

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-900

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

OMB No. 1024-0018

MCGREGOR MEMORIAL CONFERENCE CENTER

Page 1

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

1. NAME OF PROPERTY

Historic Name: McGregor Memorial Conference Center

Other Name/Site Number:

2. LOCATION

Street & Number: 495 Ferry Mall (campus of Wayne State University)

Not for publication:

City/Town: Detroit

Vicinity:

State: Michigan County: Wayne Code: 163

Zip Code: 48202

3. CLASSIFICATION

Ownership of Property

Private: ___

Public-Local: ___

Public-State: X

Public-Federal: ___

Category of Property

Building(s): X

District: ___

Site: ___

Structure: ___

Object: ___

Number of Resources within Property

Contributing

1

1

1

3

Noncontributing

___ buildings

___ sites

___ structures

___ objects

___ Total

Number of Contributing Resources Previously Listed in the National Register: 3

Name of Related Multiple Property Listing: N/A

MCGREGOR MEMORIAL CONFERENCE CENTER

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

4. STATE/FEDERAL AGENCY CERTIFICATION

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this ____ nomination ____ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property ____ meets ____ does not meet the National Register Criteria.

Signature of Certifying Official

Date

State or Federal Agency and Bureau

In my opinion, the property ____ meets ____ does not meet 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

Date of Action

MCGREGOR MEMORIAL CONFERENCE CENTER

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

6. FUNCTION OR USE

Historic:	EDUCATION	Sub:	Education-related conference facility
Current:	EDUCATION	Sub:	Education-related conference facility

7. DESCRIPTION

ARCHITECTURAL CLASSIFICATION: MODERN MOVEMENT: New Formalism

MATERIALS:

Foundation:	Concrete
Walls:	Marble
	Other: Gunite
Roof:	Asphalt
Other:	Aluminum
	Glass

MCGREGOR MEMORIAL CONFERENCE CENTER

United States Department of the Interior, National Park Service

Page 4

National Register of Historic Places Registration Form

Summary

The McGregor Memorial Conference Center is significant under National Historic Landmark Criterion 4, as a benchmark work in the career of nationally-significant Japanese-American architect Minoru Yamasaki. One of the twentieth century's most important Modern architects, the building represents a key turning point in Yamasaki's consequential career as he moved from away from International Style orthodoxy into his own distinct vision, later considered part of the stylistic trend "New Formalism." It is the work that best exemplifies the principles of "surprise, serenity, and delight" that Yamasaki emphasized throughout his later career. Through the careful stewardship of Wayne State University, the building's significant features and historic character remain highly intact, and the meticulously restored reflecting pool and sculpture garden once again reflect Yamasaki's design intent, in total, for the building and its surroundings.

Describe Present and Historic Physical Appearance.

In the context of Modern architecture, Minoru Yamasaki's McGregor Memorial Conference Center is one of the most significant architectural masterpieces of the twentieth century. Unlike many of its contemporaries, the McGregor Center is remarkably intact and in good condition, a testament to the affection many hold for the building and the careful attention that Wayne State University (WSU) has paid to maintaining its original appearance and materials.

The Site

The McGregor Memorial Conference Center sits in the heart of Wayne State University's campus in Detroit's "Midtown" area. It is located on the southeast corner of two wide intersecting pedestrian malls running north-south (Gullen Mall, formerly Second Avenue) and east-west (Ferry Mall, formerly Ferry Street). The McGregor Center is bordered by Ferry Mall on the north, Gullen Mall on the west, the Art Building on the south, and the Alumni House on the east. Other adjacent buildings include the Law School complex across Ferry Mall to the north and Yamasaki's Education Building across Gullen Mall to the west. Two additional Yamasaki-designed buildings on the WSU campus, Prentis Hall and the DeRoy Auditorium, are located two blocks south of the McGregor Center.

Site Integrity Assessment

Yamasaki paid particular attention to the context and setting of the campus and its surrounding neighborhood in designing the McGregor Center. The Center originally sat at the edge of Wayne State University's campus, with residential neighborhoods surrounding it. Second Avenue and Ferry Street were still active vehicular traffic routes. Yamasaki's design intentionally addressed the importance of this location; he saw the Center as a bridge between the campus and the surrounding neighborhood, and as the campus' public face to the rest of the city. Some site features were a direct result of the original context, such as a brick wall on the west side of the site along Second Avenue, which provided some separation between the busy roadway and the serene setting of the Center.

At first glance, the setting of the Center has changed considerably since its construction. With the expansion of the WSU campus and the conversion of both Second Avenue and Ferry Street to pedestrian malls, the McGregor Center is now entirely surrounded by the university campus. Second Avenue is now Gullen Mall and Ferry Street has become Ferry Mall, moving vehicular traffic away from the center of campus and replacing it with wide pedestrian avenues. With the removal of vehicular roads, the brick wall on the west side has been removed, opening that side of the building up to the rest of campus and extending the planting area.

Although these appear to be significant alterations to the historic context and setting of the McGregor Center, in reality these represent the fulfillment of Yamasaki's larger campus plan. Shortly after submitting his drawings

MCGREGOR MEMORIAL CONFERENCE CENTER**Page 5**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

for the McGregor Center, Yamasaki was asked to design a new campus master plan for Wayne State University. Rather than following the typical university campus models of the pastoral quadrangle or urban oasis, Yamasaki directly addressed the campus' urban context by envisioning a small Renaissance city consisting of a series of open squares and arcaded courts linked by pedestrian malls or narrow streets. The conversion of Second Avenue to a pedestrian mall had been discussed as early as 1944 and was prominent in Yamasaki's master plan. Although the closing of Second Avenue had been approved by the Traffic Commission and the Detroit City Council as early as 1957, the actual conversion to a pedestrian mall did not happen until the 1970s, concluding in 1978. It was then renamed Gullen Mall after WSU President George Gullen, under whose leadership the project took place. With the creation of the pedestrian malls at both Second Avenue and Ferry Street, Yamasaki's originally envisioned setting for the McGregor Center was finally fulfilled.

The Landscape

In the McGregor Memorial Conference Center, Yamasaki set out to create a dignified and serene building that would reflect its character as a memorial. The most immediate aspect that contributes to this memorial character is the elevated platform that sets the building above and apart from its surroundings. This sense of elevation is enhanced by the sunken reflecting pool and the low, linear character of the adjacent Art Building and Alumni House.

The landscape and setting of the McGregor Memorial Conference Center also define its memorial character. The wide pedestrian malls provide separation from other university buildings and contribute to the panoramic views of the building and its landscape from the north, west, and south. To the north of the McGregor Center, Ferry Mall widens into a rectangular concrete plaza with a sculpture centered on an axis with the building's atrium and bordered by exposed aggregate raised planting beds. Ramps at the east and west ends of the plaza lead to the Center's elevated platform.

On the west side, an expanse of mown lawn occupies the space between Gullen Mall and the Center's elevated plaza and reflecting pool. The lawn is anchored on the north end by an L-shaped planting bed with low concrete walls. This bed has a mixture of trees, bushes, and perennial plantings. Benches are fixed onto the wall at the west end. The lawn area contains a mixture of coniferous and deciduous trees and bushes. A wide sidewalk running perpendicular to Gullen Mall bisects the lawn leading to the elevated plaza at the southern end of the building. A concrete retaining wall edges the lawn on the north side of this walk, while a narrower sidewalk running parallel to Gullen Mall leads to the entrance to the Art Building to the south.

The signature element of Yamasaki's landscape design is the sunken L-shaped reflecting pool wrapping around the south and east sides of the building. Three rectangular islands within the pool provide a surface for planters and sculptures. The islands are surfaced with exposed marble aggregate pavers and are connected to each other and the surrounding terrace by seven bridges constructed of precast concrete with black granite aggregate. A flight of concrete steps leads from the Center's elevated plaza down to the center island. Groupings of large boulders are set within the pool. The sculpture garden contains four sculptures, with Yamasaki instrumental in choosing all four. Giacomo Manzù's two pieces, "Nymph" and "Faun" (1968), were commissioned in bronze by Wayne State University and paid for by the McGregor Foundation. Georg Kolbe's "Assunta," also in bronze, is a 1976 recast of a 1921 sculpture owned by the Detroit Institute of Arts. The original piece was on long term loan to the McGregor Center, with a few absences, from the 1950s until 1976, when it was copied for the McGregor Center. The fourth piece is Michael Todd's "Ikebana II" (1976), a contemporary steel sculpture whose choice was approved by Yamasaki. The pool is surrounded by a concrete terrace lined with trees, planters, and benches. A switchback ramp provides barrier-free access to Gullen Mall on the north side. Metal railings line both the ramp and the elevated platform on the Center's south side.

MCGREGOR MEMORIAL CONFERENCE CENTER

United States Department of the Interior, National Park Service

Page 6

National Register of Historic Places Registration Form

To further enhance the McGregor Center's memorial character, Yamasaki set the building on an elevated platform. The platform is surrounded by two shallow marble steps and is set with an alternating pattern of rectangular Mankato pavers.

Landscape Integrity Assessment

The most significant differences between the original and current landscape relate to the creation of the pedestrian malls to the north and west. Originally these were city streets, and the space between the elevated platform and the street contained more traditional street features like concrete sidewalks and lawn in the rights-of-way. A low brick wall separated the grass of the right-of-way from the elevated platform on the west side of the building. These features were removed when the streets were closed and the malls created, replaced by the concrete plaza on Ferry Mall and the planting bed on Gullen Mall.

One of Yamasaki's design principles for the campus master plan was variety in paving. Because of the heavy traffic on campus and the harsh northern winters, Yamasaki anticipated less use of grass and more hard surfaces. To provide visual interest, he recommended utilizing a variety of paving materials, rather than simply bare concrete. This was carried out at the McGregor Center's elevated platform with a geometric design featuring slate diamonds (perhaps echoing the shape of the building's pyramidal skylights) offset by Mankato stone pavers. This design was clearly visible in historic photographs from the late 1950s. However, the original paver design and materials are no longer in place. Interestingly, the replacement, a pattern of rectangular Mankato pavers, appears to match the alternate design Yamasaki specified for the plaza as seen in the original landscape plan.

The reflecting pool and sculpture garden were critical to Yamasaki's design concept for the McGregor Center. In his larger plan for the campus, Yamasaki created variety by inserting a series of arcaded courts with different landscapes "...some with trees, some open, and others with fountains. These should give the student walking through the campus a series of delightful experiences." The McGregor Center reflecting pool and sculpture garden would be the first of these "delightful experiences" on the campus. The sunken pool provided the serene and beautiful setting for the building that characterized many of Yamasaki's later works. Nestled between the McGregor Center and its two adjacent buildings, the Art Building and Alumni House, the pool enhanced the more private spaces between the buildings, an antidote to the public thoroughfares to the north and west.

The pool and sculpture garden remain much as Yamasaki designed them. For many years, the pool sat empty due to deterioration and leaking, but a recent restoration has returned the pool to its functioning state. Initiated by a grant to the Art and Art History Department to study the issues and start the planning process, restoration work began in earnest when the university approved the allocation of significant funds to the project. Several individual donors also made contributions, including an endowment to support maintenance in perpetuity. The restoration for the most part followed Yamasaki's original design and materials, with minor changes to address the overall functionality of the pool. For example, Yamasaki's original drawings for the pool specified that the island surfaces be covered with loose white marble chips, which can be seen in photographs from shortly after the center was completed. These tended to be kicked into the pool and clog the pool filtration and pump systems. The surfaces have been replaced with exposed marble chip aggregate pavers, which provide a very similar appearance while enhancing the longevity of both the surface and the water systems. Other changes are relatively minor; the lighting fixtures around the pool are slightly different from those seen in the original design plans and historic photographs, the underwater planters in the pool specified by Yamasaki and seen in historic photographs have not yet been replaced, and benches have been added to the terrace surrounding the pool. Yamasaki included bench designs in his original plans, but they were not executed at the time. The new benches are based on Yamasaki's original design.

MCGREGOR MEMORIAL CONFERENCE CENTER

United States Department of the Interior, National Park Service

Page 7

National Register of Historic Places Registration Form

In general, the reflecting pool provides a very similar aesthetic to that of the original. Reflecting pools were a design characteristic that Yamasaki frequently used in his buildings, and many of those pools have since been removed or filled in, enhancing the importance of the pool at the McGregor Center.

The Building Exterior

The McGregor Memorial Conference Center was the first building in which Yamasaki fully applied the insights he had derived from his world travels. His design responds not only to the site and setting of the building, but also to its function and purpose. As a conference center and as a memorial to Tracy and Katherine McGregor, this building's design is very different from Yamasaki's later campus buildings, which were scheduled for more traditional university functions.

The two-story, rectangular building is formed in three distinct pieces: two identical halves bisected north to south by a glass atrium that projects above and outside the building. These create identical facades on opposing elevations, north/south and east/west.

The defining characteristic of the exterior is the use of materials and pattern to create an interplay of light and shadow. On the north and south elevations, the smooth planes of the exterior wall are faced with narrow vertical slabs of warm Italian travertine in a staggered pattern. The words "McGregor Memorial" are inscribed into the marble on the second floor walls of both the north and south elevations. These smooth planes contrast with sloped overhangs constructed of Gunitite (pneumatically applied concrete) which project from the second floor and roof levels and taper out to a knife point. Projecting from the center of each elevation is the atrium, constructed of extruded aluminum framing with clear glass panes. The atrium walls are composed of alternating narrow rectangular panes which echo the pattern of the travertine marble slabs. The atrium walls project above the main roofline, capped with three vertical triangular extensions. Each end of the atrium has a set of four glass and aluminum doors covered with decorative aluminum screens. These screens, commissioned by Yamaski from Lee DuSell of Syracuse, New York, feature an alternating pattern of projecting and recessed triangles which echo the triangular elements on the rest of the building. Metal screens like this would become a characteristic of Yamasaki's later work.

On the east and west elevations, the smooth plane of the north and south elevations is carried on as a wall of aluminum and glass windows. Projecting outward from these planes on each elevation are ten Gunitite triangular protrusions at the second floor and roof levels. These projections are carried on rectangular structural steel columns faced with white St. Cloud marble. Like the overhangs on the north and south elevations, these projections taper in three dimensions to a point, creating beveled triangular arches between each pair of projections. This created a repeating pattern of light and deep shadow which served not only an aesthetic purpose, but also shaded the interior spaces from direct sunlight. Yamasaki enhanced this effect by installing perforated aluminum screens, again in a geometric pattern, in the upper third of the spaces between the columns on each level to shade the interior. Yamasaki would repeatedly use the pointed arch as a theme in his later work, considering it to serve both a structural and an aesthetic purpose.

The main roof is flat, covered with a built-up composition material. Extending above the main roof is the atrium skylight. Constructed of extruded aluminum pyramids set with clear glass, the skylight carries on the theme of the exterior design and creates a light-filled interior.

At the east end of the building a set of aluminum and glass doors lead into an aluminum-framed glass-enclosed walkway that connects the McGregor Center with the Alumni House to the east.

MCGREGOR MEMORIAL CONFERENCE CENTER

United States Department of the Interior, National Park Service

Page 8

National Register of Historic Places Registration Form

Building Exterior Integrity Assessment

In his design for the exterior of the building, Yamasaki introduced several qualities that emphasized the dignified memorial character of the building. Yamasaki broke from the standard International Style of simple rectilinear forms and glass and steel materials by utilizing repeating structural forms to create patterns of light and shadow, endowing the building with interest, warmth, and beauty. Although he used a grey and white marble for the steps, he chose a warmer Travertine for the exterior walls. The triangular projections of the east and west elevations, with their recessed floor to ceiling windows, created patterns of light and shadow that changed throughout the day with the angle of the sun. The recessed windows, with their delicate sunscreens, protected the interior from the heat of the sun while still allowing diffused light into the conference rooms. The projecting atrium walls and skylight glazing directed light into the interior more than would be achieved by a flat window treatment.

These characteristics have, for the most part, been maintained. The most significant changes to the exterior are the windows and skylights. As specified by the original drawings and seen in historic photographs, the windows on the east and west elevations were originally a series of vertically divided single-paned windows, with the vertical divisions centered within each bay. These windows have been replaced, likely for the sake of increased energy-efficiency, by double-paned units. Although the vertical pattern was retained, an additional horizontal muntin was added about a third of the way above the floor on each level.

At the projecting atrium walls, the staggered window muntin pattern has been retained. At the skylight, however, it appears that additional structure has been added to carry double-paned glazing. The original skylight pyramids were designed as complete units floating on the structural framing to accommodate building movement and expansion of materials. The heaviness of the added structure has somewhat obscured the delicate tracery effect of the original skylight as seen in historic interior photographs. In addition, the original lights of the skylight were listed as "hue white wireglass" by Libby Owens Ford. This added a translucent or milky appearance to the skylight, letting light in while filtering the direct sunlight, which again can be seen in historic photographs. The skylight glass is now clear.

Overall, the McGregor Center exterior retains a high degree of integrity. Although the changes to the windows and skylights represent a departure from the original specifications, the visual differences are minor in relation to the overall aesthetics of the building.

The Building Interior

Yamasaki carried the memorial character of the McGregor Center into the interior. The central space of the building is a two-story, light-filled, glass-enclosed atrium covered by the pyramids of the skylight. The triangular projections of the east and west exterior elevations and the marble-clad columns are repeated on the interior east and west sides of the atrium. Here, the effect is much like a medieval cathedral, with a soaring center aisle flanked by tree-like columns and galleried side aisles, an apt allusion for a building meant to memorialize and inspire.

Set behind the galleries are flat plaster walls and flush doors which echo the flat planes of the exterior walls. While the exterior is mostly white and relies on subtle textures to provide variety, Yamasaki softened the white and bright interior with teak wood panels on the walls. The main and gallery floors are Vermont white marble, contrasted in the atrium with a purple carpet in the center. On the second floor the two side galleries are linked by an antique Verde marble bridge across the atrium, carried on steel framing with stainless steel railings. The placement of the steel framing for the atrium bridge, and the triangular railing framing, repeat in smaller scale the overall geometry of the building.

MCGREGOR MEMORIAL CONFERENCE CENTER

United States Department of the Interior, National Park Service

Page 9

National Register of Historic Places Registration Form

To either side of the galleries are a series of large and small conference rooms, with the ability to subdivide the larger rooms into smaller spaces. The layout is similar on both floors. On the west side, there is a large conference room to the south and a smaller one to the north, divided by the main stair, with a small pantry behind it, accessible from both rooms. On the east side, there is a central lobby with an elevator, stairs, and storage room on the south side and men's and women's restrooms on the north side. The second floor has conference rooms to either side of the lobby, while on the first floor, the north side is divided into four smaller offices.

The conference rooms and office spaces are finished with plaster walls and ceilings, teak panels, and carpeted floors. The pantries have ceramic tile wainscoting and the restrooms have tiled walls and floors. The east side elevator/stair lobbies have white marble floors and Italian travertine walls. On the north wall of each lobby is a drinking fountain; on the first floor this is stainless steel, with a bronze relief of Tracy McGregor above it¹, while the fountain on the second floor is cast bronze.

There are two sets of stairs in the building. The main stairs on the west wall are open to the atrium. They are constructed of marble treads and risers with a stainless steel and teak railing. The stair is held back slightly from the side walls, creating deep shadows and a floating effect that reinforces the ethereal qualities of the memorial. The enclosed second set of stairs off the east side lobby are more utilitarian in character, with rubberized treads and risers and a plainer metal railing.

The McGregor Center has a basement level which contains the kitchen and storage facilities for the building. It is utilitarian in character, with linoleum floors, plaster walls, and acoustic tile ceilings. There is an underground tunnel leading from the Center to the Alumni House basement to the east.

Lighting throughout the building is a combination of hanging cylindrical pendants in the atrium and lobbies and fluorescent strip lighting in the conference rooms and offices. The building retains many interesting original features, such as brushed metal doors for the fire hoses, and spy holes in the conference room doors looking into the rooms. In the atrium, the original Mies van der Rohe-designed Barcelona chairs and black leather couches are still in use. Rolling shades have been installed over the windows on the east and west sides of the conference rooms.

Building Interior Integrity Assessment

For the interior of the McGregor Center, Yamasaki repeated the simple character of the exterior design. The interior is remarkably intact, given its constant use. Aside from the window and skylight issues already discussed, little has changed. When compared to the original drawings, the building layout is virtually identical, with only minor changes in the use of some of the small storage rooms. The soaring character of the atrium has been retained, as has the use of materials, including the marble flooring, plaster walls, and teak paneling. Although the atrium carpet has been replaced, the space retains its original furniture and differs only in very minor details, such as trash cans and fire pulls. The original cylindrical light fixtures are still in place, as are the second floor bridge and railings. The most notable changes are to the furnishings in the conference rooms, including new carpets, standard fluorescent strip lighting, and the installation of rolling shades rather than the original curtains that can be seen in some exterior historic photographs.

¹ The bronze relief is by Marshall Fredericks (1908-1998), one of Michigan's most prominent sculptors. He taught from 1932-1942 at Cranbrook Academy in Bloomfield Hills, Michigan.

MCGREGOR MEMORIAL CONFERENCE CENTER

United States Department of the Interior, National Park Service

Page 10National Register of Historic Places Registration Form

Conclusion

Minoru Yamasaki's McGregor Memorial Conference Center, one of his most significant architectural accomplishments, appears much as it did immediately after its construction. Conscientious stewardship and a commitment of resources by Wayne State University and the donor community have enabled the building and its reflecting pool and sculpture garden to retain integrity of location, setting, design, materials, workmanship, association, and feeling. Visitors to this Modern masterpiece feel the same sense of beauty, serenity and delight that Yamasaki intended.

MCGREGOR MEMORIAL CONFERENCE CENTER**Page 12**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

State Significance of Property, and Justify Criteria, Criteria Considerations, and Areas and Periods of Significance Noted Above.**Introduction**

One of the most significant Modern architects of the twentieth century, Japanese American Minoru Yamasaki provoked admiration and controversy when his work began to diverge from the strict principles of International Style architecture in the late 1950s. Although his most famous design was the World Trade Center in New York City, Yamasaki produced a number of benchmark works during his long and extremely prolific career. The McGregor Memorial Conference Center represents a key turning point in Yamasaki's work, as he moved away from the canonical elements of International Style architecture and forged his own distinct architectural statements within a stylistic trend that has come to be known as "New Formalism." It is the work that best exemplifies the principles The McGregor Memorial Conference Center is nationally-significant under NHL Criterion 4 as the work of Yamasaki's that most fully represents his interest in creating an elegant and delightful architecture. The building and its surroundings demonstrate an interest in the human experience and the beauty of thoughtful design as crafted using the high-quality materials and construction methods that feature in the very best architecture of the mid-twentieth century.

Early Life and Influences

Minoru Yamasaki (1912-1986) came of age during a transitional period in American architecture. Born in Seattle in 1912 to Japanese immigrants, Yamasaki's early life was influenced by the struggles of his family for success and acceptance. Although his father's family in Japan had been well off, his father, the third son, opted to move to America for better opportunities. Despite widespread prejudice against Asian immigrants at the time, the elder Yamasaki was able to gradually improve conditions for his family. Yamasaki later cited the natural beauty of the Seattle area, including the "exceptionally beautiful evergreen forests," the grandeur of Mount Rainier, and the breathtaking views of Puget Sound from Seattle's seven hills, as an early influence on his aesthetic outlook.² Yamasaki also never forgot the early racial prejudice that he encountered, which hurt him deeply at the time and led to the egalitarian views he espoused throughout his lifetime.

Young Minoru attended Seattle's public schools and excelled in his math and science classes. He clearly remembered the moment that fixed his future profession; it came during a visit from his maternal uncle, Koken Ito, who had just completed a degree in architecture from the University of California. On his way to a job in Chicago, he visited the Yamasakis and, as he unrolled his drawings, Minoru recalled that he "almost exploded with excitement...right there and then I decided to become an architect."³

Yamasaki studied architecture at the University of Washington (UW), where he cited Professor Lionel Pries (1897-1968) as a significant influence. At the time, UW's architectural program, like most, was still dominated by the pedagogical methods established by the École des Beaux-Arts in Paris. Despite the contemporary challenges to the Beaux-Arts styles and methods throughout the 1920s, 1930s, and 1940s, Pries maintained the traditional method at UW until the late 1940s. Pries was not, however, a reactionary and worked to expose his students to new ideas. Yamasaki was a student in 1931-32 when Pries tried to secure a local showing of the New York Museum of Modern Art's "Modern Architecture: International Exhibition," and throughout the 1930s, professors in the program became more open to student projects featuring international modernism.⁴ Pries was held in awe by many of his students, and Yamasaki believed that Pries had inspired him at a turning

² Minoru Yamasaki, *A Life in Architecture* (New York: Weatherhill, 1979), 10.

³ Yamasaki, *A Life in Architecture*, 10-11.

⁴ Jeffrey Ochsner, "Modern or Traditional? Lionel H. Pries and Architectural Education at the University of Washington, 1928-1942," *The Pacific Northwest Quarterly* 96 (Summer 2005): 132-50.

MCGREGOR MEMORIAL CONFERENCE CENTER**Page 13**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

point in his education, when he “encouraged me with the prediction that I would become one of the best architects ever to graduate from the school.”⁵

Yamasaki devoted several pages of his autobiographical sketch in *A Life in Architecture* to his summers working in Alaskan salmon canneries to help pay for college, an experience that he clearly felt greatly influenced his later life (apparently more so than his trip to Japan in the summer of 1933). The harshness of the surroundings and the dehumanizing nature of the work taught him the importance of humility and recognizing the humanity in people; it also influenced the way he would later treat his employees when he was in charge of his own business.⁶

Introduction to Modernism in New York

Yamasaki graduated from the UW with a Bachelor of Architecture degree in 1934, and immediately faced a choice. His uncle, who had inspired him to become an architect, had established a practice in Japan after finding he could not become a licensed architect in America, and Yamasaki would have been assured a comfortable place in his uncle’s firm. Instead, he opted to pursue a career in New York City. With the nation still in the grip of the Depression, architectural jobs were scarce, and Yamasaki was forced to take a job for a china distributor for his first two years in the city. At the same time, he enrolled in New York University’s Master of Architecture program, and taught a course in watercolors on the side. After volunteering for a two-week charette, Yamasaki finally landed a position as designer/draftsman with an architectural firm.⁷

Yamasaki entered the architectural profession at the close of a transitional and sometime contentious period of change. The formal and overtly historical styles of the Beaux-Arts school, which had dominated American architecture in the late nineteenth and early twentieth centuries, had given way to the new principles of Modernism. Driving the change was the introduction of new architectural materials. While more traditional architects used these materials to imitate historical styles, others fully embraced the new materials and used their introduction to create a new architectural vocabulary. In Chicago, Louis Sullivan coined the phrase “form ever follows function” and became the “father of the modern skyscraper,” while in Detroit Albert Kahn revolutionized industrial architecture through his simple, clean, and structurally honest factory buildings.

Modern movements like Art Deco also reflected the change, but it was the International Style which exemplified a strain of European-originated Modernism that represented a complete break from historical reference and styles, and emphasized radically simplified forms, functionality, lack of ornament, and the use of the machine in the mass production of materials and methods. Much of the groundwork for European Modernism had been laid by Americans, including Louis Sullivan, Frank Lloyd Wright, and particularly Albert Kahn and his industrial architecture. After World War I, European Modernism was strongly pursued in France by Le Corbusier and by architects associated with the German Bauhaus School, founded by Walter Gropius in 1919.

⁵ Yamasaki, *A Life in Architecture*, 13.

⁶ *Ibid.*, 13-17.

⁷ Yamasaki does not name this first firm in his memoirs. Architectural historian Dale Gyure has shed light on Yamasaki’s early firm affiliations: “according to licensing documents, Yamasaki’s first firm was Githens and Keally (1935-38). Then he worked for the Metropolitan Life Insurance Co. (1938-41), Shreve, Lamb, and Harmon (1941-43), Harrison, Fouilhoux & Abramovitz (1944), and Raymond Loewy (1944-45) before moving to Detroit to work at Smith, Hinchman & Grylls. Dale Gyure to James A. Jacobs, electronic correspondence, 6 Jan. 2014, copy in the NHL file for the McGregor Memorial Conference Center, Washington, D.C. A history of Yamasaki’s first Michigan employer, Smith, Hinchman and Grylls, mentions that he also worked for York and Sawyer. Thomas J. Holleman and James P. Gallagher, *Smith, Hinchman & Grylls: 125 Years of Architecture and Engineering, 1853-1978* (Detroit, Michigan: Wayne State University Press, 1978), 147.

MCGREGOR MEMORIAL CONFERENCE CENTER**Page 14**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

American interest in the European Modernists came in the early 1930s, chiefly through Philip Johnson's 1932 exhibition at the Museum of Modern Art, where the term "International Style" was coined (this was the exhibition that Lionel Pries had attempted to bring to the University of Washington while Yamasaki was a student there). This coincided with the completion of the first skyscraper of the style constructed in the United States, Philadelphia's PSFS (Philadelphia Savings Fund Society) Building (1932; NHL, 1976), designed by William Lescaze and George Howe. When the Nazi regime, which vociferously despised the Bauhaus movement, forced adherents of the style to flee Germany later in the 1930s, they found a welcome in the United States. Most, like Gropius, Marcel Breuer, and Mies van der Rohe, were invited to take up influential teaching positions at American universities, training the next generation of architects. While Le Corbusier remained in France, his influence was also felt in America, particularly in the field of urban planning. Over the next few decades, these transplants taught a generation of adherents to International Style design, including I. M. Pei, Lawrence Halprin, and Paul Rudolph, who would become superstars of American architecture.

Although he had been trained in the Beaux Arts tradition, Yamasaki, like many of his contemporaries, was drawn to the Modernist approach. It was likely this which attracted him to New York City at the beginning of his career. After work ran out at his first position, in 1941 Yamasaki moved to the firm of Shreve, Lamb and Harmon, best known for the Empire State Building (1929-31; NHL, 1986). However, not liking their design work, he instead concentrated on the production of working drawings for the firm.⁸ While with Shreve, Lamb and Harmon, Yamasaki, notably, designed ten buildings for the Sampson Naval Training Station (1942) in upstate New York. Yamasaki would later credit this hands-on experience for his understanding of the construction process and his ability to carry out large projects.

Yamasaki was fortunate that anti-Japanese sentiment did not force him out of his job at the beginning of World War II, as it did his fellow Nissei and contemporary George Nakashima.⁹ Nakashima, who was seven years older than Yamasaki, was also a native of Washington state and had followed a similar path to Yamasaki, earning a degree in architecture from the University of Washington. Nakashima traveled throughout Europe, India, and Japan during the 1930s, eventually rejecting the field of architecture and setting up his own furniture shop in Seattle just prior to the United States' entry into World War II. Following the attack on Pearl Harbor Nakashima and his family, along with many others of Japanese ancestry on the West Coast, were forced into an internment camp. Nakashima's experience in the camps directly affected his later work, both practically and philosophically. He was fortunate to meet Japanese carpenter Gentaro Hikogawa in the camp, who shared his skills with Nakashima. Philosophically, it strengthened his passion for his work and caused him to strongly embrace Japanese culture and aesthetics in his work.¹⁰

In contrast, Yamasaki, working on the East Coast, was not interned after Pearl Harbor, although he was directly affected by the policy. In order to save his family from the internment camps, Yamasaki and his wife, Teruko (whom he had married two days before Pearl Harbor), moved his brother and parents into their one-bedroom apartment in New York for the duration of the war.¹¹ They joined hundreds of Japanese-Americans who had been granted leave to escape the internment camps under certain conditions and who re-settled in New York City during the 1940s. Not surprisingly, the evacuees faced significant discrimination upon their arrival, particularly in housing and employment. Fortunately for Yamasaki, although he did encounter prejudice from strangers, he emphasized that his friends, employers, and co-workers were very supportive. Yamasaki actively worked to provide the evacuees with decent housing through his service as chair of a committee, the

⁸ Yamasaki doesn't say what he did not like about their design work; perhaps their design ethic was not modern enough for him.

⁹ A term applied to the American-born children of Japanese immigrants, literally meaning "second generation."

¹⁰ David Kimmerly and Catherine C. Lavoie, National Historic Landmark nomination for the "George Nakashima Woodworker Complex," National Park Service, U.S. Department of the Interior, 2013-14.

¹¹ Yamasaki, *A Life in Architecture*, 19-21.

MCGREGOR MEMORIAL CONFERENCE CENTER**Page 15**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

Resettlement Council of Japanese American Organizations, that helped build a hostel for Japanese Americans in Brooklyn in 1944, against the vehement protests of many, including New York Mayor Fiorello LaGuardia.¹²

As war-time construction projects slowed toward the end of the war, Yamasaki once again found himself lacking work. As a result of a recommendation, he secured a position in 1944 at the large New York firm of Harrison, Fouilhoux, and Abramovitz, later Harrison and Abramovitz. The firm, at that time engaged in the ongoing design of Rockefeller Center (1930-39; NHL, 1987) and later best known as the lead architect for the United Nations (1952), worked more consciously in Modernism, particularly as it applied to tall urban office buildings. Although only there for about ten months, Yamasaki retained a cordial relationship with both Harrison and Abramovitz as his career developed.¹³

It appeared that by the mid 1940s, Yamasaki was beginning to develop a reputation for his Modern design work. His time at Harrison, Fouilhoux and Abramovitz, although short, was likely a factor, but Yamasaki had also made friends with a range of key Modernist architects and designers in New York. Yamasaki had begun teaching architectural design at Columbia University in 1943 and became friends with George Nelson, who had joined the faculty the previous year.¹⁴ Nelson, who would later design much of the twentieth century's most iconic modernist furniture through his work for the Michigan-based furniture manufacturer Herman Miller, was at the time also an editor for the *Architectural Forum*, which published Yamasaki's "Postwar Project for a Converted Apartment in New York City" in November of 1944.¹⁵ Yamasaki and Nelson moonlighted together on a number of remodeling projects during World War II, and Nelson was one of those friends who supported Yamasaki against anti-Japanese prejudice.

In 1944, Nelson's interest in industrial design influenced Yamasaki to take a job with industrial designer Raymond Loewy. His time there was brief, as Yamasaki found "the idea of designing a skin around a machine whose form had already been decided was distasteful for me."¹⁶ Demonstrating the tight circles in which Modernist designers worked during this period, while at Loewy's studio Yamasaki sat next to Ruth Adler Schnee, who would become one of the country's most well-known Modern textile designers, and Warren Platner, an architect and interior designer who later designed the interiors for the Windows on the World restaurant in Yamasaki's World Trade Center. All three would eventually cross paths again in Michigan. When Yamasaki decided against remaining with Loewy, he and George Nelson briefly considered a partnership, but they felt their diverging interests discouraged it.

Early Career and International Style Work in Detroit

In 1945, Yamasaki was offered the position of chief designer for one of Detroit's pre-eminent firms, Smith, Hinchman, and Grylls (SHG). Founded in 1853 by Sheldon Smith, the firm had incorporated in 1903, one of the earliest firms in the country to combine both architects and engineers. The firm was well-placed at the beginning of Detroit's building boom in the early twentieth century, and over the next several decades, it would design some of the city's most significant and iconic buildings, including Henry Ford's Piquette Avenue plant (1904; NHL, 2006), the Buhl Building (1925), the Penobscot (1928) and Detroit's Art Deco masterpiece, the

¹² A May 27, 1944 image held by the University of California - Berkeley Bancroft Library identifies Yamasaki as the chair of the committee. Accessed online at: <http://content.cdlib.org/ark:/13030/ft0m3n99qv/?query=yamasaki&brand=calisphere>. See also Mike Wallace, "Another Ruckus, Another War" <http://www.nytimes.com/roomfordebate/2010/08/05/a-mosque-and-new-york-city/another-ruckus-another-war>.

¹³ See correspondence between the architects in the Yamasaki Collection, Reuther Library, Wayne State University, Detroit, Michigan (hereafter Yamasaki Collection).

¹⁴ Stanley Abercrombie, *George Nelson: The Design of Modern Design* (Cambridge, MA: MIT Press, 2000), 30.

¹⁵ Abercrombie, *George Nelson*, 306.

¹⁶ Yamasaki, *A Life in Architecture*, 22.

MCGREGOR MEMORIAL CONFERENCE CENTER**Page 16**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

Guardian Building (1929; NHL, 1989). Many architects who later became successful in their own right trained at SHG, including George Mason, Wirt Rowland, and George Hellmuth.

Although the firm had downsized considerably during the Depression, by the end of World War II it was on the rebound. SHG's leaders recognized that relying on the classical styles of the early twentieth century would not win them commissions, so they made the decision to embrace Modernism. In order to do this, the firm wanted a head designer who could deliver the Modern aesthetic. SHG's George Hellmuth recommended Yamasaki, and the firm hired him, meeting the high salary that Yamasaki's reputation already merited.¹⁷

Why would Yamasaki, who seemed to be advancing rapidly in the New York architectural world, move to Detroit? In 1945, Detroit, and Michigan in general, offered a designer of Yamasaki's background and talents better opportunities. Michigan after World War II was the epicenter of industrial design. Birthplace of the American automobile industry in the early decades of the century, Michigan had become the natural "Arsenal of Democracy" during the Second World War, with its automotive factories easily converted to making war supplies and airplanes. The concentration of the military industry in the state, and the Detroit area in particular, attracted innovators in design technology and materials. The automobile industry had also created a healthy economy in the area, from the millionaire automobile company owners down to the assembly-line workers who were paid enough to actually own the vehicles they produced.

Southeast Michigan was not the only area to flourish after the War. The Grand Rapids area, the first center of mass-produced furniture in the country, saw furniture manufacturers such as Steelcase and American Seating thrive as they developed modern furniture for the post war market. The city of Zeeland in West Michigan was home to the iconic modern furniture manufacturer Herman Miller. Entrepreneurs in Holland used a new material developed during World War II to pioneer a new industry, fiberglass recreational boats, which were later manufactured by Chris Craft. In Midland, the Dow Chemical Company produced new building materials, including Styrofoam-based insulation, that were used in the post-war construction boom.

Michigan had a strong base of nationally significant architects who prefigured the Modern movement. The most prolific of these was Albert Kahn. The German-born Kahn, often called the "Architect of Detroit" became the foremost American industrial architect of his day. Kahn's most significant innovation was replacing structural wood with reinforced concrete in his factory designs, allowing for multiple stories, fewer internal columns, and large window areas to light the factory floors. For this, Kahn became known as the "originator of the modern American factory."¹⁸ He designed many of the major automobile factories in Detroit, stripping away style and ornament to present clean, simple buildings that clearly expressed their function, buildings like the Packard Motor Car Company factory (1903), Ford Motor Company's Highland Park plant (begun in 1909; NHL, 1978), and the Ford River Rouge Plant (1917; NHL, 1978). Kahn had a fine sense for adapting his designs to the function and vision of his clients; he was just as adept at executing an Italian Renaissance Palazzo (Detroit Athletic Club, 1915) or an English manor house (Edsel and Eleanor Ford House, 1927) as he was at creating the modern industrial factory. But it was his implementation of the axiom "form follows function" in his industrial architecture that made him an inspiration to early modern architects such as Le Corbusier and Walter Gropius.

Michigan had also attracted Finnish architect Eliel Saarinen. In 1922, Saarinen had entered a contest to design Chicago's Tribune Tower. His entry took second place, yet still had architectural influence over the design of the tall buildings of the 1920s. Following this acclaimed design, Saarinen came to the University of Michigan School of Architecture to serve as a visiting professor in 1923 at the invitation of Dean Emil Lorch, who had

¹⁷ Thomas J. Holleman and James P. Gallagher, *Smith, Hinchman & Grylls: 125 Years of Architecture and Engineering, 1853-1978* (Detroit: Wayne State University Press, 1978), 147. See also Yamasaki, *A Life in Architecture*, 22.

¹⁸ Leland Roth, *A Concise History of American Architecture* (New York, NY: Harper and Row, 1979), 235.

MCGREGOR MEMORIAL CONFERENCE CENTER**Page 17**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

established the University's influential architectural education program based on his pedagogical theory of "Pure Design," a precursor of Modernism.¹⁹ In 1925, Saarinen was approached by George Booth, the father of one of his students and owner of the *Detroit News*, to design the campus of the Cranbrook educational community (1926-43; NHL, 1989), the American answer to the Bauhaus. Saarinen inspired the work of a number of prominent designers, including furniture designers Charles and Ray Eames and Florence Knoll, as well as his own son, Eero, who would become one of the leaders of the International Style.

When Yamasaki reached Michigan in 1945, its architectural community, already built on a base of strong pre-Modern design work, was at the beginning of a significant period of Modern architectural work. Yamasaki was a leader of this early wave of Modern work in Michigan, with his design, while still at Smith, Hinchman and Grylls, for the Federal Reserve Bank of Chicago Detroit Branch Building Annex. The original bank had been built in 1927 in the Classical Revival style by Graham, Anderson, Probst, and White. Yamasaki created an eight story annex, set back thirty feet from the sidewalk and behind the original building. Designed in the International Style, it features alternating horizontal bands of tinted green glass and white marble, supported by a stainless steel grid. Although the annex is in a very different style from the 1927 building, Yamasaki linked the two by continuing the line of spandrel panels, while the marble bands reference the marble on the original structure. The Annex is considered the first important post-World War II building in Detroit, the first example of Modern architecture and planning in the city, and one of the buildings at the forefront of the Modern design movement.²⁰ W. Hawkins Ferry, in his *Buildings of Detroit*, stated: "by introducing new concepts of design and construction and allowing space on the ground level for landscaping, Yamasaki ushered in a new era of commercial architecture in Detroit."²¹ The annex was completed in 1951, after Yamasaki had left SHG.

Although Yamasaki was only at SHG for four years, he had a significant influence on the company, drawing other talented designers to the firm and designing a number of the firm's significant works during those years, including the administration building at the General Motors Proving Grounds (1950), the original plans for the Stevens T. Mason State Office Building in Lansing (which were drastically modified before construction), and several Michigan Bell Telephone Exchange buildings in the Detroit area.²²

Yamasaki also bore much of the credit for SHG securing the contract to construct Eero Saarinen's design for the General Motors Technical Center in Warren (GM Tech Center, 1949-61; recommended for NHL designation, 2013).²³ Saarinen, by that time a good friend of Yamasaki's, was the lead architect and designer for the GM Tech Center, and was looking for a firm to produce the construction drawings and superintend the construction. Yamasaki assured Saarinen that SHG would be a good fit, and the firm ended up carrying out about 80 percent of the work.²⁴ The GM Tech Center, named by *Architectural Record* as GM's "Industrial Versailles," was a major commission even for a firm of SHG's size and experience and remains one of the world's most significant industrial landmarks.

Although Yamasaki had been instrumental in SHG being contracted to construct most of the GM Tech Center, he had already left the firm by the time work was earnestly underway. While Yamasaki enjoyed his work at SHG, particularly the experience it gave him in designing large projects, he preferred to work in a smaller office

¹⁹ Marie Frank, "Emil Lorch: Pure Design and American Architectural Education," *Journal of Architectural Education* 57 (May 2004): 28-40.

²⁰ Rebecca Binno Savage, National Register of Historic Places form for the "Federal Reserve Bank of Chicago Detroit Branch Building," National Park Service, U.S. Department of the Interior, 2007.

²¹ W. Hawkins Ferry, *The Buildings of Detroit* (Detroit: Wayne State University Press, 1980), 363.

²² Holleman and Gallagher, *Smith, Hinchman & Grylls*, 148.

²³ Emily T. Cooperman, National Historic Landmark nomination for the "General Motors Technical Center," National Park Service, U.S. Department of the Interior, 2013-14.

²⁴ Holleman and Gallagher, *Smith, Hinchman & Grylls*, 148-9.

MCGREGOR MEMORIAL CONFERENCE CENTER**Page 18**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

where he could have more direct contact with his clients. In 1949, he left SHG and teamed with former SHG colleagues George Hellmuth and Joseph Leinweber to create their own firm, which went by the name of Hellmuth, Yamasaki, and Leinweber in St. Louis and Leinweber, Yamasaki, and Hellmuth in Detroit.²⁵ The partnership landed several significant projects in the next few years, the most successful of which was the 1956 Lambert-St. Louis International Airport Main Terminal. Yamasaki, who found existing air terminals uninspiring, created a design that many consider the first modern airport terminal, one that would influence later terminals, like Eero Saarinen's TWA Terminal at JFK in New York completed in 1962. With its repetitive concrete-shell vaulted halls and sense of airiness, Yamasaki had created an open, welcoming terminal that *Architectural Forum* dubbed the "Grand Central of the Air."²⁶ It won an AIA First Honor Award.

During this period, Yamasaki also designed a project that would attain mythical notoriety – the Pruitt-Igoe housing project, also in St. Louis. Urban renewal was well underway in many American cities, and St. Louis was no exception. Opened in 1954, Pruitt-Igoe was St. Louis's second major urban renewal housing project, part of a concept that would demolish inner ring "slums" and construct new housing for the residents. Yamasaki's original design envisioned a mix of high and mid-rise buildings, flanked by a "river of trees." Its demolition in 1977 was interpreted by architectural Charles Jencks as "the day that Modern architecture died," a conclusion that has widely been used to dubiously argue that "orthodox" modernism failed in the realm of public housing.²⁷ In truth, Pruitt-Igoe's rapid slide to demolition occurred because of a complicated confluence of factors: the design requirements and intervention of the St. Louis Housing Authority and the federal Public Housing Administration; cost-cutting measures for construction; rising vacancy rates initially unrelated to the buildings/complex; neglect and poor maintenance; and social and economic realities among the urban poor.²⁸

Yamasaki's name became attached to another urban renewal project closer to home – the Gratiot Redevelopment Area in Detroit, later known as Lafayette Park.²⁹ After several failed attempts by the city to come up with a workable plan, the Citizens Redevelopment Committee in late 1954 enlisted Yamasaki, Victor Gruen, and Oscar Stonorov to create a new site plan with patterns for residential development and the design of some prototypical buildings. Yamasaki's involvement was short-lived, however; by the following summer, developer Herbert Greenwald had purchased the Gratiot land and brought in his own architect, Ludwig Mies van der Rohe, to design what would become Lafayette Park.³⁰ Yamasaki wrote to Victor Gruen: "I feel certain our services as consulting architects will no longer be necessary."³¹

With several major projects in St. Louis (the firm was also working on a commission for a military records facility), Yamasaki spent much of his time between 1949 and 1954 commuting between Detroit and St. Louis. With his family based in Troy, outside Detroit, the travel added stress to Yamasaki's already workaholic lifestyle.³² In 1954, the strain of travel and his partnership precipitated a severe case of bleeding ulcers, forcing him to undergo surgery. This incident, and the events that followed it, changed the course of Yamasaki's architectural philosophy and his career.

²⁵ Gyure to Jacobs, electronic correspondence, 6 Jan. 2014.

²⁶ "Grand Central of the Air," *Architectural Forum* 104 (May 1956).

²⁷ See: Charles Jencks, *The Language of Post-Modern Architecture* (New York: Rizzoli, 1977).

²⁸ See Katherine Bristol, "The Pruitt-Igoe Myth," *Journal of Architectural Education* 44 (May 1991): 163-71.

²⁹ A National Historic Landmark nomination for Lafayette Park is in process.

³⁰ Roger Montgomery, "Improving the Design Process in Urban Renewal," *Journal of the American Institute of Planners* 31:1 (1965): 10-11.

³¹ Yamasaki to Victor Gruen, 28 Nov. 1955, Correspondence Files, Yamasaki Collection.

³² Yamasaki again encountered prejudice when trying to purchase a home in Detroit's suburbs, a majority of which were closed to non-white buyers. The Yamasakis eventually purchased and remodeled a 125 year old farmhouse in Troy.

MCGREGOR MEMORIAL CONFERENCE CENTER**Page 19**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

The Development of New Design Philosophy

The threat to his health forced Yamasaki to make some radical changes in his working life. The most immediately significant was the breakup of the partnership with George Hellmuth. Yamasaki and Leinweber remained in Detroit, while Hellmuth formed his own firm in St. Louis with Gyo Obata and George Kassabaum, HOK, now the largest US-based architecture-engineering firm.

Yamasaki's new partnership with Leinweber received a commission from the US State Department to design its consulate in Kobe, Japan, which opened in 1955. As part of this commission, Yamasaki traveled to Japan three times. On one of those trips, he took the time to travel around the world, including Southeast Asia, India, and Europe, observing the architecture of many different cultures. As Yamasaki wrote later:

This gave me the opportunity to collect my thoughts about the kind of design I was doing. I found myself strongly affected by the humanistic qualities of the historical buildings, qualities that I had not encountered in contemporary structures...Following this, I began to think about how to incorporate into my own work the qualities I had so admired in the great buildings of the past. Prior to this, my buildings were shallow imitations of those of Mies van der Rohe, who, I believe, was the most influential and best architect in the world at that time.³³

While Yamasaki continued to admire the work of Mies and the other International Style architects, it was at this point that his own design philosophy began to diverge from the strict principles of the International Style, and he embarked on a search for the "best possible combination of aesthetics and function."³⁴ Rather than embracing architectural tradition, as the Beaux Arts architects had done, or rejecting it, as the International Style did, Yamasaki sought to learn from the way architects of the past had solved the same problems of "emotion" that he saw facing the contemporary architectural profession. The humanistic qualities Yamasaki observed in historic buildings spoke to his experiences struggling against prejudice and working in dehumanizing jobs.

Yamasaki also recognized the role that stress played in modern life, perhaps magnified by his own experiences with ulcers. Serenity became an important element of his designs. In his biography, as well as in several later interviews, he remembered a key experience from one of his trips to Japan, ducking into a restaurant to escape the chaos of Tokyo and reaching a quiet oasis in the courtyard. He often tried to recreate this sense of serenity in his later buildings, particularly through the use of water features such as reflecting pools. Another key element to Yamasaki's design philosophy inspired by that visit to the restaurant was surprise. Sudden, breathtaking changes, expressed by a change in ceiling height or room size, engaged the visitor's intellect and interest. This technique had earlier been employed by Frank Lloyd Wright, who often led visitors through a tight and winding entry which then opened into a light and airy space, emphasizing the contrast.

Although many of Yamasaki's designs during this period contain recognizable references to earlier styles, such as Gothic (Education Building, Wayne State University, 1960), Japanese (the many pools and sculpture courts he designed), and Middle Eastern (Dhahran International Airport, Saudi Arabia, 1961) architecture, in form and structure they were thoroughly modern. Yamasaki believed that the key to simplicity and aesthetic beauty lay in a building's structure, and that the building's façade should enhance rather than cover that structure. He revived forms that International Style architects had discarded, not as ornament but as structural elements. Yamasaki noted that the arch, for example, was an excellent structural form, and to cast it in steel or concrete made it even stronger. He would incorporate the Gothic arch, as well as the column, as a structural element in a number of his later designs.

³³ Yamasaki, *A Life in Architecture*, 24.

³⁴ *Ibid.*, 29.

MCGREGOR MEMORIAL CONFERENCE CENTER**Page 20**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

Yamasaki's use of materials also reflected his new design philosophy. He saw monotony as an inherent problem in the modern glass and steel facades of tall buildings, and experimented with using contemporary materials to impart richness and interest. And while he did use concrete, metal, and glass in his exterior design, he preferred to use softer materials in designing interiors; rich teak and carpets created warm, human-focused environments.

Another insight that Yamasaki derived from his study of the world's historic architecture was his belief that the masterpieces of the past had one common characteristic – that they were designed to make the most of the available light. In his later work, he designed his buildings to reflect the interplay of light and shadow throughout the day and the seasons, creating rhythmic patterns and indentations that would in some ways reflect the sculptural qualities of Brutalist architecture.

Above all, Yamasaki believed he was designing for people, designing buildings that would both protect them and make them feel happy. He embraced change and development, but believed that innovation simply for its own sake often led to unaesthetic and poor design. He noted that “the purpose of architecture is to create usable, livable areas where man can lead his life both productively and happily.”³⁵

National Ascendancy: The McGregor Memorial Conference Center

Perhaps no other building exemplifies Yamasaki's new design philosophy better than his first major commission following his surgery and overseas travel. This was the McGregor Memorial Conference Center on the campus of Wayne State University in Detroit. The McGregor Center had been commissioned by the foundation established by well-known Detroit philanthropists Tracy and Katherine McGregor. Following Tracy's death in 1936 and Katherine's in 1954, the McGregor Fund decided that a community conference center would be an appropriate tribute to the work and legacy of the McGregors. Although it would be located on the campus of Wayne State University, it would not be an academic building, but rather a bridge between the university and city. Although the building is now located in the center of campus, at the time it was on the edge, and as such would also serve as a public face of the campus. The Center was envisioned as a meeting place for ideas, a “temple of talk” as *Time* magazine would eventually call it.

Although Wayne State had a campus architect in Suren Pilafian, it appears that Yamasaki was always the first choice to design this building. This was an ideal commission for Yamasaki to begin expressing his new design philosophy. He preferred larger commissions and institutional clients because they afforded him more time and resources to concentrate on the details of the design. Institutional clients were also too involved in their own affairs to attempt to dictate every detail of the design, as Yamasaki was finding with his residential clients. The nature of the building and its use also gave him more scope for experimentation, as he was not constrained by the functional needs of a typical classroom or office building. Finally, the memorial nature of the commission made it possible to more fully express his ideals of surprise, serenity, and delight.

To express its character as a memorial, the two-story building is set on an elevated plinth, while the sunken reflecting pool and sculpture garden wrapping around its south and east sides provide the serenity and repose natural to a memorial space. The conference rooms to each side of the building are divided by a common area enclosed by a glass atrium, reflecting the essential function of the building. The accordion-like triangular projections of the east and west elevations and the wide overhangs on each floor emphasize light and shadow and provide visual interest through the expression of structure. The triangular projection theme is carried through to the interior where it serves to frame the atrium space at the first and second floor ceilings. The triangular skylight floods the interior with light, while the use of teak on the walls softens the marble flooring.

³⁵ Ibid., 30.

MCGREGOR MEMORIAL CONFERENCE CENTER**Page 21**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

The McGregor Memorial Conference Center, completed in 1958, brought Yamasaki national attention, as well as winning him the AIA Honor Award. It was the first completed expression of his mature design philosophy, and the most significant break from his earlier International Style work. Many of the elements used in this building would become standard in his later work, such as the pointed arch, the use of rich materials like travertine, marble, and teak, and the use of metal screens as a simultaneously decorative and functional element. This also appeared to be his first incorporation of a reflecting pool into the site design. These pools, often rectangular in form and relatively simple in their design, were typically located at the base of the building, sometimes forming a complete “moat,” as at the DeRoy Auditorium or Reynolds Metals building, that set the building apart from its surroundings. These pools were critical in creating the sense of serenity and delight that Yamasaki was aiming for; many of these pools have now been lost.

Yamasaki was not alone in seeking a new approach to design during this period, and the McGregor Center was a benchmark for the new style. At least two other major American architects, Philip Johnson and Edward Durell Stone, joined Yamasaki in what architectural historian Marcus Whiffen termed “their (unashamed) pursuit of delight.”³⁶ This approach, now known as “New Formalism,” took its inspiration from historical and classical styles (in an abstract manner) while incorporating the newest materials and building technologies. Typical characteristics included the use of classical elements, such as arches, colonnades, and columns, in new materials and contexts; a return to richness of materials like travertine, marble, and rich woods, or sometimes using newer materials that mimicked the richness of traditional materials; formal landscapes, including central plazas, pools, fountains, and sculpture; and the creation of modern monuments, including techniques such as setting the building on a podium.

Philip Johnson, the architect who had first brought the International Style of Europe to America in his 1932 exhibition at the Museum of Modern Art, continued as a proponent of Modern architecture throughout his career. Still, his design continued to evolve from his Glass House (1949; NHL, 1997) and the Seagram Building (1956) through New Formalism to the creation of one of the early Post-Modern landmarks, the AT&T (now Sony) Building in Manhattan (1984). Johnson’s New Formalist work came chiefly during his mid-career, for example the New York State Theater at the Lincoln Center in New York (1964). As with Yamasaki, Edward Durell Stone’s conversion to New Formalism was a movement away from strict Modernism, also inspired by extensive foreign travel, particularly in Italy. Stone’s early iconic American Embassy in New Delhi (1954) defined the style for many and he was also well-known for both his domestic and international commissions, including the Kennedy Center for the Performing Arts in Washington, D.C. (1971).

Mature Design Work

By the completion of the McGregor Center in 1958, Yamasaki was firmly in the category of nationally recognized architect, and his visibility, and workload, only increased in the coming years. The late 1950s and early 1960s were arguably the height of his career and popularity as an architect. During the final years of the 1950s, Yamasaki and Leinweber would be completing mostly Michigan projects that they had secured in the early years of their partnership. Although the firm did undertake some residential commissions, their interests lay mainly with larger, institutional clients, and their residential work was always a minor part of their office. Yamasaki’s design of the McGregor Center so impressed Wayne State University that its leaders chose him to create a new campus plan. Prior to this, the University had been considering a move to a new, open site, farther out in the county where it would have room to grow. Yamasaki’s plan, which demonstrated how they could continue to grow while remaining in the city, changed their minds. Instead of trying to create a traditional campus quadrangle, or even an urban oasis, Yamasaki directly addressed the campus’ urban context by envisioning a small Renaissance city consisting of a series of open squares and arcaded courts linked by pedestrian malls or small streets.

³⁶ Marcus Whiffen, *American Architecture since 1780: A Guide to the Styles* Cambridge, MA: The MIT Press, 1985), 257.

MCGREGOR MEMORIAL CONFERENCE CENTER**Page 22**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

While the university always had the intention to hire a variety of architects for the various buildings on the campus, it also engaged Yamasaki to design three more buildings to begin carrying out his campus plan: the Education Building (1960), and the Prentis Hall/DeRoy Auditorium complex (both completed in 1964). The Education Building, designed to complement its neighbor, the McGregor Center, employed multiple levels of pre-cast concrete Gothic arches on the exterior, creating a repetitive façade that sheltered a loggia at the ground level. The DeRoy Auditorium, with its surrounding moat, referenced the reflecting pool at the McGregor Center, while the central first floor atrium on Prentis Hall provided a visual axis between the Auditorium and the Detroit Public Library to the east.

Another well-known early design in the Detroit area was the Reynolds Metals Company building in Southfield (1959), the so-called “jewel on stilts.” While Yamasaki had used aluminum screening in a more restrained manner on the McGregor Center, here he installed a gold anodized aluminum screen that wrapped around the entire building to let light into the building while deflecting the harshest rays of the sun. Like the McGregor Center, it was also set on a “podium” and was surrounded by a reflecting pool, which has since been infilled. The Reynolds Metals Company design won Yamasaki another AIA First Honor Award in 1961.

The use of screening, first seen at the McGregor Center and expanded at the Reynolds Metals Company, became another characteristic of Yamasaki’s style. He executed it in metal at McGregor and Reynolds, in concrete (appropriately) at the American Concrete Institute Building in Detroit (1958), and in brick at the College for Creative Studies Building, in Detroit (1957). He also achieved this effect through the placement of close-spaced window mullions, like at the Michigan Consolidated Gas Company Building, Detroit (1963), or by the insertion of marble panels between narrow flanking windows, as he did at the Northwestern National Life Insurance Company in Minneapolis (1964).

In 1958, Yamasaki was commissioned to build a high rise in downtown Detroit for the Michigan Consolidated Gas Company (MichCon), still one of the iconic buildings along Jefferson Avenue. It was the firm’s first high rise commission, and would occupy a prominent location at the foot of Woodward Avenue, in the middle of Detroit’s Civic Center. The pre-cast concrete and quartz aggregate skin with white marble column facings harmonized with the white marble used in other Civic Center buildings. It also had the relatively narrow window openings that would characterize many of Yamasaki’s later office towers, in particular the World Trade Center. Yamasaki suffered from acrophobia, and he believed that building occupants would naturally feel more comfortable in high rise buildings if they felt secure near the windows. These narrow window openings also contributed to the vertical emphasis of his high rise buildings. The MichCon Building also featured one of Yamasaki’s nearly standard reflecting pools along Jefferson Avenue, now infilled. The MichCon building (currently known as One Woodward) remains one of Yamasaki’s most significant buildings in Detroit and Michigan.

Yamasaki also had a number of high-profile international commissions in the 1950s. In addition to the US Consulate in Kobe, Japan (1955, demolished ca. 1980s), other significant international works from this period were the United States Pavilion at the World Agricultural Fair in New Delhi, India (1959) and the Civil Air Terminal at Dharan International Airport in Saudi Arabia (1961). In these commissions, Yamasaki demonstrated his talent for incorporating tributes to the host community’s culture and architectural styles. At the US Pavilion in New Delhi, Yamasaki was asked to design an integrated exhibit that would show how American agricultural experience and technology could help improve Indian agriculture. Working under a very short timetable, Yamasaki and his staff created a playful, friendly sequence of spaces which combined an American country fair with India’s annual “Mela” or harvest fair.³⁷

³⁷ Yamasaki, *A Life in Architecture*, 59-63.

MCGREGOR MEMORIAL CONFERENCE CENTER**Page 23**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

Yamasaki's second international commission from this era was the Dharan Air Terminal in Saudi Arabia. The one-story building contained both domestic and international terminals, separated by four open structural bays. Constructed of pre-cast concrete, the roofline prominently featured projecting triangular overhangs very similar to those of the McGregor Center. Yamasaki would later complete two more commissions in Saudi Arabia: the Monetary Agency Head Office (1981) and the Eastern Province International Airport (1985). Other international commissions toward the end of his career included the Founder's Hall, Shinji Shumeikai, Shiga Prefecture, Japan (1982) and the Torre Picasso, Madrid (1988).

In 1959, Yamasaki separated from his former partner, Joseph Leinweber, setting up his own company, Yamasaki and Associates. The firm's popularity was enormous, and by the early 1960s Yamasaki was juggling commissions from across the country and around the world. Some of his most memorable buildings from this period include the Federal Science Pavilion at the Seattle World's Fair (1962), Oberlin Conservatory of Music in Ohio (1963), North Shore Congregation Israel in Glencoe, Illinois (1964), Robertson Hall at the Woodrow Wilson School of Public and International Affairs at Princeton (1965), and the Century Plaza Hotel, Los Angeles (1966). Yamasaki also designed his more modest company office in Troy, Michigan (1967; scheduled for demolition in 2014).

It is clear that Yamasaki was considered one of the most important architects of his time. As early as 1955, his friend Eero Saarinen had called him "one of the six best architects in the country."³⁸ In 1959 he was honored by the Architectural League of New York with a one man show—the first time the League had done so since Frank Lloyd Wright's show twenty-eight years prior. In addition to the AIA Honor Award for McGregor, he also received them for the David Feld Medical Clinic in Detroit in 1954 (while still part of Yamasaki, Leinweber, Associates), Benjamin Franklin Junior High in Wayne, Michigan in 1959, the Reynolds Metals Company Building in 1961, and the International Terminal at Dharan Airport in Saudi Arabia, and was made a fellow of the AIA in 1963. Yamasaki's correspondence also reinforces that he had collegial relationships and friendships with many of the most prominent architects of the day, including Mies van der Rohe, Max Abramovitz, Eero Saarinen, Pietro Belluschi, and Victor Gruen, and he was frequently solicited for articles and speaking engagements around the country.³⁹ He drew praise from Modernist luminaries like Walter Gropius and Wallace Harrison, his former employer. Former employee Harry Van Dine may have hit on the appeal of Yamasaki's buildings when he noted that they provoked an almost "physiological" reaction, operating "from the heart" rather than intellectually. Balthazar Korab, who photographed many of his buildings, saw his buildings as textural and pleasing to the eye.⁴⁰ Karl Greimel, dean of the School of Architecture at Lawrence Institute of Technology in 1986, noted: "he really wrenched Michigan, and the Detroit area in particular, into the spirit of Modern architecture."⁴¹ Many of his works, including the McGregor Center, North Shore Congregation Israel, and his office towers are widely admired.

Most would agree that Yamasaki's career culminated with the commission for the World Trade Center in New York City received in 1962 (constructed 1968-75; destroyed 2001). It exemplified many of Yamasaki's design ideals. To Yamasaki, the design of the site was just as, or perhaps more, important than the soaring towers. He was responsible for the creation of a superblock out of the proposed site, closing off the cross streets and

³⁸ Eero Saarinen to the National Council of Architectural Registration Boards, 18 Nov. 1955, Correspondence Files, Yamasaki Collection. Yamasaki's copy of the letter includes handwritten note from Saarinen at the bottom: "Your probable reaction: 'Oh! Only one of six!'"

³⁹ See various correspondence in the Yamasaki Collection.

⁴⁰ Ray Roddy and Marsha Miro, "Minoru Yamasaki: Architect Put Soul in *Modern*," *Detroit Free Press* 9 Feb. 1986, in Wayne State University Biographical Files, "Minoru Yamasaki" (folder), Walter P. Reuther Library, Wayne State University, Detroit, Michigan.

⁴¹ Roddy and Miro, "Minoru Yamasaki."

MCGREGOR MEMORIAL CONFERENCE CENTER**Page 24**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

widening adjacent streets to route vehicular traffic around the site and improve pedestrian access. This enlarged site allowed him to create a mix of high and low rise buildings set within an urban oasis—a garden space where people could relax and find serenity. The 110 story towers were the tradeoff for these open spaces.

The design of the two towers themselves also reflected Yamasaki's design philosophy, namely his search for serenity and beauty. The simple, vertical volumes of the buildings, the delicate character of the vertical elements, the human scale of the design at the ground level, and the warm character of the exterior surface provided "graceful proportions... (and an) ensuing peace and sense of permanence" that Yamasaki found "essential parts of fine buildings."⁴² Yamasaki also continued his search for better methods of design and construction, almost a necessity when planning two of the tallest towers in the world. He worked with his contractors to solve many of the problems he encountered during the construction process, creating a "slurry wall" system to lay the foundations and utilizing a Vierendeel truss system at the exterior walls rather than the typical central core X-bracing, creating a more open area at the interior and allowing a smaller module size for more flexibility in the office space. He worked with the chairman of Alcoa to create a new composition of aluminum alloy that gave a warmer color than the standard cold exterior of aluminum. Alcoa and its sub consultants also redesigned the aluminum system to eliminate the need for sealants, further reducing construction and maintenance costs. Finally, Yamasaki designed a system of elevators composed of intermediate sky lobbies plus stacked local elevators to reduce the space taken up within the building by the elevator cores.

The World Trade Center was by far the largest commission of Yamasaki's career; so much so that he at first thought the project budget was a mistake. Work on the Trade Center dominated Yamasaki's office for the better part of a decade—even physically, as they had to cut a hole in the ceiling to accommodate the models. At the time he was awarded the project, the office had only fifty-five employees; that would rise to eighty over the course of the project. Choosing a non-New York architect created some resentment in the city; given that, and the high profile of the project, controversy was almost guaranteed. However, its commission in 1962 sealed Yamasaki's status as one of the nation's most significant architects, landing him on the cover of *Time* magazine. It was his best-known work, even before its tragic destruction in 2001 gave it iconic status in the history of the United States.

Conclusion: Death and Legacy

Yamasaki remained active in architecture into the 1980s, maturing into a respected elder of the profession. Over the years, he mentored a number of architects who in their turn would become the most successful of the subsequent generation, including well-known designers such as Gunnar Birkerts, William Kessler, Phil Meathe (who later headed Yamasaki's old firm, Smith, Hinchman and Grylls), Don Hisaka, and many others.

Yamasaki's firm continued to produce a number of significant architectural works across the country into the 1970s and 1980s. These included the Century Plaza Towers in Los Angeles (1975), the Rainier Bank Tower in Seattle (1977), 100 Washington Square in Minneapolis (1981), as well as a number of international commissions (noted above). The firm also continued its work in Michigan, including Temple Beth El in Bloomfield Township (1974), and the Columbia Center Towers in Troy (1989-2000). Temple Beth El is one of Yamasaki's more significant later commissions. The design demonstrated that he still sought inspiration in the past: the tent like shape of the sanctuary was a direct reference to the tents that had served as the Jewish faith's original synagogues. Yamasaki was also still seeking novel solutions; the sanctuary's shape required him to re-invent his approach to the building's framing and structure.⁴³

⁴² Yamasaki, *A Life in Architecture*, 118.

⁴³ Yamasaki, *A Life in Architecture*, 144.

MCGREGOR MEMORIAL CONFERENCE CENTER**Page 25**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

After his serious illness in 1954, Yamasaki continued to suffer from stomach problems exacerbated by his heavy workload and the extreme pressure he placed on himself, leading to further operations and even a morphine addiction, which he gradually broke. He died of stomach cancer in 1986.

Minoru Yamasaki's unique design style married his taste for history, his simply expressed humanism, and his occasional whimsy with the technological advances available to modern architecture. Influenced by his experience as a Nissei in 1930s and World War II-era America, he fully embraced the principles of Modernism that he encountered among his friends and colleagues in New York City. Yamasaki brought that aesthetic to post-war Detroit, the epicenter of Modern and industrial design, where he continued his close collaboration with colleagues like Eero Saarinen, who was already working in the Detroit area. His early work here hewed to the standards of the International Style in designs like the Federal Reserve Bank of Chicago Detroit Branch Annex, which brought Modern design to Detroit, the Lambert-St. Louis International Airport Main Terminal, considered the first modern airport terminal, and the now infamous Pruitt-Igoe urban renewal complex. Following a period of ill-health and world travel, Yamasaki emerged with a new aesthetic style, based on the principles of surprise, serenity and delight. The McGregor Memorial Conference Center both established and embodied those principles, bringing Yamasaki international recognition and numerous commissions. He would continue to develop this new style, now recognized as one of the exemplars of New Formalism, in works in Michigan (the Reynolds Metals Company building and the Michigan Consolidated Gas Company tower), the United States (the Federal Science Pavilion at the Seattle World's Fair and Oberlin Conservatory of Music in Ohio), and around the world (Dharam International Airport in Saudi Arabia). His career culminated with the design of the World Trade Center in New York City, but in his later years he continued to challenge himself with works like Temple Beth El in Michigan and the Rainier Bank Tower in Seattle.

Speaking in 1962 at the Seattle World's Fair, Yamasaki said:

I believe that architecture must be dignified and elegant. It must be humanely scaled to man so that he has pride in it, so that he loves it, so that he wishes to touch it. It must have ever-changing qualities to overcome the boredom caused by the repetitious quality of machine production — changing space, light and mood — a soaring quality which represents the realized and potential nobility of man in our society. There must be elements of delight, to offset the monotony of mass-produced building and to enhance the enjoyment of life. Yet we must thoroughly respect technology, since only by constructing our buildings through the machine process can we economically produce the vast amount of building necessary to house the varying activities of man.

The dignified, elegant, delightful and thoroughly Modern McGregor Memorial Conference Center, still recognized as his best work, exemplifies Minoru Yamasaki's philosophy, both in life and in art.

MCGREGOR MEMORIAL CONFERENCE CENTER

United States Department of the Interior, National Park Service

Page 26

National Register of Historic Places Registration Form

9. MAJOR BIBLIOGRAPHICAL REFERENCES**Collections**

Reuther Library, Wayne State University, Detroit, Michigan

Yamasaki Collection (correspondence, writings, etc).

Vertical Files, Buildings: M; Box #5.

Biographical Files: Minoru Yamasaki

Official Minutes and Proceedings of the Meetings of the Board of Governors of Wayne State University.

State Archives of Michigan, Lansing, Michigan

Yamasaki Collection (drawings, photographs).

Books and Theses

Abercrombie, Stanley. *George Nelson: The Design of Modern Design*. Cambridge, MA: MIT Press, 2000.

Ferry, W. Hawkins. *The Buildings of Detroit*. Detroit, MI: Wayne State University Press, 1980.

Glanz, James, and Eric Lipton. *City in the Sky: The Rise and Fall of the World Trade Center*. New York: Times Books, 2003.

Hill, Eric J., and John Gallagher. *AIA Detroit: The American Institute of Architects Guide to Detroit Architecture*. Detroit: Wayne State University Press, 2003.

Holleman, Thomas J., and James P. Gallagher. *Smith, Hinchman & Grylls: 125 Years of Architecture and Engineering, 1853-1978*. Detroit: Wayne State University Press, 1978.

Hyde, Charles K. "The Physical Development History of the Campus of Wayne State University, Detroit, Michigan." Thesis. Wayne State University, 1993.

Mason, Philip. *Tracy W. McGregor: Humanitarian, Philanthropist, and Detroit Civic Leader*. Detroit: Wayne State University Press, 2008.

Roth, Leland. *A Concise History of American Architecture*. New York: Harper and Row, 1979.

Whiffen, Marcus. *American Architecture Since 1780: A Guide to the Styles*. Cambridge, MA: The MIT Press, 1985.

Yamasaki, Minoru. *A Life in Architecture*. New York: Weatherhill, 1979.

Articles, Manuscripts, and Nominations

"A Gem of Quiet Reflection." *Detroit Free Press* 1 Feb. 1965. Clipping in Wayne State University Archives Building Files, "McGregor Memorial Conference Center Clippings, 1960-present" (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.

MCGREGOR MEMORIAL CONFERENCE CENTER**Page 27**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

- “Architects’ Institute Honors Buildings Here and Abroad.” *The New York Times* 26 Feb. 1961. Sec. R: 1.
- “Art: The Road to Xanadu.” *Time* (magazine) 18 Jan. 1963 (cover).
- Baulch, Vivian M. “Minoru Yamasaki, World-class Architect.” *The Detroit News* 14 Aug. 1998. Accessed online, 24 Jul. 2012. <http://blogs.detroitnews.com/history/1998/08/13/minoru-yamasaki-world-class-architect/>
- Benson, Robert. “Yamasaki’s Legacy: His Buildings are his Monument.” *The Detroit News* 18 Feb. 1986. Sec. D: 3.
- Boyd, Robert. “He Dreams of Beautifying Decaying Area near WSU.” *Detroit Free Press* 11 May 1958. Sec. C: 2.
- Braun, Lilian Jackson. “Gateway to a University: Architect Yamasaki designs a Jewel for Wayne State Campus.” *Detroit Free Press* 28 Sep. 1958. Living Section: 17-18.
- Bristol, Katherine. “The Pruitt-Igoe Myth.” *Journal of Architectural Education* 44 (May 1991): 163-71.
- Broner, Robert. “He Builds as He Wants To.” *Detroit Times* 20 Sep. 1959. Clipping in Wayne State University Biographical Files, “Minoru Yamasaki” (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.
- Colby, Joy Hakanson. “Focus/Art.” *The Detroit News* 11 Mar. 1982. Clipping in Wayne State University Biographical Files, “Minoru Yamasaki” (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.
- Colby, Joy Hakanson. “Yamasaki: The People’s Architect.” *The Detroit News Magazine* 24 Oct. 1982: 17-30.
- Collier, Barney and Larry Gareau. “Start New Building.” *Collegian* (Wayne [State] University) 18 Dec. 1956. Clipping in Wayne State University Archives Building Files, “McGregor Memorial Conference Center Clippings, 1954-1959” (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.
- “Community Building will Serve Detroit.” *Collegian* (Wayne [State] University) 17 Dec. 1956. Clipping in Wayne State University Archives Building Files, “McGregor Memorial Conference Center Clippings, 1954-1959” (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.
- “Community Conference Center.” *Inside Wayne* 2 Jan. 1957. Clipping in Wayne State University Archives Building Files, “McGregor Memorial Conference Center Clippings, 1954-1959” (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.
- “Conference Center Gift to Wayne U.” *Detroit Times* 15 Feb. 1956. Clipping in Wayne State University Archives Building Files, “McGregor Memorial Conference Center Clippings, 1954-1959” (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.
- Cooperman, Emily T. National Historic Landmark nomination for the “General Motors Technical Center.” National Park Service, U.S. Department of the Interior, 2013-14.

MCGREGOR MEMORIAL CONFERENCE CENTER**Page 28**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

Duffy, Robert W. "Lambert Field." Accessed online, 26 Feb. 2014: http://www.landmarks-stl.org/architecture/lambert_field/

Evaskis, Christiane. "Yamasaki's Spirit of St. Louis." Accessed online, 26 Feb. 2014: <http://seekingmichigan.org/look/2011/04/28/yamasakis-spirit-of-st-louis>

Falbaum, Berl. "Notables Attend Dedication." *Collegian* (Wayne [State] University) 20 May 1958. Clipping in Wayne State University Archives Building Files, "McGregor Memorial Conference Center Clippings, 1954-1959" (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.

"Famed Detroit Yamasaki Answers Vigorous City Hall Defender." *The Detroit News* 16 Oct. 1959. Clipping in Wayne State University Archives Building Files, "McGregor Memorial Conference Center Clippings, 1954-1959" (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.

Frank, Marie. "Emil Lorch: Pure Design and American Architectural Education.," *Journal of Architectural Education* 57 (May 2004): 28-40.

Goldberger, Paul. "Why Modernist Architecture Lost Face." *The New York Times* 28 Feb. 1982. Sec. D: 1.

Haessler, George, "A Random Portrait: Minoru Yamasaki." *Collegian* (Wayne [State] University) 1 Jan. 1958. Clipping in Wayne State University Biographical Files, "Minoru Yamasaki" (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.

"Hibernation is Ending for Winter-Worn Students." *The South End* (Wayne State University) 14 Mar. 1977: 2.

"Honors Due Yamasaki in New York." *Detroit Free Press* 21 May [1959]. Clipping in Wayne State University Biographical Files, "Minoru Yamasaki" (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.

Huxtable, Ada Louise. "Pools, Domes, Yamasaki – Debate: The Exotic Designs of a Japanese-American Architect Raise a Storm of Controversy." *The New York Times* 25 Nov. 1962: 36.

Huxtable, Ada Louise. "What Is Your Favorite Building?" *The New York Times* 21 May 1961. Sec. SM: 34.

Huxtable, Ada Louise. "Who's Afraid of the Big Bad Buildings?" *The New York Times* 29 May 1966. Sec. D: 13.

Ingraham, Joseph. "Detroit Debates Jewel on Stilts." *The New York Times* 27 Sep. 1959. Sec. R: 1.

"Jewel on Stilts' Costing 2 Million Ready to Open." *The Detroit News* 13 Sep. 1959. Clipping in Wayne State University Biographical Files, "Minoru Yamasaki" (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.

Korab, Balthazar. "Yamasaki's First Skyscraper Open." *The New York Times* 18 Aug. 1963: 303.

Konzelman, Carl. "Ugliness – but Beauty, Too: Detroit Has Islands of Hope – No. 4 in Series." *The Detroit News* 2 Nov. 1962. Sec. D: 1.

MCGREGOR MEMORIAL CONFERENCE CENTER**Page 29**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

- Konzelman, Carl. "Yamasaki: Architect of a More Beautiful USA, or...Controversy Engulfs Artistry of Detroit on Eve of Greatest Project." *The Detroit News Magazine* Page 30 Nov. 1962. Clipping in Wayne State University Biographical Files, "Minoru Yamasaki" (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.
- Lutz, William W. "Designer Strives for 'Serenity'." *The Detroit News* 6 May 1958: 46.
- "McGregor Memorial Still Shines as WSU Architectural Gem." *Alumni News* (Wayne State University) Dec. 1981: 5.
- Wayne State University. "McGregor Memorial Community Arts Center Ten Year Anniversary Brochure." 1968.
- McGregor Memorial Conference Center. "Facts for Your Files." 16 May 1958.
- "Million Dollar Center Given by McGregors." *Collegian* (Wayne [State] University) 1 Feb. 1956. Clipping in Wayne State University Archives Building Files, "McGregor Memorial Conference Center Clippings, 1954-1959" (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.
- "Million Dollar Gift Provides Conference Center." *Alumni News* (Wayne [State] University) Mar. 1956. Clipping in Wayne State University Archives Building Files, "McGregor Memorial Conference Center Clippings, 1954-1959" (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.
- Montgomery, Roger. "Improving the Design Process in Urban Renewal." *Journal of the American Institute of Planners* 31:1 (1965): 7-20.
- Morris, Don. "No Ivory Tower at WSU." *Detroit Times* 23 May 1958. Clipping in Wayne State University Archives Building Files, "McGregor Memorial Conference Center Clippings, 1954-1959" (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.
- Nicholson Kovalchick Architects. Seattle Historic Landmark nomination for the "Pacific Science Center." 26 Feb. 2010.
- Northrup, Dale, and Herbert Conlan. "Minoru Yamasaki Left His Imprint on City Skylines." *The Observer and Eccentric Newspapers* 13 Feb. 1986. Sec. 1: E.
- Ochsner, Jeffrey. "Modern or Traditional? Lionel H. Pries and Architectural Education at the University of Washington, 1928-1942." *The Pacific Northwest Quarterly* 96 (Summer 2005): 132-50.
- O'Brien, George. "Architecture In Anarchy, Expert Says: Purpose Needed." *The New York Times* 25 Apr. 1962: 34.
- Olinick, Michael. "WSU Fears Center Use by Communists, 'Crackpots'." *The Michigan Daily* (Ann Arbor) 2 Oct. 1960. Clipping in Wayne State University Archives Building Files, "McGregor Memorial Conference Center Clippings, 1960-present" (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.

MCGREGOR MEMORIAL CONFERENCE CENTER**Page 30**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

- Pells, Robert. "Richly Designed, Landscaped Buildings Win Top Awards." *The New York Times* 3 May 1959. Sec. R: 1.
- Popa, Robert. "Gifts with Strings Attached Shackle State." *The Detroit News* 16 Jan. 1966. Clipping in Wayne State University Archives Building Files, "McGregor Memorial Conference Center Clippings, 1960-present" (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.
- Prudon, Theodore. "Rediscovering Yamasaki: Appreciating 1960s Architecture." Accessed online, 26 Feb. 2014: http://docomomo-us.org/news/rediscovering_yamasaki_appreciating_1960s_architecture
- Ray, Roddy and Marsha Miro. "Minoru Yamasaki: Architect Put Soul in Modern." *Detroit Free Press* 9 Feb. 1986. Clipping in Wayne State University Biographical Files, "Minoru Yamasaki" (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.
- Rozmay, Thais. "Rich White Elephant Planned." *The South End* (Wayne State University) 3 Jun. 1976. Clipping in Wayne State University Archives Building Files, "McGregor Memorial Conference Center Clippings, 1960-present" (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.
- Salsinger, Harry. "Civic Leaders Attend Wayne Center Rites." *The Detroit News* 23 May 1958. Clipping in Wayne State University Archives Building Files, "McGregor Memorial Conference Center Clippings, 1954-1959" (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.
- Salsinger, Harry. "Conference Center Opened to 200 Leaders at Wayne U." *The Detroit News* 23 May 1958. Clipping in Wayne State University Archives Building Files, "McGregor Memorial Conference Center Clippings, 1954-1959" (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.
- Salsinger, Harry. "'Gateway to University' Opening at Wayne State." *The Detroit News* 9 May 1958. Clipping in Wayne State University Archives Building Files, "McGregor Memorial Conference Center Clippings, 1954-1959" (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.
- Savage, Rebecca Binno. National Register of Historic Places form for the "Federal Reserve Bank of Chicago Detroit Branch Building." National Park Service, U.S. Department of the Interior. 2007.
- "Says Buildings in US Don't Express Culture." *Ann Arbor News* 19 Mar. 1960. Clipping in Wayne State University Archives Building Files, "McGregor Memorial Conference Center Clippings, 1960-present" (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.
- "Screen Cuts Heat: Aluminum on Facade Keeps Reynolds Building Cool." *The New York Times* 24 Apr. 1960. Sec. R: 15.
- Singer, Christopher M. "McGregor center links WSU with city." *The Detroit News* 4 Apr. 2001. Clipping in Wayne State University Archives Building Files, "McGregor Memorial Conference Center Clippings, 1960-present" (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.

MCGREGOR MEMORIAL CONFERENCE CENTER

United States Department of the Interior, National Park Service

Page 31

National Register of Historic Places Registration Form

- Smith, Patricia Barbara. "Out in Birmingham, the Man Who is Creating the World's Tallest Building." *Detroit Free Press* (special section) 2 Apr. 1967: 12-15, 18-19.
- Smith, Patricia Beach. "Yamasaki – Nature's advocate." *Birmingham Observer-Eccentric* 21 Nov. 1974: Creative Living. Clipping in Wayne State University Archives Building Files, "McGregor Memorial Conference Center Clippings, 1960-present" (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.
- Sterling, Pauline. "Mrs. Yamasaki: A Modern Design." *Detroit Free Press* 20 Sep. 1959. Clipping in Wayne State University Biographical Files, "Minoru Yamasaki" (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.
- "Sunlitter May Meet the 'Spirit'." *Detroit Free Press* 22 Aug. 1962. Sec. D: 10.
- "Urban University is Topic at WSU's New Center." *The Detroit Times* 18 May 1958. Clipping in Wayne State University Biographical Files, "Minoru Yamasaki" (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.
- Ward, Hilary H. "He Puts a 'Soul' in Churches." *Detroit Free Press* 15 Oct. 1960: 8.
- "Wayne Gift of \$1,000,000 to Build Hall." *The Detroit News* 25 Jan. 1956. Clipping in Wayne State University Biographical Files, "Minoru Yamasaki" (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.
- Wells, Robert. "Shopper's Fairyland Designed for Detroit." *The Detroit News* 30 Aug. 1959. Clipping in Wayne State University Biographical Files, "Minoru Yamasaki" (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.
- "Yamasaki Show to Open in India." *The Detroit News* 8 Nov. 1959. Clipping in Wayne State University Biographical Files, "Minoru Yamasaki" (folder). Walter P. Reuther Library, Wayne State University. Detroit, Michigan.
- "Yamasaki's 'White Emerald.'" *Daily Collegian* 11 Feb. 1958: 4.
- Yamasaki, Minoru. "History and Emotional Expression." *Journal of Architectural Education* 12 (Summer 1957): 8.
- Yamasaki, Minoru. "The Plan for Wayne University." *Journal of Architectural Education* 13 (Autumn 1958): 47-49.

Other

Harriman, Virginia. Personal interview with Minoru Yamasaki. ca. August 1959. Transcript available online: <http://www.aaa.si.edu/collections/interviews/minoru-yamasaki-interview-6235#transcript>

Previous documentation on file (NPS):

MCGREGOR MEMORIAL CONFERENCE CENTER

United States Department of the Interior, National Park Service

Page 32

National Register of Historic Places Registration Form

- Preliminary Determination of Individual Listing (36 CFR 67) has been requested.
- Previously Listed in the National Register. NR #10001023, 12/13/2010
- 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 (Wayne State University, Reuther Library)
- Other (Specify Repository):

10. GEOGRAPHICAL DATA

Acreage of Property: approximately one acre

UTM References:	Zone	Easting	Northing
	17	329492.12	4691762.31

Verbal Boundary Description:

The boundary of the McGregor Memorial Conference Center is a rectangular plot bounded on the north by Ferry Mall (formerly Ferry Street), on the west by Gullen Mall (formerly Second Avenue), on the south by the north façade of the Art Building, and on the east by the west facades of the Alumni House/Community Arts Auditorium building.

Boundary Justification:

The boundary encompasses the McGregor Memorial Conference Center building, the adjacent reflecting pool, and the lawn area/planting beds historically associated with the Conference Center's design.

MCGREGOR MEMORIAL CONFERENCE CENTER

United States Department of the Interior, National Park Service

Page 33

National Register of Historic Places Registration Form

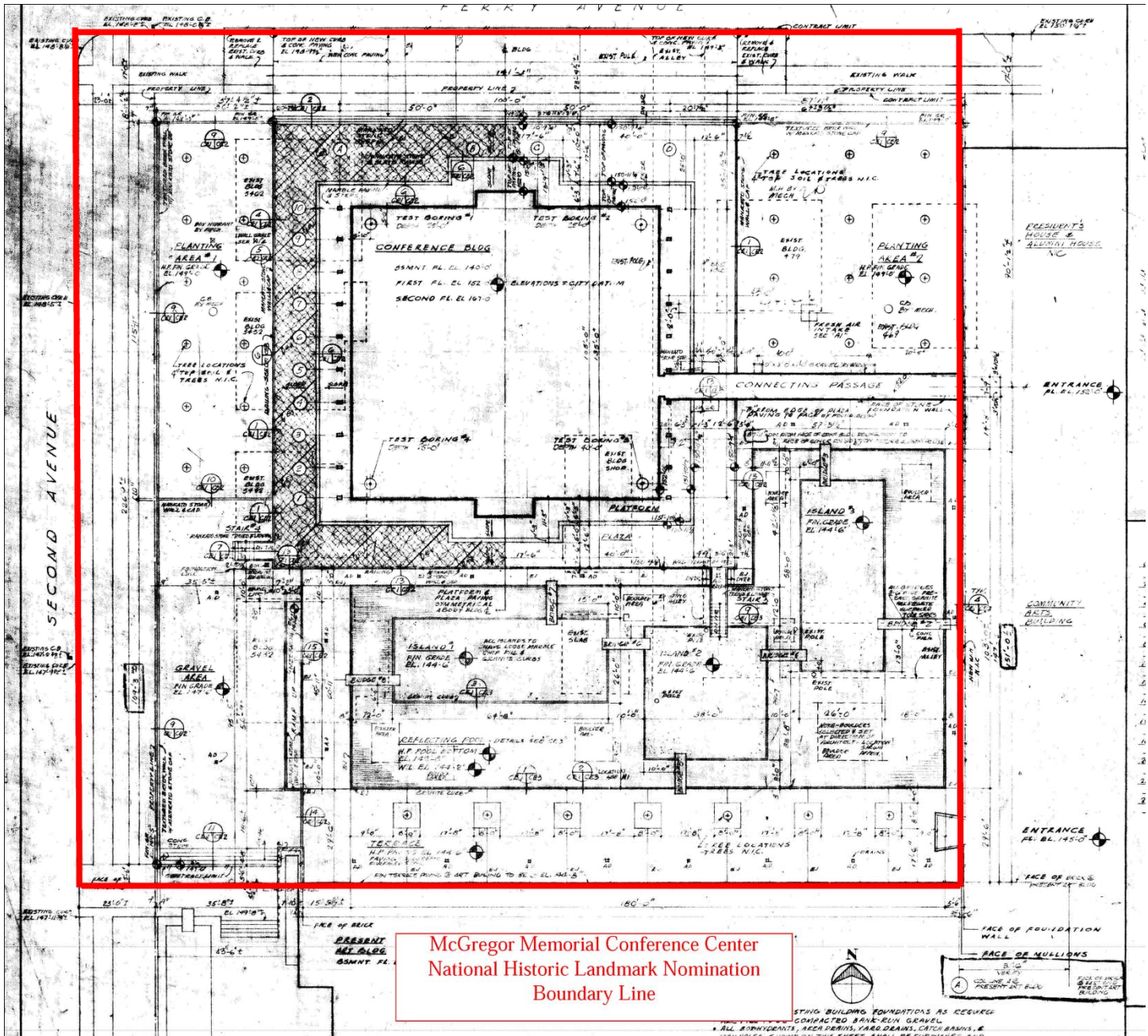
11. FORM PREPARED BY**Name/Title:** Ruth E. Mills, Architectural Historian**Address:** Quinn Evans Architects
219 ½ North Main Street
Ann Arbor, Michigan 48104**Telephone:** 734-663-5888**Date:** January 2014**Edited by:** James A. Jacobs, Historian
National Park Service
National Historic Landmarks Program
Historic American Buildings Survey
1201 Eye St. NW, 2270
Washington, DC 20005**Telephone:** (202) 354-2184NATIONAL HISTORIC LANDMARKS PROGRAM
March 26, 2014

MCGREGOR MEMORIAL CONFERENCE CENTER

United States Department of the Interior, National Park Service

Images

National Register of Historic Places Registration Form



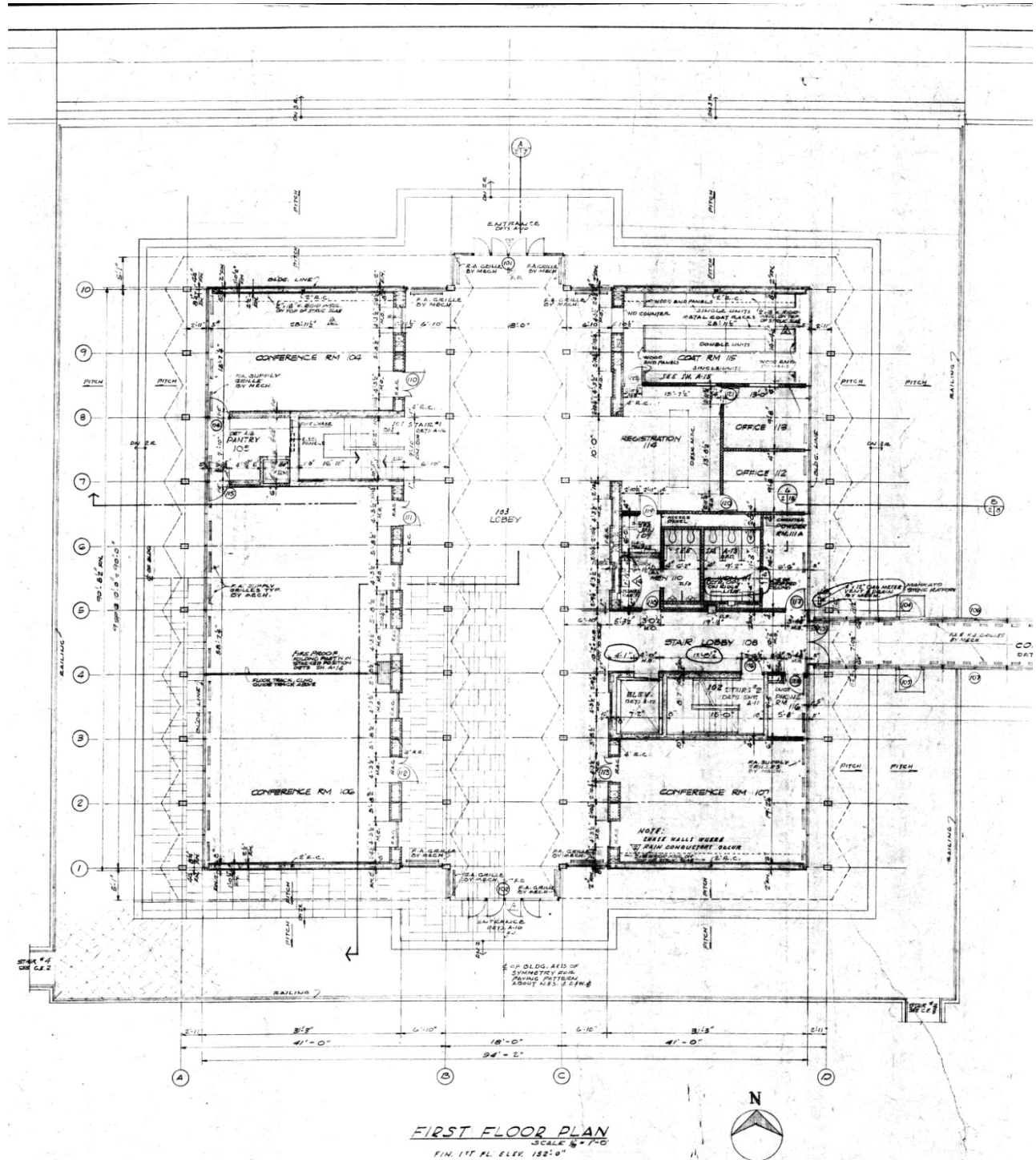
McGregor Memorial Conference Center Proposed NHL boundary
Ruth E. Mills, Quinn Evans Architects, 2013

MCGREGOR MEMORIAL CONFERENCE CENTER

United States Department of the Interior, National Park Service

Images

National Register of Historic Places Registration Form



First-floor Plan

MCGREGOR MEMORIAL CONFERENCE CENTER

United States Department of the Interior, National Park Service

Images

National Register of Historic Places Registration Form



North and west elevations, looking southeast (above)
West elevation, detail of columns and screens (below)
Ruth E. Mills, photographer, 2013



MCGREGOR MEMORIAL CONFERENCE CENTER

United States Department of the Interior, National Park Service

Images

National Register of Historic Places Registration Form



West and south elevations, looking northeast (above)
Entrance doors, south elevation (below)
Ruth E. Mills, photographer, 2013



MCGREGOR MEMORIAL CONFERENCE CENTER

United States Department of the Interior, National Park Service

Images

National Register of Historic Places Registration Form



Pool and south elevation, looking northeast (above)
Pool, sculptures, and south and east elevations, looking northwest (below)
Ruth E. Mills, photographer, 2013



MCGREGOR MEMORIAL CONFERENCE CENTER

United States Department of the Interior, National Park Service

Images

National Register of Historic Places Registration Form



First-floor of atrium, looking south
Ruth E. Mills, photographer, 2013

MCGREGOR MEMORIAL CONFERENCE CENTER

United States Department of the Interior, National Park Service

Images

National Register of Historic Places Registration Form



Atrium, from second-floor bridge, looking south
Ruth E. Mills, photographer, 2013

MCGREGOR MEMORIAL CONFERENCE CENTER

United States Department of the Interior, National Park Service

Images

National Register of Historic Places Registration Form



Second floor, looking west across atrium (above)
Interior of conference room on second floor (below)
Ruth E. Mills, photographer, 2013

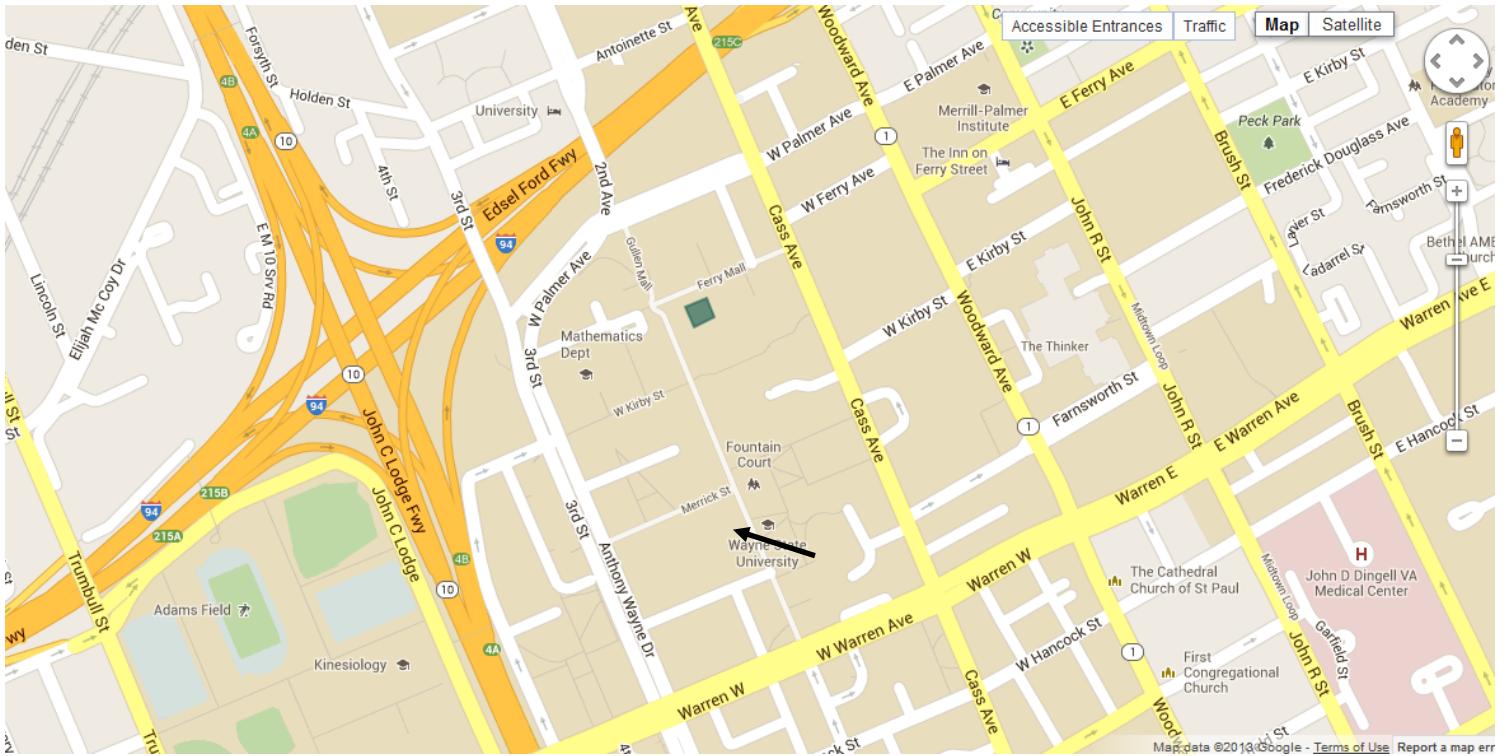


MCGREGOR MEMORIAL CONFERENCE CENTER

United States Department of the Interior, National Park Service

Map

National Register of Historic Places Registration Form



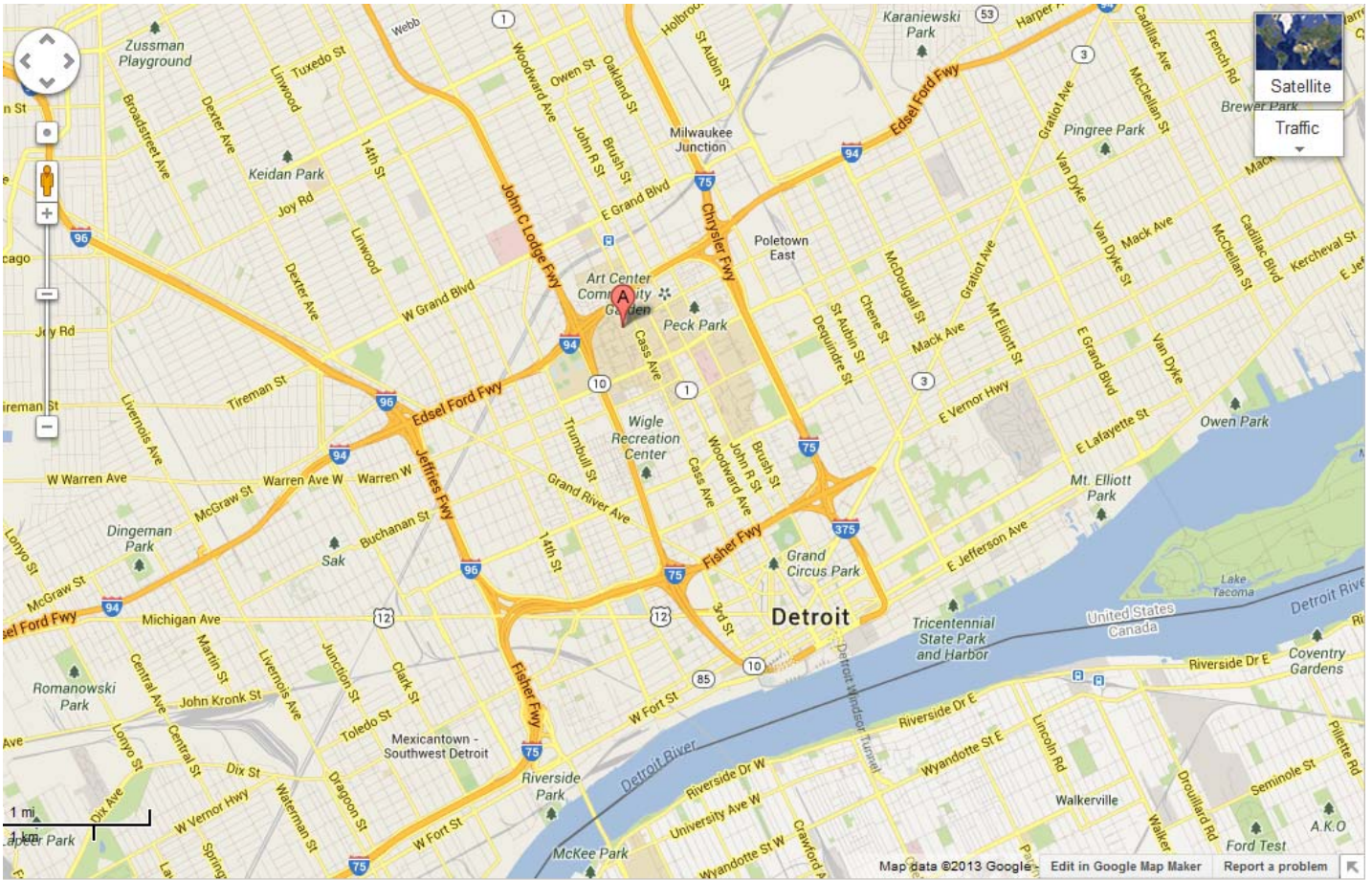
Map of Wayne State University Campus, arrow pointing to McGregor Center (source: Wayne State University campus map)

MCGREGOR MEMORIAL CONFERENCE CENTER

United States Department of the Interior, National Park Service

Map

National Register of Historic Places Registration Form



Map of Detroit, Michigan. McGregor Center at "A" (source: Google Maps), Datum WGS84



UTM References: **Zone** **Easting** **Northing**
 17 329492.12 4691762.31