The City of Seattle

Landmarks Preservation Board

Mailing Address: PO Box 94649, Seattle WA 98124-4649
Street Address: 600 4th Avenue, 4th Floor

REPORT ON DESIGNATION LPB 500/17

Name and Address of Property: Pacific Architect & Builder Building
1945 Yale Place East

Legal Description: Parcel A

Beginning at a point on the North line of a tract of land conveyed to W. Parry Smith, by D.T. Denny, by deed dated May 4, 1886, recorded in book 39 of Deeds, pages 1 and 2, records of said county, which said point is 30 feet South of the Southeast corner of Block 4, Greene's Addition to the City of Seattle, as per plat recorded in Volume 2 of Plats, page 73, records of King County, which point is also the Southwest corner of East Newton Street and Howard Avenue North (now Yale Avenue East); thence Westerly along said North line of said tract conveyed to W. Parry Smith, 60 feet; thence Southerly along a line parallel to projection of the West line of said Howard Avenue North (now Yale Avenue East) 173 feet to the South line of the W. Parry Smith Tract; thence Easterly along said South line, 125.5 feet to the Southwesterly line of Howard Place (now Yale Place East) as established by Ordinance No. 5566 of the City of Seattle, thence Northwesterly and Northerly along the line of said Howard Place, and Howard Avenue North (now known as Yale Place East), 199 feet, more or less, to the point of beginning.

Together with portion of Yale Place East adjoining said premises vacated by Ordinance 52992, which would revert to said premises.

At the public meeting held on July 19, 2017 the City of Seattle's Landmarks Preservation Board voted to approve designation of the Pacific Architect & Builder Building at 1945 Yale Place East as a Seattle Landmark based upon satisfaction of the following standard for designation of SMC 25.12.350:

D. It embodies the distinctive visible characteristics of an architectural style, or period, or a method of construction.

E. It is an outstanding work of a designer or builder.

DESCRIPTION

Location

The subject property is at 1945 Yale Place East, on the east side of the street. It is sited on the low end of a steep slope with the main entrance of Yale Place at the top floor. It is bordered on the north by E. Newton Street (Fig. 1).

The Site

The site consists of two parcels (Fig. 2). Parcel A is an irregular shaped parcel of 12,700 sq. ft. The building site grade drops steeply from the east by an estimated 20' total. Parcel B is a thin, 40' wide (approximately 6,900 sq.ft.) property overgrown with blackberry and ivy separating the building site with a multi-family residential development to the west. From the bottom southwest corner, the site is one block away from the shoreline industrial areas of east Lake Union.

The directional designations for streets was changed in 1961 and Yale Avenue North became Yale Avenue East. Running north-south, Yale Avenue East is a two-lane street providing two-way traffic (Fig. 14) with parking lanes on each side. Supposedly because of navigating the steep slope, the avenue was diverted east in the 1940s, becoming Yale Place East as it continues towards Eastlake Ave. A commercial office building borders the site to the south and other single-family houses and apartment buildings fill the surrounding neighborhood. The building faces east, although its form has a presence from all angles.

Landscaping consists of naturalized woodland plants and trees, including mature maples and ivy covering the slope. Concrete pavement surrounds the loading area and leads to the parking level from the north.

The Original Building Structure and Exterior Features

The plan is composed of three different elements: the main office/printing concrete block, a concrete block stock/loading area block to the north and the concrete stair and ramp on the east side. The steep site conditions presented unique opportunities in the composition of the elements. In order to keep vehicular/dynamic loads at ground level, parking and loading access took advantage of the lowest street level access available off of Newton Street (Fig. 22 & 23). As the building rises above the steep hillside on Yale Avenue East, the main entry occurs at the top floor. The dramatic site slope is emphasized by the main entry with a 50' ramp that bridges the gap between building and sidewalk (Fig. 15 & 21). The dramatic sloped site is further emphasized by the stair tower, a separate feature perched on a center concrete wall (Fig. 26 & 29). The stair hovers over the slope while also framing the main entry between itself and the main structure.

In section, three floors house three distinct program components: parking/building services at the lowest level; printing at the middle level and the publishing offices on the upper level. Dictated by the need for large unobstructed floor plates and the weight of the printing equipment, the main structure had to be concrete. The architecture takes advantage of this program requirement, by creating an expressive example of the versatility of concrete. Six bays

are divided by seven rectilinear concrete columns on the east and west elevations. A slab on grade is at the basement floor and a 14" structured slab spans the middle (printing) floor. Atop the concrete frame, the top (publishing) floor is covered by a hyperbolic paraboloid roof, freeing the office floor (45' x 83') of structural columns and allowing for a flexible partitioning, while creating an uplifting effect throughout the floor. Exterior concrete was left a natural color. Columns, slabs and the roof have smooth finishes and walls display the horizontal rough sawn wood forms.

The hyperbolic paraboloid roof can be read from the interior and creates a natural light and ventilation design opportunity. Since the roof spans between the exterior columns, steel clerestory windows infill the peaked roof forms and provide natural light to the dramatic ceiling and into offices (Fig. 10, 11, 34 & 35). Outside, the overhanging roof allows these windows to be free of blinds or curtains. In the center of each peak, an operable twelve-inch square awning window allows warm air to escape the high ceiling (Fig. 28).

To avoid disturbing the purity of the rectilinear office block and its roof/ceiling form, some utilitarian spaces were located in separate forms. On the north end, a square form containing toilets, storage and loading areas, etc. were built with concrete block to distinguish it from the central form and provide cost savings (Fig. 22). On the east elevation, the stair tower and entry ramp's dramatic cantilevers hover over the steep hillside highlighting the structural capacity of concrete (Fig. 26).

On the upper two floors, the horizontal wood siding and steel windows are a modern wood curtain wall hanging off concrete structure. Between the steel sliding/fixed windows and the clerestory at the top floor, a row of translucent fiberglass panels is divided into a smaller rhythm (Fig. 21). This horizontality of the curtain wall balances the vertical action of the stair tower and shaped roof.

Interior Features

A discernable sense of volume under the shaped ceiling creates a sense of order and overall unity for the offices on the top floor (Fig. 10, 11, 34 & 35). Partial-height wood framed partitions stopped with glass and a birch veneer cedar paneling once separated the private offices around a common meeting/work area in the center of the floor. Toilet and service rooms, needing full height walls are located in the CMU block at the north end.

"Considerable effort was made to prevent lighting fixtures and other interferences from destroying this sense of space." (Dryer 2004). Lighting fixtures were suspended on a metal track grid in which the wiring is run through. Center rods supporting this grid were the only feature intersecting the ceiling. Heating was achieved by radiant floors and no mechanical cooling was installed, so the ceiling space was uninterrupted by ducts and grilles.

The middle floor had a few offices, but was mostly divided into two main large spaces for the printing equipment. A partition was built to the underside of the concrete floor; but no ceiling was installed. Except some utility rooms, the bottom floor was completely open to parking.

Changes to the Building

Information on the building after the magazine was closed was not readily available. In the late 1970s, it appears that ownership may have remained in the hands of individuals responsible for selling the magazine business. A financial institution occupied the building for approximately five years and it appears the office (third) floor layout was altered for this tenant - the concept of partial height partitions and no ceilings was used to take advantage of the light from the clerestory windows and grid of lights. The printing (second) floor was further subdivided as well. It appears that the mechanical equipment on the north CMU block roof and the ducts in the first floor ceiling were installed at this time. The United Indians of All Tribes owned the building for twenty-four years with few changes operating the building as a community center and social service office. Only one additional building permit application was found for some alterations in 1999, including office and toilet alterations at the first and second floor. The toilets were enlarged to provide disabled access. At this time, new handrails were added to the front entry ramp to meet current code spacing dimension. A new pre-manufactured steel stair replaced the steel stair at the north end of the CMU block. At the time of purchase, WCI made additional changes to the office layout of the first floor with a Subject-to-Field-Inspection permit in 2006. The new layout, defined with more contemporary manufactured office partitions, again took advantage of the unique ceiling and clerestory windows.

SIGNIFICANCE

"Sympathetic collaboration between an understanding owner and a talented architect produced an imaginative and stimulating building for the publishing and printing plant of Pacific Builder and Engineer, Inc. A concrete hyperbolic paraboloid roof and structure combined with natural stained wood, on a difficult site at 1945 Yale Place North, result in a nicely composed expression of Seattle's contemporary architecture." (Steinbrueck, Seattle Cityscape, pg. 172)

A confident belief in the future and technology was generated by the 1962 Century 21 Exposition and expressed in its architecture. The distinctive forms of the Pacific Architect and Builder's Headquarters is a reminder of this enthusiasm stretching beyond the borders of the exhibition grounds and time frame. This bold expression of Modern architecture, built to house a growing regional publication, embraces the newest technology and embodies the magazine's mission: to showcase the Northwest's design and construction acheivements. The structure is the work of two important designers: the Architect, A.O. Bumgardner and the Structural Engineer, Jack Christiansen. For Bumgardner, an active and important civic figure in Seattle, the building marks an important threshold between the smaller residential work of his early career and his larger commercial commissions. For Christiansen, the building is a fine example of the pioneering concrete forms and designs found around the region.

Historic Development of the Eastlake Neighborhood

Eastlake is an elongated, hillside community on Lake Union. Defined by the lake and Interstate 5, it is only five blocks wide, but stretches over twelve blocks (one and one-half miles) from

the intersection of Fairview and Eastlake Avenues on the south to the University Bridge on the north. When I-5 was constructed in 1962, it cut Eastlake off from Capitol Hill, of which it was once a part.

The Eastlake neighborhood emerged in the early 1880s as a group of small farmhouses, homes and small businesses along the street that linked the city's downtown to communities along the north end of Lake Union, such as Latona and Portage Bay. Travel through the area became common, with establishment of a streetcar line, and the draw of the University after the campus was established in 1890s and the Alaska Yukon Pacific Exposition in 1909. When the University Bridge was constructed in 1919, travel along Eastlake Avenue increased. The city's streetcars were replaced by buses in the early 1940s, but Eastlake remained one of the city's prominent north-south routes, as it connected areas in the north end, such as Lake City, Roosevelt and Northgate, and nearby communities such as Kenmore and Bothell via Roosevelt Way northeast to the downtown via Denny Way on the south.

Like many of the city's oldest neighborhoods, Eastlake contains a wide mix of uses and building types. Traditionally it was a blue-collar residential and industrial neighborhood. The Eastlake waterfront has played an important part in Seattle's industrial development. This includes industries such as Seattle's earliest hydroelectric plant, the City Light Lake Union Steam Plant (1921, Daniel R. Huntington; presently Zymogenetics) at its south end, the Lake Union Dry Dock and Sound Propeller Company on Fairview Avenue East, both serving the Navy during World War I, and the site of William Boeing's 1916 airplane facility located at the foot of Roanoke Street, and numerous marinas along Fairview Avenue and the lake front (Leman, pg. 1-2). Some of these businesses remain, mixed in with present-day offices, specialty retailers and services, taverns, restaurants and cafes.

The neighborhood retains many other examples of its built history with Victorian farmhouses, Craftsman style bungalows, Mission Revival and Art Deco apartment buildings. Eastlake also contains one of the city's oldest schools – the original wood frame Seward Elementary School (former Denny-Fuhrman School), which dates from 1893 – 1895, with later additions from 1906 and 1918.

Houseboats on Lake Union were built in the teens and 1920s, as a floating "Hooverville" of small, inexpensive dwellings for seasonal workers, such as loggers and fishermen. The houseboats were gradually transformed into a low-income residential community of bohemians, poets, students and teachers by the 1960s. Permanent sewer connections were installed in the 1970s, and the dwelling sizes gradually grew to include multi-story houseboats with decks and roof terraces. The houseboat community gradually changed to provide romantic, water-bound residences and middle-income life styles.

In the late 1950s and early 1960s Eastlake was physically divorced from the Capitol Hill neighborhood by construction of Interstate 5. Official planning for the freeway began in the 1950s. During construction of the freeway, many of the large old homes were removed. Some of these were relocated, but many buildings were demolished, some replaced by surface parking lots.

For those who simply travel through the linear neighborhood, Eastlake Avenue provides many glimpses and sliver views of Lake Union, complemented by small street-end shoreline parks at the bottom of Lynn, Roanoke and Newton Streets and the small Fairview Olmsted Park. The open space below the I-5 freeway distinguishes the neighborhood's south end with its classical-like columns and green space.

Postwar Building Heritage of Eastlake

In the Eastlake neighborhood, modern architecture of the 1950s and 1960s was represented by a number of small-scale, local commercial buildings and several residential structures. Typically these buildings were of wood framing and feature strong relationships to their individual sites and landscape.

The visual low-scale of the neighborhood, the availability of land, and desirable mix of uses attracted a small community of design professionals who felt at ease with a population composed of artists, teachers, students and bohemians. Eastlake seemed like a welcoming area for architects and engineers to establish their offices and to experiment with Modernist design. Many of these professionals were leading designers of the post-war period and graduates of the nearby University of Washington.

Gene Zema's Asian gallery and architectural office building (1953 – 1961), located on East Boston Street, was built three years after he graduated from architecture school at the University of Washington. In 1956, the architectural office of Steinhart Theriault & Anderson, located on Eastlake Avenue East, attracted considerable attention with the building of an innovative cantilevered glass structure, a striking example of post-war International Style. The Elmec Building was built on Eastlake Avenue in 1960, a 4,000 square foot office building designed by Durham Anderson and Freed Architects. The architectural studio of Paul Hayden Kirk and Associates (Fig. 37) established their new office building on Fairview Avenue East in 1961. Two blocks away on Yale Place East, the publishers of Pacific Architect and Builder Magazine, the subject of this report, relocated from downtown and constructed their new office/printing facility.

These design-related buildings in Eastlake reflect a pattern evident in other neighborhoods near Seattle's downtown where a number of design offices, product showrooms, and furniture stores were built using expressive modern forms. Among others they include the showroom constructed by the Armstrong Company, a national manufacturer of wall, ceiling and floor finishes in the Cascade neighborhood, and the Knoll furniture showroom on Capitol Hill. In the 1950s, architects Paul Thiry, J. Lister Holmes, and NBBJ all designed and built small-scale architectural office buildings on First Hill, which expressed their keen interest in modern forms and materials. Similarly, Tucker Shields and Terry, built a Modern style building for their firm, designed by Roland Terry, on the west edge of Capitol Hill. Modern furniture retailers also emerged in the 1950s, such as Keegs and Del-Teet on Broadway and Miller Pollard on University Way, to sustain the public's growing interest in contemporary European and American design products. A popular Northwest style of Modernism, expressed by new

commercial buildings, residential architecture, and a product and craft traditions emerged during the post-war era. (Johns, multiple essays)

The value of these examples of Seattle's Modern heritage has long been recognized. Several of the buildings have been cited in local architectural history books, such as Victor Steinbrueck's *Cityscape 1 and City Scape 2* series of the 1960s, Sally Woodbridge's 1980 *Guide to Architecture in Washington State,* and the 2014 second edition of *Shaping Seattle Architecture*, by Jeffrey Ochsner (ed.). Furthermore, both the Steinhart Theriault Anderson Office Building, and the Kirk Office were both surveyed and cited as potential local landmarks in the city's 1979 historic survey.

Modern Architecture

The Pacific Architect and Builder building is a fine, and intact example of Modern style architecture in postwar Seattle. “Modern Architecture” was conceived in reaction to the supposed chaos and eclecticism of the various earlier 19th-century revivals of historical forms. The Modern movement began between World Wars I and II with the optimistic belief that science and new industrial technologies could produce a genuine “modern age architecture” of universal principles.

Much of this revolutionary architectural philosophy emanated from advocate leaders of the Modern Movement: Walter Gropius, Mies van der Rohe and Le Corbusier, but also the strong influence of Frank Lloyd Wright through European publications. The evolution of modern architecture, exemplified by the International Style, provided an architecture that dominated the five decades from the early 1920 to the end of 1960 before transforming itself in a greater plurality of architectural expression.

The first use of the term “International Style” to describe Modern style buildings was at the 1932 exhibition at the new Museum of Modern Art in New York. The exhibition highlighted aspects of Modern style architecture as a new direction and attitude. As defined by Le Corbusier’s “Five Points,” its formal principles included architecture as volume, which dealt with the creation of space by floors supported by a columnar structure, and allowed for flexibility in plan; regularity, expressive of the structural ordering of the building, rather than axial symmetry; and avoidance of applied decoration in an attempt to eliminate superficiality.

In the years after World War II Modern style architecture, particularly in the United States, became widespread. While Europe largely remained in the midst of general post-war destruction and economic deprivation, America was experiencing unprecedented economic growth. This prosperity was coupled with the availability of new materials and construction techniques that sparked a new building boom. Architectural publications in the northwest and nationally focused on Modern buildings and their architects and engineers. At the same time design education was changing across the country, following the lead of German émigrés from the Bauhaus, whose work emphasized new approaches to design and new forms of architecture.
In Seattle, the University of Washington’s Department of Architecture underwent a radical change in the 1940s with the earlier Beaux Arts curriculum giving way to Modernism.

American post-war Modernism had a significant influence on popular culture in the 1950s, a time of optimism when the American Dream was at its peak. Mid-Century architectural achievements of the era – the suburban house, the corporate arcadia, the glass curtain-wall, the shopping mall, etc. – were specifically experimental in their goal, using design to change the environment of the everyday life.

American contribution to Modern architecture includes: Frank Lloyd Wright's Fallingwater and Usonian home concept (1937), and Guggenheim Museum (1959); Richard Neutra's Kaufman Desert House (1947); Mies van der Rohe's Farnsworth House and Lake Shore Drive Apartments (1951), and Seagram Building (1958); the steel-frame Case Study house prototypes of the Los Angeles area (1945); SOM's Lever House (1952); Eero Saarinen's TWA Terminal, John F. Kennedy Airport (1962); Louis Kahn's Salk Institute (1965).

Modernism in the Northwest

During the early period of construction, Modern style buildings were limited in the Northwest by provincial tastes - a continued interest in Moderne and Art Deco style designs, and the debilitating impacts of the Depression. Demand rose immediately after World War II for quick new construction, functional designs, and manufactured off-the-shelf building components. This cultural and economic environment set the context for Modernism in the post-war era.

By the end of World War II there was built-up demand for new public buildings and housing. Municipal and regional governments across the nation responded with construction of new schools, hospitals, libraries and civic buildings in the late 1940s and early 1950s. Commercial buildings and downtown skyscrapers followed. Modern style buildings in Seattle that represented this trend include the Public Safety (demolished) and Municipal Buildings (demolished); Downtown Library (demolished); and the Norton, SeaFirst, Logan and Washington Buildings. During the same era many smaller-scale Modern buildings were constructed, such as Capitol Hill's Susan J. Henry branch library (demolished), Northeast, Southwest, Lake City and Magnolia Libraries, and the Seattle Parks Department Headquarters in Denny Park.

In the Northwest, Pietro Belluschi, working in Portland, and Paul Thiry, of Seattle, had already gained national recognition for significant modern work before World War II. Paul Thiry was a leader in transforming International Style Modernism to fit the Northwest context. The "Northwest Style," a regional variant of Modernism, was quickly adopted by a new generation of Seattle architects who initiated their careers with suburban building type projects. Inspired from a variety of modern sources as well as traditional Japanese architecture, Seattle's architects favored a wood timber-built architecture and a design approach that explored the Northwest qualities of its landscape. Architecture and site were inextricably tied together, offering an original direction that played an influential role in shaping Northwest architecture.

Architects designed small structures for emerging professional services in the post-war decades, including professional design offices and medical clinics. By the 1950s larger corporate architectural practices took over large commercial and business projects, mostly in

the downtown area, with building designs influenced by national tendencies, notably the Miesian tradition of steel frames and the aluminum and glass curtain-wall structures.

The planning and the buildings of Seattle's World Fair of 1962 reflected the continuing powerful influence of Modernism. The symbol of the fair, the Space Needle, embodied the era's faith with technology and progress.

In addition, there are unique small-scale professional offices of architects and engineers, such as the Shannon and Wilson Building, as well as medical clinics from the 1950s and 1960s. While some of these feature timber and wood framing, others utilize expressive concrete frames and thin-shell roof forms. Examples include the following:

- Zema Office & Asian Gallery, 200 E. Boston St. (Gene Zema, 1953-61)
- Blakeley Clinic, 2271 NE 51st Street (1956)
- City Light Control Center, 157 Roy Street (Harmon, Pray & Dietrich, 1963); City Landmark
- AUOW Hall, 501 Dexter Ave. N. (J. Lister Holmes, 1952), J. Lister Holmes
- Bricklayer's Union Building/South Lake Union Trolley facility, 318 Fairview Ave. N. (Copeland, 1960)
- Doctor's Clinic of Lake City, 3202 NE 125th St (Paul Kirk, 1951-53)
- Shannon & Wilson Building 3652 Woodland Park Ave. N. (NBBJ, 1960)

Unlike the styles that preceded it, Modernism strove to create timeless yet contemporary architecture that was free of ornamentation. Paralleling the Machine Age, modern architecture initially took on the streamlined forms reflected in the technological strides of automobiles, airplanes, etc. These ideas were manifested in outward formal characteristics including flat roofs, large sheets of glass, horizontal ribbon-rows of windows, and smooth wall surfaces as indicated in Le Corbusier's *Vers une Architecture*, published in 1927.

Beauty was inherent to utility, the foremost principle to be met in design. The structure and materials employed in the design of a building were intended to further express its utilitarian nature. Materials were used in a manner to express their natural state, and building structure was exposed. There are several examples of this notion in the design of the Pacific Architect & Builder, with the simple geometry of its massing, use of exterior cladding and band of horizontal windows and large flexible plan at the upper floor.

Although "form follows function" was a well-known principle of the Modern Movement, the architect's expression of a design often preceded utility. The Pacific Architect and Builder building was similar to many late Modernist era buildings that stressed economy and material innovation in its forms. Potentially inspired by innovative concrete forms of later buildings of

Le Corbusier, the PA&B headquarters expresses its structural virtuosity with its roof and cantilevered forms.

Thin Shell Buildings

The Pacific Architect & Builder building is an outstanding example of experimentation in thin shell concrete that began to take place across the world in the post-war era. Initiated in Europe in the 1930s, architect-engineers like Eduardo Torroja began experimenting with the use of an absolute minimum amount of structural material – an economical approach triggered by economic depression and world wars. Torroja found that by adapting the form of the building to resist gravity forces, thin sections of concrete (acting primarily in tension, compression and shear) could be effectively used. In the United States, the Austrian immigrant Anton Tedesco began building thin-shell concrete airplane hangars during the Second World War – driven primarily by the shortage of steel.

In the postwar era, the use of thin-shell concrete expanded across the globe – highlighted by the work of Felix Candela. Candela pioneered the use of the hyperbolic paraboloid as a rational yet expressive means of constructing thin shell buildings, becoming a module of architectural modernism. As a warped variation of the rectilinear shapes of the International Style, it maintained obedience to the principles of modernism in its efficiency, simplicity and embrace of technology but also expressed a style and visual stimulation lacking in the pre-war era. Through its complex geometry and the increased importance of engineering calculations, the hyperbolic paraboloid (HP) also became advanced structure – a form that exhibited new structural sophistication that was not previously possible.
This geometric shape became a system that could generate a wide variety of forms by changing certain variables and combining different HPs in different configurations. Shapes could range from saddle-shapes to umbrella surfaces to the cooling towers of nuclear power plants.
The fact that this surface could be defined by straight lines opened up almost unlimited potential as it could be directly made from the industrial materials that were emerging in the postwar era. Linear wood boards or plywood could be used, or as form work to pour the shapes as concrete shells. Extruded aluminum, in surplus after the war, could be easily assembled into hyperbolic parabolas.

With his architectural education and self-taught knowledge of engineering, Candela worked as true builder – a merge of architect and engineer – refining forms based both on engineering calculations and on qualities of space. He integrated multiple programs under his parabolic roofs and designed for a number of different site conditions, but remained mindful of the construction process, the cost of construction and quality of engineered materials. Between 1950 and 1971, Candela designed an incredibly many hyperbolic paraboloids – from market halls, to restaurants to churches and factories.

Beginning in the early 1950s, Candela inspired designers across the world – including Jack Christiansen here in the Pacific Northwest. In the mid-1950s, Jack Christiansen was a lead design engineer at the firm of Worthington Skilling Helle & Jackson. Starting with small scale projects of simple barrel-vaulted geometry, such as the Evans Pool at Green Lake (1954) and the Seattle School District Warehouse (Fig. 42) (1956, demolished), then increasing in scale,

Christiansen designed the B-52 Hangars at Moses Lake (1956) using thin shell concrete, followed by Maintenance Hangar 7 at Boeing Field, Seattle (demolished) (Fig. 38) (1962).

In 1957, Christiansen became aware of Candela's work, particularly the use of the hyperbolic paraboloid. Christiansen immediately adopted the form, and tried multiple variations of it over the course of his long career. He designed the Nile Temple, presently part of the Children's Theater at the Seattle Center (with Samuel G. Morrison & Associates, 1956 and 1957), the Chief Sealth High School and the Pioneer Middle School in Wenatchee, WA (both with NBBJ, 1957), using hyperbolic paraboloid canopies. In 1958, he designed thin shell projects – the Mercer Island Multipurpose Room (with Fred Bassetti), the Mercercrest Gymnasium and Multipurpose Room (also with Bassetti), and St. Edwards Church (with John Maloney), followed by Ingraham High School Gymnasium (1959). The latter project was one of the first applications of prestressed shells, edge beams, and tied stiffener integrated into a cylindrical multi-barrel design.

With Christiansen as an emerging expert in thin-shell construction, the firm of Worthington Skilling Helle & Jackson pursued more thin shell work. Architects were drawn to its expressive nature of the dramatic roof forms, while contractors appreciated the minimal building material needed and rational construction method. Christiansen trained others in the office to design concrete shells, under his supervision – providing the concept for a structure, and leaving the details and execution to others.

Anchored by Christiansen, hyperbolic paraboloid thin-shell concrete became a prominent building type in the Pacific Northwest. The simple warping of a rectilinear roof plane helped usher in a new era of architectural modernism. The hyperbolic paraboloid could negotiate both the need for logic and minimalism with the desire for expression. The form could be equally approached as an object of engineering – materially efficient – or as an architectural expression – demonstrating variation within repetition. For the architects and engineers of the Pacific Northwest, it was simultaneously a rational system that could enclose large areas with little material, and an expression of a new type of Modern style buildings – the thoughtful conversion of geometry into architecture.

From buildings for the Seattle World's Fair, to churches, residences, airplane hangars and clubs, thin shell concrete was widespread – integrated in many diverse works of architecture. The culmination of this trend manifested in the Seattle Kingdome – the largest free-standing dome in the world, composed on radial segments of hyperbolic paraboloid thin shell concrete. As with the Kingdome, the majority of thin shell buildings in the Northwest (ones mentioned here and others) have been demolished. Through efficiency and material minimalism it was tied to previous forms of modernism and other modernist developments around the world, but it was also experimental and expressive in a new time and place.

Some other examples of notable thin-shell concrete design projects in the Seattle area by Modernist architects in addition to the PA&B building include:

- Asa Mercer Middle School, 1600 Columbian Way South (John Maloney, 1957)
- Chief Sealth High School, 2600 SW Thistle Street (NBBJ, 1956-57)

- Shannon & Wilson Building (NBBJ, 1960)
- Fine Arts Pavilion, Seattle Center (Kirk Wallace McKinley, 1961, altered)
- Seattle Schools District Warehouse (John Maloney, 1955-56, demolished)
- St. Demetrios Greek Orthodox Church, 2100 Boyer Avenue East (Paul Thiry, 1962)
- Multipurpose Building, Mercer Island High School (Bassetti & Morse, 1958, demolished)

The Original Client: Pacific Architect & Builder

This concrete structure was built for the Printer's Building and Equipment Company, an entity formed to print the published materials of Pacific Builder and Engineer (PB&E). PB&E was founded in 1902 and published the *Construction News Bulletin* to cover construction news in Washington, Oregon, Idaho, Montana and Alaska. The paper announced pending and contemplated jobs as well as calls for and results of bids. In the third week of each month, this weekly publication issued the *Architecture and Building Edition of the Construction News Bulletin* which was a construction industry report on current building projects that occasionally included a design article. PB&E's editorial, advertising and circulation departments were located in the demolished Arcade Building at 2nd & Union and was printed at an independent plant in Portland.

Through the work of architects such as Paul Thiry, Modernism took hold in the region and architectural design was seen as important tool to express the new social and economic realities of the postwar period. As other architects such as Kirk, Bassetti and Bumgardner embraced this new style, they began to develop a different nuanced regional approach. The significance of this architecture was not lost on the publishers of the weekly *Construction News Bulletin*. In July 1954, the publishers announced the new name of its monthly *Bulletin* publication – *Pacific Architect and Builder (PA&B)*. "Pacific" in the name was inspired "by the words of Pietro Belluschi and others at the AIA convention in Seattle last summer [1953] that the Pacific Coast – and the Pacific Northwest in particular – leads the nation and the world in expressing the 'new architecture.'"(Editorial, Introducing new title of magazine, July 1954). *PA&B* intended to tell the world about this potentially revolutionary Pacific architecture and its unique forms and use of building methods.

Soon after the announcement, extensive plans were initiated to expand the company by pursuing its own printing plant and looking for outside publishing clients (including NW Medical, Argus and the Mountaineers) to increase profitability. A building was leased at 3rd and Wall and publishing activities were organized under Pacific Builder and Engineer, Inc. and printing activities became Pacific Printing Company.

On its second anniversary, *PA&B* announced its appointment of A.O. Bumgardner as its architectural advisor and featured his Graham residence. With publishing activities expanding throughout California and Hawaii and circulation and advertising growing, a decision was made to invest in owning a building. Because Bumgardner understood staff needs at all levels, including the printing, he was chosen to design the building.

In March 1959, *PA&B* published, in its own *News* section, the "two-story with covered parking scheme" proposed for its new headquarters on a steeply sloping site in the Eastlake neighborhood. The magazine published three consecutive "Progress Reports" in December of 1959, March of 1960 and July of 1960 (Fig. 8 & 9). Fascinated by the concrete technology, construction was extensively photographed. The progress reports related detailed information about the construction process, as well as, including program and budget decisions. Finally, in January 1961, the magazine cover featured the new building (Fig. 6); and, the article "A New Roof Over PA&B," announcing "we have come to know first hand what it means to be transplanted from a building - that is simply a building - to a structure that is indeed architecture."

The magazine published throughout the 1960s, including a special feature on the Seattle's World Fair in 1962. Owners and editors saw the World's Fair as an innovative and commercially marketable backdrop against which to refocus the editorial content of their publication. In April, 1962, as their coverage expanded to 13 western states, *PA&B* changed its name to *Architecture/West (A/W).* In the April issue, an article named "Architecture/West: What's in a Name?" explained the word "Pacific" in their "old title was an embarrassing misnomer from the days when we covered only the Pacific Coast." Architecture was in an exciting time and publications such as these communicated the influence of nationally and regionally renown architects. Enthusiasm for the new modern architecture could be seen in numerous publications that promoted western design: Western Builder, Arts and Architecture & Sunset magazine (which was "more dedicated to architecture at that time" than the decorator influence it covers now) and A/W looked to reposition itself to compete with larger architectural publications.

However, two trends would alter the influence of the magazine and its newest identity. In the early 1970s, Modernism nationwide was facing accusations of banality and ignoring the contextual environment of the city. As seen in the rise of the preservation movement (in which Bumgardner was also locally involved) the concern rapidly spread about the disappearing historic structures that Modernism ignored. Furthermore, the Boeing bust of 1971-1972 brought economically difficult times to the Puget Sound region and public funding for university and governmental projects dried up. As the interest for the architecture that PA&B and A/W featured and the number of built projects diminished, so did advertising revenue for A/W. In 1970, the editors attempted to follow on the earlier successes of PA&B and A/W with another short-lived named change - *Environmental Design: West*, a title which seemed to be reacting to Modernism's critics. The magazine published its last edition in 1973. While some editorial staff was retained and *Construction News Bulletin* continued to distribute, the publishing and printing facilities were sold. The company was eventually sold to Reed Construction that publishes regional construction news bulletins nationwide including a publication using the name *Pacific Builder and Engineer*.

The Original Architect, A.O. Bumgardner, AIA

Seattle architect A.O. (Albert Orin) Bumgardner (1923 – 1987) was born on a farm in Chatham, Illinois. After attending a small college, he was drafted into Army service in 1942. Instead of going overseas, he entered the Army's engineering program and served most of two

years in an Army/Air Force training facility in Louisiana. With the assistance of the GI Bill, he attended the University of Illinois and graduated with an architecture degree in 1949. Along with classmate Jack Christiansen, he moved to Seattle in 1949. Drawn here by the published works of local architects such as Chiarelli, Kirk, Bassetti and Thiry, he later became one of the most published and active architects in the Northwest.

His first job in Seattle was with the Army Corps of Engineers and then worked two years with Ralph Burkhart, an Eastside architect working on many educational facilities. After securing some residential projects, he began his own architectural practice in Seattle in 1953 and the firm he founded continues to practice today - 30 years after his death at the age of 64. During the early years, the firm focused mostly on single family residential projects (Moore Residence, Fig. 39, Lange Residence, Fig. 38, Reed Residence, Fig. 41) as well as some small institutional buildings (King County Volunteer Fire Station – 1954 AIA Honor Award). In February 1958, announcing his position as architectural advisor, PA&B featured his Graham Residence (1956 AIA Honor Award) in order to "help familiarize our readers with Bumgardner's work."

Bumgardner and/or his firm received Seattle AIA Honor Awards on a regular basis from 1954 to 1975. Among his more notable early projects was the Chester Bartholomew House (1960 Seattle AIA Home of the Year Award); the Moore House; the aforementioned Graham House (1956 Seattle AIA Home of the Year Award); the Lange House (1957); Wallace Reed House (1959 Seattle AIA Home of the Year Award); and the Clark House (Fig. 40) (1968). As his residential practice expanded, he hired two young architects from the University of Washington: Al Dreyer and Peter Parsons, in 1957. The practice operated from his home on E. Broadway. In 1960, he partnered with Dreyer and Parsons to form A.O. Bumgardner Partnership, and the PA&B building was the firm's first commercial commission. Within a few years of the PA&B building, Bumgardner's partnership secured many new residential and commercial projects. The practice became the Bumgadner Partnership (with Dreyer & David Wright) in 1967. Based on increased funding for public building, especially at the universities, and strong recommendations from residential clients, the firm steadily grew through the 1970s (Arts Addition at Western Washington University – 1968, Residential Halls at Evergreen State College – 1971, Tulalip Community Center – 1972, South Campus Center at UW – 1974, Waterfront Park - 1974).

Current partner, Mark Simpson, joined the firm in the 1970s and many other current influential architects worked under Bumgardner including David Hoedemaker, David Fukui and Dave Hewitt. During the 1980s, the firm, now Bumgardner Architects, secured many large urban mixed-use projects including Market Place North (1982), the Waterfront Place Building (1984), Watermark Tower (1983), the Alexis Hotel renovation (1984) and other highly visible projects including the renovation of Queen Anne High School (1986).

"The firm was his family and he treated Seattle like a small town by pitching into changing and improving the place" (Dreyer, 2004). His professional activities reached into many organizations that continue to impact the urban face of his chosen city. In the early 1950s, as a young member of the Seattle chapter of the American Institute of Architects, Bumgardner was recruited to organize a series of professional development seminars for younger practitioners.

The series was a success and he continued to be involved with the AIA, serving as Treasurer in 1956 and 1957 and becoming chapter president in 1963 at the age of 40. In 1971, he was elected fellow of the AIA. He was awarded the Gold Medal by the Seattle chapter of the AIA in 1987.

During the 1970s, Bumgardner was a member of a group of activist architects (Fig. 4) who became highly influential in the important urban revitalization and development efforts of the decade. As chairman of the Joint Commission of the Planning Commission and the Commission on Historic Zoning, he directed the drafting of the ordinance that created the Pioneer Square historic district. Recognizing his influence, Mayor Wes Uhlman named him to head Seattle's first Design Commission. The list of his board memberships is long – Allied Arts, Historic Seattle and Environmental Works Community Design Center. Among his most lasting legacies was a gift that put the Seattle Architecture Foundation on firm footing. In 1994, SAF made its first award in his name.

In 1957, Bumgardner was named as an architectural advisor of Pacific Architect and Builder magazine with the intention of "raising our editorial standards" and to "better serve the entire building industry." Shortly after his appointment, his office was commissioned to design the new headquarters building for the magazine and its publisher. The resulting building is the subject of this landmark nomination.

The Design Architect, Alvin Dreyer

Alvin Dreyer was born in 1933 in Snoqualmie. He grew up in the Yakima Valley and graduated from Sunnyside High School in 1951. He entered the University of Washington in 1951 and graduated with an architecture degree in 1957. During the summer of 1956, Dreyer work as a drafter for the structural engineer Don Radcliff, an instructor at UW. Along with his classmate Peter Parsons, Dreyer worked part-time, occupying a portion of the basement of Bumgardner's Capitol Hill house. When architectural work was slow, the two employees assisted with the renovation of Bumgardner's house. The three formed a partnership in 1960. In 1963, after the construction of the PB&A building, Dreyer left the partnership to pursue work in lighting design. However, during his absence, the firm secured many new larger scale projects and Bumgardner asked Dreyer to return to work on the Western Washington University project. He remained with the partnership until retiring in 1995. He currently resides on San Juan Island where he is active in building his own house.

The Original Structural Engineer, Worthington Skilling Helle and Jackson

The building's unique thin-shell envelope design was developed by Bumgardner and Dreyer and the structural engineers of Worthington Skilling Helle and Jackson. The original structural drawings were signed by Jack Christiansen. This collaborative effort is a distinctive trait within the Modernist work of the Pacific Northwest. This structural engineering firm is the oldest one in Seattle. Founded in 1928 as the W. H. Witt Company, it was the only structural engineering operation to remain in continuous operation through the Great Depression. Led by John B. Skilling and Harold Worthington in the postwar era, the firm quickly rose in stature. Skilling collected talented engineers, such as Helge Helle, Jack Christiansen, Frank Hoelterhoff and Leslie E. Robertson. Jack Christiansen soon emerged as a world-renown expert in thin shell

concrete construction, while Robertson specialized in tall buildings. Both men later became partners, and were recognized in the firm's new name, Skilling Helle Christiansen Robertson.

John "Jack" Christiansen (1927 -) was born in Chicago. He was raised in Oak Park, a suburban city largely identified by the presence of early buildings by Frank Lloyd Wright. Christiansen was educated at the University of Illinois, where he was exposed to the work of early European thin-shell structures designed by engineers Pier Luigi Nervi, Robert Maillart and Eduardo Torroja, and studied with engineering professor Newlin D. Morgan. He received a Bachelor in Architectural Engineering degree in 1949, and went on to receive a Masters degree in Civil Engineering from Northwestern University in 1950. After working briefly for several Chicago firms, Christiansen and his wife left for the West. Because of family ties they settled in the Seattle area, where he went to work for W. H. Witt. Eventually, as a member of this firm, Christiansen designed a number of noteworthy thin-shell hyperbolic paraboloid structures.

This firm designed the 22-story Washington Building in 1958 (the first tall building in Seattle in over 30 years) with NBBJ, and then established a prominent relationship with Minoru Yamasaki. Christiansen and Yamasaki (with NBBJ) designed the US Science Pavilion (Pacific Science Center, City Landmark) for the 1962 Seattle World's Fair. Skilling and Robertson worked with Yamasaki on the 1963 IBM Building in Seattle. Both of these projects led to the firm designing the two tallest buildings in the world: the World Trade Center Towers in New York City (1963-1973). Skilling, Christiansen and Robertson were all elected to the National Academy of Engineering – the highest honor an engineer can achieve. The firm continues to operate today, as the Magnusson Klemencic Associates. They have continued to be a world-renowned firm active in both high-rise buildings and inventive uses of structures.

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The features of the Landmark to be preserved include*: The portion of the site described as Parcel A; exterior of the building; and the roof/ceiling interior from the springpoint of the vaults upward.*

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Sarah Sodt
City Historic Preservation Officer

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