Stateville Correctional Center 1922 Power House
Illinois Route 53 North
Crest Hill
Will County
Illinois

IL HABS No. WI-1997-1-B

PHOTOGRAPHS

SITE AND FLOOR PLANS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Illinois Historic American Buildings Survey
Illinois Historic Preservation Agency
Old State Capitol
Springfield, Illinois 62701

ILLINOIS HISTORIC AMERICAN BUILDINGS SURVEY

ILLINOIS DEPARTMENT OF CORRECTIONS
STATEVILLE CORRECTIONAL CENTER
1922 POWERHOUSE

IL HABS No. WI-1997-1-B

Location: Illinois Route 53 North
Crest Hill, Will County, Illinois (near Joliet, Illinois)

Quad: USGS Joliet Quadrangle, Illinois – Will County

UTM: 16.408560.4603330

Present Owner: State of Illinois Department of Corrections
Springfield, Illinois

Present Occupant: Stateville Correctional Center
Mechanical and Maintenance Division

Present Use: Vacant

Significance: The 1922 Stateville Correctional Center Power House was an element of initial site construction for the Illinois State Penitentiary – Stateville when construction on the 64 acre interior confinement facility began in 1916. The 1922 Power House provided steam heat, hot water, auxiliary process power, and later acted as an electrical power sub-station for all operational and support buildings/areas of the institution until its replacement by a new power generating facility in 2003.

PART I. HISTORICAL INFORMATION

A. Physical History

1. Dates of Construction

Original construction substantially completed in 1922.

2. Architect/Engineer

Zimmerman, Saxe and Zimmerman – Chicago, Illinois

Henry W. Tomlinson, A.I.A. – Construction Manager, Illinois Penitentiary Board

3. Owner and Managing Agencies

State of Illinois; Illinois Department of Public Welfare, Illinois Department of Public Safety and Illinois Department of Corrections.

4. Builder/Contractors/Suppliers

Construction of the of the 1922 Stateville Power House was undertaken almost exclusively through the labor of inmates incarcerated at the nearby Joliet State Penitentiary and later by inmates housed at the Stateville Penitentiary. Construction was under the direction Henry W. Tomlinson, A.I.A., Superintendent of Construction for the Illinois State Penitentiary Commission.[1] Civilian foreman and tradesmen supervised the labor force.[2]

Known suppliers of materials and equipment used in the original construction of the Power House include the Springfield Boiler Company of Springfield, Illinois.[3]

5. Original Plan and Construction

The original concept for the 1922 Stateville Power House was for a steam process, heat and hot water generating facility to support operations at the Illinois State Penitentiary – Stateville. The location selected placed the facility in a centralized location near the west containment wall in the vicinity of other institutional infrastructure support elements, such as the wells, water reservoir tank and the internal railway lines. Construction of the building began in 1921. The building was substantially completed in 1922, with institutional feed lines being completed in the spring of 1923.[4]

6. Additions and Alterations

The 1922 Stateville Correctional Center Power House has had one major addition to its original plan, that being the detached construction of Stateville's Main Electrical Distribution Station (MEDS) in 1928.[5] The

---

[1] Rexford Newcomb, "The New Illinois State Penitentiary at Stateville," *The Western Architect* XXXI, no. 12 (December 1922), 138.
[2] *State of Illinois Department of Purchases and Construction Annual Report, July 1, 1930 to June 30, 1931, 17.*
[3] William Weidling, interview by Stephen A. Thompson, 28 September 2004.
[4] *State of Illinois Department of Public Welfare Fifth Annual Report, July 1, 1921 to June 30, 1922*, 25.
[5] Wiss, Janney, Elstner Associates, Inc., "Stateville Correctional Center," IL HABS Documentation, WI-1997-1, 5.

MEDS was connected to the Power House building by an enclosed concrete walkway prior to the end of World War II.[6]

The Power House has undergone numerous architectural alterations during its existence. The most significant changes concerning the exterior appearance of the building include the removal of the roof top penthouse which contained the coal conveyance system, replacement of numerous stacked, steel window units with glass block infill and construction of a concrete saline tank adjacent to the west elevation and a concrete ramp and loading dock on the northwest corner of the building. Interior architectural alterations include the removal of stacked, steel windows and masonry materials of the division wall separating the boiler/engine rooms on the main level and the addition of stud wall offices along the northern wall of the main level engine room floor.

The Power House has undergone various power generation equipment modifications throughout the years. Most significant include the 1937 addition of two new boilers and the 1960s/70s conversion of the plant from coal to natural gas power. The power conversion project resulted in the removal of most of the original coal conveyance system, removal of portions of the internal fly ash disposal system, addition of natural gas feed lines and addition of new boiler control units.[7]

B. Historical Context

Steam Power Plants

The purpose of a power plant is to produce a unit of power as efficiently as possible consistent with the economics of the exiting conditions.[8] During the early part of the 20th Century the type of power plant that exhibited the best economy, weighing the factors of start up investment, fuel sources, operational labor and maintenance, was steam.[9]

Steam power dates to 150 B.C. with its first application being Hero's reaction turbine. During the dawn of the industrial age in the late 18th Century, blacksmith Thomas

---

[6] George W. Drury, Chief Engineer, Stateville Penitentiary. Plot Plan, Illinois State Penitentiary-Stateville, 1 July 1946.
[7] Weidling, interview by Stephen A. Thompson, 28 September 2004.
[8] Gustaf A. Gaffert, *Steam Power Stations* (New York: McGraw-Hill Book Company, Inc., 1937), 1.
[9] Ibid, 4.

Newcomen and engineer James Watt did much to perfect the machinery for the utilization of the heat energy available in steam.[10]

Newcomen invented a fire engine consisting of an open cylinder at the top and a piston sliding along its inner surface. Steam introduced under the piston expelled air, and the subsequent cooling and condensing of the steam by a jet of water by a jet of water created a vacuum which allowed atmospheric pressure to push the piston. Watt refined Newcomen's approach by eliminating alternate heating and cooling of the cylinder. Watt's refinement, causing steam condensation to take place in an exhaust vessel reduced steam consumption by 75%, thereby allowing surplus steam to be used for additional industrial purposes. By 1785, Watt had perfected the rotative type engine and placed it on the market.[11]

In the United States, the first example of economy and design in a steam powered power plant was the Pearl Street Station constructed by Thomas Edison in 1880 for the New York Edison Company. The Pearl Street Station was built to power 60,000 lights by bipolar generators driven by water-tube boilers. The system was groundbreaking, in that it integrated mechanical coal and ash handling apparatus, steel-plate flues and exhaust stacks and direct-connected prime movers, which could be operated in parallel and arranged for maximum ventilation/cooling of generator elements. Steam engines reached their maximum capacity with the introduction of triple-expansion engines at the end of the 19th century. The vertical turbine was then developed to maximum design by 1914, later giving away to the more practical horizontal type turbine.[12]

Prior to World War II, steam dominated the industrial and fixed consumer power markets in the United States, although hydroelectric and, to a lesser extent, oil/gas-engine plants were beginning to share the power generation industry market.[13] Since World War II, other power generation systems, such as wind, solar and nuclear, have been examined and put into practice in the United States. Yet, the dominate large-scale, localized power generation system for heating and as a pressure power driver remains steam, as established systems have been upgraded and made more efficient through refinement of system sub-elements such as generators and generating machinery.[14]

---

[10] Ibid, 1.
[11] Ibid, 1.
[12] Ibid, 2.
[13] Ibid, 3.
[14] Ibid, 6.

Stateville Correctional Center 1922 Power House

The 1922 Stateville Power House was constructed as part of a new penitentiary planned by the State of Illinois in the era prior to World War I to replace the antiquated facilities at the Illinois State Penitentiary at Joliet.[15]

In 1907, the State of Illinois created the Illinois Penitentiary Commission. The Penitentiary Commission's duties were,

> "To select and obtain...for the State, a suitable site for the relocation of the Illinois State Penitentiary and the Illinois Asylum for Insane Criminals, at or near Joliet. Site to contain no less than 200 acres."
>
> "To erect buildings, using convict labor so far as possible."[16]

The Penitentiary Commission consisted of; Chairman James A. Patten of Chicago, along with members Ira C. Copley of Aurora and John Lambert of Joliet.[17] These gentlemen served as commissioners until Stateville was dedicated in 1924. Shortly thereafter, the Commission was abolished and its powers and duties were turned over the State of Illinois Department of Public Welfare. During the Commission's existence, it was provided with an initial appropriation of $500,000 in 1907 and additional fiscal appropriations through 1919 to fund its objectives.[18]

Through purchase and condemnation, the Commission acquired a 2,200 acre site in Will County, north of Joliet and to the west of the DesPlaines River for the Stateville farm and prison complex. Once the site was acquired, the Commission spent a substantial amount of time researching other prison systems throughout the world in an effort to formulate conceptual plans for the new facility, which they desired to be the most modern in the world. With this task complete, the Commission asked for plans and specifications for their ideal institution from several architectural firms. The firm of Zimmerman, Saxe and Zimmerman of Chicago provided a plan consisting of a 64 acre prison yard surrounded by a 33' tall reinforced concrete wall with guard towers on the corners; circular cell houses with a central dining facility; power house; administration building and other support buildings; all to be

---

[15] Wiss, Janney, Elstner Associates, Inc., "Stateville Correctional Center," IL HABS Documentation, WI-1997-1, 87.
[16] Margaret C. Norton, "History of State Departments of Illinois Government, 1787-1943" Vol. VI (Illinois State Library, Springfield, Illinois, 1984), 38.
[17] Louis L. Emmerson, Secretary of State, ed. *Blue Book of the State of Illinois, 1917-18, 317.*
[18] Norton, "History of State Departments of Illinois Government, 1787-1943" Vol. VI, 38.

constructed of concrete body, brick veneer and fire-proof and were awarded the design contract.[19]

Construction of the 64 acre prison facility commenced on 25 August 1916 under the direction of Commission appointed construction manager Henry W. Tomlinson, A.I.A. Inmate labor, initially numbering 175 workers, constituted the bulk of the workforce. Inmates were under the supervision of outside (civilian) foremen or tradesmen. [20] As many as 700 inmates would eventually be part of the construction crew during peak efforts in the early 1920s.[21]

Although a temporary Power House was constructed early in the facility's development, the 1922 Stateville Power House was started in 1921 soon after the initial, round cell house, D House, was completed in 1919.[22] The primary function of the power house was to provide steam for institutional heating, process steam for support buildings such as the bakery and eventual prison industries buildings.

The Power House was scheduled to generate electrical power for the institution also. It is doubtful that this service was ever provided by the 1922 Stateville Power House systems. During early construction of the institution, electrical power was extended from the power house of the local sanitary district.[23] Circa 1928, the Stateville Main Electrical Distribution Station (MEDS) was constructed adjacent to the southeast corner of the Power House. The MEDS was originally enclosed by a fenced perimeter. A grade-level, concrete walkway connected the main entrance on the west elevation of the MEDS to the institutional, enclosed concrete walkway at the east elevation of the Power House. By the 1940s, a rectangular concrete tunnel, faced with brick, connected the two buildings.[24] An institutional site plans from 1946 exhibits that primary underground transmission lines extend to the MEDS from a private utility sub-station outside the west perimeter containment wall. A site inspection conducted in September 2004 found no evidence that mechanical systems from the Power House supported the distribution of electrical power from the MEDS to the institution.

Major modifications to the mechanical systems of the Power House during its functional life include the addition of two 325 h.p. boilers (1 & 6) in 1937 and the change to a natural gas boiler firing system in the late 1960s or early 1970s.

---

[19] Illinois Prison Inquiry Commission, *the Prison System in Illinois: A Report to the Governor* (Springfield, Illinois, State of Illinois, 1937), 156-157.
[20] Ibid, 157.
[21] *State of Illinois Department of Public Welfare, Fifth Annual Report, July 1,1921 to June 30, 1922,* 25.
[22] *State of Illinois Department of Public Welfare, Fourth Annual Report, July 1, 1920 to June 30, 1921,* 22.
[23] Ibid, 22.
[24] Drury, 1946 Plot Plan, Illinois State Penitentiary- Stateville.

Architectural plans indicate that little modification to structural aspects of the original design were necessary for the boiler additions, as the plant was planned to add this capacity.[25] In 1967, a water treatment and water-softening system as well as 80,000 pounds per hour boilers were installed.[26] The switch to natural gas eventually led to the removal of major mechanical/architectural elements associated with the coal conveyance system, primarily the removal of the rooftop, clearstory, penthouse conveyance housing, conveyor drives, and boiler stoking augers descending from the ceiling mounted storage hoppers.

Other modifications to the Power House include the addition of stud-walled office space in the main level engine room, removal of the original concrete salt tank at the basement level, capping of the exterior coal bunker receiving area and removal of the rail spur accessing the Power House from the sally port on the south containment wall.

Operations of the Power House were always under the direction of the Chief Engineer of the institution. Personnel operating the engineering systems associated with the Power House are contemporarily designated Stationary Engineers. The stationary engineers were supported by inmate labor, especially during the era of coal firing. The stationary engineers work in three eight hour shifts.[27] Evidence that inmate laborers resided on site exists in form of confinement spaces in the basement level of the Power House and MEDS. Verification of the MEDS confinement spaces was not confirmed during the site inspection due to flooding of the basement level of the building.

The contemporary Stateville Power House, replacing the 1922 Power House, was constructed outside the institutional west containment wall and came online in 2003. The new Power House is constructed of steel framing, covered in drivet material and is a quarter the size of the 1922 version. Mechanical systems include gas fired boilers. The entire system is computer synchronized but can be manually operated if necessary.

Zimmerman, Saxe and Zimmerman

The architectural firm responsible for the design for the 1922 Stateville Power House, as well as the rest of the original Illinois State Penitentiary – Stateville, was the Chicago, Illinois firm of Zimmerman, Saxe and Zimmerman. The firm's partners

---

[25] *State of Illinois Department of Public Welfare, Fourth Annual Report, July 1, 1920 to June 30, 1921*, 22.
[26] Wiss Janney, Elstner Associates, Inc., "Stateville Correctional Center," IL HABS Documentation No. WI-1997-1, 192.
[27] Weidling, interview by Stephen A. Thompson, 28 September 2004.

consisted of architects William Carbys Zimmerman, FAIA, former Supervising Architect for the State of Illinois, his son-in law Albert Moore Saxe and his son Ralph Waldo Zimmerman.

William Carbys Zimmerman (1859-1932) was the senior partner of this firm and had been associated with other firms in Chicago, Zimmerman & Flanders and Zimmerman & Saxe, since the late 1880s. In 1905, Zimmerman took the position of Supervising Architect for the State of Illinois, a position held until 1913. After leaving the State of Illinois, the senior Zimmerman's Chicago firm was known as Zimmerman, Saxe & McBride for a time until son Ralph Waldo joined the firm during the World War I era. Designs generated by firms with which the elder Zimmerman was associated were not limited to correctional facilities. Other designs generated by Zimmerman related firms included, commercial, residential and recreational buildings in Chicago as well as the Illinois Supreme Court Building in Springfield, Illinois.

W.C. Zimmerman served as the firm's lead during the design of Stateville and also the Eastern State Penitentiary in Graterford, Pennsylvania. Zimmerman retired from his firm in the mid-1920s and died in April of 1932.[28]

PART II. ARCHITECTURAL/ENGINNERING INFORMATION

A. General Statement

1. Architectural Character

The 1922 Stateville Correctional Center Power House building exhibits an unpretentious neoclassical exterior design of block-like massing. It is clad with speckled buff colored brick laid in a common bond of seven stretcher rows per each header row. Blonde terra cotta cornice and parapet coping accentuate the buff colored brick and provide a sense of depth to the building's elevations. Steel, rectangular windows, with steel security coverings are present on all elevations, with multi-story units in place on the east and west facades. Exterior doors are hollow-core steel units.

The interior of the building is divided into a boiler/engine room level, with the main smoke(exhaust)stack and plant mechanical systems extending into the higher reaches, and a basement level containing the smokestack pedestal, concrete structural elements, plant mechanical systems and institution steam

[28] Wiss, Janney, Elstner Associates, Inc., "Stateville Correctional Center," IL HABS Documentation No. WI-1997-1, 3-7.

distribution piping running to/through a connecting access tunnel on the east façade. The exposed interior fabric of the building is primarily reinforced concrete with minimal red brick cladding in some areas. Structural subdivision of both the boiler room and basement levels for office/support spaces is evident in the southern portion of the interior. A stud wall constructed office area is present in the northeastern area of the engine room floor.

2. Power Engineering System

Basic mechanical function of the Stateville 1922 Power House steam generation system involved the heating of water in boilers, partial transference of steam generated to turbine engines, which through pressure lines, pushed primary steam generated from the boilers to other locations of Stateville Correctional Center for heating and process functions. No physical evidence exists as a result of the September 2004 site inspection or review of historic plans that the power for the adjacent 1928 Stateville Main Electrical Distribution Station was generated by steam power from the Power House.

Remnants of the steam generating engineering system incorporated into the 1922 Stateville Power House indicate that its last configuration was that of natural gas fed, non-condensing turbine plant. In a non-condensing plant, steam, after passing through the turbine(s), is piped to other locations for process steam and heating functions. Physical evidence in the form of pulverized bituminous coal residue, coal conveyance equipment and ceiling mounted storage hoppers indicate that the original design was as a coal fed system.

Both levels of the Power House are separated by a typical boiler/engine room division wall. The four original 300 h.p., the two 1937 325 h.p. boiler additions and the 1967 replacement boilers formerly located in the main level boiler room have been removed. The boilers were fed by pumps centered in an aisle between boilers 3 and 4. Control panels for the boilers remain in an aisle to the west of the removed boiler units. Receiving/feed tanks and convection type super heater piping are located in the upper reaches of the boiler room. The main level engine room contains no turbine drives, only vertical/horizontal receiving/processing tanks associated with the system water processing/softening functions. Electrical control panels associated with sub-system pumps and turbine operations are located on the southern and eastern walls of the main level engine room.

The western portion of the basement level of the building contains the boiler foundations, boiler forced air fans/motors/ductwork, ash pits, ash disposal piping, original water softening tanks and the coal conveyance shaft from the original exterior coal bunker. The eastern portion of the basement contains two turbines and associated receiving tanks/piping. Steam feed lines, as well as water/natural gas intake lines are present at the tunnel entrance at the basement level.

The historically associated system concrete salt tank, vertical air receiver tank and ash disposal silo with support structure are present around the perimeter of the building.

3. Condition of Fabric

In September of 2004, the architectural elements of the 1922 Stateville Power House were in fair to poor condition. Most of the observed failures and deterioration was due to the lack of periodic maintenance, much of which may have been deferred in anticipation of construction of a new institutional power facility. The most significant failure noted was external brick cladding on the northeast elevation of the building which has developed large fissures and is approaching catastrophic collapse. Other fabric deterioration noted related to steel window/window lintel corrosion, the long term decline of interior paint finishes in former office areas and elastic roof covering separation. Standing water was also present in basement areas, lending to further deterioration of mechanical equipment and metal building components on this level.

The condition of the extant engineering elements associated with the Power House is poor. Main boilers and significant associated boiler piping have been removed. Boiler water heating and receiving tanks/piping, water softener tanks/piping and fly ash disposal piping, as well as associated values are significantly corroded and no longer functional. Engine Room turbines/ motors show signs of water damage.

B. Description of Exterior

1. Overall Dimensions

The 1922 Stateville Correctional Center Power House has footprint dimensions of 118'x 93'. Slight deviations to this rectangular layout exist on the south elevation where there is a 19'x 13' recess on the southeast portion of

this façade where the connecting, enclosed concrete walkway leads to the Main Electrical Distribution Station.

Elevation height dimensions for the Power House vary, as the building has two roof levels. The western/rear portion of the building has a height of approximately 39' from grade to parapet coping level. The eastern/front portion of the building has a height of approximately 32' from grade to parapet coping. Smokestack height is approximately 160' from grade to discharge opening.

2. Foundation

A discussion of the building's foundation is included in the structural system description below.

3. Walls

The exterior walls of the 1922 Stateville Correctional Center Power House are clad with glazed, brown-speckled, buff brick laid in a common bond. At a height if 18" above grade exists five shiner courses topped by a rowlock course of wire cut brown brick. Upper level cornices are composed of blonde terra cotta tiles. A three foot high parapet wall extends around the perimeter of the building. The parapet is capped with blonde terra cotta coping and has an interior wall of single course red brick laid in common bond.

Directly below the cornice tiles there exists copper drainage scuppers connected to 3"x4" rectangular, galvanized downspouts linked to cast iron drains approximately 18" from grade. There are two drainage elements on the east elevation, one on the north, four on the west and three on the south. Rooftop lightening rod grounding cables parallel drainage elements on all elevations. The east elevation contains a steel rooftop access ladder located on the south side of the concrete walkway. The west elevation contains mechanical system a galvanized venting pipe and cap on the northwest corner.

All elevations contain stacked, steel windows covered with iron bar security units. East and north elevations contain double door openings. A bulkhead on the north elevation contains a single door opening. The west elevation contains a single door opening in the vicinity of the fly ash disposal structure.

4. Structural System

The basement level of the building is 4" concrete slab set on a 2'x4'x4' perimeter concrete foundation. The basement wall consists of 12'6" high, steel-reinforced, formed concrete frame which joins with the main boiler room floor, also constructed of concrete.

The eastern half of the basement level includes twelve 18"x18"x10'h concrete columns for upper level support. Additionally, eight 6" steel I-beams on 12" concrete footings have been added for support in the southeast portion of this area. The western half of the basement level contains 18" reinforced concrete bearing walls to support the boiler/mechanical areas of the upper level. Central to the basement level is a two-tiered, octagonal-shaped reinforced concrete pedestal for support of the facility smokestack.

The main boiler room level is supported by brick perimeter bearing walls divided into eastern and western sections by an internal brick boiler/engine room division wall approximately 44' from and parallel to the east elevation wall. Support for the concrete roof in the eastern half of the main boiler room level is enhanced by four centered steel trusses bolted perpendicularly to the interior bearing walls and linked to the concrete roof beams by 18" steel I-beams. Twelve inch steel I-beams centered between the truss members are bolted perpendicularly to the 18" I-beams under the concrete roof beams. Structural support for the western portion of the main boiler room area consists of the perimeter masonry bearing walls and a system of 12" steel I-beams on 18" concrete footings tied to concrete roof beams and the six concrete coal hopper housings.

5. Roof

The roof of the 1922 Stateville Power House building consists of two levels. The eastern half exists at a level of approximately 28' from grade. The western portion of the roof is approximately 35' above grade level. Both roof levels possess an elevation wall, 4' brick parapet capped with terra cotta tile coping around their perimeter. Galvanized coping is present on the north and south parapet area where the coal conveyance penthouse was previously positioned. The base roof material of this building is concrete with an Ethylene Propylene Diene Monomer (EPDM) covering.

The eastern portion of the roof contains the projection of the facility smoke (exhaust) stack and various cylindrical mechanical equipment vents for the

main boiler room floor water softening equipment. Steel boiler exhaust units emerging from the division wall forming the eastern boundary of the western portion of the roof structure are mounted on framing of 18" and 12" steel I-beams. One drainage opening is present on the north and south elevations, as well as two on the east elevation. Galvanized electrical conduit supporting security cameras/lighting mounted on the parapet runs along the interior parapet wall. Exhaust stack lightening rod cables and insulators are mounted on the roof at 45 degree angles from the stack and run to the drainage scupper ports at the on the northeast and southeast corners of this roof area. The lightening rod cables run parallel to the elevation downspouts to grade. A steel ladder immediately adjacent to the northern portion of the stack provided access to this roof from the upper level.

The western portion of the roof contains two galvanized 4'x4' boiler exhaust vents with 6'x6' galvanized covers. Immediately to the east of each of the vent are three, cylindrical cast iron exhaust vents approximately 5' in height. Centered between these vent elements towards the eastern perimeter wall is another cast iron vent element. Running the length of this roof on a north-south axis at a height of approximately 18" are the remains of the original clearstory coal conveyor housing. Centered to the east of this housing is the roof access door. The facility's bronze emergency warning whistle and a security camera are mounted on the east parapet wall. Four drainage openings are present on the west parapet wall.

6. Smoke(exhaust)stack

The 157' high brick Power House smokestack was originally 15' in diameter at its base. An undated project lined the stack base with a 12" band of concrete and an 8" course of brick pavers. The exterior pf the stack projects from the basement through the main boiler room section and exits on the east roof adjacent to the central bearing wall. The stack is flashed with galvanized tin covered with EPDM material where it exits the roof.

Above the roof line, rectilinear, steel boiler exhausts structures exit the centralized bearing wall and connect at right angles to the stack. The southern exhaust connects to the stack at a height of approximately 15' above the roof line. The northern exhaust connects to the stack at a height of approximately 40' above the roof line. Both exhausts enter the stack through projected brick and concrete openings measuring approximately 4'x6'.

The stack also possesses 4" steel support bands. Two bands are positioned in the area of the exhaust connections. Ten bands are connected at the upper level of the stack. The stack also contains two lightening rods at its discharge level.

7. Openings

a. Doorways and Doors

The Power House north, east and south elevations contain exterior door openings on the main boiler/engine room level. The east and south elevations have door openings at the basement level.

On the main boiler/engine room level, there exists a double-swing door opening centered on the east façade. This 6'x6" opening leads to the institutional above ground concrete walkway to the exterior and the main boiler room floor on the interior. Two 3'x7' steel hollow core doors with upper panel wire glazing are mounted on a steel framing unit. Mounted on the exterior of the frame are two iron bar security gates. On the western portion of the south elevation at this level, there exists a single steel, 3'x7' hollow core door with upper panel glazing mounted in a steel frame. This door has a 1" bar security gate attached to the interior portion of the door frame. On the western portion of the north elevation there exists another double door opening leading to the loading dock and ramp and similar to the east elevation unit in size, frame, door and gate configuration. A single steel hollow core door exists at grade level in the eastern most masonry projection on the north elevation just below the main boiler room floor.

The basement-level east elevation contains a centralized door opening to the institutional tunnel system. This opening contains doors, frame and security gates identical to the unit on the main boiler room floor directly above. The only other exterior basement level door opening is a double door unit located at the midpoint of the south elevation. This opening contains typical steel doors and frame, but no security gate. The opening leads to a below-grade stairwell consisting of a concrete retaining wall and thirteen concrete steps ascending to grade level.

b. Windows

Rectangular, steel framed, windows with translucent, wire or block glazing exist on both levels and all elevations of the Power House. All window openings are covered with 1" diameter iron security guards anchored to brick elevation elements adjacent to the window openings. Window openings at grade or below level have area wells extending from 24" to 48" from the building's perimeter.

On the east elevation there are two window openings centered either side of the main entrance, approximately 14' wide by 18" in height. The openings posses steel upper lintels and limestone sills, which are consistent for window units throughout the building. The steel windows units filling these openings consist of three stacked fixed units separated by 4" two vertical steel supporting members, with centered hopper elements in a 16 over 16 configuration. The upper units are lacking the lower fixed row of steel framing and are separated from the lower units by a horizontal 4" cross member. Above the main entrance below the cornice line is a 14'x5' opening containing three twelve pane units. One 5'x2' fixed steel unit exists south of the concrete walkway connecting the Power House to the Main Electrical Distribution Station building. Four basement-level typical 6 over 6 hopper windows are centered on the boiler room level units.

The south elevation contains six 6'x4' typical units in openings on the one-story section. Five 4'x4' openings and typical window units exist at basement level on this elevation below the upper openings. The exception being the unit where the below grade egress is located. Above the one-story addition there exists three 6'x5' openings with typical window units. At the higher level west of the stack, there are two additional 6'x5' units with typical window units.

The west elevation contains seven non-symmetric 18'x6'6" openings with typical window units on the main boiler room level. An additional opening with glazed block infill is present on the southern portion of this elevation. Four basement level 6'6" openings with typical window units are located on this elevation.

The north elevation contains three 18'x6'6" openings on the eastern section of the façade. These openings contain typical window units and are above 3'x6'6" basement level openings with typical units. On the

upper level of the north elevation west of the stack are three 6'x5' openings with typical steel window units.

C. Description of Interior

1. Floor Plans

The main level exists of primarily an open plan with a centralized north-south axis masonry boiler room/engine room division wall, one-story office/machine shop area and full height stairwell in the southern portion of the building and a stud-walled office space in the northeastern portion of the main boiler room floor. The stud-walled office area consists of three 18'6"x13" spaces. West of the dividing masonry wall exists the actual boiler room.

The basement level also consists of a generally open plan. East of the centralized boiler room/engine room division wall is open space. One 19'x12' and one 14'x12' machine shop rooms and a 15'x12' room leading to the exterior south elevation egress exist in the southern portion of this level. Adjoining the exterior egress space to the west is a 9'x12' storage room. All of the aforementioned rooms have concrete walls. A 20'x17' concrete-walled inmate confinement room is located in the northeast corner of the basement level. West of the bearing wall division are boiler ash discharge areas which are subdivided by concrete structural members.

2. Stairways

The interior of the Power House contains three stairway elements. A steel spiral unit located in the northeast corner of the engine room in front of the stud-walled office area provides access to the basement level. Additionally, a common concrete stairway with pipe railing is located in the full-height stairwell in the southwest corner of the building provides access between the main and basement levels. Centered in the main level boiler room is a steel spiral stairway which leads to the roof access doors and accesses the steel catwalks leading to mechanical lines and equipment above the boiler unit spaces.

3. Flooring

All flooring in the building is concrete. A large portion of the engine room on the main level is covered with brown quarry tile.

4. Wall and Ceiling Finishes

Interior walls at the basement level are exclusively concrete. Interior perimeter walls and the centralized bearing wall on the main boiler room level are of brick construction. Stud walls in the main level engine room floor area are covered with paneling or pressboard. All walls and ceilings in the eastern portion of the building are painted white. Walls and ceilings in the western portion of the building have no finish. Masonry in the upper reaches of the boiler room proper areas are stained with black soot.

5. Openings

a. Doorways and Doors

Each subdivided space in the Power House has door or circulation openings. Interior double door openings exist in the basement level exterior egress room and the office space directly above on the main boiler room floor. All other interior door openings are single door size, approximately 3'x7'. Main circulation openings in the basement boiler room area and between the eastern and western portions of the main boiler room through the bearing wall are approximately 36" wide.

Doors in the interior of the building a typical steel hollow core, two panel units with translucent wire or standard glazing in the upper panel. The openings to the corridor leading to the Main Electrical Distribution Station on the main boiler room level and to the inmate confinement level on the basement level have 1" bar security gates mounted on steel frames. The stud-walled office space unit openings on the main boiler room have steel mesh gates mounted on steel frames.

b. Windows

Interior windows are limited to glass block units in the stud-walled office area in the main level engine room floor and eight 18'x6'6" openings in the interior north-south axis bearing wall. The six center window units have been removed and only the two end openings have typical stacked, steel framed units.

6. Decorative Features and Trim

The interior of the Power House is industrial in nature and possesses no architecturally decorative features or trim.

7. Hardware

Hardware associated with Power House interior architectural elements is exclusively steel or lighter metals and is generally associated with doors, security gates and window elements. Other significant hardware present includes bolts and nuts used for mounting the steel roof trusses in the eastern half of the main boiler room area, as well as bolts, nuts and mounting plates used in the assembly of the buildings interior staircases and mechanical gallery catwalks.

8. Mechanical Equipment

a. Heating, Ventilation and Air Conditioning

There is no evidence of any heating or air conditioning equipment associated with the Power House. Environmental venting and cooling devices present in the building appear only to be the hopper units associated with the exterior and interior bearing wall windows and exterior door openings.

b. Lighting/Surveillance Cameras

Exterior lighting for the Power House consists of incandescent units covered by security covers over each entry door. Rectangular flood light units are mounted on the east elevation parapet above the institutional concrete walkway entrance and on the south elevation parapet. Remote control video surveillance cameras are mounted on the north elevation parapet and the south elevation single-story component wall.

Interior lighting is limited to incandescent fixtures throughout the building with fluorescent fixtures present above primary workspaces in the mechanical areas. No lighting fixtures were observed in the upper reaches of the boiler room mechanical area.

c. Plumbing

Traditional plumbing systems are limited in the Power House. The only evidence being a shower head attached to a ½" galvanized water line, a wall mounted porcelain sink and commode located in the eastern portion of the southern, one-story section of the main boiler room floor. Plans, 1983 revised, indicate a toilet room adjacent to the western end of the one-story section, but no evidence of this space was located.[29] No evidence of water fountain fixtures or related lines were located in the building.

In the basement level, there exists four sump pump wells below grade in the concrete floor. One is located adjacent to the west elevation near the exempt coal conveyance shaft, another is located directly west of the stack pedestal. The other two wells are located in the eastern half of the basement in the vicinity of power generation water pumps and reservoirs. The sump wells contain pump units and 1" galvanized discharge piping.

d. Power Generation

Main Boiler/Engine Room Level

The dominant mechanical engineering system in the Power House is related to the institutional steam generating function of the building.

Located on the floor in the boiler room on the main level are spaces for six boilers. Boilers were numbered 1-6 from north to south. Boilers 1, 2 and 3 were located in the northern portion of the boiler room. Boilers 4, 5 and 6 were located in the southern portion of the boiler room. Original boilers 2, 3, 4 and 5 were cast iron, 300 h.p. units. 1937 additions, boilers 1 and 6, were cast iron, 325 h.p models. The boilers were set on concrete foundations extending upward from basement level.[30] All Power House boilers have been removed. Boiler plate covers from these units retained by Stateville stationary engineers indicate that the boilers were manufactured by Springfield Boiler Company of Springfield, Illinois.

---

[29] Nakawatase, Rutkowski, Wyns & Yi, Inc., Power House Structural Renovation, Stateville Correctional Center, CDB Project No. 120-230-059, Sheet A-1, 28 February 1983.

[30] C. Herrick Hammond, Supervising Architect, State of Illinois Department of Public Works and Construction, Division of Architecture and Engineering, Additions and Alterations to Power House, Illinois State Penitentiary-Stateville, no sheet number, 9 June 1937.

The plan for the two sets of boilers is symmetrically identical. A 14' pump aisle containing a spiral staircase leading to the roof access and the catwalk system servicing boiler intake/discharge piping, water reservoir tanks and the exhaust stack chase system separates the three boiler layouts. Rectangular steel fabricated exhaust ducts approximate 3'x8' in size exit to the roof either side of the opening though the central, masonry boiler/engine room division wall just below exterior wall parapet level.

Directly to the east of the spiral staircase and extending vertically to just below the ceiling are the dual boiler water and steam circulation systems. Mounted on a concrete footing on the boiler room floor are two boiler feed pumps. Exhaust lines from the pumps run vertically through the ceiling to an exhaust head on the roof. Above each pump unit is a vertically mounted 9'hx4'd boiler feed water heater tank. Feed and discharge lines associated with the water pumping system are cast and range in size from 2" to 6". Valves for this system are cast, primarily 4" in size and possess circular operating wheels. In the area directly above where boilers 2/3 and 4/5 were placed, are horizontally mounted 12'x4'd cast iron receiving tanks with associated piping. Three 2 ½" circular, cast iron vent pipes run from the receiving tanks to roof discharge points.

Still extant on the floor to the west of the location of boilers 3 and 4 are two individual FYR-COMPAK Packaged Burner control system units for natural gas combustion and regulation. An associated natural gas system feed monitoring panel exists centered on the west elevation wall.

Evidence of the original coal feed conveyance system remains in the boiler room area. A 4'x2' steel conveyor shaft housing extends from the boiler room floor to the ceiling. Mounted in the in the 3" concrete roof slab and supported by 12" concrete enclosures are six 12'x12' conical coal hoppers. The hoppers in the northern section of the boiler room are constructed of 6" concrete. The hoppers in the southern section of the boiler room are constructed of bolted steel plating and 2" angle iron. Hoppers have been capped at their discharge points and no evidence exists of boiler stoking augers or housings.

In the southern section of the main level engine room there are numerous receiving and processing tanks associated with the plant/institutional hot water softening system. The tanks in this area are light blue painted cast iron mounted vertically and horizontally on angle iron supports. Vertical mounted cast iron tanks in the central position are unpainted and are

surrounded by a 4" high concrete retaining wall. Piping and valves for this system are primarily cast iron. Additional piping elements in this area are PVC material.

Basement Level

The western portion of the basement primarily contains boiler foundations, mechanicals supporting boiler air circulation, ash disposal and boiler water receiving tank anti-corrosion systems.

Directly below boiler 1 and 6 positions are boiler ash pits. No ash pits were observed under boiler 2, 3, 4 and 5 positions. The 5'x3'6" dual ash pits under boiler 1 and 6 positions are set in 12" concrete and have brick lining/pit dividers. Each pit has a cast iron ash disposal door. To the rear of the boiler 1 and 6 ash pits are forced air draft fans and motors, as well as associated duct work connected to the rear of the ash pits. Forced air draft fans, motors and associated duct work are also located in areas below the former positions of boilers 2/3 and 4/5.

Directly in front of the ash pits is a 6" cast iron ash disposal line running perpendicularly to an area adjacent to the stairwell in the southwest corner of the basement. At this point, the line runs vertically upward and terminates at the roof line. It appears this line use to feed to the fly ash silo prior to the shift to natural gas as the combustion element of the system.

Centered outside the perimeter of the west basement wall are the remains of the original concrete coal bunker for the Power House. The 18'x8'x10' coal bunker has been sealed with organic infill at grade level on the exterior of the building. Elements of the coal conveyor track run to the vertical transport shaft approximately 6' from the west wall. Also along the southwestern area the of the west basement wall are vertically oriented 10'hx4'd cast iron receiving tanks and piping associated with boiler anti-corrosion functions.

In the eastern half of the basement level is the exhaust stack pedestal and the base of the stack. Immediately north of the stack pedestal are a turbine, motors/generators, pumps and piping associated with the institutional forced steam transport system. In the area south of the stack pedestal are a turbine, motors/generators and receiving tanks, pumps and piping associated with the institutional hot water softening system.

Primary steam/hot water/compressed air distribution and water/natural gas intake lines exit/enter the Power House through the institutional access tunnel on the east elevation. The distribution lines are cast iron with insulation (non-asbestos) covering remaining in place east of the Power House entrance. Piping lines running along the east/west walls and ceiling of the tunnel consist of 12" softened water distribution, 8" cold water intake, 2" compressed air, 8" winter steam distribution and 6" summer steam distribution. The natural gas intake line is 2" rated pipe.

D. Site

1. Building Setting and Orientation

The 1922 Stateville Correctional Center Power House is centrally located within the interior perimeter of the institution near the west containment wall just northwest of the southern access sallyport on the south containment wall. The building is set in an industrial type environment, adjacent to the extant 1930 Mechanical and Maintenance Shop to the northwest, a 1980s multipurpose building to the northeast and the 1924 former Sheet Metal Fabricating/Shoe and Clothing Repair Shop to the southeast. The east elevation of the Power House was historically the primary façade. The east façade's presentation has been infringed upon by the above-grade concrete walkway, over the below-grade institutional service and support tunnel, terminating at the building's primary pedestrian exit.

2. Historic Landscape Design

Early views of the 1922 Power House site indicate the existence of shrubs and flower beds in the vicinity of the areas adjacent to the east elevation of the building.[31] No evidence of these plantings is extant, although one deciduous and one coniferous tree of about 20 years in age are present next to the walkway around the north elevation. In the southeast site quadrant between the electrical sub-station and the concrete walkway exists a decorative concrete, limestone and brick planter.

[31] Wiss, Janney, Elstner Associates, Inc., "Stateville Correctional Center." IL HABS Documentation WI-1997-1, supplemental material.

3. Outbuildings/Structures

1928 Main Electric Distribution Station (MEDS)

Attached by an enclosed, buff brick-faced, concrete corridor to the southeast perimeter 1922 Stateville Power House is the Main Electric Distribution Station (MEDS), a 1928 addition to the original Power House site. The MEDS was fed by below grade lines from a Commonwealth Edison electrical sub-station located on the exterior side of the west containment wall.

The 40'x28'x20'h MEDS is of reinforced construction and is clad in brown speckled brick on the upper level, with exposed reinforced concrete on the lower level. Rectangular steel windows exist on every elevation, as well as smaller rectangular steel vents on the north, east and south façades. All windows and vents are covered by security bar units. A cooper gutter and downspout system feeds into cast drains on the east elevation. The roof is flat, aggregate/tar covered, with an approximately three foot brick parapet with red tile coping on the north, west and south elevations. The roof contains five copper, atmospheric vent covers. Attached on the south half of the west elevation is a 25'x20'x12'h one-story garage covered in a non-typical, higher-glazed example of buff brick above the exposed concrete foundation extending above grade.

The interior of the MEDS consists of two levels. The level online with the boiler room level of the Power House is subdivided into four spaces; the switch board, transformer, battery and voltage regulator rooms. The main entrance to this level is through the concrete tunnel on the west elevation. The separate rooms are connected by a clockwise corridor terminating in the voltage regulator room. Each room has openings with steel door frames, but doors have been removed.

The lower level, referred to as the dormitory room, is accessed by a spiral steel staircase in the southwest corner of the switch board room. On the days of site investigation, the lower level was flooded and not accessible for survey. No plan of the lower level has been located.

Interior electrical features related to the MEDS operation remaining in the structure include original transformers, voltage regulators and switch gear connectors. This equipment has been disconnected and is stored awaiting environmentally safe disposal.

1931 plans of the site indicate the extant exterior door opening on the east elevation, main level voltage regulator room. These plans also indicate a single door, west elevation exterior entrance above concrete risers where the Power House tunnel now exists.[32] A concrete walkway extends from the MEDS to the primary concrete facility walkway close to the Power House east elevation entrance. Also indicated is a security fence ringing the perimeter of the MEDS at a distance of approximately ten feet. A 1946 facility plot plan indicates the presence of the linking concrete walkway and elimination of the west elevation entrance risers.

Structures

The Fly Ash Silo with supporting structural and associated mechanical equipment is located approximately ten feet from the south elevation of the Power House's southwest quadrant. Total height of the support structure, silo and remaining upper level ash removal mechanical system is approximately sixty feet. The silo is constructed of concrete and is clad with glazed brick pavers laid exclusively in rowlock header form.. The silo support structure consists of 8"x14" steel I-beams with 2"x3" steel cross members supported by 16"x18" concrete base footings. Ash disposal mechanical components are located on a platform approximately eight feet above grade. A steel, caged access ladder exists on the southwest portion of the structure.

Additional Power House operations supporting structures adjacent to the west elevation include a sulfuric acid reservoir tank on a 12'x13' concrete pad and two underground utility manhole covers.

Located on the northern extreme of the west elevation is a compressed air blowdown tank supported by angle iron supports mounted on a concrete pad. At a distance of approximately 25 feet is the retired system's 33'x17' concrete saline tank. A utility manhole is also located adjacent to the southern portion of the west building façade.

On the north elevation there exists a concrete loading dock and ramp to the Power House that is not of original construction. Centered approximately 25 feet north of the north elevation on a concrete pad is an 18'hx4'd steel air receiver tank for the retired power conversion system.

---

[32] C. Herrick Hammond, Supervising Architect, State of Illinois Department of Purchases and Construction, Division of Architecture and Engineering, Underground Feeder System, Main Electrical Distribution Station, Sheet E-6, Revised 26 June 1931.

In the northeast quadrant of the east elevation adjacent to the primary institution concrete walkway/tunnel and directly east of the Power House east façade is a below grade electrical transformer vault. Directly to the east of the transformer vault is a concrete pad supporting a contemporary electrical transformer. The southeast quadrant of the east elevation contains one concrete manhole structure adjacent to the primary walkway north of the Main Electrical Distribution Building.

PART III. SOURCES OF INFORMATION

A. Original Architectural/Engineering Drawings

1. Blaw Knox Company, Erie, Pa. E.C.I.W. Contract No. 75-2. Soot Blower Arrangement. Drawing No. B-13174. 10 October 1967. Soot blower start up shop drawings.

2. Drury, George W., Chief Engineer, Stateville Penitentiary. Plot Plan, Illinois State Penitentiary – Stateville Branch. Sheet 1. July 1946. Site plan.

3. Hammond, C. Herrick, Supervising Architect, State of Illinois Department of Purchases and Construction, Division of Architecture and Engineering. Underground Feeder System, Illinois State Penitentiary – Stateville, Illinois. Sheets E-1, E-2, E-3, E-4, E-5 and E-6. Revised 26 June 1931. Transformer vault floor plan, elevations and cable diagram.

4. Hammond, C. Herrick, Supervising Architect, State of Illinois Department of Purchases and Construction, Division of Architecture and Engineering. Alterations to Power House Piping and Equipment, Illinois State Penitentiary – Joliet. Sheet 1M. 23 August 1932. Piping and equipment details.

5. Hammond, C. Herrick, Supervising Architect, State of Illinois Department of Public Works and Buildings, Division of Architecture and Engineering. Additions and Alterations to Power House, Illinois State Penitentiary – Stateville. Sheets S-1 and S-2. 9 June 1937. Boiler foundations and hopper/ girder/column details.

6. Hammond, C. Herrick, Supervising Architect, State of Illinois Department of Public Works and Buildings, Division of Architecture and Engineering. Water Distribution Improvements, Illinois State Penitentiary – Stateville. Sheet M-3. October 1942. Water main details.

7. Nakawatase, Rutkowski, Wyns & Yi, Inc. Power House Structural Renovation, Stateville Correctional Center. Sheets G-1, A-1, A-2, A-3, A-4, and A-5. 28 February 1983. Main floor plan, roof penthouse plan, elevations, sections and details.

8. Nakawatase, Rutkowski, Wyns & Yi, Inc. Power House Roof Replacement, Stateville Correctional Center. Sheets G-1, RF-1, RF-2 and RF-3. 19 July 1986. Roof plans, sections and details.

9. Raymond Professional Group, Inc. Demolition of the Existing Power Plant – Bldg.CO-0301, Stateville Correctional Center. Sheets G-1, D-1, D-2, D-3, D-4, D-5, D-6, D-7, D-8, D-9 and S-1. 01 May 2004. Site plan, elevations, sections, piping and tunnel modifications.

10. The Fairfield Engineering Company. General Arrangement of Coal Handling Equipment for the Illinois State Penitentiary – Stateville Branch. Drawing No. E-11-22165-3. 8 July 1968. Power House coal handling system; plan, sections, and section details.

B. Early Views

1. Supplemental material contained in IL HABS No. WI-1997-1 Cover Document.

2. General site development views contained in Stateville Correctional Center Chief Engineer's Office Archives.

3. View of south elevation of newly constructed Power House contained in Rexford Newcomb's article in *The Western Architect* XXXI, no. 12 (December 1922).

C. Interviews

1. Menzel, Dave. Capital Programs Administrator, Capital Programs Unit, Illinois Department of Corrections. Interviewed by Stephen A. Thompson, 20 September 2004.

2. Volling, Patrick. Carpenter, Stateville Correctional Center. Interviewed by Stephen A. Thompson, 27 and 28 September 2004.

3. Weildling, William. Stationary Engineer, Stateville Correctional Center. Interviewed by Stephen A. Thompson, 28 September 2004.

D. Bibliography

1. Primary and unpublished sources

Illinois Capital Development Board. Capital project archives drawing files.

Illinois Department of Corrections. Capital Programs Unit project files.

Illinois Department of Corrections. Capital Programs Unit capital project appropriations list, 1975 – 2003.

Illinois Historic Preservation Agency, Preservation Services Division. Illinois architect files.

Illinois Historic Preservation Agency, Preservation Services Division. Illinois county survey files.

Norton, Margaret C. "History of State Departments of Illinois Government, 1787-1943." Vol. I, 1984. n.p.

_____ "History of State Departments of Illinois Government, 1787-1943." Vol. VI, 1984. n.p.

Stateville Correctional Center, Engineering Office. Capital project files.

Wiss, Janney, Elstner Associates, Inc. Illinois Historic American Buildings Survey, "Stateville Correctional Center," IL HABS No. WI-1997-1.

Wiss, Janney, Elstner Associates, Inc. Illinois Historic American Buildings Survey, "Stateville Correctional Center – Old Hospital," IL HABS No. WI-1997-1-B.

2. Secondary and published sources

Blue Book of the State of Illinois

Rose, James A., Secretary of State, ed. *Blue Book of the State of Illinois, 1907.*

Stevenson, Lewis G., Secretary of State, ed. *Blue Book of the State of Illinois, 1915-16.*

Emmerson, Louis L., Secretary of State, ed. *Blue Book of the State of Illinois, 1917-18.*

Emmerson, Louis L., Secretary of State, ed. *Blue Book of the State of Illinois, 1919-20.*

Emmerson, Louis L., Secretary of State, ed. *Blue Book of the State of Illinois, 1921-22.*

Emmerson, Louis L., Secretary of State, ed. *Blue Book of the State of Illinois, 1923-24.*

"Boiler Installation Nears Completion in Power House." *Time* 8, no. 10 (October 1966).

Croft, Terrell, ed. *Steam Power Plant Auxiliaries and Accessories.* New York: McGraw-Hill Book Company, Inc., 1946.

Dalby, W.E. *Steam Power.* New York: Longman, Green & Company, 1915.

Gaffert, Gustaf A. *Steam Power Stations.* New York: McGraw-Hill Book Company, Inc., 1937.

Gebhardt, George F. *Steam Power Plant Engineering.* New York: John Wiley and Sons, Inc., 1922.

Hutton, Fredric Remsen. *The Mechanical Engineering of Power Plants.* New York: John Wiley and Sons, Inc., 1948.

Illinois Prison Inquiry Commission. *The Prison System in Illinois: A Report to the Governor.* Springfield, Illinois: State of Illinois, 1937.

Marquis, Albert Nelson., ed. *Who Was Who in America, Vol. I (1897-1942).* Chicago: A.N. Marquis & Company, 1942.

Marquis, Albert Nelson, ed. *Who's Who in Chicago: The Book of Chicagoans.* Chicago: A.N. Marquis & Company, 1926.

Meyer, Henry C., Jr. *Steam Power Plants: Their Design and Construction.* New York: McGraw-Hill Book Company, Inc., 1912.

Newcomb, Rexford. "The New Illinois State Penitentiary at Stateville." *The Western Architect* XXXI, no. 12 (December 1922).

Potter, Philip J. *Steam Power Plants.* New York: Roland Press Company, 1949.

Saxe, Albert Moore. "The New Illinois State Penitentiary," in *Blue Book of the State of Illinois*, edited by Louis L. Emmerson, Secretary of State, 1918.

"Some Work from the Offices of Zimmerman, Saxe and Zimmerman." *The Western Architect* XXXI, no. 3 (March 1922).

State of Illinois

State of Illinois. *First Administrative Report of the Directors of Departments under the Civil Administrative Code together with the Adjutant General's Report, For the year July 1, 1917, to June 30, 1918.* Springfield, Illinois: State of Illinois, 1918.

State of Illinois. *Second Administrative Report of the Directors of Departments under the Civil Administrative Code together with the Adjutant General's Report, For the year July 1, 1918, to June 30, 1919.* Springfield, Illinois: State of Illinois, 1919.

State of Illinois. *Third Administrative Report of the Directors of Departments under the Civil Administrative Code together with the Adjutant General's Report, For the year July 1, 1919, to June 30, 1920.* Springfield, Illinois: State of Illinois, 1920.

State of Illinois. *Fourth Administrative Report of the Directors of Departments under the Civil Administrative Code together with the Adjutant General's Report, For the year July 1, 1920, to June 30, 1921.* Springfield, Illinois: State of Illinois, 1921.

State of Illinois. *Fifth Administrative Report of the Directors of Departments under the Civil Administrative Code together with the Adjutant General's Report, For the year July 1, 1921, to June 30, 1922.* Springfield, Illinois: State of Illinois, 1922.

State of Illinois. *Sixth Administrative Report of the Directors of Departments under the Civil Administrative Code together with the Adjutant General's Report, For the year July 1, 1922, to June 30, 1923.* Springfield, Illinois: State of Illinois, 1923.

State of Illinois Department of Public Safety

State of Illinois Department of Public Safety Annual Report. 1965.

State of Illinois Department of Public Safety Annual Report. 1967.

State of Illinois Department of Public Welfare

State of Illinois Department of Public Welfare Annual Report. July 1, 1917 to June 30, 1918.

State of Illinois Department of Public Welfare, Second Annual Report. July 1, 1918 to June 30, 1919.

State of Illinois Department of Public Welfare, Third Annual Report. July 1, 1919 to June 30, 1920.

State of Illinois Department of Public Welfare, Fourth Annual Report. July 1, 1920 to June 30, 1921.

State of Illinois Department of Public Welfare, Fifth Annual Report. July 1, 1921 to June 30, 1922.

State of Illinois Department of Public Welfare, Sixth Annual Report. July 1, 1922 to June 30, 1923.

State of Illinois Department of Public Welfare, Fourteenth Annual Report. July 1, 1930 to June 30, 1931.

State of Illinois Department of Public Welfare, Fifteenth, Sixteenth, Seventeenth and Eighteenth Annual Reports, June 30 1935.

State of Illinois Department of Purchases and Construction

State of Illinois Department of Purchases and Construction Annual Report, July 1, 1930 to June 30, 1931.

State of Illinois Department of Purchases and Construction Annual Report, July 1, 1931 to June 30, 1932.

State of Illinois General Assembly

Laws of the State of Illinois Enacted by the Forty-Fifth General Assembly at the Regular Biennial Session to the Time of Taking a Recess on May 16, 1907.

Woodruff, Everett B. and Herbert B. & Thomas F. Lammers. *Steam-Plant Operation, Fifth Edition.* New York: McGraw-Hill Book Company, 1984.

E. Likely Sources Not Yet Investigated

1. Archives

Stateville Correctional Center Engineering Office Archives Storage

Although used as a research source, many original architectural/engineering plans, capital construction/maintenance files and institutional photographs possibly contained in site administration storage areas were inaccessible during allotted site visit periods due to a lack of systematic documentation classification and physical obstructions in confined storage areas on the third floor of the Stateville Correctional Center Administration Building.

F. Supplemental Material – No supplemental material is included as part of this IL HABS documentation.

PART IV. METHODOLOGY OF RESEARCH

A. Research Strategy

The primary objective of this IL HABS documentation project was to provide a written and graphic record of the original Illinois Department of Correction's Stateville Correctional Center's 1922 Power House prior to demolition. Preliminary research strategy for this project included the use of archival and field approaches designed to identify resource historic contexts and verify the current physical attributes of the building and its surrounding environs, in relation to its original form/function and development/modifications throughout its existence.

B. Actual Research Process

The research process for the IL HABS documentation of the Stateville Correctional Center's 1922 Power House included the gathering of resource data from pertinent archives/repositories, a contemporary physical assessment of the extant resource and interviews with current Illinois Department of Correction's personnel associated with the management and former operation of the building.

C. Archives and Repositories Utilized

1. Public Libraries

a. Booth Library, Eastern Illinois University, Charleston, Illinois

b. Illinois State Historical Library, Springfield, Illinois

c. Illinois State Library, Springfield, Illinois

d. Mattoon Public Library, Mattoon, Illinois

e. University of Illinois Library, Urbana, Illinois

2. Public Archives

a. State of Illinois Archives, Springfield, Illinois

b. Illinois Capital Development Board Archives, Springfield, Illinois

c. Illinois Historic Preservation Agency, Preservation Services Division Archives, Springfield, Illinois

3. Private Collections

a. Stateville Correctional Center, Crest Hill, Illinois

b. Illinois Department of Corrections, Springfield, Illinois

4. **Additional Sources of Information**

   a. Internet website of the Illinois Department of Corrections, at www.idoc.state.il.us.

D. Research Staff

1. **Primary Preparer:** Stephen A. Thompson, Intrepid Consulting Service, Inc., Mattoon, Illinois
2. **Photographer:** Barry Boyd, Barry Boyd Imaging, Danville, Illinois
3. **Delineator:** Andrea Schultz, University of Illinois at Urbana-Champaign
4. **Additional Staff:** Doug Jackson, Dean's Superior Blueprint, Inc., Champaign, Illinois

   Rich Dowell, Capitol Blueprint, Springfield Illinois

PART V. PROJECT INFORMATION

This IL HABS documentation project was undertaken by the Illinois Department of Corrections through facilitation by the Illinois Capital Development Board and was associated with the capital project addressing the construction of the 2003 Power House at Stateville Correctional Center located in rural Will County north of Joliet, Illinois. Additionally, this IL HABS documentation project was undertaken to fulfill the primary mitigative stipulation included in the Memorandum of Agreement executed on 21 September 2004 between the Illinois Historic Preservation Agency, the Illinois Department of Corrections and the Illinois Capital Development Board regarding compliance by the participating agencies with the Illinois State Agency Historic Resources Preservation Act (20 ILCS 3420/1 et. seq.).

This project was administered by the Illinois Capital Development Board (CDB), with Bill Mabie as project manager. Primary State of Illinois architectural/engineering consultant for the construction of the 2003 Stateville Correctional Center Power House and demolition of the 1922 Power House was Raymond Professional Group, Inc. of Chicago, Illinois, with Bob Mattern serving as project coordinator. Review of all submitted IL HABS documentation was conducted by Anne Haaker, Deputy State Historic Preservation, Preservation Services Division, Illinois Historic Preservation Agency.

Illinois Department of Corrections (IDOC) personnel assisting in the research and preparation of this documentation included:

Dave Menzel, Capital Programs Administrator, IDOC Capital Programs Unit, Springfield, Illinois.

Jon Luchsinger, Chief Engineer, Stateville Correctional Center

Patrick Volling, Carpenter, Stateville Correctional Center

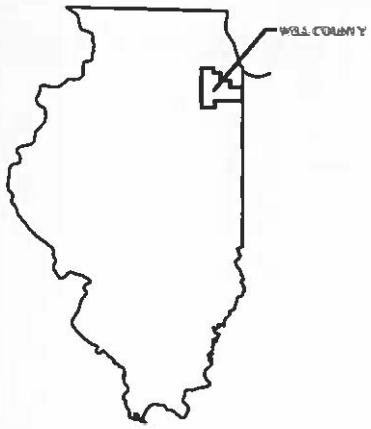
Barry Damon, Carpenter, Stateville Correctional Center

William Weidling, Stationary Engineer, Stateville Correctional Center

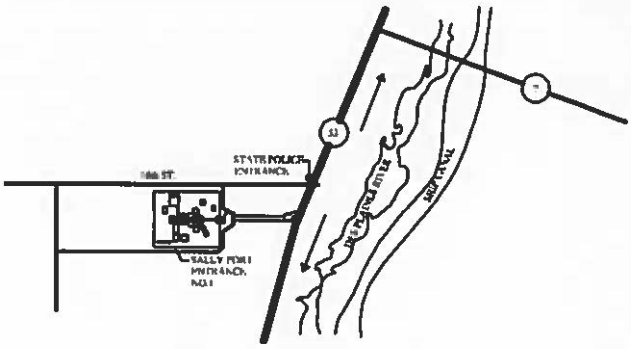
Andrew M. Mazzeo, Laborer, Stateville Correctional Center

Joe A. Garcia, Laborer, Stateville Correctional Center

1922 Power House
Stateville Correctional Center
Crest Hill, Will County, Illinois
IL HABS No. WI-1997-1-B



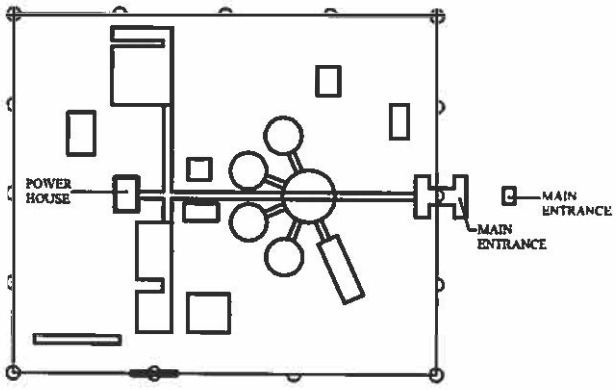
STATE LOCATION PLAN



AREA LOCATION PLAN

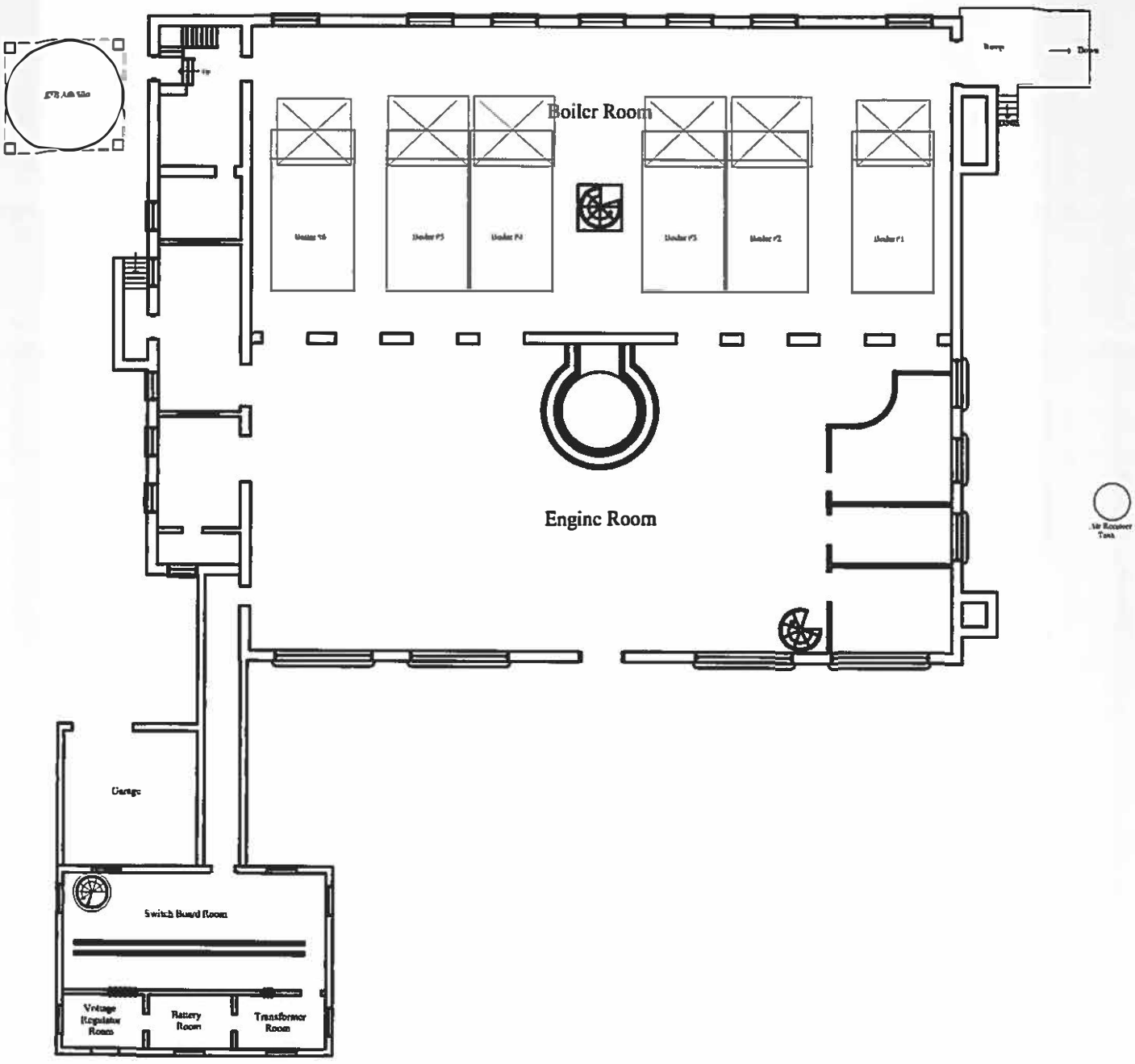
N

STATEVILLE CORRECTIONAL CENTER



KEY PLAN

N

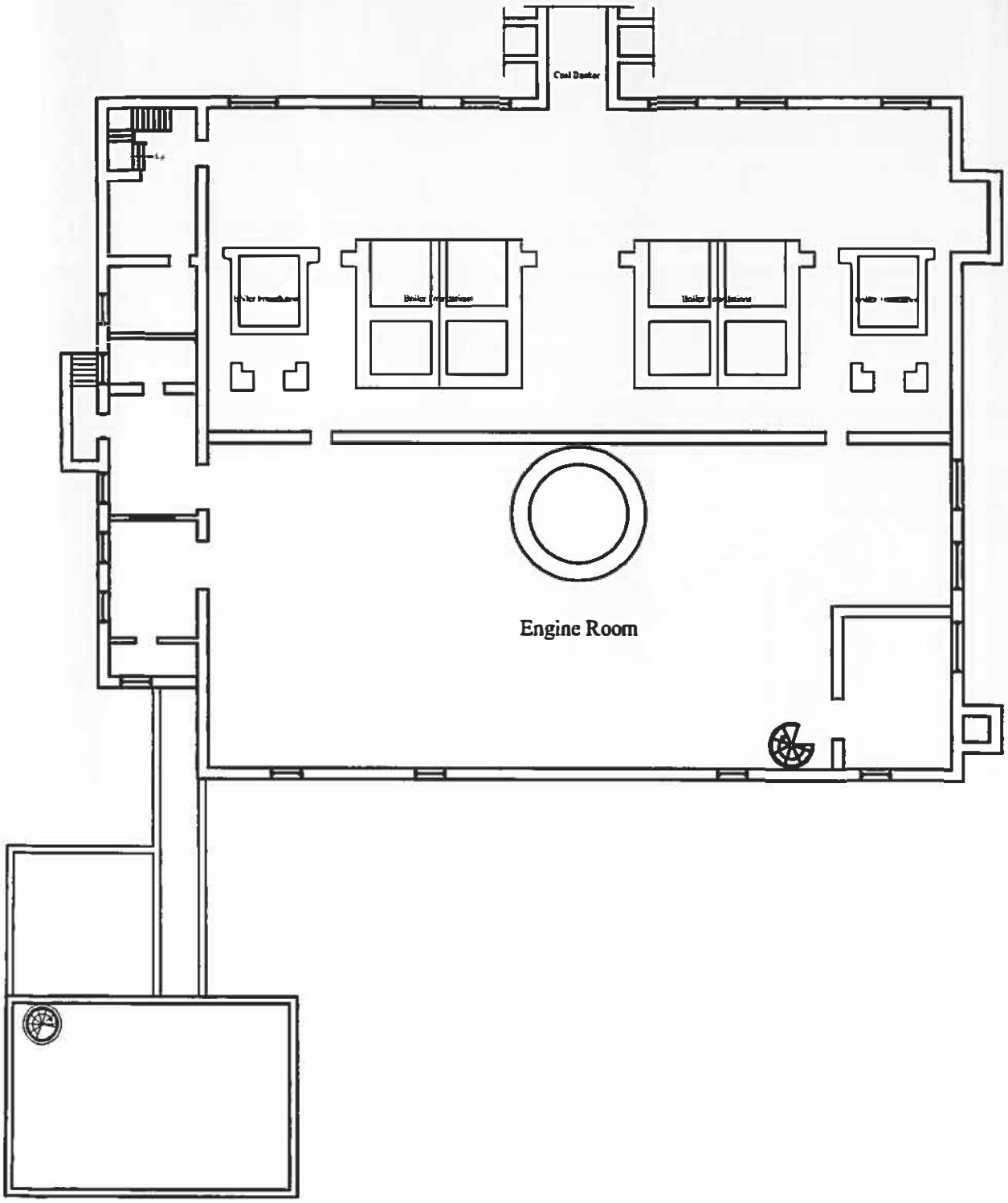


Main Electrical
Distribution Station

1922 Stateville Power House
IL HABS No. WI-1997-1-B
Main Floor Plan

Approx. Scale: 1/16" = 1'-0"

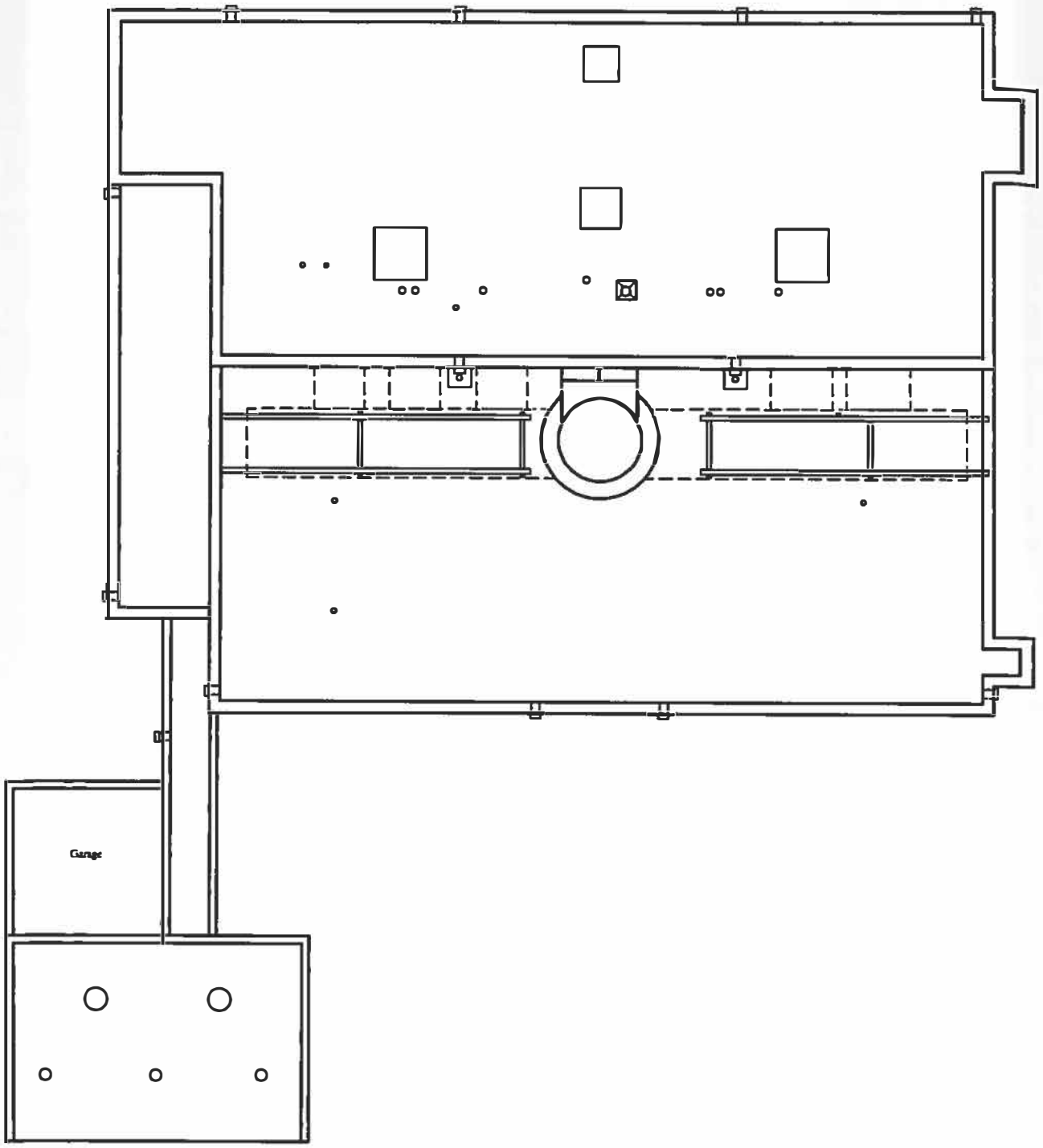
N



1922 Stateville Power House
IL HABS No. WI-1997-1-B
Basement Floor Plan

Approx. Scale: 1/16" = 1'-0"

N



Main Electrical
Distribution Station

1922 Stateville Power House
IL HABS No. WI-1997-1-B
Roof Plan

Approx. Scale: 1/16" = 1'-0"

N

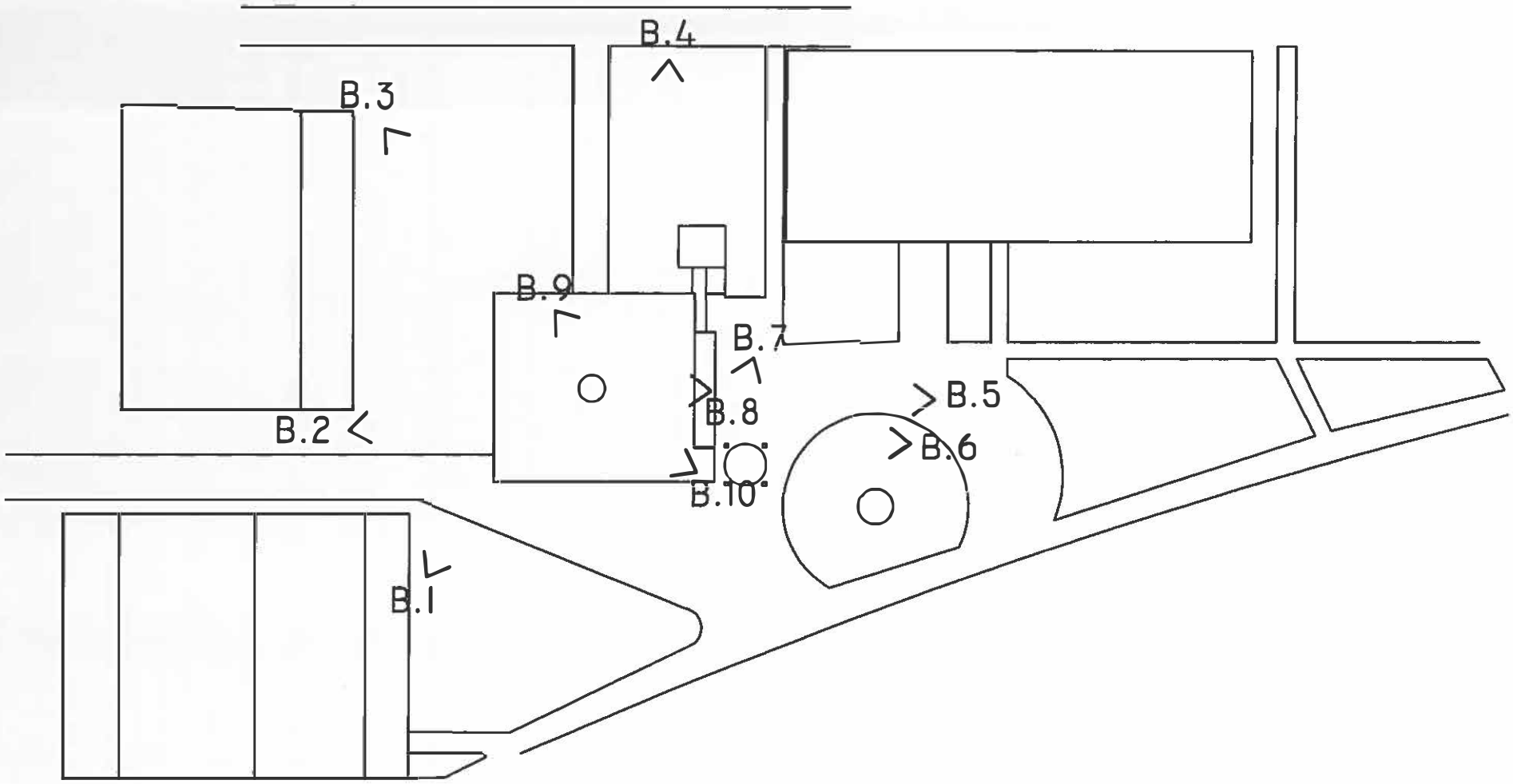
Index to Photographs

1922 Powerhouse
Stateville Correctional Center
Joliet, Will County, Illinois

IL HABS No. WI-1997-1-B

Documentation: 8 Exterior photographs, 4 interior photographs.

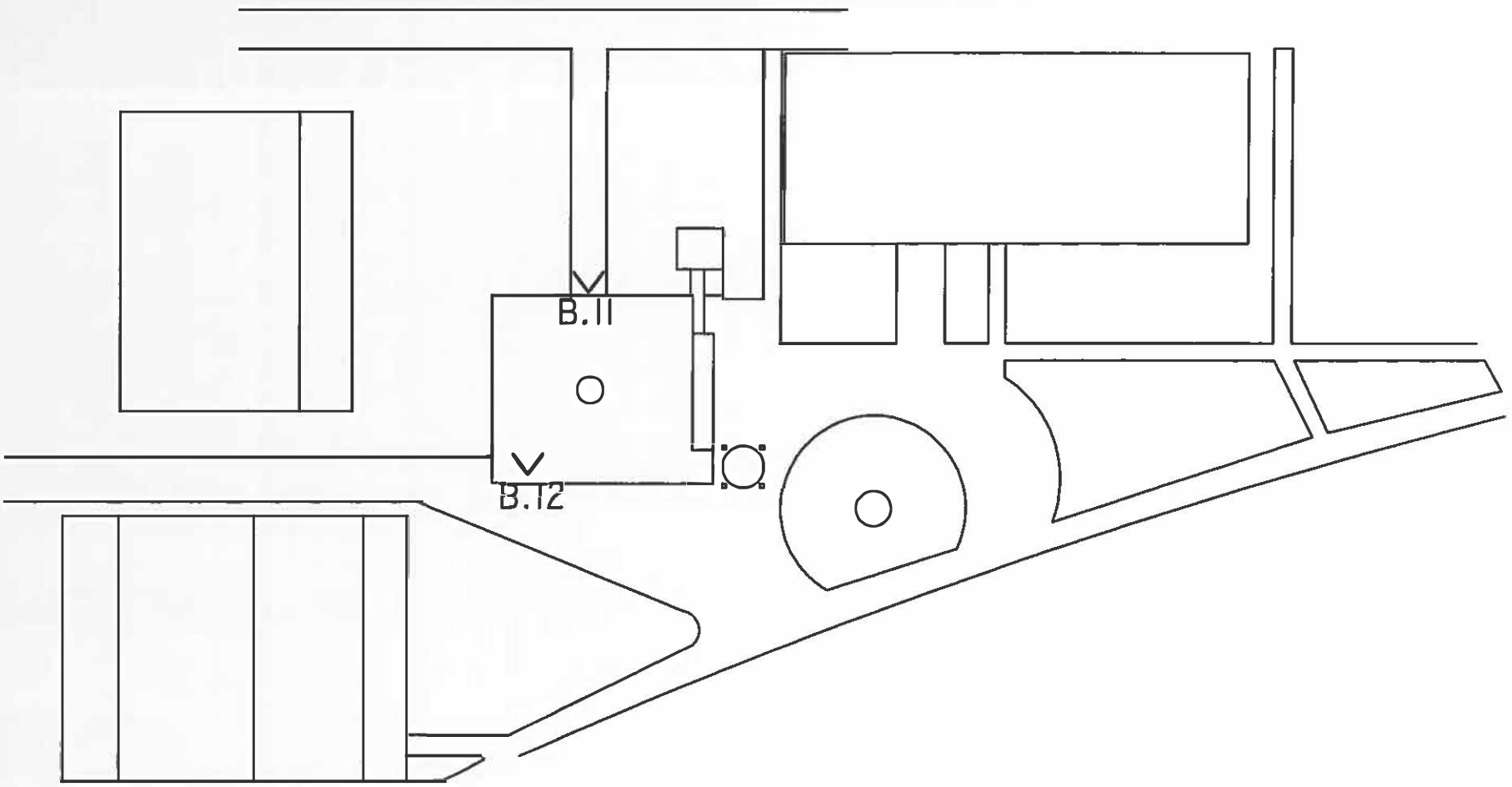
WI-1997-1-B.1	Power House west and north elevations looking southeast
WI-1997-1-B.2	Power House north and west elevations looking south
WI-1997-1-B.3	North half of Power House east elevation and institutional covered concrete walkway looking southwest
WI-1997-1-B.4	South half of Power House east elevation, east elevation of the Main Electrical Distribution Station and institutional concrete walkway looking west
WI-1997-1-B.5	Power House south elevation, south elevation of the Main Electrical Distribution Station and Fly Ash Silo structure looking north
WI-1997-1-B.6	Power House south elevation, Fly Ash Silo structure and complete above roofline Smokestack looking north
WI-1997-1-B.7	Fly Ash Silo structure looking northwest
WI-1997-1-B.8	Boiler Room roof and Smokestack looking northeast
WI-1997-1-B.9	Main level Engine Room, including Smokestack and water softening mechanical equipment looking southwest
WI-1997-1-B.10	Main level Boiler Room looking northeast
WI-1997-1-B.11	Steam distribution piping in basement level tunnel from Power House east to primary confinement/administration areas
WI-1997-1-B.12	Fly Ash Pit and discharge piping under Boiler #1 in northwest corner of the basement level



1922 Stateville Power House - IL HABS No. WI-1997-1-B
Photographic Shot Key Map - Main Level

N

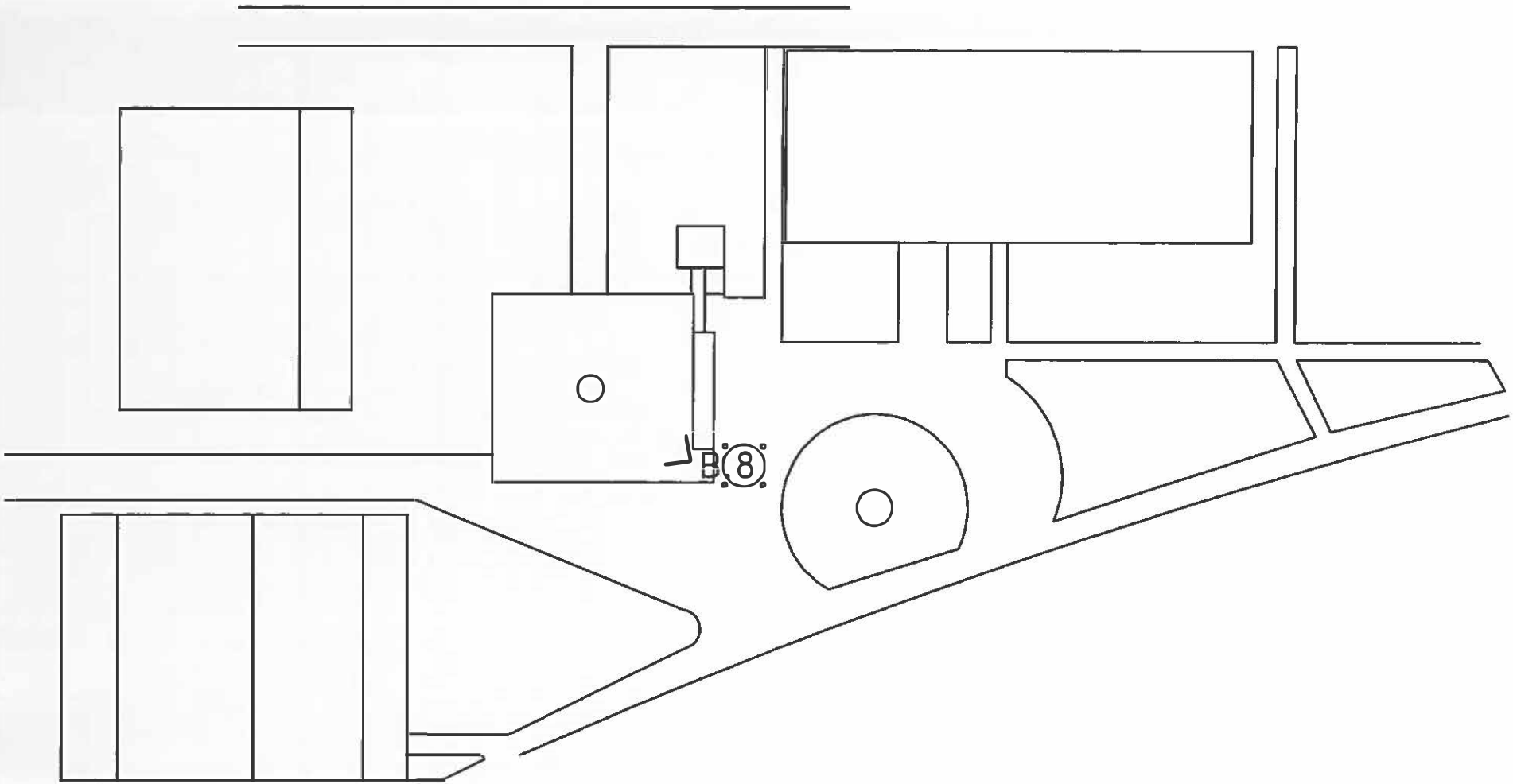
50' 0' 50' 100' 300'



1922 Stateville Power House - IL HABS No. WI-1997-1-B
Photographic Shot Key Map - Basement Level

N

50' 0' 50' 100' 300'

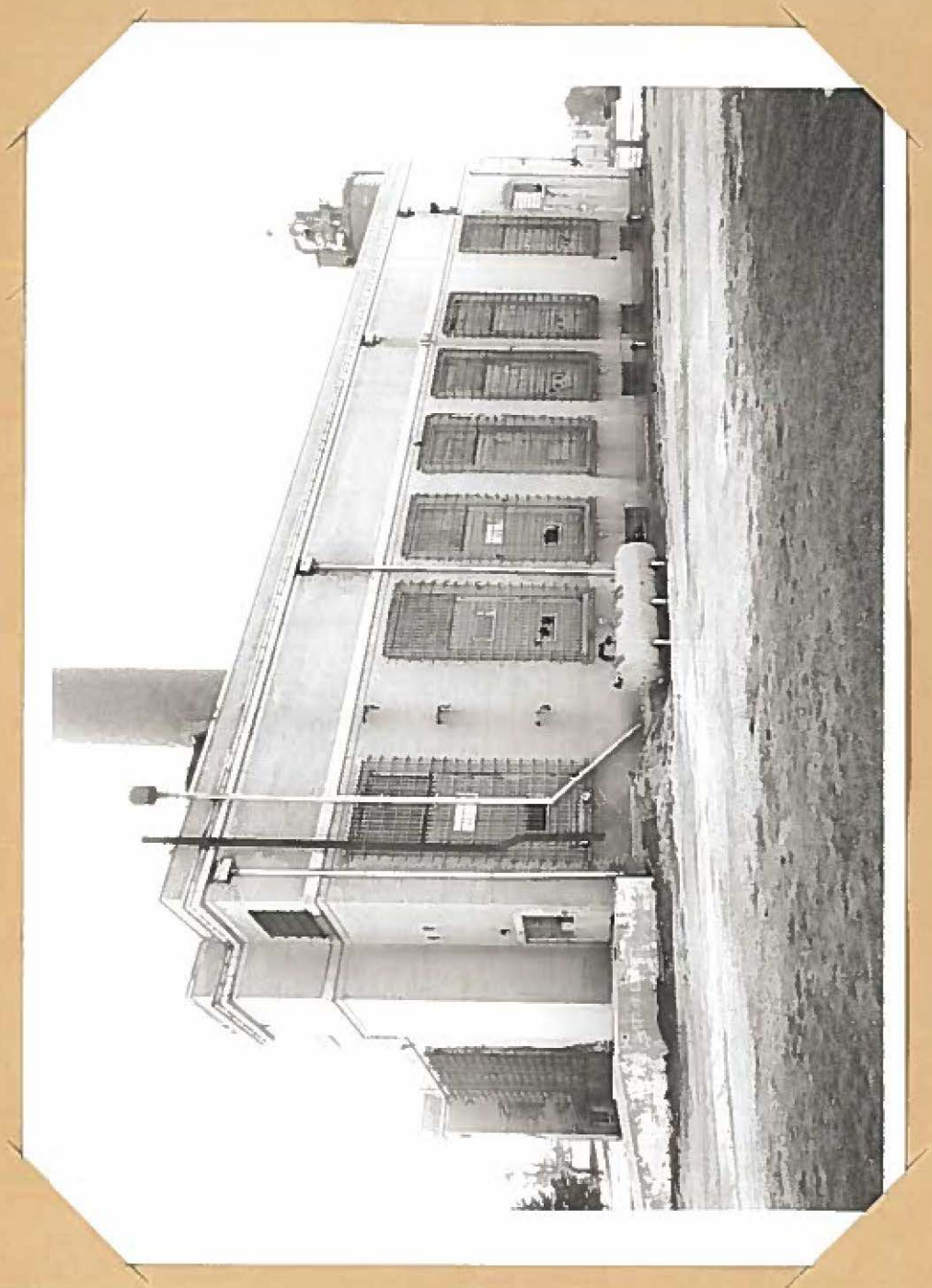


1922 Stateville Power House - IL HABS No. WI-1997-1-B
Photographic Shot Key Map - Roof Level

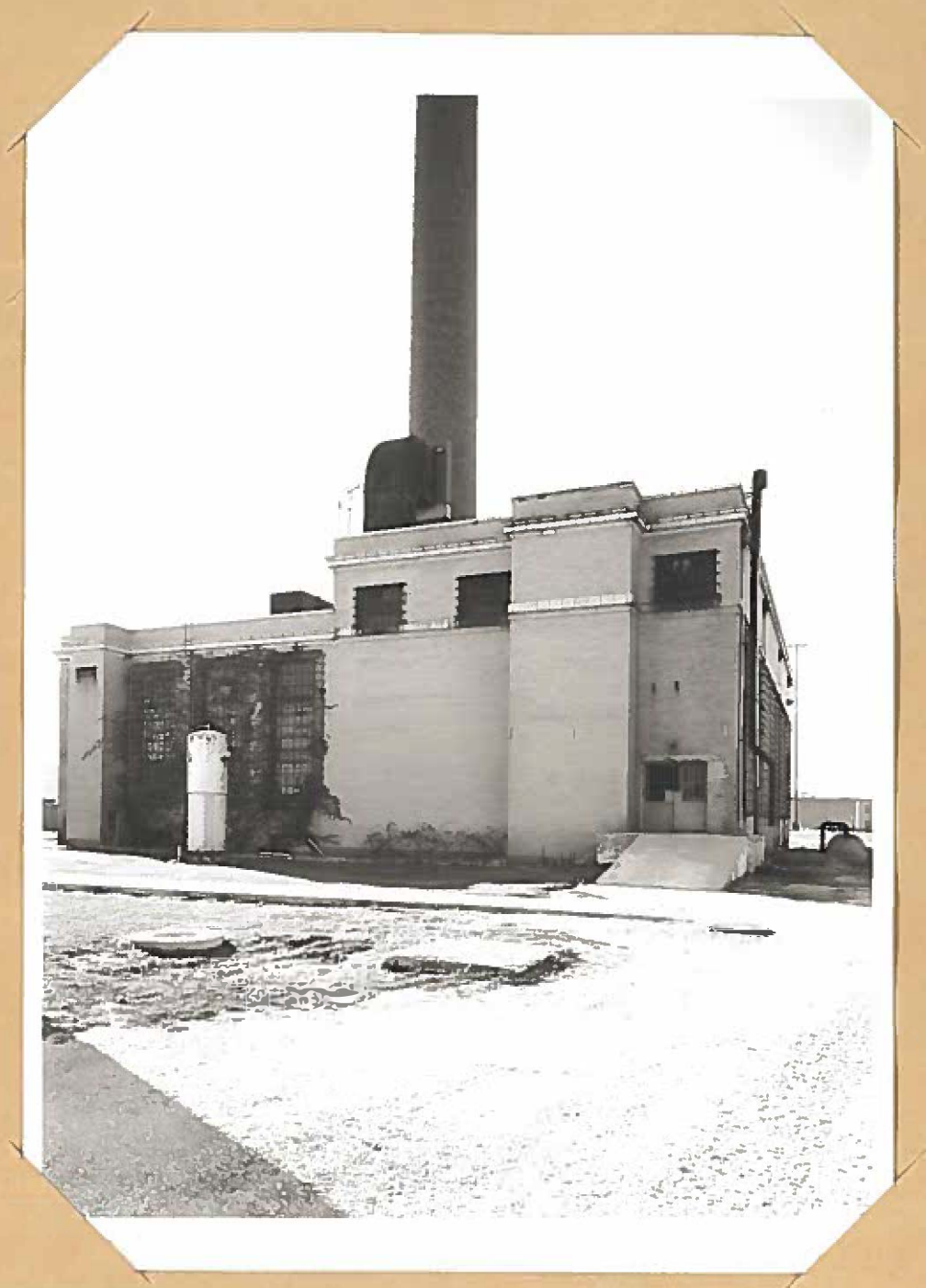
N

50' 0' 50' 100' 300'

IL HABS No. WI-1997-1-B. 1
SEE INDEX TO PHOTOGRAPHS FOR CAPTIONS

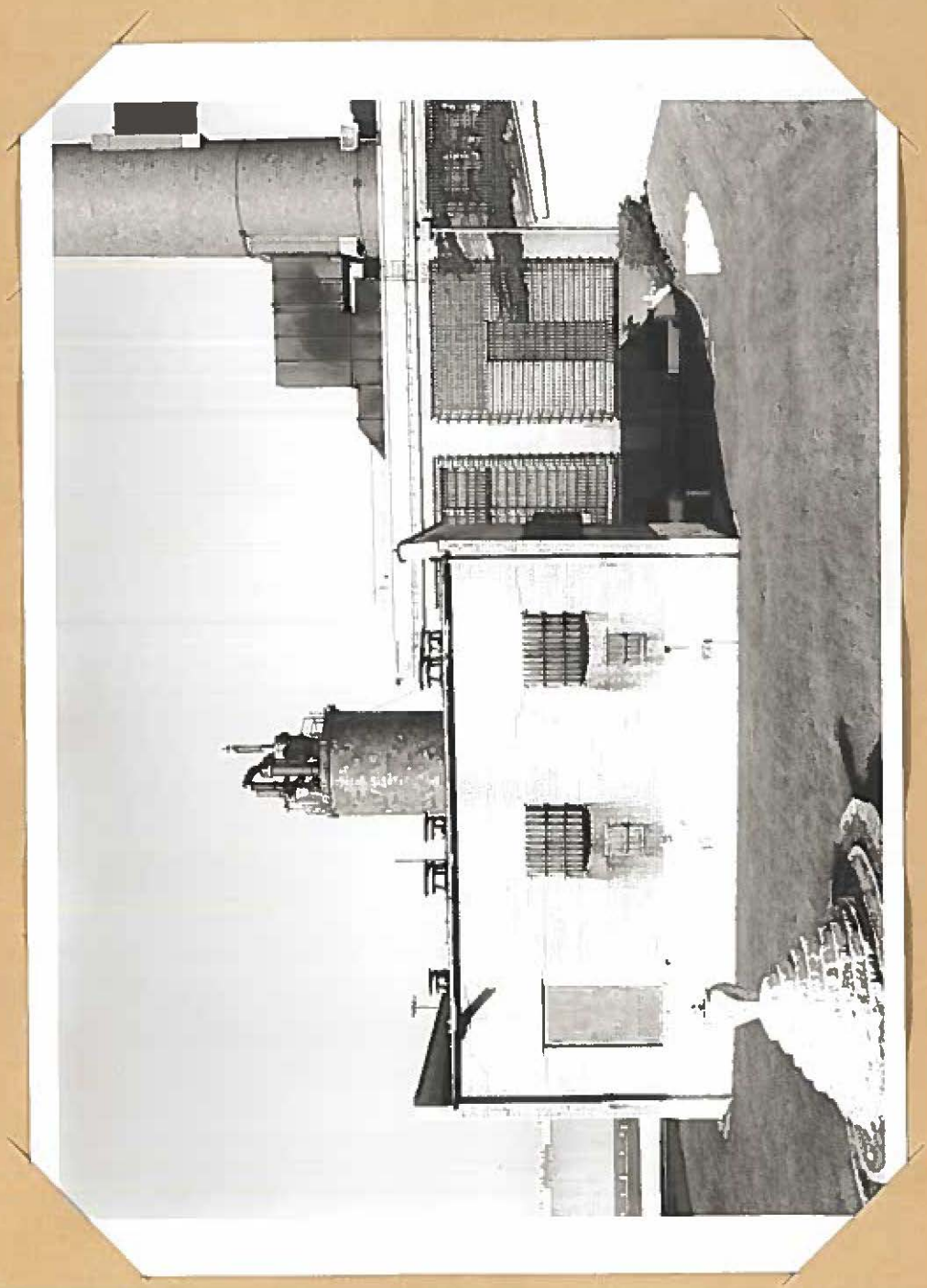


IL HABS No. WI-1997-1-B.2
SEE INDEX TO PHOTOGRAPHS FOR CAPTIONS

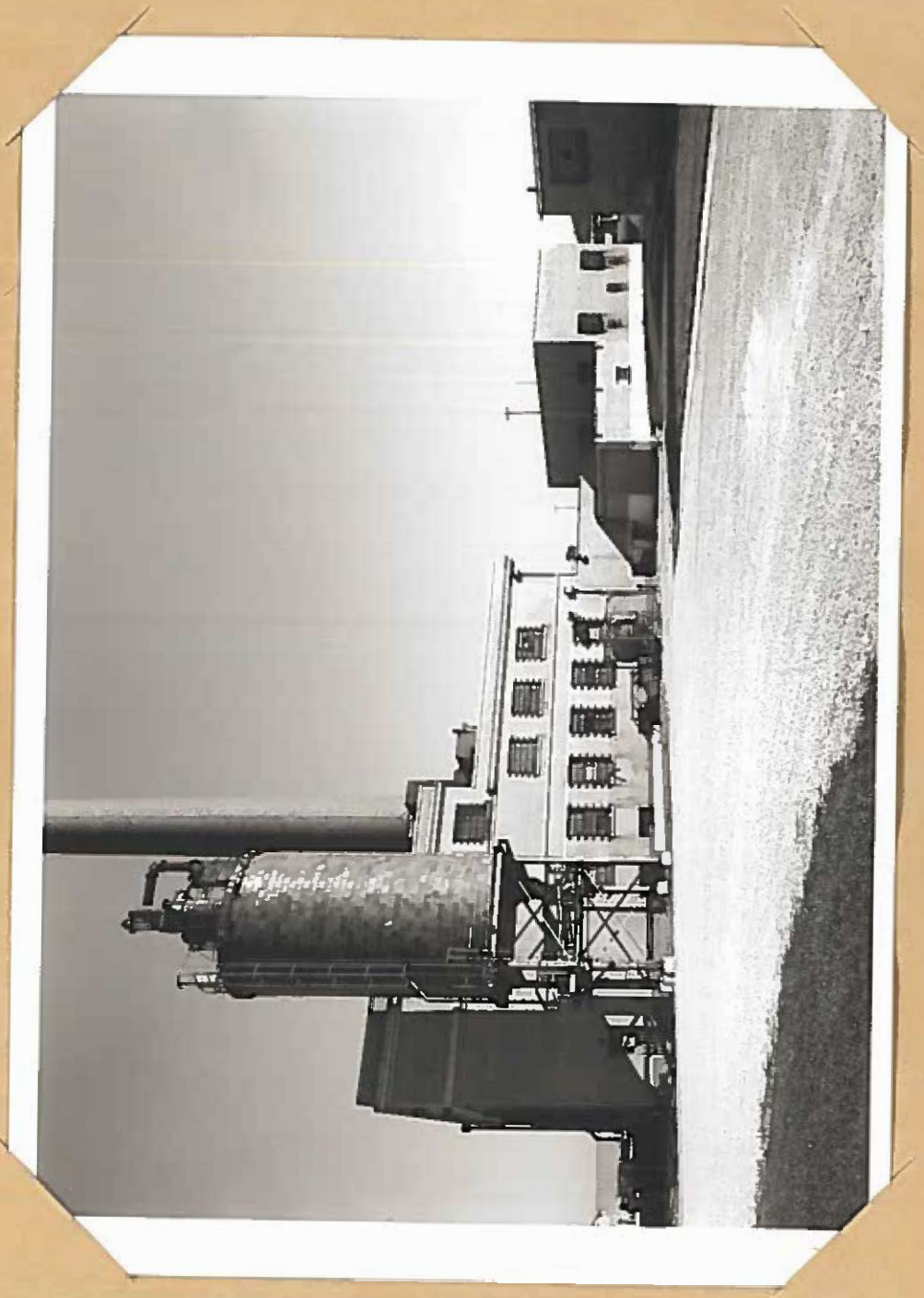


IL HABS No. WI-1997-1-B.3
SEE INDEX TO PHOTOGRAPHS FOR CAPTIONS

IL HABS No. WI-1997-1-B.4
SEE INDEX TO PHOTOGRAPHS FOR CAPTIONS

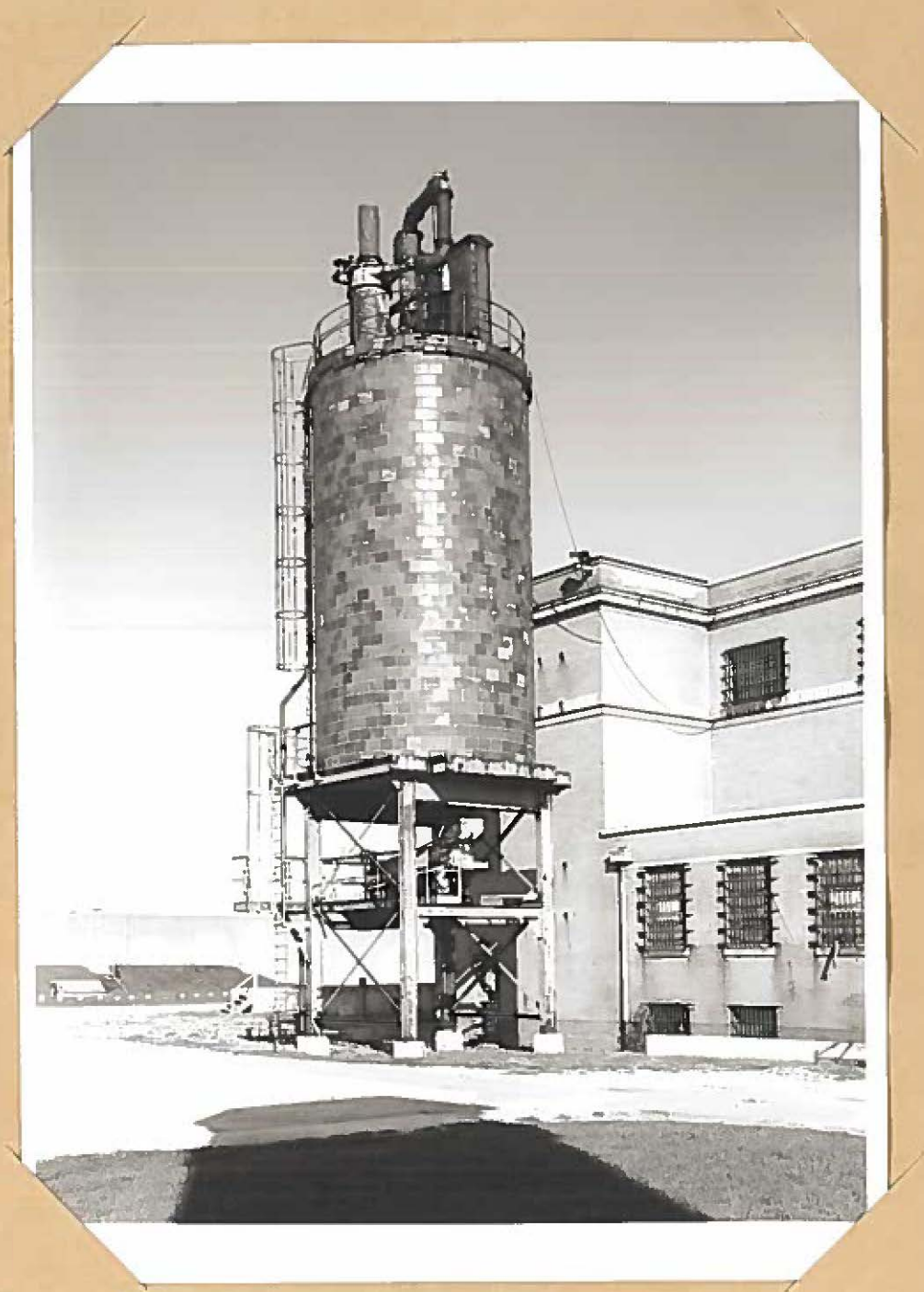


IL HABS No. WI-1997-1-B. 5
SEE INDEX TO PHOTOGRAPHS FOR CAPTIONS

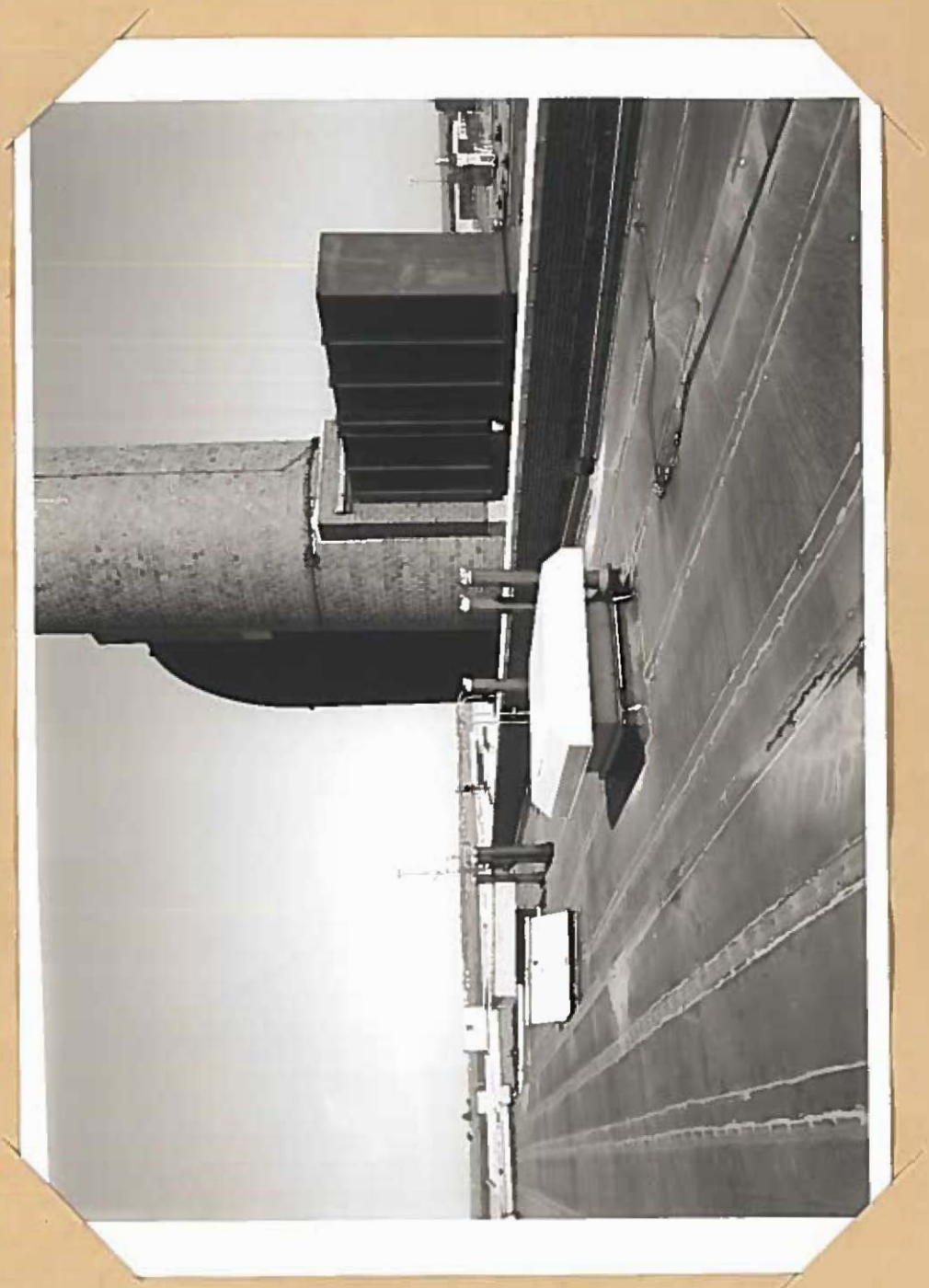


IL HABS No. WI-1997-1-B. 6
SEE INDEX TO PHOTOGRAPHS FOR CAPTIONS

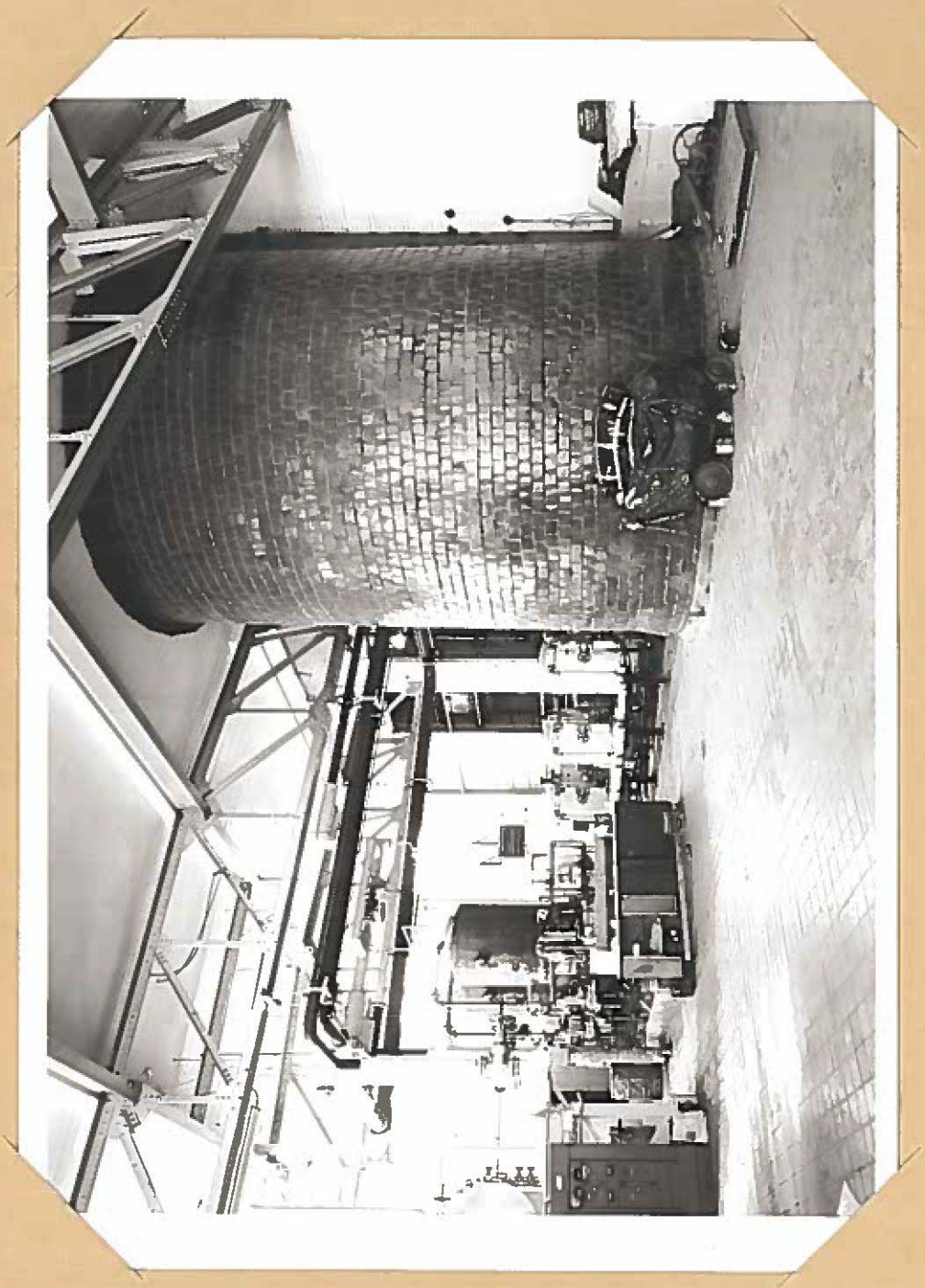
IL HABS No. WI-1997-1-B. 7
SEE INDEX TO PHOTOGRAPHS FOR CAPTIONS



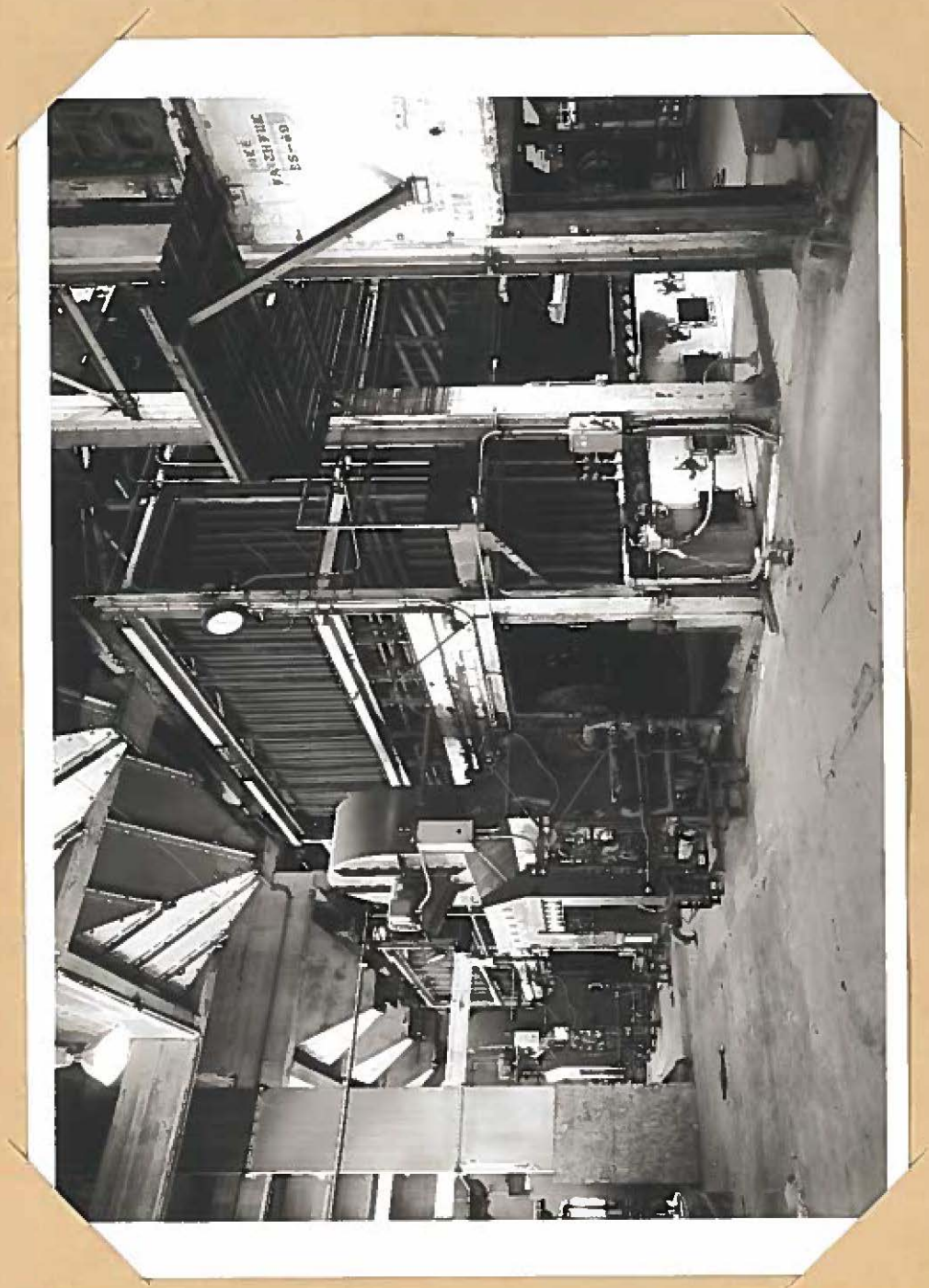
IL HABS No. WI-1997-1-B. 8
SEE INDEX TO PHOTOGRAPHS FOR CAPTIONS



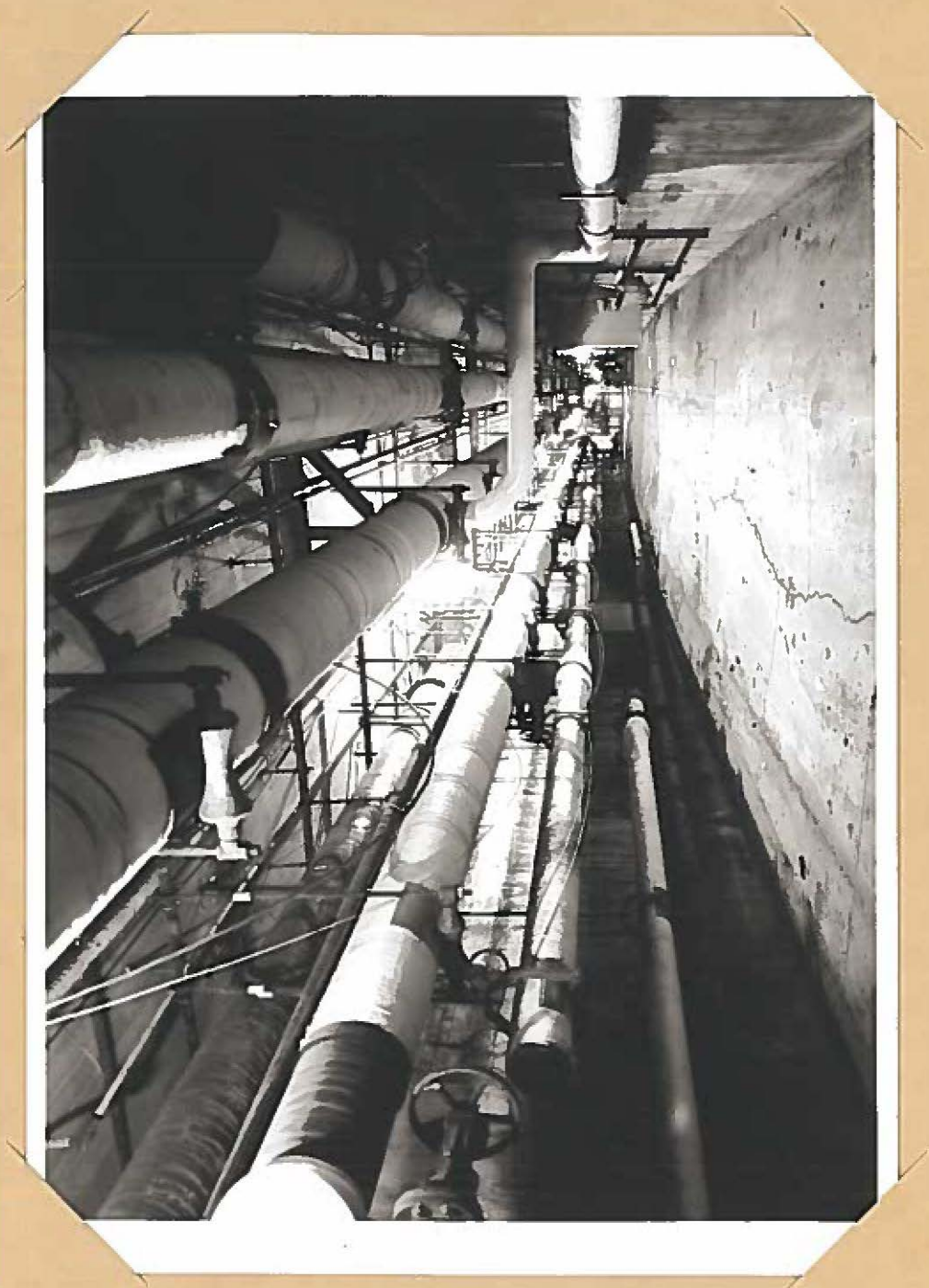
IL HABS No. WI-1997-1-B. 9
SEE INDEX TO PHOTOGRAPHS FOR CAPTIONS



IL HABS No. WI-1997-1-B. 10
SEE INDEX TO PHOTOGRAPHS FOR CAPTIONS



IL HABS No. WI-1997-1-B. 11
SEE INDEX TO PHOTOGRAPHS FOR CAPTIONS



IL HABS No. WI-1997-1-B. 12
SEE INDEX TO PHOTOGRAPHS FOR CAPTIONS