HISTORIC ILLINOIS BUILDINGS SURVEY

HIBS CK-2023-2

PORTLAND CEMENT ASSOCIATION CAMPUS: COVER DOCUMENT

Location: The Portland Cement Association campus is located at 5400-5420 Old Orchard Road in Skokie, Illinois. It is on a parcel that is bounded by Woods Drive on the east, Circuit Court of Cook County property on the west, a residential subdivision on the north, and Old Orchard Road and the Harms Woods Forest Preserve on the south. The property is located on Lot 1 of the Portland Cement Association Subdivision and includes part of the Northwest Fractional Quarter of Section 9, Township 41 North, Range 13, East of the Third Principal Meridian, in Niles Township, Cook County.

Present Owner: TD 5400 Old Orchard, LLC

Present Use: Research and Experiments (Research Building and Structures Laboratory); vacant (Materials Storage Building and Administration Building)

Significance: The Portland Cement Association (PCA) was founded in 1916 by a group of cement manufacturers as a non-profit organization dedicated to improving and extending the use of Portland cement and concrete. In 1950, the Association relocated its main research facility from downtown Chicago to a rural parcel in northwest suburban Skokie, just west of the Edens Expressway (I-94), which was then under construction. The site selection was indicative of the relocation of corporate headquarters to suburban locations along newly constructed expressways that occurred nationwide in the post-World War II era.

The PCA's Skokie campus featured two buildings in 1950: the Research Building and the Storage Materials Building (Carr & Wright). The former housed a variety of laboratories and a million-ton testing machine. The property was expanded in 1958 with the Fire Research Center (razed) and a Structural Laboratory (Dunlap & Esgar), and in 1968 with a new headquarters building (Perkins & Will), consolidating operations at what was then known as the Cement and Concrete Center.

The property is significant for the scientific achievements undertaken in the PCA's laboratories (later operated by the CTLGroup), and as a mid-twentieth century corporate campus that represented its owner's branded image. Its buildings incorporated the latest developments in concrete—

especially the use of precast concrete panels—showing that the PCA was at the forefront of innovation in terms of concrete building construction. Their designs were both modernistic and functional while demonstrating the varied means in which concrete could provide decorative effects through texture, shape, and color.

## PART I. HISTORICAL INFORMATION

### A. Physical History

1. Dates of construction:
   1948-50: Research Building and Material Storage Building
   1956-58: Structures Laboratory
   1967-68: Administration Building

2. Architect:
   Carr & Wright, Chicago (Research Building and Material Storage Building)
   Dunlap and Esgar, Chicago (Structures Laboratory)
   Perkins and Will (Administration Building)

3. Contractor/Builder:
   Turner Construction Company, Chicago (Research Building and Material Storage Building)
   George A. Fuller Company, Chicago (Structures Laboratory)
   J.W. Peters and Sons, Burlington, Wisconsin (Administration Building)

4. Artist:
   Paul K. Kufrin (Panels in Structures Laboratory vestibule)

5. Original plans and construction:
   See individual outline reports on the Research Building, Material Storage Building, Structures Laboratory, and Administration Building and the following essay below: “Development of the Portland Cement Association Campus in Skokie.”

6. Additions:
   See individual outline reports for information on interior alterations.

B. Historical Context:

**1. Overview History of the Portland Cement Association**

The Portland Cement Association (PCA) was founded by a group of cement manufacturers in 1916 as a non-profit organization committed to improving and extending the uses of Portland cement and concrete through market development, research, engineering, education, and policy work.

Portland cement was invented by English bricklayer Joseph Aspdin from Leeds and patented in 1824. Aspdin produced a new type of cement with exceptional binding properties by heating powdered limestone mixed with clay in a furnace and grinding the resulting clinker to a powder. He called the product "Portland Cement" because of its resemblance, when set, to Portland stone, a type of stone quarried on the Isle of Portland. Cement plants were established in the U.S. starting in the 1870s and by the turn of the twentieth century, the versatile material was becoming a construction staple for all types of buildings and structures.[1]

The origins of the Portland Cement Association dates to 1902, when a group of cement manufacturers in the eastern U.S. assembled to discuss problems with cement packaging. At the time, cement was packaged in reusable cloth sacks that were returned to the manufacturer, a process that proved problematic for several years. The group soon passed a resolution to create a permanent organization. Representatives of twenty cement companies were present at a meeting held in New York on October 23, 1902, when they adopted a Constitution and By-Laws and elected officers. The name "Association of Portland Cement Manufacturers" was selected at the organization's first Annual Meeting, held on December 9, 1902. In 1904, the name was changed to the "American Portland Cement Association."[2]

In 1916, the Association relocated its headquarters from Philadelphia to downtown Chicago, where it was housed in the Conway Building at 111 W. Washington Boulevard. An amended Constitution and By-laws in 1916 changed its name to the Portland Cement Association and established a Board of Directors. The PCA's aim was to increase the knowledge and use of Portland cement and concrete through scientific investigation, public education, and promotion. The organization had eight district offices with a total of 121 employees in 1916 and a membership comprised of 53 cement

[1] Robert Lesley, *History of the Portland Cement Industry in the U.S*. (Chicago: International Trade Press, Inc., 1924) 34-35.
[2] Ibid, 196-197, 200-202, 215.

companies. Ben F. Affleck, president of Atlas Universal Cement, served as the PCA's first chairman and president from 1916 to 1920.[3]

Also in 1916, the PCA entered a cooperative agreement with the Lewis Institute of Chicago to establish a Structural Materials Research Laboratory in its building at the southeast corner of Madison and Damen Avenues (razed c. 1990).[4] In this facility, the PCA focused on developing basic information about cement and concrete and standards governing their use. The information attained through experiments was disseminated by the PCA through its publications, the number of which increased exponentially over the years. In 1918, the PCA was publishing three regular periodicals—*Concrete Highway Magazine*, a monthly, as well as *Concrete Builder* and *Concrete in Architecture and Engineering*, both bi-monthlies. These, with fifty or more booklets, constituted the PCA's standard promotional literature at that time.[5]

In 1926, the PCA built an all-concrete headquarters building at 33 W. Grand Avenue—which was then a light industrial area just north of Chicago's Loop—which was five stories in height and designed by Holabird & Roche. The building accommodated about a third of the organization's 525 employees; the others were scattered among its 30 district offices nationwide. The PCA moved its laboratory from the Lewis Institute to its new general office building, where it occupied the basement and first two floors. The PCA's Grand Avenue building also housed what came to be known as the sand library, which featured thousands of sand specimens for study.[6]

During the 1920s—a decade that witnessed the advent of the automobile—the PCA focused on opportunities to promote concrete as a road-building material, such as urging local officials to construct "seedling miles." The assumption was that the users of these mile-long concrete roadways, built in previously unpaved areas, would pressure their legislators to fund more miles.

The PCA's research division discovered air entrainment during the 1930s as a method of making concrete less susceptible to damage from freeze-thaw cycles, a problem in northern climates. Other PCA research focused on best practices in concrete construction. For example, in 1931 researchers found that internally vibrated concrete was 2,000 pounds per square inch (psi) stronger than hand-placed concrete with the same cement content. The

---

3 Ibid, 229-231.

4 Ibid, 230. In 1940, the Lewis Institute merged with the Armour Institute, located on Chicago's Near South Side, to become the Illinois Institute of Technology.

5 Ibid, 234.

6 "Portland Assn. Moves to Home in Grand Avenue," *Chicago Tribune* (May 16, 1926); Portland Cement Association. *Thirty Three West Grand* (Chicago: Portland Cement Association, 1926).

vibration itself did not make the concrete stronger. However, it did allow workers to place stiff concrete mixtures made with less water and therefore a lower water-cement ratio, which increased the product's strength significantly. PCA consumer advertisements expanded in the 1930s and 1940s to focus on the benefits of architectural concrete for single-family home construction.[7]

In the late 1940s, the PCA built the largest and best-equipped laboratory in the world devoted exclusively to cement and concrete in northwest suburban Skokie. It was here that PCA engineers developed the ultimate strength design concept, which was adopted by the American Concrete Institute (ACI) Building Code of 1956. This advancement greatly reduced the required size of concrete structural members and placed concrete building frames in a highly competitive position with steel. It also laid the foundation for concrete to compete in the high-rise market with a string of record-breaking projects, starting with Marina City in Chicago, which broke the 500-foot vertical barrier upon its completion in the early 1960s.[8]

The PCA soon needed new capabilities for specialized research and testing and added two buildings to its Skokie campus in 1958: the Fire Research Center and a Structural Laboratory. The facilities enabled research to improve transportation facilities and to enhance fire safety for concrete structures throughout North America.[9]

The PCA's advertising campaigns of the 1960s reflected concrete's increased use in both residential and commercial markets. One advertisement series featured case studies of how concrete helped architects realize their visions and the goals of their clients. The PCA teamed up with several allied industry groups during this decade to jointly sponsor the Concrete Industries Horizon Homes program, which encouraged the creative use of concrete in the construction of moderately priced homes by providing technical support to home builders.[10]

In 1968, PCA moved its headquarters from Chicago to a newly completed office building on its Skokie campus, consolidating operations at what was then known as the Cement and Concrete Center. Advances in concrete strength and innovations in construction technology, such as pumping, were hallmarks of PCA's research work in the 1970s. At 859 feet, Chicago's Water Place became the world's tallest concrete building upon its completion in 1975 on Chicago's North Michigan Avenue.

---

7 Cement.org/history/timeline. "History of the PCA – Timeline," 2016.
8 Ibid.
9 Cement.org. "History of the Cement and Concrete Campus," 2016.
10 Cement.org/history/timeline. "History of the PCA – Timeline," 2016.

In 1985, Construction Technology Laboratories, the research and development division of PCA, gained national attention when NASA provided it with a large sample of lunar soil for investigative research. Test results verified that lunar material is an excellent aggregate for making concrete on the moon. Two years later, this division became a subsidiary of PCA called Construction Technology Laboratories, Inc. (renamed CTLGroup in 2005), which occupied the Research Building, the Material Storage Building, and the Structures Laboratory on the PCA's Skokie campus. (The Fire Research Laboratory was razed in 1998). CTLGroup functioned as a separate profit center to conduct research, testing, and consulting on a contract basis for a wide range of clients, including PCA member companies and the PCA itself.[11]

Activities during the 2000s included the establishment of the PCA Education Foundation, which funds activities to raise public awareness about appropriate uses of cement and concrete. In 2004, the PCA launched "Concrete Thinking for a Sustainable Future," a program highlighting concrete's use in sustainable construction.[12]

In 2012, the PCA shifted its headquarters to Washington, D.C. as part of a renewed emphasis on national advocacy efforts in the capital. However, the Skokie office continued to operate as an important resource for North American and regional promotion and advocacy efforts. The PCA marked its centennial in 2016 by publishing the 16th edition of *Design and Control of Concrete Mixtures*, which provides guidance on all aspects of concrete technology, backed by over 100 years of research by the organization. The PCA has digitized all its publications since 1915, which can be accessed from its library website: https://pcalibrary.libguides.com/home/about.

The PCA currently (2023) serves as the premier policy research, education, and market intelligence organization serving America's cement manufacturers. Its members represent 91 percent of U.S. cement production capacity and have facilities in all 50 states. Its Skokie campus was acquired by Barco Investment Group in 2019, which also acquired the CTLGroup in the same year. The campus was subsequently purchased by TD 5400 Old Orchard, LLC, which intends to replace its buildings with a mixed-use development.[13]

---

11 Ibid.
12 Ibid.
13 CTLGroup.com. "Barco Investment Group Acquires CTLGroup," October 24, 2019. https://www.ctlgroup.com/press_releases/barco-investment-group-acquires-ctlgroup/.

**2. <u>Post-World War II Suburban Office Development</u>**

The PCA's decision to move its research laboratories, and then its national headquarters, from downtown Chicago to northwest suburban Skokie, Illinois, was emblematic of the redistribution of people, retail establishments, and businesses that began in the early twentieth century and accelerated at a rapid pace following World War II. The post-war suburban building boom included residential subdivisions, regional shopping malls, office developments, and industrial parks. Rapid growth outside central cities nationwide from the 1950s onward was spurred by a variety of factors, including an enormous pent-up demand for both new housing and modern office space following a quarter-century of economic depression and war. The 1956 Federal Highway Act, which financed new highway construction, opened up land far beyond reach of the old cable-car and commuter rail lines, while the availability of low-interest, government-guaranteed mortgages through the GI Bill helped facilitate home ownership for returning veterans.

Coinciding with the post-war skyscraper boom that occurred in downtowns nationwide was the growth of suburban office developments, where a preferred managerial workforce (white, educated, married men) was moving. Louise Mozingo detailed the origins of these corporate environments in her 2011 book, *Pastoral Capitalism: A History of Suburban Corporate Landscapes*. In contrast with the city, "the suburbs were predicable, spacious, segregated, specialized, quiet, new and easily traversed—a much more promising state of affairs to corporations bent on expansion," according to Mozingo.[14]

Mozingo identified three major forms that dominated these novel suburban environments for business: the corporate campus, corporate estate, and the office park. Corporate campuses were initially developed to house research-and-development divisions in a collegiate environment that would allow them to compete with major universities for job candidates. However, all kinds of suburban office sites are often called campuses for their use of low-rise buildings, quadrangles or courtyards, and pastoral greenery. AT&T Bell Telephone Laboratories pioneered the first corporate campus, acquiring land in the suburbs near Summit, New Jersey, during the 1930s. Company officials sought a quiet space for research away from the density of Manhattan. After more than a decade of planning and construction, the new Bell Labs—resembling a leafy college campus—opened in 1942 to much critical acclaim.[15]

---

[14] Hunter Oatman-Stanford, "Why are America's Most Innovative Companies Stuck in 1950s Suburbia," *Collectors Weekly* (April 18, 2016).

[15] Louise A. Mozingo, *Pastoral Capitalism: A History of Suburban Corporate Landscapes* (Cambridge, Mass.: The MIT Press, 2011) 59, 61.

A "corporate estate" was typically the site of a company's executive headquarters, nestled within sprawling landscaped grounds and featuring high-end amenities. General Foods, a processed-food manufacturer that ballooned in size after World War II, was one of the earliest companies to relocate its entire headquarters from the city to the suburbs, relocating from Manhattan to Westchester County, New York, in the mid-1950s. Another highly influential project was commissioned by Connecticut General Life Insurance, which moved from Hartford to Bloomfield, Connecticut, in 1956. The company selected the firm of Skidmore, Owings & Merrill (SOM) to design its building in partnership with landscape designer Joanna Diman and artist Isamu Noguchi, who created sculptures for the grounds. Its new corporate estate included snack bars, ping-pong tables, shuffleboards, bowling alleys, tennis courts, horseshoe pits, a barbershop, beauty parlor, game room, media library and meditation room—more than half a century before Google and Facebook added such amenities.[16]

In the post-World War II period, large corporations, like IBM, came to regard such suburban office environments, whether they were dedicated to research, production, or administration, as part of their branded image, and almost as representative of the company as the products it made. And like those products, the buildings were required to feature cutting-edge designs and incorporate the latest materials and technologies to prove that the company was at the forefront of innovation. The architects of most major outlying office buildings were usually prominent local firms also heavily involved with prestigious buildings downtown, while landscaping was often entrusted to leading landscape architects.

In contrast to campuses/estates built by a single corporation, office parks were designed as speculative developments with buildings rented to smaller commercial tenants, like branch offices for major corporations. Areas like Silicon Valley, south of San Francisco, were developed from farmland into office parks. Unlike industrial parks on which they were modeled, office parks were in upscale residential suburbs and catered to white-collar management tenants. Rapid expansion of such office parks was hastened by the construction of airports and highways, and the most important concentrations of suburban office buildings were concentrated where expressways intersected.[17]

---

16 Mozingo, 113.

17 Robert Bruegmann, "The Recentering of the Metropolitan Area," in: *Chicago Architecture and Design, 1923-1993*. John Zukowsky, Ed. (Munich: Prestel-Verlag, 1993) 154.

In the Chicago region, new office zones followed the expressways north and west of the city, especially the Edens Expressway (I-94), the Tri-State Tollway (I-294), the Eisenhower Expressway (I-290), the East-West Tollway (I-88), the Kennedy Expressway (I-90), the Dan Ryan Expressway, and the Stevenson Expressway, all of which were constructed in the 1950s or 1960s.

Among the earliest office parks in the Chicago region was the Concourse near the Edens Expressway (I-94) in Skokie. G.D. Searle & Co., a large pharmaceutical corporation, relocated from Chicago to Skokie as early as 1942. The Portland Cement Association opened its new research campus in the northwest corner of Skokie in 1950, just west of the new Edens Expressway, which linked downtown Chicago to the Tri-State Tollway. Completion of the Edens in the 1950s spurred many corporations to relocate to Skokie in the post-World War II era, such as Rand McNally & Company, which erected a six-acre building for printing and warehousing its publications. Others included the Fel-Pro Corporation, a manufacturer of automobile gaskets and sealers; the Welch Company, a maker of scientific instruments; and the Brunswick Corporation, best known for its bowling and billiards equipment.[18]

Allstate was one of the many corporations to build sprawling, and lushly landscaped, office campuses/estates along the Chicago region's fast-growing Tri-State Tollway in the 1960s and 1970s. Others included Abbott Laboratories, which built a massive complex on a 400-acre rural tract near the western periphery of Libertyville starting in the late 1960s, which one contemporary writer described as "more like a campus than a center of industrial production."[19] In the early 1970s, SOM was hired by Baxter Travenol (now Baxter International) to design a master plan for its 179-acre site in Deerfield—just north of the Allstate campus—which featured a cluster of flexible, two- and three-story modular office pavilions connected to a central facilities building.[20]

The office buildings erected in these environments from the 1950s through the early 1970s were often designed in the "International Style," a term that entered the lexicon in 1932 with an exhibit organized at the Museum of Modern Art (MOMA) in New York by Henry Russell Hitchcock and Philip Johnson. The exhibit and its accompanying catalogue, *The International Style: Architecture Since 1922*, documented the work of European architects that included Le Corbusier in France, Walter Gropius and Ludwig Mies van der

---

18 Skokiecentennialbook.com. Richard Whittingham, *Skokie: Centennial History* (Wilmette, Illinois: Raspail Productions, 1988).

19 "Abbott Park Creates Campus Effect," *Chicago Tribune* (August 30, 1970).

20 "Baxter International, Inc." in: https://www.som.com/projects/baxter-international-inc/.

Rohe in Germany, and JJP Oud in Holland during the 1920s. Hitchcock and Johnson demonstrated that these architects had developed a distinctive architectural style that both reflected twentieth-century century concerns with functionalism and responded to the social upheaval in Europe following World War I. The architects involved used innovative structural techniques and materials in ways that rejected styles of the past.

Hallmarks of the International Style, as seen mainly in Europe during the 1920s and 1930s, included flat roofs, windows arranged in continuous horizontal ribbons of glass, rectilinearity, and smooth wall planes often sheathed in stucco. Such buildings were typically devoid of ornamentation and no more than two stories in height. Among the first buildings to emulate this style in the United States were those designed by the German emigre, Ludwig Mies van der Rohe, for the campus of the Armour (now Illinois) Institute of Technology (IIT) in Chicago. The low-rise, flat-roofed, steel-framed buildings designed by Mies for IIT were built after World War II and featured infill panels of glass or tan brick. They were distributed across a landscaped superblock and designed according to a 24-square-foot module that theoretically permitted rapid growth and reconfiguration.

The modernist glass-and-steel, low-rise prototype pioneered by Mies at IIT was widely imitated, as corporations moved their headquarters to suburbia in the 1950s and 1960s. One such project indebted to the International style, and especially the modular uniformity of the Mies-designed buildings at IIT, was the General Motors Technical Center in Warren, Michigan. The campus featured low-slung, flat-roofed, research buildings—arranged around a twenty-two-acre lake—that were sheathed in mass-produced, glazed, modular curtain-wall units. The massive, one-square-mile campus site and its buildings were occupied in 1956 and designed by the father and son team of Eliel and Eero Saarinen, with landscaping by designer Thomas D. Church.[21]

Not all suburban office buildings embodied the Spartan, smooth-walled surfaces of the International style. The nine-story administrative building designed by Eero Saarinen for the John Deere Headquarters in Moline, Illinois, features an exposed structural frame of unpainted Cor-Ten steel, a material that oxidizes with age to the color of brownstone, giving the building a rugged and earthy look. The 1,400-acre corporate site with wooded land overlooking the Rock River Valley was created in the early 1960s and landscaped by Sasaki, Walker and Associates.[22]

---

21 "General Motors Technical Center" in: https://sah-archipedia.org/buildings/MI-01-MB3.

22 "Deere and Company Administrative Center" in: https://sah-archipedia.org/buildings/IL-01-061-0027.

The embrace of mass-produced, pre-cast concrete panels as sheathing was yet another response to the severe, glass and steel Miesian designs of the post-World War II era. Precast-concrete wall panels were used in a limited way in the early twentieth century when units were cast at the job site and tilted into place. For many years, the typical panel was rectangular or square in shape, with a flat surface, and grey in color. Such panels served as curtain wall units supported by the building frame.[23]

The decade of the 1960s saw the introduction of dual purpose precast concrete panels with integrated window frames that served as both exterior sheathing and fenestration. Such panels were used on the McDonalds Plaza Building in Oakbrook, Illinois (1971; Salvatore Balsamo). Here, each panel was two windows wide and faced with crushed quartz aggregate, which provided a sparkling white appearance. In fact, the use of exposed aggregate became an increasingly common means to provide a textured, decorative surface to precast wall panels.

Dual purpose precast concrete panels with exposed aggregate formed the exterior of the 31-story Bankers Trust Building on Park Avenue in New York (1963; Emery Roth & Sons with Henry Dreyfuss), where the glass was installed after the precast units had been erected. Deeply recessed windows were provided in the frames that comprised the exteriors of both the Phoenix City Hall (1960; Haver, Nunn & Associates; now Calvin C. Goode Building), and the Hilton Hotel in Denver (1960; I.M. Pei & Associates; now Sheraton Hotel). Both buildings—and the McDonald's Plaza Building mentioned above—were designed with a cast concrete colonnade on the ground floor. The 500 Jefferson Building in Houston (1963; Welton Beckett & Associates) added a new fabrication technique to precast window unit production. The glass was installed at the precasting plant, eliminating on-site glazing operations on the 21-story building.[24]

The Allstate Insurance Company's North Plaza Complex in Northbrook (1967; Schmidt, Garden & Erikson; razed) featured the use of precast, concrete panels that incorporated window framing infilled with grey-tinted and opaque glass. Its high-rise administration building possessed geometric beauty through the grid-like appearance of its elevations, while the surrounding low-rise buildings featured minimalist, full-height, concrete colonnades that provided an austere, Classical temple-like appearance. The three-story, flat-roof A.C. Nielsen Company headquarters, built 1973 just

---

23 T.W. Hunt, "Precast Concrete Wall Panels: Historical Review," in: *Symposium on Precast Concrete Wall Panels* (Detroit: American Concrete Institute, Second Printing, 1966) 4-5.

24 Ibid, 10-11.

north of the Allstate campus Northbrook (1973; Welton Beckett & Associates; razed), featured precast concrete spandrels and vertical piers with exposed aggregate arranged in a rationalist grid design; each bay was infilled with a strip of four solar bronze glass panels.

The use and variety of precast concrete panels grew exponentially in the 1960s and 1970s due to improved methods of production, better handling and erecting equipment, and the development of new techniques and materials. Perhaps the greatest factor in their increased use, according to concrete specialist T.W. Hunt in a 1964 paper, was "the relative ease with which an almost unlimited range of shapes, designs, colors, and textures can be produced," which "has stimulated the imagination of engineers and architects. The increased use of color, both in the cement matrix and in exposed aggregate, has made it possible to produce patterns or designs in panel surfaces that add to their attractiveness."[25]

The use of concrete was often associated with Brutalism, a style that flourished from the 1950s through the 1970s. Hallmarks include the use of raw, unfinished concrete and sculptural, or blocky forms that are usually top-heavy, with deep-set windows. These characteristics set Brutalist buildings apart from other modernist styles in the same period, which appear lighter and more transparent. Brutalist buildings communicate a sense of permanence and monumentality, sometimes appearing fortress-like with large angular forms.

**3. <u>Development of the Portland Association Campus in Skokie</u>**

The PCA's Skokie campus is significant for the scientific achievements undertaken in its laboratories (later operated by the CTLGroup), and as a mid-twentieth century corporate campus that represented its owner's branded image. Its buildings incorporated the latest developments in concrete—especially the use of precast concrete panels—showing that the PCA was at the forefront of innovation in terms of concrete building construction. Their designs were both modernistic and functional while demonstrating the varied means in which concrete could provide decorative effects through texture, shape, and color.

In 1935, the PCA purchased a rural 37-acre site at the northwest corner of Skokie (called Niles Center until 1940), which fronted Old Orchard Avenue (then called Harrison Street). The Skokie Valley Line of the North Shore Electric Railway with service to downtown Chicago ran along the east side of the site. In 1941, the PCA installed about a thousand concrete slabs, lined up in rows, on the property as a long-term research project to study the behavior

[25] Ibid, 5.

of Portland cement and concrete under the conditions of freezing and thawing in the winter. Each slab was carefully observed periodically. The Skokie installation was part of extensive field work undertaken by the PCA throughout the U.S. to collect information aimed to create more durable and economical Portland cement and concrete for roads, homes, airport, and a myriad of other uses.[26]

The PCA expanded its research division in 1946, the year that Dr. A. Allan Bates was elected vice president in charge of research and development. Bates was formerly manager of the chemical, metallurgical, and ceramic research division of Westinghouse Electric corporation. PCA president Frank Sheets announced at the time of Bates' election that a substantial part of the organization's income was being used solely for the work in the research division. [27]

In early 1948, the PCA hired the Chicago-based firm Carr & Wright to design a new research facility on its Skokie property, which was intended to replace its existing research laboratory in its Chicago headquarters at 33 W. Grand Avenue. A model of the new complex was published in the *Chicago Tribune* on April 3 of that year. It showed two concrete buildings—a two-story main research building and a one-story auxiliary building—with a total floor area of 98,000 square feet connected by a covered walkway. Sheets was quoted in the article as stating that the facility would "enhance the importance of Chicago as one of the world's largest scientific, technological, and engineering centers."[28]

The first concrete for the PCA's new Skokie research facility was poured on June 30, 1948. A lever that started the mechanism for the concrete pour was pulled by Charles E. Aspdin, the great-great-grandson of Joseph Aspdin, who invented Portland cement in Leeds, England, in 1824. The ceremonies for the start of construction were also attended by Frank T. Sheets, PCA president, members of the PCA's board of directors, and presidents of various cement corporations.[29] Turner Construction Company of Chicago was the general contractor for the project. Dr. Allan Bates remarked at the ceremony that the purpose of the new laboratory was to "expand and intensify scientific research to keep pace with the growing importance of concrete construction in the national postwar economy."[30]

---

26 "The 'Farm' That Grows Concrete Near Chicago," Central Manufacturing District Magazine, November 1950: 25-27. Some of these slabs were later displayed on the west side of the Research Building.

27 *Chicago Tribune* (July 2, 1946).

28 "Cement Lab to Be Built in North Skokie," *Chicago Tribune* (April 3, 1948).

29 "First Concrete for Big Cement Lab is Poured," *Chicago Tribune* (July 1, 1948).

30 "Descendant of British Inventor To Place First Concrete For New Cement Laboratory," *The Superior Express* (Superior, Nebraska) (July 15, 1948).

Leaders in the county's cement and concrete industry took part in the dedication of the PCA's new $3 million research laboratory in Skokie, held on June 8, 1950. The two-story, all-concrete Research Building was designed in the European version of the International style, featuring a flat roof, smooth wall planes comprised of pre-cast concrete panels, rectilinearity, and horizontal strips of windows alternating with panels of vertical fluting in concrete. The soffits of its east and west wings and those above the main entrance were detailed with sculptural relief panels representing the production of concrete. The words "Portland Cement Association" in stainless steel letters were placed on the wall above the main entrance, which faced Old Orchard Road and was fronted by a grassy lawn.

The Research Building was linked to the one-story Material Storage Building (originally called the Auxiliary Building) to the north by a concrete canopy, which sheltered a driveway. The Material Storage Building also had smooth wall planes comprised of precast concrete panels. Its high central bay was illuminated by clerestory windows and accessed by overhead garage/roll-up doors on the north and south walls. The central bay was flanked by rooms for the storage and sorting of materials, such as cement and aggregate, as well as a large boiler room. It also originally incorporated a garage, a soil processing room, and a wood shop along its western side.

The *Chicago Tribune* published a description of the PCA's new research complex shortly after its 1950 completion:

> The Portland Cement Association's bright new research and development laboratory building on Harrison Street in Skokie is an institution of contrasts. Awe inspiring is the contrast between a testing machine that can exert one million pounds of pressure and a balance which is sensitive enough to weigh the dust from a butterfly's wing.
>
> The association is a national organization of 67 member companies devoted to the improvement and extension of uses of Portland cement and concrete. Portland cement is not a brand name, as many people think, but a kind of cement. It was given its name by an English stone mason who invented it about 1824 and thought the mortar made from it resembled a natural stone of the Isle of Portland.
>
> New laboratories of the association, which has carried on its work for more than 30 years, are the largest in the world devoted exclusively to research in cement and concrete. The building, dedicated a month ago, is staffed by physicists, chemists, mathematicians, and engineers who are specialists in their respective fields.
>
> A visitor to the Skokie building might at first fancy himself in a modern country resort hotel—rather than a place of science. Thru the large picture windows of

> the lobby he can look over spacious lawns to the trees of nearby Harms woods forest preserve. And a walk down the hall would take him to a cafeteria decorated and furnished as a resort hotel restaurant might be.
>
> Once thru a laboratory door, however, the resort resemblance ends. The visitor sees equipment which makes it possible to carry out experiments under conditions colder than the arctic, hotter than the equator, drier than the Sahara, and wetter than the Amazon valley.
>
> In one electrical laboratory research engineers "take the pulse" of concrete specimens. By placing a phonograph like needle against the concrete, the technician can hear sound waves as well as see them on a picture tube. This machine determines the vibration rate of concrete specimens and enables engineers to calculate quickly important properties of the concrete.
>
> To determine how concrete stands up under frigid conditions the association stores concrete blocks in rooms where the temperature is kept at 20 below zero the year around. In brine and water tanks the normal cycle of winter and summer freezing and thawing can be speeded up to the point where concrete test specimens undergo the equivalent of several years of weather punishment in a matter of weeks. A moist curing room, which is kept at 73 degrees the year round, provides concrete with the test of extreme humidity conditions.
>
> Soil for soil cement, a comparatively new development of the industry, is tested in the lab. Soil cement utilizes soil on the site of construction to form a hard surface economically. In the new building, samples of soil from all parts of the world are tested to determine its qualities for the mixing of soil cement.
>
> The huge compression testing machine can provide one million pounds of pressure. It can be operated in a delicate manner too. For example, it can measure pressure needed to crack an egg.
>
> A soniscope, which resembles a radar equipment, is used in the laboratory. The device shoots supersonic waves into concrete specimens. The time that it takes the waves to penetrate the concrete is registered on the radar like screen. By reading and analyzing the elapsed time, scientists can study the interior structure of concrete.[31]

All the laboratories were in the Research Building, which included a small cement manufacturing plant where products used in tests were made. The facility contained more than 30 laboratories dedicated to researching the production and properties of concrete and cement and methods for using these materials. They included rooms capable of duplicating conditions of arctic cold, desert dryness, or tropical heat with temperatures ranging from 20 degrees below zero to 130 degrees Fahrenheit. Trays, columns, and 10-inch sticks of concrete of different prescriptions were subjected to these varying weather conditions. Some of the tests were completed in months, while others

[31] "Plant in Skokie Works to Make Better Cement," *Chicago Tribune* (July 6, 1950).

were scheduled for a half century duration. Its specialized equipment featured the only one-million-pound compression testing machine in private ownership.[32]

In 1952, the PCA built a one-story Soils Research Laboratory to the north of the Materials Storage Building. The building had a long, rectilinear footprint and featured walls of precast concrete panels like those used in the two earlier buildings. In 1958, the Association enlarged its campus with the completion of two additional buildings: the Structures Laboratory and the Fire Laboratory, both of which were designed by the Chicago firm Dunlap & Esgar and constructed by the George A. Fuller Company.

The Fire Research Laboratory—situated at the northeast corner of the PCA campus—was a one-story plus basement building constructed with precast concrete panels (razed 1998). The purpose of the building was to conduct fundamental research of the physical properties of concrete and reinforcing materials during exposure to fire. It was also intended for use to investigate fire resistance of structural elements and assemblies, and ultimately to predict methods for fire resistance. The building housed five furnaces of varying size for bench-scale and full-sized tests of beams and girders, columns, floors and slabs, and wall assemblies. Assemblies were also tested under load, so furnaces were designed to apply axial and/or bending forces during test procedures, requiring additional strength of the building's floor assemblies. The Fire Laboratory also included a casting and curing room, where the test components (beams, girders, and other assemblies) could be constructed within a controllable environment.[33]

The Structures Laboratory—situated constructed at the northwest corner of the PCA campus—was a one-story, one-room laboratory building featuring two levels of balconies with offices across its east end linked by a modernistic staircase comprised of thick, concrete slabs that had a sculptural appearance. An elegant concrete spiral staircase was situated in its southwest corner, providing access from the main floor to a balcony that extended across its south wall.

The exterior walls of the Structures Laboratory were sheathed in precast concrete panels and divided into bays by full-height concrete piers. The uppermost portion of the north and south walls featured decorative concrete panels with geometric motifs and vertical bands. Especially noteworthy was

---

32 "Cement Lab Dedication Is Set for Today," *Chicago Tribune* (June 8, 1950).

33 Cement.org. "History of the Cement and Concrete Campus," 2016. In: https://www.cement.org/docs/default-source/about-pca-pdfs/88770_pca_history.pdf?sfvrsn=2. (Accessed November 20, 2023).

the projecting main entrance vestibule, which had the words "Structural Laboratory" in stainless steel letters across its flat roof. While the front (east) wall of this vestibule was entirely sheathed with glass, its north and south walls—both interior and exterior—were comprised of full-height concrete panels depicting machinery mixing cement fabricated by artist Paul Kufrin. Instead of housing conventional testing machines, the Structures Laboratory itself was a giant testing machine, capable of resisting forces of over 10 million pounds.

The main floor of the Structures Laboratory was used for the testing of girders, beams, and other shapes of up to 120 feet. The building's 24-inch-thick concrete floor was pierced with holes spaced three feet apart. Steel rods inserted through those holes extended to hydraulic jacks in the basement, which was constructed of 200,000 tons of concrete and 700 tons of steel. The laboratory was intended to promote knowledge of the structural properties of concrete and to support new and improved structural applications, such as precast frames and bridges, shell structures, folded plates, and space frames.[34]

One writer described the PCA campus following a tour in 1959, just after the Structural and Fire Laboratories were constructed:

> In a yard behind the laboratory buildings, 200 feet of pavement have been laid in precast and pre-stressed slabs 12 by 30 feet in area and 5 inches thick. The first purpose of this study is to measure the hinging action at accidental cracks caused by applied pressure. "We might build hinges into such pavements so that underground conduits could be served without breaking the slab," stated Dr. Allan Bates.
>
> In a structural development laboratory, a separate bunker of one room and a basement is constructed of 200,000 tons of concrete and 700 tons of steel, Douglas McHenry, the director, showed preliminary tests which are underway on beams designed for a bridge to be built in the building. It will be a half scale model of a 166-foot, four-lane span and will take three months to construct and another three months to destroy by measured and recorded stresses.
>
> In another building, a 42-foot concrete beam, built originally for the Illinois tollway, is being subjected to high temperatures and varying stresses in a gas fed furnace. Under construction is a second furnace that will measure the fire resistance of concrete floors and ceilings. "There are three other buildings like this in the world," Dr. Allan Bates said. "Those in Holland and in England are smaller. We know little about the third, which is in Russia."[35]

---

34 Cement.org. "History of the Cement and Concrete Campus," 2016.

35 "Bubbles Halt Thaw Damage to Pavement," *Chicago Tribune* (March 9, 1959).

The PCA's research campus served as experimental laboratory over the years, where any of its 70 member companies could finance elaborate trials and tests. The facility also hosted educational events for professionals over the years. For example, in April 1958 nearly 90 suburban building inspectors attended a field day at the campus. The day was sponsored by the Suburban Building Officials conference and aimed at helping the men perform their tasks of enforcing building codes, as reported by a contemporary newspaper:

> In the cement association's elaborate plant visitors could see the endurance of a given sample of concrete. They learned how they might run on the job tests on concrete mixtures to see if contractors were living up to their pledges and codes assuring correct materials and mixtures in concrete.
>
> Of more immediate value, however, was the viewing of testing procedures which reveal how engineers and technicians arrive at the formulas specified in building. codes. Some of the testing devices were simple affairs—a mere cone to hold a given quantity of freshly mixed concrete. When the cone was removed, the amount that new and wet concrete "slumped" became a measurable factor. That measurement could be used as an exact testing device to see if batches of concrete were the same in content as a previous mixture of material.[36]

The PCA was supported in the late 1950s by 70 cement manufacturers, each contributing in proportion to its sale volume. Of its research budget, 94 per cent was spent on user problems, on improving the product's value to the companies' customers. Only 6 percent of the budget was spent on manufacturing problems.[37] Among the lessons learned from a myriad of study projects undertaken at the PCA campus in its early years was that microscopic air bubbles can immunize Portland cement concrete against the destructive influence of freezing and thawing.[38] Information attained through such projects was disseminated through the PCA's varied publications, its district offices nationwide, as well as through direct contact with engineers, architects, technical and professional societies, and government agencies.

In 1967, the PCA announced its intention to erect an office building on its Skokie research campus to serve as its new national headquarters and selected the Perkins & Will partnership as the architect. The *Chicago Tribune* published a model of the proposed building on February 7 of that year. It was intended to "not only demonstrate structural features of Portland cement, but also decorative possibilities," according to C.W. Reene, secretary of the Association. Reene also stated that, "the building will demonstrate the gracefulness, openness, and modernity possible in well-designed concrete structures today." She noted that its design, featuring light buff-colored

36 "Concrete Fact is Featured at Field Day," *Chicago Tribune* (April 20, 1958).
37 "Bubbles Halt Thaw Damage to Pavement," *Chicago Tribune* (March 9, 1959).
38 Ibid.

precast concrete spandrels, constituted a "movement away from the massive structures of yesterday."[39]

In 1968, the PCA moved into it new, $1.5 million Administration Building at the southwest corner of its Skokie campus, consolidating operations at what was known at the time as the Cement and Concrete Center. The walls of the $1.5 million office building featured 574 precast concrete panels that were fabricated by J.W. Peters and Sons of Burlington, Wisconsin, in just 14 weeks.[40] The raw concrete panels of grey concrete incorporated spandrels with an exposed aggregate comprised of white cement, white silica sand, and Romeoville crushed limestone, which provided a decorative appearance. The dual purpose precast concrete panels had integrated window frames infilled with strips of single-pane glass and alternated with full-height concrete piers which divided the building's facades into bays and created a rationalist grid design.

The two-story, flat-roof Administration Building had a pinwheel design, and the ends of each of its wings—and its east-facing entrance bay—were all sheltered by massive, cantilevered concrete canopies. The raised plaza that fronted the main entrance was originally intended to cover a tunnel connecting the Administration Building to the Research Building, but it was never built.

The lobby featured terrazzo flooring and a wood burning fireplace sheathed in concrete with an exposed aggregate comprised of the same white coloring used in the exterior spandrels. The sculptured wall in the lobby of the building was designed by three students at the School of the Art Institute of Chicago. Their intent was to use the two diverse shapes—a right triangle and curvilinear form—to transform the entire wall into a sculptural element of white Portland cement plaster that suggested the beauty and plasticity of concrete as well as its unique versatility and permanence. The design featured in-floor distribution for communications and electrical power for maximum office flexibility.[41]

In 1985, Construction Technology Laboratories, a division of the PCA, became a subsidiary of the Association called Construction Technology Laboratories, Inc. (renamed CTLGroup in 2005). It utilized the Research Building, Materials Service Building, and the Structures Laboratory and functioned as a separate profit center to conduct research, testing, and consulting on a contract basis for a wide range of clients, including PCA

39 "Plan 1.5-Million Office HQ," *Chicago Tribune* (February 5, 1967).
40 Ibid.
41 Ibid.

member companies and PCA itself. In 2012, the PCA's administration functions were relocated to Washington, D.C.; however the office building on its Skokie campus continued in use for the Association's regional promotion and advocacy efforts. The Fire Laboratory Building was razed in 1998. The east end of the campus, which formerly housed this building, was subsequently sold and is currently occupied by a large health and fitness club.

**4. <u>Carr & Wright, Architect of the Research Building and the Material Storage Building</u>**

The Research Building and the Material Storage Building were both designed in 1948 by Carr & Wright, a full-service, Chicago-based firm with offices in the 333 N. Michigan Avenue Building.

**George Wallace Carr** (1879-1958) was born in 1879 in Milwaukee, Wisconsin. He studied design and engineering at the Art Institute of Chicago and the Armour Institute of Technology (now Illinois Institute of Technology). After three years of travel and study abroad, Carr joined the architectural firm of Pond & Pond in 1899. **Clark Chittenden Wright**, AIA (1880-1948), was born on July 3, 1880, in Libertyville, Illinois, and educated at Beloit College in Wisconsin. He later studied architecture and engineering at the Art Institute of Chicago and the Armour Institute of Technology in Chicago.[42]

George Carr and Clark Wright began working in the Chicago office of George C. Nimmons in 1914 and 1915, respectively. George C. Nimmons, FAIA (1867-1947) was born in Wooster, Ohio. He studied architecture in Europe before entering the office of famed Chicago architects Burnham & Root in 1885 as a draftsman. In 1897, he formed the partnership of Nimmons and Fellows with William K. Fellows, which lasted until 1910.[43]

In 1904, Nimmons & Fellows received one of the largest architectural commissions in Chicago to that date: the Sears, Roebuck & Co., headquarters complex in the city's North Lawndale community area, which is a designated Chicago landmark.[44] This firm, and its successors, subsequently became the de facto in-house architect for Sears, designing dozens of buildings nationwide for the company through the mid-twentieth century. Other commercial buildings attributed to Nimmons & Fellows in Chicago include

---

42 *American Architects Directory, Second Edition* (New York: R.R. Bowker, 1956) 84; Henry F. Withey and Elsie Rathburn Withey. *Biographical Dictionary of American Architects (Deceased)* (Los Angeles: Hennessey & Ingalls, Inc., 1970) 672.

43 Withey, 442.

44 "Sears, Roebuck and Co. District," Final Landmark Recommendation adopted by the Commission on Chicago Landmarks, December 4, 2014.

the Lesher Building at 515-521 S. Franklin Street (1902, demolished), the Dixon Building at 411 S. Wells Street (1908), the Washburne Trade School at 3231-3337 W. 31st Street (1909, demolished), and the Railway Terminal and Warehouse Company Building at 444 W. Grand Avenue (1909).[45]

The Nimmons and Fellows partnership dissolved in 1910, when the latter left and founded a new practice with Dwight H. Perkins and John L Hamilton (Perkins, Fellows, and Hamilton). Nimmons then established an independent practice under the firm names of George C. Nimmons & Co. and Nimmons & Co. and continued to specialize in commercial and industrial design. During the 1910s and 1920s, Nimmons published numerous articles in leading architectural journals on industrial design, including a series of articles on "Modern Industrial Plants" in *The Architectural Record* in 1918 and 1919. He became nationally known for industrial buildings that combined functionality with visual elegance. Nimmons also wrote essays on the future of concrete.

Prominent works by the Nimmons firm in Chicago during the period that Carr and Wright worked for the firm include the Reid Murdoch & Co. Building at 325 N. LaSalle Street (1914), a brick warehouse and office building with ten-story tower detailed with terra cotta ornament; the 13-story New Franklin Building at 720 S. Dearborn Street (1912), which is a contributing building in the Printing House Row Chicago Landmark District; the six-story Adam Schaff Building at 319-21 S. Wabash Avenue (1916; razed c. 1970); the six-story Union Special Machine Building at 400 N. Franklin Street (1918); a ten-story warehouse with 14-story tower for the Commonwealth Edison Company at 2233 S. Throop Street (1926); and the western portion of the American Furniture Mart at 680 N. Lake Shore Drive (1926).[46] The firm also designed numerous retail buildings for Sears, including those in Kansas City (1913) and Philadelphia (1919).

The firm of Nimmons, Carr & Wright was established in 1928, with George Wallace Carr and Clark C. Wright as partners, as the successor firm to Nimmons & Co. In the same year, the firm relocated from the Peoples Gas Building at 122 S. Michigan Avenue to offices on the 19th floor of the newly constructed 333 North Michigan Avenue Building.[47] Building construction nationwide was nearly at a standstill during the Depression and war years of the 1930s and early 1940s. However, Nimmons, Carr & Wright were kept busy during this era designing retail department stores for Sears in cities nationwide that included Miami Florida (1929), Spokane, Washington (1930),

---

45 Frank A. Randall. *History of the Development of Building Construction in Chicago, Second Edition* (Urbana: University of Illinois Press, 1999) 452-453.

46 Randall, 453.

47 "Nimmons & Co. Changes Name and Will Move," *Chicago Tribune* (February 12, 1928).

Glendale, California (1935), Baltimore, Maryland (1935), and Detroit, Michigan (1935), as the Sears embarked on a coast-to-coast building program. Nimmons, Carr & Wright also designed a headquarters building for Sears at the Century of Progress International Exposition, held in Chicago from 1933-34.[48]

The department stores designed in the late 1920s and 1930s by Nimmons, Carr & Wright for Sears resembled industrial buildings in form—typically featuring a main block with symmetrical bays and a corner tower—but were enlivened with Art Deco or Art Moderne detailing. The firm's design of the Sears store at 63rd Street and Halsted, in Chicago's Englewood community, was touted as the "world's first windowless department store." The $1.5 million steel and concrete building, faced in Indiana limestone with vertical banding and black granite trim, was one of the first in the country to be artificially lighted throughout and fully air conditioned. Subsequent department stores for Sears were designed by the firm in the same "windowless" mode introduced in the Englewood store.[49]

George C. Nimmons retired in 1944. The firm Carr & Wright was established as the successor to Nimmons, Carr & Wright in 1947, the year that Nimmons died, and lasted until 1952. The firm's name change and new ownership structure was announced in the *Chicago Tribune*, which stated that, "Carr & Wright has about 20 million dollars' worth of industrial and commercial construction on the boards and 16 major building projects under construction. Since 1905 the firm has designed all Sears, Roebuck & Co.'s mail order buildings and many Sears retail stores. Their operations for Sears cover 65 cities in 28 states."[50]

Over the course of its five years in operation, Carr & Wright designed several notable buildings, including a ten-story headquarters for the Allstate Insurance Company on Chicago's West Side, on the southeast corner of Spaulding Avenue and Arthington Street (1948). The firm presumably received this commission through its long relationship with Sears, as Allstate was a subsidiary of the department store giant. The modernistic building featured horizontal spandrel bands that alternated with horizontal bands of windows. In 1951, Carr and Wright designed a sprawling one-story regional office building

---

48 "Sears, Roebuck & Co. Retail Store Will Open Tomorrow," *The Miami Herald* (November 13, 1929); "New Half-Million Dollar Sears, Roebuck Store Opens Tomorrow," *Spokane Chronicle* (February 26, 1930); "Five Million Dollar Chain Now Under Way," *Chicago Tribune* (November 7, 1937); "A Mail Order Monument," *Chicago Tribune* (January 17, 1932).

49 "New Sears Unit to be Entirely Air Conditioned," *Chicago Tribune* (May 20, 1934); "Five Million Dollar Chain Now Under Way," *Chicago Tribune* (November 7, 1937).

50 "Old Architect Firm Revised to Carr & Wright," *Chicago Tribune* (February 2, 1947).

for Allstate, facing the Edens Expressway in Skokie, which was fully air conditioned and illuminated with fluorescent lighting.[51]

Carr & Wright continued to design department stores for Sears, including one on the north side of Benton Street in Joliet, between Chicago and Scott streets (1947). In 1950, the firm completed plans for a $3 million Sears store at the northeast corner of Harlem and North avenues in Chicago, to cover an entire city block. Carr & Wright's 1948 design of the PCA's research facility in Skokie was awarded a merit award in 1951 from the Chicago Chapter of the American Institute of Architects as an "outstanding" example of an industrial building.[52]

Clark Wright died in 1948. George W. Carr retired in 1949 from active participation in Carr & Wright, after working for 50 years as an architect. He relocated to Claremont, California, from his home in Highland Park, Illinois, in 1954. Carr died in 1958 at the age of 79.[53]

5. **Dunlap & Esgar, Architect of the Structures Laboratory**

The Structures Laboratory was designed in 1958 by Dunlap & Esgar, a full-service architectural and engineering firm that specialized in large-scale commercial projects. The partnership of **Leonard E. Dunlap** (1893-1974) and **R. Rea Esgar** (1905-1966) was established in 1952 as the successor of Carr & Wright and retained the firm's offices in the 333 North Michigan Avenue Building.[54]

Leonard E. Dunlap was born on April 15, 1893, in Savoy, Illinois. He worked in the Building Department of the Illinois Central Railroad immediately after graduating from the University of Illinois in 1917. Dunlap, a licensed engineer, subsequently worked for George C. Nimmons, Architects (1919-20); as a District Engineer for Kalman Steel Company of Chicago (1920-27); Nimmons, Carr & Wright (1927-49), and for Carr & Wright, Inc. (1949-52), where he served as Vice President and then President, prior to his partnership with Esgar.[55]

---

51 "New Headquarters for Allstate," *Chicago Tribune* (March 28, 1948); "Allstate Plans Million Dollar Skokie Offices," *Chicago Tribune* (August 18, 1951).

52 "Work has started on new Sears Store in Joliet," *Chicago Tribune* (August 17, 1947); "Sears to build North Av. And Harlem Store," *Chicago Tribune* (September 3, 1950); "Realty Notes," *Chicago Tribune* (June 16, 1951).

53 Withey, 672; "George W. Carr, 79, Architect 50 Years, Dies," *Chicago Tribune* (March 26, 1958).

54 "Real Estate Notes," *Chicago Tribune* (October 11, 1952); "R. Rea Esgar Now Vice President of New Chicago Firm," *The Bozeman Courier* (Boseman, Montana) (October 24, 1952).

55 *American Architects Directory, Second Edition* (New York: R.R. Bowker, 1962) 183.

R. Rea Esgar, AIA, was born in 1905 in Bozeman, Montana. He graduated from Montana State College with a bachelor's degree in architecture in 1927 and received a master's degree in architecture from Harvard University in 1930. Prior to his partnership with Dunlap, Escar worked in the architectural offices of Coolidge, Shepley, Bulfinch & Abbott (1929-40), Chas. T. Main, Inc. (1940-44), Coolidge, Shepley, Bulfinch & Abbott (1944-46), and Carr & Wright (1946-49). Esgar was elected president of the Chicago Chapter of the American Institute of Architects in 1961.[56]

Dunlap & Esgar received numerous commissions for large-scale commercial and industrial buildings, in addition to the Structures Laboratory for the PCA. Another Skokie project was a sleek, modernistic, regional office building designed for the Allstate Insurance Company on the west side of the newly created Edens Expressway (I-94) at a cost of $1.5 million (1957). Other projects included 250,000-square-foot refrigerated plant on a 35-acre site near New Albany, Kentucky, for the Pillsbury Company (1957); a million-dollar plant in Palatine, Illinois, for the Micronics division of the Elgin Watch Company (1958); and a five-story, $1.3 million addition to the front of Roseland Community Hospital in Chicago (1959).[57]

Dunlap & Esgar continued to receive commissions from Sears, including a store and auto service building at 1101 E. Washington Avenue in Madison Wisconsin (1953); a new Sears store in St. Joseph, Michigan (1955); and the expansion and remodeling of an existing Sears store designed by Nimmons, Carr & Wright at 1334 E. 79th Street in Chicago in 1924 (1957); and a mail order plant for Sears in Greensboro, North Carolina (1957). The firm's 1967 design for a regional Sears store in Cincinnati was dubbed a "model city" as it introduced shopping center merchandising methods in a "one-stop shopping" complex plan. The two-story building was intended to house 52 merchandising departments and included a restaurant and a complete auto service center.[58]

---

56 *American Architects* Directory (1962) 199; "Robert Esgar, Boseman Native, Dies in Chicago," *Gallatin County Tribune* (Bozeman, Montana), December 15, 1966. "Architects Elect," Chicago *Tribune* (July 1, 1961).

57 "Architect's Drawing of Allstate's Chicago Regional Office," *Chicago Tribune* (July 18, 1957); "Pillsbury Will Start Plant Near New Albany in Spring," *The Courier-Journal* (Louisville, Kentucky) (December 8, 1957); "Elgin Watch Unit to Build New Facility," *Chicago Tribune* (January 15, 1958); "Sketch Shows Planned Hospital Wing," *Chicago Tribune* (December 20, 1959).

58 "Sears Gets Permit for $900,000 Store," *Wisconsin State Journal* (Madison, Wisconsin) (November 19, 1953); "Bid Deadline is Extended," *St. Joseph News-Press* (St. Joseph, Missouri) (June 27, 1955); "Community Progress See in Construction," *The Daily Calumet* (February 22, 1957); "Sears Roebuck and Co. retail store at 79th and Kenwood," *Chicago Tribune* (January 26, 1967); "Cincinnati 'Model City' For Sears," *The Cincinnati Enquirer* (April 9, 1967).

R. Rea Esgar died on December 12, 1966, at the age of 61. He was posthumously cited for service to the profession by the Chicago Chapter of the AIA the following year. No information was found on commissions by Dunlap and Esgar after 1967 and the firm presumably dissolved in that year. Leonard Dunlap died in 1974 at the age of 81.[59]

**6. <u>Paul K. Kufrin, Sculptor of Structures Laboratory's Relief Panels</u>**

Paul K. Kufrin (1888-1973), the artist who created the massive concrete relief panels in the Structures Laboratory vestibule, was born in Croatia on June 22, 1887, and he became interested in sculpturing as a youth. After four years of study at the Royal National School of Fine Arts in Vajreb, he came to the U.S. in 1909 and found employment with a Chicago firm specializing in the manufacture of bronze panels. Kufrin opened his own art school at Division and LaSalle streets in 1910 and operated it for four years, after which time he made sculpturing his full-time occupation.[60]

Kufrin was busy with commissions throughout his career. His strongly molded bust of famed attorney Clarence Darrow won a gold medal in 1934 at Chicago's Century of Progress World's Fair. Kufin's works in Chicago included bronze doors for the Federal Reserve Bank Building on LaSalle Street, the brooding eagles of the Uptown Post Office, and six sculptured panels in the Field Museum's Assyrian Room. He also made superbly wrought silver relief covers for the Holy Gospels used in St. Peter and Paul Croatian Byzantine Catholic Church on South Central Park Avenue in Chicago.[61]

Works from various periods of Kufrin's career were displayed at the Palette and Chisel Academy (1012 N. Dearborn Street) and at the Chicago Public Library (now Chicago Cultural Center) in 1959 and 1960, respectively. They included Kufrin's busts of Cardinal George Mundelein, Clarence Darrow, Anton Cermak, Ivan Ev Saric, late archbishop of Sarajevo, and Dr. Francis Preveden, a linguist and historian. Other works by Kufin on display included a larger-than-life plaster panel of St. Agnes. One reviewer of Kufrin's works exhibited at the Palette and Chisel Academy noted:

> The Croatian sculptor is currently at work on the façade of the Porland Cement Association Research Centre at Skokie, where he is creating gigantic panels in bass relief depicting Man in the center panel directing all facets of cement production. The panels will also show the varied types of implements and machinery that man has

---

59 "Eight Chicagoans Are Honored by Architects," *Chicago Tribune* (June 6, 1967); "R. Rea Esgar," *Chicago Tribune* (December 13, 1966); "Dunlap," *Chicago Tribune* (October 12, 1974).

60 "Molds Skill, Patience Into Life as Sculptor," *Chicago Tribune* (August 7, 1960).

61 "Rites tomorrow for sculptor Paul Kufrin," *Chicago Tribune* (November 9, 1973).

been using from the beginning to mix cement. Incidentally, the Skokie Research Center is a place where students from all parts of the world come to study the latest methods in cement manufacture.[62]

An article about Kufrin's work as a sculptor was published in the August 6, 1960, issue of the *Chicago Tribune*, which stated, in part:

Kufrin is no stranger to the art world, having exhibited his works here and abroad since 1906. His extensive collection has won awards from several artist groups, including the Bohemian Arts Club, the Pallet-Chisel Academy, and the Chicago Painters and Sculptors Society.

Kufrin performs most of his work in his home studio, except when sculpturing oversized panels which require a higher ceiling or wider table space. For each figure he often spends months studying his subject, more months in building up a clay model, then settles at the scaffold to create his impression of the personality.

Although Kufrin works mostly from photographs, he prefers meeting his subjects to study their facial expressions and predominant characteristics. His frequent encounters with [Clarence] Darrow and [Anton] Cermak resulted in portrait studies which outline details of each man's personality. He now is working on a bust of Gov. Nelson Rockefeller, expecting to complete it by the end of the summer.

Sculpturing figures is Kufrin's favorite ground, but he tackles his panels with equal zest. His most prized work, erected outside the Portland Cement association, Skokie, is one which depicts machinery mixed cement.[63]

Paul Kufrin and his wife, Mae (1897-1973), had two sons: Paul Jr. (b. 1923) and George (b. 1927). The family lived at various addresses in Chicago's North and South Lawndale (now Little Village) community areas, which had many residents of Bohemian descent in the early twentieth century.[64] Kufrin maintained a studio in his house at 2606 S. Millard Avenue in North Lawndale, where he lived with Mae from 1942 until his death on November 8, 1973, at the age of 85. He is buried at the Bohemian National Cemetery in Chicago.[65]

**7. <u>Perkins and Will, Architect of the Administration Building</u>**

The Administration Building was designed by Perkins and Will, a Chicago architectural firm that grew from a two-man operation to one of the largest firms in the country, with commissions that included schools, hospitals, and office buildings. The firm was established in 1935 when **Lawrence B.**

62 "Kufrin's Works on Exhibit," *Danica* (Chicago) (April 22, 1959).
63 "Molds Skill, Patience Into Life as Sculptor," *Chicago Tribune* (August 7, 1960).
64 U.S. Census of Population and Housing, varying years.
65 "Rites tomorrow for sculptor Paul Kufrin," *Chicago Tribune* (November 9, 1973).

**Perkins** (1912-1997) and **Philip Will, Jr.** (1906-1985) formed a partnership specializing in small commissions, especially North Shore residences inspired by the Prairie School.

Lawrence Perkins was the son of noted Chicago architect Dwight Perkins, who played a significant role in Chicago's progressive reform movement, designing settlement houses and park field houses, and was deeply involved in the early twentieth century movement to create neighborhood parks throughout the city. The elder Perkins served as Chief Architect for the Chicago Board of Education from 1905 to 1910, during which time he "set the standard for scholastic building in Chicago."[66] His mother, Lucy Fitch Perkins, was a noted children's book author. His cousin, Marion Mahony Griffin, was the nation's first licensed female architect and worked with Frank Lloyd Wright on several houses.[67]

Born in Evanston, Lawrence Perkins graduated from new Trier High School in the mid-1920s and from Cornell University in 1930. There, he roomed with Philip Will, a native of Rochester, New York, who later became a longtime resident of Evanston.[68] When the two young architects started their firm in 1935, they were soon joined by Todd Wheeler. The firm's name was Perkins, Wheeler & Will until 1946. The small practice received national recognition in 1940 for the design of the progressive Crow Island School in Winnetka, Illinois, in collaboration with the renowned Finnish architects Eliel Saarinen and his son Eero. Crow Island pioneered the concept of zoned areas for different age groups and led the architects to specialize in school design in postwar baby-boom America. Another influential building was the Heathcote Elementary School (1954) in Scarsdale, New York.[69]

In 1950 the firm changed its name to The Perkins and Will partnership and had a staff of fifty people with offices in the penthouse of the building at 309 W. Jackson Boulevard. The fast-growing firm became a leader in the school design field during the 1950s; by 1960, it had finished 372 school projects in 24 states. Their first school was completed in 1953 for Barrington, Illinois.[70]

Perkins and Will combined the design features of European Modernism with American educational philosophy in their school designs of the 1950s, which ranged from one- to three-stories in height and typically featured flat roofs,

---

66 Carl W. Condit, *The Chicago School of Architecture* (Chicago: University of Chicago Press, 1964) 200.
67 Blair Kamin, "Lawrence B. Perkins, Architectural Pioneer," *Chicago Tribune* (December 4, 1997).
68 Kenan Heise, "Philip Will Jr., 79, top city architect," *Chicago Tribune* (October 24, 1985).
69 For a good overview of the history of Perkins and Will, see: *Perkins and Will: The First Fifty Years* (Chicago: Perkins and Will, 1985).
70 *Perkins and Will: The First Fifty Years* (Chicago: Perkins and Will, 1985).

windows arranged in continuous horizontal ribbons of glass, rectilinearity, and smooth wall surfaces. Such buildings lacked ornamentation and sometimes featured glass curtain walls, such as a three-story classroom building at Keokuk High School in Keokuck, Iowa (1953). Other Modernist school designs of this era by Perkins and Will include: Norman High School in Norman, Oklahoma (1953); Pocantico Hills Central School in Pocantico, New York (1954); Southern Illinois Student Residence Hall in Carbondale, Illinois (1957); and Butler Senior High School in Butler, Pennsylvania (1957).[71]

By the end of the 1960s, constructing health facilities such as Stamford Hospital in Connecticut (1968) and commercial office buildings, such as the United States Gypsum Building at 101 S. Wacker Drive, Chicago (1963; razed), were as large a part of the practice as the educational commissions. One of Perkins and Will's best-known designs, the First National Bank Building of Chicago (1969), dates from that period.

Starting in the 1960s and 1970s, the firm established an international practice while continuing to design hospitals, universities, and office buildings across the United States, including the 80-story, marble-clad, Standard Oil Building at 200 E. Randolph Street (1973) and the glass-and-steel 2 N. LaSalle Street Building (1979), both in Chicago. About this time the name of the firm again became Perkins and Will. The firm collaborated with Kohn Pederson Fox, a New York firm, on Chicago skyscrapers at 333 Wacker Drive (1983), 900 North Michigan Ave (1989), and 225 West Wacker Drive (1989). Perkins and Will remains a large firm in Chicago, with offices in New York and Washington D.C. and clients worldwide.[72]

## PART II. ARCHITECTURAL INFORMATION

### A. Site:

1. General setting and orientation:
The Portland Cement Association campus is located at 5400-5420 Old Orchard Road in Skokie, Illinois. It is situated on a parcel that is bounded by Woods Drive on the east, Circuit Court of Cook County property on the west, a residential subdivision on the north, and Old Orchard Road and the Harms Woods Forest Preserve on the south. The site features four buildings that are part of this HIBS recordation: the Research Building (1950) at the southeast corner; the Material Storage Building (1950) near its northeast corner; the

[71] Photographs of these schools are in: *Perkins and Will: The First Fifty Years* (Chicago: Perkins and Will, 1985).

[72] Pauline Saliga (Ed.). *The Sky's the Limit: A Century of Chicago Skyscrapers* (New York: Rizzoli: 1990) 298.

Structures Laboratory (1958) on its west side; and the Administration Building (1968) at its southwest corner. Additionally, the site contains the Soils Laboratory (1952) at its northeast corner. This flat-roof, one-room building measures 25 by 180 feet, has a rectilinear footprint, and is sheathed in precast concrete panels.

The PCA campus is accessed from a driveway off Old Orchard Road and is bisected by a north-south drive that provides access to three parking lots: one fronting the Research Building, one in-between the Structures Laboratory and the Administration Building, and one at the northwest corner of the property. The Research Building and the Administration Buildings are surrounded by grassy lawns and shrubbery. The Research Building's west courtyard features grass, a concrete walkway, and a concrete bench. A series of concrete panels that were formerly used for testing are placed upright alongside the Research Building's west facade. The east side of the Administration Building has a raised terrace with concrete pavement and concrete benches.

2. Buildings:
See individual HIBS outline reports for architectural information on the Research Building, Material Storage Building, Structures Laboratory, and Administration Building.

## PART III. SOURCES OF INFORMATION

A. Architectural Drawings:
See individual HIBS outline reports for a listing of historic architectural drawings reviewed for the Research Building, Material Storage Building, Structures Laboratory, and Administration Building.

B. Bibliography:

1. Primary and unpublished sources:

"Allstate Plans Million Dollar Skokie Offices," *Chicago Tribune*, August 18, 1951.
"Architect's Drawing of Allstate's Chicago Regional Office," *Chicago Tribune*, July 18, 1957.
"Architects Elect," Chicago *Tribune*, July 1, 1961.
"Bid Deadline is Extended," *St. Joseph News-Press* (St. Joseph, Missouri), June 27, 1955.
"Bubbles Halt Thaw Damage to Pavement," *Chicago Tribune*, March 9, 1959.
Cement.org. "History of the Cement and Concrete Campus," 2016.

In: https://www.cement.org/docs/default-source/about-pca-pdfs/88770_pca_history.pdf?sfvrsn=2.

Cement.org/history/timeline. "History of the PCA – Timeline," 2016. In: https://www.tiki-toki.com/timeline/entry/567372/Portland-Cement-Association-Centennial-1916-2016/.

"Cement Lab to Be Built in North Skokie," *Chicago Tribune,* April 3, 1948.

"Cement Lab Dedication Is Set for Today," *Chicago Tribune*, June 8, 1950.

"Cincinnati 'Model City' For Sears," *The Cincinnati Enquirer*, April 9, 1967.

Collens, Geoffrey A., "Precast Concrete Wall Panels: Architectural Commentary," in: *Symposium on Precast Concrete Wall Panels*. Detroit: American Concrete Institute, Second Printing, 1966.

"Community Progress See in Construction," *The Daily Calumet,* February 22, 1957.

"Concrete Best Atom Defense, Scientist Says," *Chicago Tribune*, June 9, 1950.

"Concrete Fact is Featured at Field Day," *Chicago Tribune*, April 20, 1958.

CTLGroup.com. "Barco Investment Group Acquires CTLGroup," October 24, 2019. https://www.ctlgroup.com/press_releases/barco-investment-group-acquires-ctlgroup/.

"Descendant of British Inventor To Place First Concrete For New Cement Laboratory," *The Superior Express* (Superior, Nebraska), July 15, 1948.

"Dunlap," *Chicago Tribune,* October 12, 1974.

"Eight Chicagoans Are Honored by Architects," *Chicago Tribune,* June 6, 1967.

"Elgin Watch Unit to Build New Facility," *Chicago Tribune,* January 15, 1958.

"The 'Farm' That Grows Concrete Near Chicago," *Central Manufacturing District Magazine,* November 1950: 25-27.

"First Concrete for Big Cement Lab is Poured," *Chicago Tribune,* July 1, 1948.

"Five Million Dollar Chain Now Under Way," *Chicago Tribune*, November 7, 1937.

"G.S. Bartlett, 87, Concrete Pioneer, Dies," *Chicago Tribune*, October 22, 1945.

"George W. Carr, 79, Architect 50 Years, Dies," *Chicago Tribune,* March 26, 1958.

Hedrich-Blessing Photograph Collection, Job File HB-32054, Chicago History Museum.

Heise, Kenan, "Philip Will Jr., 79, top city architect," *Chicago Tribune*, October 24, 1985.

Hunt, T.W., "Precast Concrete Wall Panels: Historical Review," in:

*Symposium on Precast Concrete Wall Panels*. Detroit: American Concrete Institute, Second Printing, 1966.

Kamin, Blair, "Lawrence B. Perkins, Architectural Pioneer," *Chicago Tribune*, December 4, 1997.

"Kufrin's Works on Exhibit," *Danica* (Chicago), April 22, 1959.

Lesley, Robert. *History of the Portland Cement Industry in the U.S*. Chicago: International Trade Press, Inc., 1924.

"A Mail Order Monument," *Chicago Tribune*, January 17, 1932.

"Molds Skill, Patience Into Life as Sculptor," *Chicago Tribune*, August 7, 1960.

"Officials Study Concrete Mixer," *Chicago Tribune*, April 6, 1958.

"New Headquarters for Allstate," *Chicago Tribune*, March 28, 1948.

"New Half-Million Dollar Sears, Roebuck Store Opens Tomorrow," *Spokane Chronicle*, February 26, 1930.

"New Sears Unit to be Entirely Air Conditioned," *Chicago Tribune*, May 20, 1934.

"Nimmons & Co. Changes Name and Will Move," *Chicago Tribune*, February 12, 1928.

"Old Architect Firm Revised to Carr & Wright," *Chicago Tribune*, February 2, 1947.

"Pillsbury Will Start Plant Near New Albany In Spring," *The Courier-Journal* (Louisville, Kentucky), December 8, 1957.

"Plan 1.5-Million Office HQ," *Chicago Tribune*, February 5, 1967.

"Plant in Skokie Works to Make Better Cement," *Chicago Tribune*, July 6, 1950.

Portland Cement Association. Thirty Three West Grand. Chicago: Portland Cement Association, 1926.

"Portland Assn. Moves to Home in Grand Avenue," *Chicago Tribune*, May 16, 1926.

"R. Rea Esgar Now Vice President of New Chicago Firm," *The Bozeman Courier* (Boseman, Montana), October 24, 1952.

"R. Rea Esgar," *Chicago Tribune*, December 13, 1966.

"Realty Notes," *Chicago Tribune*, June 16, 1951.

"Real Estate Notes," *Chicago Tribune*, October 11, 1952.

"Rites tomorrow for sculptor Paul Kufrin," *Chicago Tribune*, November 9, 1973.

"Robert Esgar, Boseman Native, Dies in Chicago," *Gallatin County Tribune* (Bozeman, Montana), December 15, 1966.

"Sears, Roebuck & Co. Retail Store Will Open Tomorrow," *The Miami Herald*, November 13, 1929.

"Sears Gets Permit for $900,000 Store," *Wisconsin State Journal* (Madison, Wisconsin), November 19, 1953.

"Sears Roebuck and Co. retail store at 79th and Kenwood," *Chicago Tribune*,

January 26, 1967.
"Sears to build North Av. And Harlem Store," *Chicago Tribune*, September 3, 1950.
"Sears, Roebuck and Co. District," Final Landmark Recommendation adopted by the Commission on Chicago Landmarks, December 4, 2014.
"Sketch Shows Planned Hospital Wing," *Chicago Tribune*, December 20, 1959.
"Work has started on new Sears Store in Joliet," *Chicago Tribune*, August 17, 1947.

2. Secondary and published sources:

*American Architects Directory, Second Edition*. New York: R.R. Bowker, 1956.
*American Architects Directory, Second Edition*. New York: R.R. Bowker, 1962.
Bruegmann, Robert, "The Recentering of the Metropolitan Area," in: *Chicago Architecture and Design, 1923-1993*. John Zukowsky, Ed. Munich: Prestel-Verlag, 1993.
Carl W. Condit, *The Chicago School of Architecture* (Chicago: University of Chicago Press, 1964) 200.
Hunt, T.W., "Precast Concrete Wall Panels: Historical Review," in: *Symposium on Precast Concrete Wall Panels*. Detroit: American Concrete Institute, Second Printing, 1966.
Keating, Ann Durkin. *Chicago Neighborhoods and Suburbs: A Historical Guide*. Chicago: The University of Chicago Press, 2008.
Mozingo, Louise A. *Pastoral Capitalism: A History of Suburban Corporate Landscapes*. Cambridge, Mass.: The MIT Press, 2011.
*Perkins and Will: The First Fifty Years*. Chicago: Perkins and Will, 1985.
Randall, Frank A. *History of the Development of Building Construction in Chicago, Second Edition*. Urbana: University of Illinois Press, 1999.
Pauline Saliga (Ed.). *The Sky's the Limit: A Century of Chicago Skyscrapers*. New York: Rizzoli: 1990.
Skokiecentennialbook.com. Whittingham, Richard. Skokie: Centennial History. Wilmette, Illinois: Raspail Productions, 1988.
Withey, Henry F. and Elsie Rathburn Withey. *Biographical Dictionary of American Architects (Deceased)*. Los Angeles: Hennessey & Ingalls, Inc., 1970.

C. Supplemental Material: Scans of HIBS photographs taken as part of this HIBS recordation are attached to this Cover Report, as are a site plan of the PCA campus and images published in newspaper articles related to the property or its architects/sculptor. Representative color digital photographs of each building accompany the individual HIBS outline reports.

## PART IV. METHODOLOGY OF RESEARCH

A. Research Strategy:
The research strategy was to review a variety of primary and secondary sources, including books, newspaper and journal articles, and other unpublished resources, as well as historic photographs, floor plans and site plans, to develop a thorough history of the PCA campus, and evaluate its historic and architectural significance within the context of post-World War II suburban office developments. A site visit to the campus was planned for the purpose of large-format black and white HIBS photography as well as color digital photography of the buildings and the overall site.

B. Actual Research Process:
The property owner provided Dr. Guarino with original architectural drawings of the Research Building, Material Storage Building, Structures Laboratory, and the Administration Building, which were very helpful in understanding each building's design. The CTLGroup, nor the PCA, have an archive pertaining to the design and development of its campus that is available to outside researchers.

Research was conducted at the Chicago History Museum's (CHM) Research Center, which has black and white prints of the Administration Building taken by Hedrich Blessing. They can be found under the following call numbers: HB-32054 (11 photographic prints of the Administration Building, A-G). Other pertinent materials at CHM include the following books: *History of the Portland Cement Industry in the U.S.* (1924), and *Thirty Three West Grand* (1926).

The Newspapers.com database was extensively searched and provided an abundance of contemporary articles related to the planning, design, and construction of the PCA campus and its architects; the history of the Association; and on post-World War II suburban office development in general, and in the Chicago metropolitan region. The University of Illinois at Chicago's Daley Library was useful for the review of secondary sources, including Louise A. Mozingo's book, *Pastoral Capitalism: A History of Suburban Corporate Landscapes* (The MIT Press, 2011), which provides a comprehensive overview on the emergence and design of suburban office developments.

C. Archives and Repositories Used: Chicago History Museum's Research Center; University of Illinois at Chicago's Daley Library, Chicago; Skokie Public Library.

D. Project Team:

1. Supervision and Primary Preparer: All aspects of this project were supervised by Jean L. Guarino, Ph.D., architectural historian, 844 Home Ave., Oak Park, Illinois. Dr. Guarino researched and wrote the HIBS Cover Report, Outline Reports, and took color digital photographs of the site and its buildings.

2. HIBS Photographer: Black and white HIBS photography was taken by Leslie Schwartz, Leslie Schwartz Photography, 2147 N. Claremont Avenue, Chicago.

## PART V. PROJECT INFORMATION

This HIBS documentation project was undertaken to mitigate the adverse effect of TD 5400 Old Orchard, LLC's Development Project on cultural resources within the project area. The terms of the mitigation were agreed upon and executed to ensure compliance with the Illinois State Agency Historic Resources Preservation Act (20 ILCS 3420).

**HIBS PHOTOGRAPHIC IDENTIFICATION SHEET**

**Photographer: Leslie Schwartz, Leslie Schwartz Photography**
**2147 N. Claremont Avenue**
**Chicago, IL**
**773.359.8172**
**Photos taken June 19 and 20, 2023**

HIBS CK-2023-2.1: Administration Building, view northwest.

HIBS CK-2023-2.2: Administration Building detail, view northwest.

HIBS CK-2023-2.3: Administration Building, view southeast.

HIBS CK-2023-2.4: Administration Building detail, view southeast.

HIBS CK-2023-2.5: Administration Building, view southeast.

HIBS CK-2023-2.6: Administration Building, view northeast.

HIBS CK-2023-2.7: Administration Building, lobby fireplace.

HIBS CK-2023-2.8: Research Building main entrance, view north.

HIBS CK-2023-2.9: Research Building, view northwest.

HIBS CK-2023-2.10: Research Building, view northeast.

HIBS CK-2023-2.11: Research Building detail, view northwest.

HIBS CK-2023-2.12: Research Building, view southeast.

HIBS CK-2023-2.13: Research Building, view south.

HIBS CK-2023-2.14: Research Building, view southwest.

HIBS CK-2023-2.15: Research Building lobby.

HIBS CK-2023-2.16: Research Building, concrete mix laboratory.

HIBS CK-2023-2.17: Research Building, stairway in concrete mix laboratory.

HIBS CK-2023-2.18: Research Building, million-pound testing machine.

HIBS CK-2023-2.19: Research Building, equipment in million-pound room.

HIBS CK-2023-2.20: Material Storage Building, view northeast.

HIBS CK-2023-2.21: Material Storage Building, view southeast.

HIBS CK-2023-2.22: Material Storage Building, high bay, view south.

HIBS CK-2023-2.23: Structures Laboratory, view southwest.

HIBS CK-2023-2.24: Structures Laboratory, main entrance vestibule, view southwest.

HIBS CK-2023-2.25: Structures Laboratory, view northeast.

HIBS CK-2023-2.26: Structures Laboratory vestibule, concrete sculptural panel, view north.

HIBS CK-2023-2.27: Structures Laboratory vestibule, concrete sculptural panel, view south.

HIBS CK-2023-2.28: Structures Laboratory, view northeast toward balconies and main staircase.

HIBS CK-2023-2.29: Structures Laboratory, detail of main staircase.

HIBS CK-2023-2.30: Soils Research Laboratory.

HIBS CK-2023-2.1

HIBS CK-2023-2.2

HIBS CK-2023-2.3

HIBS CK-2023-2.4

HIBS CK-2023-2.5

HIBS CK-2023-2.6

HIBS CK-2023-2.7

HIBS CK-2023-2.8

HIBS CK-2023-2.9

HIBS CK-2023-2.10

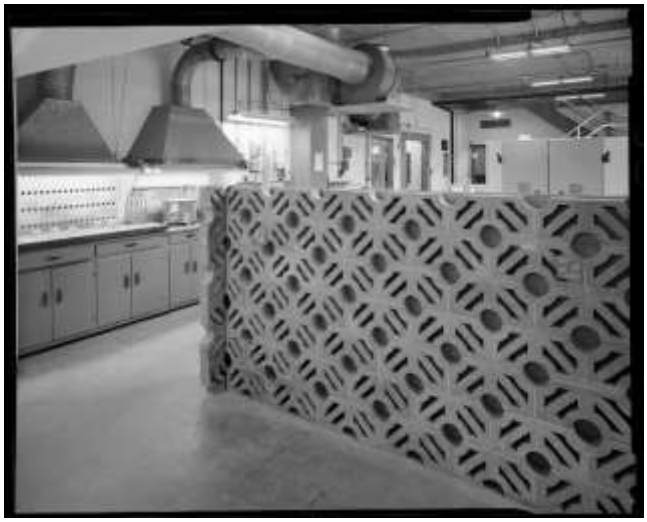
HIBS CK-2023-2.11

HIBS CK-2023-2.12

HIBS CK-2023-2.13

HIBS CK-2023-2.14

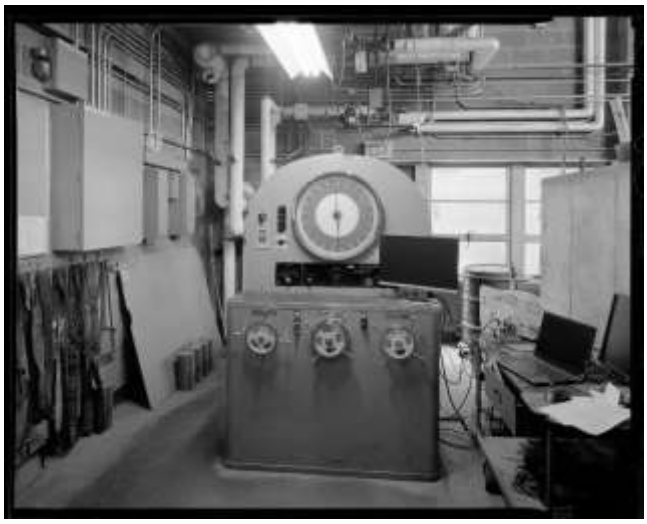
HIBS CK-2023-2.15



HIBS CK-2023-2.16

HIBS CK-2023-2.17

HIBS CK-2023-2.18



HIBS CK-2023-2.19

HIBS CK-2023-2.20

HIBS CK-2023-2.21

HIBS CK-2023-2.22

HIBS CK-2023-2.23

HIBS CK-2023-2.24

HIBS CK-2023-2.25

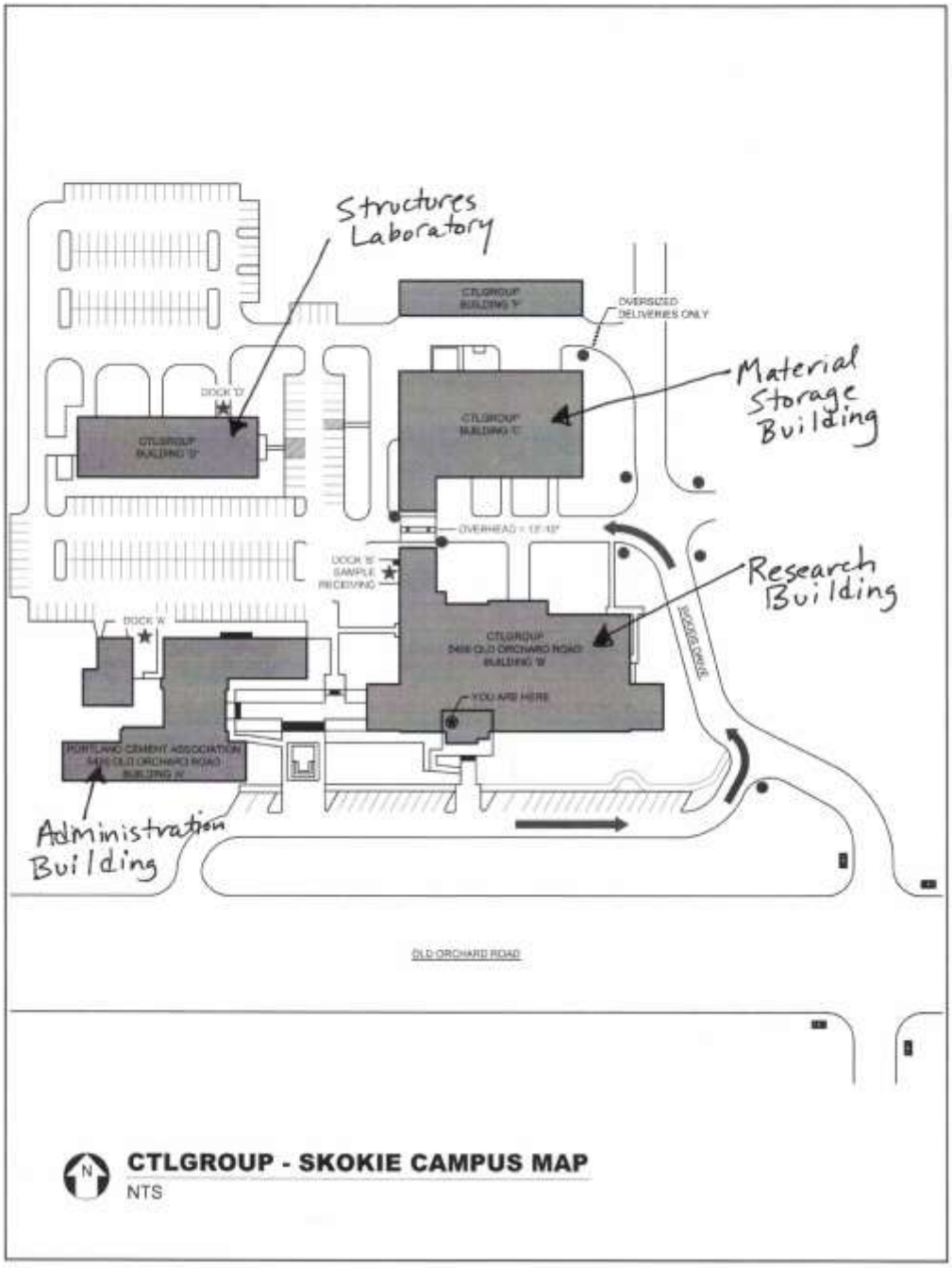
HIBS CK-2023-2.26

HIBS CK-2023-2.27

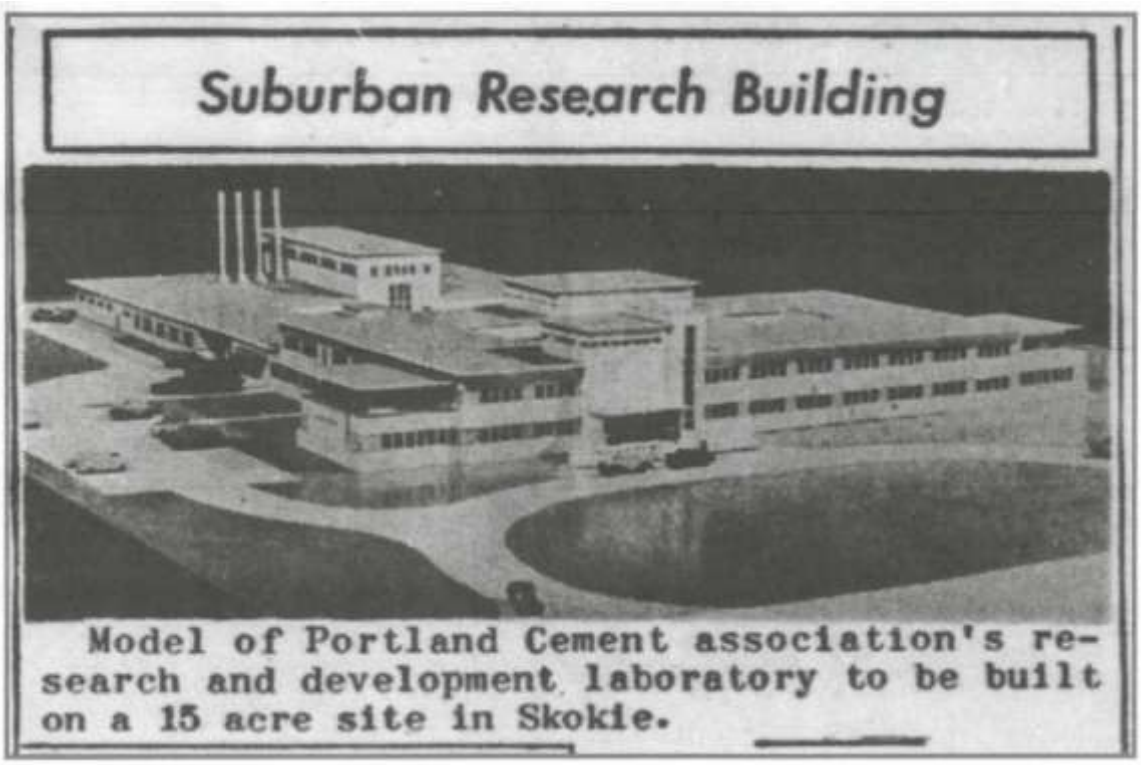
HIBS CK-2023-2.28

HIBS CK-2023-2.29

HIBS CK-2023-2.30




Site plan of the former Portland Cement Association campus, provided by TD 5400 Old Orchard, LLC, 2023.

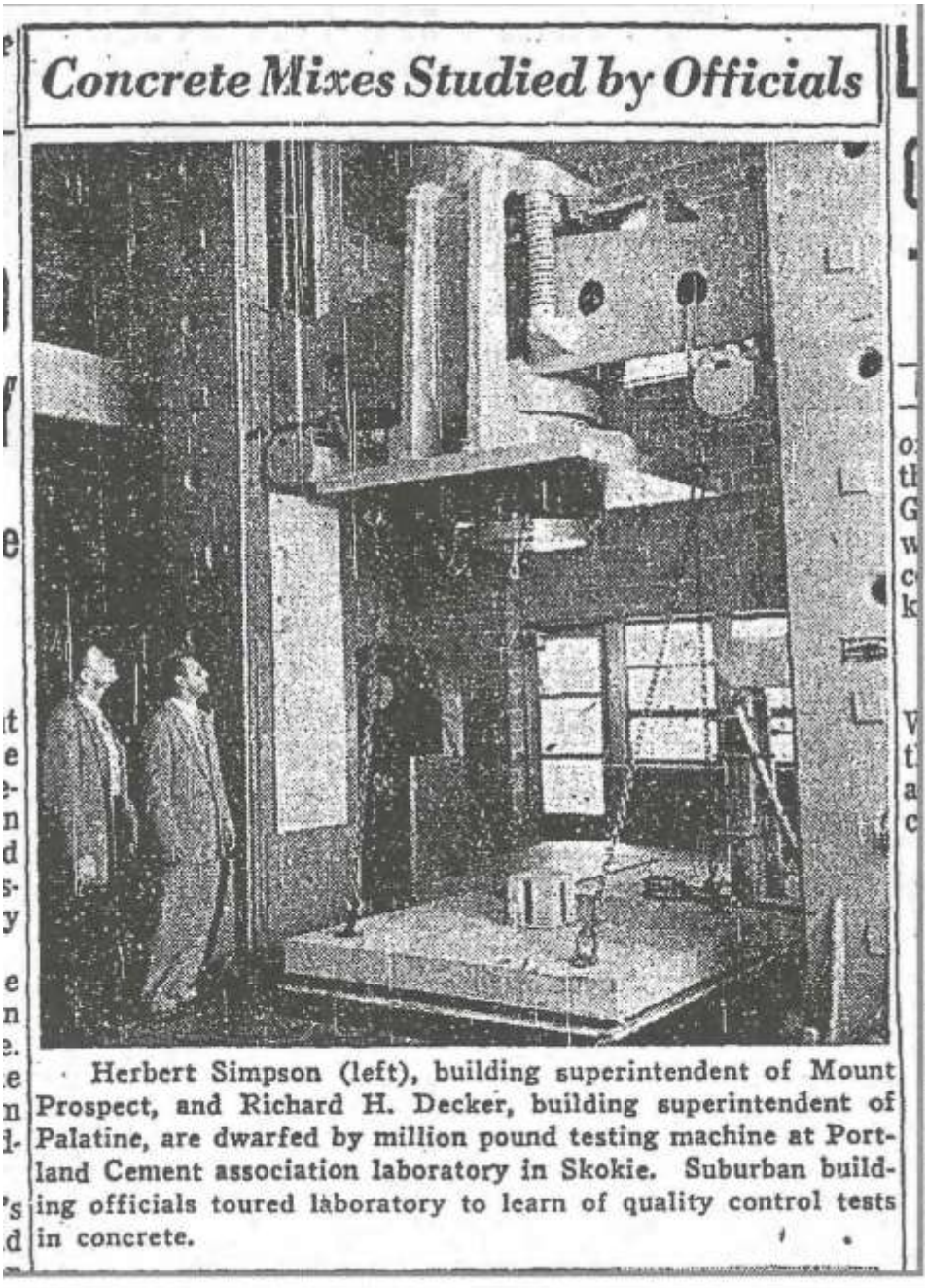



Model of the Research Building and the Material Storage Building proposed for the PCA's property in Skokie, 1948. *Chicago Tribune*, April 3, 1948.


The Portland Cement association's new 3 million dollar research and development laboratory in Skokie, dedicated a month ago, is one of the suburb's most attractive buildings. The structure contains the world's largest and most completely equipped laboratories devoted to research in portland cement.

(Story on page 3)

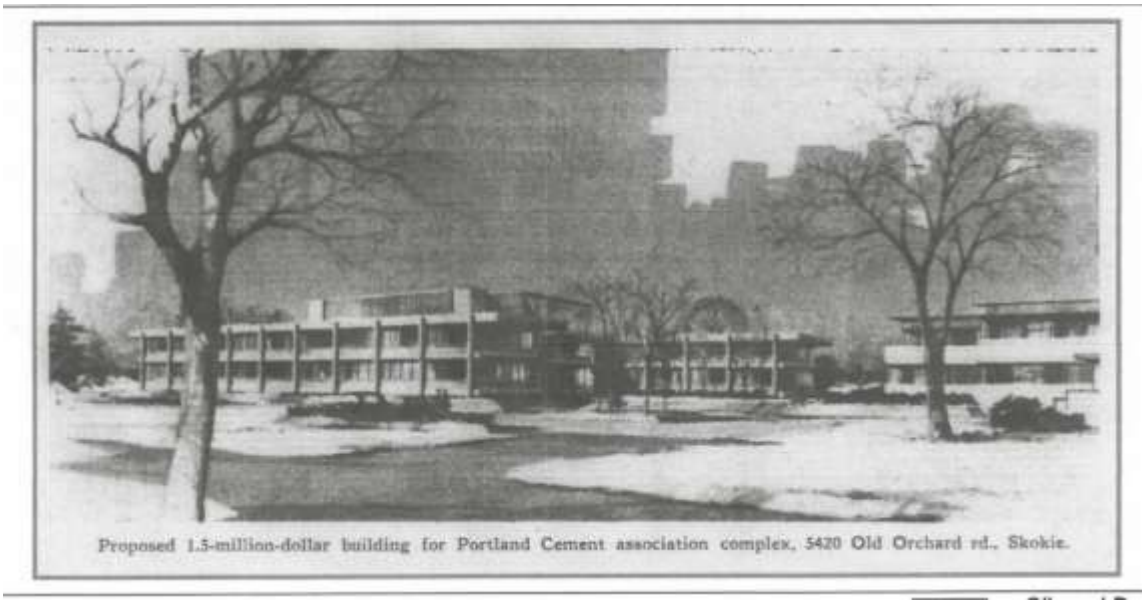
View of the Research Building upon completion, 1950. *Chicago Tribune*, July 6, 1950.



## Concrete Mixes Studied by Officials

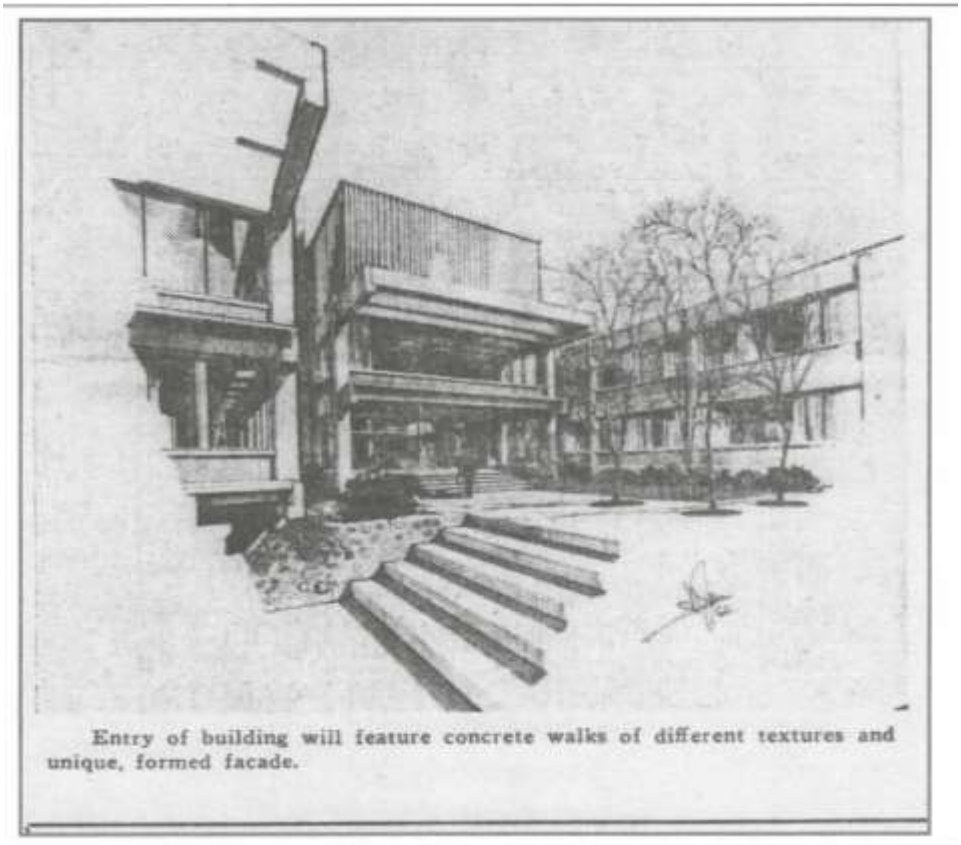
Herbert Simpson (left), building superintendent of Mount Prospect, and Richard H. Decker, building superintendent of Palatine, are dwarfed by million pound testing machine at Portland Cement association laboratory in Skokie. Suburban building officials toured laboratory to learn of quality control tests in concrete.

Contemporary photograph of the million-pound testing machine in the Research Building, 1958.
*Chicago Tribune*, April 20, 1958.



Proposed 1.5-million-dollar building for Portland Cement association complex, 5420 Old Orchard rd., Skokie.

Drawing by Perkins & Will of the Administration Building (top and bottom), 1967.
*Chicago Tribune*, February 5, 1967.



Entry of building will feature concrete walks of different textures and unique, formed facade.

DIRT, DUST AND DIN KEPT OUT BY SOLID WALLS

As a result of sweeping changes in the design of the Sears, Roebuck & Co.'s Englewood unit, now under construction at the northeast corner of 63d and Halsted, the above building will be the world's first great windowless department store. It also will be the first application of modern functional design to department store architecture, it is claimed. The only natural illumination in the floors devoted to selling will be through four tunnel shafts of glass over the entrances. The fifth floor, used for offices and storage, will have regulation windows throughout.

The building, of steel and concrete, will be faced with Indiana limestone, with black granite trim, including a skyline of that material. All of the five stories, the basement and subbasement, and a roof unit to be used as a balcony, will be completely air conditioned. The new design was created by Nimmons, Carr & Wright, architects, from suggestions by L. E. Jones, national director of display and store arrangement for Sears. The D-W Construction company has the general contract. Completion is set for Nov. 1. E. Chester Danforth made the above perspective.

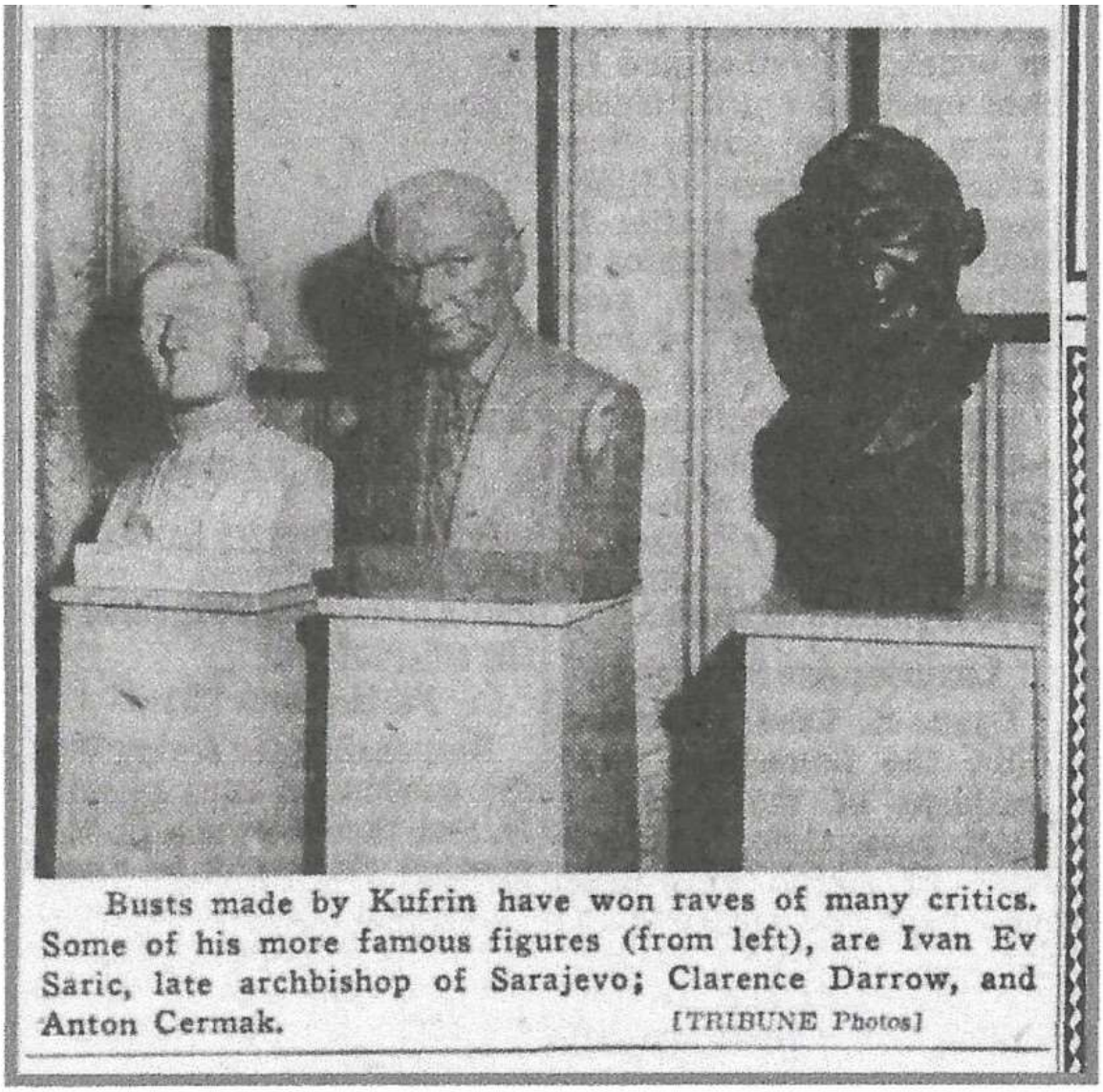
Design for Sears Department Store at 63rd and Halsted in Chicago by Carr & Wright (1934), the architect of the Research Building and the Material Storage Building. This edifice was touted in the popular press as the "world's first windowless department store" and served as a prototype for Carr & Wright's subsequent designs for Sears in the 1930s. *Chicago Tribune*, May 20, 1934.

Library Displays Works of Art

(Story on page 1)

Paul Kufrin, 2606 S. Millard av., sculptures madonna figure in his home studio. Bust to left is of Gov. Nelson Rockefeller. Kufrin is exhibiting his works during August in art department of public library.

Paul Kufrin at work in his studio, 1960. Kufrin sculpted the massive concrete panels in the vestibule of the Structures Laboratory. *Chicago Tribune*, August 7, 1960.



Busts made by Kufrin have won raves of many critics. Some of his more famous figures (from left), are Ivan Ev Saric, late archbishop of Sarajevo; Clarence Darrow, and Anton Cermak. [TRIBUNE Photos]

Examples of Paul Kufrin's sculptural work. *Chicago Tribune*, August 7, 1960.

HISTORIC ILLINOIS BUILDINGS SURVEY

HIBS CK-2023-2

# PORTLAND CEMENT ASSOCIATION CAMPUS: RESEARCH BUILDING

Location: The Research Building is situated at the southeast corner of the former Portland Cement Association Campus, which is located at 5400-5420 Old Orchard Road in Skokie, Illinois. It is on a parcel bounded by Woods Drive on the east, Circuit Court of Cook County property on the west, a residential subdivision on the north, and Old Orchard Road and the Harms Woods Forest Preserve on the south. The property is on Lot 1 of the Portland Cement Association Subdivision and includes part of the Northwest Fractional Quarter of Section 9, Township 41 North, Range 13, East of the Third Principal Meridian, in Niles Township, Cook County.

Present Owner: TD 5400 Old Orchard, LLC

Present Use: Research and office use

Significance: The Research Building was completed in 1950 on the Portland Cement Association's (PCA) newly established campus in Skokie, just west of the Edens Expressway (I-94), which was then under construction. Upon its dedication, the edifice was considered the largest and best-equipped laboratory in the world devoted exclusively to researching the production and properties of cement and concrete and methods for using these materials. The facility contained more than 30 laboratories, which included rooms capable of duplicating conditions of arctic cold, desert dryness, or tropical heat with temperatures ranging from 20 degrees below zero to 130 degrees Fahrenheit. Its specialized equipment featured the only one-million-pound compression testing machine in private ownership.

The two-story, all-concrete Research Building was designed by the firm Carr & Wright in the European version of the International style, featuring a flat roof, smooth wall planes comprised of pre-cast concrete panels, rectilinearity, and horizontal strips of windows alternating with fluted panels. The soffits of its east and west wings, and the canopy above the main entrance are detailed with sculptural relief panels representing the production of concrete. The Research Building was utilized by CTLGroup, Inc., a for-profit subsidiary of the PCA, starting in the late 1980s.

## PART I. HISTORICAL INFORMATION

A. Physical History

1. Dates of construction: 1948-50

2. Architect: Carr & Wright, Chicago

3. Contractor/Builder: Turner Construction Company, Chicago

4. Alterations and Additions:
This building has excellent architectural integrity and is virtually unchanged from its original appearance. A comparison of the original and current floor plans shows that a few spaces on the first floor have been subdivided into smaller rooms. The wall-to-wall carpeting in the offices is non-original and it is likely that the present acoustical tile ceilings are upgrades.

B. Historical Context:
See the Cover Document for the following contextual essays:

1. Overview History of the Portland Cement Association
2. Post-World War II Suburban Office Development
3. Development of the Portland Cement Association Campus in Skokie
4. Carr & Wright, Architect of the Research Building and Material Storage Building
5. Dunlap & Esgar, Architect of the Structures Laboratory
6. Paul K. Kufrin, Sculptor of the Structure Laboratory's Vestibule Panels
7. Perkins and Will, Architect of the Administration Building

## PART II. ARCHITECTURAL INFORMATION

A. General Statement
The two-story, all-concrete Research Building was designed in the European version of the International style, featuring a flat roof, smooth wall planes comprised of pre-cast concrete panels, rectilinearity, and horizontal strips of windows alternating with fluted concrete panels. The soffits of its east and west wings, and the canopy sheltering the main entrance, are detailed with sculptural relief panels representing the production of concrete. The words "Portland Cement Association" in stainless steel letters are on the wall above the main entrance, which faces south toward Old Orchard Road. The south façade features a second-story corridor that is supported by concrete columns and encloses a west

courtyard. The interior contains about 30 laboratories as well as offices, some of which are arranged around an east courtyard.

B. Description of Exterior

1. Foundations
The building is supported by concrete caissons that descend to bedrock.

2. Over-all dimensions
The building's footprint has overall dimensions of approximately 292'-0" (east-west) by 179'-0" (north-south)

3. Walls
The walls are comprised of precast concrete spandrels with horizontal strips of windows alternating with concrete panels detailed with vertical fluting. The wall above the main entrance on the front (south) façade has the words "PORTLAND CEMENT ASSOCIATION" in stainless steel lettering.

4. Canopies
The main entrance bay on the front (south) façade is sheltered by a flat-roof, aluminum-framed concrete canopy, the underside of which features concrete relief panels with motifs related to concrete construction. Entrances on the west and south facades are sheltered by flat-roof, aluminum-framed concrete canopies. The north end of the Research Building's west wing is linked to the Material Storage Building by a flat-roof, concrete canopy, which shelters a concrete drive that extends between the two buildings.

5. Structural system
The building utilizes reinforced concrete construction.

6. Openings:

a. Doorways and doors
The main entrance on the front (south) façade features a pair of sliding glass doors. The south wall of the west courtyard has a pair of glass doors. Entrances elsewhere in the building are generally comprised of metal doors, some of which have a single light, and are arranged in pairs or alone. The north façade has a tall, overhead metal garage door in its central pavilion.

b. Windows
Vertical stacks of hopper windows are used throughout the building. They are arranged in horizontal bands that alternate with fluted, concrete panels.

An exception is the entrance pavilion on the front (south) façade, which has a vertical strip of windows alternating with aluminum spandrels.

7. Roof

   a. Shape, covering
   The building has a flat, concrete slab roof covered with a built-up membrane. The overhanging eaves on its east and west ends are detailed with decorative concrete relief panels with motifs related to concrete construction.

C. Description of Interior:

1. Floor plans
The building has four stairwells: one adjacent to the main lobby and three others in the center, east, and west sides of the building. There are two freight elevators: one each near the northwest and southwest corners of the building. All three floors (basement, first, and second) are arranged around an east courtyard and each has three double-loaded corridors: one east-west corridor and two north-south corridors, one each on opposite ends of the building.

The basement features a variety of mechanical rooms, storage rooms, and laboratory rooms. The first floor has a main lobby, a variety of laboratories, a two-story space that contains the million-pound testing machine, a small kitchen, and a series of small offices along its south wall. The second floor is mainly comprised of offices and has a few small laboratory rooms.

2. Stairways
Typical stairways throughout the building have walls finished with concrete blocks and concrete stairways with metal pipe railings and handrails. The staircase adjacent to the main lobby has stainless steel railings with wood handrails.

3. Elevators
The building has two freight elevators, one each near its northwest and southwest corners, each of which has metal doors.

4. Flooring
The building has exposed concrete flooring which in some spaces is finished with terrazzo (main lobby toilet rooms), asphalt tiles (corridors, kitchen), or wall-to-wall carpeting (offices).

5. Wall and ceiling finish
   Partition walls throughout the building are comprised of cement block. The walls of the main lobby feature cast granite cement blocks. Ceilings feature exposed concrete or are finished with lay-in acoustical tile systems.

6. Openings

   a. Doorways and doors
      Interior doors throughout the building are varied, and consist of either wood, metal, or glass. Laboratories have specialized insulated metal doors.

7. Mechanical equipment

   a. Heating
      The building is climate controlled; it is cooled by air-conditioning equipment and heated by gas boilers.

   b. Lighting
      Fluorescent lighting within lay-in acoustical tile systems is used throughout the building.

   c. Plumbing
      Women's and men's restrooms throughout the building have standard sinks as well as toilets with concrete partitions.

D. Site:

1. General setting and orientation
   See Cover Document.

## PART III. SOURCES OF INFORMATION

A. Architectural Drawings: TD 5400 Old Orchard, LLC, the property owner, provided original architectural drawings by Carr & Wright for review in the development of this HIBS recordation, some of which were scanned and are attached to the end of this report.

B. Bibliography: See Cover Document.

C. Likely Sources Not Yet Investigated: See Cover Document.

D. Supplemental Material: All color digital photographs of the Research Building that are attached to this report were taken by Jean L. Guarino on June 16 and June 19, 2023.

## PART IV. METHODOLOGY OF RESEARCH

A. Research Strategy: See Cover Document.

B. Actual Research Process: See Cover Document.

C. Archives and Repositories Used: See Cover Document.

D. Project Team: See Cover Document.

## PART V. PROJECT INFORMATION

This HIBS documentation project was undertaken to mitigate the adverse effects of TD 5400 Old Orchard, LLC's Development Project on cultural resources within the project area. The terms of the mitigation were agreed upon and executed to ensure compliance with the Illinois State Agency Historic Resources Preservation Act (20 ILCS 3420).

Photograph 1: Front façade, view north.


Photograph 2: Main entrance, view north.


Photograph 3: Front façade, view northwest.

Photograph 4: Main entrance, view northwest.

Photograph 5: Decorative concrete relief panel on main entrance soffit.

Photograph 6: Decorative concrete relief panel on main entrance soffit.

Photograph 7: Decorative concrete relief panel on main entrance soffit.

Photograph 8: Front façade, view northeast.

Photograph 9: West façade, view east.

Photograph 10: Decorative concrete inserts on west façade.

Photograph 11:  West façade, view southeast.

Photograph 12:  Detail of west façade, view southeast.

Photograph 13: Concrete panels placed on lawn next to west façade, view southeast.

Photograph 14: West façade entrance, view east.

Photograph 15: Detail of west façade, view east.

Photograph 16: Detail of canopy linking the Research Building with the Material Storage Building.


Photograph 17: Canopy linking the Research Building (right) with the Material Storage Building (left).

Photograph 18: Rear façade, view southwest toward opening to west courtyard.

Photograph 19: Opening to west courtyard, view southwest.

Photograph 20: West courtyard, view southeast.

Photograph 21: West courtyard, view north.

Photograph 22: Concrete bench in west courtyard.

Photograph 23: Rear façade, view south.

Photograph 24: Detail of high bay that houses the million pound testing machine, view south.

Photograph 25: Rear façade, view southwest.

Photograph 26:  Rear façade, view southwest.

Photograph 27: Rear façade, view south.

Photograph 28: Front façade, view northeast.

Photograph 29: Southeast corner of the building, showing soffits with decorative concrete panels and aluminum railings.

Photograph 30: Soffits with decorative concrete panels.

Photograph 31: Detail of precast concrete panels on front façade, view north.

Photograph 32: Main lobby's glass curtain wall.

Photograph 33: Two-story main lobby, view southest.

Photograph 34: Staircase in main lobby with doors to former telephone booths on the left.


Photograph 35: Main lobby with checkerboard terrazzo flooring.


Photograph 36: First floor hallway, view east.

Photograph 37: Concrete mixing room with perforated concrete wall.

Photograph 38: Stairway in concrete mixing room.

Photograph 39:  Concrete mixing room.

Photograph 40: Laboratory room, first floor.

Photograph 41:  Million pound testing machine.

Photograph 42:  Equipment on million pound testing room.

Photograph 43: First floor meeting room.

Photograph 44: First floor kitchen.

Photograph 45: First floor meeting room.

Photograph 46: Interior detail of first floor window.

Photograph 47:  West concrete stairway with metal pipe railings.

Photograph 48: Women's toilet room with concrete partitions.


Photograph 49:  Freight elevator and first floor hallway, view south.

Photograph 50: First floor office.

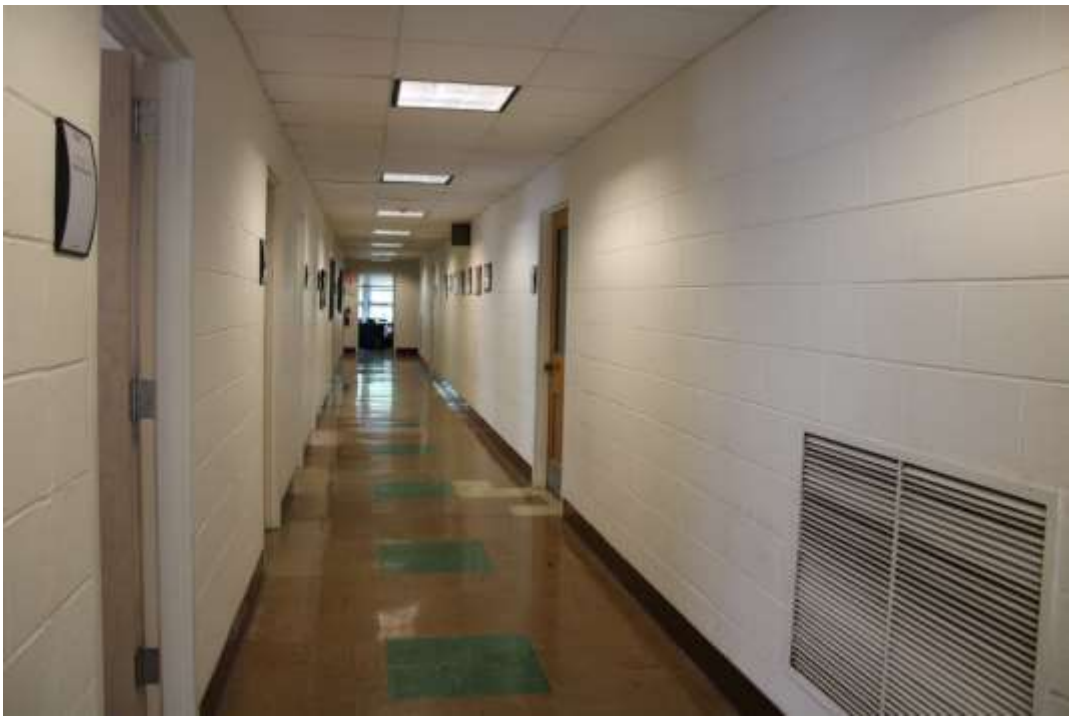

Photograph 51: Insulated door to first floor laboratory.

Photograph 52:  Door to first floor laboratory.

Photograph 53: Doors to first floor laboratory.

Photograph 54: Doors opening onto the west courtyard.

Photograph 55:  Second floor hallway.

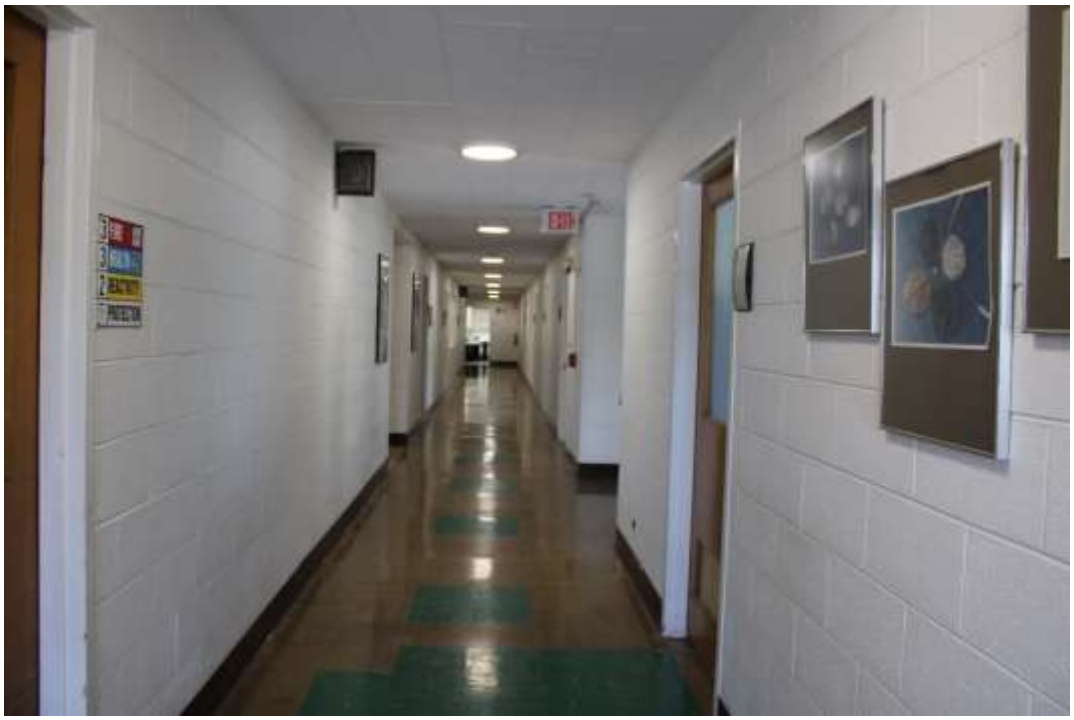


Photograph 56: Second floor hallway.

Photograph 57: Front stairwell.

Photograph 58: Second floor office.

Photograph 59: Second floor walkway overlooking west courtyard.



Photograph 60:  Second floor courtyard.

Photograph 61:  Balcony overlooking the million pound testing room.

Photograph 62: Concrete stairway in center of building, view toward basement landing.

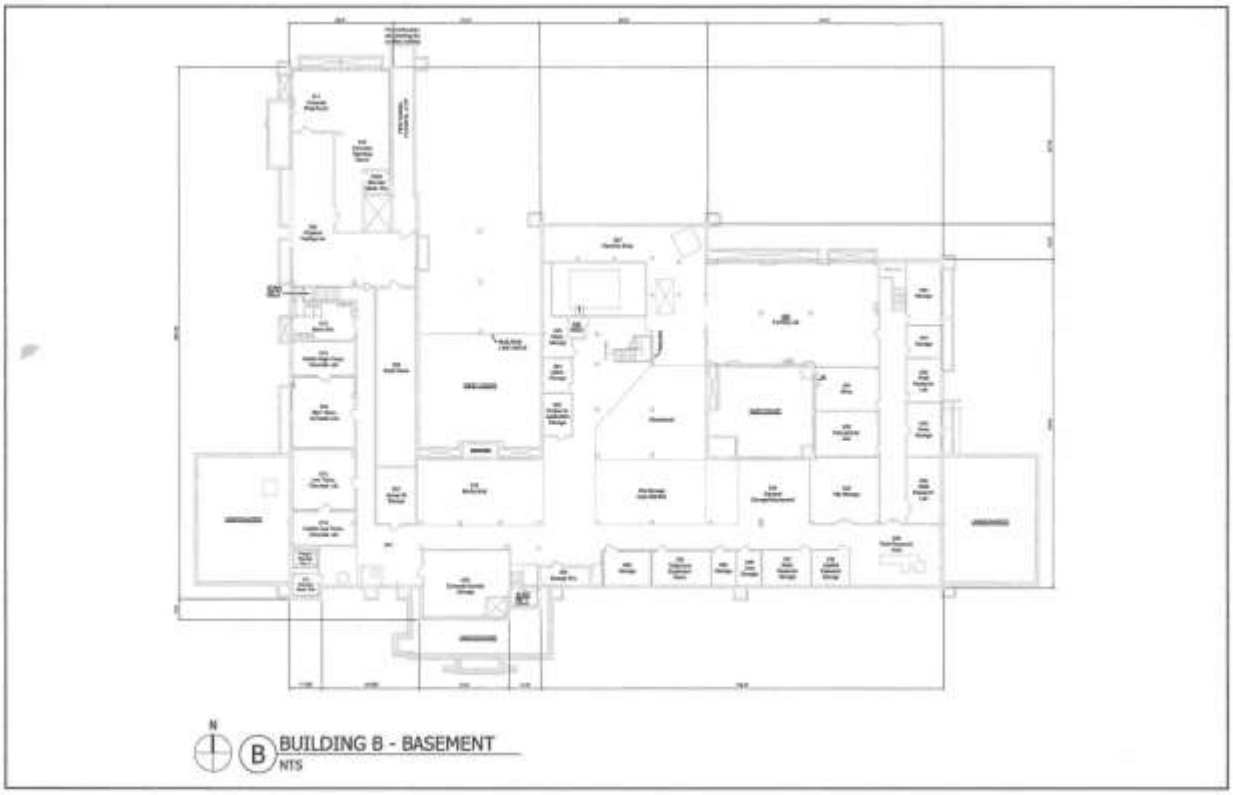

Photograph 63: Concrete stairway in center of building, view from basement.

Photograph 64: Basement storage/mechanical space.

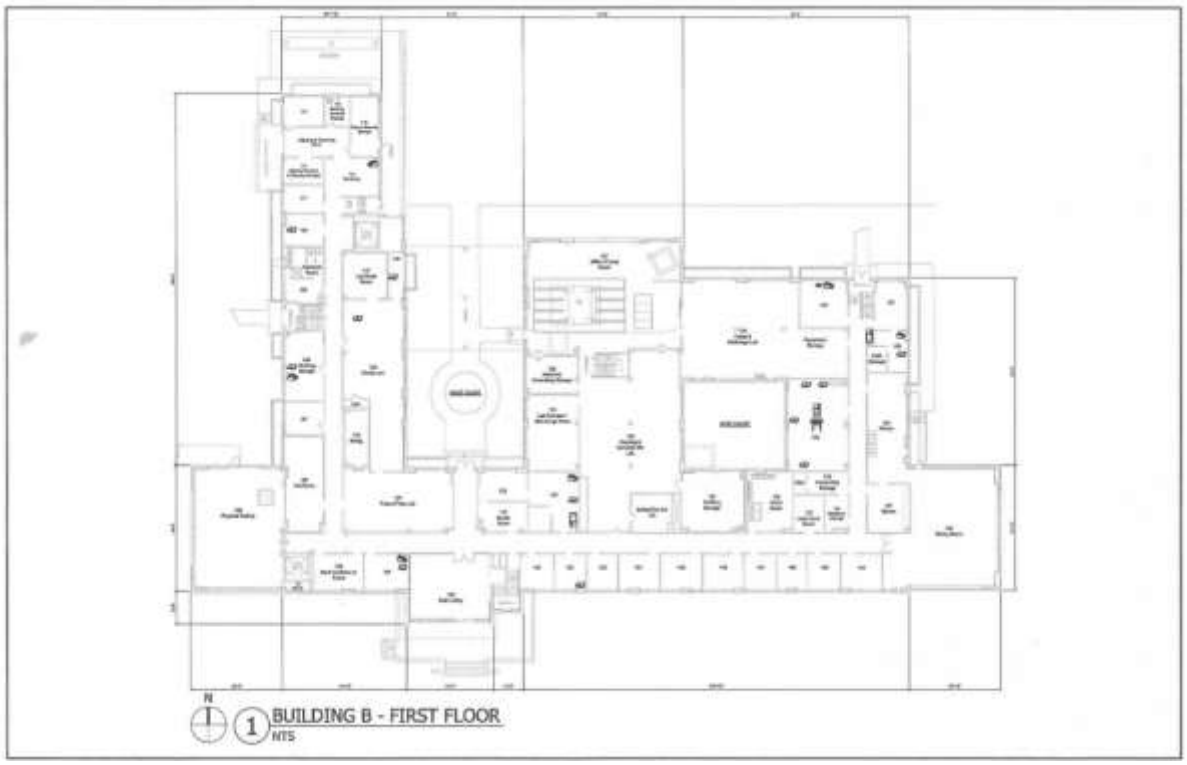
Photograph 65: Basement storage/mechanical space.

Photograph 66: Basement storage/mechanical space.

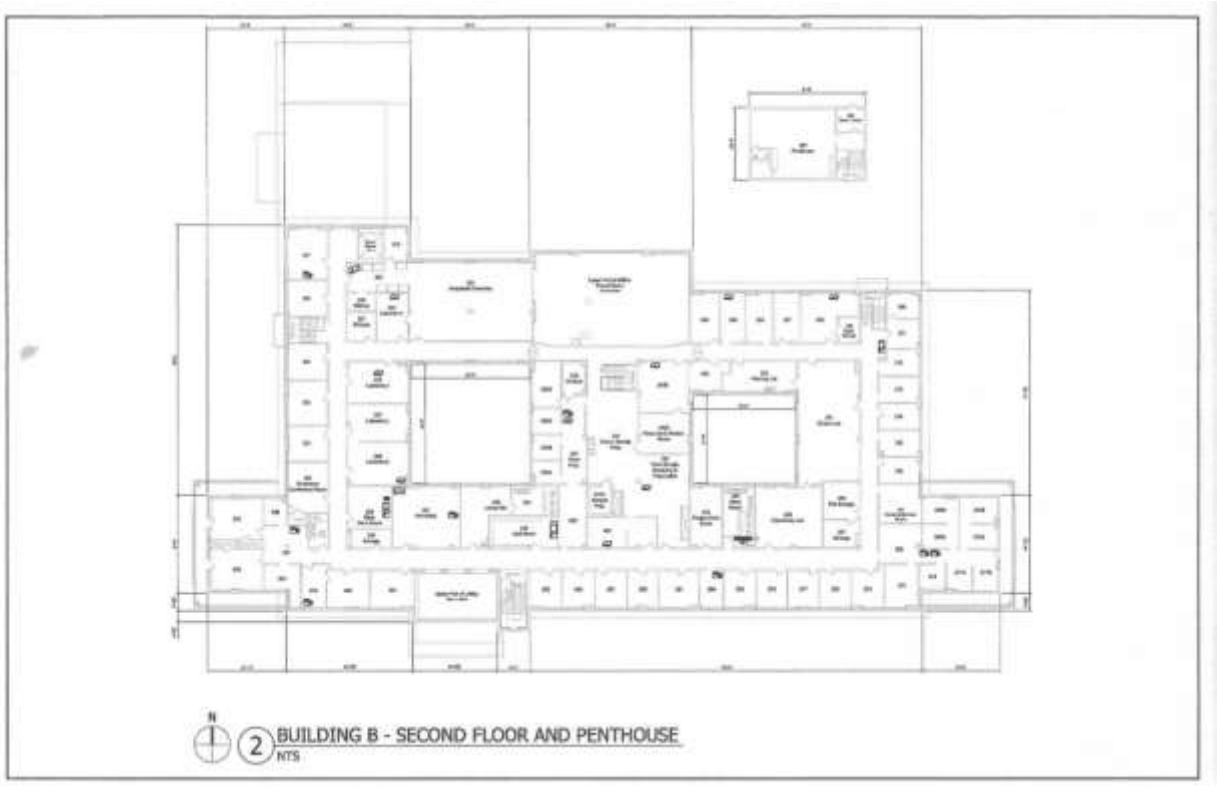
Photograph 67: Basement storage/mechanical space.



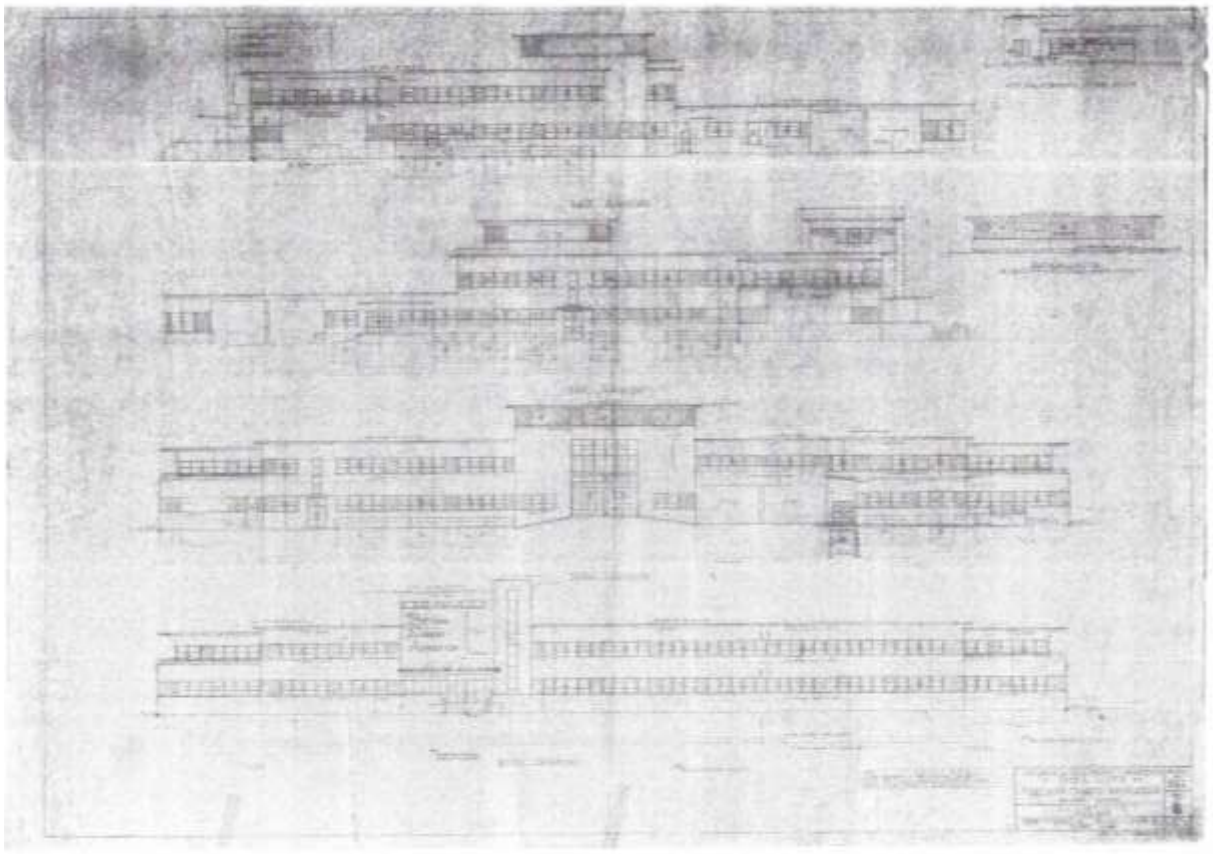

Basement Plan, 2023.



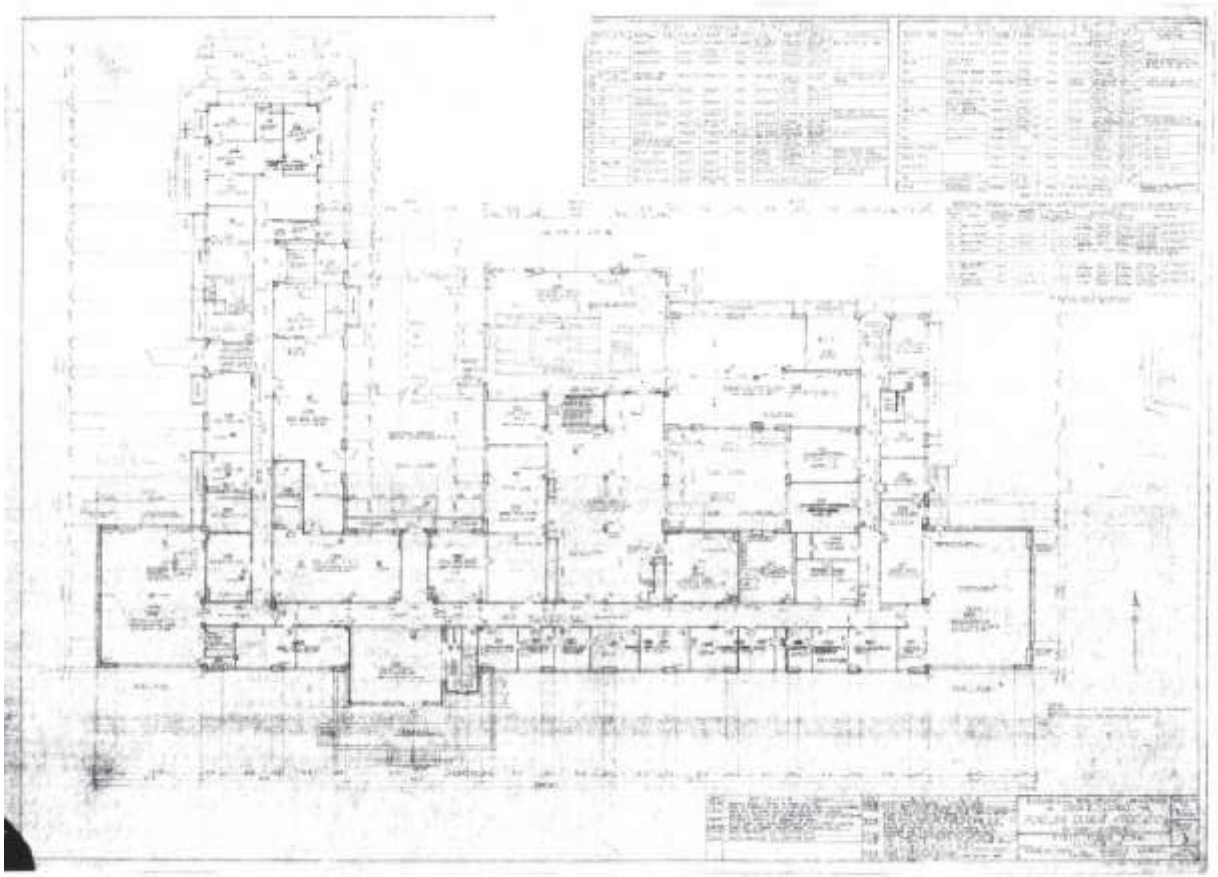

First Floor Plan, 2023.



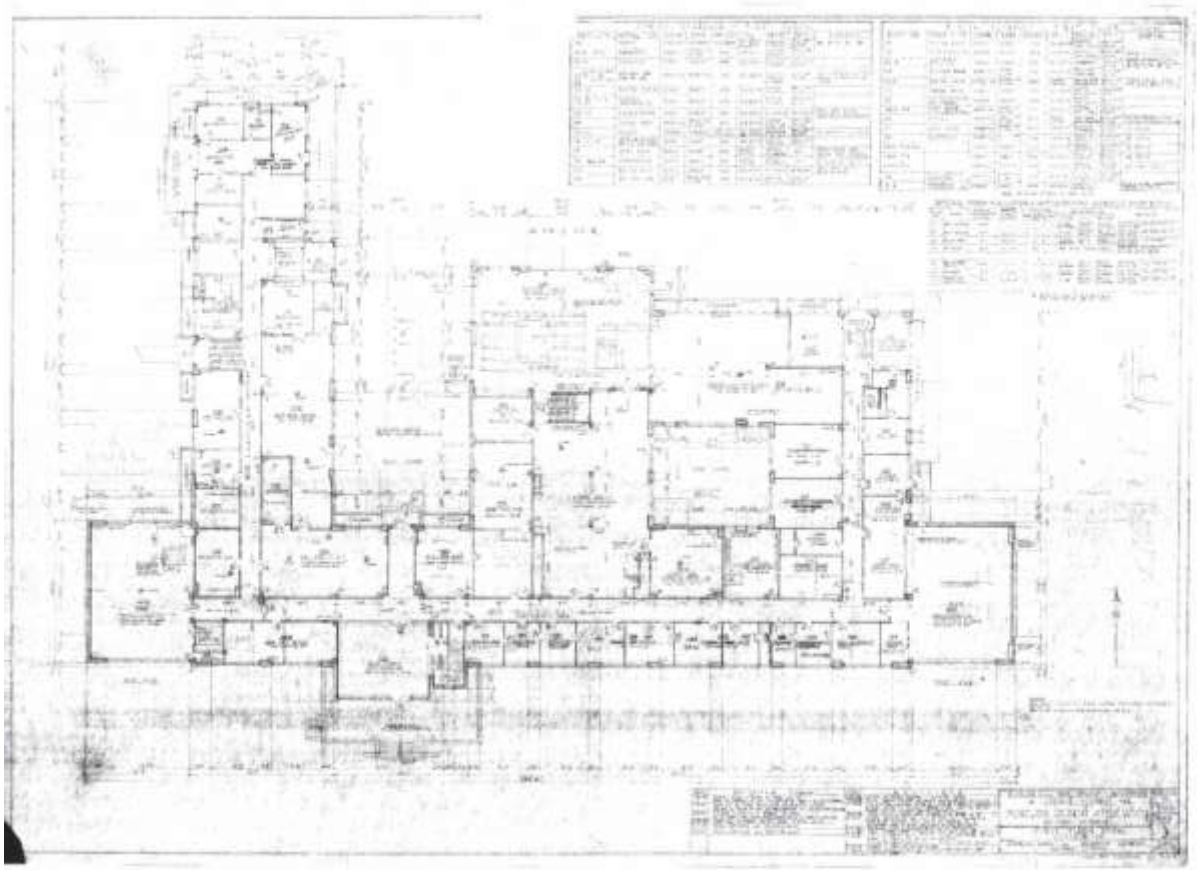

Second Floor and Penthouse Plan, 2023.



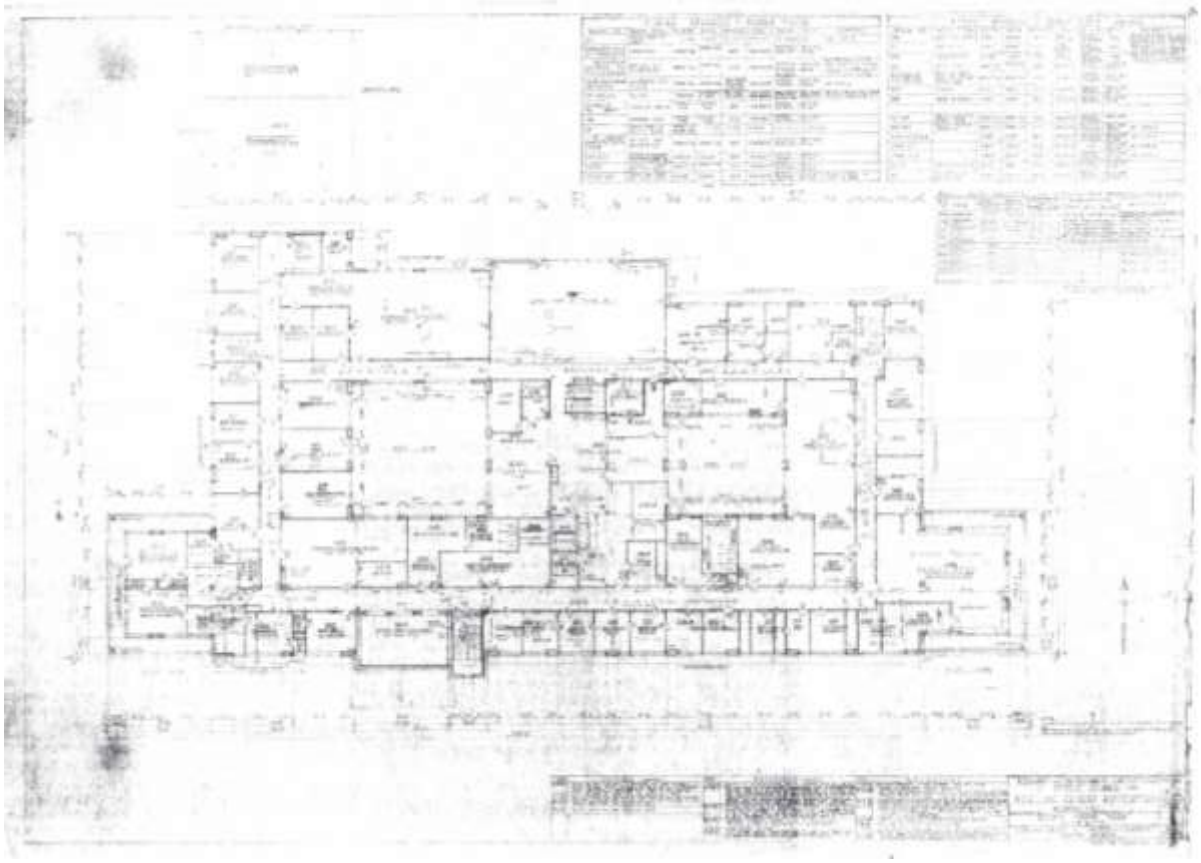
Carr & Wright, Research Building Elevations, April 1, 1948.



Carr & Wright, Basement Plan for the Research Building, April 1, 1948.



Carr & Wright, First Floor Plan for the Research Building, April 1, 1948.



Carr & Wright, Second Floor Plan for the Research Building, April 1, 1948.

HISTORIC ILLINOIS BUILDINGS SURVEY

HIBS CK-2023-2

# PORTLAND CEMENT ASSOCIATION CAMPUS: STRUCTURES LABORATORY

Location: The Structures Laboratory is at the southeast corner of the former Portland Cement Association Campus, which is located at 5400-5420 Old Orchard Road in Skokie, Illinois. It is on a parcel that is bounded by Woods Drive on the east, Circuit Court of Cook County property on the west, a residential subdivision on the north, and Old Orchard Road and the Harms Woods Forest Preserve on the south. The property is located on Lot 1 of the Portland Cement Association Subdivision and includes part of the Northwest Fractional Quarter of Section 9, Township 41 North, Range 13, East of the Third Principal Meridian, in Niles Township, Cook County.

Present Owner: TD 5400 Old Orchard, LLC

Present Use: Vacant

Significance: The Structures Laboratory—situated constructed on the west side of the PCA campus—was designed by the Chicago firm Dunlap & Esgar and completed in 1958. The one-story, one-room laboratory building has two levels of balconies with offices across its east end linked by a modernistic staircase comprised of thick, concrete slabs that had a sculptural appearance. The exterior walls of the Structures Laboratory were sheathed in precast concrete panels and divided into bays by full-height concrete piers. Especially noteworthy was the projecting main entrance vestibule; its north and south walls—both interior and exterior—were comprised of full-height concrete panels depicting machinery mixing cement fabricated by artist Paul Kufrin.

The laboratory was intended to promote knowledge of the structural properties of concrete and to support new and improved structural applications, such as precast frames and bridges. The main floor was used for the testing of girders, beams, and other shapes of up to 120 feet in length. Instead of housing conventional testing machines, the Structures Laboratory itself was a giant testing machine, capable of resisting forces of over 10 million pounds. The building was utilized by CTLGroup, Inc., a for-profit subsidiary of the PCA, starting in the late 1980s.

## PART I. HISTORICAL INFORMATION

A. Physical History

1. Dates of construction: 1956-58

2. Architect: Dunlap & Esgar, Chicago

3. Contractor/Builder: George A. Fuller Company, Chicago

4. Alterations and Additions:
The Structures Laboratory has excellent architectural integrity and is virtually unchanged from its original appearance.

B. Historical Context:
See the Cover Document for the following contextual essays:

1. Overview History of the Portland Cement Association
2. Post-World War II Suburban Office Development
3. Development of the Portland Cement Association Campus in Skokie
4. Carr & Wright, Architect of the Research Building and Material Storage Building
5. Dunlap & Esgar, Architect of the Structures Laboratory
6. Paul K. Kufrin, Sculptor of the Structure Laboratory's Vestibule Panels
7. Perkins and Will, Architect of the Administration Building

## PART II. ARCHITECTURAL INFORMATION

A. General Statement
The Structures Laboratory is a tall, one-story, one-room laboratory building featuring two levels of balconies with offices across its east end linked by a modernistic staircase comprised of thick, concrete slabs that have a sculptural appearance. An elegant concrete spiral staircase is situated in the southwest corner of the laboratory, providing access from the main floor to a balcony that extends across its south wall. The building's exterior walls are comprised of precast concrete panels and divided into bays by full-height concrete piers. The uppermost portion of the north and south walls featured decorative concrete panels with geometric motifs and vertical bands. Especially noteworthy was the projecting main entrance vestibule, which had the words "Structural Laboratory" in stainless steel letters across its flat roof. Its north and south walls—both interior and exterior—are comprised of full-height concrete panels depicting machinery mixing cement fabricated by artist Paul Kufrin.

B. Description of Exterior

1. Over-all dimensions
The building's footprint has overall dimensions of 176'-4" (east-west) by 58'-0" (north-south)

2. Walls
The building's exterior walls are comprised of precast concrete panels and divided into bays by full-height concrete piers. The uppermost portion of the north and south walls featured decorative concrete panels with geometric motifs and vertical bands. The projecting entrance vestibule on the east façade has glass-enclosed east wall; its north and south walls—both interior and exterior—are comprised of full-height concrete panels depicting machinery mixing cement.

3. Structural system
The building utilizes reinforced concrete construction.

4. Openings:

a. Doorways and doors
The main (east) entrance vestibule has a pair of glass doors. The building has a total of four overhead metal garage doors: three on the north façade and one on the west façade. The west façade also has a metal service door.

b. Windows
Fenestration consists of vertical stacks of hopper windows and is limited to the east façade and the easternmost bay on both the north and south facades. The remainder of the building is windowless.

5. Roof

a. Shape, covering
The building has a slightly peaked roof covered with a built-up membrane.

C. Description of Interior:

1. Floor plans
The building has two staircases: one at its east end and the other at its southwest corner. The basement has an open floor plan with a boiler room and a mechanical room flanking the staircase on its east end. The ground floor consists of a one room laboratory and has a toilet room, two offices, and an entrance vestibule at its east end. The second and third floor east balconies

each have a total of five offices. The interior also has a balcony that extends the full width of its south wall, connecting the building's two stairways.

2. Stairways
The main stairwell on the east end of the building has cement block walls. Its stairway has treads and risers comprised of thick concrete slabs. A concrete spiral stairway is at the southwest corner of the building.

3. Elevators
A freight elevator runs between the basement and the ground floor.

4. Flooring
The flooring consists of exposed concrete.

5. Wall and ceiling finish
The rooms on the east side of the building have cement block partition walls.

6. Openings

   a. Doorways and doors
   Offices on the east balcony levels have metal doors.

7. Mechanical equipment

   a. Heating
   The building is climate controlled; it is cooled by air-conditioning equipment and heated by gas boilers.

   b. Lighting
   Fluorescent lighting strips are suspended from the exposed concrete ceiling.

   c. Plumbing
   The toilet room on the ground floor level has standard sinks and toilets with concrete partitions.

D. Site:

1. General setting and orientation
See Cover Document.

## PART III. SOURCES OF INFORMATION

A. Architectural Drawings: TD 5400 Old Orchard, LLC, the property owner, provided original architectural drawings of the Structures Laboratory by Dunlap & Esgar for review in the development of this HIBS recordation, some of which were scanned and are attached to the end of this report

B. Bibliography: See Cover Document.

C. Likely Sources Not Yet Investigated: See Cover Document.

D. Supplemental Material: All color digital photographs of the Structures Laboratory that are attached to this report were taken by Jean L. Guarino on June 16 and June 19, 2023.

## PART IV. METHODOLOGY OF RESEARCH

A. Research Strategy: See Cover Document.

B. Actual Research Process: See Cover Document.

C. Archives and Repositories Used: See Cover Document.

D. Project Team: See Cover Document.

## PART V. PROJECT INFORMATION

This HIBS documentation project was undertaken to mitigate the adverse effects of TD 5400 Old Orchard, LLC's Development Project on cultural resources within the project area. The terms of the mitigation were agreed upon and executed to ensure compliance with the Illinois State Agency Historic Resources Preservation Act (20 ILCS 3420).

Photograph 1: Front (east) façade, view southwest.


Photograph 2: Front entrance vestibule, view southwest.

Photograph 3: Sculptural relief panel on the exterior north wall of the entrance vestibule.

Photograph 4: Front entrance vestibule, view northwest.

Photograph 5: Sculptural relief panel on the exterior south wall of the entrance vestibule.

Photograph 6:  North façade, view south.

Photograph 7:  North (left) and west (right) facades, view southeast.

Photograph 8: West façade, view east.

Photograph 10: West (left) and south (right) facades, view northeast.

Photograph 11:  South façade, view north.

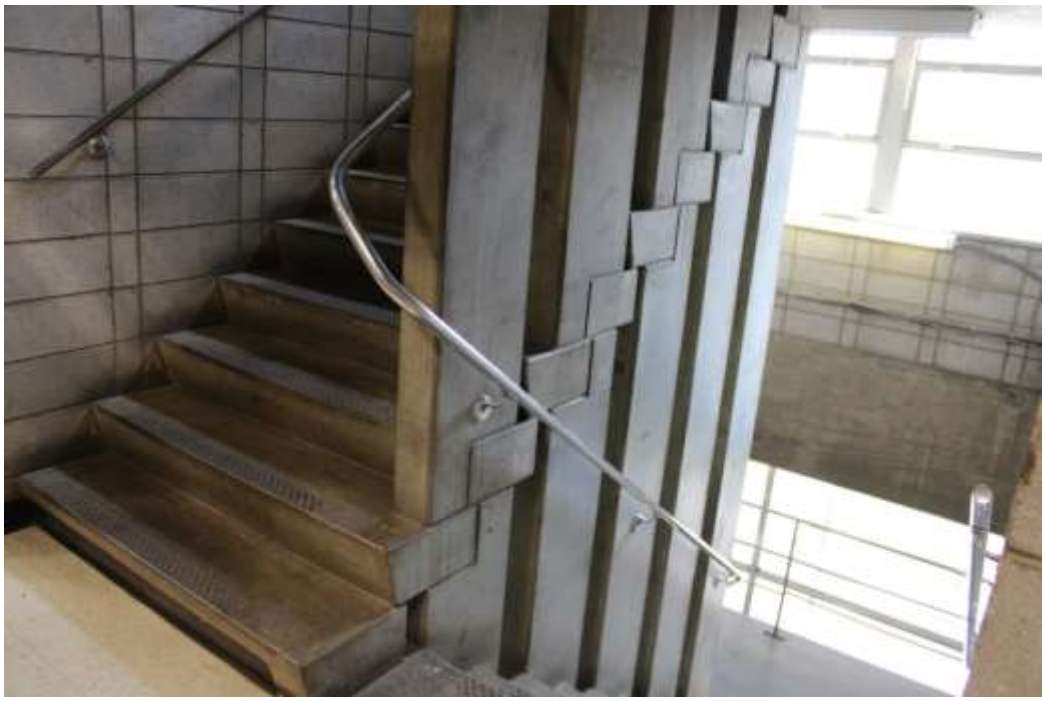
Photograph 12: South (left) and east (right) facades, view northwest.

Photograph 13: Detail of precast concrete panels on south façade, view north.

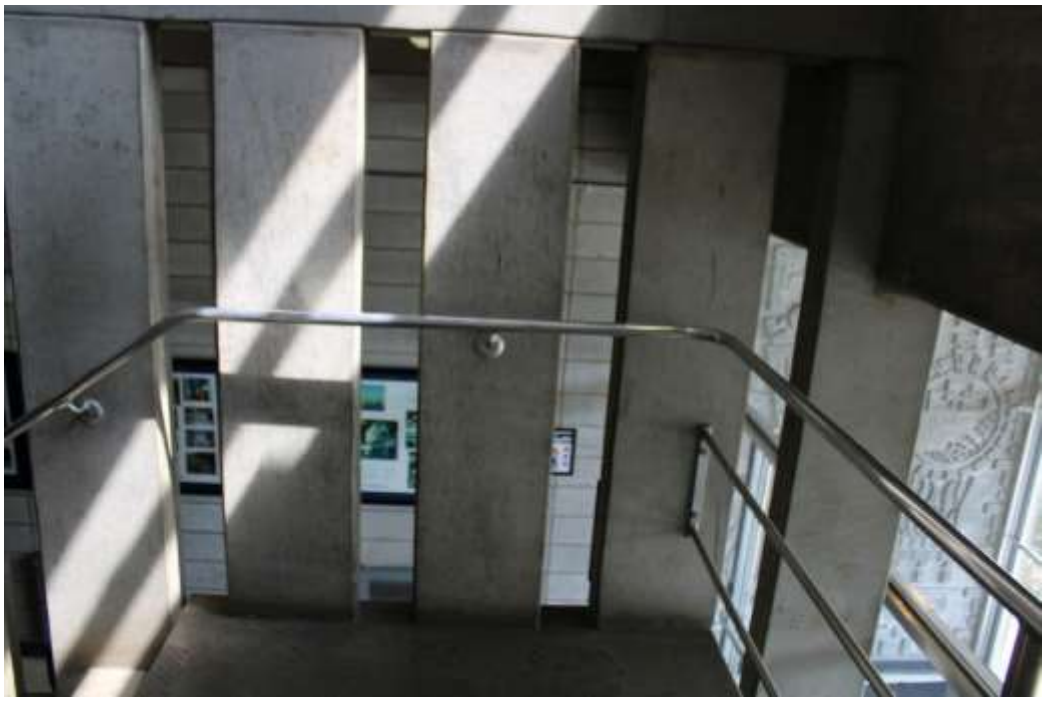
Photograph 14: Sculptural relief panel on the exterior south wall of the entrance vestibule.

Photograph 15: Sculptural relief panel on the exterior north wall of the entrance vestibule.

Photograph 16: Laboratory, view northeast toward upper balconies.



Photograph 17: *Concrete staircase linking the balcony levels at the east end of the laboratory.*



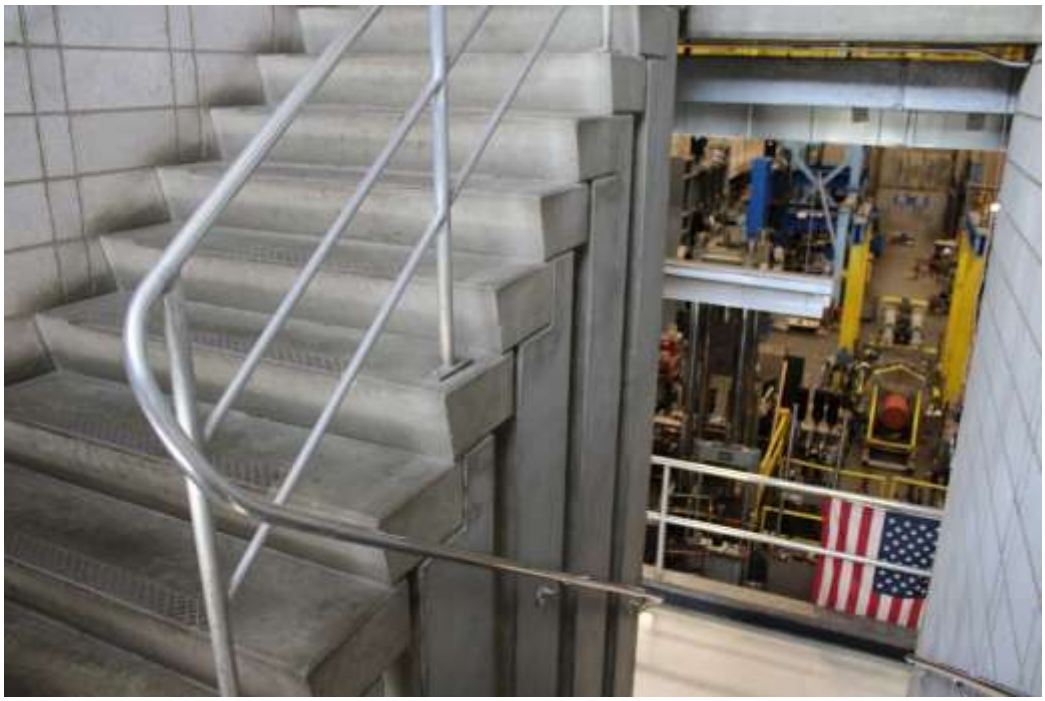
Photograph 18: Concrete staircase linking the balcony levels at the east end of the laboratory.

Photograph 19: Concrete staircase linking the balcony levels at the east end of the laboratory.

Photograph 20: Second floor balcony spanning east end of laboratory, view south.

Photograph 21: Third floor balcony spanning east end of laboratory, view north.

Photograph 23: Concrete staircase, looking down toward the laboratory.



Photograph 24: Concrete staircase linking the balcony levels at the east end of the laboratory.

Photograph 25: Toilet room with concrete partitions.

Photograph 26: Laboratory, view north toward steel roll-up door with balconies on the right.

Photograph 27:  Laboratory, view west.

Photograph 28: Laboratory, view northwest from balcony spanning the south wall.

Photograph 29: Laboratory, view west from second floor balcony.

Photograph 30: Laboratory, view west.

Photograph 31: Laboratory, view northeast from balcony spanning the south wall.

Photograph 32: Spiral concrete staircase in the southwest corner of the laboratory.


Photograph 33: Laboratory, detail of south wall's upper portion.

Photograph 34: Laboratory, view of steel roll-up door, view northwest.

Photograph 35: Corridor leading to basement.

Photograph 36: Basement.


Photograph 37: Basement.


Photograph 37: Basement showing freight elevator and insulated door.

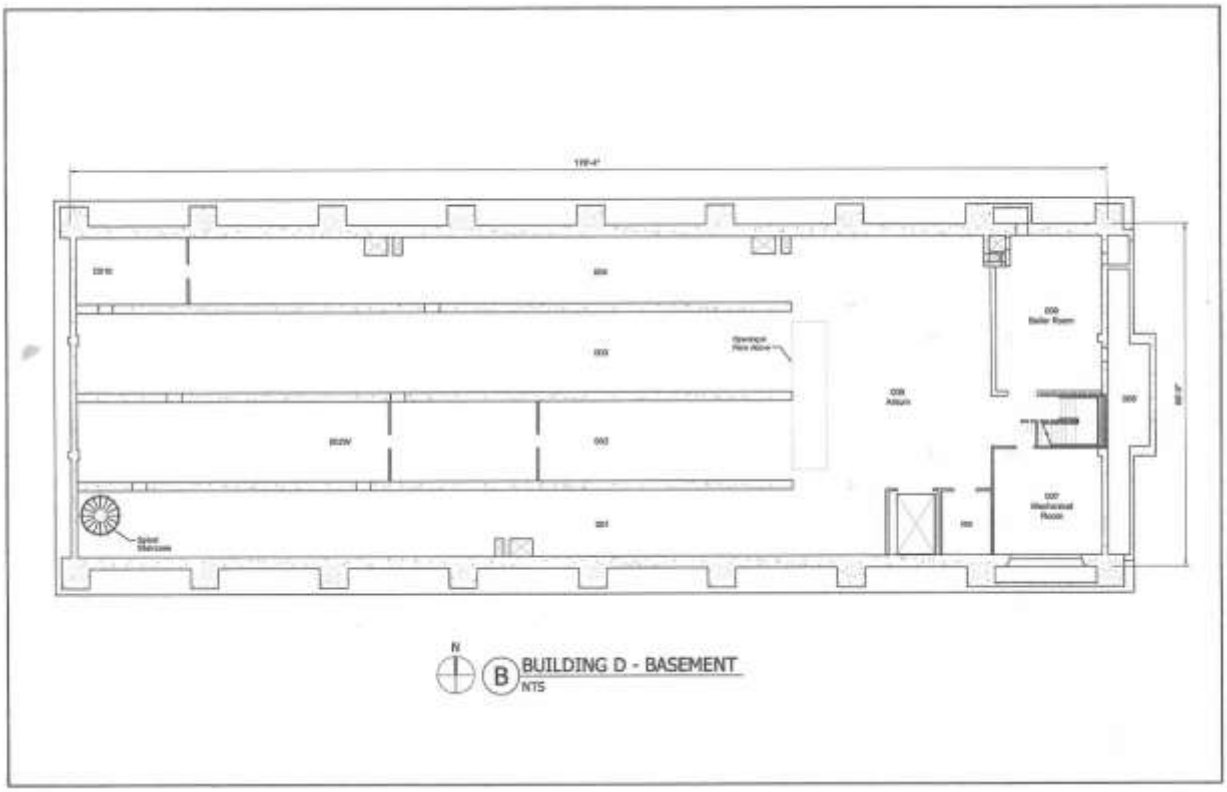



Figure 1: Structures Laboratory, basement plan, 2023.

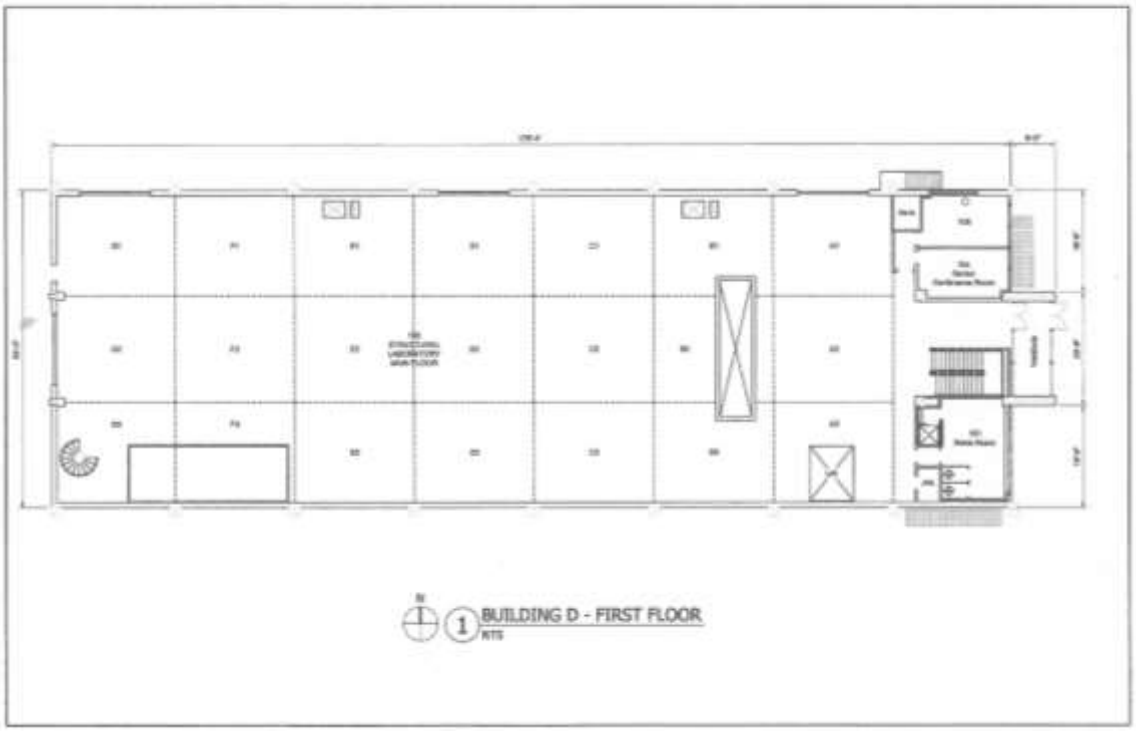



Figure 2: Structures Laboratory, first floor plan, 2023.

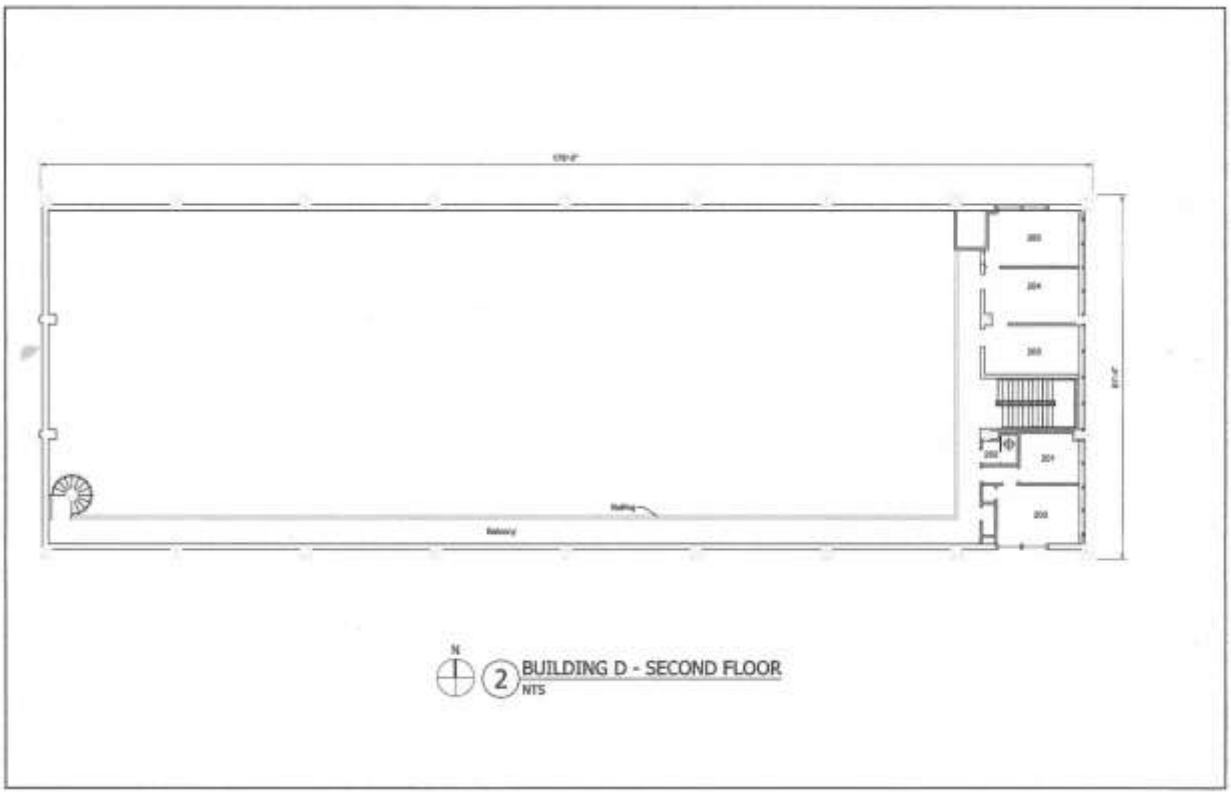



Figure 3: Structures Laboratory, second floor balcony plan, 2023.

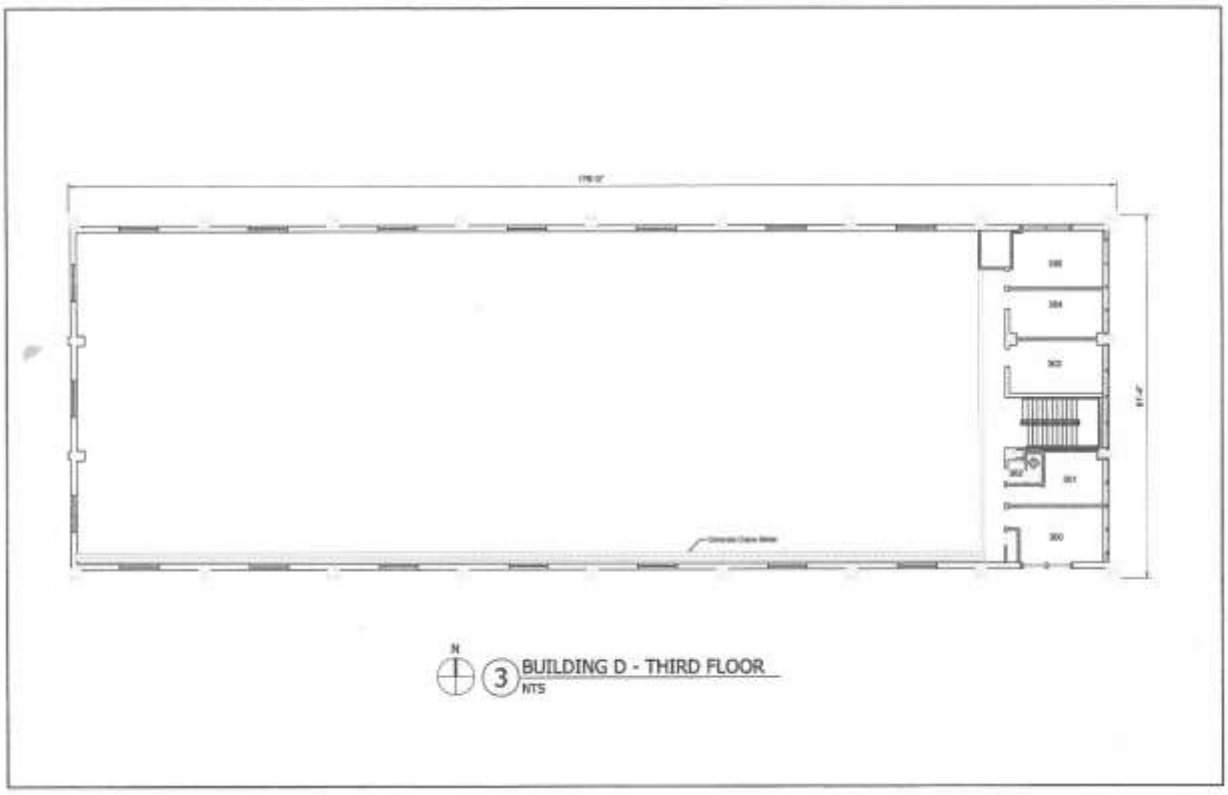
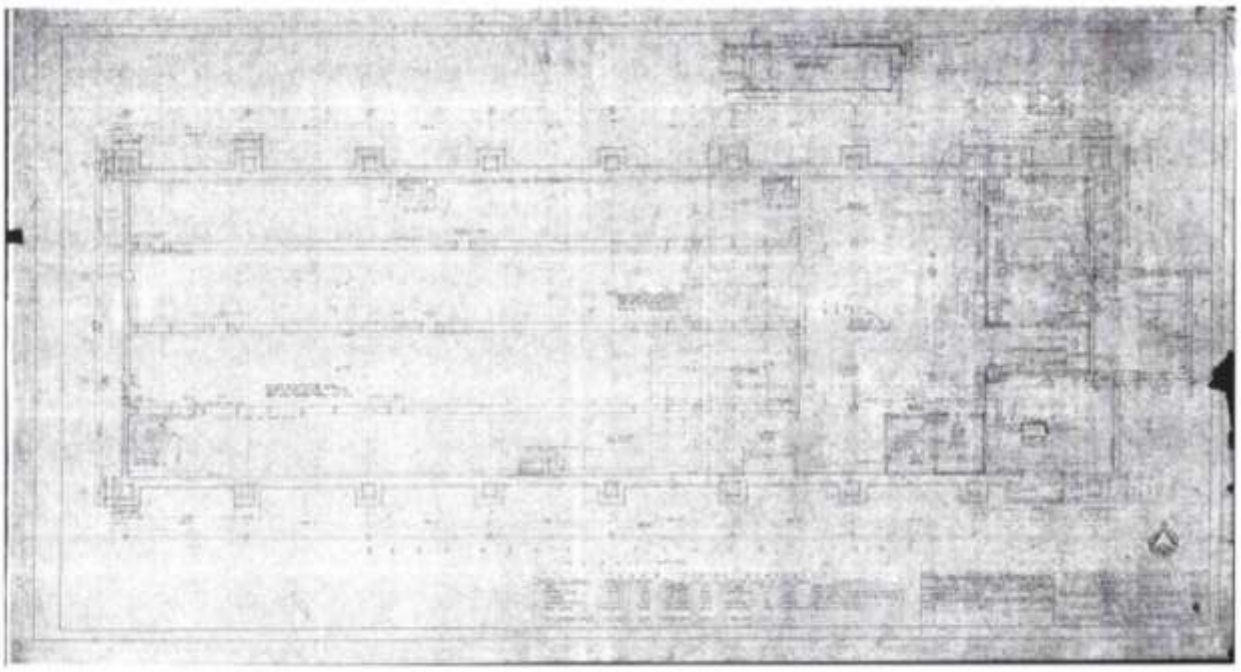
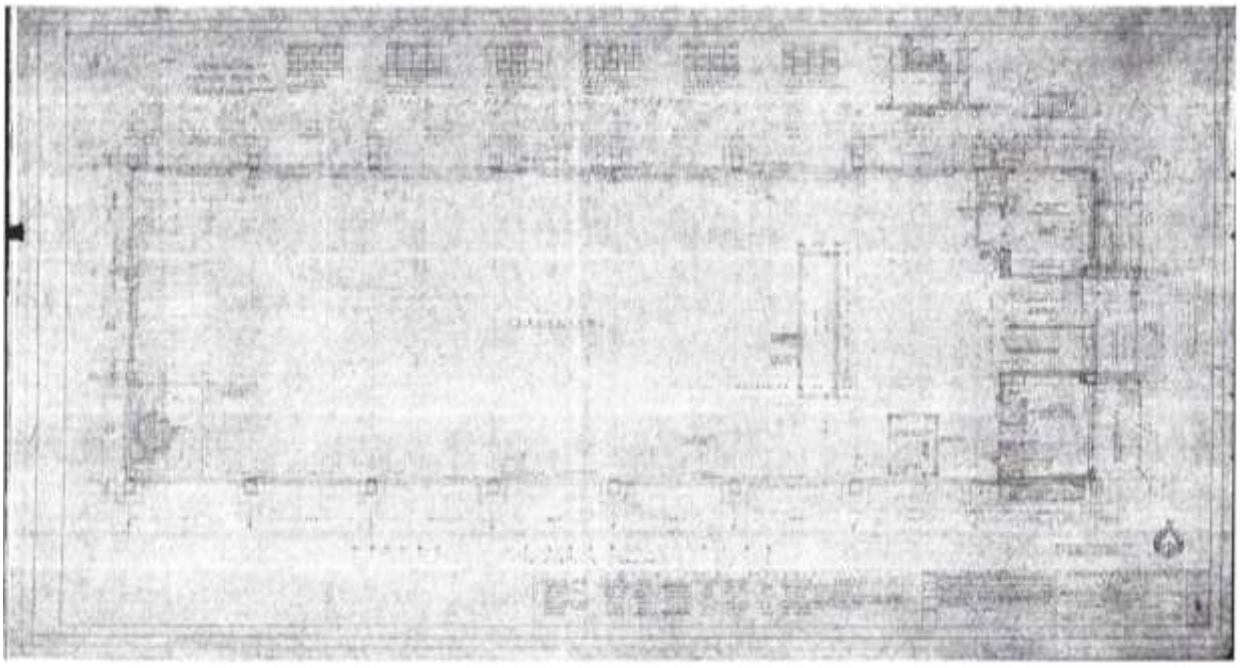


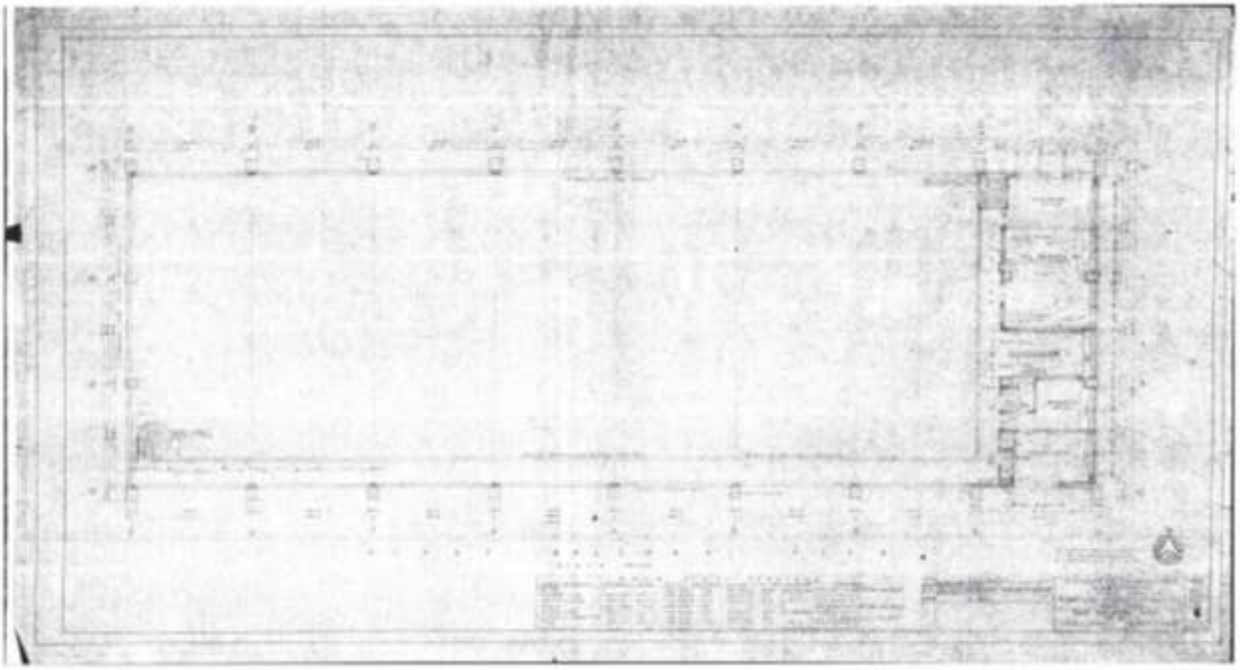

Figure 4: Structures Laboratory, third floor balcony plan, 2023.



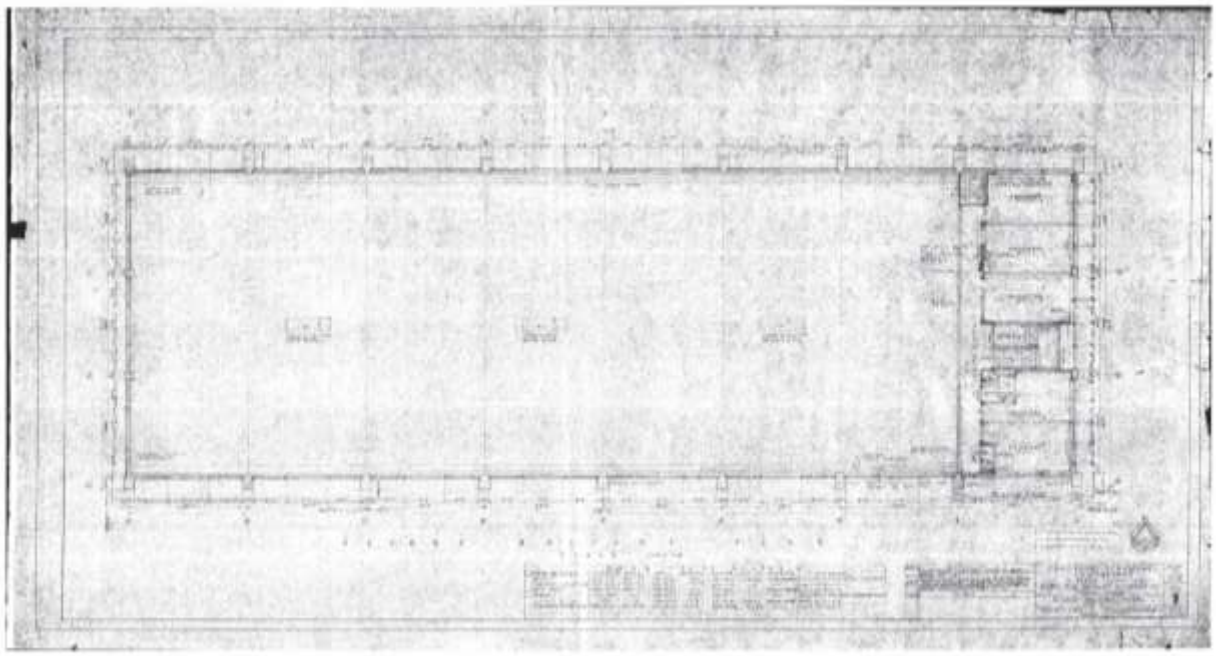
Dunlap & Esgar, Basement Plan for Structures Laboratory, June 22, 1956.



Dunlap & Esgar, Ground Floor Plan for Structures Laboratory, June 22, 1956.



Dunlap & Esgar, Second Floor Balcony Plan for the Structures Laboratory, June 22, 1956.



Dunlap & Esgar, Third Floor Balcony Plan for the Structures Laboratory, June 22, 1956.

HISTORIC ILLINOIS BUILDINGS SURVEY

HIBS CK-2023-2

# PORTLAND CEMENT ASSOCIATION CAMPUS: MATERIAL STORAGE BUILDING

Location: The Material Storage Building is at the northeast corner of the former Portland Cement Association Campus, which is located at 5400-5420 Old Orchard Road in Skokie, Illinois. It is on a parcel bounded by Woods Drive on the east, Circuit Court of Cook County property on the west, a residential subdivision on the north, and Old Orchard Road and the Harms Woods Forest Preserve on the south. The property is located on Lot 1 of the Portland Cement Association Subdivision and includes part of the Northwest Fractional Quarter of Section 9, Township 41 North, Range 13, East of the Third Principal Meridian, in Niles Township, Cook County.

Present Owner: TD 5400 Old Orchard, LLC

Present Use: Vacant

Significance: The Material Storage Building was completed in 1950 on the Portland Cement Association's (PCA) newly established campus in Skokie, just west of the Edens Expressway (I-94), which was then under construction. This one-story building with a high central bay was designed by the Chicago firm Carr & Wright and features smooth wall planes comprised of precast concrete panels. The building's varied spaces were intended for the storage and sorting of materials, such as cement and aggregate. It also originally incorporated a soil processing room and a wood shop along its western side. The Material Storage Building was utilized by CTLGroup, Inc., a for-profit subsidiary of the PCA, starting in the late 1980s.

## PART I. HISTORICAL INFORMATION

### A. Physical History

1. Dates of construction: 1948-1950
2. Architect: Carr & Wright, Chicago
3. Contractor/Builder: Turner Construction Company, Chicago

4. Alterations and Additions:
   This building has excellent architectural integrity and is virtually unchanged from its original appearance. Alterations mainly consist of the reconfiguration of spaces on its west side—which originally featured a garage, soil processing lab, and a wood shop—to incorporate offices and storage rooms.

B. Historical Context:
   See the Cover Document for the following contextual essays:

1. Overview History of the Portland Cement Association
2. Post-World War II Suburban Office Development
3. Development of the Portland Cement Association Campus in Skokie
4. Carr & Wright, Architect of the Research Building and Material Storage Building
5. Dunlap & Esgar, Architect of the Structures Laboratory
6. Paul K. Kufrin, Sculptor of the Structure Laboratory's Vestibule Panels
7. Perkins and Will, Architect of the Administration Building

## PART II. ARCHITECTURAL INFORMATION

A. General Statement
   The one-story Material Storage Building has smooth wall planes comprised of precast concrete panels. Its high central bay is illuminated by clerestory windows and accessed by overhead garage/roll-up doors on the north and south walls. The central bay is flanked by rooms for the storage and sorting of materials, such as cement and aggregate, as well as a large boiler room (north side) and offices (west side). The Material Storage Building is linked to the two-story Research Building to the south by a concrete canopy, which shelters a concrete driveway that extends between the two buildings.

B. Description of Exterior

1. Over-all dimensions
   The building's footprint has overall dimensions of 180'-0" (east-west) by 135'-0" (north-south)

2. Walls
   The walls of the building are comprised of precast concrete panels and feature decorative concrete panels detailed with vertical fluting that alternate with window groups.

3. Canopies
   The south end of the Material Storage Building's west wing is linked to the

Research Building by a flat-roof, concrete canopy, which shelters a concrete drive that extends between the two buildings.

4. Structural system
The building utilizes reinforced concrete construction.

5. Openings:

a. Doorways and doors
Exterior service doors throughout the building are metal, arranged alone or in pairs. The building also has several metal overhead garage doors: three on the south façade, four on the west façade, and two on its north façade. The north façade also has a tall, steel roll-up door in its central bay.

b. Windows
Vertical stacks of hopper windows are used throughout the building. They are arranged alone, in pairs, or in groups of four and alternate with fluted, concrete panels. Windows in the high central bay are arranged at the clerestory level.

6. Roof

a. Shape, covering
The building has a flat, concrete slab roof with overhanging eaves and is covered with a built-up membrane.

C. Description of Interior:

1. Floor plans
The ground floor plan is bisected by a single, high bay space that extends from its north to south walls. To the north of the high bay space are six storage rooms of varying sizes. To the south of the high bay are a large boiler room, two large storage rooms, one toilet room, and several offices of varying sizes.

2. Flooring
The flooring is comprised of exposed concrete, which is finished with vinyl tiles in the offices that line the west side of the building.

3. Wall and ceiling finish
Partition walls throughout the building are comprised of cement block except for the west side of the building where offices are partitioned with drywall. Ceilings feature exposed concrete.

4. Openings

   a. Doorways and doors
   The interior has hinged metal doors; some of the larger storage rooms have sliding or wall-hung metal doors.

5. Mechanical equipment

   a. Heating
   The building is climate controlled; it is cooled by air-conditioning equipment and heated by gas boilers.

   b. Lighting
   Lighting mainly consists of fluorescent strips that are suspended from the ceiling.

   c. Plumbing
   The single toilet room has standard sinks and toilets with metal partitions.

D. Site:

1. General setting and orientation
   See Cover Document.

## PART III. SOURCES OF INFORMATION

A. Architectural Drawings: TD 5400 Old Orchard, LLC, the property owner, provided original architectural drawings of the Material Storage Building by Carr & Wright for review in the development of this HIBS recordation, some of which were scanned and are attached to the end of this report.

B. Bibliography: See Cover Document.

C. Likely Sources Not Yet Investigated: See Cover Document.

D. Supplemental Material: All color digital photographs of the Material Storage Building that are attached to this report were taken by Jean L. Guarino on June 16 and June 19, 2023.

## PART IV. METHODOLOGY OF RESEARCH

A. Research Strategy: See Cover Document.

B. Actual Research Process: See Cover Document.

C. Archives and Repositories Used: See Cover Document.

D. Project Team: See Cover Document.

PART V. PROJECT INFORMATION

This HIBS documentation project was undertaken to mitigate the adverse effects of TD 5400 Old Orchard, LLC's Development Project on cultural resources within the project area. The terms of the mitigation were agreed upon and executed to ensure compliance with the Illinois State Agency Historic Resources Preservation Act (20 ILCS 3420).

Photograph 1: South façade, view northeast.

Photograph 2: South wing of building, view northwest.

Photograph 3: South façade, view northeast.

Photograph 4: South façade detail showing precast concrete panels.

Photograph 5: South façade, view northwest toward canopy connecting Material Storage Building to the Research Building.

Photograph 6: South façade, detail of high bay, view northwest.

Photograph 7: View southeast.

Photograph 8: North façade, view southeast.

Photograph 9: North façade, view southwest.

Photograph 10: North façade high bay, view south.

Photograph 11:  North façade, view southwest.

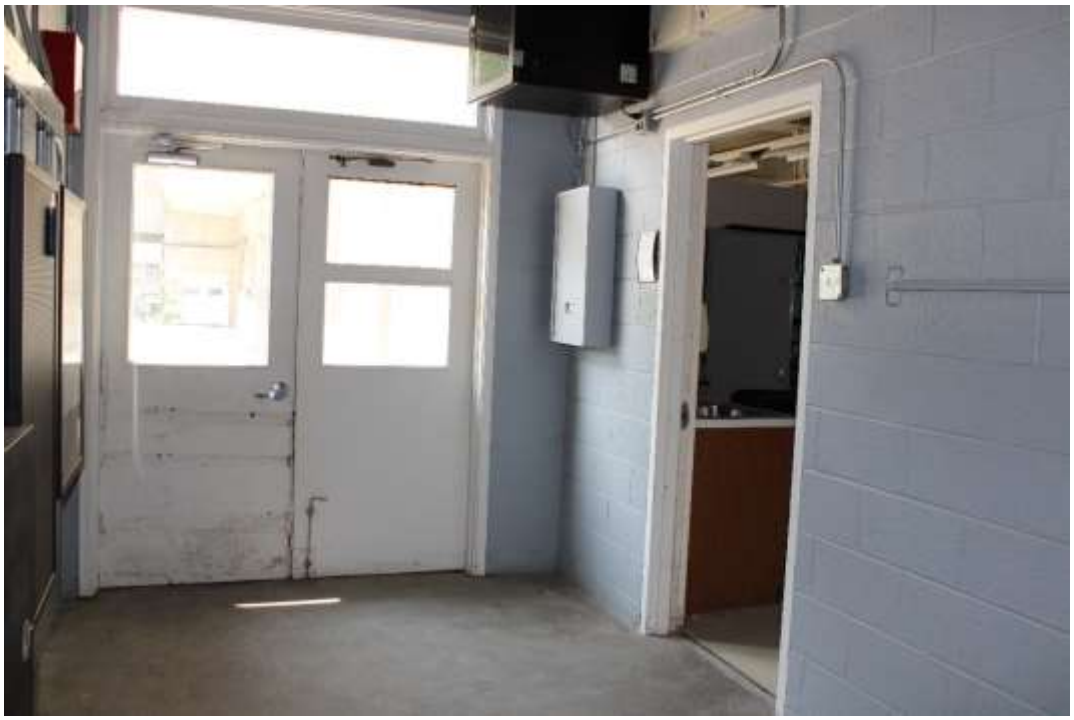
Photograph 12: West façade, view southeast.

Photograph 13:  West façade, view southeast.

Photograph 14: West façade, detail of windows and precast concrete panels.


Photograph 15: West façade, view northeast.

Photograph 16: Corridor, view south.



Photograph 17: Corridor, view south toward exterior door.

Photograph 18: Office along west side of building

Photograph 19: Office along west side of building.

Photograph 20: Office along west side of building.

Photograph 21: Office along west side of building.

Photograph 22:  Office along west side of building.


Photograph 23: Aggregate Storage Room.

Photograph 24: High bay room, view south.

Photograph 25: High bay room, view southwest.

Photograph 26: High bay room, view north.

Photograph 27: High bay room ceiling

Photograph 28: Storage room.

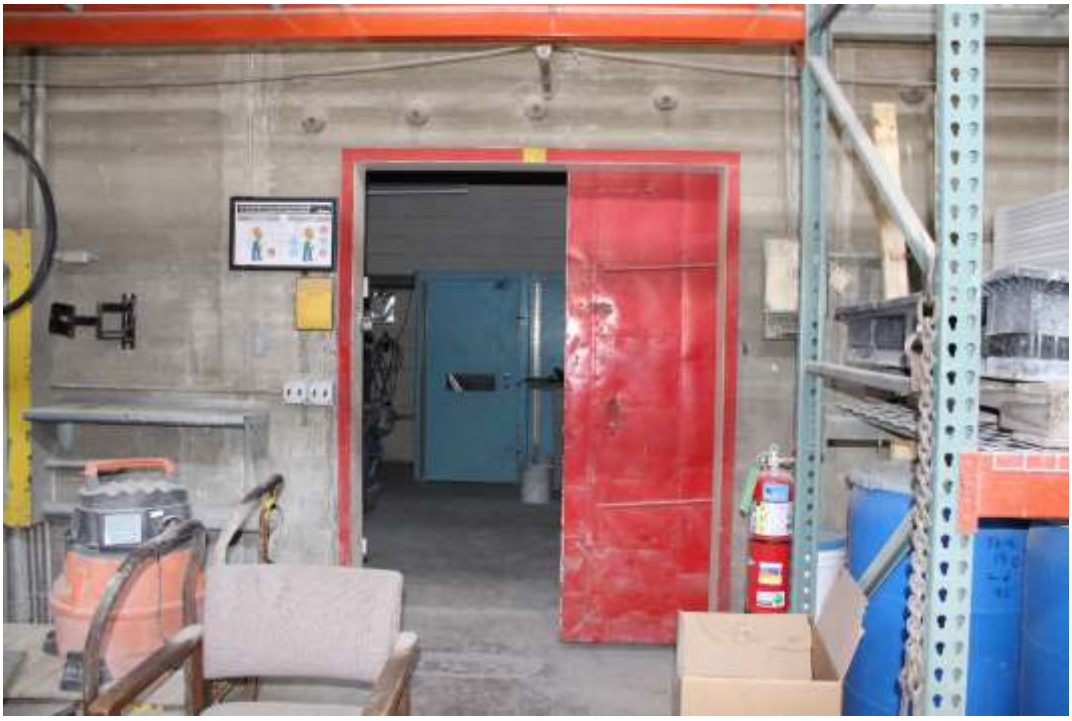
Photograph 29: Storage room.

Photograph 30: Storage room,

Photograph 31: Storage room.

Photograph 32: Storage room, view northwest toward exterior door.

Photograph 33:  Storage room, view southwest.



Photograph 34: Storage room, view north.

Photograph 35:  Storage room.

Photograph 36:  Storage room.

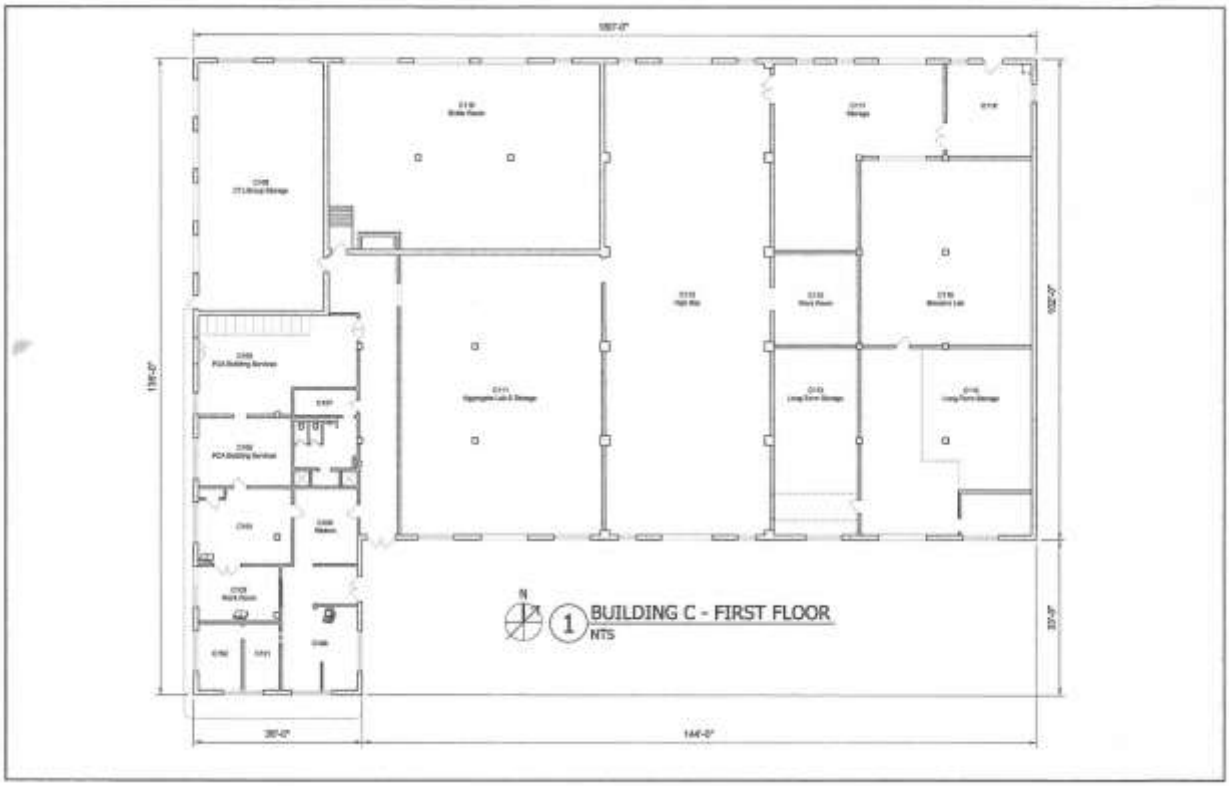



Figure 1: First Floor Plan, 2023.

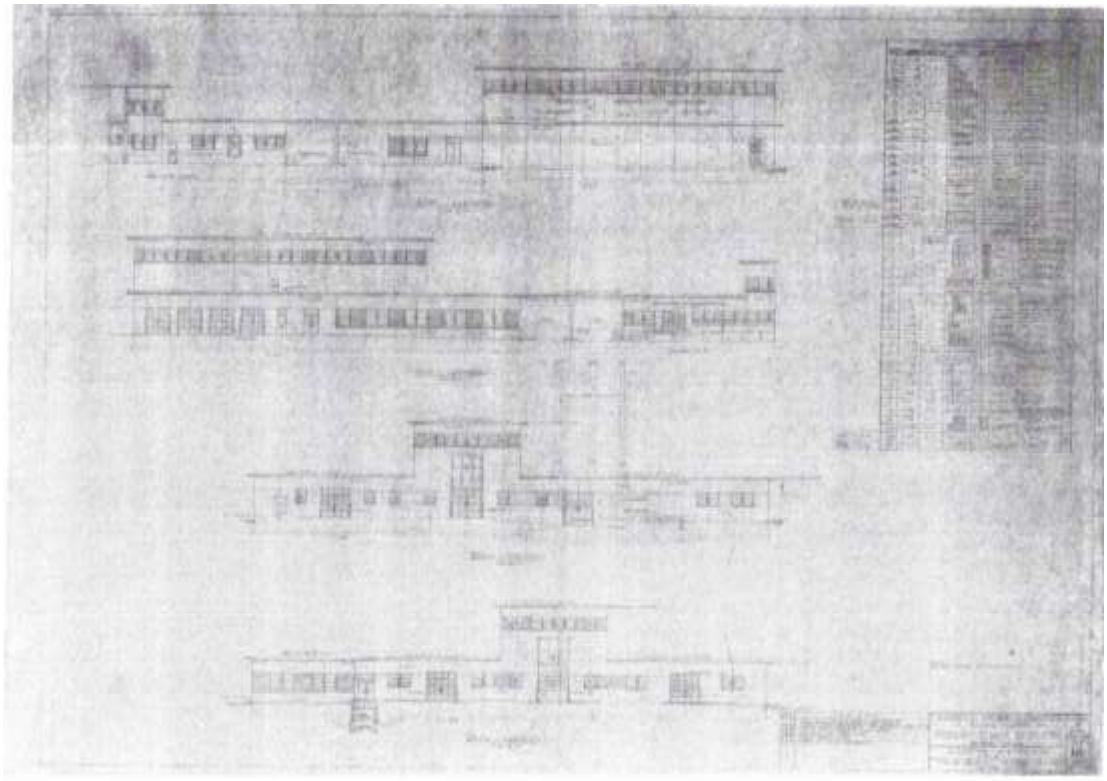


Figure 2: Carr & Wright, Material Storage Building elevations, April 1, 1948.

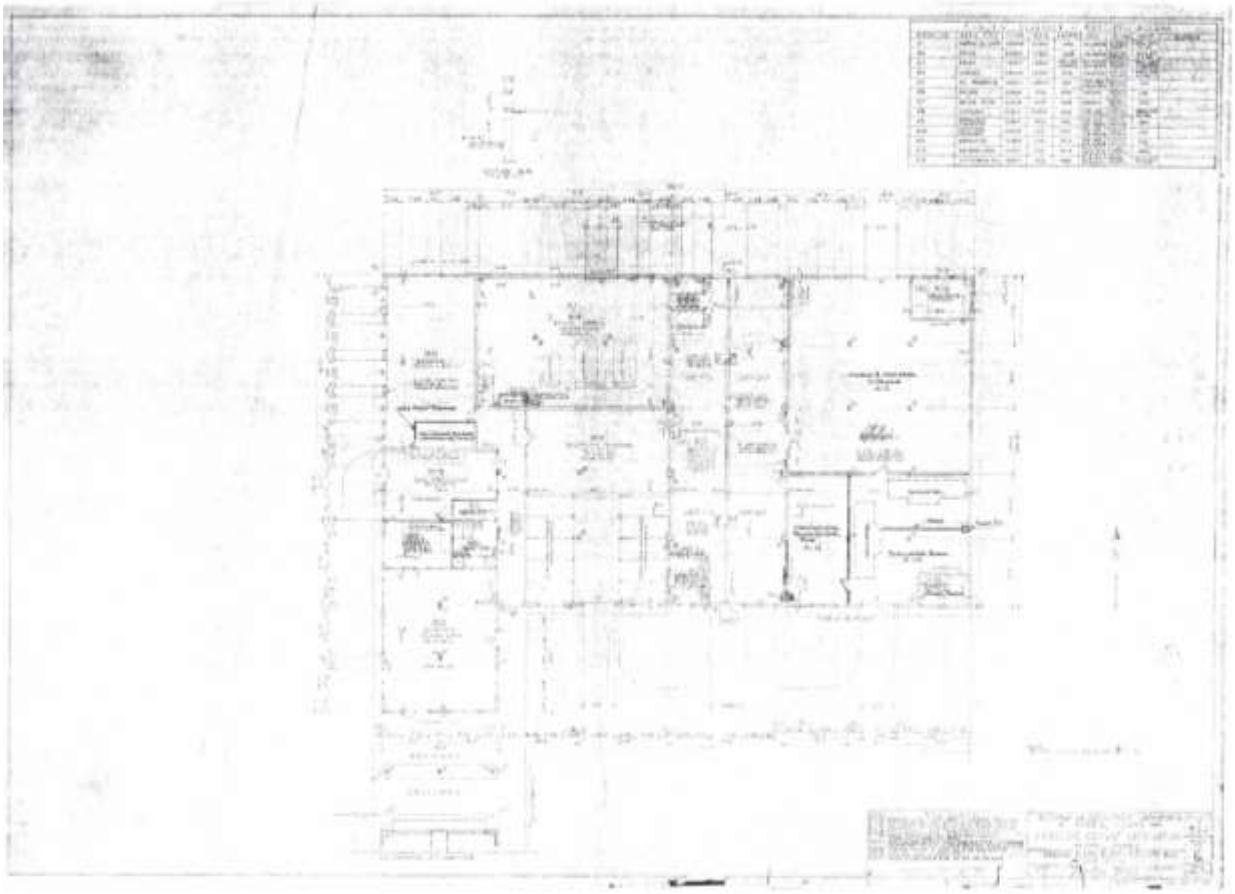


Figure 2: Carr & Wright, Material Storage Building, ground floor plan, April 1, 1948.

HISTORIC ILLINOIS BUILDINGS SURVEY

HIBS CK-2023-2

# PORTLAND CEMENT ASSOCIATION CAMPUS: ADMINISTRATION BUILDING

Location: The Administration Building is situated at the southwest corner of the former Portland Cement Association Campus, which is located at 5400-5420 Old Orchard Road in Skokie, Illinois. It is situated on a parcel that is bounded by Woods Drive on the east, Circuit Court of Cook County property on the west, a residential subdivision on the north, and Old Orchard Road and the Harms Woods Forest Preserve on the south. The property is located on Lot 1 of the Portland Cement Association Subdivision and includes part of the Northwest Fractional Quarter of Section 9, Township 41 North, Range 13, East of the Third Principal Meridian, in Niles Township, Cook County.

Present Owner: TD 5400 Old Orchard, LLC

Present Use: Vacant

Significance: In 1968, the Portland Cement Association (PCA) moved its headquarters from Chicago to this new office building on its Skokie campus, consolidating operations at what was then known as the Cement and Concrete Center. The Association's relocation of its headquarters from Chicago to Skokie was indicative of the dispersal of corporate offices from city centers to suburbs strung out along newly built expressways in the post-World War II era. The walls of its $1.5 million office building, designed by Perkins & Will, featured 574 precast concrete panels that were fabricated by J.W. Peters and Sons of Burlington, Wisconsin, in just 14 weeks. The cutting-edge, dual purpose precast concrete panels have integrated window frames infilled with strips of single-pane glass. Full-height concrete piers divide the building's facades into bays and create a rationalist grid design. The PCA moved its administrative offices to Washington, D.C. in 2012; however, its Skokie office building continued in use for the organization's regional promotion and advocacy efforts until 2023.

## PART I. HISTORICAL INFORMATION

A. Physical History

1. Dates of construction: 1967-68

2. Architect: Perkins & Will, Chicago

3. Contractor/Builder: J.W. Peters and Sons, Burlington, Wisconsin

4. Alterations and Additions:
This building has excellent architectural integrity and is virtually unchanged from its original appearance. A comparison between the original and current floor plans shows that some larger interior spaces in the central block and the north wing were later subdivided into offices.

B. Historical Context:
See the Cover Document for the following contextual essays:

1. Overview History of the Portland Cement Association
2. Post-World War II Suburban Office Development
3. Development of the Portland Cement Association Campus in Skokie
4. Carr & Wright, Architect of the Research Building and Material Storage Building
5. Dunlap & Esgar, Architect of the Structures Laboratory
6. Paul K. Kufrin, Sculptor of the Structure Laboratory's Vestibule Panels
7. Perkins and Will, Architect of the Administration Building

## PART II. ARCHITECTURAL INFORMATION

A. General Statement
The Administration Building is a flat-roof, two-story with basement edifice featuring an overwhelmingly horizontal appearance and an irregular, zigzag footprint. The walls are comprised of precast concrete panels with a raw, grey concrete finish and spandrels with an exposed aggregate comprised of white cement, white silica sand, and Romeoville crushed limestone. The dual purpose precast concrete panels have integrated window frames infilled with strips of single-pane glass that alternate with full-height concrete piers which divide the building's facades into bays and create a rationalist grid design. The ends of each wing and the building's main entrance bay are all sheltered by massive, cantilevered concrete canopies. The lobby features terrazzo flooring and a wood burning fireplace sheathed in concrete with an exposed aggregate.

B. Description of Exterior

1. Over-all dimensions
The building's zigzag footprint has overall dimensions of approximately 241'-0" (east-west) by 140'-2" (north-south)

2. Walls
The walls feature 574 precast concrete panels that were fabricated by J.W. Peters and Sons of Burlington, Wisconsin. The raw concrete panels of grey concrete incorporate spandrels with an exposed aggregate comprised of white cement, white silica sand, and Romeoville crushed limestone, which provide a decorative appearance. The dual purpose precast concrete panels have integrated window frames infilled with strips of single-pane glass and alternate with full-height concrete piers which divided the facades into bays and created a rationalist grid design.

3. Canopies
The building has a pinwheel design, and the ends of each of its wings—and its east-facing entrance bay—are sheltered by massive, cantilevered concrete canopies.

4. Structural system
The building utilizes reinforced concrete construction.

5. Terraces, Ramps, Stairways
A raised terrace comprised of brick pavers and featuring concrete benches is situated along the front (east) façade. The building has two exterior metal stairways: one each along the north and south facades of the north wing. An accessible concrete ramp is situated along the west façade.

6. Openings:

a. Doorways and doors
The main entrance on the east side of the building has a pair of plate glass doors. Other exterior doors are plate glass with metal frames, or metal.

b. Windows
Fenestration is comprised of fixed, single-pane windows that are arranged in horizontal strips in each bay.

7. Roof

   a. Shape, covering
      The building has a flat, concrete slab roof covered with a built-up membrane.

C. Description of Interior:

1. Floor plans
   The building features a pinwheel design with a central block, from which a north wing extends eastward, and a south wing extends westward. Circulation is provided through two stairwells and two passenger elevators. The basement has utility/mechanical rooms and a variety of classrooms. The main lobby is situated on the east side of the central block. The remainder of the first-floor plan and the plan of the second floor is mainly comprised of offices that extend along the perimeter walls separated from larger workspaces used by secretarial staff by glass partition walls.

2. Stairways
   The building has two stairwells: one in the central block and one in the south wing. Each has walls finished with square, cement blocks with a smooth finish, concrete stairways covered with carpeting, and metal railings.

3. Elevators
   The building has two passenger elevators with aluminum doors: one in the central block and one in the south wing.

4. Flooring
   Flooring in virtually all spaces throughout the building is covered with wall-to-wall carpet tiles. Exceptions include the lobby and toilet rooms, which are finished in terrazzo, and some basement spaces, which are finished with vinyl tiles or have exposed concrete flooring.

5. Wall and ceiling finish
   Partition walls are primarily comprised of cement blocks of various shapes and textures, and some feature exposed aggregate. Offices arranged along perimeter walls are generally separated from adjacent workspaces by continuous glass partition walls. Ceilings are finished with lay-in acoustical tile systems or are comprised of exposed concrete.

6. Openings

   a. Doorways and doors
   Typical interior doors are hollow wood or metal with accessible metal handles.

7. Mechanical equipment

   a. Heating
   The entire complex is climate controlled; it is cooled by air-conditioning equipment and heated by gas boilers.

   b. Lighting
   Fluorescent lighting strips are used throughout the building. They are either suspended from the concrete ceiling or incorporated within acoustical tile ceiling systems.

   c. Plumbing
   Women's and men's toilet rooms throughout the building have standard sinks as well as toilets with metal partitions.

D. Site:

1. General setting and orientation
   See Cover Document.

## PART III. SOURCES OF INFORMATION

A. Architectural Drawings:
TD 5400 Old Orchard, LLC, the property owner, provided original architectural drawings by Perkins & Will for review in the development of this HIBS recordation, some of which were scanned and are attached to the end of this report.

B. Bibliography: See Cover Document.

C. Likely Sources Not Yet Investigated: See Cover Document.

D. Supplemental Material: All color digital photographs of the Administration Building that are attached to this report were taken by Jean L. Guarino on June 16 and June 19, 2023.

## PART IV. METHODOLOGY OF RESEARCH

A. Research Strategy: See Cover Document.

B. Actual Research Process: See Cover Document.

C. Archives and Repositories Used: See Cover Document.

D. Project Team: See Cover Document.

## PART V. PROJECT INFORMATION

This HIBS documentation project was undertaken to mitigate the adverse effects of TD 5400 Old Orchard, LLC's Development Project on cultural resources within the project area. The terms of the mitigation were agreed upon and executed to ensure compliance with the Illinois State Agency Historic Resources Preservation Act (20 ILCS 3420).

Photograph 1: Central entrance block showing raised terrace and concrete benches, view northwest.


Photograph 2: Central entrance block, view west.

Photograph 3: Detail of entrance terrace with concrete benches, view north.

Photograph 4: South wing (left) and central block (right), view southwest.

Photograph 5:  Detail of north wing, view south.

Photograph 6: South wing (left) and north wing (right), view southwest.

Photograph 7: Detail of north wing, view southwest.

Photograph 8: North wing, view south.

Photograph 9: North wing, view southeast.

Photograph 10: Detail of central block (left) and stair tower (right), view southeast.

Photograph 11: Detail of stair tower.

Photograph 12: Stair tower, view east.

Photograph 13:  Detail of concrete spandrel with exposed aggregate.

Photograph 14: Detail of south wing, view southeast.

Photograph 15: South wing, view southeast.

Photograph 16: South wing, view northeast.

Photograph 17:  Lobby with terrazzo flooring, view northeast.

Photograph 18: Lobby fireplace.

Photograph 19: Main lobby, view south.

Photograph 20: First floor hallway.

Photograph 21: First floor workspace.

Photograph 22: First floor office with glass partition wall.

Photograph 23: First floor office.

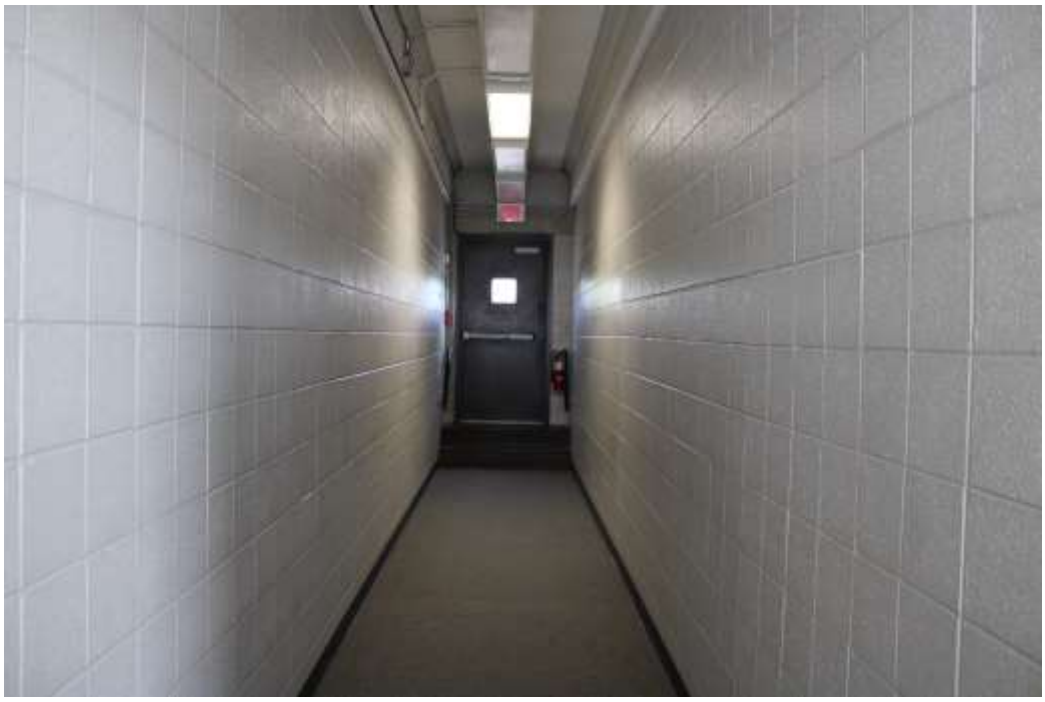
Photograph 24: First floor work space.

Photograph 25: First floor workspace.

Photograph 26: Typical men’s toilet room.

Photograph 27:  Typical stairwell.

Photograph 28: Second floor workspace separated from perimeter offices by a glass partition wall.



Photograph 29: Second floor corridor.


Photograph 30: Second floor corridor.

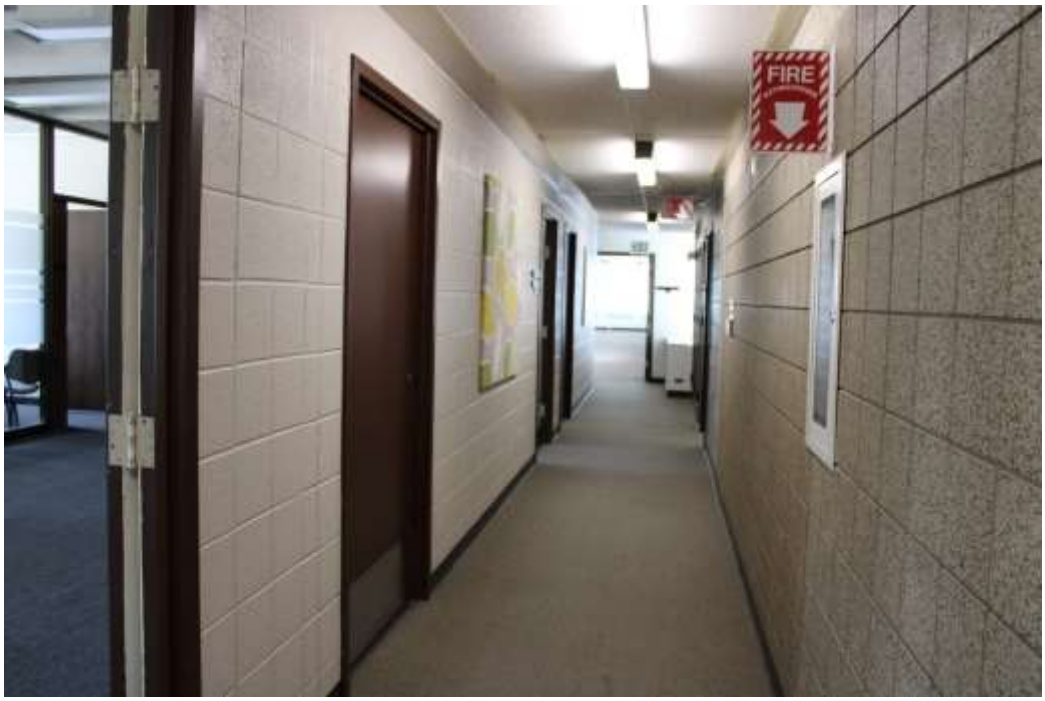
Photograph 31: Second floor workspace with glass partition wall.

Photograph 32:  Second floor office.

Photograph 33: Second floor office.

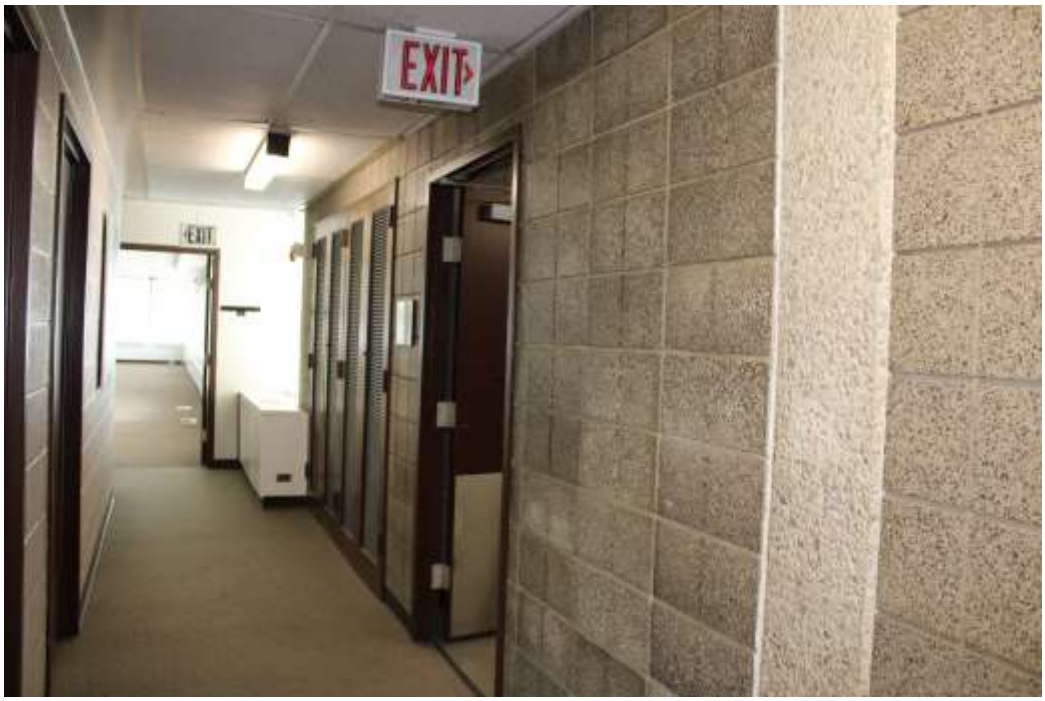
Photograph 34: Second floor corridor detail.


Photograph 35: Second floor elevator lobby.



Photograph 36: Second floor corridor.


Photograph 37: Second floor office.




Photograph 38: Second floor office.


Photograph 39: Basement elevator lobby.

Photograph 40: Basement.

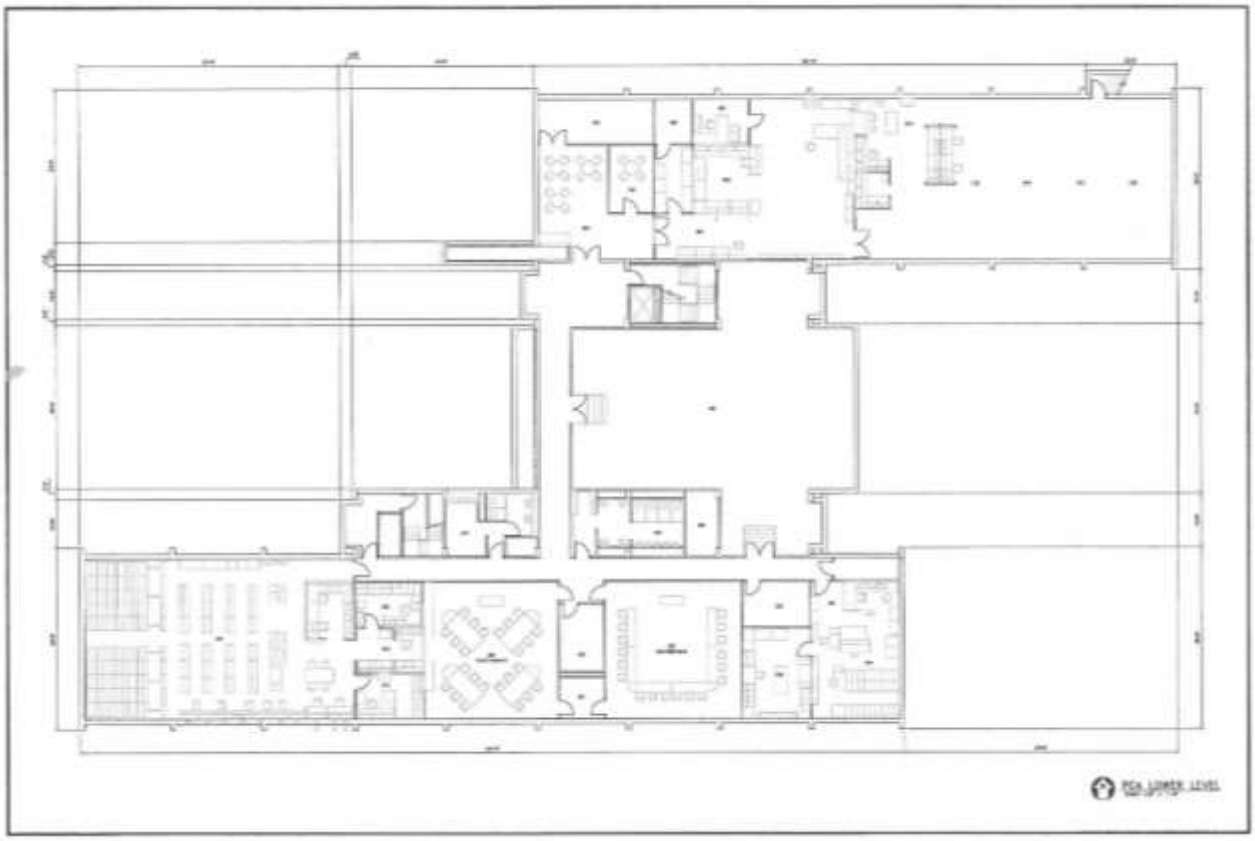
Photograph 41: Basement corridor.


Photograph 42: Basement.


Photograph 43: Basement corridor.

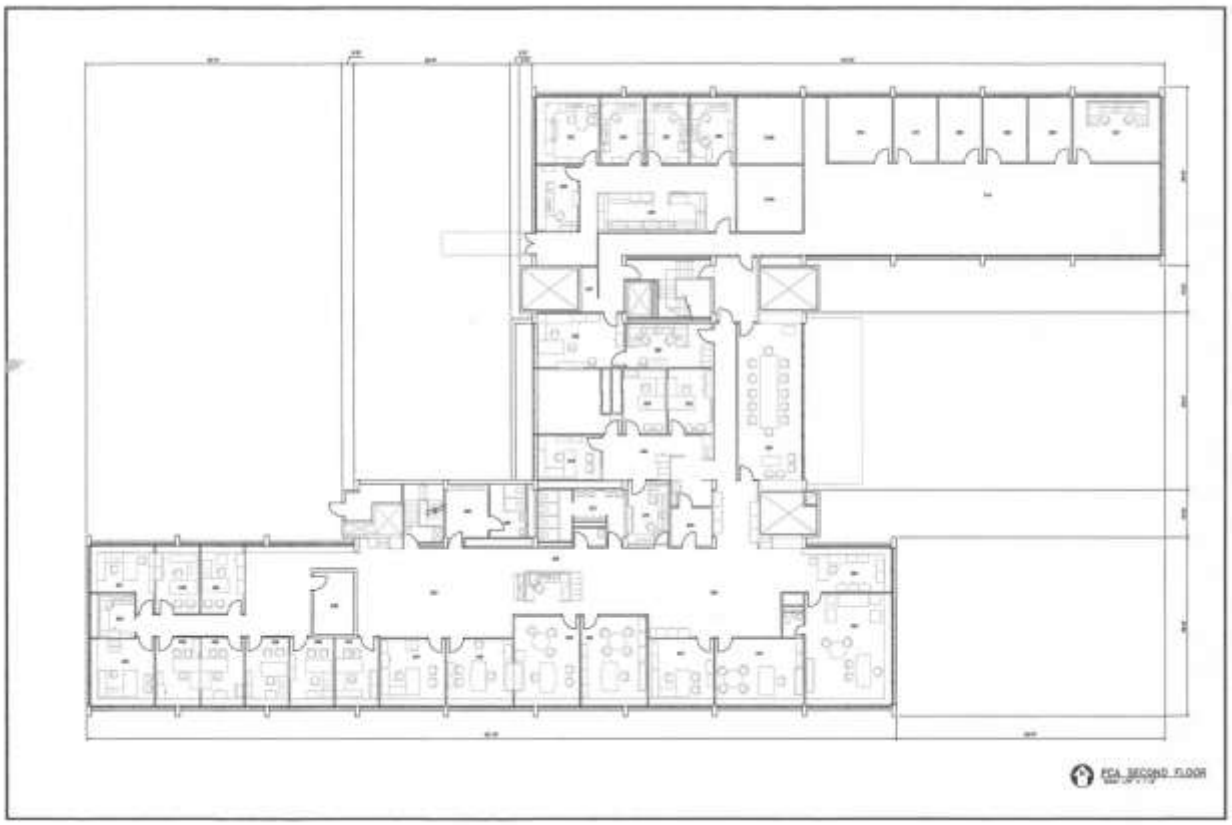
Photograph 44: Basement classroom.

Photograph 45: Basement classroom.

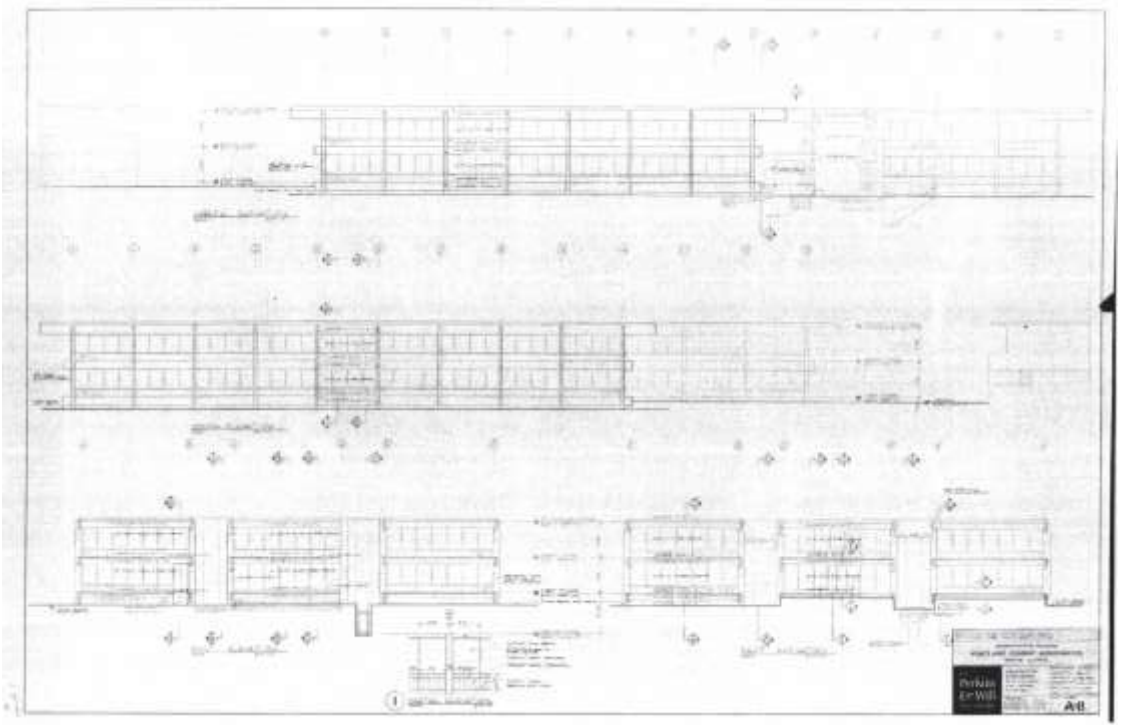


Administration Building, basement plan, 2023.

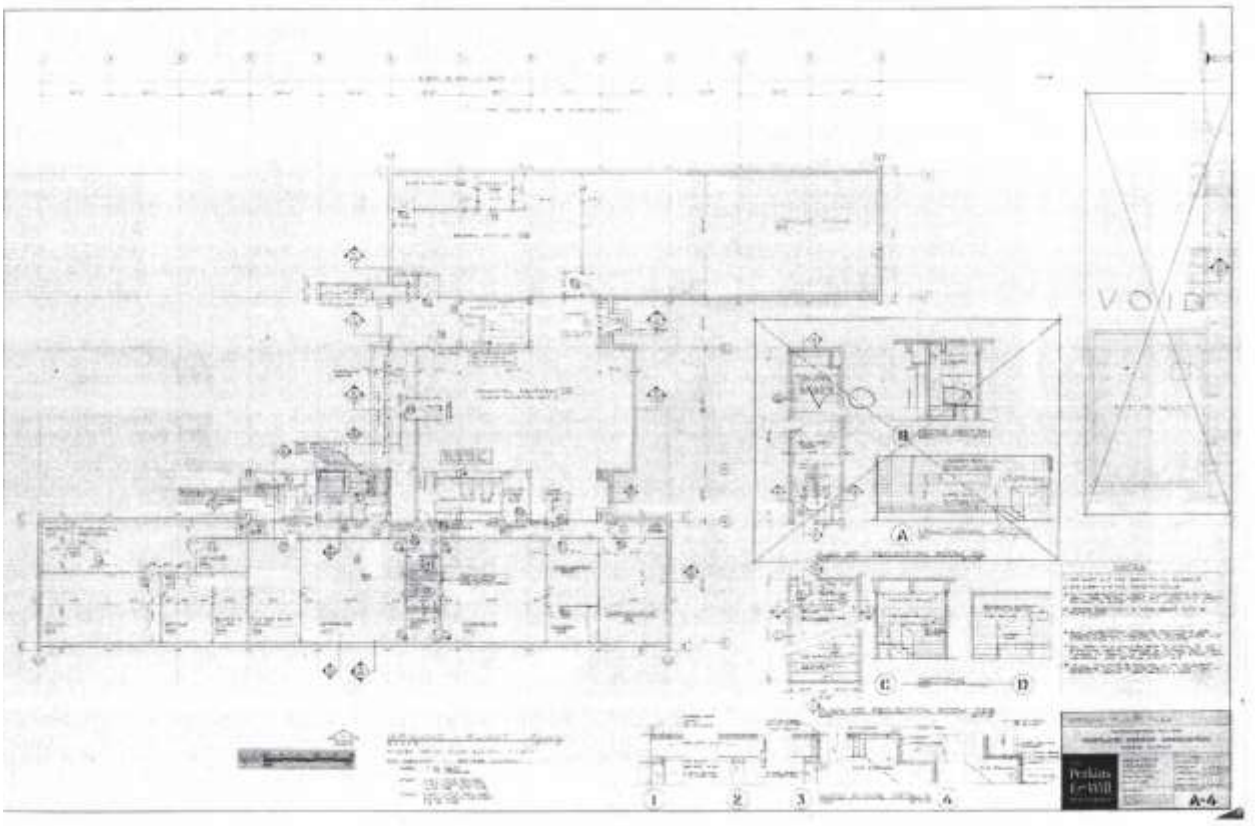
Administration Building, first floor plan, 2023.



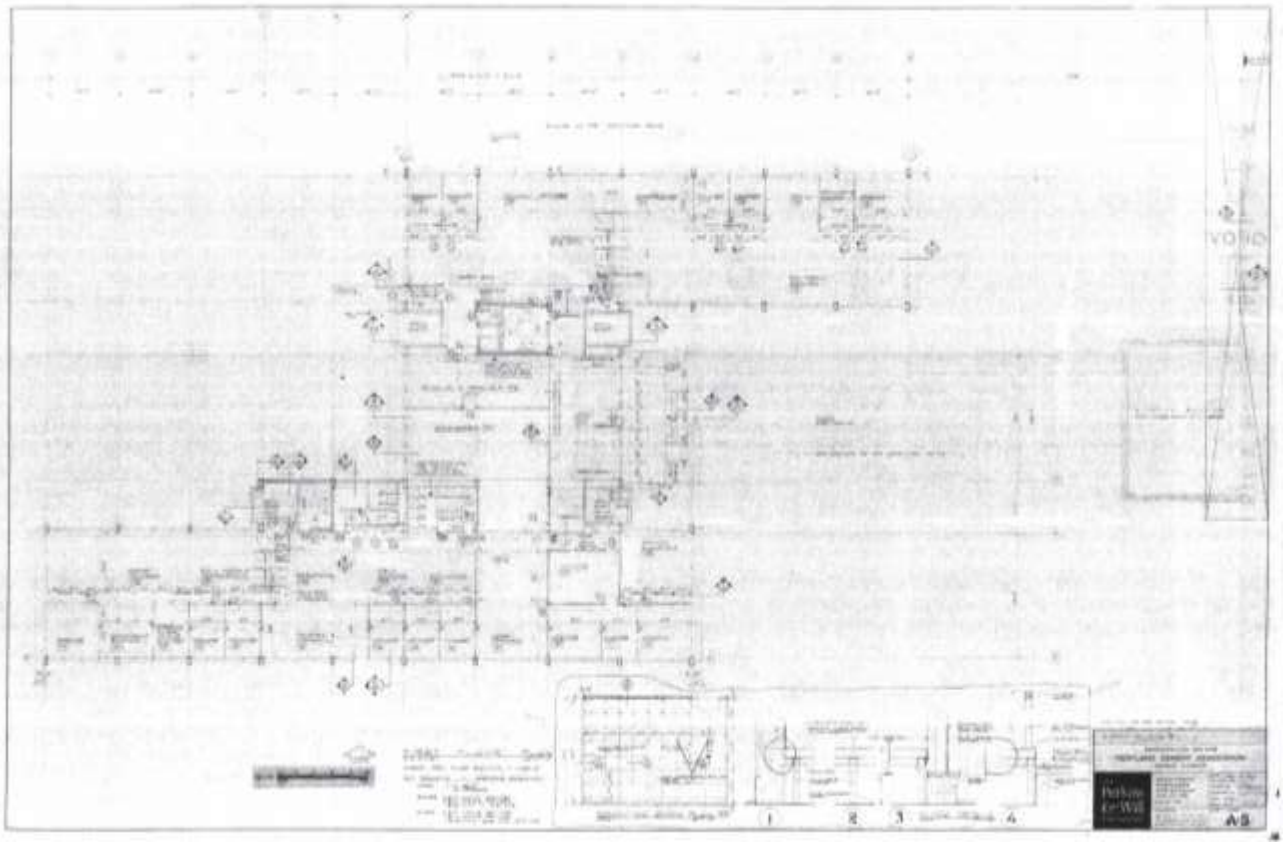

Administration Building, second floor plan, 2023.



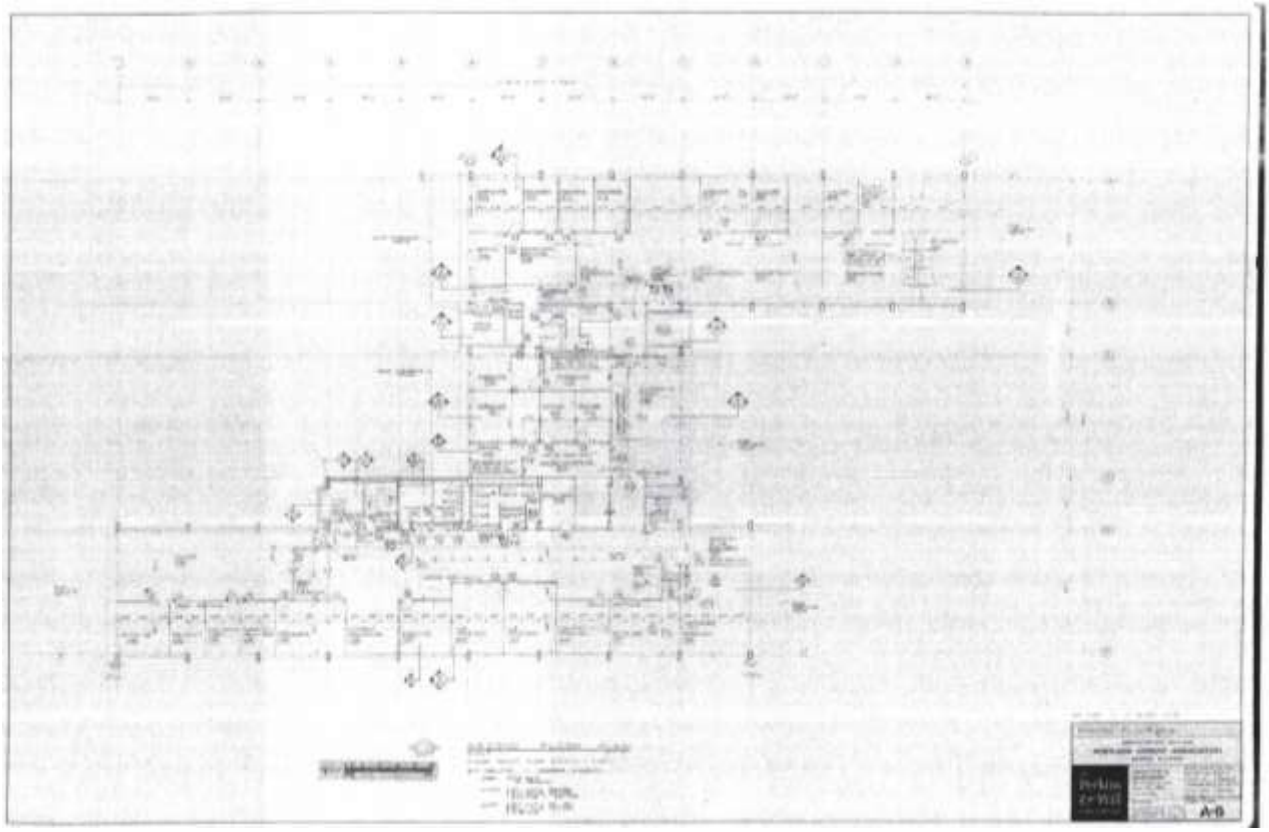
Perkins & Will, Administration Building, elevations, March 15, 1967.




Perkins & Will, Administration Building, basement plan, March 15, 1967.



Perkins & Will, Administration Building, first floor plan, March 15, 1967.



Perkins & Will, Administration Building, second floor plan, March 15, 1967.

PCA Administration Building, view north.
Hedrich-Blessing Photograph Collection, Job File HB-32054, Chicago History Museum.

PCA Administration Building, view southwest.
Hedrich-Blessing Photograph Collection, Job File HB-32054, Chicago History Museum.

PCA Administration Building, view southwest.
Hedrich-Blessing Photograph Collection, Job File HB-32054, Chicago History Museum.

PCA Administration Building, view northwest.
Hedrich-Blessing Photograph Collection, Job File HB-32054, Chicago History Museum.

PCA Administration Building, view west.
Hedrich-Blessing Photograph Collection, Job File HB-32054, Chicago History Museum.

PCA Administration Building, view northwest.
Hedrich-Blessing Photograph Collection, Job File HB-32054, Chicago History Museum.

PCA Administration Building, lobby.
Hedrich-Blessing Photograph Collection, Job File HB-32054, Chicago History Museum.

PCA Administration Building, offices.
Hedrich-Blessing Photograph Collection, Job File HB-32054, Chicago History Museum.

PCA Administration Building, conference room/hallway.
Hedrich-Blessing Photograph Collection, Job File HB-32054, Chicago History Museum.

PCA Administration Building, office.
Hedrich-Blessing Photograph Collection, Job File HB-32054, Chicago History Museum.

PCA Administration Building, west wall of lobby.
Hedrich-Blessing Photograph Collection, Job File HB-32054, Chicago History Museum.