAT PRODUCTION
132938	GOLDEN GUERNSEY DAIRY	SCHUSTER METALS	2206 N 30TH ST	FOOD AND MEAT PRODUCTION
232288	OMAR BAKING COMPANY	-	2130 CLYBOURN AVE	FOOD AND MEAT PRODUCTION
232305	-	GAHN MEAT COMPANY	3319 N 35TH ST	FOOD AND MEAT PRODUCTION
232310	-	-	3243 N 32ND ST	FOOD AND MEAT PRODUCTION
232328	LAMBRECHT	-	2900 W CENTER ST	FOOD AND MEAT PRODUCTION
232332	-	-	2651 N 30TH ST	FOOD AND MEAT PRODUCTION
232344	-	NEPTUNE SANDWICHES	4706 W STATE ST	FOOD AND MEAT PRODUCTION
232347	MILK DAIRY	ALLIED WELDING SUPPLY	5042 W STATE ST	FOOD AND MEAT PRODUCTION
232363	GRIDLEY DAIRY	-	1351 W NORTH AVE	FOOD AND MEAT PRODUCTION
232366	GROESCHEL & SON	-	3157 W BURLEIGH ST	FOOD AND MEAT PRODUCTION
232378	DAIRY DISTRIBUTORS, INC.	-	1633 E NORTH AVE	FOOD AND MEAT PRODUCTION
232382	WHOLE FOOD PRODUCTS	MA BAERSCH'S OCEAN CAUGHT HERRING	1025 W LOCUST ST	FOOD AND MEAT PRODUCTION
232409	-	MILK PLANT	3950 N HOLTON ST	FOOD AND MEAT PRODUCTION
232567	LUICK DAIRY COMPANY SOUTH BRANCH	-	2738 S 13TH ST	FOOD AND MEAT PRODUCTION
232571	BLOCHOWIAK DAIRY COMPANY	-	2954 S 9TH ST	FOOD AND MEAT PRODUCTION
232622	OSWALD JAEGER BAKERY	-	918 W SOMMERS ST	FOOD AND MEAT PRODUCTION
113648	MILWAUKEE MALT & GRAIN / MILWAUKEE-WESTERN MALT/	CLEAN POWER, INC./KURTH MALT CORP. OFFICE	315-317 S WATER ST	FOOD AND MEAT PRODUCTION
120013	HEIN FLOUR & SUPPLY COMPANY	KURT VAN ENGEL COMPANY	211 W SEEBOTH	FOOD AND MEAT PRODUCTION
232404	-	UHAUL	505 E CAPITOL DR	FOOD AND MEAT PRODUCTION

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
108675	USINGER SAUSAGE CO. ADDITION	-	1016 3RD ST	FOOD AND MEAT PRODUCTION
109936	BUTTER WAREHOUSE	VISUALS PLUS	1715-1717 S 12TH ST	FOOD AND MEAT PRODUCTION
78294	CHARLES STOLPER COOPERAGE COMPANY OFFICE	VACANT	3232 W FOND DU LAC AVE	LUMBER MILLING AND WOOD PRODUCTS
78964	M. HILTY LUMBER CO.	ALDRICH CHEMICAL CO.	1127 W ST PAUL AVE	LUMBER MILLING AND WOOD PRODUCTS
78965	MILWAUKEE CASKET COMPANY	ACTION HEATING AND COOLING	1418 W ST PAUL AVE	LUMBER MILLING AND WOOD PRODUCTS
78969	MILWAUKEE CASKET COMPANY	ACTION HEATING AND COOLING	422 N 15TH ST	LUMBER MILLING AND WOOD PRODUCTS
99026	INTERIOR WOODWORK CO.	HESCO	913 W BRUCE ST	LUMBER MILLING AND WOOD PRODUCTS
99028	INTERIOR WOODWORKING CO.	MANDELLA BOX CO., EAGLE MOVING	929 W BRUCE ST	LUMBER MILLING AND WOOD PRODUCTS
99041	TAGGA LUMBER CO. OFFICE	MILLER COMPRESSING	1500B W BRUCE ST	LUMBER MILLING AND WOOD PRODUCTS
104616	CREAM CITY SASH & DOOR CO.	MILWAUKEE SCRAP METAL CO.	1200 W PIERCE ST	LUMBER MILLING AND WOOD PRODUCTS
104617	CREAM CITY SASH & DOOR CO.	MILWAUKEE SCRAP METAL	1236 W PIERCE ST	LUMBER MILLING AND WOOD PRODUCTS
111535	A.F. MECKELBURG SASH AND DOOR COMPANY	BROWN, INC.	2200 N 31ST ST	LUMBER MILLING AND WOOD PRODUCTS
115272	A.J. PIETSON WOODWORKING	A.J. PIETSON WOODWORKING	3535 W STATE ST	LUMBER MILLING AND WOOD PRODUCTS
232336	-	FRED'S DOORS	3123 W NORTH AVE	LUMBER MILLING AND WOOD PRODUCTS
232545	GENERAL LUMBER	COMMERCE GROUP CORP.	6001 N 91ST STREET	LUMBER MILLING AND WOOD PRODUCTS
232623	-	-	3404 N HOLTON ST	LUMBER MILLING AND WOOD PRODUCTS
113804	HILTY-FORSTER LUMBER CO. OFFICES	ACT GRAPHICS & ALTERNATIVE ENERGY DESIGNS	3846 W WISCONSIN AVE	LUMBER MILLING AND WOOD PRODUCTS

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
115974	NORTHWESTERN FURNITURE CO.	LAACKE & JOYS COMPANY	1433 N WATER ST	LUMBER MILLING AND WOOD PRODUCTS
117163	BADGER SASH & DOOR CO.	-	1737 N PALMER ST	LUMBER MILLING AND WOOD PRODUCTS
16200	A.O. SMITH CORPORATION RESEARCH AND ENGINEERING BUILDING	-	3533 N 27TH ST	MACHINERY/MANUFACTURING
16206	A.O. SMITH CORPORATION	-	3533 N 27TH ST	MACHINERY/MANUFACTURING
41968	ALLEN-BRADLEY CO.	ROCKWELL INTERNATIONAL	1201 S 2ND ST	MACHINERY/MANUFACTURING
78392	NATIONAL BLOWER WORKS / GEUDER, PAESCHKE & FREY CO	MITCHELL FURNITURE	1700 W ST PAUL AVE	MACHINERY/MANUFACTURING
78898	CUTLER-HAMMER INC. ADMINISTRATION BUILDING	VALLEY BUSINESS CENTER	272-274 N 12TH ST	MACHINERY/MANUFACTURING
79339	GUEDER, PAESCHKE & FREY COMPANY	GENERAL PRESS & FABRICATING COMPANY	1500 W ST PAUL AVE	MACHINERY/MANUFACTURING
89071	MILWAUKEE PRINTERS ROLLER CO.	BADGER PARTS DEPARTMENT, SCATHAIN	422 S 4TH ST	MACHINERY/MANUFACTURING
97918	AUTOMATIC SCREW MACHINE PRODUCTS	ATHLETIC EQUIPMENT REPAIR	530 S 2ND ST	MACHINERY/MANUFACTURING
98082	-	MILWAUKEE RADIATOR COMPANY	701-11 S 16TH ST	MACHINERY/MANUFACTURING
98444	-	BADGER TRAILER	415 S 3RD ST (S HALF)	MACHINERY/MANUFACTURING
98445	-	BADGER TRAILER	415 S 3RD ST (N HALF)	MACHINERY/MANUFACTURING
99039	MILW. MFG. CO. (1899) OILGEAR CO. (1924-1950'S)	DAVID BROWN CO.	1403 W BRUCE ST	MACHINERY/MANUFACTURING
99089	-	JORDAN MACHINERY CORPORATION	512-530 S 5TH ST	MACHINERY/MANUFACTURING
99090	-	JORDAN MACHINERY CORPORATION	530 S 5TH ST (N HALF)	MACHINERY/MANUFACTURING
99091	STEFFKE FREIGHT CO.	JORDAN MACHINERY CORPORATION	530 S 5TH ST (S HALF)	MACHINERY/MANUFACTURING
99286	ALLEN BRADLEY	ALLEN BRADLEY	136 W GREENFIELD AVE	MACHINERY/MANUFACTURING
99287	ALLEN BRADLEY	ALLEN-BRADLEY	136 W GREENFIELD AVE	MACHINERY/MANUFACTURING
99995	MILWAUKEE SPOKE & BENDING CO.	BADGER STATE TANNING CORP.	305 N 25TH ST	MACHINERY/MANUFACTURING
101584	W.W. GRAINGER, INC.	C.I. BANKER CO.	136 E WALKER ST	MACHINERY/MANUFACTURING

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
101691	-	MAGNATEK LOUIS ALLIS	427 E STEWART ST (SE CORNER OF S ALLIS ST)	MACHINERY/MANUFACTURING
101692	-	MAGNATEK LOUIS ALLIS	427 E STEWART ST	MACHINERY/MANUFACTURING
101693	MECHANICAL APPLIANCE CO.	MAGNATEK LOUIS ALLIS	427 E STEWART ST (E END OF COMPLEX)	MACHINERY/MANUFACTURING
102857	-	ASTRONAUTICS CORP.	133-35 E WASHINGTON ST	MACHINERY/MANUFACTURING
102859	-	CROWN METAL CO.	127 E WASHINGTON ST	MACHINERY/MANUFACTURING
103114	-	MILLER COMPRESSING CO.	900-954 S WATER ST	MACHINERY/MANUFACTURING
103115	-	B & H MACHINE MFG. CO.	828-34 S WATER ST	MACHINERY/MANUFACTURING
103117	WILLIAM STEEL AND SUPPLY / JACK LYNCH	THE LITZAU GROUP	818-820 S WATER ST	MACHINERY/MANUFACTURING
103899	-	COCHRANE COMPRESSOR CO.	1500 W NATIONAL AVE	MACHINERY/MANUFACTURING
103900	SIEBERS & RAISCH PATTERN WORKS	COCHRAINE COMPRESSOR CO.; AVILES PLASTICS	1500-1504 W NATIONAL AVE	MACHINERY/MANUFACTURING
106837	GENERAL WELDING & MFG. CO.	MEDVED TOOL & DIE CO.	325 W FLORIDA ST	MACHINERY/MANUFACTURING
108457	GENERAL ELECTRIC SUPPLY CORP.	KARP'S BAKERY SUPPLIES	540 S 1ST ST	MACHINERY/MANUFACTURING
108475	CH&E MANUFACTURING CO.	ZPC COATINGS	926 S 1ST ST (A.K.A. 112-120 E MINERAL ST)	MACHINERY/MANUFACTURING
108499	-	GREDE FOUNDRIES	1526 S 1ST ST	MACHINERY/MANUFACTURING
108501	-	GREDE FOUNDRIES	1534 S 1ST ST	MACHINERY/MANUFACTURING
108513	-	BUTTERS FETTING	1669 S 1ST ST (S HALF)	MACHINERY/MANUFACTURING
108535	ALLEN BRADLEY	ALLEN BRADLEY CO.	1201 S 2ND ST	MACHINERY/MANUFACTURING
109076	M. SHAPIRO COMMERCIAL	CREAM CITY WIPER CO.	1417 N 4TH ST	MACHINERY/MANUFACTURING
110095	GUEDER & PAESCHKE MFG. CO.	ACTION HEATING AND COOLING	324 N 15TH ST	MACHINERY/MANUFACTURING
111591	KIEL FURNITURE CO.	MASTER LOCK COMPANY	2600 N 32ND ST	MACHINERY/MANUFACTURING
111593	ROMADKA BROTHERS TRUNK & BAG FACTORY	BRIGGS AND STRTTON	2748 N 32ND ST	MACHINERY/MANUFACTURING
115137	LUTTER & GIES MACHINE SHOP	MILW. PRESS & MACHINE CO.	114 E PITTSBURGH AVE	MACHINERY/MANUFACTURING
116698	ROBERTS BRASS COMPANY	NELSON PATTERN COMPANY	306 E LINCOLN AVE	MACHINERY/MANUFACTURING

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
118759	FALK MANUFACTURING CO.	FALK CORP.	3001 W CANAL ST	MACHINERY/MANUFACTURING
119434	-	HARLEY-DAVIDSON	3410 W MCKINLEY BLVD	MACHINERY/MANUFACTURING
119971	MILWAUKEE FOUNDRY EQUIPMENT CO.	AQUA-MATIC PIERS, B&B PALLET	3238 W PIERCE ST	MACHINERY/MANUFACTURING
119974	AMERICAN MILL SUPPLY	SPECIAL ELECTRIC CO/SPECIAL MATERIALS CO/NORTHERN PRO, ESCUELA VERDE	3628 W PIERCE ST	MACHINERY/MANUFACTURING
232268	WISCONSIN GUN COMPANY, CUTLER-HAMMER INC.	JOY GLOBAL INDUSTRIES	4011 W GREENFIELD AVE	MACHINERY/MANUFACTURING
232276	INTERNATIONAL HARVESTER CO. WAREHOUSE	-	1875 W BRUCE ST	MACHINERY/MANUFACTURING
232277	INTERNATIONAL HARVESTER CO. WAREHOUSE	-	1875 W BRUCE ST	MACHINERY/MANUFACTURING
232293	BRADLEY WASH FOUNTAIN COMPANY	-	2203 W MICHIGAN ST	MACHINERY/MANUFACTURING
232294	-	-	3533 N 27TH ST	MACHINERY/MANUFACTURING
232295	A.O. SMITH CORPORATION	-	3420 N 35TH ST	MACHINERY/MANUFACTURING
232296	A.O. SMITH CORPORATION	-	3600 N 35TH ST	MACHINERY/MANUFACTURING
232308	MILWAUKEE BRIDGE COMPANY	-	3282 N 35TH ST	MACHINERY/MANUFACTURING
232313	LOGEMANN BROTHERS	-	3232 W BURLEIGH ST	MACHINERY/MANUFACTURING
232317	ATLAS METAL PARTS	-	3232 N 31ST ST	MACHINERY/MANUFACTURING
232322	-	STEEL PRODUCTS MFG. CO. INC.	3258 W FOND DU LAC AVE	MACHINERY/MANUFACTURING
232352	LUDELL MANUFACTURING	-	5200 W STATE ST	MACHINERY/MANUFACTURING
232353	-	BADGER ALLOYS MACHINE SHOP	1152 N 54 TH ST	MACHINERY/MANUFACTURING
232354	-	HEAT TREATING ENGINEERS	1146 N 54TH ST	MACHINERY/MANUFACTURING
232355	ACME IRON & STEEL CO.	-	5329 W STATE ST	MACHINERY/MANUFACTURING
232362	-	-	1532 W GALENA ST	MACHINERY/MANUFACTURING
232370	EVINRUDE MOTORS	-	4143 N 27TH ST	MACHINERY/MANUFACTURING
232372	C.B. COTTRELL & SONS	TRAMONT LLC	3701 N HUMBOLDT BLVD	MACHINERY/MANUFACTURING

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
232380	-	MOTO-SCOOT	1420 N NEWHALL	MACHINERY/MANUFACTURING
232384	J.W. SPEAKER CORP.	HI FI LOFTS	3059 N WEIL ST	MACHINERY/MANUFACTURING
232390	CLEAVER-BROOKS COMPANY	COMPO STEEL PRODUCTS	326 E KEEFE AVE	MACHINERY/MANUFACTURING
232391	BEN HUR MANUFACTURING CO	-	600 E KEEFE AVE	MACHINERY/MANUFACTURING
232400	GLOBE UNION MANUFACTURING CO.	C & D TECHNOLOGIES	910 E KEEFE	MACHINERY/MANUFACTURING
232402	-	F. BARLOW & BURKE CANDY	3830 N FRATNEY ST	MACHINERY/MANUFACTURING
232412	METAL PRODUCTS CORP.	-	245 E KEEFE AVE	MACHINERY/MANUFACTURING
232421	-	-	106 E MELVINA ST	MACHINERY/MANUFACTURING
232426	-	ALFA MACHINE CO.	2425 W PURDUE ST	MACHINERY/MANUFACTURING
232429	-	MILWAUKEE LEAD WORKS	4715 N 27TH ST	MACHINERY/MANUFACTURING
232430	WISCONSIN MAGNETO INC.	-	4727 N TEUTONIA AVE	MACHINERY/MANUFACTURING
232431	-	ALECO MACHINERY SALE	1500 W CORNELL ST	MACHINERY/MANUFACTURING
232516	TJM INNOVATIONS	-	5519 W WOOLWORTH AVE	MACHINERY/MANUFACTURING
232517	-	LMS SIGN & ELECTRICAL SERVICE	4811 WOOLWORTH AVE	MACHINERY/MANUFACTURING
232535	MILWAUKEE METAL PRODUCTS, CO.	-	8000 W FLORIST AVE	MACHINERY/MANUFACTURING
232544	LUDMAN INDUSTRIES	-	N 124TH STREET	MACHINERY/MANUFACTURING
232547	OILGEAR	-	2300 S 51ST ST	MACHINERY/MANUFACTURING
232548	CURTIS & FB FIREBRICK FOUNDRY SUPPLIES	-	2400 S 43RD ST	MACHINERY/MANUFACTURING
232549	REMY BATTERY CO.	-	2311 S 43RD ST	MACHINERY/MANUFACTURING
232551	-	ACKER MILLWORK	3300 W PABST AVE	MACHINERY/MANUFACTURING
232554	-	-	2628-2636 S 32ND ST	MACHINERY/MANUFACTURING
232557	-	-	3000 W MONTANA ST	MACHINERY/MANUFACTURING
232558	HEIL FACTORY	-	NE CORNER W DAKOTA & S 29TH ST	MACHINERY/MANUFACTURING
232560	-	MYSHOCK TOOL AND DIE	2716 S 19TH ST	MACHINERY/MANUFACTURING
232566	ACME ENGINEERING CO.	-	2807 S 15TH ST	MACHINERY/MANUFACTURING
232570	A.J. LINDEMAN & HOVERSON	-	825 W CLEVELAND AVE	MACHINERY/MANUFACTURING

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
232576	RUSSEL METALS	-	999 W ARMOUR AVE	MACHINERY/MANUFACTURING
232581	BADGER ELECTRIC MOTOR	-	5000 S 2ND ST	MACHINERY/MANUFACTURING
232582	-	REXWORKS/GIUFFRE BROS.	445 W OKLAHOMA AVE	MACHINERY/MANUFACTURING
232584	WISCONSIN DIE CASTING	-	201 W OKLAHOMA AVE	MACHINERY/MANUFACTURING
232585	-	CIMCO	2969 S CHASE AVE	MACHINERY/MANUFACTURING
232587	NASH MOTORS COMPANY	OTTOWAY MOTOR PARTS/CHRYSLER/MOPAR DISTRIBUTION CENTER	3280 S CLEMENT AVE	MACHINERY/MANUFACTURING
232588	-	WB BOTTLE WORKS	3400 S CLEMENT AVE	MACHINERY/MANUFACTURING
232599	VILTER MANUFACTURING CORP.	-	2217 S 1ST ST	MACHINERY/MANUFACTURING
232601	ETE REMAN	-	8155 N 76TH ST	MACHINERY/MANUFACTURING
232602	VIBRAFLIGHT	-	8331 W CALUMET ROAD	MACHINERY/MANUFACTURING
232604	APPLE DIE	-	7817 W CLINTON AVE	MACHINERY/MANUFACTURING
232605	RES COMPANY MANUFACTURING	-	7801 N 73RD ST	MACHINERY/MANUFACTURING
232612	-	RYERSON METAL PROCESSING	500 S 88TH ST	MACHINERY/MANUFACTURING
232619	MOTOR CASTING CO. PLANT NO. 2	-	657 S 72ND ST	MACHINERY/MANUFACTURING
232624	AIR REDUCTION SALES, CO.	WENNINGER COMPRESSOR CO.	3435 N BUFFUM ST	MACHINERY/MANUFACTURING
111595	E.R. WAGNER COMPANY	E. R. WAGNER COMPANY	4611 N 32ND ST	MACHINERY/MANUFACTURING
120000	NATIONAL RADIATOR CORPORATION	MEKEY PERFORATING COMPANY, INC.	2015 W ST PAUL AVE	MACHINERY/MANUFACTURING
227495	MEINECKE MANUFACTURING CO.	-	3707 N RICHARDS ST	MACHINERY/MANUFACTURING
232271	INTERNATIONAL HARVESTER CO. HEATING PLANT	-	1875 W BRUCE ST	MACHINERY/MANUFACTURING
232278	-	REXNORD	3001 W CANAL ST	MACHINERY/MANUFACTURING
232279	AMERICAN RADIATOR COMPAMY	-	c.1755 W ST PAUL AVE	MACHINERY/MANUFACTURING
232284	CUTLER-HAMMER INC.	MATERION	1316 W ST PAUL AVE	MACHINERY/MANUFACTURING
232285	CUTLER-HAMMER INC.	ALLIED INSULATION SUPPLY	1215 W ST PAUL AVE	MACHINERY/MANUFACTURING

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
232286	-	BRASS LIGHT GALLERY	1101 W ST PAUL AVE	MACHINERY/MANUFACTURING
232311	LOGEMANN BROS.	-	3150 W BURLEIGH ST	MACHINERY/MANUFACTURING
232321	KOEHRING COMPANY	UNITED METAL	3305 N 30TH ST	MACHINERY/MANUFACTURING
232350	HOLT ELECTRIC MOTOR COMPANY	-	5227 W STATE ST	MACHINERY/MANUFACTURING
232351	MILWAUKEE ELECTRIC TOOL CORPORATION	-	5316 W STATE ST	MACHINERY/MANUFACTURING
232369	CUTLER-HAMMER INC.	DRS TECHNOLOGIES	3060 W HOPE AVE	MACHINERY/MANUFACTURING
232408	SQUARE D CO. ELECTRIC EQUIPMENT MANUFACTURERS	HEINN/TREND CORPORTATION & SOCIAL DEVELOPMENT COMMISSION	4037-4041 N RICHARDS ST	MACHINERY/MANUFACTURING
232460	CLEAVER BROOKS BOILER HOUSE	-	3232 W LANCASTER ST	MACHINERY/MANUFACTURING
232594	LOUIS ALLIS POWERHOUSE	-	427 E STEWART ST	MACHINERY/MANUFACTURING
115432	MKE. WOVEN WIRE WORKS / PULP REPRODUCTION CO.	CLARKE MANUFACTURING INC.	3000 W CLARKE ST	MACHINERY/MANUFACTURING
119996	STANDARD SANITARY MFG. COMPANY	GUEDER, PAESCHKE & FREY	1635 W ST PAUL AVE	MACHINERY/MANUFACTURING
232395	-	CECCO TRADING	620 E VIENNA	MACHINERY/MANUFACTURING
104716	GARAGE EQUIPMENT MFG. CO.	COMMUNITY WAREHOUSE FURNITURE & APPLIANCES	1610 W PIERCE ST	MACHINERY/MANUFACTURING
104718	UTILITY PATTERN WORKS	ACTION AUTO	1638 W PIERCE ST	MACHINERY/MANUFACTURING
108512	PRIME MANUFACTURING CO.	BUTTERS FETTING	1669 S 1ST ST (N PORTION)	MACHINERY/MANUFACTURING
232523	AMERICAN CAN DO. PLANT CAN FACTORY	MILLIPORE SIGMA	6000 N TEUTONIA AVE	MACHINERY/MANUFACTURING
232634	A.D. MEISELBACH COMPANY, SOUTH PLANT	-	5070 N 35TH ST	MACHINERY/MANUFACTURING
232635	HARLEY-DAVIDSON	BRIGGS & STRATTON SERVICE DISTRIBUTION WAREHOUSE	3212 W CENTER ST	MACHINERY/MANUFACTURING
232636	MID-STATES SHOE COMPANY	BRIGGS & STRATTON	2769 N 32ND ST	MACHINERY/MANUFACTURING

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
232637	BRIGGS & STRATTON GAS ENGINE DIVISION FACTORY	-	2748 N 32ND ST	MACHINERY/MANUFACTURING
232638	MILSCO MANUFACTURING	BRIGGS & STRATTON	2758 N 33RD ST	MACHINERY/MANUFACTURING
232639	RELIANCE BOILER WORKS	BRIGGS & STRATTON	2784 N 32ND ST	MACHINERY/MANUFACTURING
232640	VILTER MANUFACTURING, ERECTING AND CRATING SHOP	-	2252 S 1ST ST	MACHINERY/MANUFACTURING
232641	VILTER MANUFACTURING, ERECTING AND PATTERN SHOP	-	2252 S 1ST ST	MACHINERY/MANUFACTURING
232642	VILTER MANUFACTURING, BLACKSMITH SHOP	-	2252 S 1ST ST	MACHINERY/MANUFACTURING
232643	VILTER MANUFACTURING, STOREHOUSE AND BOX MAKING	-	2252 S 1ST ST	MACHINERY/MANUFACTURING
232644	VILTER MANUFACTURING, ENGINE HOUSE	-	2252 S 1ST ST	MACHINERY/MANUFACTURING
232645	VILTER MANUFACTURING, FLASK AND COKE STORAGE BUILDING	-	2252 S 1ST ST	MACHINERY/MANUFACTURING
232646	VILTER MANUFACTURING, OFFICE	-	2217 S 1ST ST	MACHINERY/MANUFACTURING
232647	VILTER MANUFACTURING, WEST PIPE SHOP	-	2217 S 1ST ST	MACHINERY/MANUFACTURING
232648	FILER & STOWELL, MACHINE SHOP	-	147 E BECHER ST	MACHINERY/MANUFACTURING
232649	FILER & STOWELL, WOODWORKING AND PATTERN SHOP	-	147 E BECHER ST	MACHINERY/MANUFACTURING
232650	FILER & STOWELL, ENGINE HOUSE	-	147 E BECHER ST	MACHINERY/MANUFACTURING
232651	FILER & STOWELL, FOUNDRY	-	147 E BECHER ST	MACHINERY/MANUFACTURING

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
232652	FILER & STOWELL, CORE ROOM	-	147 E BECHER ST	MACHINERY/MANUFACTURING
232653	FILER & STOWELL, WOODWORKING SHOP	-	147 E BECHER ST	MACHINERY/MANUFACTURING
232654	FILER & STOWELL, FORGE SHOP	-	147 E BECHER ST	MACHINERY/MANUFACTURING
232655	FILER & STOWELL, GARAGE	-	147 E BECHER ST	MACHINERY/MANUFACTURING
232660	MILWAUKEE HAY TOOL COMPANY MACHINE SHOP	-	2773 S 29TH ST	MACHINERY/MANUFACTURING
232661	MILWAUKEE HAY TOOL COMPANY WAREHOUSES	-	2773 S 29TH ST	MACHINERY/MANUFACTURING
232569	J.B. LONG MOTOR FREIGHT	-	978 W MONTANA AVE	MOTOR FREIGHT TRANSFER
232580	MAYFIELD FREIGHT TRANSFER	-	1011 W LAYTON AVE	MOTOR FREIGHT TRANSFER
99087	FRED OLSON & SON FREIGHT TERMINAL	HISPANIC NEWSPAPER & JORDAN MACHINERY	505 S 5TH ST	MOTOR FREIGHT TRANSFER
99088	FRED OLSON & SON FREIGHT TERMINAL	-	S OF 505 S 5TH ST	MOTOR FREIGHT TRANSFER
16452	MILWAUKEE GAS LIGHT CO., WEST SIDE PLANT	ZIMMERMAN ARCHITECTURAL STUDIOS	2122 W MT VERNON AVE	OTHER
41921	GEORGE ORMSBY GARAGE	-	2027 N SUMMIT AVE	OTHER
63216	EVERBRITE ELECTRIC SIGN COMPANY	O'REILLY MOTOR CARS	324 W CHERRY ST (AND 600 N 4TH)	OTHER
71350	SUELFLOHN AND SEEFELD BUILDING	WAREHOUSE LOFTS	413 N 2ND ST	OTHER
78293	CREAM CITY BEDDING CO.	COMPO CORPORATION	3220 W FOND DU LAC AVE	OTHER
99757	-	-	823 E HAMILTON	OTHER
103208	-	-	1801 N MARSHALL	OTHER
108532	FROEMMING BROS. SHIPBUILDING INC.	-	1905 S 1ST ST	OTHER
108653	-	KEN MICHAELS FURNITURE	423 N 3RD ST	OTHER

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
109049	-	-	1303 N 4TH ST	OTHER
109244	E.L. HUSTING CO.	BADGER EXPOSITION SERVICE	N 5TH ST E SIDE BETWEEN W CHERRY AND W VLIET	OTHER
113221	KELLOGG SEED CO.	ASMUTH MALT & GRAIN CO.	332 E FLORIDA ST	OTHER
113426	CHICAGO NORTHWESTERN RAILROAD	EMERALD YACHT-SHIP	300 N VAN BUREN ST	OTHER
113667	-	WISCONSIN ELECTRIC SUBSTATION	3700 W WELLS ST	OTHER
115468	-	MOTOR TRUCK BODY	424 W CHERRY ST	OTHER
116583	PERLICK CO.	REPUBLIC-DAN PAINT & WALLPAPER CO. (PARK IND. CENTER)	3108-10 W MEINECKE AVE	OTHER
120403	OUTDOOR ADVERTISING COMPANY	NAEGELE OUTDOOR ADVERTISING COMPANY/FOSTER & KLEISER	4550 W WISCONSIN AVE	OTHER
232266	KOTZE CONSTRUCTION CO.	-	3722 W PIERCE ST	OTHER
232270	SCHON CUSTOM CUES MFG.	-	3812 W BURNHAM ST	OTHER
232280	-	BILL DORAN WHOLESALE FLORIST	1739 W ST PAUL AVE	OTHER
232314	BASS BROTHERS WHOLESALE	-	3163 N 31ST ST	OTHER
232329	-	-	2431 N 30TH ST	OTHER
232331	-	-	2577 N 30TH ST	OTHER
232375	-	ROJAHN AND MALANEY COMPANY WHOLESALE FLORIST	1005 N EDDISON ST	OTHER
232422	MIDWEST DIECASTING CORP.	-	3930 N 1ST ST	OTHER
232568	-	-	2750 S 14TH ST	OTHER
232574	-	MAACO	4128 S 13TH ST	OTHER
232579	-	SAIA FREIGHT	4939 S 6TH ST	OTHER
232590	STEMPER'S	T.H. STEMPER CO.	1125 E POTTER AVE	OTHER
232591	-	REFINISHING & PLATING CO.	305 LINCOLN AVE	OTHER
232606	-	LAKESIDE WATER TREATMENT, INC.	7869 N 73RD ST	OTHER
232608	-	TRUPKE CLEANEARS & UPHOLSTERS	5119 W CLINTON AVE	OTHER
232609	-	FRIES CARPET SALES	7271 N 51ST STREET	OTHER

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
232345	MAGNUS METALS, NATIONAL LEAD CO.	KENNICOTT	4841 W STATE ST	OTHER
232348	BADGER BRASS & ALUMINUM FOUNDRY	BADGER ALLOYS	5118 W STATE ST	OTHER
101566	MILWAUKEE FIRE DEPARTMENT REPAIR SHOP	-	118 W VIRGINIA ST	OTHER
103625	LEVY BROS. & CO. DRY GOODS	SORGEL ELECTRIC COMPANY	838 W NATIONAL AVE (NE CORNER OF S 9TH)	OTHER
108445	MILWAUKEE BRONZE CASTING	KD TRUCK AND AUTO REPAIR	145 S 1ST ST	OTHER
108533	FROEMMING BROS. SHIPBUILDING	MILWAUKEE MARINE	1933 S 1ST ST	OTHER
232371	VAPOR BLAST	-	3025 W ATKINSON AVE	OTHER
232603	PERLICK INDUSTRY	-	8300 GOOD HOPE ROAD	OTHER
79209	-	MILWAUKEE LACE PAPER CO.	1306 E MEINECKE AVE	PAPER MANUFACTURING
103564	-	WISCONSIN PAPERBOARD CORP.	1514 E THOMAS	PAPER MANUFACTURING
103565	CORNELL WOOD PRODUCTS CO. & HUMMEL & DOWNING CO.	WISCONSIN PAPERBOARD CORP.	1516 E THOMAS	PAPER MANUFACTURING
104267	-	-	2495 N NEWHALL	PAPER MANUFACTURING
105775	-	WISCONSIN PAPERBOARD	2445-2463 N CAMBRIDGE	PAPER MANUFACTURING
232628	INLAND CONTAINER CORP	TULIP MOLDED PLASTICS	714 KEEFE AVENUE	PAPER MANUFACTURING
117356		REGAL BOX CO. MANUFACTURING	923 E GARFIELD AVE	PAPER MANUFACTURING
108462	ASSOCIATED BAG CO., INC.	GENE D'AOUST WOODWORKING CO.	725 S 1ST ST	PAPER MANUFACTURING
104613	RAZALL CO.- LITHOGRAPHERS	-	1133 W PIERCE ST (AKA 710 S 12TH ST)	PRINTING
107835	LEADER CARDS	LEADER PAPER PRODUCTS	935 S 5TH ST (S HALF)	PRINTING
109592	E. WIENEK UPHOLSTERING	KALMBACH PUBLISHING CO.	1027 N 7TH ST	PRINTING
113515	E.C. KROPP CO. (POSTCARD MFG.)	MOBIUS	300 N JEFFERSON ST	PRINTING
113913	PHOENIX PRINTING CO.	AMERICAN WAREHOUSE COMPANY	525 E CHICAGO ST	PRINTING
232376	-	LAKEVIEW PRINTING	C.1800 N 4TH ST	PRINTING
232446	-	HART ENGRAVING	4928 N 29TH ST	PRINTING

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
232546	LAKESIDE BRIDGE & STEEL	-	5300 33RD STREET	STEEL AND IRON PRODUCTION
99038		MID-CITY FOUNDRY CO.	1400 W BRUCE ST	STEEL AND IRON PRODUCTION
99042	A.E. MARTIN'S CENTRAL FOUNDRY	MID-CITY FOUNDRY CO.	1521 W BRUCE ST	STEEL AND IRON PRODUCTION
99043	A.E. MARTIN'S CENTRAL FOUNDRY	MID-CITY FOUNDRY CO.	1521 W BRUCE ST	STEEL AND IRON PRODUCTION
99048	NORTHWESTERN MALLEABLE IRON CO., INTNTL. HARVESTER	-	1640 W BRUCE ST	STEEL AND IRON PRODUCTION
99049	NORTHWESTERN MALLEABLE IRON CO.	MORRIS MILLER BUILDING	1640 W BRUCE ST	STEEL AND IRON PRODUCTION
108816	GREDE FOUNDRY HEAT TREATMENT CENTER	WISCONSIN STEEL INDUSTRIES	1500 S BARCLAY ST	STEEL AND IRON PRODUCTION
232555	BADGER WIRE AND IRON WORKS	SOUTHSIDE COMMUNITY PREP	3003 CLEVELAND AVE	STEEL AND IRON PRODUCTION
232556	MILWAUKEE MALLEABLE & GREY IRON WORKS	-	2773 S 29TH ST	STEEL AND IRON PRODUCTION
232561	MAYNARD ELECTRIC STEEL CAST CO.	-	2856 S 27TH ST	STEEL AND IRON PRODUCTION
232578	CENTRAL STEEL AND WIRE	-	4343 S 6TH ST	STEEL AND IRON PRODUCTION
232596	FILER & STOWELL COMPANY	-	147 E BECHER ST	STEEL AND IRON PRODUCTION
119998	MILWAUKEE STRUCTURAL STEEL CO.	ITT GRINNELL	1819 W ST PAUL AVE	STEEL AND IRON PRODUCTION
232477	WISCONSIN BRIDGE & IRON	-	5141 N 35TH ST	STEEL AND IRON PRODUCTION
232561	ACME GALVANIZING INC.	-	2730 S 19TH ST	STEEL AND IRON PRODUCTION
232662	MILWAUKEE MALLEABLE & GREY IRON WORKS FOUNDRY	-	2776 S 29TH ST	STEEL AND IRON PRODUCTION
232663	MILWAUKEE MALLEABLE & GREY IRON WORKS FOUNDRY	-	2776 S 29TH ST	STEEL AND IRON PRODUCTION
232664	WISCONSIN BRIDGE & IRON	-	514 N 35TH ST	STEEL AND IRON PRODUCTION

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
78309	GRANT MARBLE CO.	D.R. DIEDRICH AND CO.	2615 W GREVES ST	STONE QUARRYING AND MASONRY PRODUCTION
78903	GRANT MARBLE CO.	THIELE TANNING CO.	123 N 27TH ST	STONE QUARRYING AND MASONRY PRODUCTION
99037	PETOSKEY CEMENT CO.	DUNDEE CEMENT CO.	1304 W BRUCE ST	STONE QUARRYING AND MASONRY PRODUCTION
101686	KOLINSKY CONCRETE CO.	MEDUSA CEMENT OFFICE	344 E STEWART ST	STONE QUARRYING AND MASONRY PRODUCTION
108817	A.P. GREEN REFRACTORIES OF WISCONSIN, INC.	-	1120 S BARCLAY ST	STONE QUARRYING AND MASONRY PRODUCTION
109840	HURON CEMENT CO.	-	470 S 11TH ST	STONE QUARRYING AND MASONRY PRODUCTION
118704	UNIVERSAL ATLAS CEMENT	BLUE CIRCLE CEMENT	712 W CANAL ST	STONE QUARRYING AND MASONRY PRODUCTION
232388	-	KEYSTONE MARBLE & GRANITE	3225 N PIERCE ST	STONE QUARRYING AND MASONRY PRODUCTION
232575	MILWAUKEE GENERAL CONSTRUCTION & PESCH READY-MIX	-	4572 S 13TH ST	STONE QUARRYING AND MASONRY PRODUCTION
232282	-	HOUSE OF STONE	1701 W ST PAUL AVE	STONE QUARRYING AND MASONRY PRODUCTION
104706	WALTER SALMON MARBLE CO. WESLEY STEEL TREATING	TOOLS & ABRASIVE INC.	1536 W PIERCE ST	STONE QUARRYING AND MASONRY PRODUCTION
16446	STAR TANNERY / ALBERT TROSTEL AND SONS TANNERY	NORTHERN LIGHT CO. / MURPHY IND. CENTER INC.	1661 N WATER ST	TANNING AND LEATHER PRODUCTS
99027	-	BLACKHAWK TANNING CO.	920 W BRUCE ST	TANNING AND LEATHER PRODUCTS
99029	FITZSIMMONS STEEL PRODUCTS, SOLAR CORP.	BLACKHAWK TANNERS	1000 W BRUCE ST	TANNING AND LEATHER PRODUCTS
99035	-	GEBHARDT-VOGEL TANNING CO., BADGER BUILDING SUPPLY	1228 W BRUCE ST	TANNING AND LEATHER PRODUCTS

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
99036	-	A.L. GEBHARDT TANNERS	1237 W BRUCE ST	TANNING AND LEATHER PRODUCTS
99271	WESTERN HARDWARE & MFG./ J. GREENEBAUM TANNERY	THE HIDE HOUSE	2625 S GREELEY ST	TANNING AND LEATHER PRODUCTS
101684	PFISTER & VOGEL LEATHER CO. GARAGE & STABLE	FINN PATTERN CO. INC.	339 E STEWART ST (AKA 1982 S HILBERT ST)	TANNING AND LEATHER PRODUCTS
105478	WESTERN LEATHER CO.	-	904 E PEARSON ST	TANNING AND LEATHER PRODUCTS
109071	CHARLES H. STEHLING CO.	NATIONAL ACE HARDWARE	1303 N 4TH ST	TANNING AND LEATHER PRODUCTS
111590	PFISTER AND VOGEL TANNERY	LAKESIDE MANUFACTURING	1977 S ALLIS ST	TANNING AND LEATHER PRODUCTS
117199	WESTERN LEATHER CO.	WESTERN LEATHER CO.	1800 BLOCK N MARSHALL	TANNING AND LEATHER PRODUCTS
109071	CHARLES H. STEHLING CO.	NATIONAL ACE HARDWARE	1303 N 4TH ST	TANNING AND LEATHER PRODUCTS
55797	JOSEPH BENESCH AND CO.	COAKLEY BUILDING	3530-3534 W PIERCE ST	WAREHOUSING
74250	THE NORTH AMERICAN PRESS	SICKROOM SERVICE NATIONAL HEADQUARTERS	728 N JAMES LOVELL	WAREHOUSING
103127	CHICAGO & NORTHWESTERN RR DOCK/WAREHOUSE	HANSEN STORAGE & DRY ICE	412-500 S WATER ST	WAREHOUSING
103217	-	ABC KORTSCH / KORTSCH MOVING AND STORAGE	2409 N MARYLAND	WAREHOUSING
103873	PEDERSON & GROBBEN	F. W. BOELTER CO., INC.	1136 W NATIONAL AVE	WAREHOUSING
105040	-	EAST BANK STORAGE	2124 N PROSPECT (AKA E WOODSTOCK GARAGE)	WAREHOUSING
105120	COAKLEY BROTHERS WAREHOUSE	THE CLOCK TOWER BUILDING	2264-2266 N PROSPECT	WAREHOUSING
113220	MILWAUKEE MALT & GRAIN CO.	WISCONSIN COLD STORAGE	334 E FLORIDA ST	WAREHOUSING

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
113485	E.R. GODFREY & SONS WHOLESALE GROCERIES	SALVATION ARMY ADULT REHABILITATION CENTER	324 N JACKSON ST	WAREHOUSING
115080	WELLAUER BLDG.	-	712 W MICHIGAN ST	WAREHOUSING
116131	F.A. GULL & CO.	BUREAU OF FORESTRY, CITY OF MILWAUKEE	5230 W STATE ST	WAREHOUSING
232386	-	-	3275 N PIERCE	WAREHOUSING
232498	-	NORTH POINT CHARTER SCHOOL	4200 W DOUGLAS AVE	WAREHOUSING
232537	-	-	8817 W LYNX AVE	WAREHOUSING
232553	-	-	2631-2639 S 31ST ST	WAREHOUSING
232595	-	-	960 E BAY ST	WAREHOUSING
232616	-	L&S	616 S 89TH STREET	WAREHOUSING
113797	COAKLEY BROTHERS WAREHOUSE	-	3742-3800 W WISCONSIN AVE	WAREHOUSING
232287	-	SAV-ON FOODS WAREHOUSE MARKET	2041 W MICHIGAN ST	WAREHOUSING
105013	UNITED FIRE PROOF WAREHOUSE CO.	EAST BANK STORAGE	2122-24 N PROSPECT	WAREHOUSING
232632	-	PRIME FURNITURE WAREHOUSE	205 VOGEL AVE	WAREHOUSING
63420	-	FIEBING CO.	516 S 2ND ST	UNKNOWN
63422	J.L. BURNHAM BUILDING	FIEBING CO.	508 S 2ND ST	UNKNOWN
79169	-	-	4420 N GREEN BAY AVE	UNKNOWN
83374	MILWAUKEE ELECTRIC RAILWAY & LIGHT CO. POWERHOUSE	LAKEFRONT BREWERY	1872 N COMMERCE ST	UNKNOWN
91808	-	J. B. MAYER & SONS	2339 S AUSTIN ST	UNKNOWN
97883	HENRY MILLMANN BROS	MOEBIUS IRONWORKS	421 S 2ND ST	UNKNOWN
97921	-	-	613 S 2ND ST	UNKNOWN
98164	BROADWAY PRODUCE CO.	-	340-346 (AKA 342) N BROADWAY ST	UNKNOWN
98304	APPLETON ATLAS CAR MOVER CORP.	FOAM RUBBER PRODUCTS	1423 S 2ND ST	UNKNOWN
98448	R.E. LOCHER & SCHEFRIN COMPANY	-	500 S 3RD ST	UNKNOWN

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
98987	MEREDITH BROS. CO.	MID-WEST SCENIC, ANODYNE COFFEE ROASTING	224 W BRUCE ST	UNKNOWN
99031	-	SORGEL ELECTRIC CORP.	1035 W BRUCE ST	UNKNOWN
99034	-	MIKI'S SALVAGE	1144 W BRUCE ST	UNKNOWN
99047	O.N. STEIN WAREHOUSE	NATIONAL PLATING	1565 W BRUCE ST	UNKNOWN
99165	-	-	2424 S GRAHAM ST	UNKNOWN
99272	-	-	BETWEEN THE WASHINGTON SLIP AND GREENFIELD SLIP AND CHICAGO & NORTHWESTERN TRACKS	UNKNOWN
99274	-	-	125 E GREENFIELD AVE	UNKNOWN
100748	-	ARENZ PATTERN CO. / ARENZ ELECTRIC MARINE	720 W MADISON ST	UNKNOWN
101179	-	B.S. WISNIEWSKI	201-245 W MAPLE ST (AKA. 215 W MAPLE ST)	UNKNOWN
101181	-	ELLIS GRAPHICS/BAYVIEW TOOL & ENG./LITTLE WIZARD AUD.	245 W MAPLE ST	UNKNOWN
101302	WISCONSIN LUMBER & WRECKING	PETERS TOOL CO.	114 E SCOTT ST	UNKNOWN
101504	STEVE ITALIANO	-	1512 N VAN BUREN	UNKNOWN
101567	-	-	127 W VIRGINIA ST	UNKNOWN
101571	-	HYPNEUMAT	616 W VIRGINIA ST	UNKNOWN
101585	-		114 E WALKER ST	UNKNOWN
101587	-	ASTRONAUTICS	117 W WALKER ST	UNKNOWN
101588	-	FEDERAL MANUFACTURING CO.	201 W WALKER ST (SEE 901-17 S 2ND ST)	UNKNOWN
103234	-	ZPC COATINGS	112 E MINERAL ST	UNKNOWN
103574	-	ART-WAY MFG.	125 E NATIONAL AVE	UNKNOWN
103620	-	-	816 W NATIONAL AVE	UNKNOWN
103626	-	-	BESIDE 838 W NATIONAL AVE	UNKNOWN
103627	-	-	838 W NATIONAL AVE	UNKNOWN
103662	-	SAECO	1036 W NATIONAL AVE	UNKNOWN

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
103948	-	-	2127 W NATIONAL AVE	UNKNOWN
104290	-	GLEASON CORP.	1707 E NORTH AVE	UNKNOWN
104291	-	GLEASON CORP.	1707 E NORTH AVE	UNKNOWN
104292	-	GLEASON CORP.	1707 E NORTH AVE	UNKNOWN
104697	-	-	1439 W PIERCE ST	UNKNOWN
104712	-	THERMO ELECTRON CORP.	1575 W PIERCE ST	UNKNOWN
104724	-	-	1713 W PIERCE ST	UNKNOWN
104919	-	MILWAUKEE FORGE	1532 E OKLAHOMA AVE	UNKNOWN
105044	-	-	2170 N PROSPECT	UNKNOWN
105459	-	-	701 E PEARSON ST	UNKNOWN
106838	WM. H. SHINNERS AND CO.	HENKE MFG. CO.	431 W FLORIDA ST	UNKNOWN
107215	-	STANDARD ROOFING	1820 S KINNICKINNIC AVE	UNKNOWN
107729	-	KENDALL MFG.	706 S 5TH ST (MID 1/3)	UNKNOWN
107730	-	KENDALL MFG.	706 S 5TH ST (S 1/3)	UNKNOWN
107861	-	-	1112 S 5TH ST	UNKNOWN
107867	-	-	405 S 6TH ST	UNKNOWN
107936	-	-	414 S 7TH ST	UNKNOWN
108037	KNOX MOTOR SERVICE	SORGEL ELECTRIC CO. STORAGE	701 S 9TH ST (AKA. - 912-925 W PIERCE)	UNKNOWN
108451	MILWAUKEE SCHOOL OF TRADES, PLUMBING OFFICES/PAWLING	ARKAY CORPORATION	224-226 S 1ST ST	UNKNOWN
108453	-	MILWAUKEE SCHOOL OF TRADES	228 S 1ST ST	UNKNOWN
108522	T.M.E.R.&L. CO.	METAL SURGERY LIMITED	1734 S 1ST ST	UNKNOWN
108553	-	-	1736 N 2ND ST	UNKNOWN
108620	-	-	312 S 2ND ST	UNKNOWN
108818	SADEK REALTY CO.	TONY Z. ZINGALE INC.	1100 S BARCLAY ST	UNKNOWN
108820	-	-	934 S BARCLAY ST	UNKNOWN
108966	-	-	829 E BAY ST (AKA 2123 S LENOX ST)	UNKNOWN
109087	-	-	1616 N 4TH	UNKNOWN
109904	-	ACME LOCK CO.	1319 N 12TH ST	UNKNOWN

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
110317	H. ALTSCHOSAGER BUILDING	O.L. SCHILFFARTH & CO. LITHOGRAPHERS	326-332 W BROWN ST	UNKNOWN
110428	-	-	1924 N HUBBARD ST	UNKNOWN
110932	-	JOE OTT ADVERTISING	520 E ERIE ST	UNKNOWN
111429	HOFFMANN & BAUER CO.	HESS, SCHWEITZER PAINTERS PLUS	123 W PITTSBURGH AVE	UNKNOWN
111488	-	-	2066 S 19TH ST	UNKNOWN
112313	HUMPHREY'S SERVICE GARAGE	NORMAN GILBERT	4022 N 27TH ST	UNKNOWN
112628	-	METRO MILWAUKEE FLORIST DELIVERY CO-OP	733-741 N 35TH ST	UNKNOWN
112689	-	SHADUR BOX COMPANY	5088-5110 N 35TH ST	UNKNOWN
112746	-	-	763 N 37TH ST	UNKNOWN
113130	-	BUILDINGS 43, 20 - MILLER BREWING CO.	850 N 41ST ST	UNKNOWN
113156	-	ULLSTRUP TOOL & DIE CORP.	158 S BARCLAY ST	UNKNOWN
113222	PHILLIP ORTH. COMPANY	DERNEHL TAYLOR CO.	304 E FLORIDA ST	UNKNOWN
113452	-	LIQUID CARBONIC CORP.	640 E POLK ST	UNKNOWN
113898	MILWAUKEE WAUKESHA DELIVERY	BOULEVARD STORAGE	2620 W WISCONSIN AVE	UNKNOWN
114087	-	-	301 E RESERVOIR	UNKNOWN
115271	BRAKE AND SPRING SERVICE	-	3539 W STATE ST	UNKNOWN
115426	-	SCHLITZ INDUSTRIAL	1534-1600 N COMMERCE	UNKNOWN
115664	-	WM. DURANT CO.	1929 N BUFFUM	UNKNOWN
115980	-	SCHLITZ INDUSTRIAL RELATIONS BUILDING	219 E WALNUT ST	UNKNOWN
116097	-	-	W SIDE OF S WATER	UNKNOWN
116220	-	TRANS PAC	235 E PITTSBURGH ST	UNKNOWN
116264	-	-	211 W NORTH AVE	UNKNOWN
117162	-	-	1741-45 N PALMER	UNKNOWN
117164	-	-	1731 N PALMER ST	UNKNOWN
117288	-	-	424 W GALENA ST	UNKNOWN
117353	-	GIMBEL'S WAREHOUSE	329 W GARFIELD AVE	UNKNOWN

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
117355	-	-	1009 E GARFIELD AVE	UNKNOWN
117506	-	HERCULES CORPORATION	5240 N HOPKINS ST	UNKNOWN
118705	CENTRAL SHOP	MUNICIPAL SERVICE BUILDING	1540 W CANAL ST	UNKNOWN
119340	CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC RR ELEVATOR E	CARGILL ELEVATOR "E"	335 S MUSKEGO AVE	UNKNOWN
120001	BAYLEY HEATING COMPANY	THE SPENCE CORP.	2045 W ST PAUL AVE	UNKNOWN
224072	-	-	3111-3113 W MILL ROAD	UNKNOWN
224073	-	-	3117 W MILL ROAD	UNKNOWN
225510	CHARTER WIRE	SUMMERFEST COMMUNICATIONS	114 N JACKSON ST	UNKNOWN
227491	-	-	225 W CAPITOL DR	UNKNOWN
227492	-	-	3889 N 1ST ST	UNKNOWN
227493	-	-	101 W ABERT PL	UNKNOWN
227494	-	-	3849 N PALMER ST	UNKNOWN
227496	-	-	3707 N RICHARDS ST	UNKNOWN
227498	HEIDER & BOTT, INC.	-	214 E VIENNA AVE	UNKNOWN
232265	-	M.P. IDING CO.	3420 W PIERCE ST	UNKNOWN
232267	-	-	4100 W ORCHARD ST	UNKNOWN
232269	-	ORCHARD PARK INDUSTRIAL PARK, MASTER HALCO FENCE SYSTEMS	1551 S 38TH ST	UNKNOWN
232272	-	-	530 S MUSKEGO AVE	UNKNOWN
232273	-	-	550 S MUSKEGO AVE	UNKNOWN
232274	-	CARGILL	210 S EMMBER LN	UNKNOWN
232275	-	CARGILL	320 S EMMBER LN	UNKNOWN
232281	-	GARNET ABRASIVE	1719 W ST PAUL AVE	UNKNOWN
232283	-	-	1505-1601 W ST PAUL AVE	UNKNOWN
232289	WHITE COMPANY TRUCK SALES AND SERVICE	-	2440 W CLYBOURN AVE	UNKNOWN
232290	-	-	2422 W CLYBOURN AVE	UNKNOWN
232291	-	MATA COMMUNITY MEDIA	2404 W CLYBOURN AVE	UNKNOWN
232292	-	-	2202-2210 W CLYBOURN AVE	UNKNOWN

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
232297	-	GLENN RIEDER	3420 W CAPITOL DR	UNKNOWN
232298	-	-	3341 W CAPITOL DR	UNKNOWN
232299	-	-	4050 N 34TH ST	UNKNOWN
232300	-	-	4060 N 34TH ST	UNKNOWN
232301	-	-	3374 W HOPKINS ST	UNKNOWN
232302	-	INTEGRATED MAIL INDUSTRIES	3410 W HOPKINS ST	UNKNOWN
232303	-	USA ANODIZING	4152 N 35TH ST	UNKNOWN
232304	-	-	4130 N 35TH ST	UNKNOWN
232306	-	-	3351 N 35TH ST	UNKNOWN
232307	-	SHEILA'S SHINING STARS	3380 N 35TH ST	UNKNOWN
232309	-	FRANK GILLITZER ELECTRIC	3266 N 33RD ST	UNKNOWN
232312	-	MOTORWEST	3211 SENATOR AVE	UNKNOWN
232315	-	-	3227 N 31ST ST	UNKNOWN
232316	-	-	3235 N 31ST ST	UNKNOWN
232318	-	-	3139 N 31ST ST	UNKNOWN
232319	BYRNE BROS. CO.	-	3100 W BURLEIGH ST	UNKNOWN
232320	-	-	3295 N 30TH ST	UNKNOWN
232323	-	-	3033 N 30TH ST	UNKNOWN
232324	-	-	2979 N 30TH ST	UNKNOWN
232325	-	-	2965 N 30TH ST	UNKNOWN
232326	-	-	2947 N 30TH ST	UNKNOWN
232327	-	-	2880 N 30TH ST	UNKNOWN
232330	-	-	2424 N 30TH ST	UNKNOWN
232333	-	-	2233 N 30TH ST	UNKNOWN
232334	-	-	2011 N 30TH ST	UNKNOWN
232335	-	NEW HORIZONS INTEGRATED MINISTRIES	2233 N 31ST ST	UNKNOWN
232337	CENTRAL SALES & MFGR.	-	3001 W LISBON AVE	UNKNOWN
232338	CARL-BOBKE	-	3044 W LISBON AVE	UNKNOWN
232339	-	-	3101 W LISBON AVE	UNKNOWN
232340	-	-	1818 N 31ST ST	UNKNOWN
232342	-	-	2900 W VLIET ST	UNKNOWN

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
232343	-	STAINLESS STEEL & SHEET METAL PRODUCTS, INC.	4300 W MONARCH PL	UNKNOWN
232349	-	-	5151 W STATE ST	UNKNOWN
232356	-	FIRST RATE MOTORS	5426 W STATE ST	UNKNOWN
232357	-	BEYOND VISION	5504 W STATE ST	UNKNOWN
232358	-	GENERAL FIRE EQUIPMENT COMPANY	975 HAWLEY RD	UNKNOWN
232359	-	-	603 N 36TH ST	UNKNOWN
232360	-	BONDED MESSENGER SERVICE	418 N 27TH ST	UNKNOWN
232365	-	MCP	2320 N 11TH ST	UNKNOWN
232367	-	-	3229 N 30TH ST	UNKNOWN
232368	-	KARDON INC.	4044 N 31ST ST	UNKNOWN
232372	-	-	3215 W HAMPTON AVE	UNKNOWN
232374	-	-	1137 N 4TH ST	UNKNOWN
232377	-	-	1518 E NORTH ST	UNKNOWN
232379	-	-	1420 E PARK ST	UNKNOWN
232381	-	-	1945 N BARTLETT AVE	UNKNOWN
232383	-	-	2970 N. WEIL STREET	UNKNOWN
232385	-	-	3276 N WEIL ST	UNKNOWN
232387	-	-	3210 N PIERCE ST	UNKNOWN
232389	-	METAL FORMS CORPORATION	3300-3334 N BOOTH ST	UNKNOWN
232392	-	ADVANCED DYECAST	3760 N HOLTON ST	UNKNOWN
232393	-	ESCA	3745-47 N BOOTH	UNKNOWN
232394	-	HABITAT FOR HUMANITY/RAINMAKER XLP	3744-3736 N BOOTH	UNKNOWN
232396	-	-	811 E VIENNA ST	UNKNOWN
232397	-	CREATIVE STORE DESIGN	3728 N FRATNEY ST	UNKNOWN
232398	-	-	3720 N FRATNEY	UNKNOWN
232399	-	TWO BROTHERS	3700 N FRATNEY	UNKNOWN
232401	-	WISCONSIN THERMOSET MOLDING, INC	910 E VIENNA ST	UNKNOWN
232403	-	-	532 E CAPITOL DR	UNKNOWN
232405	-	-	4355 N RICHARDS STREET	UNKNOWN

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
232406	-	-	4161 N RICHARDS ST	UNKNOWN
232407	-	-	4141 N RICHARDS ST	UNKNOWN
232410	-	ELIAS GRINDING CO., INC.	3713 N HOLTON ST	UNKNOWN
232411	-	FALCON INDUSTRIAL	3775 N RICHARDS ST	UNKNOWN
232413	-	LAKEFRONT DISTRIBUTION CENTER	3519 N HUBBARD ST	UNKNOWN
232415	-	U.S. CORRUGATED OF MILWAUKEE	3832 N 3RD STREET	UNKNOWN
232416	MIDWEST FIRE PROTECTION	-	3851 N HUBBARD ST	UNKNOWN
232417	-	-	255 ABERT PL	UNKNOWN
232418	-	-	3860 N PALMER ST	UNKNOWN
232419	-	-	3867-3869 N PALMER ST	UNKNOWN
232420	-	-	105 E MELVINA ST	UNKNOWN
232423	-	-	125 W MELVINA ST	UNKNOWN
232424	-	RK RUBBER	1987 W PURDUE ST	UNKNOWN
232425	-	-	4775 N GREEN BAY AVENUE	UNKNOWN
232427	-	-	2475 W HAMPTON AVE	UNKNOWN
232428	-	-	2525 W HAMPTON AVE	UNKNOWN
232432	-	TRACER	1600 W CORNELL ST	UNKNOWN
232433	-	LOGISTICS PLUS	1700 W CORNELL ST	UNKNOWN
232434	-	ATHEA LABORATORIES AND PACKING	1900 W CORNELL ST	UNKNOWN
232435	-	-	2016 W CORNELL ST	UNKNOWN
232436	-	SAFRAN MESSIER-BUGATI-DOWTY	2040 W CORNELL ST	UNKNOWN
232437	-	PRESTIGE LAWN & LANDSCAPE	2116 W CORNELL ST	UNKNOWN
232438	-	ACRO METAL STAMPING	2200 W CORNELL ST	UNKNOWN
232439	-	MID AMERICA IBC	2300 W CORNELL ST	UNKNOWN
232440	-	CDM LOGISTICS	2400 W CORNELL ST	UNKNOWN
232441	-	-	2432 W CORNELL ST	UNKNOWN
232442	-	-	2456 W CORNELL ST	UNKNOWN
232443	-	USED TIRES	2500 W. CORNELL ST	UNKNOWN
232444	-	-	2500 W CORNELL ST	UNKNOWN
232445	-	-	C.4926 N 29TH STREET	UNKNOWN

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
232447	-	-	C.2820 W STARK ST	UNKNOWN
232448	-	ADEPT CONTRACTORS INC.	2845 W STARK ST	UNKNOWN
232449	-	-	2900 W HAMPTON AVE	UNKNOWN
232450	-	YEHUDA MANUFACTURING	4905 N 32ND ST	UNKNOWN
232451	-	RECYCLING	4900 N 32ND ST	UNKNOWN
232452	-	-	4915-4925 N 32ND ST	UNKNOWN
232453	MARKCRAFT CO.	-	4930 N 32ND ST	UNKNOWN
232454	-	MARKCROFT CO.	4930 N 32ND STREET	UNKNOWN
232455	-	-	3115 W CAMERON AVE	UNKNOWN
232456	-	ZOLLIE'S OUTREACH AND AUTO SERVICE	C.3113 W CAMERON AVE	UNKNOWN
232457	-	-	4919 N31ST ST	UNKNOWN
232458	-	-	3235 W CAMERON	UNKNOWN
232459	-	KITCHEN DESIGNS	5015 N 33RD ST	UNKNOWN
232461	-	MIRACLES SAFE HAVEN DEVELOPMENT.	5117 N 32ND ST	UNKNOWN
232463	-	-	5133-5135 N 32ND ST	UNKNOWN
232464	-	-	5151 N 32ND ST	UNKNOWN
232465	-	-	5150 N 32ND ST	UNKNOWN
232466	-	WELDGUY	5253 N 31ST ST	UNKNOWN
232468	-	-	3100 W VILLARD AVE	UNKNOWN
232469	-	NOVOZYMES	3101 W CUSTER AVE	UNKNOWN
232470	-	ACME PRODUCTION RESOURCES/WCGV	5445 N 27TH ST	UNKNOWN
232471	HEIM CHAPMAN	-	5435 N 27TH ST	UNKNOWN
232472	-	JONCO INDUSTIRIES	2800 W CUSTER AVE	UNKNOWN
232473	-	-	5400 N TEUTONIA AVE	UNKNOWN
232474	-	-	5040 N 35TH ST	UNKNOWN
232475	-	BLIFFERT LUMBER	5030 N 35TH ST	UNKNOWN
232476	-	WEEDS, INC	5008 N 35TH ST	UNKNOWN
232478	-	-	5024 N 37TH ST	UNKNOWN
232479	-	ROETTINGERS OIL INC	5169 N 37TH ST	UNKNOWN

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
232480	-	-	5126 N 38TH ST	UNKNOWN
232481	-	FLINT INK CORPORATION	3901 W ROHR AVE	UNKNOWN
232482	-	THOMAS FURNITURE REFURNISHING	5231 N HOPKINS	UNKNOWN
232483	-	DECORATING	5219 N HOPKINS	UNKNOWN
232484	-	STORE CONCEPT & DESIGN	5350 N SHERMAN BLVD	UNKNOWN
232485	-	GALACTIC	2730 W SILVER SPRING RD	UNKNOWN
232486	-	-	2826 W SILVER SPRING RD	UNKNOWN
232487	-	BINTZ	2729 W CARMEN AVE	UNKNOWN
232488	-	-	2733-2809 W CARMEN AVE	UNKNOWN
232489	-	CLUB ESCAPE	6263 N TEUTONIA AVE	UNKNOWN
232490	-	SCHOOL MASTERS FURNITURE REFURNISHING	4070 W DOUGLAS AVE	UNKNOWN
232491	-	-	4010 W DOUGLAS AVE	UNKNOWN
232492	PETROLEUM EQUIPMENT, INC.	-	3950 W DOUGLAS AVE	UNKNOWN
232493	-	LANGE BROS, WOODWORK CO, INC	3920 W DOUGLAS AVE	UNKNOWN
232494	-	ADMIRAL CHEMICALS	6200 N 39TH ST	UNKNOWN
232495	-	-	3806 W DOUGLAS AVE	UNKNOWN
232496	-	-	3739 W DOUGLAS AVE	UNKNOWN
232497	-	GLENNCO, INC.	3716 W DOUGLAS AVE	UNKNOWN
232499	-	-	3443 W MILL ROAD	UNKNOWN
232500	-	TWINCO ROMAX/ ZECOL	3100 W MILL ROAD	UNKNOWN
232501	-	TIFFIN CONSTRUCTION SERVICES	3131 W MILL ROAD	UNKNOWN
232502	-	-	6450 N TEUTONIA AVE	UNKNOWN
232503	-	THE HOLMING CO	6900 N TEUTONIA AVE	UNKNOWN
232504	-	-	7026 N TEUTONIA AVE	UNKNOWN
232505	-	MAJESTIC ENGRAVING	7552 N TEUTONIA AVE	UNKNOWN
232506	-	-	6667 N TEUTONIA AVE	UNKNOWN
232507	-	KISTING	3510 W KIEHNAU AVE	UNKNOWN
232508	-	CENTRAL METAL FABRICATORS	6533 N TEUTONIA AVE	UNKNOWN
232509	-	CARBOLINEUM WOOD PRESERVING CO.	6680 N 40TH ST	UNKNOWN

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
232510	-	AMERICAN BUILDING CONTRACTORS, INC.	4200 W KIENHAU AVE	UNKNOWN
232512	-	STOREWALL	4119 W GREEN TREE RD	UNKNOWN
232513	-	VECTOR	6820 N 43RD ST	UNKNOWN
232514	-	-	4330 W GREEN TREE RD	UNKNOWN
232515	-	COMMERCE INDUSTRIAL CHEMICALS	5611 W WOOLWORTH AVE	UNKNOWN
232518	-	KIEDLING, INC.	4545 W WOOLWORTH AVE	UNKNOWN
232519	-	AIRSAN	4554 W WOOLWORTH AVE	UNKNOWN
232521	-	B & K POWER COATING	6305 N 40TH ST	UNKNOWN
232522	-	W.L. DECKERT CO.	5323 N 64TH	UNKNOWN
232524	-	KALLAS HONEY	5500 W DOUGLAS	UNKNOWN
232525	-	ROTORK	5607 W DOUGLAS AVE	UNKNOWN
232526	-	OLYMPIC SUPPLY, CO.	5711 W DOUGLAS AVE	UNKNOWN
232527	-	THE GUND COMPANY	5730 W DOUGLAS AVE	UNKNOWN
232528	-	QUINN DISTRIBUTORS	5777 W DOUGLAS AVE	UNKNOWN
232529	-	PACK LOGIX	5800 W DOUGLAS AVE	UNKNOWN
232530	-	DURAL COMPANY	5724 W FLORIST AVE	UNKNOWN
232531	-	CABLEMASTER	6000 N 60TH ST	UNKNOWN
232532	-	HENTZEN COATINGS, INC	6937 MILL ROAD	UNKNOWN
232533	-	ACTIVE FORM PRODUCTS, INC.	6210 W DOUGLAS AVE	UNKNOWN
232536	-	MATERIAL RECOVERY INC	8100 W FLORIST AVE	UNKNOWN
232538	-	-	8847 W FLAGG AVE	UNKNOWN
232539	-	KILBOURN	9226 W FLAGG AVE	UNKNOWN
232540	-	PHILLIPS EQUIPMENT COMPANY	9444 W CARMEN AVE	UNKNOWN
232541	KEN COOK, CO.	-	9929 W SILVER SPRING DR	UNKNOWN
232542	-	BUTLER METAL SPINNING CORP.	12120 W SILVER SPRING DR	UNKNOWN
232543	SPRINKMAN SONS	-	12100 W SILVER SPRING DR	UNKNOWN
232550	-	WE ENERGIES	2425 S 35TH ST	UNKNOWN
232552	-	THE OLD SHEET METAL SHOP	2585 S 33RD ST	UNKNOWN

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
232562	-	-	2024 W HOLT AVE	UNKNOWN
232563	-	RECYCLE AMERICA	2020 W MORGAN AVE	UNKNOWN
232564	-	ATLAS BUS SALES	2828 S 16TH ST	UNKNOWN
232565	-	-	2836 S 16TH ST	UNKNOWN
232572	-	-	4740 S 13TH ST	UNKNOWN
232573	-	NATIONAL RECYCLING, INC.	4244 S 13TH ST	UNKNOWN
232577	REGENT	-	730 W ARMOUR AVE	UNKNOWN
232583	-	AIMS ENGINEERING & CONSULTING	235 W OKLAHOMA AVE	UNKNOWN
232586	-	BIRD LADDER & EQUIPMENT	2620 S 5TH ST	UNKNOWN
232589	-	MPC CO.	3400 NEVADA AVE	UNKNOWN
232592	-	-	230 LINCOLN AVE	UNKNOWN
232593	-	-	214-216 E LINCOLN AVE	UNKNOWN
232597	-	-	2018 S 1ST ST	UNKNOWN
232598	-	-	2252 S 1ST ST	UNKNOWN
232600	-	STAFFING SOLUTIONS	2115 S 1ST ST	UNKNOWN
232607	-	NATURE TECH	5400 W GOOD HOPE RD	UNKNOWN
232610	-	-	5606 W HEMLOCK ST	UNKNOWN
232611	-	-	538-617 S 94TH ST	UNKNOWN
232613	-	MASTER MACHINE CO.	8900 S 89TH ST	UNKNOWN
232614	-	-	627 S 89TH ST	UNKNOWN
232615	-	WALSH CONSTRUCTION	615 S 89TH ST	UNKNOWN
232617	-	OZINGA READY MIX CONCRETE	633 S 84TH ST	UNKNOWN
232618	WISCONSIN ELECTRIC POWER CO. GARAGE AND REPAIR DEPARTMENT	FAIR PARK BUSINESS CENTER	620 S 76TH ST	UNKNOWN
232620	-	-	1220 E MEINECKE	UNKNOWN
232625	-	BENTLEY COMPANIES	4080 PORT WASHINGTON RD	UNKNOWN
232626	-	ONCOURSE	4066 N PORT WASHINGTON RD	UNKNOWN

PROPERTY ID	HISTORIC NAME	OTHER NAME	ADDRESS	INDUSTRY DESCRIPTION
232627	-	PERELES BROS, INC.	5840 N 60TH	UNKNOWN
232629	DART CHART CENTER/ COAKLEY ARCHIVES	-	3825 W GREEN TREE AVE	UNKNOWN
232633	-	KOSS	4129 N PORT WASHINGTON RD	UNKNOWN
232630		LA LUNE FURNITURE	930 E BURLEIGH ST	UNKNOWN
232631	INDEPENDENT ELECTRIC MANUFACTURING CO.	-	2156 S 4TH ST	UNKNOWN

Appendix B. List of Properties Recommended Eligible for the National Register of Historic Places

THIS PAGE INTENTIONALLY LEFT BLANK

Milwaukee Industrial Properties Survey – October 2016

The following table includes property information obtained from the Milwaukee County Land Information Office and the City of Milwaukee Assessor's Office. These sources do not contain complete data for all properties, but available information is provided below where applicable.

** Properties in italics were previously determined eligible and surveyors found that these resources continue to retain sufficient integrity to convey their significance.*

** Indicates whether the associated parcel has a record in the Wisconsin Department of Natural Resource's Bureau for Remediation and Redevelopment Tracking System.

*** Indicates whether the Milwaukee Public Library (MPL) and/or the City of Milwaukee (City) reported available plans for buildings located at the associated address.

PROPERTY NAME	BUILDING NAME	AHI NUMBER	ADDRESS	CURRENT OWNER	CURRENT OWNER ADDRESS	TOTAL SQUARE FOOTAGE	EST. AVERAGE FLOOR PLATE SIZE (SQUARE FOOTAGE)	CURRENT ZONING	PARCEL SIZE	POSSIBLE ENVIRONMENTAL ISSUES**	PLANS AVAILABLE***
A.D. MEISELBACH MANUFACTURING COMPANY	NORTH PLANT	112689	5088-5110 N. 35TH ST	STAINLESS FOUNDRY & ENGINEERING, INC	5150 NORTH 35TH ST MILWAUKEE WI 53209	–	–	INDUSTRIAL HEAVY	–	N	–
	SOUTH PLANT	232634	5070 N. 35TH ST	RICHARD R. PIEPER	5477 S WESTRIDGE CT NEW BERLIN WI 53151-7951	60,529	31,529	INDUSTRIAL HEAVY	2.05 ACRES	Y	–
A.O. SMITH CORPORATION	A.O. SMITH CORPORATION OFFICE	16202	3025 W. HOPKINS ST	REDEVELOPMENT AUTHORITY OF THE CITY OF MILWAUKEE	809 N BROADWAY MILWAUKEE WI 53202	–	–	INDUSTRIAL HEAVY	–	Y	MPL; CITY
	A.O. SMITH CORPORATION RESEARCH & ENGINEERING BUILDING	16200	3025 W. HOPKINS ST	REDEVELOPMENT AUTHORITY OF THE CITY OF MILWAUKEE	809 N BROADWAY MILWAUKEE WI 53202	–	–	INDUSTRIAL HEAVY	–	Y	
	A.O. SMITH CORPORATION - SOUTH SHOP	16206	3533 N. 27TH ST	CENTURY CITY REDEVELOPMENT CORPORATION	809 N BROADWAY MILWAUKEE WI 53202	–	–	INDUSTRIAL HEAVY	–	Y	
	A.O. SMITH CORPORATION	232295	3420 N. 35TH ST	3420 MILWAUKEE LLC	2500 HIGHLAND AVE, #103 LOMBARD IL 60148	–	208,000	INDUSTRIAL HEAVY	13.125 ACRES	Y	
	A.O. SMITH CORPORATION	232296	3600 N. 35TH ST	HB 3600 LLC C/O PAK TECHNOLOGIES INC	7025 W MARCIA RD MILWAUKEE WI 53223	–	–	INDUSTRIAL HEAVY	–	Y	
ALLEN-BRADLEY COMPANY		41968, 99286, 99287, 108535	1201 S. 2ND ST	ALLEN-BRADLEY CO C/O ROCKWELL AUTOMATION	PO BOX 623 MILWAUKEE WI 53201-0623	–	–	INDUSTRIAL LIGHT (OLDER CORRIDOR)	–	Y	MPL; CITY
AMERICAN HAIR & FELT COMPANY		*117998*	*944 N. 46TH ST*	*THEODORE F. DRAGOTTA*	*657 S 72ND ST # 100 MILWAUKEE WI 53214*	*204,558*	*185,514*	*INDUSTRIAL HEAVY*	*4.696 ACRES*	*Y*	–
			900N. 46TH ST	*THEODORE F. DRAGOTTA*	*657 S 72ND ST # 100 MILWAUKEE WI 53214*	*51,139*	*53,758*	*INDUSTRIAL HEAVY*	*1.174 ACRES*	*Y*	–
AMERICAN RADIATOR COMPANY (W. ST. PAUL AVENUE INDUSTRIAL HISTORIC DISTRICT)		232279	C.1755 W. ST. PAUL AVE	LCM FUNDS 30 ST PAUL LLC	330 E KILBOURN AVE # 838 MILWAUKEE WI 53202	83,247	14,458	INDUSTRIAL COMMERCIAL	1.848 ACRES	Y	MPL; CITY
BAYLEY HEATING COMPANY (W. ST. PAUL AVENUE INDUSTRIAL HISTORIC DISTRICT)		120001	2045 W. ST. PAUL AVE	CALEDONIA PROPERTIES 2045 LLC	3017 N MARIETTA AVE MILWAUKEE WI 53211	10,900	7,350	INDUSTRIAL COMMERCIAL	.268 ACRES	N	CITY
BEN-HUR MANUFACTURING COMPANY		232391	600 E. KEEFE AVE	ROADSTER LLC	5325 W ROGERS ST WEST ALLIS WI 53219	159,224	124,504	INDUSTRIAL LIGHT (OLDER CORRIDOR)	5.02 ACRES	N	CITY

PROPERTY NAME	BUILDING NAME	AHI NUMBER	ADDRESS	CURRENT OWNER	CURRENT OWNER ADDRESS	TOTAL SQUARE FOOTAGE	EST. AVERAGE FLOOR PLATE SIZE (SQUARE FOOTAGE)	CURRENT ZONING	PARCEL SIZE	POSSIBLE ENVIRONMENTAL ISSUES**	PLANS AVAILABLE***
BILL DORAN WHOLESALE FLORIST (W. ST. PAUL AVENUE INDUSTRIAL HISTORIC DISTRICT)		232280	1739 W. ST. PAUL AVE	PATRICIA J OLIVOTTI LIVING TRUST	619 W JEFFERSON ST ROCKFORD IL 61103	18,707	18,700	INDUSTRIAL COMMERCIAL	.453 ACRES	N	CITY
BLATZ BREWERY	BLATZ BREWERY COMPANY BOTTLING HOUSE	16655	1015 N. BROADWAY	MILWAUKEE SCHOOL OF ENGINEERING	ATTN: FINANCE OFFICE 1025 N BROADWAY MILWAUKEE WI 53202-3109	–	–	CIVIC ACTIVITY	–	N	MPL
	BLATZ BREWERY COMPANY WASH HOUSE	104594	1101 N. MARKET ST	SSG PROPERTIES LLC	270 E HIGHLAND AV STE E MILWAUKEE WI 53202	60,069	18,998	C9B(A)	.75 ACRES	N	MPL
BRIGGS & STRATTON, WEST PLANT	MAIN PLANT	111593	2748 N. 32ND ST	WIS INDUSTRIES PENSION PLAN & TRUST	3939 W MC KINLEY AVE MILWAUKEE WI 53208	265,157	196,542	INDUSTRIAL HEAVY	4.16 ACRES	Y	CITY
	GAS ENGINE DIVISION FACTORY	232637									
	SERVICE DISTRIBUTION CENTER	232635	3212 W. CENTER ST			49,764	28,981	INDUSTRIAL LIGHT (OLDER CORRIDOR)	1.142 ACRES	N	
	FACTORY	232638	2758 N. 33RD ST			80,769	–	INDUSTRIAL LIGHT (OLDER CORRIDOR)	1.185 ACRES	N	
	FACTORY	232639	2784 N. 32ND ST			44,983	28,483	INDUSTRIAL HEAVY	1.1 ACRES	Y	
	FACTORY	232636	2769 N. 32ND ST	KENNETH E MATER REV TRUST	PO BOX 100020 MILWAUKEE WI 53210	53,240	–	INDUSTRIAL LIGHT (OLDER CORRIDOR)	.679 ACRES	N	
C.B. COTTRELL & SONS, CLAYBOURN DIVISION		232372	3713 HUMBOLDT BLVD	3701 HUMBOLDT LLC	2500 S HIGHLAND AVE #103 LOMBARD IL 60148	–	–	INDUSTRIAL LIGHT (OLDER CORRIDOR)	–	Y	CITY
CLEAVER-BROOKS COMPANY		232390	3637 NORTH HOLTON ST	COMPO STEEL PRODUCTS INC FKA COMPO CORP	3637 N HOLTON MILWAUKEE WI 53212	142,616	117,616	INDUSTRIAL LIGHT (OLDER CORRIDOR)	8.3 ACRES	Y	MPL; CITY
COAKLEY BROTHERS WAREHOUSE		*113797*	*3742-3800 W. WISCONSIN AVE*	*COAKLEY WISCONSIN AVENUE LLC*	*STE 200 2151 N MARTIN L KING JR DR MILWAUKEE WI 53212*	*11,511*	*11,511*	*COMMERCIAL SERVICE*	*.264 ACRES*	N	–
CONWAY CABINET COMPANY (W. ST. PAUL AVENUE INDUSTRIAL HISTORIC DISTRICT)		119999	1925 W. ST. PAUL AVE	HENRY ALBERT & SANDRA ALBERT LLC	2015 W ST PAUL AVE MILWAUKEE WI 53233	9,180	9,180	INDUSTRIAL COMMERCIAL	.239 ACRES	N	–
CUTLER-HAMMER, INC. (W. ST. PAUL AVENUE INDUSTRIAL HISTORIC DISTRICT)	CUTLER-HAMMER INC. ADMINISTRATION BUILDING	78898	272-274 N. 12TH ST	MYRIAD PROPERTY GROUP LLC	272 N 12TH ST MILWAUKEE WI 53233	16,016	7,560	INDUSTRIAL HEAVY	.59 ACRES	Y	MPL; CITY
	CUTLER-HAMMER MOTOR SWITCH PLANT ADDITION	232286	1101 W. ST. PAUL AVE	JRB VIII LLC	PO BOX 674 MILWAUKEE WI 53201-0674	–	–	INDUSTRIAL COMMERCIAL	–	Y	
	CUTLER-HAMMER, INC.	232284	1316 W. ST. PAUL AVE	CR INTERNATIONAL INC	P O BOX 1178 MILWAUKEE WI 53201	–	–	INDUSTRIAL HEAVY	–	Y	

PROPERTY NAME	BUILDING NAME	AHI NUMBER	ADDRESS	CURRENT OWNER	CURRENT OWNER ADDRESS	TOTAL SQUARE FOOTAGE	EST. AVERAGE FLOOR PLATE SIZE (SQUARE FOOTAGE)	CURRENT ZONING	PARCEL SIZE	POSSIBLE ENVIRONMENTAL ISSUES**	PLANS AVAILABLE***
	CUTLER-HAMMER, INC.	232285	1215 W. ST. PAUL AVE	ANCHOR ENTERPRISES II	POB 2116 MILWAUKEE WI 53201	99,371	99,336	INDUSTRIAL COMMERCIAL	1.37 ACRES	Y	
DAIRY DISTRIBUTORS, INC.		232378	1617 E. NORTH AVE	ROBERT E. JOHN	834 N PLANKINTON AVE MILWAUKEE WI 53203	29,076	29,076	INDUSTRIAL LIGHT (OLDER CORRIDOR)	.36 ACRES	Y	CITY
DROTT TRACTOR COMPANY		*113805*	*3841 W. WISCONSIN AVE*	*WISCONSIN REGIONAL TRAINING PARTNERSHIP INC*	*3841 W WISCONSIN AVE MILWAUKEE WI 53208*	–	–	*COMMERCIAL SERVICE*	–	Y	–
EAGLE KNITTING MILLS		56661	507 S. 2ND ST	ROADSTER LLC	5325 W ROGERS ST WEST ALLIS WI 53219	107,500	82,000	INDUSTRIAL MIXED	.643 ACRES	Y	–
E.C. KROPP COMPANY BUILDING		113515	300 N. JEFFERSON ST	JEFFERSON 300 LLC	300 N JEFFERSON ST MILWAUKEE WI 53202	189,267	62,927	MIXED ACTIVITY	4.179 ACRES	N	MPL; CITY
E.R. WAGNER COMPANY		111595	4611 N. 32ND ST	E.R. WAGNER MFG CO	4611 N 32ND ST MILWAUKEE WI 53209	–	–	INDUSTRIAL HEAVY	–	Y	CITY
EVINRUDE DIVISION, OUTBOARD MOTOR COMPANY		232370	4143 N. 27TH ST	LINCOLN INVESTORS LLC	401 E KILBOURN AVE STE 201 MILWAUKEE WI 53202	314,004	283,769	INDUSTRIAL HEAVY	13.218 ACRES	Y	MPL; CITY
F. KUEHN BOOT & SHOE COMPANY		108484	1134 S. 1ST ST	GREGORY W. NAWROCKI	3849 S 97 ST MILWAUKEE WI 53228	16,000	4,000	INDUSTRIAL MIXED	.092 ACRES	N	–
FILER & STOWELL	OFFICE	232596	147 E. BECHER ST	BETA-BECHER ACQUISITION CO LLC	147 E BECHER ST MILWAUKEE WI 53207-1244	18,015	12,070	INDUSTRIAL HEAVY	7.56 ACRES	N	CITY
	MACHINE SHOP	232648	147 E. BECHER ST	BETA-BECHER ACQUISITION CO LLC	147 E BECHER ST MILWAUKEE WI 53207-1244	82,293	82,293				
	WOODWORKING AND PATTERN SHOP	232649	147 E. BECHER ST	BETA-BECHER ACQUISITION CO LLC	147 E BECHER ST MILWAUKEE WI 53207-1244	33,960	–				
	ENGINE HOUSE	232650	147 E. BECHER ST	BETA-BECHER ACQUISITION CO LLC	147 E BECHER ST MILWAUKEE WI 53207-1244	–	–				
	FOUNDRY	232651	147 E. BECHER ST	BETA-BECHER ACQUISITION CO LLC	147 E BECHER ST MILWAUKEE WI 53207-1244	40,000	40,000				
	CORE ROOM	232652	147 E. BECHER ST	BETA-BECHER ACQUISITION CO LLC	147 E BECHER ST MILWAUKEE WI 53207-1244	–	–				
	WOODWORKING SHOP	232653	147 E. BECHER ST	BETA-BECHER ACQUISITION CO LLC	147 E BECHER ST MILWAUKEE WI 53207-1244	–	–				
	FORGE SHOP	232654	147 E. BECHER ST	BETA-BECHER ACQUISITION CO LLC	147 E BECHER ST MILWAUKEE WI 53207-1244	–	–				
	GARAGE	232655	147 E. BECHER ST	BETA-BECHER ACQUISITION CO LLC	147 E BECHER ST MILWAUKEE WI 53207-1244	2,460	2,460				
GARNET ABRASIVE (W. ST. PAUL AVENUE INDUSTRIAL HISTORIC DISTRICT)		232281	1719 W. ST. PAUL AVE	GARNET ABRASIVE & WATER FILTRATION INC	1719 W ST PAUL AVE MILWAUKEE WI 53233	10,530	10,530	INDUSTRIAL COMMERCIAL	.376 ACRES	N	CITY
GEUDER, PAESCHKE & FREY CO. (W. ST. PAUL AVENUE INDUSTRIAL HISTORIC DISTRICT)	FACTORY	110095	324 N. 15TH ST	READCO	POB 1131 MILWAUKEE WI 53201	62,928	62,928	INDUSTRIAL COMMERCIAL	0.543 ACRES	N	CITY
	FACTORY	119996	1635 W. ST. PAUL AVE	CALEDONIA PROPS 1635 LLC	3017 N MARIETTA AVE MILWAUKEE WI 53211	68,000	13,600	INDUSTRIAL COMMERCIAL	.906 ACRES	N	
	FACTORY	79339	1500 W. ST. PAUL AVE	MONITOR CORP	1500 W ST PAUL AVE MILWAUKEE WI 53233	–	–	INDUSTRIAL COMMERCIAL	–	N	
	ENAMELING DEPARTMENT	232283	1505-1601 W. ST. PAUL AVE	CREAM CITY YARDS LLC	1698 AQUA VIEW CT CEDARBURG WI 53012	10,884 (1505) 20,730 (1601)	10,884 (1505) 10,500 (1601)	INDUSTRIAL COMMERCIAL	1.551 ACRES (1505) .294 ACRES (1601)	N	

PROPERTY NAME	BUILDING NAME	AHI NUMBER	ADDRESS	CURRENT OWNER	CURRENT OWNER ADDRESS	TOTAL SQUARE FOOTAGE	EST. AVERAGE FLOOR PLATE SIZE (SQUARE FOOTAGE)	CURRENT ZONING	PARCEL SIZE	POSSIBLE ENVIRONMENTAL ISSUES**	PLANS AVAILABLE***
GLOBE-UNION INC.		232400	910 E. KEEFE AVE	C&D TECHNOLOGIES INC	1400 UNION MEETING RD BLUE BELL PA 19422	–	–	INDUSTRIAL LIGHT (OLDER CORRIDOR)	–	Y	MPL
HEIL COMPANY (LAYTON PARK INDUSTRIAL HISTORIC DISTRICT)	HEIL COMPANY OFFICE	232557	3000 W. MONTANA ST	ST LUKE'S HOSPITAL ASSN INC	PO BOX 341880 MILWAUKEE WI 53234-1880	2,956	4,813	PLANNED DEVELOPMENT	.191 ACRES	Y	MPL; CITY
	HEIL FACTORY	232558	2844 S. 29TH ST	MAYNARD ALLOY CASTING COMPANY LLC	2856 S 27TH ST MILWAUKEE WI 53234	–	–	INDUSTRIAL HEAVY	–	N	
HOUSE OF STONE (W. ST. PAUL AVENUE INDUSTRIAL HISTORIC DISTRICT)		232282	1701 W. ST. PAUL AVE	STONE PROPERTIES LLC	1701 W ST PAUL AVE MILWAUKEE WI 53233	–	–	INDUSTRIAL COMMERCIAL	–	Y	–
HUMMEL & DOWNING PAPER COMPANY	FACTORY	103564	1514 E. THOMAS AVE	WISCONSIN PAPERBOARD CORP	1514 E THOMAS AVE MILWAUKEE WI 53211	–	–	INDUSTRIAL LIGHT (OLDER CORRIDOR)	–	Y	MPL; CITY
	POWER PLANT	105775									
	FACTORY NORTH ADDITION	103565									
	WAREHOUSE	104267									
JOHNSON SERVICE COMPANY BUILDING		106694	507 E. MICHIGAN ST	JOHNSON CONTROLS INC	P O BOX 591 MILWAUKEE WI 53201	146,080	21,320	OFFICE AND SERVICE	2.099 ACRES	N	MPL; CITY
LOGEMANN BROTHERS OFFICE		232313	3232 W. BURLEIGH ST	LOGEMANN BROTHERS COMPANY	3150 W BURLEIGH ST MILWAUKEE WI 53210	17, 498	8,749	INDUSTRIAL LIGHT (OLDER CORRIDOR)	.726 ACRES	N	–
THE LOUIS ALLIS COMPANY	OFFICE	101691	427 E. STEWART ST	INDUSTRIAL GROUP INC	427 E STEWART ST MILWAUKEE WI 53207	477,195	188,812	INDUSTRIAL OFFICE (OLDER)	21.47 ACRES	Y	MPL
	OFFICE	101692									
	FACTORY	101693									
	POWER PLANT	232594									
LUICK ICE CREAM		232404	505 E. CAPITOL AVE	TWENTY FOUR SAC SELF STORAGE LTD PARTNERSHIP	1250 E MISSOURI AVE PHOENIX AZ 85014	58,709	37,411	INDUSTRIAL LIGHT (OLDER CORRIDOR)	2.451 ACRES	Y	CITY
M. HILTY LUMBER CO. (W. ST. PAUL AVENUE INDUSTRIAL HISTORIC DISTRICT)		78964	1127 W. ST. PAUL AVE	JRB VIII LLC	PO BOX 674 MILWAUKEE WI 53201-0674	–	–	INDUSTRIAL COMMERCIAL	–	Y	CITY
MILLER BREWERY COMPLEX	MILLER BREWING COMPANY	42078	4000 W. STATE ST	MILLERCOORS LLC	PO BOX 482 MILWAUKEE WI 53201-0482	–	–	–	–	–	MPL; CITY
	MILLER BREWING COMPANY	113523	3939 W. HIGHLAND BLVD	MILLERCOORS LLC	PO BOX 482 MILWAUKEE WI 53201-0482	–	–	INDUSTRIAL OFFICE	–	Y	
	MILLER BREWING COMPANY	115260	4122 W. STATE ST	MILLERCOORS LLC	PO BOX 482 MILWAUKEE WI 53201-0482	–	–	INDUSTRIAL HEAVY	–	Y	
	MILLER BREWING COMPANY - BUILDING 61 & 58	115259	4135 W. STATE ST	MILLERCOORS LLC	PO BOX 482 MILWAUKEE WI 53201-0482	–	–	INDUSTRIAL HEAVY	–	Y	

PROPERTY NAME	BUILDING NAME	AHI NUMBER	ADDRESS	CURRENT OWNER	CURRENT OWNER ADDRESS	TOTAL SQUARE FOOTAGE	EST. AVERAGE FLOOR PLATE SIZE (SQUARE FOOTAGE)	CURRENT ZONING	PARCEL SIZE	POSSIBLE ENVIRONMENTAL ISSUES**	PLANS AVAILABLE***
	MILLER BREWING COMPANY - BUILDING 1	31787	4003 W. STATE ST	MILLERCOORS LLC	PO BOX 482 MILWAUKEE WI 53201-0482	–	–	INDUSTRIAL HEAVY	–	Y	
	MILLER BREWING COMPANY - BUILDING 15,16,17,& 18	115261	4025 W. STATE ST	MILLERCOORS LLC	PO BOX 482 MILWAUKEE WI 53201-0482	–	–	INDUSTRIAL HEAVY	–	Y	
	MILLER BREWING COMPANY - BUILDING 26	31788	4036 W. STATE ST	MILLERCOORS LLC	PO BOX 482 MILWAUKEE WI 53201-0482	–	–	INDUSTRIAL HEAVY	–	Y	
	MILLER BREWING COMPANY - BUILDING 29	31789	4036 W. STATE ST	MILLERCOORS LLC	PO BOX 482 MILWAUKEE WI 53201-0482	–	–	INDUSTRIAL HEAVY	–	Y	
	MILLER BREWING COMPANY - BUILDING 30	115103	4000 W. STATE ST	MILLERCOORS LLC	PO BOX 482 MILWAUKEE WI 53201-0482	–	–	INDUSTRIAL HEAVY	–	Y	
	MILLER BREWING COMPANY - BUILDING 33	116380	925 N. 40TH ST	MILLERCOORS LLC	PO BOX 482 MILWAUKEE WI 53201-0482	–	–	INDUSTRIAL HEAVY	–	Y	
	MILLER BREWING COMPANY - BUILDING 34	115104	4001 W. STATE ST	MILLERCOORS LLC	PO BOX 482 MILWAUKEE WI 53201-0482	–	–	INDUSTRIAL HEAVY	–	Y	
	MILLER BREWING COMPANY - BUILDING 35	115262	3930 W. STATE ST	MILLERCOORS LLC	PO BOX 482 MILWAUKEE WI 53201-0482	–	–	INDUSTRIAL HEAVY	–	Y	
	MILLER BREWING COMPANY - BUILDING 39	115101	4103 W. STATE ST	MILLERCOORS LLC	PO BOX 482 MILWAUKEE WI 53201-0482	–	–	INDUSTRIAL HEAVY	–	Y	
	MILLER BREWING COMPANY - BUILDING 41	29269	4103 W. STATE ST	MILLERCOORS LLC	PO BOX 482 MILWAUKEE WI 53201-0482	–	–	INDUSTRIAL HEAVY	–	Y	
	MILLER BREWING COMPANY - BUILDING 50	115102	4103 W. STATE ST	MILLERCOORS LLC	PO BOX 482 MILWAUKEE WI 53201-0482	–	–	INDUSTRIAL HEAVY	–	Y	
	MILLER BREWING COMPANY - BUILDING 54 &55	115256	4300 W. STATE ST	MILLERCOORS LLC	PO BOX 482 MILWAUKEE WI 53201-0482	–	–	INDUSTRIAL HEAVY	–	Y	

PROPERTY NAME	BUILDING NAME	AHI NUMBER	ADDRESS	CURRENT OWNER	CURRENT OWNER ADDRESS	TOTAL SQUARE FOOTAGE	EST. AVERAGE FLOOR PLATE SIZE (SQUARE FOOTAGE)	CURRENT ZONING	PARCEL SIZE	POSSIBLE ENVIRONMENTAL ISSUES**	PLANS AVAILABLE***
	MILLER BREWING COMPANY - BUILDING 56 & 57	115255	4400 W. STATE ST	MILLERCOORS LLC	PO BOX 482 MILWAUKEE WI 53201-0482	–	–	INDUSTRIAL HEAVY	–	Y	
	MILLER BREWING COMPANY - BUILDING 9	115100	4001 W. STATE ST	MILLERCOORS LLC	PO BOX 482 MILWAUKEE WI 53201-0482	–	–	INDUSTRIAL HEAVY	–	Y	
	MILLER BREWING GARAGE	31791	4103 W. STATE ST	MILLERCOORS LLC	PO BOX 482 MILWAUKEE WI 53201-0482	–	–	INDUSTRIAL HEAVY	–	Y	
	MILLER BREWING TOURIST CENTER	115257	4251 W. STATE ST	MILLERCOORS LLC	PO BOX 482 MILWAUKEE WI 53201-0482	–	–	INDUSTRIAL HEAVY	–	Y	
	MILLER INN VISITOR'S CENTER	18088	3931 W. STATE ST	MILLERCOORS LLC	PO BOX 482 MILWAUKEE WI 53201-0482	–	–	INDUSTRIAL HEAVY	–	Y	
	MILLER BREWING: REPLICA OF FREDERICK MILLER'S PLANK ROAD BREWERY	115099	N/A	MILLERCOORS LLC	PO BOX 482 MILWAUKEE WI 53201-0482	–	–	INDUSTRIAL HEAVY	–	N	
MILWAUKEE BRIDGE COMPANY		232308	3282 N. 35TH ST	UNITED REALTY LLC	3232 W FOND DU LAC AVE MILWAUKEE WI 53210	–	–	INDUSTRIAL HEAVY	–	Y	CITY
MILWAUKEE CASKET COMPANY (W. ST. PAUL AVENUE INDUSTRIAL HISTORIC DISTRICT)	MILWAUKEE CASKET COMPANY	78969	422 N. 15TH ST	PRUNE LLC	316 N MILWAUKEE ST # 400 MILWAUKEE WI 53202	13,362	6,681	INDUSTRIAL COMMERCIAL	.794 ACRES	N	–
	MILWAUKEE CASKET COMPANY	78965	1418 W. ST. PAUL AVE			34,582	13,362	INDUSTRIAL COMMERCIAL	.794 ACRES	N	CITY
MILWAUKEE ELECTRIC TOOL COMPANY		232351	5316 W. STATE ST	STATE OF WISCONSIN	5316 W STATE ST MILWAUKEE WI 53208	–	–	INDUSTRIAL LIGHT (OLDER CORRIDOR)	–	Y	–
MILWAUKEE GAS LIGHT COMPANY, WEST SIDE WORKS	RETORT BUILDING	16452	2122 W. MT. VERNON AVE	GIUFFRE VIII LLC	445 W OKLAHOMA AVE STE 1 MILWAUKEE WI 53207-2666	41,000	48,655	PLANNED DEVELOPMENT	3.85 ACRES	Y	–
	CONTROL TOWER AND ENGINE HOUSE	232656								Y	
	CONDENSER HOUSE	232657								Y	
	MACHINE SHOP	232658								Y	

PROPERTY NAME	BUILDING NAME	AHI NUMBER	ADDRESS	CURRENT OWNER	CURRENT OWNER ADDRESS	TOTAL SQUARE FOOTAGE	EST. AVERAGE FLOOR PLATE SIZE (SQUARE FOOTAGE)	CURRENT ZONING	PARCEL SIZE	POSSIBLE ENVIRONMENTAL ISSUES**	PLANS AVAILABLE***
	PURIFIER BUILDING	232659	200 N. 25TH ST	GIUFFRE VIII LLC	445 W OKLAHOMA AVE STE 1 MILWAUKEE WI 53207-2666	17,694	17,695	PLANNED DEVELOPMENT	3.85 ACRES	Y	–
MILWAUKEE HAY TOOL COMPANY (LAYTON PARK INDUSTRIAL HISTORIC DISTRICT)	OFFICE	232556	2773 S. 29TH ST	M2AE LAND LLC	2773 S 29TH ST MILWAUKEE WI 53215	–	–	INDUSTRIAL HEAVY	–	N	CITY
	MILWAUKEE HAY TOOL COMPANY MACHINE SHOP	232660									
	MILWAUKEE HAY TOOL WAREHOUSE	232661									
	MILWAUKEE MALLEABLE & GREY IRON WORKS FOUNDRY	232662	2776 S. 29TH ST	M2AE LAND LLC	2776 S 29TH ST MILWAUKEE WI 53215	–	–	INDUSTRIAL HEAVY	–	N	
	MILWAUKEE MALLEABLE & GREY IRON WORKS FOUNDRY	232663									
MILWAUKEE STRUCTURAL STEEL CO. (W. ST. PAUL AVENUE INDUSTRIAL HISTORIC DISTRICT)		119998	1819 W. ST. PAUL AVE	LCM FUNDS 30 ST PAUL LLC	330 E KILBOURN AVE # 838 MILWAUKEE WI 53202	83,247	14,458	INDUSTRIAL COMMERCIAL	1.848 ACRES	Y	CITY
NASH/LAFAYETTE AUTOMOTIVE PLANT		232587	3280 S. CLEMENT AVE	NEW CARCO ACQUISITION LLC	1000 CHRYSLER DR AUBURN HILLS MI 48326	1,057,616	1,057,616	INDUSTRIAL HEAVY	43.533 ACRES	Y	CITY
NATIONAL BLOWER WORKS / GEUDER, PAESCHKE & FREY CO. (W. ST. PAUL AVENUE INDUSTRIAL HISTORIC DISTRICT)		78392	1700 W. ST. PAUL AVE	WISC INVESTMENT CO LLC	7750 GLADE RD LOVELAND CO 80538-9135	–	–	INDUSTRIAL COMMERCIAL	–	Y	MPL
NATIONAL RADIATOR CORPORATION (W. ST. PAUL AVENUE INDUSTRIAL HISTORIC DISTRICT)		120000	2015 W. ST. PAUL AVE	HENRY ALBERT & SANDRA ALBERT LLC	2015 W ST PAUL AVE MILWAUKEE WI 53233	34,007	34,007	INDUSTRIAL COMMERCIAL	1.345 ACRES	N	CITY
NORDBERG MANUFACTURING		*230650, 230651, 230652, 230653, 230654, 230655, 230656, 230657*	*3073 S. CHASE AVE*	*INDUSTRIAL PROPERTIES LLC*	*3073 S CHASE AVE, STE 110 MILWAUKEE WI 53207*	–	–	*INDUSTRIAL HEAVY*	–	Y	–

PROPERTY NAME	BUILDING NAME	AHI NUMBER	ADDRESS	CURRENT OWNER	CURRENT OWNER ADDRESS	TOTAL SQUARE FOOTAGE	EST. AVERAGE FLOOR PLATE SIZE (SQUARE FOOTAGE)	CURRENT ZONING	PARCEL SIZE	POSSIBLE ENVIRONMENTAL ISSUES**	PLANS AVAILABLE***
NORTHWESTERN FUEL COMPANY OFFICE (W. ST. PAUL AVENUE INDUSTRIAL HISTORIC DISTRICT)		79250	1133 MT. VERNON AVE	REDEVELOPMENT AUTHORITY OF THE CITY OF MILWAUKEE	260 N 12TH ST MILWAUKEE WI 53233	–	–	INDUSTRIAL HEAVY	–	Y	–
NORTHWESTERN MALLEABLE IRON COMPANY	OFFICE	99049	1640 W. BRUCE ST	MILLER COMPRESSING CO	700 OFFICE PARKWAY ST LOUIS MO 63141	–	–	PLANNED DEVELOPMENT	–	Y	CITY
	ANNEALING BUILDING	99048	1640 W. BRUCE STREET	MILLER COMPRESSING CO	700 OFFICE PARKWAY ST LOUIS MO 63141	–	–	PLANNED DEVELOPMENT	–	Y	
PERLICK CORPORATION		232603	8300 W. GOOD HOPE RD	BERTWAL INV CO	8300 W GOOD HOPE RD MILWAUKEE WI 53223	–	–	INDUSTRIAL LIGHT (MODERN INDUSTRIAL PARK)	–	N	–
PFISTER & VOGEL, BAY VIEW TANNERY		111590	1977 S. ALLIS ST	1982 SOUTH HILBERT STREET LLC	3939 W MCKINLEY AVE MILWAUKEE WI 53208	79,324	67,992	INDUSTRIAL HEAVY	9.973 ACRES	Y	CITY
R. PERLICK BRASS COMPANY/PERLICK COMPANY, INC.		116583	3100 W. MEINECKE AVE	ALLIED MORTGAGE & SERVICES LLC	TIERRA SUBIDA LTD PTNRSHIP PO BOX 6097 BEVERLY HILLS CA 90212	65,529	54,000	INDUSTRIAL HEAVY	.63 ACRES	Y	–
SCHLITZ BREWERY BAR (W. ST. PAUL AVENUE INDUSTRIAL HISTORIC DISTRICT)		78334	1900 W. ST. PAUL AVE	SOBELMANS 1900 LLC	1900 W ST PAUL AVE MILWAUKEE WI 53233	5,735	2,785	INDUSTRIAL COMMERCIAL	.146 ACRES	N	CITY
SLOCUM STRAW WORKS/NORTHWESTERN STRAW WORKS		103893	1400-1426 W. NATIONAL AVE	ASTRONAUTICS CORPORATION OF AMERICA	P O BOX 523 MILWAUKEE WI 53201	–	–	INDUSTRIAL MIXED	–	N	CITY
SPERRY CANDY COMPANY		111430	127-133 W. PITTSBURGH AVE	PITTSBURGH AVENUE LLC	601 N COLLEGE AVE STE 1A BLOOMINGTON IN 47404	58,800	9,800	INDUSTRIAL MIXED	7.323 ACRES	N	MPL
VILTER MANUFACTURING CORPORATION	FACTORY AND MACHINE SHOP	232598	2252 S. 1ST ST	ASSET ACQUISITIONS INC	445 W OKLAHOMA AVE MILWAUKEE WI 53207	223,768	162,167	INDUSTRIAL HEAVY	5.137 ACRES	Y	MPL
	ERECTING AND CRATING SHOP	232640									
	ERECTING AND PATTERN SHOP	232641									
	BLACKSMITH SHOP	232642									
	STOREHOUSE AND BOX MAKING	232643									
	ENGINE HOUSE	232644									
	FLASK AND COKE STORAGE BUILDING	232645									
	OFFICE	232646	2217 S. 1ST ST	ASSET ACQUISITIONS INC	445 W OKLAHOMA AVE MILWAUKEE WI 53207	70,988	45,650	INDUSTRIAL HEAVY	2.967 ACRES		
	WEST PIPE SHOP	232647									
WADHAMS OIL COMPANY HEADQUARTERS		108473	907 S. 1ST ST	S.J. CAMPBELL & ASSOCIATES LLC	907 S 1ST ST MILWAUKEE WI 53204	46,212	7,713	INDUSTRIAL MIXED	.803 ACRES	Y	CITY
WE ENERGIES SOUTH SERVICE CENTER		232550	2425 S. 35TH ST	WISCONSIN GAS LLC	231 W MICHIGAN ST MILWAUKEE WI 53203	117,000	113,544	INDUSTRIAL LIGHT (OLDER CORRIDOR)	6.4250 ACRES	Y	–

PROPERTY NAME	BUILDING NAME	AHI NUMBER	ADDRESS	CURRENT OWNER	CURRENT OWNER ADDRESS	TOTAL SQUARE FOOTAGE	EST. AVERAGE FLOOR PLATE SIZE (SQUARE FOOTAGE)	CURRENT ZONING	PARCEL SIZE	POSSIBLE ENVIRONMENTAL ISSUES**	PLANS AVAILABLE***
WESTERN LEATHER COMPANY		117199, 105478	904 E. PEARSON ST	CONDOMINIUMS – MULTIPLE OWNERS	–	–	–	INDUSTRIAL MIXED	–	N	–
WILLIAM P. FROEHLICH PAPER WAREHOUSE		115918	419 W. VLIET ST	419 VLIET LLC	606 E JUNEAU AVE # 510437 MILWAUKEE WI 53203	11,250	2,950	INDUSTRIAL LIGHT (OLDER CORRIDOR)	.258 ACRES	Y	–
WISCONSIN BRIDGE & IRON COMPANY	SHOP	232477	5141 N. 35TH ST	35TH STREET HOLDINGS LLC	5045 N 35TH ST MILWAUKEE WI 53209	–	–	INDUSTRIAL HEAVY	–	Y	MPL
	OFFICE	232664									
WISCONSIN COLD STORAGE WAREHOUSE		113220	334 E. FLORIDA ST	MANDEL FIFTH WARD HOLDINGS I	301 E ERIE ST MILWAUKEE WI 53202	70,356	47,232	INDUSTRIAL MIXED	1.307 ACRES	N	–
WISCONSIN GUN COMPANY		232268	4107 W. ORCHARD ST	HARNISCHFEGER CORPORATION	P O BOX 554 MILWAUKEE WI 53201	–	–	INDUSTRIAL HEAVY	–	Y	MPL; CITY

THIS PAGE INTENTIONALLY LEFT BLANK