### NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-900

OMB No. 1024-0018

S.R. CROWN HALL

USDI/NPS NRHP Registration Form (Rev. 8-86)

 $\begin{tabular}{ll} Page 1\\ National Register of Historic Places Registration Form \end{tabular}$ United States Department of the Interior, National Park Service

1. NAME OF PROPERTY	
Historic Name: S. R. Crown Hall	
Other Name/Site Number:	
2. LOCATION	
Street & Number: 3360 South State Street	Not for publication:_
City/Town: Chicago	Vicinity:
State: IL County: Cook Code	: 031 Zip Code: 60616
3. CLASSIFICATION  Ownership of Property Private: X Public-Local: Public-State: Public-Federal:	Category of Property Building(s): X District: Site: Structure: Object:
Number of Resources within Property Contributing  1 — — — — 1 Number of Contributing Resources Previously List Name of Related Multiple Property Listing: n/a	Noncontributing buildings sites structures objects 0 Total  ted in the National Register: 0

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# 4. STATE/FEDERAL AGENCY CERTIFICATION

As the designated authority under the National Historic Pr that this nomination request for determination or registering properties in the National Register of Historic I requirements set forth in 36 CFR Part 60. In my opinion, was National Register Criteria.	of eligibility meets the documentation standards for Places and meets the procedural and professional
Signature of Certifying Official	Date
State or Federal Agency and Bureau	_
In my opinion, the property meets does not mee	et the National Register criteria.
Signature of Commenting or Other Official	Date
State or Federal Agency and Bureau	_
5. NATIONAL PARK SERVICE CERTIFICATION  I hereby certify that this property is:	
Entered in the National Register Determined eligible for the National Register Determined not eligible for the National Register Removed from the National Register Other (explain):	
Signature of Keeper	

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# **6. FUNCTION OR USE**

Historic: Education Sub: College

Current: Education Sub: College

# 7. DESCRIPTION

Architectural Classification: Modern - International Style/Miesian

Materials:

Foundation: Concrete

Walls: Metal (steel), Glass

Roof: Metal (steel), bitumen & gravel

Other: Travertine marble (south porch entrance steps)

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### Describe Present and Historic Physical Appearance.

Located on the Illinois Institute of Technology's architecturally important campus, S.R. Crown Hall (1950-56) has long been considered the most important building among the many (19) Mies van der Rohe designed buildings on campus. Mies himself considered S.R. Crown Hall to be the clearest statement of his philosophy of a universal building type, which was associated with what has come to be called the "International Style." However, within this architectural style, there is a complete and distinct genre and style more precisely known as "Miesian", due to its very specific synthesis of technology, materials, detailing and design. Crown Hall is the epitome of both.

### **Main Campus**

The main campus is located on the near South Side of Chicago between 31st and 35th streets, and is bisected by the north-south running State Street corridor. The Dan Ryan Expressway (I-90/94) defines the west side of the campus and the east side is bordered by Michigan Avenue.

The master-planned campus (designed by Mies) is comprised of fifty-five buildings on 120 acres in a very urban setting. Conceived of as a rational and park-like space, Mies designed nineteen of the fifty-five buildings during his directorship of the architectural program from 1938 to 1958. According to noted Mies biographer Franz Schulze, Mies created the master plan on a grid system as a response to

the unremitting flatness of IIT's South Side site, as well as the eight-blocks-to-themile rhythm of Chicago's constraining rectilinear grid city plan. The unit length (of the buildings) is twenty-four feet in both directions, with half of that meant as the modular height of the interiors. The space between (the buildings) as well as within the campus was organized accordingly... Twenty-four feet matched the dimensions of standard American classrooms and laboratories, and modularity made for uniform, thus cheaper, building components which could be organized in a variety of ways.<sup>1</sup>

The grid also guaranteed future architectural unity and integrity, which is little changed today.

The plan laid out two symmetrically balanced groups of buildings, and the open spaces between the buildings were meant to be miniature parks, a few of which were personally designed and planted by a former Mies student, notable faculty member, and landscape architect Alfred Caldwell (1903-1998). Rather than feeling enclosed, walled-in and static in the "open" spaces, Mies' open spaces have a free-flowing, meadow like quality. They are planted with native species such as American elm, honey locust, and hawthorn trees.

The four most important buildings that were precursors to Crown Hall are Perlstein Hall (1945-46), Alumni Memorial Hall (1945-46), Wishnick Hall (1945-46), and Siegel Hall (1945-46; constructed '56-57). These buildings are north of Crown Hall (Figure 1).

Alumni Memorial (1945-46) was Mies' first classroom building on campus, and

Franz Schulze, Mies van der Rohe, A Critical Biography. Chicago: Univ. of Chicago Press, 1985, 221.

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had much of the look of a Merrill-Schupp box built on a steel frame with brick and glass infill. There is a fireproofed structural steel frame, which is enclosed by a skin of welded steel members, with infill of buff-colored brick panels and plate glass windows set in aluminum sashes. The vertical rhythm of the elevation concludes emphatically at each end of the building in a complex serrated corner.

Mies' treatment of this last element was his way of distinguishing between the primary structure of the building and the secondary structure of the skin. The former consisted of wide-flange columns encased in fireproofing concrete and covered with steel plates, the latter, of I-beams welded to the steel plates. Each of these components and their connections were *expressively* exposed at the corner, while a negative reveal between I-beam and brick infill avoided a possibly untrue adjacency between the edges of the two materials.<sup>2</sup>

All but Perlstein Hall (1945-46) have these "serrated" corner treatments. These buildings' primary materials are plate glass, steel, aluminum, and brick with black or gray terrazzo flooring inside. As noted previously, all four buildings are composed of modular units. Each bay is 24 feet long by 24 feet wide and 12 feet high, to allow maximum flexibility in laying out the interior rooms. Therefore, the facades reflect the plan of the buildings and the supporting steel grid of the curtain wall system implicitly suggests the steel structure within.

### S.R. Crown Hall

South of Siegel Hall stands S.R. Crown Hall (1950-56), initially called the Industrial Design and Architecture Building. Crown Hall is located immediately south of a rectangular lawn that runs along the east side of Siegel Hall; this space was recently re-designed and re-planted by landscape architect Peter Lindsay Schaudt. Peter Lindsay Schaudt Architects based the design and plantings on his interpretation of Alfred Caldwell's original vision for the campus landscape, which was not fully realized due to a lack of resources. A smaller lawn with mature trees lies immediately west of this space, separated by a 6' wide sidewalk that runs north-south.

Facing these fields is the north elevation of S.R. Crown Hall. Described by the internationally renowned and respected architect Peter Carter, a former graduate student (1957-58) of Mies van der Rohe, who also worked in Mies' firm from 1958-68,

Crown Hall represents the first large-scale realization of Mies van der Rohe's concept for a clear-span/universal-space building. Housing IIT's School of Architecture and City Planning and the Department of Design, this building consists of a 120 foot wide by 220 feet long, 18-foot high column-free hall (known now as the Upper Core), in which the space is subdivided by low free-standing wall and two non-structural service shafts into student work areas, a central exhibition space and administration corral. The hall is raised 6 ft above the ground in order to provide natural light and ventilation for the workshops and lecture rooms located on the floor below. From the south the building is

<sup>&</sup>lt;sup>2</sup>Franz Schulze, Mies van der Rohe, A Critical Biography. Chicago: Univ. of Chicago Press, 1985, 224-25.

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approached by a broad flight of steps, interrupted at mid point by a floating platform; this structure is separately articulated from both the building and the ground, and upon mounting it one is imperceptibly lifted from the one to the other.

Building's structure and materials. Four externally exposed steel bents – located at 60 ft intervals – carry a steel framed roof, which in turn cantilevers in the longitudinal direction 20 ft beyond the end supporting members. The building's substructure is of re-enforced concrete construction and is independent of the superstructure. The skin is composed of welded steel components and is glazed with clear and translucent glass. All exposed steel is painted black. The exterior stairs are steel framed and paved with travertine. In the interior, the floors are either dark gray terrazzo with black and white flecks or black Formica tiles, the ceiling is a white acoustic gypsum tile, the walls of the two service shafts are plastered and painted white, and the freestanding walls are paneled in oak.<sup>3</sup>

Building Module	10 ft
Overall dimension of plan	120 X 220 ft
Gross area per floor	26,000 sq ft
Structural bay	60 X 120 ft
Roof Cantilever	20 ft
Depth of roof girder	6 ft 3 in
Clear height of main floor	18 ft
Clear height of lower floor	12 ft
Height of main floor above grade	6 ft
Height of building	27 ft 5 in

Through its careful details and clear proportions, the technologically advanced glass and steel structure of Crown Hall is the equivalent of the ornament. Inside the building, the space is almost completely unobstructed, creating an expansive and free workspace for the open and collaborative exchange of ideas through cooperative learning. Crown Hall is one of the earliest examples and precursors of a large-scale, long-span pavilion and universal space, a flexible building type Mies later used in his Federal Center Post Office (1959-64) in Chicago and the New National Gallery (1962-67) in Berlin.

### Physical Description of Exterior

S.R. Crown Hall's primary orientation is to the south. To enter the building, one is guided up to a wide terrace called the South Porch. Framed in steel and supported only at four points by steel columns, the terrace is paved with white travertine marble. These travertine steps lead up to the terrace and then to a smaller landing before the doors. The steps have open risers, giving the appearance that the steps are floating. This effect has been described as a delight "to the mind, which recognizes that the steps belong specifically to neither the ground nor the wall plane and appreciates their not clogging the intersection." Only the inclusion of thin metal handrails, painted black, provides a sense of verticality and enclosure. Two pairs of Ellison stainless steel doors mark the entry.

<sup>&</sup>lt;sup>3</sup>Peter Carter, Mies van der Rohe at Work. Phaiden Press Ltd., 1974 (1999), 86.

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The exterior skin is fully glazed, with the glazing divided into three horizontal layers. The top layer consists of large panels of clear glazing, approximately 9 feet, 7 inches wide by 11 feet, 6 inches tall. Vertical steel I-beams running the full height of the building provide a frame between each light. The middle layer runs from the base of the main floor to a height of 7 feet, 9 inches. A horizontal steel mullion separates this layer of glazing from that above. A second, similar vertical mullion divides each middle-glazing bay into two lights. The middle section of glazing is translucent, except in the center structural bays flanking the entries on the north and south elevations. At the base of each translucent light is a louvered vent, approximately 8 inches tall that provides natural ventilation to the main hall. The lower layer of glazing is the clerestory windows for the basement level. These windows are also translucent and are 4 feet tall. A vertical mullion, similar to the windows above, divides each bay into two lights. The basement windows are operable and work in unison with multiple lights on a crank operated system.

A secondary entry on the north elevation is located in the center bay. There are two sets of Ellison stainless-steel double-doors that provide access to the main floor and mirror those on the south elevation. A concrete symmetrical landing at this entry can be reached from both the east and west by two sets of cast concrete steps. Floating just above this landing are two wide travertine steps that provide a vertical transition between the landing and the threshold. Two additional doors are also located on the north elevation, each just below and east and west of the bases of the upper landing steps. These doors permit access to the lower floor, and these entrances are accessed via concrete steps that descend to the lower level. These entrances are covered by double leaf, hollow steel doors. Thin metal handrails, painted black, provide a barrier along the edge of the lower level entrance cavity as well as around the elevated landing structure.

The roof is a flat built-up bitumen and gravel roof with interior roof drains. Originally a steel angle coping framed the edge of the roof, but this was changed to painted aluminum in 1997. A 40-foot square penthouse lies at the center of the roof and is approximately 6 feet tall. The penthouse, which houses mechanical equipment, was originally designed with translucent glazing along the north and south elevations and ventilation louvers on the east and west sides.

All exterior steel is painted black. The original paint was Pre-War Superior Graphite # 30 (Natural Black), manufactured by the Detroit Graphite Company. Since 1956, the steel has been repainted at least three times, but according to various sources the original paint has never been fully stripped. All joints and connections are field welded; there are no visible mechanical assemblies. Welds are ground down to provide a seamless appearance.

### Physical Description of Interior

The main hall (called the Upper Core) is one of Mies' greatest universal spaces. The Upper Core is organized about an axis that runs north/south, creating symmetrical wings to the east and west. It is a single open hall with no permanent partitions or formal separation of spaces. The building itself is organized on two floors, with the main floor raised about 6 feet above grade to allow natural light and ventilation into the lower level through clerestory windows.

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The entire Upper Core flooring is terrazzo divided into 2 ½-foot by 5-foot segments. Virginia black and Tennessee gray marbles make up the aggregate. The cement binder is black. Overall, the visual effect is of a charcoal gray color. A radiant heating system is embedded in the terrazzo flooring.

The only features that rise from floor to ceiling are two vertical chases set approximately 80 feet apart and about 40 feet from the north side of the room. Built of hollow clay tile, the chases are finished in plaster painted white. Narrow plaster reveals circle the top of each chase at the intersection with the ceiling. Similar reveals at the base are of terrazzo.

Leading to the basement from the Upper Core are two internal staircases that puncture the main floor. The stairs are set approximately 50 feet apart and 40 feet north of the south curtain wall. Thin metal handrails, painted black, frame the rectangular floor openings. The stairs are cast terrazzo set within steel stringers.

The space within the main hall is partially defined by freestanding, oak-wood partitions. Standing 7 feet, 9 inches tall, the partitions help define the open space without interrupting the overall view and expansive feeling of the large hall. Each partition has a slight reveal along each edge, with the bottom reveal being wider than the top and sides. The partitions are clad in plywood veneer with solid hardwood perimeters. Both plywood and solid hardwoods are quarter-sawn Appalachian White Oak, originally finished with Pratt and Lambert Special Oak Stain. All panels are reported to be original, though they have all been refinished.

Two of the wood partitions frame an entry exhibition space just inside the south entry. The partitions are set approximately 45 feet apart, and are 35 feet long. Just to the north of the exhibition space are another series of wood partitions. These serve to frame the north edge of the exhibition space and created semi-private office areas at the north side of the main hall. The administrative offices were relocated to the lower level in the 1980's. The configuration of the north side partitions has been altered several times in the building's history, but is currently in similar arrangement to the original. In plan, the partitions are typical Mies. Spaces are loosely defined and openings at the edges allow each space to spill over into another.

The ceiling is designed to appear as one continuous plane, floating separate from the exterior walls. A soffit runs the perimeter of the ceiling, which is held back from the exterior walls by approximately one foot. One-foot square acoustical tiles make up the ceiling finish. Recessed fluorescent lights, 16 feet long, are regularly spaced across the ceiling. Round ventilation diffusers and sprinkler heads are also recessed into the ceiling.

Although it was planned, the building was originally not air-conditioned. The air handling system only provided natural ventilation and forced hot air. To reduce solar heat gain and control light levels, Venetian blinds were originally installed on all top-level windows except those at the entry bays. Air conditioning has since been added and ceiling diffusers enable both supply and return air circulation.

In order to retain the purity of the space in the Upper Core, Mies created a lower level with standard divisions allowing for building services, toilet rooms, lecture rooms and other operational necessities. Either the two staircases descending from the Upper Core or from the lower level entrances on the north side provide access to the lower level. Circulation consists of a hallway that is U-shaped in plan. The two points on top of the U- shaped plan represent the north exterior doors. The hallways are connected

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at the south end by an open hall (called the Lower Core) to which the internal stairs descend. Toilet and mechanical rooms are placed within the U. Perimeter rooms incorporate lecture halls, administrative offices, a wood and model shop and studios. At the south side of the building, separated from the stair hall by a wall of glass is the Graham Resource Center (the college's library), installed in 1990.

Although numerous changes have been made to the basement over the years, the basic configuration and materials are similar to those of the original design. Walls typically consist of painted concrete block. Floors are composite tile, except in the stair hall and corridors, which are of the same terrazzo as the main hall. Ceilings are typically the underside of the main level's concrete slab. Light fixtures are ceiling, surface mounted fluorescent fixtures, 8 feet long.

Other than the modifications to the lower core of the building, little has occurred to detract from the building's integrity of structure, originality and exceptional spatial qualities. The floor plan and layout of the upper main core is essentially unchanged since its completion in 1956. While the arrangement of the drafting tables and the relocation of the College's administrative offices from behind the oak partition on the north side of the upper core to the lower level were important changes, they in no way affect the primary layout of the building's structure or basic plan. Otherwise, the building's exoskeleton structure and skin, interior upper core, and other basic components are in good condition and retain the exceptional spatial presence and condition they embodied when first constructed.

The building's setting is important because many of the originally planned plantings were designed, placed and personally planted by noted landscape architect and Mies collaborator Alfred Caldwell. The most significant landscape design features are the remaining/surviving plantings. These are the two Honey Locust trees on the east side of the building; the three Honey Locust trees on the south side of the building; and the one Honey Locust tree on the west side of the building. The Boston Ivy that climbs the skeletal steel structure of the building is also considered very important. All of the Honey Locust trees and Ivy as described above fall within the boundary and were placed and planted by Alfred Caldwell.

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### **8. STATEMENT OF SIGNIFICANCE**

Certifying official has considered the significance of this property in relation to other properties:

Nationally: X Statewide: Locally:

**Applicable National** 

**Register Criteria:** A B x C x D

**Criteria Considerations** 

(Exceptions): A\_B\_C\_D\_E\_F\_G\_X

NHL Criteria: Criteria 2 & 4

NHL Exception: 8

NHL Theme(s): III. Expressing Cultural Values

5. Architecture, landscape architecture, and urban design

**Areas of Significance:** Architecture

**Period(s) of Significance:** 1950-1956

**Significant Dates:** n/a

**Significant Person(s):** Mies van der Rohe

**Cultural Affiliation:** n/a

**Architect/Builder:** Mies van der Rohe

**Historic Contexts:** XVI. Architecture

Z. Modern

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# <u>State Significance of Property, and Justify Criteria, Criteria Considerations, and Areas and Periods of Significance Noted Above.</u>

Like Philip Johnson's Glass House (1949 - designated a NHL in 1997), Ludwig Mies van der Rohe's (1886-1969) S.R. Crown Hall (1950-56), located on the Illinois Institute of Technology's main campus in Chicago, is a critically important monument in postwar construction. Taken on its own terms, the building epitomizes "Miesian" modern architecture as well as the International Style, which has long been considered - and historically accepted - as one of the 20th Century's most important and widely distributed architectural styles. Crown Hall also has both national and local significance because of its close personal and professional association with Mies van der Rohe (who was Director of the Department of Architecture from 1938-1958), and whose architecture and educational philosophy have had, and continue to have, a profound effect on the course of American architecture.

Crown Hall itself marks a historical distillation and crystallization of many Mies' most profound architectural ideas. The building is a bright illumination of the primary architectural principles and details of many of his previously unrealized European projects, and an exceptional precedent for many of his most notable buildings that would follow it in the remaining 10-15 years of his career. Mies personally stated that the building was "the clearest structure we have done, the best to express our philosophy," and he always considered it his best and most important building on IIT's campus<sup>4</sup>.

### Ludwig Mies van der Rohe (1886-1969)

Ludwig Mies van der Rohe is internationally recognized as one of the most important architects of the 20th Century, a founder of modern American architecture and the International Style of architecture. As both a practicing architect and teacher, his buildings and his educational principles influenced multiple generations of American architects, including such highly esteemed practitioners Philip Johnson, Richard Meier, Eero Saarinen, Sir Richard Rogers, Raphael Moneo, Myron Goldsmith, Kevin Roche, James Ingo Freed, I.M. Pei, Sir Norman Foster, Bruce Graham, Helmut Jahn, Dirk Lohan, Rem Koolhaas, and the firm Skidmore Owens and Merrill, who executed Mies principles in such famous Chicago buildings as the Sears Tower and the John Hancock Tower. Both his work and his pronouncements continue to receive critical reviews by such important institutions as the Museum of Modern Art in New York and the Canadian Center for Architecture, the latter of which is run by one of Mies' former students, Phyllis Lambert, who commissioned Mies' Seagram building in New York. Currently, both these institutions are organizing major retrospective exhibitions, which are re-assessing and re-affirming Mies' primacy in the historical canon of architecture. Finally, his significance to the nation was recognized in 1963, when President Lyndon B. Johnson awarded him America's highest civilian decoration, the Medal of Freedom.

Mies van der Rohe was born in Aachen Germany in 1886, and was named Maria Ludwig Michael Mies. After WWI and for professional reasons, he modified his name to Ludwig Mies van der Rohe. Mies was born into a modest, piously Catholic, middle class family. His father was a stonemason/marble worker, and this traditional, high craftsmanship profession was one that would significantly influence Mies' use of materials. However, little is known of Mies' early childhood due to a lack of written material, and also due to Mies' personal reticence about autobiographical accounting, which he emphasized near the

<sup>&</sup>lt;sup>4</sup>Donald Hoffman, Kansas City Times, July 17, 1963 (interview with Mies van der Rohe).

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end of his life during an interview with his grandson Dirk Lohan, "That's schoolboy stuff, isn't it?" However, the following biographical segments, arranged and culled from Franz Schulze's seminal biography *Mies van der Rohe*, describe the most significant phases of his life, and his cultural importance to our nation.

#### 1905-1918

As noted in Schulze's *Mies van der Rohe*, "the years between 1905 and 1918 – a period during which Germany advanced toward WWI, plunged headlong into it, and nearly drowned in the process – were the years of Mies' unhurried coming of professional age." In 1906/07 he had moved from Munich to Berlin, which coincided with a phase of enormous transition in the history of German architecture and design. During this most fateful of times, Mies would work with some of the most important and progressive architects during his tenure in Berlin, whose ideas would come to push his work toward the modernist manner, and whose principles he would fully adapt and later export - through architecture and education - to America.

During this time he worked for the design firm run by Bruno Paul, who at first followed the trend of the Jugendstil movement, which was most closely related to the French Art Nouveau movement. However, in 1905, when Mies began to work for him, Bruno began to adapt his design work to the sachlichkeit, a word whose meaning corresponds to a combination of matter-of-factness, objectivity and sobriety. Its iconography took the form of a hard geometry replacing the soft, organic curve of the Jugenstil, and a stripped down neo-classicism that stood for the virtue of simplicity and restraint. One of the first building projects that was to hint of this influence on Mies was the Riehl House (1906):

The Riehl House was united by a prevailing temper of cool reserve and painstaking exactitude of expression. Its most distinctive of features were the clean, clipped and severe to the point of chilliness, prefiguring the rock hard lucidities of Mies' later efforts: the proportions of the windows and doors in the *Halle*; the bold scale and controlled positioning of the windows in the study; the razor sharp indentations of the alcoves, plus the precise rendition of their parts; above all the south face, with its sure rhythms of square sectioned columns and spaces along the veranda, together with the wall which seamlessly extended the facade outward into space, past and around the garden, a device premonitory of the podiums upon which a number of his later buildings would perch.<sup>5</sup>

After the completion of this house, Peter Behrens, then Germany's leading architect hired Mies. Behrens was just 40-years old at the crest of his powers and newly occupied with a group of exceptional industrial commissions. He had already gained sufficient experience during these historically crucial years to be widely regarded as one of several principal agents of the changes through which German architecture was passing on its way to modernity. Two of the most significant projects that were highly influential on Mies were the AEG Turbine Factory in Berlin (1909 - a standard reference in all the major art/architectural history textbooks) and Behren's Kroller-Muller house project (1912), which Mies competed directly for after leaving Behren's employ in 1912, but like Behrens himself, did not receive the commission. Additionally, Mies was introduced to and worked with two other giants of modernism in Behren's office, Walter Gropius and Adolf Meyer. Gropius' first completely modern building was the

Franz Schulze, Mies van der Rohe, A Critical Biography. Chicago: Univ. of Chicago Press, 1985, 28.

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Faguswerk factory in Alfeld-an-der-Leine (1911), which has an emphatic relationship to the brick, steel and glass buildings designed on IIT's campus before Crown Hall.

#### 1919-1925

Franz Schulze notes in his introduction to this period of Mies' life that, "during the very period of the greatest ferment in the German arts of the twentieth century, we know the least about Mies' professional actions and thought, and not much more about his personal life." However, he goes on to note

Until as late as the mid-1920's he designed and built works in manners as traditional as anything in his prewar catalogue. Yet, at the very same time he was offering these concoctions to rich clients of the sort he had cultivated earlier, he was busy with a set of radical projects whose ultimate importance to the development of modern architecture was fundamental.<sup>6</sup>

Following the devastation of WWI and the ensuing collapse of the German economy, most of the more profound architectural projects took imagined forms. It was during this time that Mies befriended and was exposed to some of the most important artistic movements and artists to be found in Europe, including German Expressionism, Nietzschianism, Dada and the *Neue Sachlichkeit* movements. Mies was most sympathetic to the *Neue Sachlichkeit*, which architecturally emphasized a straightforward functionalism based on removing all unnecessary ornament and idealized historical references, and using a geometric vocabulary based on the ascendancy of industrial machine based production.

In 1921, one of the most important years in his life, Mies developed a close relationship with the artist Hans Richter, and they both joined the *November-gruppe*, a radical new society devoted to forwarding the revolutionary cause through the arts. Other influential members of this group include some of the most important and avant-garde artists and thinkers in Europe at the time including, Hans Arp, Tristan Tzara, Ludwig Hilberseimer (who Mies would later bring to IIT), Theo van Doesburg (prime leader of the Dutch de Stijl movement), El Lissitzky, Naum Gabo, Anton Pevsner, Frederick Kiesler, Man Ray, Philippe Soupault, Walter Benjamin, and Raoul Haussman. Mies' important relationships with Van Doesburg, Lissitzky and Richter over the next 3 years provided him with the basis of his philosophical and architectural principles that were defined by the first manifesto of de Stijl in 1918:

- 1. There is an old and a new consciousness of the age. The old one is directed toward the individual. The new one is directed toward the universal...
- 3. The new art has revealed the substance of the new consciousness of the age: an equal balance between the universal and the individual.
- 4. The new consciousness is ready to be realized in everything, including the everyday things of life.

Schulze comments on this movement's process of expunging of naturalistic references from painting and sculpture and historical references from architecture:

such a process of abstraction, of paring away of superficialities in order to reveal essences, struck Mies as the crucial method of arriving at vital form in the new arts, and the apparent purity of geometric form in both de Stijl and constructivism appealed to him more than the shaggy, capricious,

Franz Schulze, Mies van der Rohe, A Critical Biography. Chicago: Univ. of Chicago Press, 1985.

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crystalline angularities of expressionism. For geometry seemed the most rational product of abstraction, which was itself a rational mode of creative expression.<sup>7</sup>

The influence of these concepts are evident in Mies' famous statement made in 1924: "We are concerned today with questions of a general nature. The individual is losing significance, his destiny in no longer what interests us." It was also in 1921 that Mies submitted one of his most radical and important designs that reflected these broad concepts, the Friedrichstrasse Office Building project in Berlin. Immediately following this project he designed what is commonly referred to as the Glass Skyscraper project (1922). These two highly influential (but never built) projects reflected Mies' essential philosophical, structural and material concepts that he would later transpose to the qualities and details of S.R. Crown Hall, realized almost 30 years later. Although not a high-rise, some of the radical qualities of Crown Hall that are clearly inferred from Mies' comments (recorded in the magazine *Frulicht*, published by Bruno Taut, in 1921) are:

Only in the course of their construction do skyscrapers show their bold, structural character, and then the impression made by their soaring skeletal frame is overwhelming. On the other hand, when the facades are later covered with masonry this impression is destroyed and the constructive character denied, along with the very principle fundamental to artistic conceptualization. These factors become overpowered by a senseless and trivial chaos of forms. The best that can be said for such buildings is that they have great size; yet they should be more than a manifestation of our technical ability. Above all we must try not to solve new problems with traditional forms; it is far better to derive new forms from the essence, the very nature of the new problem. The structural principle of these buildings becomes clear when one used glass to cover non-loadbearing walls. The use of glass forces us to new ways.<sup>8</sup>

Some of Mies other important projects (both realized an unrealized) from this period which have a direct relationship to IIT's other buildings were the Brick Country House (1923/24); Concrete Country House (1923); and the Wolf House in Guben (1925-27).

#### 1925-1928

While many building projects for architects were rarely built during this time in Germany, due to the Weimar Republic's deepening financial crisis, the few projects that Mies realized during these three years mark the apex of his European career. These projects include the Weissenhof Housing Project (1927), the design of the German Pavilion for the Barcelona International Exposition (1928-29), the Hermann Lange and Josef Ester's brick houses in Krefeld (1927-30), and the Tugendhat House in Brno, Czechoslovakia (1928-30). Additionally, one of the most important and long lasting chair designs came out of this period, which is represented in almost every major museum collection in the world, (as well as any modernist corporate lobby), the ubiquitous Barcelona chair (1928).

The Weissenhof Housing Project consisted of 21 separate structures comprising sixty dwellings designed by the leading architects of the time. Organized by the Deutscher Werkbund, this housing colony project focused unprecedented international attention on the New Architecture and actively sought to promote its modernity. The executive committee appointed Mies as the artistic director of the

<sup>&</sup>lt;sup>7</sup>Franz Schulze, Mies van der Rohe, A Critical Biography. Chicago: Univ. of Chicago Press, 1985.

Mies van der Rohe, "Hochhaus Project für Bahnhof Friedrichstrasse in Berlin," Frulicht 1 (Summer 1922), 122-24.

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exhibition and the final list of architects included: Mies, Gropius, Scharoun, Docker, Behrens, Poelzig, Hilberseimer, Le Corbusier, Oud, Stam, Schneck, Bruno and Max Taut, and Victor Bourgeois. This exhibition validated the philosophies and ideals of what came be known as the International Style, whose impact was felt in America through Philip Johnson's seminal exhibition "Modern Architecture: International Exhibition" held at the Museum of Modern Art in New York in 1932.

#### 1929-1938

In Germany in 1928, Mies was offered the directorship of the highly controversial and yet highly influential Bauhaus art and design school in Dessau Germany, which he initially declined. However, after two years of continuing frustration under the newly appointed director Hannes Meyer, Mies was again offered the position in 1930, which he promptly accepted. Mies remained in this position until the Bauhaus was officially dissolved as a state sponsored institution in 1932.

However, in America, Philip Johnson and Henry-Russell Hitchcock were curating one of the most influential architectural exhibitions in the United States. Johnson was in charge of the architectural department at the newly created Museum of Modern Art, and Hitchcock was his friend. The exhibition was a review of the newest and most radical European architecture built over the previous decade, and it featured work by Mies, Walter Gropius, Oud, and Le Corbusier. In fact, Alfred Barr, the director of MoMA, coined the exhibition's title "Modern Architecture: International Exhibition", and the catalogue title *The International Style*.

This exhibition came to define a whole school and movement of modern architecture, and Mies was clearly identified as one of its most influential practitioners. As noted by Alfred Barr Jr. in the catalogue preface, "the distinguishing aesthetic principles of the International Style as laid down by the authors are three: an emphasis upon volume- space enclosed by thin planes of surfaces as opposed to the suggestion of mass and solidity; regularity as opposed to symmetry or other kind of obvious balance; and, lastly, dependence upon the intrinsic elegance of material, technical perfection, and fine proportion, as opposed to applied ornament." This exhibition introduced Mies and these architectural principles to the American public, and the book soon became a standard text in the education of American architects.

In 1936, John Holabird of Chicago's well-known architectural firm Holabird & Root, wrote Mies offering him the directorship of the school of architecture in Chicago at the Armour Institute of Technology. Although Mies replied with interest, it was not until 1938 that he finally accepted the offer, after negotiating his ability to completely re-design the curriculum. On October 18, 1938 Armour Institute hosted a ceremonial dinner in honor of Mies' appointment, which included many heads of the leading architectural schools in the nation, Chicago's social elite, and dozens of the most important local architects, including Frank Lloyd Wright, who formally introduced Mies with these comments: "Ladies and gentleman, I give you Mies van der Rohe. But for me there would have been no Mies – certainly none here tonight. I admire him as an architect, respect and love him as a man. You treat him well and love him as I do. He will reward you."

#### 1938-1969

It was during this highly significant period when Mies was most intimately associated with the Department of Architecture, (which later became) the College of Architecture, at the Illinois Institute of Technology. From 1938 to 1958, Mies van der Rohe headed the department.

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In the United States, Mies' life fortunes changed. Following decades of unrealized projects, he succeeded in building most of what he designed after 1938, including all but a few of his most important proposals. Having spent most of the 1930's in a homeless frame of mind, he responded to the freedom and security of this new environment and became a naturalized American citizen in 1944. In turn the US welcomed him as a great artist at a time when it was especially prepared for the art he had to offer. In the last decade of this life he had only one peer among the world's architects – Le Corbusier (Wright died in 1959) – and even Le Corbusier did not match him in the influence he exerted on the world's urban landscape. Mies' sway over post-WWII architecture can be measured on the one hand by the rectilinearization of the skylines of all major international cities and on the other by the force of rebellion against his principles which rose up after his death in 1969.<sup>9</sup>

Some of his most important building projects competed during this time were: The IIT campus; 880-860 North Lake Shore Drive apartments, Chicago, Illinois (1948); Farnsworth House, Plano, Illinois (1946-51); Cullinan Hall, Museum of Fine Arts, Houston, Texas (1954); Seagram Building, New York City, New York (1954-58); Bacardi Office Building, Mexico City, Mexico (1957-61); Pavilion Apartments and Town Houses, Lafayette Park, Detroit, Michigan (1958); Federal Center, Chicago, Illinois (1959-64); New National Gallery, Berlin (1962-67); Dominion Center, Toronto, Canada (1963-69); Martin Luther King Memorial Library, Washington, DC (1965-68); Brown Wing, Museum of Fine Arts, Houston, Texas (1965-74); and the IBM Regional Office Building, Chicago, Illinois (1966-69).

Finally, Mies van der Rohe's national significance is reflected in the many accolades, awards and honors he won throughout his life. Some of the most important were: America's highest civilian decoration, the Medal of Freedom (1963); Germany's highest civilian decoration, the Knight Commander's Cross of the German Order of Merit; Gold Medal of the Royal Institute of British Architects (1959); membership in the Academie d'Architecture in Paris (1958); Fellow of the American Academy of Arts and Sciences (1956); Honorary Senator in West Germany's Academy of Arts; Gold Medals from the American Institute of Architects, the Architectural League of New York, the National Institute of Arts and Letters, the Institute of German Architects, and the Chicago chapter of the American Institute of Architects; at least 15 honorary doctoral degrees from both American and German Universities; Museum of Modern Art sponsored a full retrospective exhibition of Mies work (1947)(2002); Martin Luther King Memorial Library commission Washington, DC; and Mies' design was a finalist for the John F. Kennedy Presidential Library in 1964.

### S.R. Crown Hall (1950-56)

S.R. Crown Hall (1950-56), besides its very important association with Mies, is one of the most important and influential modernist buildings of 20<sup>th</sup> Century architecture in the United States. Recognized from its date of completion in 1956 as a radical departure from traditional school building design (which was made up of compartmentalized and singular classrooms), Crown Hall is an extraordinary building because the building is an icon of modern "Miesian" architecture and the International Style; it marks a critical break/juncture from his earlier brick, steel and glass buildings on IIT's campus; it is a unique and critical precedent for his later steel and glass buildings that came to dominate his oeuvre after its completion; and, as noted earlier, it marks the first full realization of the

Franz Schulze, Mies van der Rohe, A Critical Biography. Chicago: Univ. of Chicago Press, 1985, 220.

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structural and material principles associated with his speculative glass and steel structures of 1921/22, the Friedrichstrasse Office Building project ('21) and the Glass Skyscraper project ('22).

Franz Schulze's narrative clearly implies the importance of this structure:

Success in the New World, however, was due to more than good fortune and a receptive community. He learned from America as surely as it did from him, and he remade his architecture from what he learned, all the while staying his fundamental philosophical course. Mies was forever mindful that the art of building had its origins in materials. As in Germany, he had known brick and glass, in America he found steel, on a scale and in quantity he had only dreamed of earlier. Having found it, he used it to bring to creation his vision of architecture of structure. Glass only added to this realization. It seemed to Mies, as he made it seem to America, that construction in steel and glass stood most authentically for modern technology. The Americans had a special fondness for technology, believing, especially in view of their spectacular victory in WWII, that they were the people most advanced in it. Thus in their eyes, any artist who elevated it to architecture could only add meaning and merit to American and world culture. Technology for Mies, in turn, was an entity of spiritual as well as physical significance. It was the *Zeitgeist* manifest. It was *fact*, and the material of steel and glass, themselves light enough to approach a dematerialized state, could lift fact to the level of essence, thus Truth in the desired immaterial sense.

Nor did Mies's embrace of structure in America preclude his continued exploration of space. On the contrary, the dematerialization of structure freed him to create a space of supersensible implications. The space that earlier had flowed among walls and columns gave way to the single large emptied-out clear-span area, extending implicitly in all directions and bounded only by columns and glass conceived in a rigorously symmetrical order. That he sought to achieve transcendental goals in architecture while working in a country traditionally pragmatic and materialist in its values constitutes one of the more wondrous marriages of the mind in the arts of the 20th Century.<sup>10</sup>

Under Mies leadership, the department of architecture - as well as the campus itself - was transformed into one of the most progressive and experimental architecture programs - and campuses - in the country. S.R. Crown Hall (1950-56) fulfills the second apex of Mies' career, as well as the final chapter in the completion of his buildings on campus. As the last building he designed and built on IIT's (Mies) master-planned campus, it is the only building whose structure is constructed wholly of steel and glass without any visible masonry walls. The formal and structural clarity of the design, the innovative use of steel and glass, and the expressive use of unobstructed space in the 26,000 sq. ft. interior, make its design a radical break from the traditional concept of the college classroom building, whose interiors are usually broken into smaller self-contained rooms separated by walls. The building's affect on the curriculum and American educational principles are evident in Peter Carter's observation:

The idea of providing a single large room for the School's three hundred students was in theory the physical expression of the anti-ivory tower aspects of the curriculum; in fact this concept proved to be particularly workable because a student is not isolated from others who may be further or less advanced, he soon becomes aware of his progress in its carefully planned development.<sup>11</sup>

It also vulcanized the open-design principles of Mies' long-span structures.

<sup>&</sup>lt;sup>10</sup> Franz Schulze, Mies van der Rohe, A Critical Biography. Chicago: Univ. of Chicago Press, 1985, 220.

<sup>&</sup>lt;sup>11</sup> Peter Carter, Mies van der Rohe at Work. Phaiden Press Ltd., 1974 (1999), 86.

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According to Mies' former student and the current director (founding) of the Canadian Center for Architecture, Madame Phyllis Lambert, the formulation of Crown Hall was tied to Mies' American preoccupation with auditoria building types. According to Ms. Lambert,

In 1942, Mies and his students used collage to study the spatial possibilities of freestanding walls for a concert hall within a long-span industrial space. That same year he proposed exterior girders to expand the auditorium contained within the gridded columnar open space of his Museum for a Small City Project ... Ultimately it was the intrinsic quality of the large column-free hall that fascinated Mies. Long-span structures were the means of achieving this, and the expression of these structures became the architecture itself, dramatic trusses or girders against the sky, or a great thick roof of concrete or exposed steel.<sup>12</sup>

Three important but unbuilt projects where exterior trusses were proposed were a study for IIT's Student Union building (1948), the Mannheim Theatre Competition entry (1952-53) and the Cantor Drive-In restaurant project of (1947). The Mannheim project drawings and the Cantor Drive-In restaurant project showed a large hall supported by exoskeleton steel members. None of these projects were realized, making Crown Hall's construction all the more exceptional. Again Phyllis Lambert notes the critical history of Crown Hall's tenuous conception and its exceptional architectural importance in Mies oeuvre:

When the design for the Industrial Design and Architecture Building (later named Crown Hall) came into view in July 1952, and when IIT's building committee rejected the revised plans for the Student Union building in September 1952, it was decided instead to mount an all out effort to secure the funds for the future of Crown Hall. Again the Building Committee envisioned a modest building, but on November 25 1952, Mies presented a model and drawings for a building that they declared was "of such an extreme nature... (It is) a most advanced design incorporating only steel and glass in its exterior design."

Experimentation with space, span, and structure, in which the Student Union building and the Library and Administration building had a determining role, was evidence of the Miesian will-to-space allied with a technology that he declared to have "space-toppling power" that permitted "a measure of freedom of composition that we will not relinquish". With his numerous long-span open-space hall projects so far unrealized, Crown Hall gave Mies an irresistible opportunity to again propose such a structure. This large, dramatic, clear-span building overcame the hierarchical primacy Mies had accorded to the Student Union building and the Library and Administration building, as well as the rhetorical materiality of a campus he had composed of steel, brick and glass buildings. <sup>13</sup>

Under Mies leadership the department of architecture at IIT, as well as the campus itself, was transformed into one of the most innovative and progressive architecture programs - and campuses - in the country. S.R. Crown Hall signifies a critical artistic juncture in Mies' American career, and one that has had a giant and lasting impact on the history of American architecture. It also marks the final chapter in the completion of his buildings on IIT's campus.

Crown Hall was not developed in isolation. From the initial planning drawings of 1950 to the building's completion in 1956, Mies was actively developing buildings and projects that encompassed many of his architectural ideals through the use of modern, industrial materials. Four realized projects of note that

<sup>&</sup>lt;sup>12</sup>Phyllis Lambert, "Mies's Student Union," ANY magazine, #24, (1999): 53-54.

<sup>&</sup>lt;sup>13</sup> Phyllis Lambert, "Mies's Student Union," ANY magazine, #24, (1999): 53.

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reflect these ideals, and that are listed on the National Register are as follows: Promontory Apartments in Chicago (1946-49; NR 1996); Mies van der Rohe Residential District (more commonly known as Lafayette Park in Detroit (1955-63; NR 1996); 860-880 Lake Shore Drive Apartments in Chicago (1948-51; NR 1980); and, One Charles Center in Baltimore (1960-63; NR 2000). It is important to compare some of the key differences and similarities with these already listed buildings with the exceptional detailing of S.R. Crown Hall (1950-56).

Promontory Apartments was an important project for two reasons: (1) The Promontory Apartment building was Mies' first realized high-rise structure; (2) Mies originally conceived of this high-rise structure with two distinct material possibilities in mind; the first version was with reinforced concrete, which was built; and a second conceptual version was developed with steel and glass, which made evident Mies' interest in developing a fully transparent glass curtain wall. This glass curtain wall was executed in the development of the 860/880 North Lake Shore Drive apartments in 1948-51, and became an iconic element in the majority of his high-rise buildings built after 860/880's completion. Additionally, Promontory Apartments became a prototype for many of the Mies designed residential buildings on IIT's campus, including the Carman Residence Halls (1951-1953). However, many of the building's structural and design/material elements can be directly related to his earlier IIT campus buildings designed and built in the mid-1940s.

The Promontory Apartment's relationship to Crown Hall is minimal, because it is a radically different building type. However, a key relationship lies in its original conception as a glass and steel structure, which directly relates to Mies van der Rohe's idealized notion of an architecture that embodies Saint Thomas Aquinas' notion that life should be seen as a state of unencumbered wandering. This ideal was captured with the execution of S.R. Crown Hall's vast, open and fully transparent space, which could only be achieved through the use of glass and steel. Mies' famous comment that "God is in the details" becomes especially important for the exceptional detailing of Crown Hall. This is particularly evident after understanding the main criticism of the 860/880 North Lake Shore Drive apartments.

The addition of the I-beams to the steel plates that cover the columns caused a certain amount of critical comments at the time. Since the window mullions, at five-foot three-inch center, were mounted on top of plates covering the columns, the windows adjacent to the columns are narrower than those in the center of the bays. This A-B-B-A rhythm is unique among Mies' tall buildings, and the visual result is subtle and satisfying. Through the play of light and shadow created by the counterpoint of these projecting I-beams, an intermediate series of proportions and rhythms are developed. At the same time, the mullions signify the phenomenon of the structure, if not its reality. To some critics the applied and apparently functionless I-beams were decoration (emphasis added).<sup>14</sup>

This is very different from the I-beams on Crown Hall, which are fully functional. This is one of the most significant differences between the detailing of these two critically important buildings in Mies' oeuvre, aside from their being two very different building types. These two buildings represent the dramatic and rapid maturation of Mies' use of glass and steel, with Crown Hall representing the pinnacle of an open-spaced, universal, long-span building type, and 880/860 representing the first all glass and steel high-rise building type. In fact, 880/860 became the prototype for most of Mies' later high-rise

<sup>&</sup>lt;sup>14</sup>David Spaeth, Mies van der Rohe. New York: Rizzoli International Publications, Inc., 1985, 130.

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buildings including the Federal Center in Chicago, Toronto-Dominican Center in Canada, and the two other National Register projects: Lafayette Park in Detroit; and One Charles Center in Baltimore.

The Mies van der Rohe Residential District in Detroit is unique because it represents an evolution of the many building types and styles already executed by Mies van der Rohe on IIT's campus, and it is the largest repository of Mies designed buildings in the world. However, IIT's master-planned campus and buildings predate the Lafayette Park development by approximately 5-10 years, and represent the second largest concentration of Mies buildings in the world. Therefore, it seems more appropriate to evaluate the Residential District's special characteristics within the historical context of modern urban planning, which is not directly comparable to an individual building's exceptional characteristics, as embodied by S.R. Crown Hall.

Finally, One Charles Center (1960-63) is comparable to Crown Hall through its use of a steel and glass curtain wall. However, this comparison is tenuous because reinforced concrete was substituted for steel as the primary structural material at One Charles Center, which (again) is radically different from its purely structural function in Crown Hall. A more apt comparison for One Charles Center would be to Mies' first high-rise structure Promontory Apartments. As noted earlier, the Promontory Apartment building was also conceived of in glass and steel, but this was neither economically nor technologically feasible at the time. However, this building was adapted and developed in Mies' high-rise apartment complex located at 900/910 North Lake Shore Drive (1953-56), and whose primary structural material was also reinforced concrete.

The impact of Crown Hall, both in terms of Mies' later work and on the world of architecture, cannot be understated. It was the first fully realized precedent for such important works by Mies including the US Postal Office building (1959-64), which is part of the Federal Center complex in Chicago; the Dominion Center in Toronto (1963-69); and the Berlin National Gallery (1962-67) in Germany.

The formal and structural clarity of the design, the innovative use of steel and glass, the expressive use of unobstructed space in the 26,000 sq. ft. interior, its critical importance in the historical pantheon of modernist International Style architecture, as well as its association with Mies van der Rohe, all mark it as a historic structure of exceptional importance to the nation, the region and the world.

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### **Previous documentation on file (NPS):**

Preliminary Determination of Individual Listing (36 CFR 67) has been requested.

Previously Listed in the National Register.

Previously Determined Eligible by the National Register.

Designated a National Historic Landmark.

Recorded by Historic American Buildings Survey: #

Recorded by Historic American Engineering Record: #

### **Primary Location of Additional Data:**

State Historic Preservation Office Other State Agency Federal Agency Local Government University Other (Specify Repository):

### 10. GEOGRAPHICAL DATA

Acreage of Property: less than 1 acre

UTM References: Zone Easting Northing

16 44789505 4631379

### **Verbal Boundary Description:**

Crown Hall's significant historical features fall within the boundaries of the western edge of the sidewalk on the east side of the building which parallels State Street in its north/south orientation; the northern boundary of the building is defined by the outermost (northern) edge of the driveway paving; the southern boundary is the northern edge of the sidewalk paving, which was formerly the curb of the east/west running 34th Street; the western boundary is defined by the eastern edge of the sidewalk, which was formerly the Dearborn Street Right-of-Way. The boundary is 20 feet from the west, north and east sides of the building and 50 feet from the south side.

### **Boundary Justification:**

Mies van Der Rohe planned and designed Crown Hall to fill this specific site. The building is oriented toward what was formerly 34th Street, and is spatially isolated in this site by the boundaries described above. The landscaped space immediately surrounding the building is historically important and it adds significant historical weight to the building's overall presence on the site.

United States Department of the Interior, National Park Service

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National Park Service

National Historic Landmarks Survey

1849 C St., N.W. Room NC-400

Washington, DC 20240

**Telephone:** (202)343-8166

DESIGNATED A NATIONAL HISTORIC LANDMARK ON August 7, 2001

United States Department of the Interior, National Park Service

### **FIGURES**

Figure 1 Map of Illinois Institute of Technology showing location of S.R. Crown Building

Figures 2-11 were taken by Hedrick Blessing Studios, and are used with the permission of the Chicago Historical Society's Department of Rights and Reproductions. Figures 12-15 were taken by Eric Thompson.

### **Construction photos**

Construction of Crown Hall, (1954-1955).
Lowering the exoskeleton steel structural frames (1954-1955)
View of structural steel exoskeleton and concrete floor (1954-1955)
West side of building with corner treatment (1954-1955)
View facing southwest corner showing installation of glass (1954-1955)

## **Completed Building - Exterior**

Figure 7	View of south porch/facade looking west (1956)
Figure 8	View of north facade of Crown Hall (1956)
Figure 9	View of east facade from across State Street (1956)

# **Completed Building - Interior**

Figure 10	View of Upper Core facing east from southwest corner (1956)
Figure 11	View of Upper Central Core facing north with furniture (1956)

### **Existing Conditions**

Figure 12	View of Southwest Corner Looking North (2000)
Figure 13	View of North Facade Looking Southwest (2000)
Figure 14	View of Northwest Corner Looking East (2000)
Figure 15	View of South Facade Looking Northwest (2000)

### **Architectural Drawings**

Figure 16	Existing Site Plan and Landscape
Figure 17	Original Main Floor Plan
Figure 18	Existing Upper Level Floor Plan
Figure 19	Basement Plan
Figure 20	Existing Lower Level Floor Plan

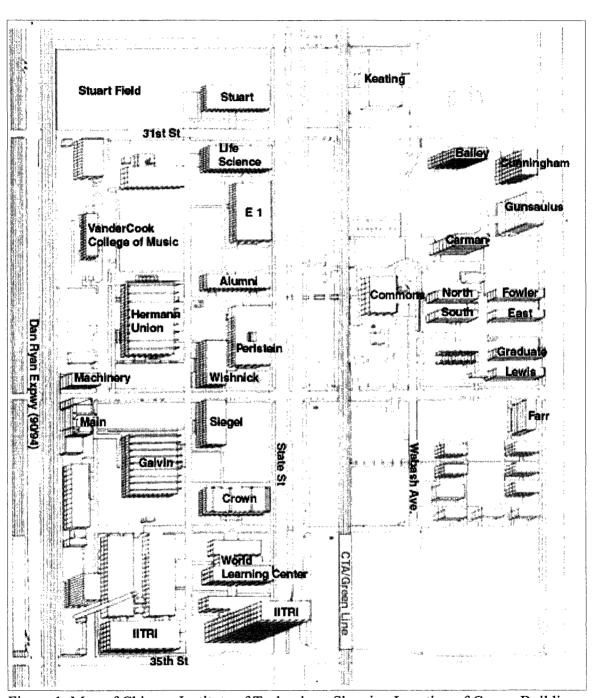


Figure 1. Map of Chicago Institute of Technology Showing Location of Crown Building

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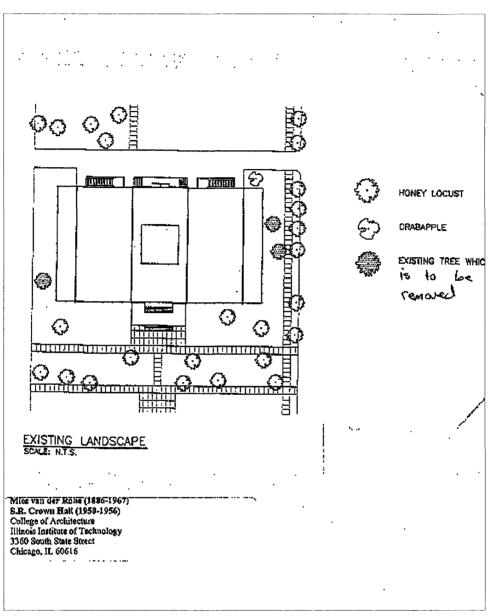
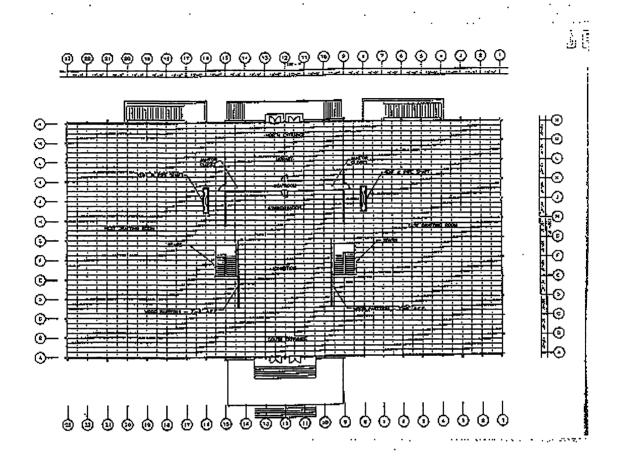


Figure 16. Existing Landscape at Crown Hall

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ORIGINAL MAIN FLOOR PLAN

Figure 17. Original Main Floor Plan

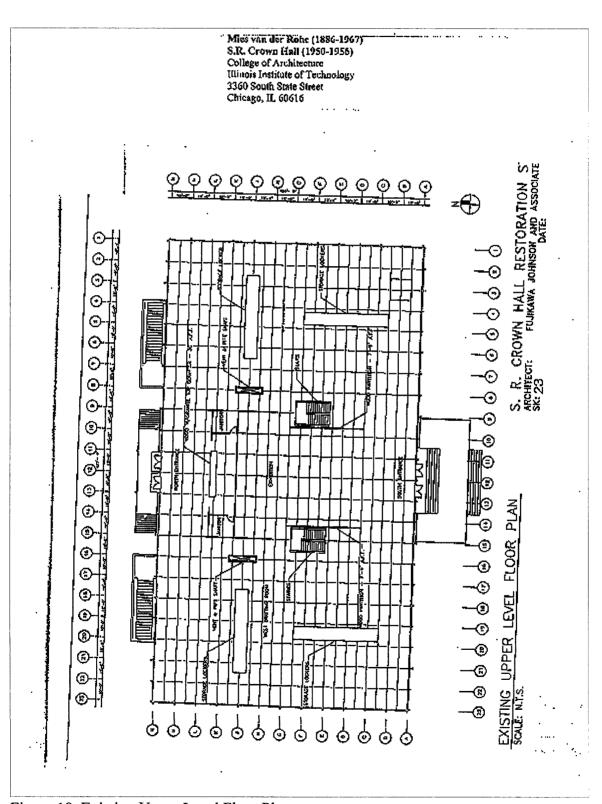


Figure 18. Existing Upper Level Floor Plan

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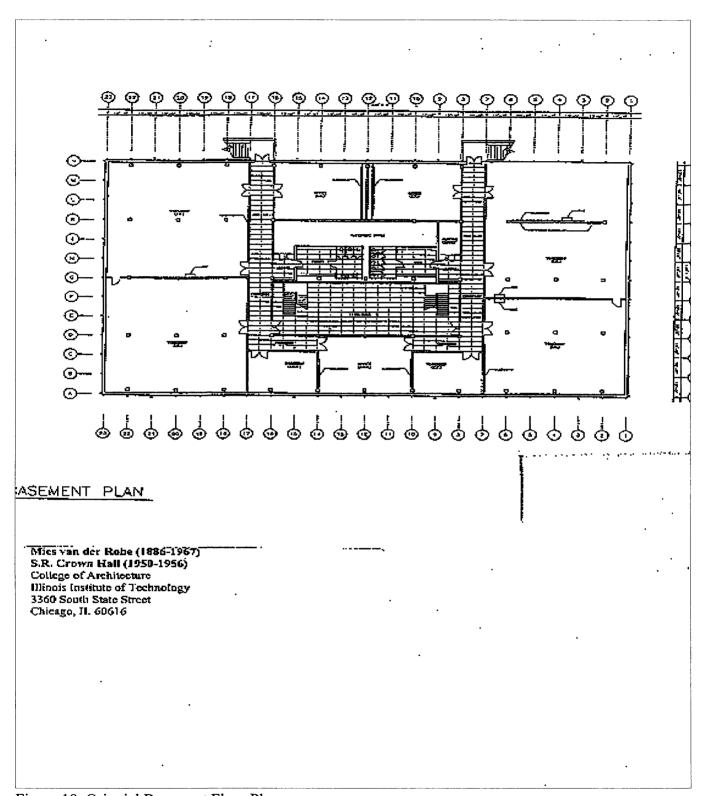


Figure 19. Orignial Basement Floor Plan.

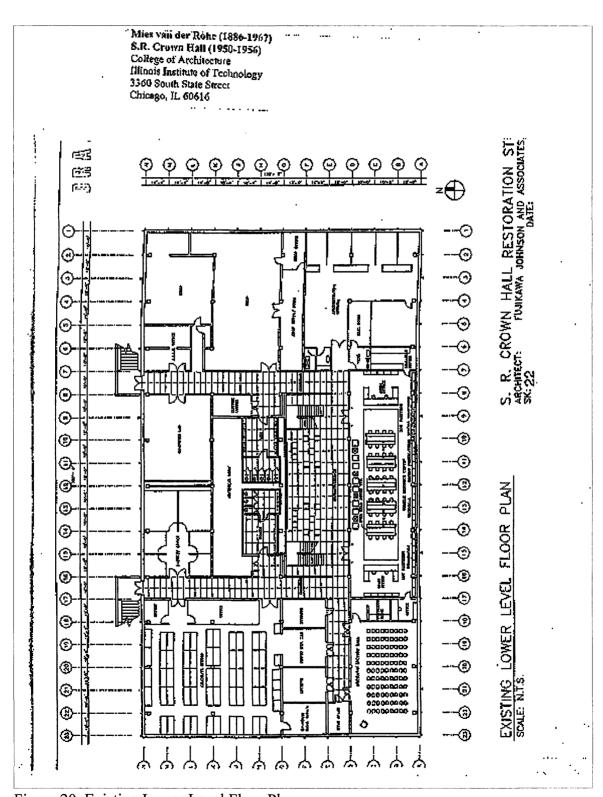
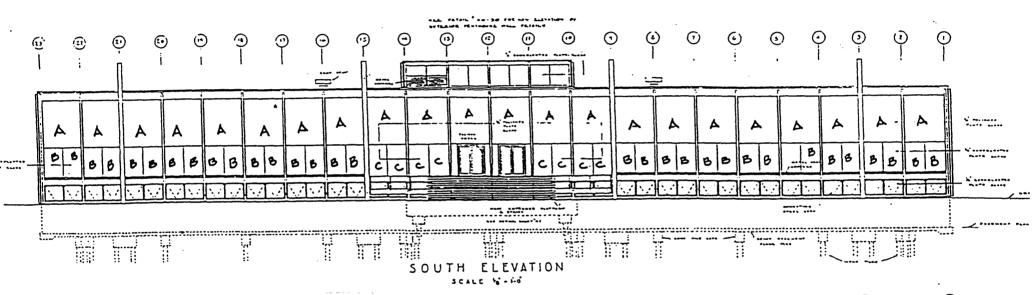
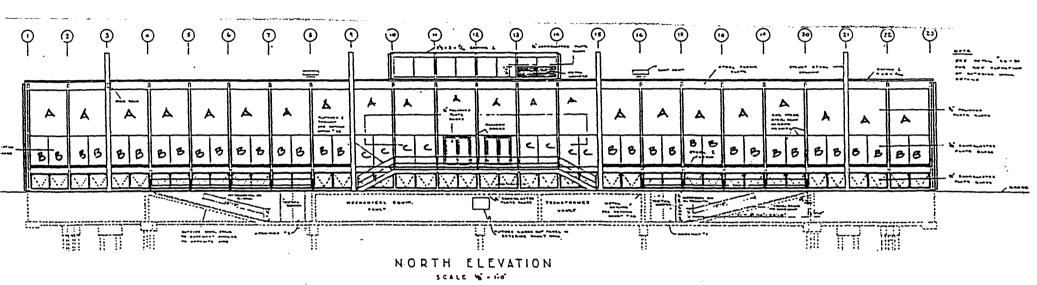


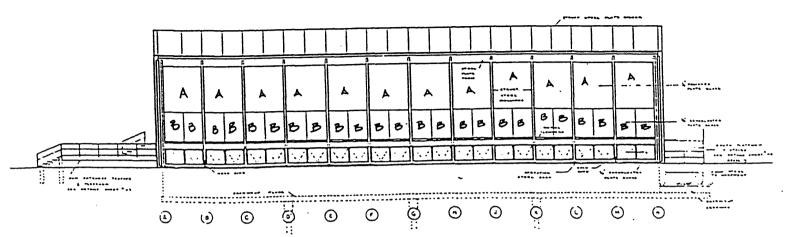
Figure 20. Existing Lower Level Floor Plan



A-NEW 12" ANNEALED GLASS B-EXISTING 14" LAMINATED GLASS C-EXISTING 14" TEMPERED GLASS

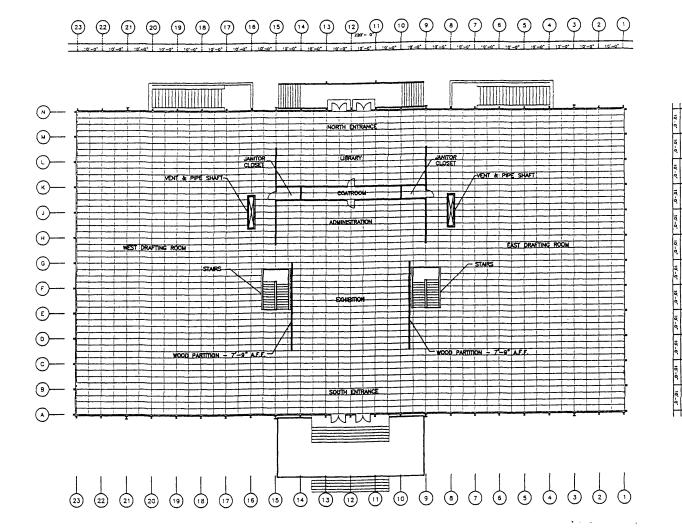


A-NEW 12" ANNEALED GLASS B-EXISTING 14" LAMINATED GLASS C-EXISTING 14" TEMPERED GLASS

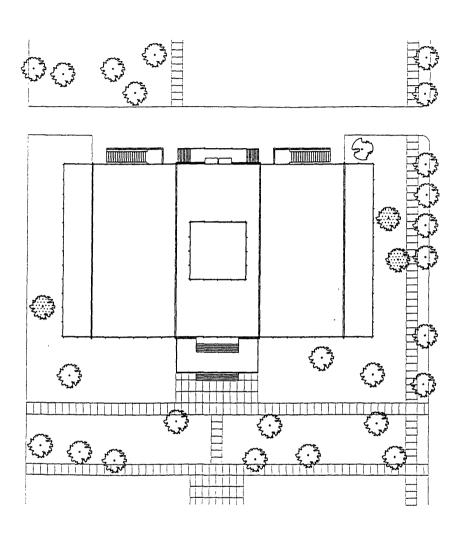


EAST ELEVATION
REVERSE FOR WEST ELEVATION
SCALE MACHINE

A-NEW 12" ANNEALED GLASS B-EXISTING 14" LAMINATED GLASS C-EXISTING 14" TEMPERED GLASS



ORIGINAL MAIN FLOOR PLAN



· S HONEY LOCUST

CRABAPPLE

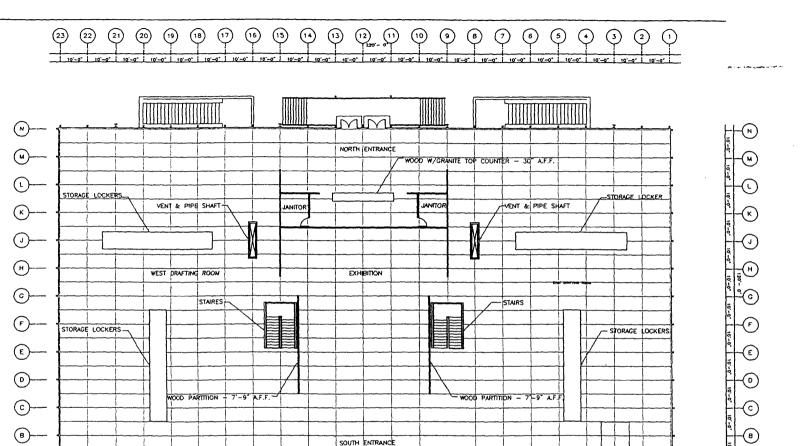
existing tree which

removed

EXISTING LANDSCAPE SCALE: N.T.S.

Mies van der Rohe (1886-1967) S.R. Crown Hall (1950-1956)

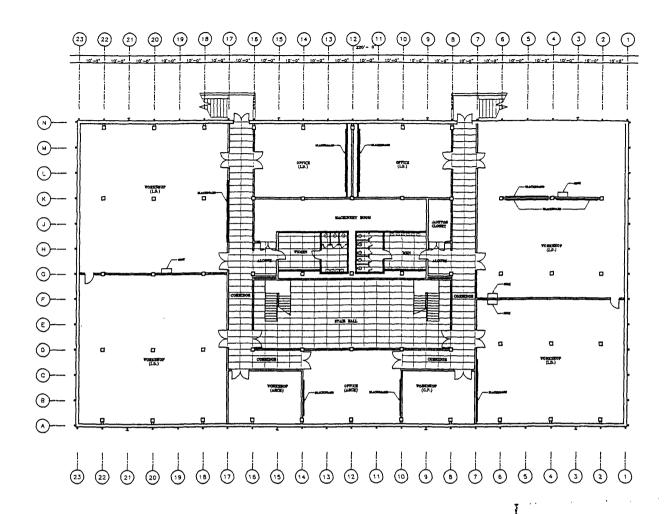
College of Architecture
Illinois Institute of Technology
3360 South State Street
Chicago, IL 60616



WW

EXISTING UPPER LEVEL FLOOR PLAN SCALE: N.T.S.

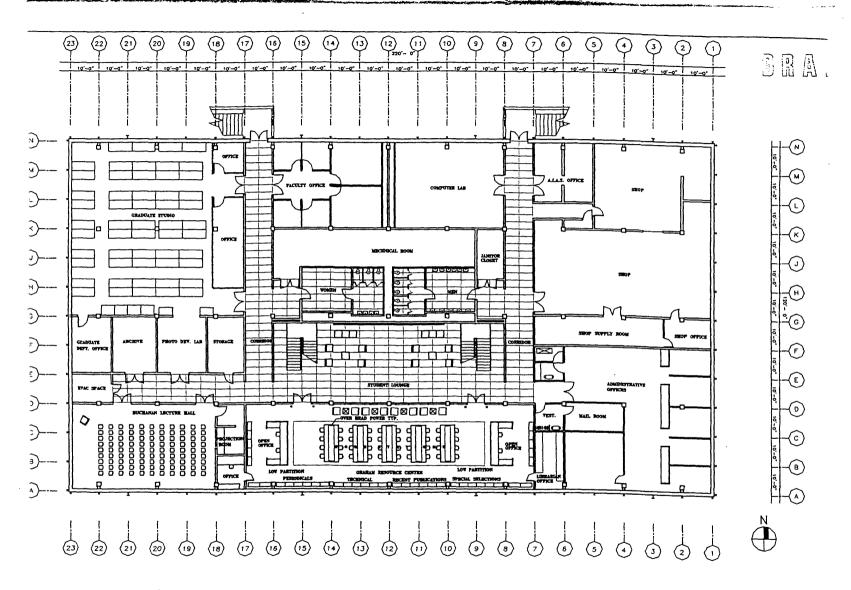
S. R. CROWN HALL RESTORATION S ARCHITECT: FUJIKAWA JOHNSON AND ASSOCIATE SK: 23



# BASEMENT PLAN

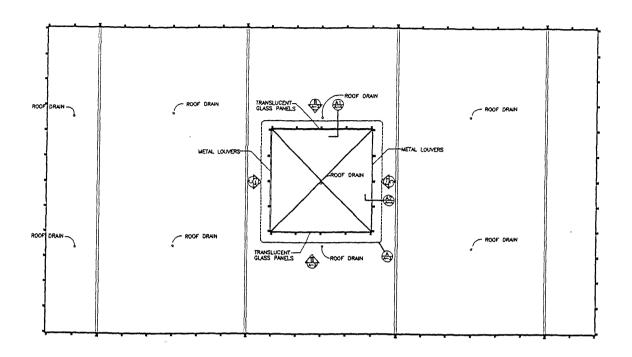
Chicago, IL 60616

Chicago, IL 60616



EXISTING LOWER LEVEL FLOOR PLAN SCALE: N.T.S.

S. R. CROWN HALL RESTORATION ST ARCHITECT: FUJIKAWA JOHNSON AND ASSOCIATES SK: 22



Original ROSE à Penthouse Plan