United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

DRAFT

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form.* If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. **Place additional certification comments, entries, and narrative items on continuation sheets if needed (NPS Form 10-900a).**

1. Name of Property

historic name General Electric Building 31

other names/site number Westinghouse Illuminating Company Building, Schenectady Railway Company Power Station

name of related multiple property listing N/A

Location

street & number 112 Erie Boulevard | N/A | not for publication

city or town Schenectady | N/A | vicinity

state New York code NY county Schenectady code 093 zip code 12305

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,

I hereby certify that this _X_ nomination ___ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the property _X_ meets ___ does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

___ national ___ statewide _x_ local

Signature of certifying official/Title Date

State or Federal agency/bureau or Tribal Government

In my opinion, the property ___ meets ___ does not meet the National Register criteria.

Signature of commenting official Date

Title State or Federal agency/bureau or Tribal Government

4. National Park Service Certification

I hereby certify that this property is:

___ entered in the National Register

___ determined eligible for the National Register

___ determined not eligible for the National Register

___ removed from the National Register

___ other (explain:) _____

Signature of the Keeper Date of Action

General Electric Building 31 Schenectady, NY
Name of Property County and State

5. Classification

Ownership of Property
(Check as many boxes as apply.)

- [x] private
- [ ] public - Local
- [ ] public - State
- [ ] public - Federal

Category of Property
(Check only **one** box.)

- [x] building(s)
- [ ] district
- [ ] site
- [ ] structure
- [ ] object

Number of Resources within Property
(Do not include previously listed resources in the count.)

Contributing	Noncontributing	
1	0	buildings
0	0	sites
0	0	structures
0	0	objects
1	0	**Total**

Name of related multiple property listing
(Enter "N/A" if property is not part of a multiple property listing)

N/A

Number of contributing resources previously listed in the National Register

0

6. Function or Use

Historic Functions
(Enter categories from instructions.)

INDUSTRY/PROCESSING/EXTRACTION:
manufacturing facility / laboratory

Current Functions
(Enter categories from instructions.)

VACANT/NOT IN USE

7. Description

Architectural Classification
(Enter categories from instructions.)

LATE VICTORIAN: Italianate

Materials
(Enter categories from instructions.)

foundation: STONE: Limestone
walls: BRICK
roof: SYNTHETICS
other:

Narrative Description

(Describe the historic and current physical appearance of the property. Explain contributing and noncontributing resources if necessary. Begin with **a summary paragraph** that briefly describes the general characteristics of the property, such as its location, setting, size, and significant features.)

Summary Paragraph

General Electric (GE) Building 31 at 112 Erie Boulevard in downtown Schenectady, New York was built ca. 1887 for George Westinghouse, Jr. The five-bay-wide, two-story, solid brick industrial building with decorative Italianate-style features originally fronted on the narrow Dock Street, which ran along the Erie Canal. The building stood in the middle of the industrial locus created by the mid-nineteenth-century railroad lines and associated locomotive yards, and the emerging late nineteenth-century electrical universe of General Electric. After General Electric's acquisition of the building, they added a two-story brick rear addition around 1915. General Electric grew at such an astounding pace that around 1922, the section of the Erie Canal that was near its entrance was filled and covered over to create the six-lane-wide Erie Boulevard, which GE Building 31 now fronts on. New commercial and civic buildings soon lined the wide and well-illuminated boulevard, and it became the main northeast/southwest route through the city, terminating at the entrance to the General Electric plant. The building served as GE Building 31 until General Electric severely downsized in 1987 and sold the building to a city agency.

Narrative Description

Setting

GE Building 31 fronts on the south side of Erie Boulevard, about half a mile southwest of the street's major intersection with State Street, and just east and within view of the entrance to the General Electric complex (**Photo 1**). State Street is the historic commercial and governmental route through downtown, and prior to the construction of Interstate 90, State Street, also part of New York State Route 5, was the main road to the capital city of Albany, about fifteen miles to the southeast. Today, GE Building 31 and the adjacent building at 108 Erie Boulevard—a 1909 commercial building which served as GE Building 32 starting in 1915—are the only two remaining turn-of the-twentieth-century commercial/industrial buildings directly related to GE still standing along this southern stretch of Erie Boulevard (**Photo 2**). GE Building 31 is the only resource on the nominated 90-foot by 222-foot parcel (City of Schenectady Tax ID No. 39.79-1-5.1).

Exterior

Ca. 1887 Building

The ca. 1887 building is a two-story, solid brick building that incorporates decorative Italianate-style features, which were typical of downtown buildings at the turn of the twentieth century. This original portion of the building measures seventy-five feet wide by one hundred feet long by twenty-four feet high and rests on a low stone foundation. The building has a wide, five-bay, symmetrical north-facing façade and a five-to-one common bond brick pattern. Brick pilasters divide the bays, each of which has brick corbelling and drip molding at the top. The front-gabled parapet roof is accented with a brick denticulated cornice supported by thick brick corbelling that wraps around both sides (**Photos 3-5**). The center entrance bay is the tallest, with sequentially lower flanking bays. The centered door has a thick, wooden bracketed hood. There are paired windows in each

of the other bays on both stories. Window openings have finished stone sills and segmentally arched brick hoods with keystones.

A ca. 1895 photograph shows oculus windows on the two outer bays of the façade's second story, where paired windows are now, and paired windows where the current front entrance is (**Figure 1**). In the 1990s, the new owner at the time replaced most of the original double-hung wood sash windows; those on the first floor were replaced with fixed, single-pane, aluminum-clad windows, and those on the second floor were replaced with nine-over-nine vinyl sash and aluminum-clad windows. Likewise, the deeply recessed, original double-leaf main door was replaced with a metal-framed, dark-tinted, single-leaf glass door with a metal-clad sidelight and transom.

The remaining three elevations feature similar finishes to the façade. In the first bay of the seven-bay-long west elevation there are no windows on the second story, while the first story contains a short double-wide window with replacement sash topped by a brick hood (**Photo 5**). This is where the original office was located, and a ca. 1890 photograph shows that the opening originally held a double-leaf wood and glass door, which originally served as the building's main entrance (**Figure 2**). A photo taken in 1913 (**Figure 3**) shows that this entrance had been converted to a window by that time. The next two bays of this elevation have window openings matching those on the façade; the ca. 1890 photo reveals that those on the second story were a later addition. In the rear bays, the window openings cease having segmental arches and hoods, and several have been infilled with brick. A two-bay-wide portion of the roof at the rear end of this elevation has been raised to add an additional half-story. Each of its bays contains a multi-light steel window.

The east elevation varies further, with single windows with flat lintel openings on both floors (**see photo 4**). When the building was constructed, there was an immediately adjacent building on its east side, so originally there were no window openings on this elevation (see **Figure 4**). This building was demolished by 1900 (see **Figure 6**), and window openings had been added by 1914 (see **Figure 7**). Today they are occupied by single-sash windows on the first story and industrial-style steel windows on the second story. The second-story window openings were cut into the brick drip molding above.

The rear (south) elevation is largely obscured by the ca. 1915 addition. The visible portion has the same brick cornice as the other elevations. The former window openings on the second story have been filled with brick. The first-story bays have been altered as well, with an overhead garage door installed in the first bay and a large opening in the second that contains a pedestrian door and vinyl siding (**Photo 6**).

The building's roof is low-pitched and has a new rubber membrane. The roof originally had a six-foot-tall raised skylight and a square brick smokestack, both of which are visible in the ca. 1890 photograph (**Figure 2**). The Sanborn map from 1930 (**Figure 12**) does not depict these features, indicating that they had been removed by that time.

Ca. 1915 Addition

A two-story, forty-five-foot-wide by eighty-five-foot-long solid brick addition was built onto the rear of the original building around 1915 (**Photo 6**). For early distribution purposes, it originally abutted a railroad siding (since removed). The addition is similar in design to the original building, with a five-to-one common bond

brick pattern; however, the bricks are not as high-fired as on the original building. The addition is narrower than the original building and was built flush with the east wall.

The side elevations each have five divided bays. There are small, original steel single windows on the second story of the east elevation. This elevation has an exterior chimney set off-center toward the north end. On the west elevation, the first bay has no window on the second story and a metal door on the first, which is a later installation. In the remaining bays, both stories have a row of double-wide, segmentally arched openings with brick hoods matching those on the main building. On the first story, one of these openings contains a garage door, one contains a pair of single-pane windows, and one contains plywood surrounding a large replacement window. The other bay (second-to-last) appears to have originally held a pair of windows each with an individual hood; one of the pair remains, now with a single-pane window, but the other has been replaced with a metal door and the hood has been removed. The second-story windows on this elevation include a pair of one-over-one wood sash, two pairs of four-over-four wood sash, and a pair of paired multi-light steel windows.

The three-bay rear elevation has a three-part stepped parapet roof, with each bay slightly shorter than the previous one. A former opening in the first story of the first bay has been infilled. On the second story is a large original multi-light steel window. The other two former window openings on the second story were converted into overhead door bays for freight truck delivery and distribution purposes, and an inclined, asphalt-covered ramp with flanking cut-stone retaining walls was built to provide access to these doors, burying the first story of these two bays.

Interior

The historical layout of the building remains intact. Both floors of the ca. 1887 building are divided longitudinally by a thick, load-bearing brick wall built off-center, making the western half wider than the eastern half. The front area of western half is further divided latitudinally with a load-bearing brick wall, creating an office space in the building's northwest corner. The earliest Sanborn map to depict this building (1889; see **Figure 4**) shows that this is the original layout. By 1894, as per that year's Sanborn map, all interior doors were fireproof (see **Figure 5**).

The first floor flooring is concrete, and all the walls are plastered. The front doors lead into the front office area, which adjoins the eastern section and the main space of the western section. The western section has wood box beams and girders (**Photo 8**). The main space is open; partition walls forming smaller rooms have been removed. The original cast metal staircase is located along the latitudinal dividing wall that separates the office space from the rest of the western section. The staircase remains in excellent condition; however, a wall that enclosed the area for a stairwell and an adjoining secondary office on both floors has been removed.

The eastern section is a large open space with a middle row of chamfered posts supporting wood beams (**Photo 7**). The ca. 1915 addition was built onto the rear of the eastern side of the building and is separated on the first floor by a wall. It is open and has terrazzo tile flooring, although the condition of the flooring is poor. The support framing has been updated with exposed metal girders, metal ceiling joists, and a corrugated metal ceiling. A brick and cinderblock-constructed freight elevator shaft remains in the northwest corner.

The building's second floor, which was the main working floor, has a higher ceiling than the first floor. All of the walls are brick. Non-original partition walls have been removed. The office area, located above the office below, has narrow tongue-and-groove flooring (**Photo 11**). The two sections of the main work floor have wide tongue-and-groove wood flooring, some of which was covered with wood planking. The wood planking might have helped support the use of heavy equipment and prevented wood dust from seeping down to the first floor, which was a fire-retardant technique used in mill construction.[1] The western section has massive wood trusses spanning the width of the room. The trusses are built into the exterior wall and the brick dividing wall (see **photo 10**). Sometime later in the building's occupation, the floor and roof of the rear southwest corner of this section was raised up (**see photos 5 and 6** for the exterior shed roof of the raised area). Exposed metal joists support the raised floor level and the open ceiling area.

The second floor of the eastern section (**Photo 9**) was built two steps higher than that of the western section. The second floor of the ca. 1915 addition is open to that of the original building, creating a single large open space. In the original portion of the building, the ceiling has exposed wood trusses spanning the width of the room that are supported by brick wall piers. Above the trusses, square wood girders run longitudinally and support wood roof joists. Wood plank sheathing covers the underside of the roof. Perhaps due to the later truck distribution functions and the need for increased height clearance, all but one of the bottom chords of the wood trusses was removed. In the addition, which is slightly wider than the eastern section of the original building, two rows of chamfered wood posts run longitudinally through the space, supporting metal I-beams and wood girders, with wood plank sheathing on the underside of the roof. The rear wall has converted overhead door bays. An original cast metal staircase is located within a brick stairwell in the rear southwest corner of the addition (**Photo 12**).

Integrity

Overall, the building retains a high degree of integrity, conveying its original design as a late nineteenth- and early twentieth-century manufactory and laboratory facility. While GE added partition walls to the western section during its ownership of the building in order to create separate offices and workspaces (see **Figure 8**), it is presumed that these were not meant to be permanent changes and that the space was regularly rearranged as the company's use of the building shifted over time. The eastern section remained a large, open space that GE used for testing (see **Figure 9**). The building's original location, design, materials, and workmanship remain intact, and as such the building is sufficiently able to convey its significance.

[1] Annie Schentag and Kerry Traynor March, "National Register of Historic Places Registration Form, Buffalo Lounge Company Building (Draft)," 2023, 10, New York State Office of Parks, Recreation, and Historic Preservation.

General Electric Building 31 Schenectady, NY
Name of Property County and State

8. Statement of Significance

Applicable National Register Criteria
(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- [X] A Property is associated with events that have made a significant contribution to the broad patterns of our history.
- [ ] B Property is associated with the lives of persons significant in our past.
- [X] C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- [ ] D Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations
(Mark "x" in all the boxes that apply.)

Property is:

- [ ] A Owned by a religious institution or used for religious purposes.
- [ ] B removed from its original location.
- [ ] C a birthplace or grave.
- [ ] D a cemetery.
- [ ] E a reconstructed building, object, or structure.
- [ ] F a commemorative property.
- [ ] G less than 50 years old or achieving significance within the past 50 years.

Areas of Significance
(Enter categories from instructions.)

ARCHITECTURE
INDUSTRY

Period of Significance

Ca. 1887-1948

Significant Dates

Ca. 1887
1909
Ca. 1915

Significant Person
(Complete only if Criterion B is marked above.)

N/A

Cultural Affiliation

Architect/Builder

Unknown

Period of Significance (justification)

The Period of Significance extends from ca. 1887, when the building was constructed, to 1948, when the building ceased functioning as General Electric's Illuminating Engineering Laboratory.

Criteria Considerations (explanation, if necessary)

N/A

Statement of Significance Summary Paragraph
(Provide a summary paragraph that includes level of significance and applicable criteria.)

General Electric Building 31 is significant as a late-nineteenth century manufacturing and laboratory building that played an important role in Schenectady, New York's electrical industry. It is eligible under Criterion A in the area of Industry for its association with the provision of electricity in Schenectady and with the success and growth of the General Electric Company (GE), having been built for the Schenectady-based Westinghouse Illuminating Company and later owned and used for many years by GE, which came to monopolize the electrical industry in the region. The building was constructed as the first purpose-built home of the Westinghouse company, which was founded by inventor George Westinghouse, Jr. in 1886 and was an early provider of electricity in the city. After the Westinghouse company was taken over by interests associated with Thomas Edison, the building became the home of the Schenectady Street Railway Company, which was purchased by GE in 1898. During this period the building was used as a power station for the city's trolley system, which GE relied on to transport their employees to work. In 1909, GE converted the building into an illuminating engineering laboratory to serve not only its Schenectady plant but the entire company. Illuminating engineering was an emerging field during this era, and the new GE laboratory provided a space for researching and testing new products and lighting technologies. The head of the laboratory was illuminating engineering pioneer William D'Arcy Ryan, who is known for designing the lighting scheme of the Panama-Pacific Exposition and popularizing the use of floodlighting. GE Building 31 remained the home of the laboratory until 1948, when that function was relocated to Massachusetts. The building continued to be used by GE for other purposes until 1987. GE underwent major downsizing in the 1980s, and much of its main Schenectady campus, located just to the west, was subsequently demolished. Today, GE Building 31 is one of only a few surviving buildings in the city that were used by GE during its heyday.

The building is also significant under Criterion C in the area of Architecture as a rare surviving example of a late nineteenth-century industrial building in Schenectady and an intact example of nineteenth-century mill construction. The building retains a great deal of its historic integrity, including the original location, materials, design, and workmanship. Italianate-style exterior detailing includes corbeled brick ornamentation below a denticulated cornice and tall, segmental-arched windows. On the interior, it retains its open floor plan, wood floors, and the heavy timber post-and-beam structure characteristic of mill construction. This area of Schenectady along Erie Boulevard was once the city's industrial center, but widespread demolition has left few extant nineteenth- and twentieth-century buildings. GE Building 31 is thus a rare remaining building that can speak to the industrial past of this section of the city.

Narrative Statement of Significance

Historic Context

Early Schenectady

The city of Schenectady began as a Dutch settlement on the south floodplain of the Mohawk River in the Mohawk Valley of upstate New York. The land was obtained from the Mohawk tribe in 1661. The name Schenectady is derived from the name of their settlement, Schonowa which means “place beyond the pine plains.” This referred to the stretch of land between the pine plateau of the City of Albany to the south and the pine plateaus of Schenectady.[2] Further, the Iroquois path between the two early settlements was the precursor to the historic State Highway 5, which turns into State Street in downtown Schenectady. State Street was originally named Albany. The beginning of sustainable industry in Schenectady occurred with the construction of the Erie Canal. Built between 1817 and 1825, the original Erie Canal traversed 363 miles from Albany to Buffalo, New York and changed the course of the Mohawk River, which allowed for boats to travel from the Hudson River up to the Great Lakes. Schenectady became a stopping point along the route, but not a port city, as they had once hoped.[3] However, the canal created the most important intersection in the town when it crossed with State Street, and the town was established as a transportation, boatbuilding, and trading center. Further solidifying the town as a transportation center was the opening of back-to-back railroads. In 1831, the sixteen-mile-long Mohawk and Hudson Railroad carried passengers and freight from the Erie Canal in Schenectady to Albany.[4] The company became the Albany and Schenectady Railroad in 1847 and then merged into the New York Central Railroad in 1853. In 1832, the Schenectady and Saratoga Railroad opened to the north, and by 1836, rail traffic was also running west to Utica. The railroads and canal business created a base from which the new industrial town would flourish from. The catalyst that would sustain this economic growth was the 1848 establishment of the Schenectady Locomotive Works, which built locomotives on the east end of town.

The amount of industry building up in Schenectady required a substantial workforce, and many people moved in from New England and New York City. More immigrants also began coming from Europe, first the Irish and British, but by the 1850s the Germans held the strongest presence, bringing with them skills to use in the factories and shops.[5] Nicholas Schermerhorn had immigrated from Germany in 1826 and became a prominent businessman. In 1874, he partnered with his son William G. Schermerhorn and they became involved in the coal industry and the hay, feed, and milling business, including owning a flour mill. William himself further became involved with the railroad and knitting mills. In addition, he was a prominent landowner and active in local civic and governmental agencies.[6] The Schermerhorn family owned much of the undeveloped land along the southern bank of the Erie Canal where General Electric would rise from. This low-lying area remained predominantly undeveloped until after the Civil War, but by the 1880s, the town was becoming established, populated, and developed. When the Schenectady Locomotive Works merged into the American Locomotive

[2] Neil Larson, *City of Schenectady Historic Resource Survey: A Reconnaissance Level Survey conducted for the Schenectady Urban Cultural Park and Department of Development*, March 1993, Volume 1, pp. III-1-2.
[3] Larson, *City of Schenectady Historic Resource Survey*, p. III-41.
[4] Larson, *City of Schenectady Historic Resource Survey*, pp. III-47-48.
[5] Larson, *City of Schenectady Historic Resource Survey*, p. III-51-52.
[6] Joel Henry Monroe, *Schenectady, Ancient and Modern: A Complete and Connected History of Schenectady from the Granting of the First Patent in 1661 to 1914* (Geneva, NY: Press of W. F. Humphrey, 1914), 243–44.

Company in 1901, it became a basis of employment and stability for over a century. At that time, the company employed 4,000 men in forty-four buildings on sixty-five acres, but that would soon be eclipsed by the emergence of the General Electric Company.

Edison Electric Works

In 1881, inventor Thomas Alva Edison opened the Edison Machine Works on the lower east side of Manhattan, New York City. At this time, he also owned the Edison Electric Lamp Company and other companies that manufactured lamps, generators, conductors, and other components for his electric lighting system.[7] By 1886, the staff of the Machine Works had grown to 800 and he began to look elsewhere for a bigger factory. A prime industrial site in Schenectady, eight acres that were part of the former Schermerhorn land that had recently been set up for the McQueen Locomotive Works with two brand new and unused "cathedral shops," became available when that company went into receivership. This land and the adjacent site of the bankrupt Jones Car Works were both available at a bargain rate.[8] Schenectady seemed an ideal location for Edison, who had to consider the expense of land and labor in New York City as well as union strikes at his own shop for more pay and shorter days.[9] The specific location, on the south side of River Road directly across from George Westinghouse Sr.'s Agricultural Machine Works, also had excellent water and rail connections. Edison purchased the property and relocated his company there along with 200 personnel.

In 1889, the now-Schenectady-based Edison Machine Works merged into the Edison General Electric Co., and by 1892 the new company employed nearly 800 people.[10] However, Edison faced competition from two other large electrical companies, the Thomas-Houston Electric Company of Lynn, Massachusetts, and George Westinghouse Jr.'s Pittsburgh, Pennsylvania-based Westinghouse Electric Company (not to be confused with the Schenectady-based Westinghouse Illuminating Company, discussed below). Thomas-Houston, like Westinghouse, favored alternating current, which would soon become the United States' electrical standard. Westinghouse and Edison were well-known for their battle over the electrical market, known as the War of the Currents, there being much debate over whether harnessing electricity with direct current or alternating current was more practical. Westinghouse won that battle when his company—which proposed using alternating current (AC), as opposed to the Edison's company's proposal of direct current (DC)—was contracted to design and light the entire 1893 Columbian Exposition.

To reduce his competition, in 1891 Edison considered purchasing Thomson-Houston, and he reached out to banker J. P. Morgan, who had helped him in the past, for financing assistance. Morgan instead bought both companies himself, merging Edison General Electric and Thomson-Houston together in 1892. The new

[7] "Life of Edison," Rutgers University School of Arts and Sciences, Rutgers-New Brunswick, https://edison.rutgers.edu/life-of-edison/biography/detailed-biography.
[8] George Wise, *Edison's Decision* (Schenectady, NY: Schenectady County Historical Society, 2010), 110 & 115–16, https://schenectadyhistorical.org/wp-content/uploads/2010/07/Edisons-Decision.pdf.
[9] Wise, 121–23.
[10] *General Electric Schenectady Works Welcomes You* (Schenectady, NY: General Electric Company, 1953), https://nyheritage.contentdm.oclc.org/digital/collection/p16694coll20/id/16925.

company was called the General Electric Company, which now had control of major manufacturing plants both in Lynn, MA and in Schenectady.[11]

The General Electric Company

The growth of GE following its establishment was unprecedented. By 1900 it employed 3,000 people. The combination of the railroad (and soon streetcar lines), large locomotive yards, and General Electric made Schenectady one of the largest manufacturing cities of the eastern United States. In 1912, GE employed 17,065 people. In 1920, with the city's population at 88,723, GE had 21,086 employees that worked in 301 buildings on 523 acres of ground (128 acres of factory floor space). In 1922, GE had factories in forty-two cities in the United States, employing 71,000 people. GE not only made electrical machinery and appliances in great quantities but engaged in important experimental work with other major factories elsewhere. But the Schenectady plant was by far the largest, and in 1924, it employed more people than any other manufacturing enterprise in New York State.[12] Thus, Schenectady quickly claimed the name of "The Electric City." It also boasted the title "the City that Lights and Hauls the World" because of the twofold economic backbone of GE and the 1848 Schenectady Locomotive Works, which merged in 1901 to create the American Locomotive Company (ALCO). The company lasted until 1968.[13]

By the early 1920s, the growth of GE, and that of the city, required improved infrastructure. The importance of canals to transportation infrastructure was diminishing, and there was a greater need to efficiently move the thousands of employees entering and exiting through the main entrance at the ever-growing GE plant. Thus, around 1922, the section of the Erie Canal, including the towpaths, that was near the entrance to the plant was filled and covered over to create the six-lane wide Erie Boulevard. This new route provided both vehicular and pedestrian transportation directly into the one main entrance of the GE plant. The six-lane boulevard was different than earlier city streets as it was unusually wide and very automobile oriented with more parking for cars, wider sidewalks, and more street lighting (**see Figure 14**). The boulevard originally had three lanes in each direction divided by parking in the middle and wide sidewalks on each side; it has since been modified with a grass median and wider sidewalks. The creation of Erie Boulevard also coincided with and connected to the 1925 opening of the Western Gateway Bridge that led from State Street north over the Mohawk River to the village of Scotia. Furthermore, the new boulevard ran between the two Schenectady industrial giants, GE and ALCO.[14]

[11] Julia Kirk Blackwelder, *Electric City: General Electric in Schenectady* (College Station, TX: Texas A&M University Press, 2014), 11–12.
[12] Nelson Greene, *The Old Mohawk Turnpike Book* (Fort Plain, NY: Nelson Greene, 1924), 39–42.
[13] Blackwelder, *Electric City*, 189.
[14] Neil Larson, *City of Schenectady Historic Resource Survey: A Reconnaissance Level Survey conducted for the Schenectady Urban Cultural Park and Department of Development*, March 1993, Volume 2, p. IV-27.

1887-1891: Westinghouse Illuminating Company

George Westinghouse Jr. was born in Central Bridge (Schoharie County), New York, on October 6, 1846, where his father George Sr. operated a small company that produced farm machinery. After a fire destroyed the business in 1856, George Sr. moved the family to Schenectady, where he established the Westinghouse Agricultural Works on a large undeveloped tract of land—the same land that GE would rise from. The Westinghouse Agricultural Works manufactured various farm machinery, but the basis was a threshing machine that George Sr. invented. At its peak, the machine shop employed 300 men, second only to the Schenectady Locomotive Works. George Jr. worked in the factory when he was young, and based on this experience would go on to produce many inventions.[15] However, he first served as a private in the cavalry for two years during the Civil War before being made Acting Third Assistant Engineer in the Navy in 1864. When Westinghouse returned to Schenectady in 1865, he enrolled in Union College, but dropped out in the first semester to work on his inventions. In that same year, he developed his first major invention, the rotary steam engine. In 1867, he married Marguerite Erskine Walker and the couple moved to Pittsburgh, Pennsylvania for bigger business and financial opportunities. Two years later in 1869, Westinghouse developed his breakthrough invention, the railway airbrake, which made train travel substantially safer. In 1886, he organized the Westinghouse Electric Company with a staff of 200. The name of the company later became the Westinghouse Electric & Manufacturing Company. In 1895 construction of an extensive plant in East Pittsburgh on 40 acres of land started. By 1904, the number of workers at the main plant was 9,000, with 3,000 additional employees in branch factories. Westinghouse and his company achieved phenomenal success, including playing an integral role in several notable projects, notably the conversion of Niagara Falls to electric power.[16]

In addition to his Pittsburgh-based electric company, Westinghouse had also incorporated a Schenectady-based company in 1886. In *Edison's Decision*, George Wise writes that on May 26, 1886, "the top local news story in the Schenectady Evening Star" was this company's opening:

> A new and rapidly growing electric company was setting up operations in Schenectady. The new arrival was the Westinghouse Illuminating Company. It would light homes, mainly of the well-to-do, with the new incandescent light, powered by the even newer alternating current. The champion of this new technology was local boy George Westinghouse, Jr., now of Pittsburgh. Running the Schenectady Company would be his brother John.[17]

[15] Betty Pieper, "George Westinghouse Slept Here," Schenectady County Historical Society Newsletter, July—August 2009, https://schenectadyhistorical.org/wp-content/uploads/2013/08/July-Aug-2009.pdf.
[16] Library of Congress, "About George Westinghouse," https://www.loc.gov/collections/films-of-westinghouse-works-1904/articles-and-essays/the-westinghouse-world/about-george-westinghouse; Library of Congress, "The Westinghouse Electric and Manufacturing Company," https://www.loc.gov/collections/films-of-westinghouse-works-1904/articles-and-essays/the-westinghouse-world/the-westinghouse-electric-and-manufacturing-company/.
[17] Wise, *Edison's Decision*, 117.

Other area cities also reported on the establishment and progress of this company; the *Rome Daily Sentinel* noted that "The Westinghouse Illuminating Company of New York is about to establish an electric light plant in Schenectady with a capacity of furnishing 1,600 lights. The first 300 applicants for lights, will have the wire strung to their place of business or residence, free of cost."[18] In early July, the *Troy Daily Times* reported, "The plant of the Westinghouse Illuminating Company is well advanced, and the manager expects to have the lights in operation by the middle of this month. Two sixty-horse power dynamos will be used, two seventy-five horsepower engines furnishing the power. Over six tons of heavy wire has been strung about the city."[19]

The company's first plant for generating electricity was in the rear of a bank building on State Street.[20] The business's growth led Westinghouse to seek a larger site, and in 1887 he purchased the parcel of land where GE Building 31 stands (which at that time had the address 295 Dock Street) from William Schermerhorn, a prominent land and business owner along the Erie Canal.[21] The building was completed sometime between late 1887 and early 1888, and served as "a new and greater power plant" for the company.[22] An undated advertisement for the Westinghouse Illuminating Company proclaims the "advantages and low cost" of the company's incandescent lighting and notes the "office and station" location as 295 Dock Street.[23]

1891-1909: Schenectady Railway Company and Schenectady Illuminating Company

Westinghouse's success in Schenectady was short-lived, as Thomas Edison's electric company, Westinghouse's primary competitor in the city, bought out Westinghouse Illuminating in 1891. They continued to run it as a distinct company but changed the name to the Schenectady Illuminating Company.[24] The building at 112 Erie Boulevard was sold to the Schenectady Street Railway Company (also under the Edison company's ownership) and was used to "furnish power for the electric railway, the city's arc lamps and house illuminating."[25] The Schenectady Street Railway Company was the only provider of streetcar service in the city. It had been incorporated in 1886, the same year as Thomas Edison's arrival in Schenectady and as the incorporation of the Westinghouse companies. The street railway company began on a small scale, only serving a few Schenectady streets with five horse-drawn cars. After it converted to electric power in 1891, it switched to six new streetcars.[26] However, as the national Panic of 1893 was beginning, the railway company went into receivership, and in 1895, the bankrupt company was reorganized as the Schenectady Railway Company. The new company continued to use the building at 112 Erie Boulevard. The 1900 Sanborn map labels it as the "Power Station" for the company (**Figure 6**).

[18] "State News," *Rome Daily Sentinel*, May 26, 1886.
[19] "Notes From Out of Town," *Troy Daily Times*, July 2, 1886.
[20] Monroe, *Schenectady, Ancient and Modern*, 239.
[21] Deed from Schermerhorn to Westinghouse, July 1, 1887 (DB:92/374).
[22] Monroe, *Schenectady, Ancient and Modern*, 240.
[23] Archives of the Schenectady County Historical Society.
[24] Monroe, *Schenectady, Ancient and Modern*, 240.
[25] Deed from Westinghouse to the Schenectady Street Railway Company, September 1891 (DB:92/374); *The Financial and Mining Record*, August 15, 1891.
[26] Eric H. Allen, *Schenectady: Trolley Hub of Eastern New York* (Arcadia Publishing, 2021), 7–9.

The railway company became integral not only to the growth of the city, but to GE, as its streetcars moved thousands of the company's workers in and out of the plant, especially during the two major shift changes each day. But with GE growing at such a rapid pace, they needed a more efficient method for transporting employees to work, and it was decided that a system of trolley lines using GE's latest turbines for power would be the best solution. Consequently, in 1898 GE bought both the Schenectady Railway Company and the Schenectady Illuminating Company (the former Westinghouse Illuminating Company) for $750,000.[27] Soon new tracks were constructed, and the railway eventually had about forty-two miles of interurban track and twenty-three miles of city track. The interurban tracks to the Capital District made Schenectady a hub for interurban connections. At the GE plant, a system for loading and unloading thousands of employees during rush hours was developed, with streetcars quickly discharging workers at the GE Loop at the entrance of the plant without tying up the mainline.[28]

1909-1948: General Electric Illuminating Engineering Laboratory

General Electric established its first illuminating engineering laboratory in Lynn, MA in 1899 at the urging of William D'Arcy Ryan, who had started with GE in 1891. Ryan had noted that "No scientific study was made of lighting projects, and lights were put in by guesswork. Inevitably, thought Ryan, that sort of thing is costly. And to whom? To the users of lights—the customers of General Electric."[29] This led to his proposal that GE start an illuminating engineering laboratory. He was given an appropriation of $10,000 to launch the lab, and in 1903 received the title of illuminating engineer, becoming "the first man to hold such a title, so far as known, in the United States."[30]

The field of illuminating engineering, which arose with the advent of the electric light, focused on lighting design—both the design of actual light fixtures and of *how* a structure would be illuminated, e.g. placement, direction, and strength of the lights. It grew in prominence as technology advanced, as did Ryan:

> Illuminating engineering became a recognized profession with its own technical journal and, after 1907, annual meetings attended by hundreds of delegates. After the death of Luther Stieringer in 1903, the leadership of the profession came to W. D'Arcy, head of the General Electric lighting department, who later engineered the lighting of the Singer Building, New York's Hudson-Fulton Celebration of 1909, the San Francisco Panama Pacific Exposition of 1915, and the Chicago Century of Progress of 1933.[31]

[27] Allen, 12.
[28] Timothy Starr, "History Lesson: Trolley Line Was Vital to Ballston Spa Area Commuters," *The Saratogian*, March 4, 2012, https://www.saratogian.com/2012/03/04/history-lesson-trolley-line-was-vital-to-ballston-spa-area-commuterspublished-march-4-2012/.
[29] John Winthrop Hammond, *Men and Volts: The Story of General Electric* (New York, NY: J.B. Lippincott Company, 1941), 265, http://archive.org/details/menvolts0000unse.
[30] "W. D'Arcy Ryan, Founder of Modern Art of Illumination, Dies at His Union Street Home," *Schenectady Gazette*, March 15, 1934.
[31] David E. Nye, *Electrifying America: Social Meanings of a New Technology, 1880-1940* (Cambridge, Mass.: MIT Press, 1990), 57, http://archive.org/details/electrifyingamer0000nyed.

The success of GE's initial illuminating engineering laboratory in Massachusetts led them to establish similar facilities at their other locations, until in 1909 they consolidated all their illuminating engineering work into a single illuminating engineering laboratory in Schenectady.[32] This new, consolidated lab was housed in the building at 112 Erie Boulevard, which was owned by GE at this time through the Schenectady Street Railway Company and was designated as GE Building 31. This new laboratory was to be the "largest photometric and illuminating laboratory in the country," with a staff of twenty-five headed by Ryan, who by this time already had a strong reputation as an inventor and "one of the most noted engineers in the illuminating field."[33] The open-floorplan design of 112 Erie Boulevard was well-suited for adaptation to a laboratory, with much of the space devoted to tests and demonstrations (see **Figure 8**).

A 1913 paper describes in detail the activities of the laboratory, which had four divisions: commercial investigations and applications, photometric testing and development, research, and photography. The commercial division advised on lighting projects and provided demonstrations to prospective customers. The photographic division captured the illumination work the lab carried out, as well as other useful photos including "examples of both good and bad lighting." The most detailed description was provided for the photometric division:

> The photometric division furnishes illumination data to all the other divisions, outside departments, sales offices and through them to the general public. Thorough tests are made on all kinds of lamps and lighting equipment. Street lighting and interior systems are tested under operating conditions. Experimental tests are carried on night and day when necessary to try out some new piece of apparatus for the patent department, or furnish special data to the engineers of the laboratory. New designs of lighting apparatus and systems are constantly being devised, constructed and tried out to determine their commercial value or their application to some special purpose.[34]

It appears that GE did not originally need the entire building, as the 1914 Sanborn map (**Figure 7**) shows that the eastern half was adjoined via two frame connectors to the adjacent building of the Mica Insulator Company, who used the space for their office, machine shop, storage, and mica sorting and shellacing. The Sanborn map also shows that this half of the building had been slightly extended to the rear by this time. The arrangement with the insulator company does not seem to have lasted long, presumably because GE desired to expand their operations at the laboratory. Sometime after 1914 they further enlarged Building 31 by adding a two-story, five-bay-long, three-bay-wide rear addition (depicted on 1930 Sanborn map, **Figure 12**), and by the 1920s were using the second floor of the building's eastern half as a headlight testing range (see **Figures 9 & 10**).

In 1932, GE's commercial lighting division was consolidated with the illuminating laboratory "in order better to co-ordinate the selling and engineering activities." The new, consolidated division was housed in Building 31, relocating the commercial lighting division from the main Schenectady campus. Ryan became a consulting

[32] Nye, 54.
[33] "Lynn Man to Head New Laboratory," *Daily Evening Item* (Lynn, MA), November 16, 1909, 4.
[34] S. L. E. Rose, "The Illuminating Engineering Laboratory of the General Electric Company," in *Transactions of the Illuminating Engineering Society*, vol. 8 (New York, NY: Illuminating Engineering Society, 1913), 383.

engineer to the department, remaining as such until his death in 1934.[35] In addition to those already mentioned, his accomplishments as the head of GE's illuminating engineering department included designing lighting for Niagara Falls, leading to the Falls's regular illumination starting in the 1920s,[36] and pioneering the use of floodlighting:

> Incandescent lamps were first adopted on a massive scale by Walter D'Arcy Ryan in his lighting of San Francisco's 1915 Panama-Pacific International Exposition. By concealing the source of light and bringing building facades into brilliant relief against the surrounding darkness, accentuating details of construction, Ryan achieved a new kind of beauty. […] Floodlighting was cheaper to install and maintain than earlier 'outline' lighting with festoons of incandescent filament bulbs, and it required less electricity to operate. Ryan and other planners appreciated that night lighting should strive to enhance architectural qualities of unity, coherence, balance, scale, and texture. The idea was not to replicate daylight viewing but to make architecture at night equally if not more expressive.[37]

After Ryan's illustration of the possibilities of floodlighting at the Panama-Pacific Exposition, GE was commissioned to floodlight the capitol building in Washington, DC; the Statue of Liberty; and multiple state capitol buildings, leading to the widespread use of floodlighting. Another GE engineer subsequently began to employ the use of floodlighting to illuminate sports fields at night, an innovation stemming from Ryan's work.[38]

After Ryan's death, the laboratory remained successful, building on his work to continue to innovate in areas like street lighting. The introduction to their 1936 street lighting catalog describes the important role the illuminating laboratory played in their products and services:

> It is perhaps not widely known that our service starts before any material is purchased. For more than thirty years, it has been the practice of the Illuminating Laboratory of the General Electric Company at Schenectady, N. Y., to study the individual requirements of each customer and survey his street-lighting project from the unbiased viewpoint of a consultant. The necessary factual data are assembled and studied by a corps of highly trained experts, and illuminating engineering recommendations are made on the basis of what will most efficiently meet the customer's requirements at the lowest cost. We have found that this type of service invariably saves the customer money. The many and diverse problems involved in the selection of correct street-lighting equipment cannot be solved economically without a service of this type. General Electric's supremacy in the field of street lighting may justly be said to be largely due to the contributions of the Illuminating Laboratory — contributions based on the accumulated experience of thirty-two years and the application of a profound scientific technique. Research scientists, designing engineers, application engineers, and artists — each one a highly experienced specialist — are constantly engaged in developing better materials, new methods,

[35] "Dickerson to Direct Lighting Sales of G. E.," *Schenectady Gazette*, June 16, 1932.
[36] John A. Jakle, *City Lights: Illuminating the American Night* (Baltimore: Johns Hopkins University Press, 2001), 184, http://archive.org/details/citylightsillumi0000jakl.
[37] Jakle, 181.
[38] "Walter D'Arcy Ryan, Artist Engineer, G. E. Illuminator," *Daily Evening Item* (Lynn, MA), May 14, 1931, 8.

> and improved applications. One of General Electric's latest achievements, the sodium lamp, has received instant and wide recognition as the ideal illuminant for highways, roads, intersections, bridges, and special applications.[39]

In 1948, as part of an expansion of their Lynn, Massachusetts plant, General Electric moved the commercial lighting division/illuminating laboratory to that city.[40] During its years in Schenectady, the illuminating laboratory played a key role in GE's reputation and success as a provider of lighting.

After the Period of Significance

After the illuminating laboratory's departure, GE shifted Building 31 to administrative use. It initially housed "Communication and General Services," but by 1953 was home to "Corporate Services, Communications, and [the] Advanced Engineering Program."[41] The Advanced Engineering Program started at GE in 1923 and appears to have continued until ca. 1970. It was a competitive three-year course for a small group of talented students who were selected each year and upon graduating would be employed at different departments at GE.[42] It is unknown whether the entire engineering program moved to Building 31 or if it served as additional research and classroom space to supplement that on the main campus.

After World War II and the decline of the streetcar, railroads, and locomotive yards, neither General Electric nor Schenectady enjoyed their previous growth levels. In 1974, GE began to downsize, and it moved its main headquarters from New York City to Fairfield, Connecticut. By the early 1980s, some of the buildings in the 639-acre General Electric plant (almost a square mile) began to be demolished. In the mid-1980s GE severely downsized, and Building 31 was sold to the Schenectady Industrial Development Agency in December 1987. It went through a succession of commercial and private transactions before being sold to the current owner, 104-112 Erie LLC, in 2008.[43]

By 2001, most of the buildings on the GE campus had been demolished. Today, there are approximately thirty-three remaining buildings, including the 1949-1950 Turbine building (Building 273; see **Figure 13**), which covers approximately 20 acres, and about a dozen ancillary structures. GE Building 31 and the adjacent building at 108 Erie Boulevard—a 1909 brick factory that served as GE Building 32 beginning in 1915—are the only two known turn-of the-twentieth-century commercial/industrial buildings directly related to GE still standing on Erie Boulevard. The only other known GE building on Erie Boulevard is the ca. 1930 concrete block and brick former Grocery Warehouse building at 104 Erie Boulevard, which by 1953 served as a Training Center for GE, designated as Building 33 (see **Figure 12**).

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[39] *Street Lighting Catalog, 1936-1937* (Schenectady, NY: General Electric Company, 1936), http://archive.org/details/StreetLightingCatalog1936-1937.
[40] "GE Promotes River Works Executive," *Daily Evening Item* (Lynn, MA), November 6, 1953, 7.
[41] *General Electric Schenectady Works Welcomes You! Souvenir Booklet* (Schenectady, NY: General Electric Company, 1949), https://www.schenectadyhistory.org/ge/swwu/index.html; *General Electric Schenectady Works Welcomes You* (1953).
[42] "12 Men Complete GE's Adv. Engineering Course," *Schenectady Gazette*, June 4, 1948.
[43] Deed from General Electric to the Schenectady Industrial Development Agency, 1987, Deed Book 1171, page 56; Deed Book 1795, page 212.

Although the ca. 1887 GE Building 31 has been vacant since 1987, the original industrial and architectural presence of the Westinghouse Illuminating Company, the Schenectady Railway Company, and the General Electric Company all remain visible in this historic structure.

Architecture

When it was constructed for the Westinghouse Illuminating Company, GE Building 31 incorporated many features of the then-popular "mill construction" building technique, which featured the use of more fireproof or flame-retardant materials. The building has a stone foundation and brick load-bearing walls, as well as interior post-and-beam construction, designed to resist fire. The use of such building materials was becoming standard by the 1880s. The building's ca. 1915 addition also features solid brick exterior walls, as well as the newly introduced steel window design. The advent of slow-to-burn mill construction in New York State occurred along with the tremendous increase in textile manufacturing after industrialization. The change was precipitated by the shift to more durable brick construction, which was in part caused by the depletion of wood resources and the increase in brickyards, as well as wood's propensity to burn quickly and comprehensively. Wood factories were not common after the early nineteenth century.[44] In buildings with slow-burning mill construction, structural walls might be saved even if interior wood framing was lost, and improvements in framing techniques, such as heavy plank floors and fire doors, also tended to preserve more of the structure in the event of a fire. Mill construction was a bridge between the earlier all-wood buildings and the slightly later reinforced concrete buildings that offered even more protection.

While this area of Schenectady was once the city's industrial center, widespread demolition has left few intact buildings to testify to this aspect of the city's past. In its heyday, the city grew at such an astounding pace that around 1922, the section of the Erie Canal adjacent to Building 31 was filled and covered over to create the six-lane wide Erie Boulevard, and new commercial and civic buildings soon lined the wide and well-illuminated street. It became the main northeast/southwest route through the city, connecting the GE campus entrance to State Street, which is the historic commercial and governmental route through downtown, originally leading straight to Albany via State Route 5.

Aside from a few architecturally important buildings closer to the main intersection of Erie Boulevard and State Street and the National Register-listed Central Fire Station, most nineteenth- and twentieth-century buildings along both sides of Erie Boulevard from State Street south to the GE entrance have been demolished, including those removed for the early 1960s construction of the Interstate 890 spur and its cloverleaf, which turns into Erie Boulevard. This has left GE Building 31 as one of the few buildings that can speak to the industrial past of this section of Schenectady.

[44] Schentag and Traynor March, "National Register of Historic Places Registration Form, Buffalo Lounge Company Building (Draft)," 10.

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Previous documentation on file (NPS):

__X__ preliminary determination of individual listing (36 CFR 67 has been requested)
____ previously listed in the National Register
____ previously determined eligible by the National Register
____ designated a National Historic Landmark
____ recorded by Historic American Buildings Survey #_____
____ recorded by Historic American Engineering Record # _____
____ recorded by Historic American Landscape Survey # _____

Primary location of additional data:

__X__ State Historic Preservation Office
____ Other State agency
____ Federal agency
____ Local government
____ University
____ Other

Name of repository: New York State Parks, Recreation & Historic Preservation

Historic Resources Survey Number (if assigned): _____

General Electric Building 31 Schenectady, NY
Name of Property County and State

10. Geographical Data

Acreage of Property Less than one acre
(Do not include previously listed resource acreage.)

Latitude/Longitude Coordinates

Datum if other than WGS84:_____
(enter coordinates to 6 decimal places)

1. Latitude: 42.811401 Longitude: -73.948880
2. Latitude: Longitude:
3. Latitude: Longitude:
4. Latitude: Longitude:

Verbal Boundary Description (Describe the boundaries of the property.)

The boundary is indicated by a heavy line on the enclosed map with scale.

Boundary Justification (Explain why the boundaries were selected.)

The boundary includes the entirety of the current tax parcel, which was historically conveyed with the building.

11. Form Prepared By

name/title Anne Stuart Beckett, Architectural Historian and Mark McConnel, AIA; edited by Tabitha O'Connell, NY SHPO
organization Summit Studio, LLC date August 2024
street & number 4353 Windy Gap Drive telephone 540-915-1233
city or town Roanoke State VA zip code 24014
e-mail mm@thesummitstudio.com

Additional Documentation

Submit the following items with the completed form:

- **Maps:** A **USGS map** (7.5 or 15 minute series) indicating the property's location.

  A **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.

- **Continuation Sheets**

- **Additional items:** (Check with the SHPO or FPO for any additional items.)

General Electric Building 31 Schenectady, NY
Name of Property County and State

Photographs:

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map.

Name of Property: GE Building 31

City or Vicinity: Schenectady

County: Schenectady State: New York

Photographer: Anne Stuart Beckett and Mark McConell

Date Photographed: May 19 and 20, 2023.

Description of Photograph(s) and number:

1 of 12: View west down Erie Blvd with GE in the background, Main façade of 112 Erie Blvd.
2 of 12: Front Elevation and east elevation from Erie Blvd., View Southwest
3 of 12: Front Elevation from Erie Blvd, View South
4 of 12: Front Elevation and east elevation detail from sidewalk., View South
5 of 12: West Elevation and Front Façade, down alley between 112 and 108 Erie Blvd., View East
6 of 12: Rear elevations of ca. 1887 building (background) and ca. 1915 addition, View North
7 of 12: Interior of first floor, eastern section, View south from front of building to the rear.
8 of 12: Interior of first floor, western section, View southeast towards eastern section and rear of western section.
9 of 12: Interior of second floor, western section, View north from rear of building (ca. 1915 addition) to the front.
10 of 12: Interior of second floor, eastern section, View north towards the front and main staircase.
11 of 12: Interior of second floor, main office at front of building, View West.
12 of 12: Interior of second floor, View North, towards main office (background) and main staircase.

Property Owner:

(Complete this item at the request of the SHPO or FPO.)

name N/A

street & number _____ telephone _____

city or town _____ state _____ zip code _____

Figure 1. A ca. 1895 photograph depicting GE Building 31 (at right) and the Erie Canal. Note towpath to the left and lift bridge visible in the distance. (Schenectady County Historical Society, Grims-Doolittle Library Photograph Collection.)

Figure 2. A ca. 1890 photograph showing GE Building 31 (brick building on right) with skylight and smokestack. Note the double-door entrance on the west elevation. (Edison Tech Center, https://edisontechcenter.org/GW.html.)

Figure 3. A 1913 photograph showing GE Building 31 at top center, with the former main entrance on the west elevation having been replaced with a window. (GE Photograph Collection, miSci - Museum of Innovation and Science.)

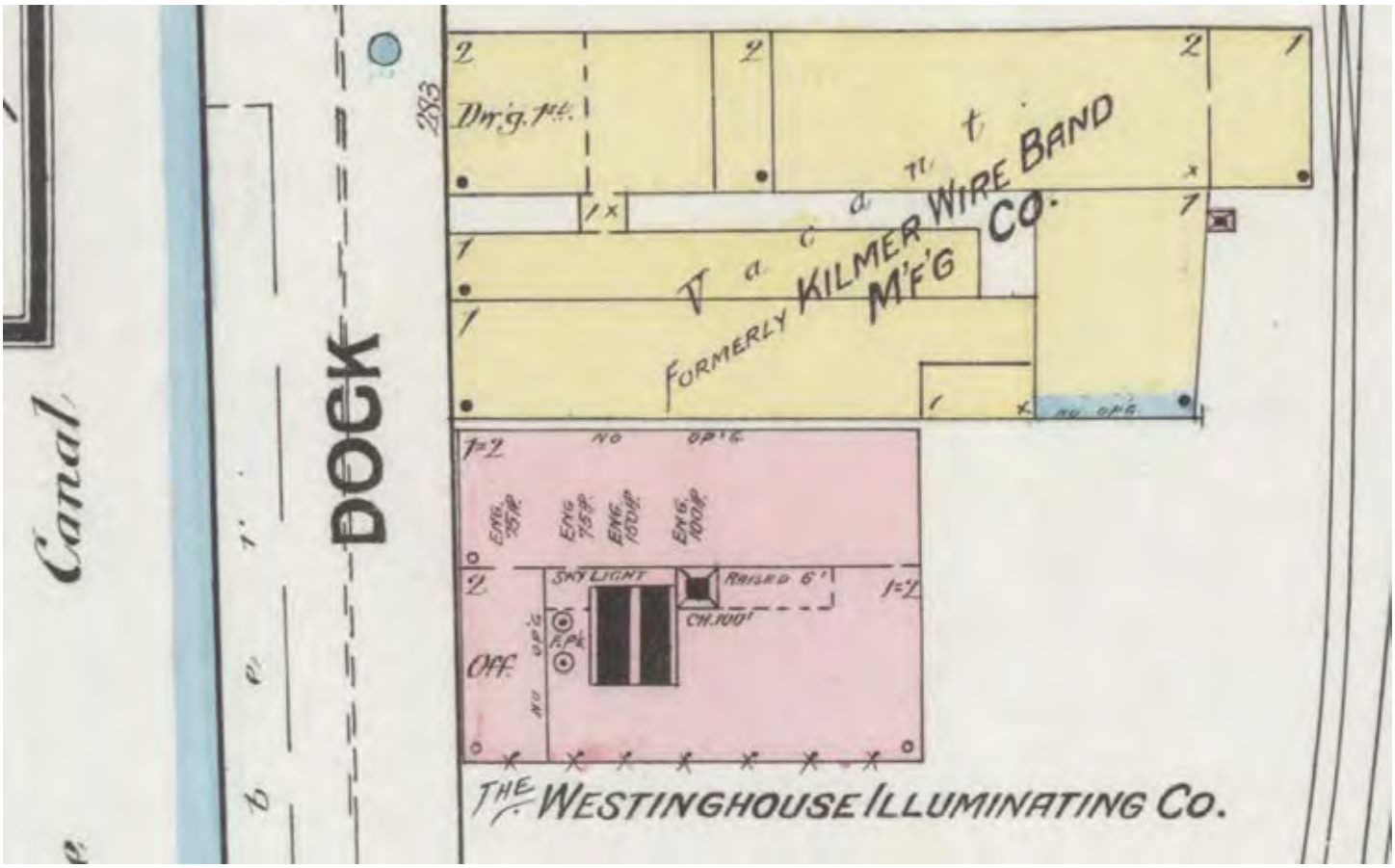


Figure 4. Detail from the 1889 Sanborn Fire Insurance Atlas of Schenectady (sheet 18) showing the Westinghouse Illuminating Company's location along Dock Street and the Erie Canal. Note interior divisions of the building and lack of windows on the east elevation.

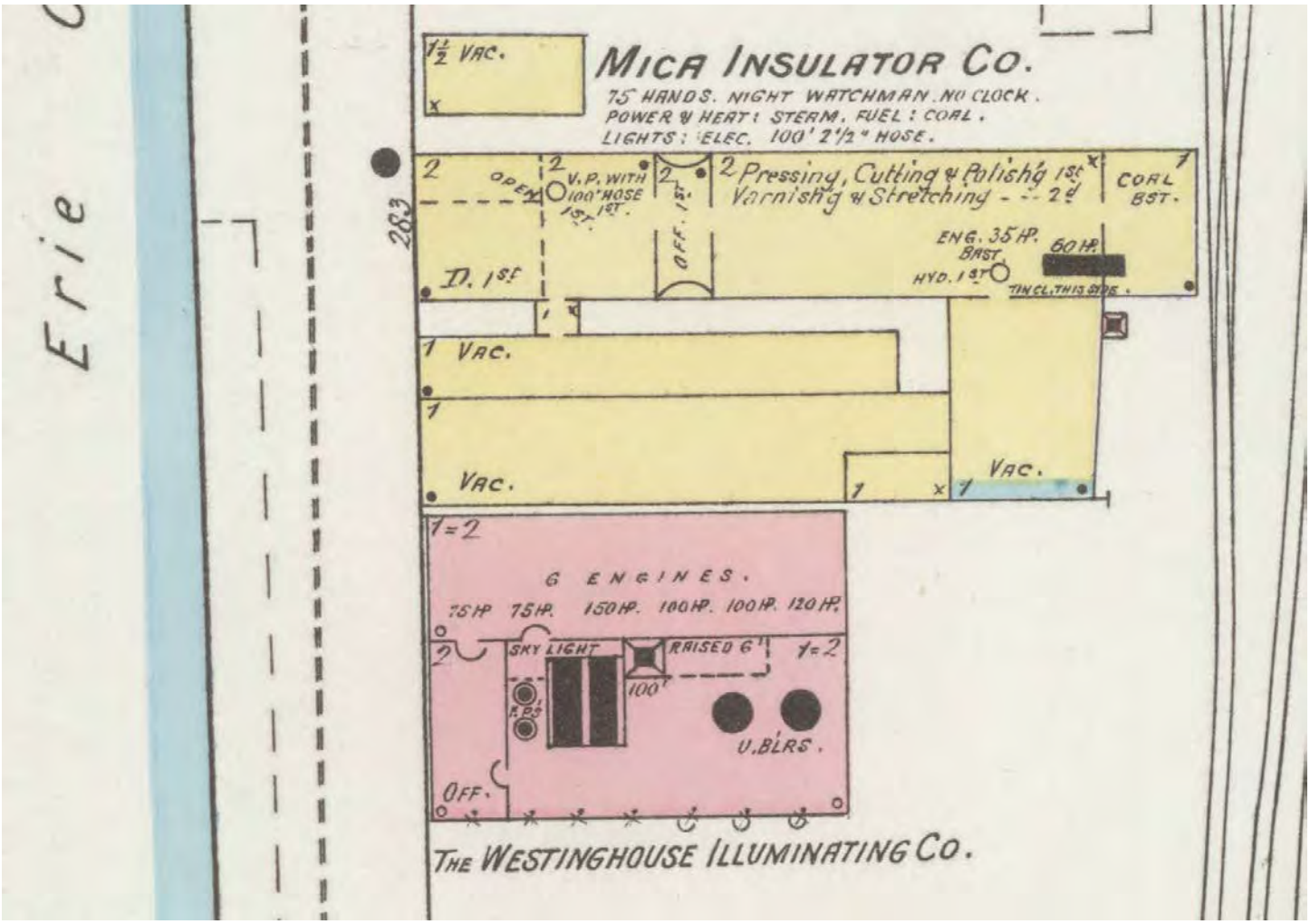


Figure 5. Detail from the 1894 Sanborn Fire Insurance Atlas of Schenectady (sheet 30) showing the Westinghouse Illuminating Company building with fireproof interior doors.

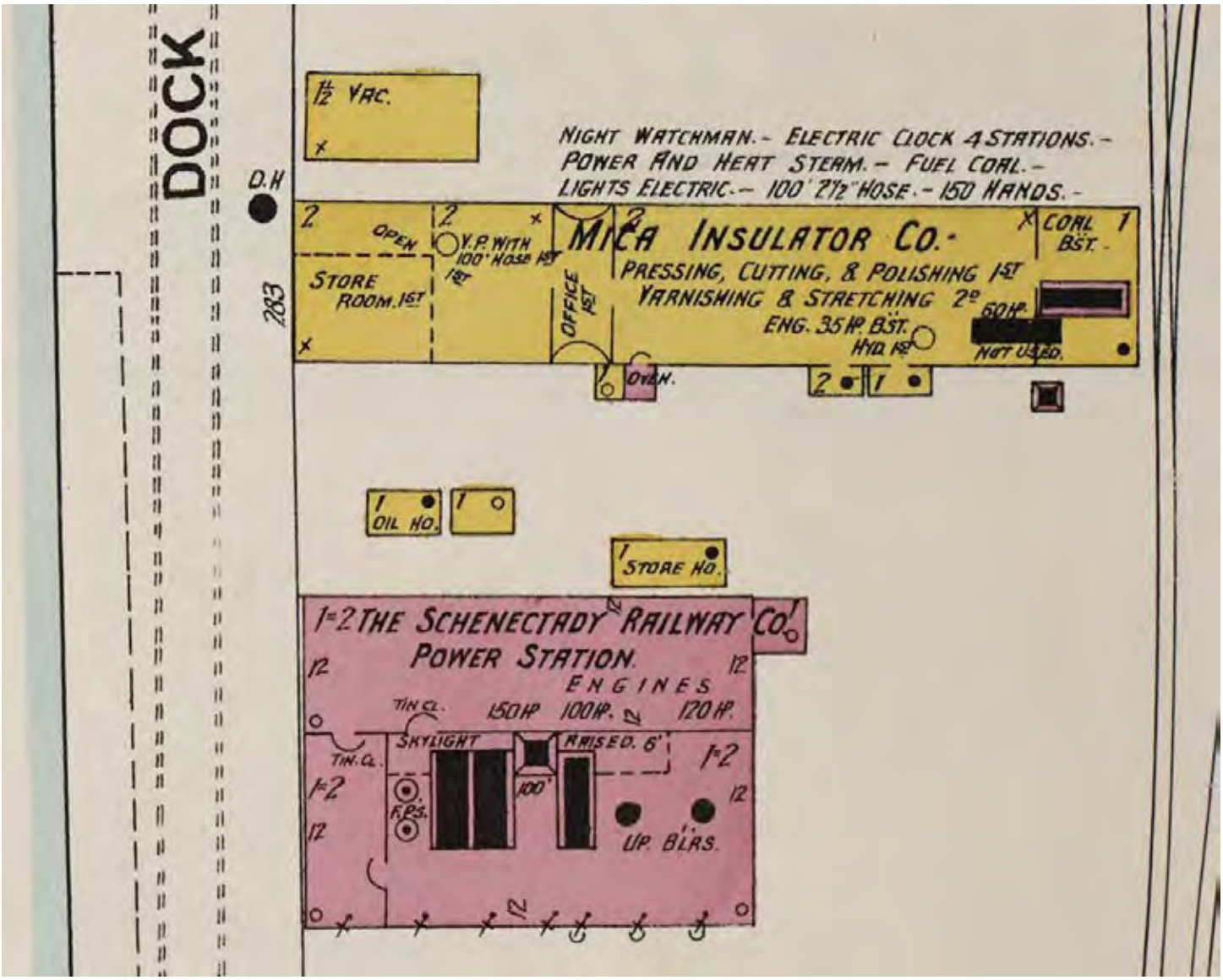


Figure 6. Detail from the 1900 Sanborn Fire Insurance Atlas of Schenectady (sheet 39) showing 112 Erie Boulevard labeled as the Schenectady Railway Company Power Station. Note demolition of immediately adjacent building to the east.

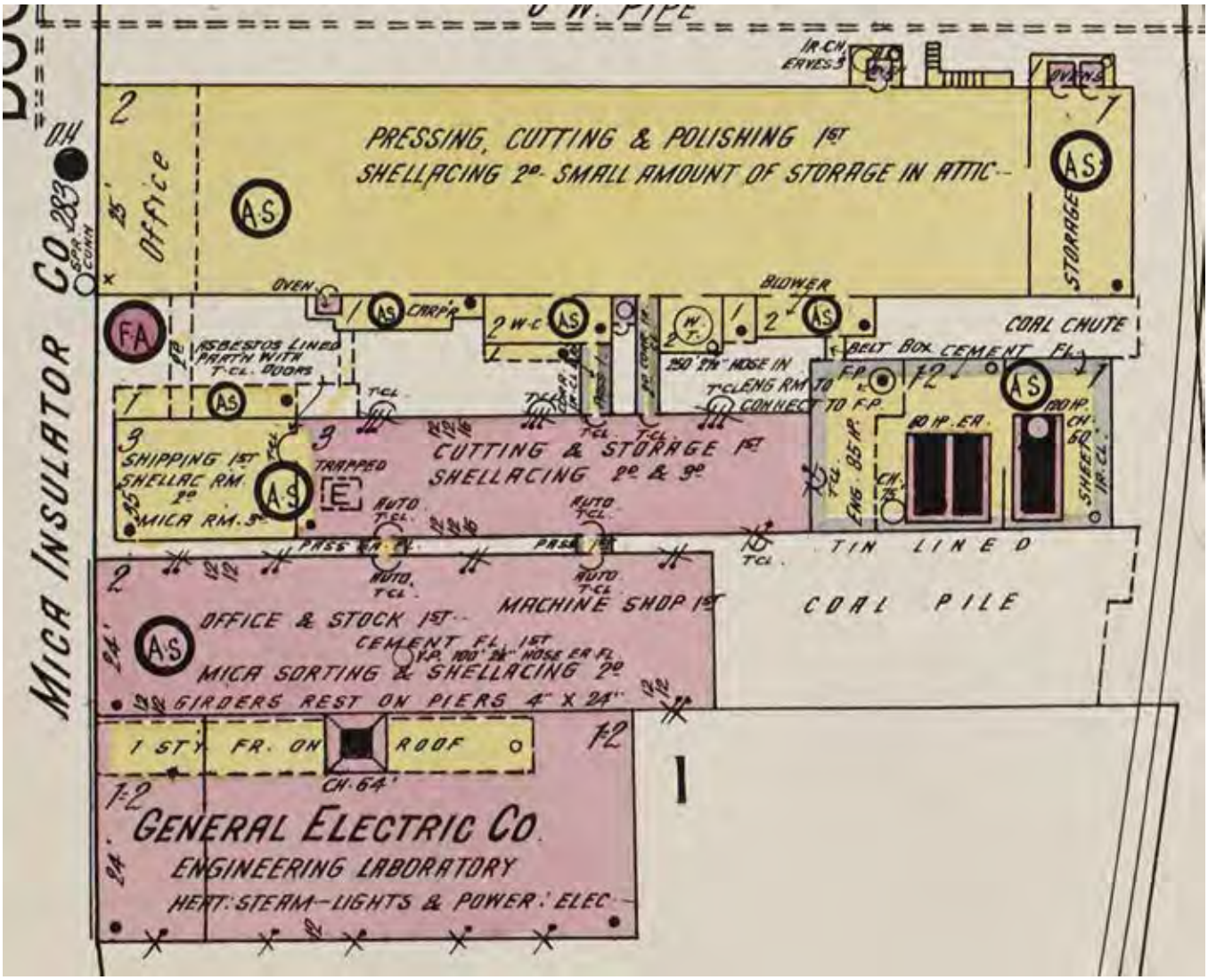
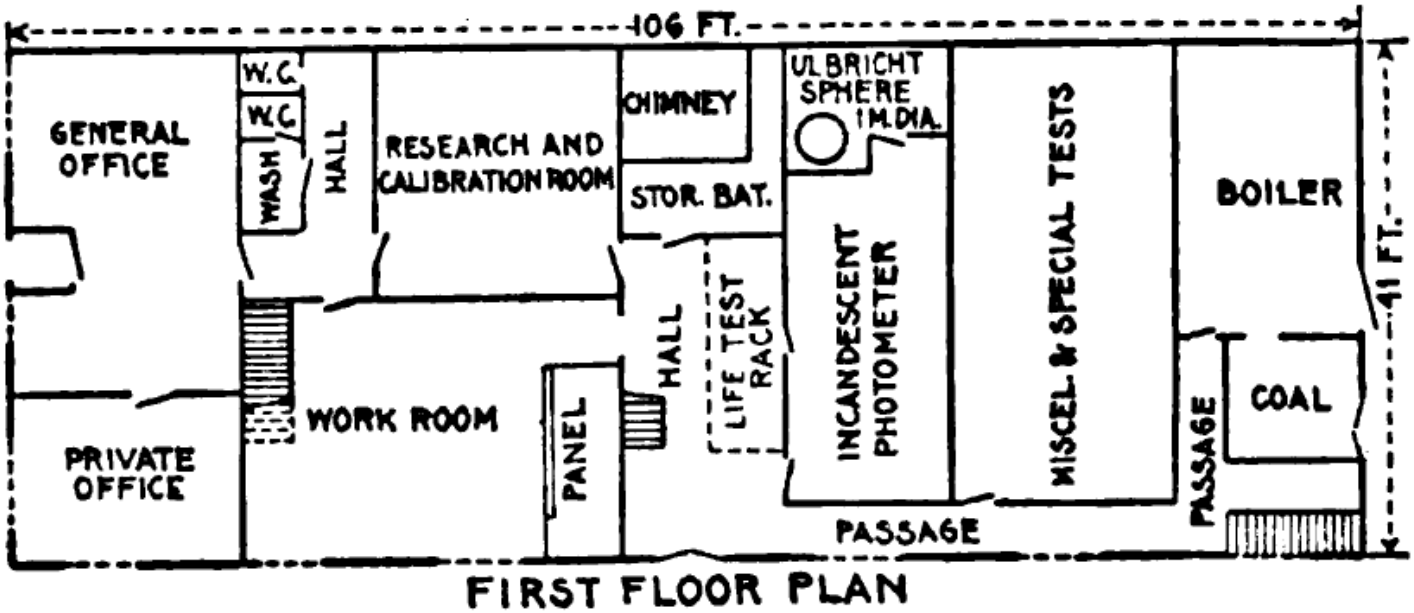


Figure 7. Detail from the 1914 Sanborn Fire Insurance Atlas of Schenectady (sheet 7) denoting the western half of GE Building 31 (bottom of image) as General Electric's engineering laboratory and the eastern half, having been extended to the rear, as being used by the Mica Insulator Company.



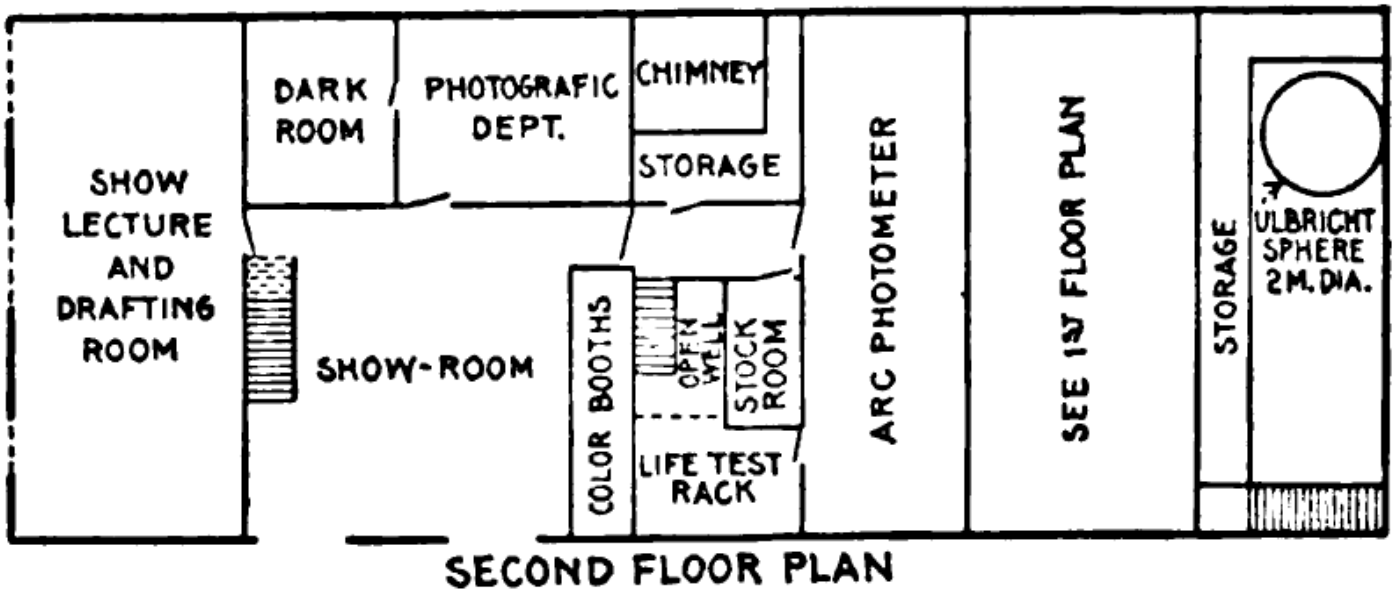


Figure 8. Plan of the GE illuminating engineering laboratory located in the western half of Building 31 in 1913. (Rose, S. L. E. "The Illuminating Engineering Laboratory of the General Electric Company," in *Transactions of the Illuminating Engineering Society*, vol. 8 (New York, NY: Illuminating Engineering Society., 1913), 380.)

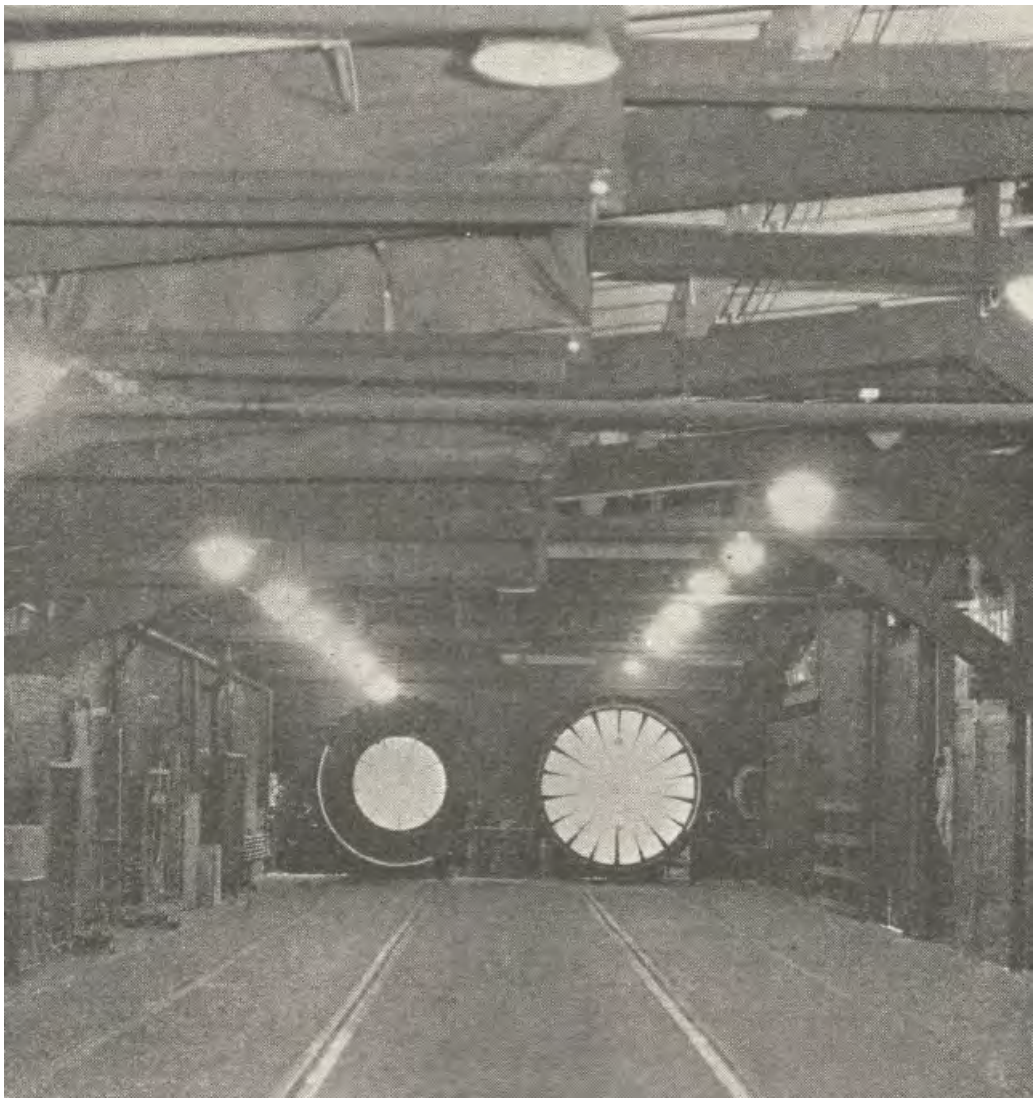


Figure 9. A ca. 1926 photo shows the 155-foot "Searchlight-Testing Range" set up within Building 31 for automobile headlight testing. This area of the building remains an open space, with the former locations of the tracks seen in the photo still visible (see **Photo 9**). (Ryan, Walter D'Arcy, "Head-Lamp Light-Characteristics and Distribution," *SAE Transactions* 21 (1926): 502–21.)

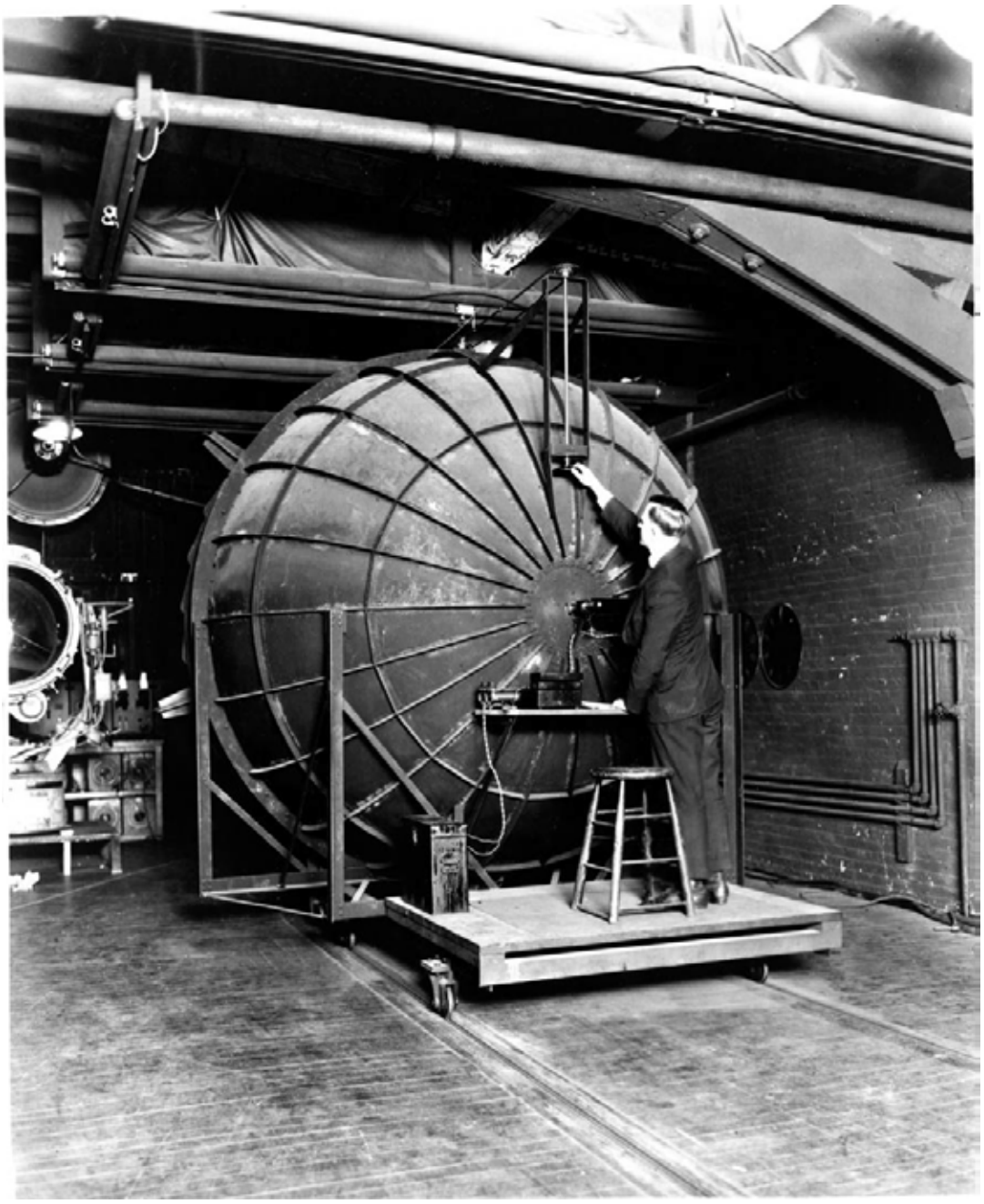


Figure 10. 1919 photo taken behind the devices shown in **Figure 9**. The beams visible at the right can be seen in **Photo 9**. (GE Photograph Collection, miSci - Museum of Innovation and Science.)

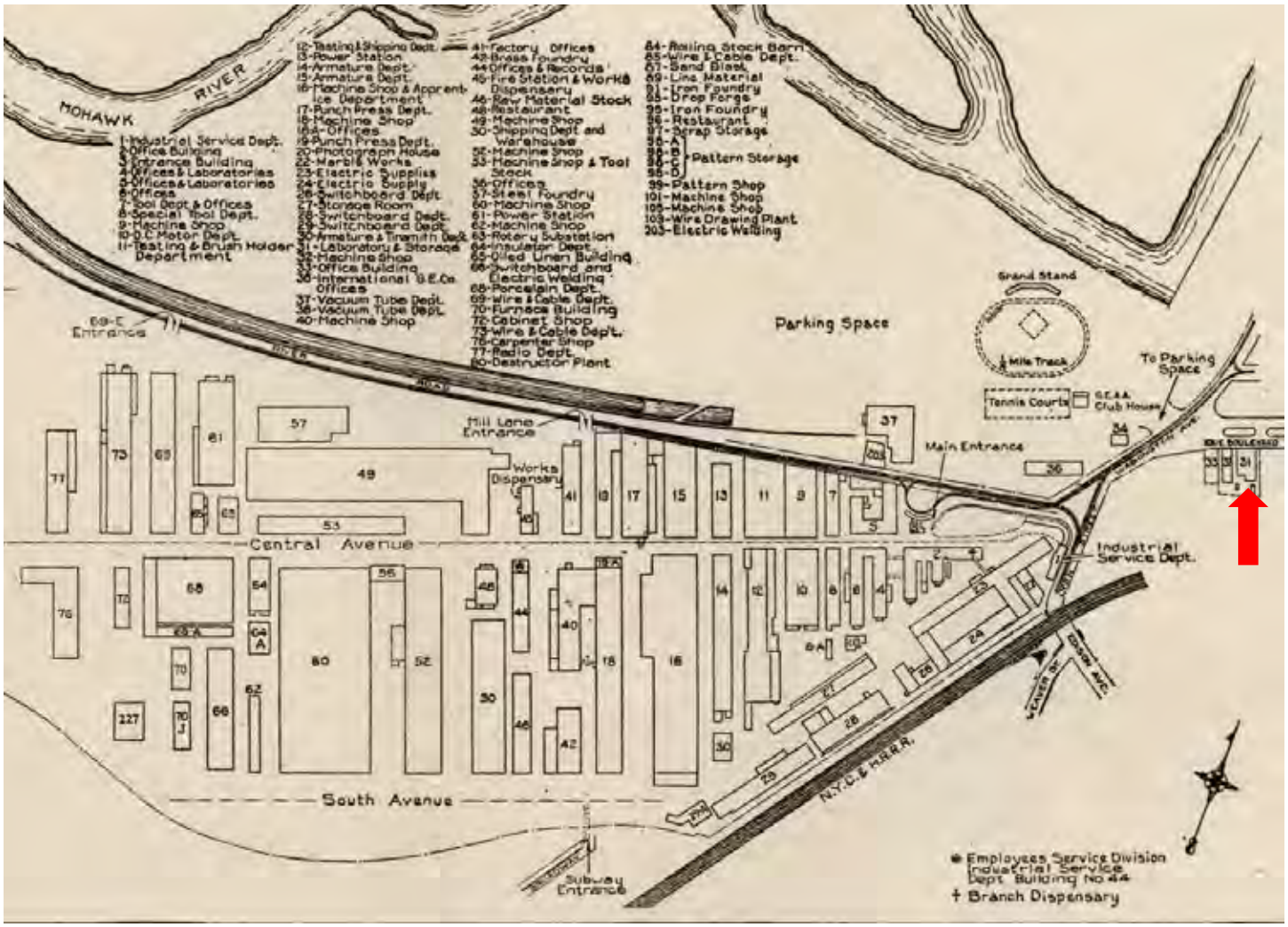


Figure 11. Section of map from the 1926 *Manual for Employees* published by the GE Schenectady Works showing the proximity of Building 31 (indicated by red arrow) to the main campus. (Schenectady Digital History Archive, https://www.schenectadyhistory.org/ge/personnelmanual1926/index.html.)

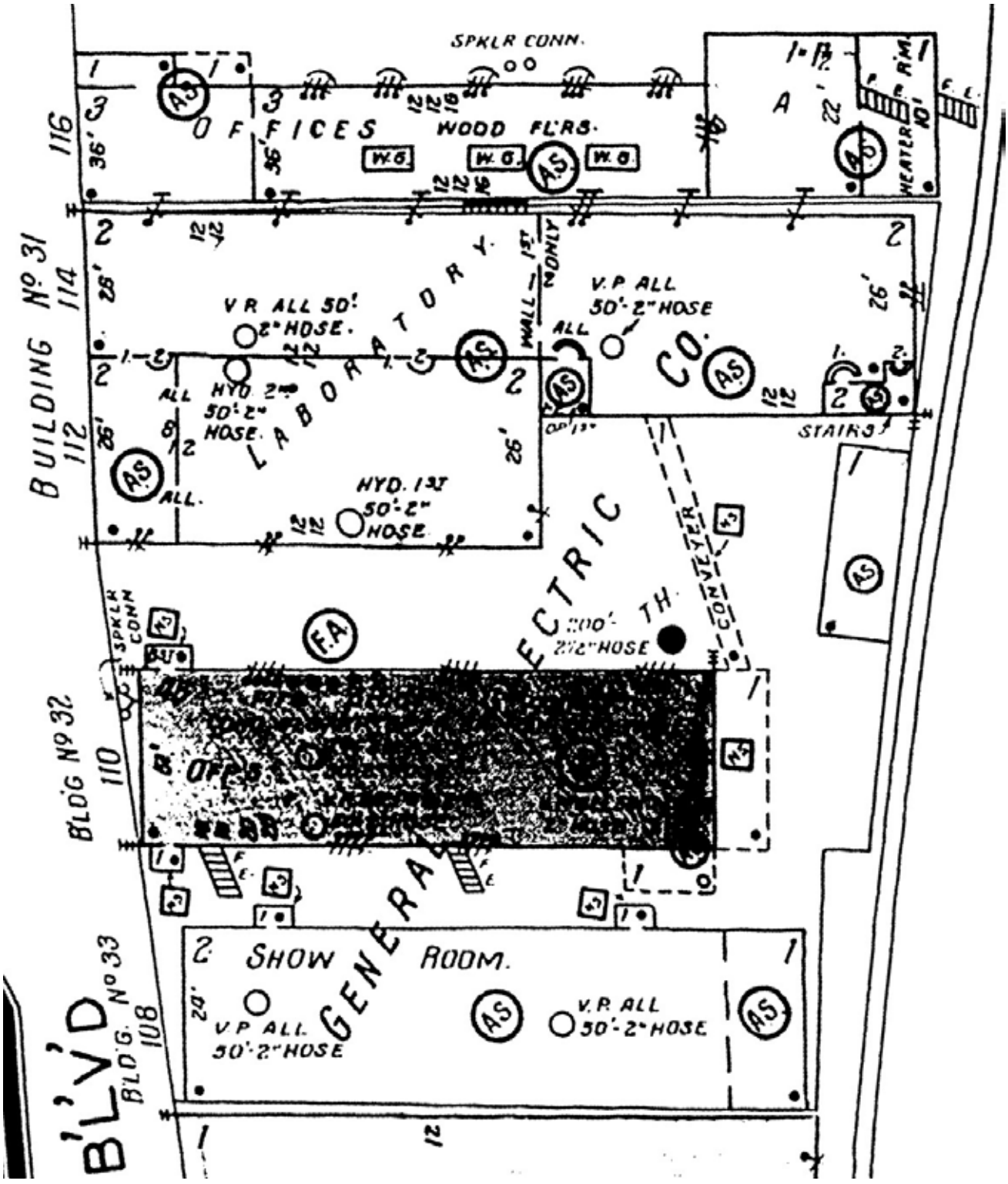


Figure 12. Detail from the 1930 Sanborn Fire Insurance Atlas of Schenectady (sheet 25) showing GE Building 31 with rear addition. Also note GE Buildings 32 and 33 to the west.

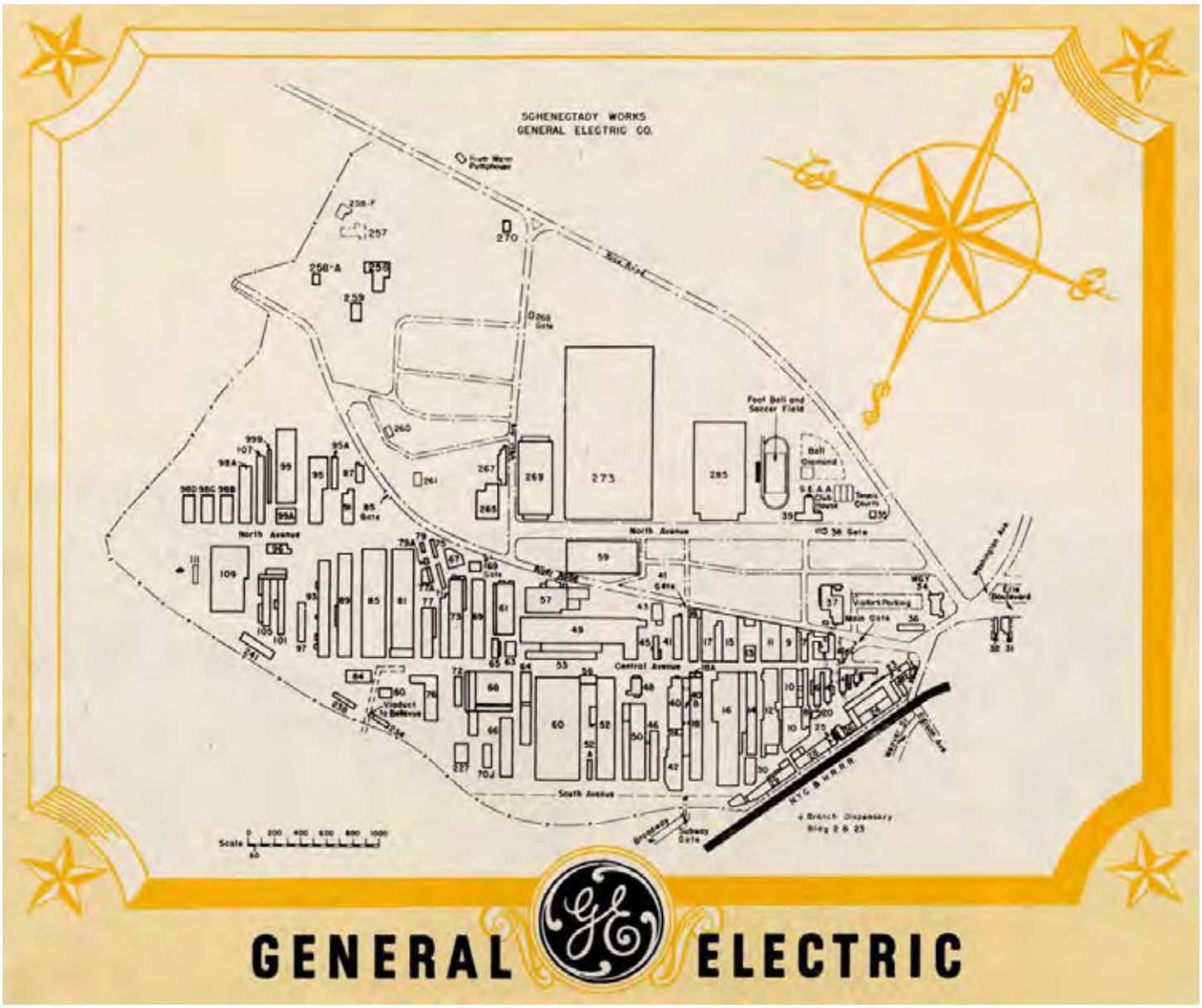


Figure 13. Map of GE campus from 1949 *General Electric Schenectady Works Welcomes You! Souvenir Booklet*, showing expansion of campus from the 1926 map (**Figure 10**). The massive Building 273 (top, center) is one of the few buildings on the campus that remain standing today. (Schenectady Digital History Archive, https://www.schenectadyhistory.org/ge/swwu/index.html.)

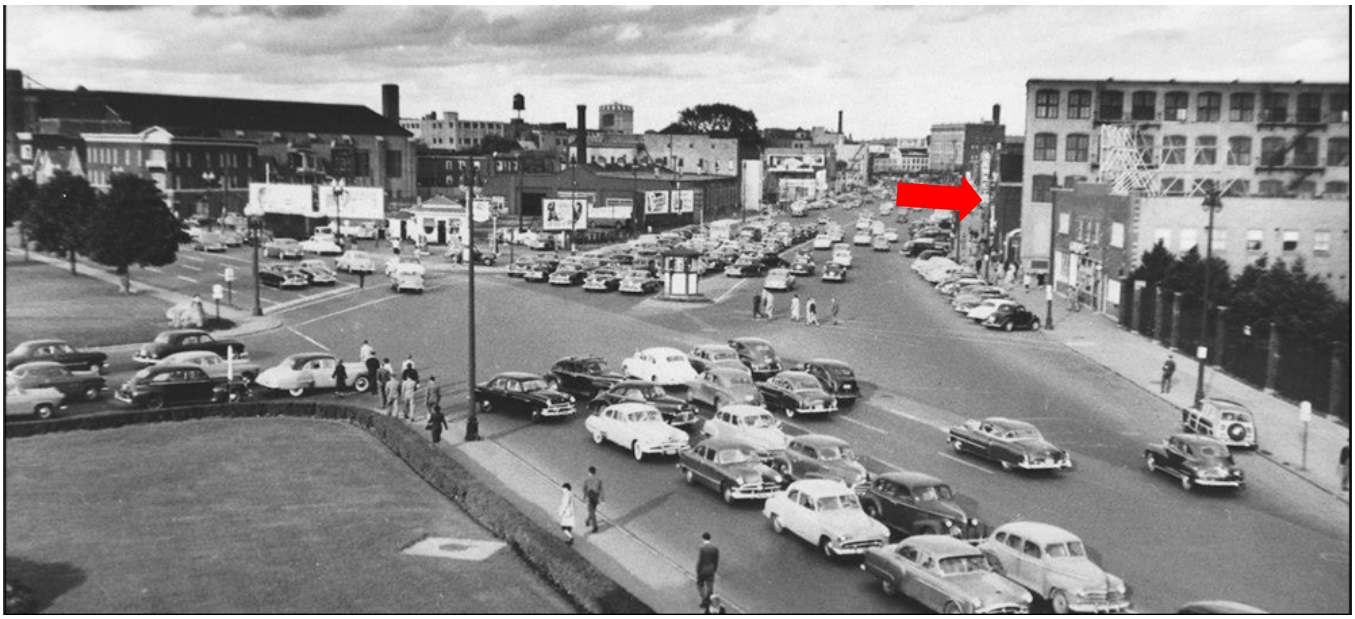
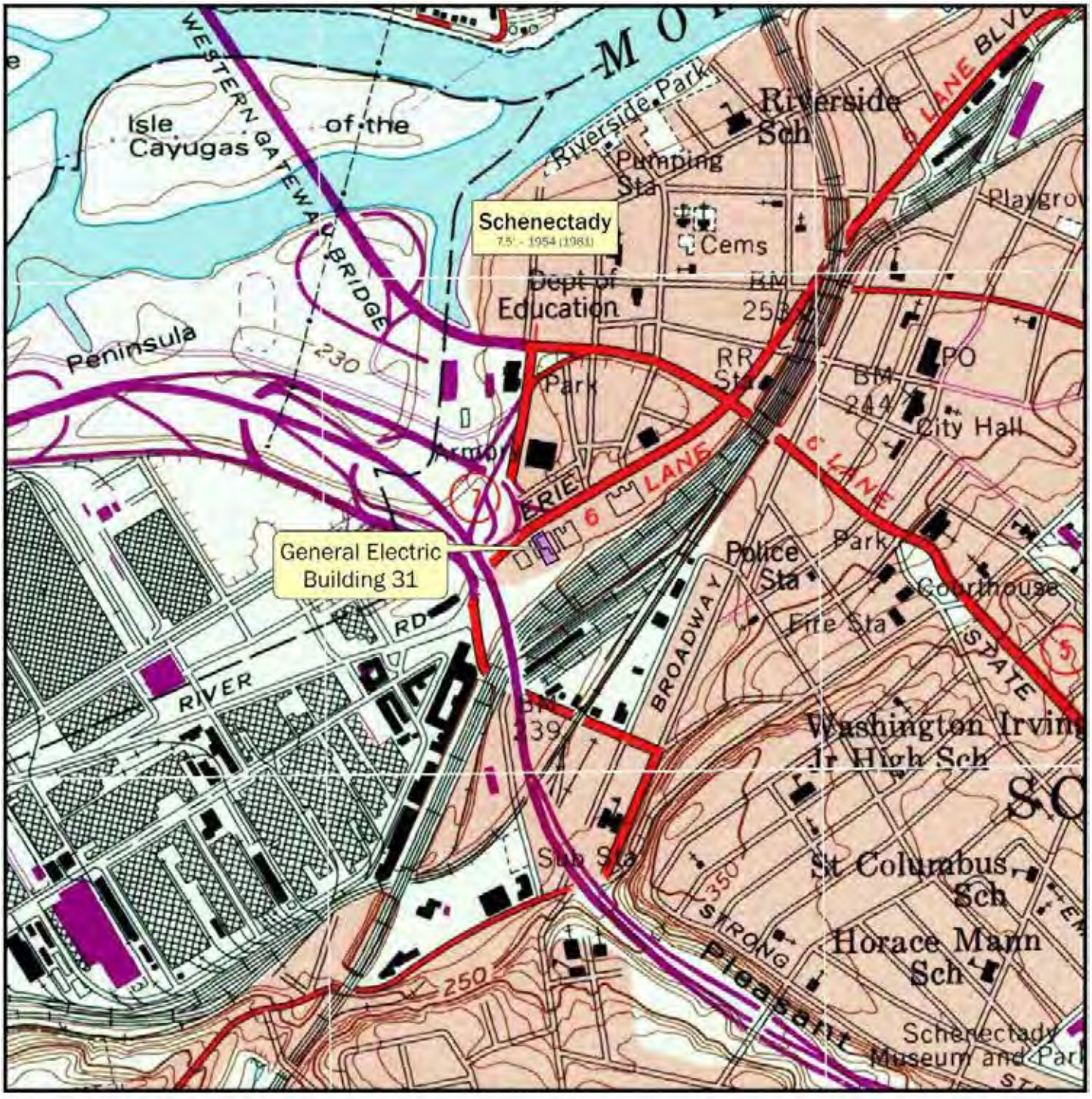


Figure 14. A 1951 photo taken from a GE building (possibly Building #34) at the main entrance of GE looking east/northeast up Erie Boulevard. GE Building 31 is to the right (indicated with red arrow). (Schenectady County Historical Society.)

General Electric Building 31 Schenectady, NY
Name of Property County and State



1:12,000
0 500 1000 ft

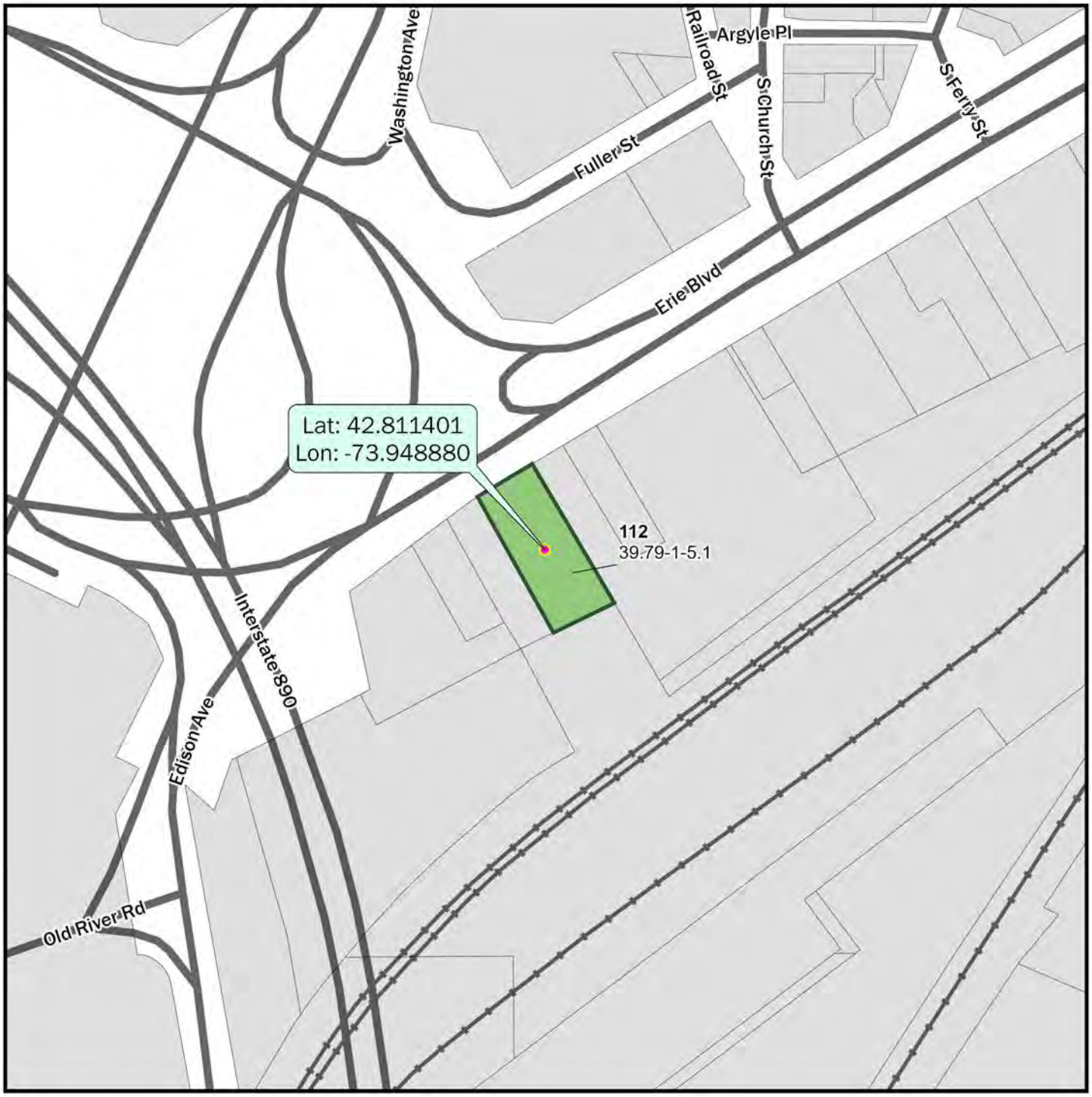
General Electric Building 31

New York State Parks, Recreation and Historic Preservation

Projection: WGS 1984 UTM Zone 18N

Mapped 08/01/2024 by Matthew W. Shepherd, NYSHPO

General Electric Building 31 Schenectady, NY
Name of Property County and State



General Electric Building 31 Schenectady, NY
Name of Property County and State

1:2,400
0 100 200 ft

Nomination Boundary (0.45 ac)

New York State Parks, Recreation and Historic Preservation

Projection: WGS 1984 UTM Zone 18N New York State Orthoimagery Year: 2021 Mapped 08/01/2024 by Matthew W. Shepherd, NYSHPO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Door