

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 709/17

Name and Address of Property: Ingraham High School – 1819 North 135th Street

Legal Description: THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 19, TOWNSHIP 26, RANGE 4 EAST, W. M., IN KING COUNTY, WASHINGTON; EXCEPT THE EAST HALF OF THE EAST HALF THEREOF; EXCEPT THE NORTH 30 FEET IN NORTH 135TH STREET; EXCEPT THE WEST 30 FEET IN ASHWORHT AVENUE NORTH; EXCEPT THE SOUTH 30 FEET IN NORTH 130TH STREET; AND ALSO EXCEPT THAT PORTION OF NORTH 130TH STREET CONDEMNED BY KING COUNTY CAUSE NUMBER 612752 AND AS SET FORTH IN CITY OF SEATTLE ORDINANCE NUMBER 92471.

At the public meeting held on October 4, 2017 the City of Seattle's Landmarks Preservation Board voted to approve designation of Ingraham High School at 1819 North 135th Street 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.

DESCRIPTION

Location & Neighborhood Character

Ingraham High School is located at 1819 N 135th Street in the Haller Lake neighborhood of North Seattle. The neighborhood is located between Aurora Avenue N to the west, Interstate 5 to the east, N 145th Street to the north, and Northgate Way/110th Street to the south. The site is bounded by Ashworth Avenue N on the west, N 135th Street on the

north, N 130th Street on the south, and a public park and residential lots fronting on Meridian Avenue N on the east.

The Haller Lake neighborhood is generally characterized by low-density, single-family structures built during the post-war period, with large lot sizes reminiscent of its farmland past, and the fifteen-acre Haller Lake at its center. The school site is surrounded by single-family homes constructed between the 1940s and 1990s. Helene Madison pool, a Seattle Parks Department facility built in 1970, is located immediately east of the school. Northacres Park is located two blocks southeast of the school.

Site

The school sits on a twenty-eight-acre flat site. The site is bounded by Ashworth Avenue N on the west, N 135th Street on the north, N 130th Street on the south, and Meridian Avenue N on the east. The site boundary is irregular; the "super block" containing the school is also occupied by the Seattle Parks Department's Helene Madison Pool on the east, and some private residences on the southeastern corner of the block.

The school was permitted as three buildings: classroom/administration buildings, an auditorium, and a gymnasium. There now are three classroom buildings, one of which includes administration space, performing arts spaces, and a lunchroom and is referred to as the "Main Building," and is also known as "Building 100." The main building occupies the northern end of the campus. Within this building, the cafeteria, classrooms, and library form three internal "courtyards." The main building has had two additions: one from 2003 at the library, partially filling in the westernmost courtyard, and another on the western end, completed in 2012. The two-story 2012 addition includes additional classrooms, a western entry to the school, and a small gathering place called "the forum."

The detached business/art/science building called "Building 200" is located to the south. This structure connects to the main building under open-air walkways and houses business education classrooms, art classrooms, science labs, a greenhouse, and a gallery. Building 200 had an addition in 2003 in the same style as the library addition.

The detached "Building 300" is a technology education shop building lying east of the business/art/science building. It connects to the main building by a covered walkway over a ramp and stair.

The gymnasium building connects to the main building through a vestibule off of the lunchroom. The gymnasium is located on the southeastern corner of the main building and to the east of building 200.

The auditorium is the easternmost building on the site, aligned with the northernmost hallway of the main building and connected to it by a glassed-in hallway with stairs and a ramp.

A previous math modular building constructed in 1967, located to the southwest of the other buildings, was torn down when the 2012 addition to the main building was constructed.

The site also includes a basketball court, lighted tennis courts, and several parking areas near the buildings. A track, field, and bleachers, collectively known as the Ingraham Sports Complex, are located on the southeastern quadrant of the site. Located immediately west of the small, steel-framed bleachers is a newer (circa 1995) single-story concrete block structure with a metal seam hip roof, comprising restrooms, ticket office, and concessionaire. The field and track, as well as the adjacent fencing, appear to be constructed of newer materials, and may have been recently upgraded or remodeled. A large grassy field for other sports such as soccer, baseball, and softball is located on the southwestern quadrant of the site. The school currently has approximately 170 on-site parking spaces. A bus-loading zone is located along N 135th Street.

Main Building (Building 100), Building 200, Building 300

Main Building (Building 100), Building 200, Building 300: Structure and Exterior Features

The main building has a generally rectangular shaped plan, with the performing arts area and lunchroom forming a north-south oriented bar on the eastern end, and an addition, completed in 2012, forming a north-south bar on the western end. The majority of the classroom buildings are constructed of concrete posts and beams, poured concrete slab foundations, and flat, poured concrete slab roof forms with metal flashing at the cornice line. Walls are clad in concrete or exposed aggregate, with common-bond brick cladding near primary entrances. The buildings are divided into bays roughly fourteen feet wide, each bay expressed by exposed concrete columns and beams; the wall plane recedes about six inches from the structural components. Fenestration primarily consists of aluminum frame window walls with four-over-four fixed and hopper sashes. A typical exterior classroom is two bays (about twenty-eight feet wide), and contains a row of eight aluminum-frame windows, with four windows within each bay.

The main building is organized around two parallel, double-loaded east-west corridors with two double-loaded north-south classroom hallways, and a single-loaded north-south hallway at the administration area; these form three interior courtyards. The front entrance to the building is accessed from N 135th Street on the northern elevation of the building leading into the intersection of north-south hallway at the administration area and the northern east-west hallway connecting to the auditorium. The entrance doors consist of a set of two steel-frame double doors with single panes of fixed glazing, overhead transom windows, and aluminum frame window walls that stretch from floor to ceiling. Brick-clad walls can also be found at this primary entrance.

The performing arts wing on the northeast contains an orchestra room, a band room, the "Little Theater," and individual practice rooms. Directly south of the performing arts wing, across the main hall, is the custodial area, kitchen, and lunchroom designed to hold over 400 students. The single-story cafeteria has a large, high-bay aluminum frame window wall that faces west toward an interior courtyard. The cafeteria connects the music wing to the north, with the gymnasium to the south. A four-story concrete chimney, square in plan, is located near the northeastern corner of the building, in the approximate location of the boiler plant behind the kitchen.

The library is located in the approximate center of the east-west classroom wing, on the eastern side of the westernmost courtyard. It contains a western glazed wall facing an interior courtyard. The library was remodeled in 2003, enclosing a portion of the westernmost courtyard, and features a barrel arch roof form with clerestory lights. The roof is clad in standing seam metal. An exposed steel roof truss is located on the western elevation. Walls are structural concrete block, with limited corrugated steel cladding. An exterior concrete block chimney rises from the west-facing façade of the barrel roof form. Fenestration consists of aluminum frame fixed and hopper-type units, and aluminum-frame doors with fixed glazing.

The rectangular shaped, two-story, 2012 classroom addition on the western end is oriented around a sky-lit two-story single-loaded corridor and circulation space, with a "forum" space on the southern end near the new western entry.

The single-story Building 200, located to the south of the classroom wing houses the visual art, business education, and science rooms. It is rectangular in plan, and has been altered by the addition of a gallery and greenhouse structure featuring a barrel arch roof form, similar in character and materials to the library addition. This building is connected to the primary classroom wing by an exterior covered walkway constructed of steel posts and beams supporting a flat, corrugated steel roof. Other similar walkways can be found on the west side of the facility, connecting it with the shop building. Building 200 is essentially identical in character to the primary classroom wing, except the walls are clad in common bond brick as opposed to concrete aggregate panels.

A shop, Building 300, is located to the west. The single-story Technical Education Shops building is rectangular in plan and similar in style and materials to the primary classroom building, with both brick and concrete aggregate cladding and aluminum frame window walls. This building was renovated in 2007. Scope of the renovation included replacement of the window units with similar aluminum frame units, roofing materials, interior restrooms, interior plaster walls and new drop ceilings.

Main Building, Building 200, Building 300: Interior Features

Interior hallways consist primarily of vinyl tile flooring and baseboards, flat ceilings clad in acoustical tile, painted concrete block walls or exposed brick at the building's entrances, and expressed and painted concrete posts and beams. Lighting consists of recessed or hanging fluorescent ceiling fixtures. Hallway fenestration consists of aluminum frame floor-to-ceiling window walls with fixed glazing, and aluminum frame double doors with fixed single panes and fixed transoms above. Painted steel lockers are generally flush-mounted to the walls, while classroom entrances are recessed, with steel frames and solid wood doors surrounded by decorative tile (generally pink, yellow, or blue). Drinking fountain areas are also recessed and clad in decorative tile work, with white ceramic drinking fountain fixtures.

The cafeteria is a single-story high-bay space with a rectangular plan, vinyl tile flooring, exposed concrete posts and beams, painted plaster and tiled walls, and aluminum frame

window walls (four-over-three) running the length of the room, and facing west toward an interior courtyard.

Opposite the cafeteria and to the south is the entrance lobby to the upper gymnasium. The gym is accessed through four sets of steel frame and solid wood double doors with fixed transoms above.

Typical classroom interiors are rectangular in plan and two structural bays wide, with vinyl tile flooring, flat ceilings clad in acoustical tile, painted concrete block walls, and exposed and painted concrete posts and beams. Fenestration consists of aluminum frame window walls of fixed and hopper-type units (two-over-two arranged in rows of four; two sets of windows per classroom). Some classrooms have glass block skylights.

The library interior is a recently remodeled space with a barrel arch ceiling and exposed steel trusses, some exposed steel framing, vinyl tile flooring, concrete block and painted plaster walls, and a chimney and fireplace constructed of concrete block. Windows are aluminum frame fixed and hopper-type units. The interior also has wood frame bookcases and an exposed HVAC system. An addition and interior remodeling of the science wing for a new gallery and greenhouse was also completed in 2003.

Auditorium

Auditorium: Structure and Exterior Features

The auditorium is a single-story structure with an irregular, oval-shaped plan, featuring a hyperbolic paraboloid concrete roof form of complex curves and projecting, pointed eaves. Three concrete two-foot-six-inch-wide roof beams curve downward to meet the ground plane, and are anchored into the earth with large concrete abutments.

The three center beams, along with rim beams at the wall lines of the auditorium, create the support structure for the hyperbolic parabolic thin-shell roof. The beams are expressed at the exterior of the structure, and support a three-inch-thick thin-shell concrete roof, which increases to six inches where the beams connect. The beams intersect at the midpoint of the structure with symmetrical 120-degree angles curving with a four-foot radius convex to the center point. The center beams vary in depth from one foot six inches at the apex where the beams meet, to four feet at the base where they intersect at their abutment. The thin-shell roof extends eight feet beyond the rim beam line at the apex of the hyperbolic paraboloid, then tapers to less than one foot at the low point before the shell terminates approximately eight feet from the joining point of the rim beams and center beam.

Each of the three abutments was designed separately. Abutment A is on the southern side and measures forty-three feet six inches long from where the rim beam meets the center beam to the outer side of the abutment. The beams meet and then flare apart in a "Y" shape filled in with a four-inch slab and continue to a twenty-eight-foot-wide concrete abutment foundation at the southern end. Abutments B and C on the northern side are smaller, measuring only eleven feet four inches from where the rim beam and the center beam join the buried concrete abutment. The roof of the auditorium is clad in rolled asphalt. The curved walls of the building are clad in common bond brick, while some of the straight walls toward the rear (southern) elevation are clad in concrete aggregate panels. Steel louvered panels can also be found toward the rear of the building.

The entrance foyer at the northwestern corner of the building consists of curved, aluminum frame window walls of fixed panes that stretch from floor to ceiling. A single aluminum frame door with two panes of fixed glazing provides the only exterior entrance to the building, located to the rear (southern) elevation, and within the interior entrance lobby area. The auditorium is connected to the main building by an interior hallway and lobby area, which consists primarily of aluminum frame window walls and two sets of steel frame double doors (north-facing elevation).

Auditorium Interior Features

The interior of the auditorium is generally oval in plan, with a sloped concrete floor containing folding seating for approximately 900 people. The curved interior walls are clad in painted plaster. A raised and curved wooden-frame stage is located toward the rear of the room (eastern elevation), featuring a curved painted plaster proscenium arch with recessed lighting, and accessed by stairs at either end of the stage. The flat ceiling is clad in spray-on acoustical foam with hanging florescent lighting fixtures and circular steel HVAC registers. Flooring is carpeted. A projection booth clad in painted fiberglass panels overhangs the rear of the auditorium. The wall surfaces below the booth are brick veneer.

The auditorium is accessed from an entrance foyer located in the northwest corner of the building. The entrance foyer floor is clad in vinyl tile, the walls clad in brick veneer, and the ceiling is clad in painted plaster. Curved, floor-to-ceiling aluminum frame window walls with fixed glazing frame the entrance lobby, and six steel lighting fixtures are affixed to the brick veneer walls. Access to the auditorium is gained through two sets of steel frame and solid wood double doors.

Gymnasium

Gymnasium: Structure & Exterior Features

The gymnasium contains a high-bay, two-story upper gym on the northern end, connected on the south to a single-story lower gym by a lower two-bay service and circulation portion. Both gyms have rectangular plans. The walls are constructed of concrete masonry units (CMU) clad in common bond brick between expressed concrete columns. Each north-south bay is approximately thirty-three feet four inches wide, and each east-west bay is fourteen feet wide.

The upper gym has a four-barrel arched roof form with flared eaves made of thin-shell concrete. Each of the four barrels measures approximately thirty-three feet four inches east-west, with a thirty-two-foot-six-inch radius curvature at the inside, landing on a north-south reinforced concrete beam measuring two feet deep by one foot two inches wide.

At the exterior, where the barrels connect over the beams is a six-foot-radius curve between the tangents of the larger barrels. The concrete shell is typically three inches thick, but increases to up to one foot at the edge of each barrel as the shell connects to beam or wall. The roof overhangs four feet at the northern and southern ends of the high roof, and the shell thickens over the northern and southern exterior walls, creating a three-foot-long horizontal beam. At the east and west, the overhang is a continuation of the six-foot-radius upcurve, which extends two feet six inches as an overhanging eave at the eastern and western façades. The northern end of the gym has square and horizontal sash aluminum-frame glazing in a syncopated pattern infilling the barrel forms and extending down to the top of a painted CMU wall. At the eastern and western façades, opaque glass block provides a clerestory above CMU walls faced with buff- and tancolored brick between painted concrete columns. On the northern ends of the eastern and western façades, the wall terminates in four-foot-long painted concrete wing walls, functioning as columns to support the roof. These columns transfer the roof loads to the foundation, where the beams supporting the barrels also intersect the northern façade. On the southern end of eastern and western façades of the high-bay structure, eleven-foot sixinch painted CMU walls are solid from the foundation to the roof beam. A solid concrete wall, scored in a rectangular pattern with openings for circulation at floor level, supports the southern end of the roof between the high-bay gym and the lower gym.

The flat-roofed intermediate area for service and circulation is approximately half the height of the high-bay gymnasium. The roof of the intermediate area is approximately six feet below that of the lower gym. Three pairs of entry doors access a vestibule on both the eastern and western side of the structure. The exterior walls of the central portion of the gym are made of painted CMU.

The lower gym, located on the southern end, has a flat roof form constructed of a poured concrete slab. The main structure of the lower gym runs east-west on concrete beams that span approximately 112 feet from the eastern and western walls to the center wall of the gymnasium. The beams are spaced fourteen feet apart, and the bays have the same spacing as the northern high-bay gym. The eastern and western façades of the lower gym are tectonically similar to that of the upper gym, with clerestory windows of opaque glass block atop brick-clad walls between painted concrete columns. At the southern façade, concrete columns are spaced sixteen feet apart, but are not expressed at the exterior, which is clad in running bond of buff and tan variegated brick interrupted by vertical painted metal louvers.

Gymnasium: Interior Features

The interior of the main (upper) gym is a high-bay, two story space with polished hard wood flooring, painted concrete block walls, and a four-barrel arch ceiling clad in fiberglass panels. A steel HVAC grid is located at the apex of each arch. Opaque glass block ribbon windows are located on the upper level of the gym at the northern and southern elevations. An aluminum frame window wall of fixed glazing is inset into the arched gable ends of the upper level of the northern-facing elevation. The gymnasium has ten retractable steel basketball hoops, and retractable wooden bleachers (eastern and western elevations). Located beneath the main (upper) gym are the boys' and girls' locker

rooms and showers, accessed by concrete stairs. All walls, ceilings, and flooring are concrete. Shower rooms are tiled, and there are rows of steel basket-type lockers. Other smaller storage rooms and offices are located on this lower level. Attached to the rear of the main gym is the lower gym, a two-story high-volume with a flat ceiling, polished hardwood floors, and painted concrete block walls. The gym is divided into two equal halves: the girls' gym on the eastern side, and the boys' gym on the western side. Opaque glass block ribbon windows are located on the upper level of the gym's northern and southern elevations.

Documented Building Alterations

Ingraham High School opened in September 1959. The athletic track and playfield were completed in 1963. The modular steel classroom building was added in 1967. The library, gallery, greenhouse additions and the science wing were completely remodeled in 2003. The Technology and Education Shops wing was in 2007 renovated with replacement aluminum frame windows and interior changes such as drop ceilings and renovated bathrooms. A 22,000-square-foot addition was constructed on the western end of the main building in 2008.

The following is a chronology of alterations and upgrades to the Ingraham School building and grounds since the school was originally built:

	Designer	Description	DPD Permit or
Date			SPS drawing
1958	Naramore, Bain,	Construct three buildings per plan:	470632
	Brady & Johanson	school, gym, & auditorium	
1959	Seattle School	Install incinerator, lunchroom	475428 & BN
	District		1504
1967		Add modular classroom	BN29389
1970		Alter school—Construct marquee	BN39801
1973		Repair fire damage in biology lab	BN46880
1984		Alter existing to create dark room	8403114
		(STFI)	
1999		Alter access to kitchen from	9907945
		lunchroom/ new snack bar per plan	
2001		Alterations to create IDF room @	2102712
		storage room 205D (STFI)	
2003		One-story additions to library &	2205614
		science lab, per plan.	
2002		Install ADA restroom (STFI)	2207743
2003		Alterations to nurse's clinic Room	2308870
		101, (STFI)	
2004		Re-roof Buildings ID#1,2,8, and	2400919
		alterations to auditorium per plans	
2008		Construct a 22,000 s.f. classroom	6192654 &
		addition at western end of existing	3009549

Recorded Building Permits and School District Work

building 100. Expand parking and reconfigure parking and improve landscaping (mechanical included), per plan.

Major Si	te Alterations		
Date	Designer	Description	DPD Permit or SPS drawing
1959		Install 4000-gallon tank	476294
1960		Five portable classrooms on post	BN7117
		& pier foundations	
1961	Seattle School District	Alter existing playfield & storage	BN7117
1961		Locate ten portable classrooms	BN7826
1962		Construct and locate twelve portables	BN11632
1963		Relocate two portables	BN15713
1963		Relocate one portable	BN15712
1963		Relocate two portables	BN15715
1963		Relocate one portable	BN15710
1963		Relocate two portables	BNx6626
1964		Relocate two portables	BN15794
1964		Construct retaining wall	BN19439
1967		Relocate two portables	BN29355
1967		Relocate one portable	BN29356
1967		Relocate two portables	BN29357
1967		Relocate one portable	525562
1968		Relocate one portable	BN31529
1968		Relocate one portable	BN31527
1968		Relocate one portable	BN31528
1971		Const. found & locate eight portables	BN41859
1973		Locate five portable on site; relocate two portables to other sites	BN46836
1974		Locate one potable	BN68239
1974		Remodel portable to childcare center	BN48622
1989		Relocate four portables	8903114
1989		Relocate one portable	8906458
2000		Redevelop athletic fields, construct bleacher seating w/ press box and restroom/storage/concession building	2002559
		ounding	

2003	Five new side sewer connections, new area drains and repair storm main	6013704
2005-	Install lightpoles to athletic fields	6065401 &
2008	(related MUP 2408963)	6179035
2006	Replace existing reader board sign with changing image sign & nylon net fencing at the baseball field	3003406
2007	Add sanitary sewer connections	6136871
2008	Demolish math modular bldg and seven portables per plot plan subject to field inspection.	6193971

SIGNIFICANCE

Historical Neighborhood Context: Haller Lake

The Seattle City Clerk's office defines the Haller Lake neighborhood as the area between N 145th Street and N Northgate Way from north to south, and from Aurora Avenue N to Interstate 5 from west to east. Because the development of Haller Lake took place in concert with the Bitter Lake, Pinehurst, and Northgate neighborhoods, this survey draws on historical information from all these areas.

The first white settler in the area was an Englishman named John Welch, who filed a homestead application for 160 acres in April of 1869, and lived on his claim from 1870 onwards. Early records occasionally list the fifteen-acre lake at the center of his property as "Welch Lake." In 1905, real estate developer Theodore N. Haller purchased the land from Welch and platted lots around the lake. Haller was the son of the late Colonel Granville Haller, a storied figure who had served as an officer in the Indian Wars, prospected in the Yukon Gold Rush, and amassed land throughout Seattle and neighboring counties and on Whidbey Island. The Haller family had a large home on Seattle's First Hill and the Haller Building downtown, on the northwestern corner of Columbia Street and Second Avenue.

After 1918, Clare (or Clara) E. Huntoon (ca. 1861- ca. 1938) arrived in Seattle and purchased a large tract of land (nearly 200 acres) in the area. She never platted the land, but her acreage was the site of many important sites in the neighborhood, including the subject building, Ingraham High School, Northwest Hospital, and the former Playland amusement park at Bitter Lake (located north-northwest of Haller Lake) that operated from 1930 to 1961.

By 1905 the Everett and Interurban Railway Company had established fourteen lines of track, running from Ballard to Lake Ballinger/Hall's Lake in Lynnwood, with Hammond cars connecting the line to Everett. However, the land was not quick to be urbanized, retaining its large lot sizes and considerable farmland until well into the twentieth century.

In 1921, three-dozen residents of Haller Lake gathered to form the Haller Lake Improvement Club, created to advocate for more roads and street lighting, and a new neighborhood school. Residents invested in a building fund for the group, and in the summer of 1922 the club purchased land off of Densmore Avenue N, just northwest of Haller Lake itself, and broke ground. The building was functional as of 1923, and fully completed in 1925. Today the building houses the organization (now known as the Haller Lake Community Club) and the Creative Dance Center.

By 1923, Haller Lake was populous enough that the area needed its own public school. Land had been set aside thirty years before and then leased until there was enough money to build a school and enough students to fill it. The school opened in 1924 as the third school in the Oak Lake School District. At first the school served grades one through six in two of the four classrooms. By 1933 all four classrooms were in use. In 1934 an addition brought a lunchroom/auditorium and four new classrooms. The Shoreline School District acquired the Oak Lake School District in 1943. Another addition in 1950 added eight more classrooms, and a gym/auditorium. The school's enrollment peaked in the 1957-1958 school year, with 750 students. Haller Lake School was incorporated into Seattle Public School District in 1954, but closed in 1978, due to declining enrollment throughout the district.

The private Lakeside School has been a feature of the neighborhood since 1930. The school was founded in 1914 on Bainbridge Island, and was originally known as the Moran Boys' School. In 1919 the school opened an extension in the Denny-Blaine neighborhood on the shore of Lake Washington. In 1924 the school moved to Madison Park, to the building that now houses the Bush School. By 1929 the school's building was again too small and inadequate, so plans were made to create a new campus of buildings to the north of Seattle, at N 145th Street and First Avenue NE. The campus was designed by Carl S. Gould of the firm Bebb & Gould, and opened on September 4, 1930, with 100 male students. In 1965 the school began integrating African American students; in 1971 Lakeside merged with St. Nicholas School, a private girls' school on Capitol Hill, thus making the school co-educational. In 1980, Lakeside purchased the former Haller Lake School, located approximately three blocks south of the main high school, to create Lakeside Middle School. The original Haller Lake School building was torn down in 1999 to make way for a new Lakeside Middle School.

On April 21, 1950, Northgate Mall opened on sixty-two acres between First and Fifth Avenues NE. The shopping center, designed by John Graham, Jr., was one of the first malls in the country. Northgate had space for eighty shops, including a three-story, \$3-million building that housed the Bon Marche. The mall was a success from its opening.

On January 4, 1954, the city of Seattle annexed ten square miles located north of N 85th street and south of N 145th street, spanning from Puget Sound to Lake Washington. This annexation made Seattle the seventeenth-biggest city in the nation. The annexation already included schools such as the nearby Pinehurst Elementary (1950, Mallis & DeHart). Schools built in the area after annexation included Northgate Elementary (1956, Paul Thiry) and Broadview-Thompson Elementary (1960, Waldron & Dietz

The Northwest Hospital campus is located between N 115th and N 120th Streets, west of Meridian Avenue N. The idea for the hospital was conceived in the late 1940s, a response to Seattle's general dearth of hospital beds. At the time, all of Seattle's hospitals were located on First Hill, and fear of a possible nuclear attack on that particular site led state planners and the Atomic Energy Commission to recommend that Seattle build hospitals in less central areas, including north Seattle. In 1949, the Community Memorial Hospital Association purchased thirty-three acres of land for \$33,000. However, due to difficulties in securing federal funds, procuring matching funds, and finding private donors, the hospital was not completed until 1960. The hospital was dedicated on September 16, 1960, and opened on September 22 of that year with 113 beds. The first baby delivered at the hospital was born the following day.

The section of Interstate 5 from Seattle to Everett was opened for traffic in February of 1965, effectively demarcating Haller Lake's eastern boundary. The interstate was a boon to Northgate Mall, which expanded that same year by twenty-five stores, thus doubling the size of the shopping center.

Today the neighborhood is mostly residential, with a population of about 8,700. Additional nearby sites of note include Helene Madison Pool (located on Seattle Parks land adjacent to Ingraham High School), Evergreen Washelli Cemetery, Jackson Park Golf Course, and Northacres Park.

Ingraham High School

In 1954, the Seattle School District annexed five elementary schools and Jane Addams Junior High School from the Shoreline School District. The district acquired Woodrow Wilson Junior High in 1954 after the north Seattle area surrounding it was annexed by the City of Seattle, along with Broadview, Oak Leaf, Lake City and Haller Lake Elementary Schools. For a period the Seattle and Shoreline school districts cooperated with shared transportation of students to the Seattle schools on Shoreline buses. Once the area was annexed, the Seattle School District began to plan for a new high school in north Seattle. Other construction projects the same year included Cedar Park Elementary School, Pinehurst Elementary, and an addition at Woodrow Wilson Jr. High in the north end and remodeling at Franklin High School in south Seattle.

The originally planned twenty-five-acre site for a north Seattle high school was in the annexed Shoreline land. However, that land was located in the area of the proposed freeway, and an alternate site was sought. The freeway site was exchanged for the current site adjacent to Seattle Parks land. In 1956, federal funds were sought for the school design through the Housing and Home Financing Agency. That year the firm of Naramore, Bain, Brady & Johanson was selected as the architect. In 1957, voters passed a bond issue for school construction. Ultimately, the Seattle School District provided more than \$11.2 million and the State of Washington contributed about \$760,000 for local school construction, with more than \$3.2 million of that allocated for the construction of the new North Seattle High School, leaving out the construction of the auditorium. Finally in 1958, the Seattle School District and the parks department agreed to the land exchange and joint use of adjacent properties.

In 1958, final building plans were approved and Sound Construction & Engineering Co. was chosen as the general contractor. The design included both a barrel-vault thin-shell concrete roof construction on the gymnasium, and a hyperbolic paraboloid thin-shell concrete roof on the auditorium. Perry B. Johanson described the roof forms as the most economical long-span structural solutions with minimal maintenance costs. The classroom building was constructed as economically as possible with a one-story flat-roof design and courtyards for natural light. The asbestos lining the interior was for fireproofing and insulation, and tar covered the roof. There were fifty-four classrooms, including the industrial arts shops. The auditorium was planned to seat 992, the gymnasium to seat 2,200, and the cafeteria to seat 448. Construction began in 1958, and was not quite complete when the new high school opened on September 9, 1959. The auditorium was under construction during the first year of operation, having been cut from the initial funding of the school.

The school board assigned the name Edward S. Ingraham to the high school on June 3, 1959, after principals and PTA presidents in the north end failed to agree on a name. Major Edward Sturgis Ingraham first came to Seattle in 1875 when he was hired as a teacher at the Central School. Ingraham introduced a grading system in 1876, and helped develop the curriculum for the first high school courses. He subsequently served as the first superintendent of Seattle Public Schools between 1882 and 1888, banning both the use of rawhide for corporal punishment and playing marbles during school hours. After resigning as superintendent he opened a printing business, served on the state board of education following Washington's admittance into the union, and was elected to the city council. He moved to Alaska for the gold rush in 1896. Ingraham returned to Seattle with his family in 1901, established Seattle's first Boy Scouts chapter, and continued to teach part time until he passed away in 1926.

Students chose the nickname "the Mountaineers," with a ram as their mascot, because Ingraham was an avid mountaineer who successfully climbed Mt. Rainier eleven times; the Rainier Ingraham Glacier was named for him. The names of the school newspaper and the yearbook, the *Cascade* and the *Glacier*, obliquely reference their school's namesake. The Ingraham school colors—blue, grey, and white—refer to a blue sky, white snow, and grey mountains.

The building wasn't officially dedicated until the third quarter of the school year, on April 29, 1960. Ernest W. Campbell, superintendent of Seattle Public Schools, delivered the dedication address, which was followed by an open house. In attendance was Kenneth Ingraham, a retired Navy commander and relative of Major Edward Ingraham.

The first year it opened, 1959–1960, 1,000 freshmen, sophomore, and junior students attended the school. (Seniors did not transfer, but stayed at their home schools.) Because the sewer pipes in the street were still under construction, the entry route was alternately muddy or dusty, depending on the weather. The auditorium was also far from complete, as construction continued until April. In 1961 enrollment increased to 1,565 due to the addition of the twelfth grade, and required ten portable buildings to house the additional pupils. By 1963 more than 2,200 students attended the school.

Claude Turner served as school principal from 1959 until 1963, and had a reputation for high educational standards. Early on, Ingraham implemented a teacher exchange program, receiving popular teachers from Kobe, Japan, and establishing an international component to the curriculum. Ingraham's concert choir toured Japan in 1964, reinforcing this emphasis. Under principal John Maxey, who served from 1963 to 1975, Ingraham became one of the first schools in the nation to establish a ten-year self-evaluation program.

In 1967, the 900 Building, a large steel-framed portable classroom building, was constructed toward the southern end of the school grounds. Remodeling in 2004 included the library and the science wing. In 2007 the Technology Education Shops wing received an interior remodeling and roofing replacement. In 2011, the ESPN program Rise Up—in which four high schools around the country received funding and support to overhaul their athletic facilities—updated the gymnasium, weight room and uniforms at Ingraham.

Ingraham emphasizes academics, activities and sports, with a three-pronged academic emphasis: the International Baccalaureate program, the Academy of Information Technology, and fine and performing arts. Ingraham established the International Baccalaureate (IB) Diploma Programme in 2002. In 2011, the district's highly capable and academically highly gifted students were allowed entry into the IB program at Ingraham, and by the 2013-2014 year, 18% of Ingraham students were enrolled in the Highly Capable Cohort (HCC). Ingraham's official name changed to Ingraham International School in 2013 due to the addition of the Language Immersion pathway connected with feeder school Hamilton Junior High.

Activities at Ingraham include thirty-four activity and multi-cultural clubs, including Journalism and Yearbook; Model United Nations; the Future Business Leaders of America Program; field trips to Washington DC, Hawaii and France; Tech Prep; and School-to-Work Programs.

In athletics, the Rams achieved early success in the 1960s and early 1970s. The football team won a record thirty-eight victories in the north division of the Metro league and secured the State Championship in 1969 and again in 1988 with Greg Lewis as running back.

Notable alumni from Ingraham High School include Washington State Governor Jay Inslee (class of 1969); Pulitzer Prize-winning cartoonist David Horsey (1969); Major League Baseball players Ken Phelps (1971), Chuck Jackson (1981), and Bob Reynolds (1966); National Football League player Greg Lewis (1986); author of MS-DOS Tim Paterson (1974); and first chair trumpet of the Boston Symphony Orchestra, Rolf Smedvig (1970).

Ingraham currently has a student enrollment of about 1,200, with an active Parent-Teacher-Student Association (PTSA), and a school foundation, the Ingraham High School Foundation (IHS), to help with funding curriculum and activities. Ingraham also offers a Community Based Training (CBT) program for students with disabilities.

Historical Architectural Context

Mid-Century Modern Style School Typology (1945-1965)

After World War II, school buildings throughout North America changed in form to reflect the rational and functionalist principles of Modernism.

Modernism, or the Modern Movement in design and architecture, had its origins in Europe after World War I, with an underlying belief that advances in science and technology would generate a new form of architecture, free from the pervasive eclecticism based on revival forms. The possibilities of curtain wall construction utilizing steel frames and the freeform massing using ferro-concrete were explored by Continental architects, as well as American Modernist pioneers including Frank Lloyd Wright. By the 1920s, these experimentations produced distinct branches of Modern architecture: the "International Style" of the Bauhaus architects Walter Gropius and Mies van der Rohe, and the béton brut style of Charles Edouard Jeanneret (Le Corbusier), or the "New Brutalism."

Modern construction, technologies, and ideas for the health, welfare, and educational ideals for children also affected school design. Because of the nationwide population boom after World War II, many new schools were needed, and the new designs focused on one-story flat-roofed buildings, using modern lightweight building technologies with ribbon windows. These schools were less expensive to build than their two-story Classical, Colonial, or Gothic predecessors, and they also had a shorter life expectancy.

Many of the plans included classrooms that opened directly to the exterior and were airconditioned. The Crow Island School in Winnetka, Illinois, designed in 1940 by Eliel Saarinen, was instrumental in influencing the new school type, called the "finger plan." Saarinen may have been influenced by what was beginning to be called the "California plan," where each room had direct access to the exterior. These "California plan" schools, developed by the firm of Franklin & Kump, such as the Acalanes Union High School in Lafayette, California, could be easily expanded for growing student populations. One of the earliest schools to apply the principles of the International Style was William Lescaze's Ansonia High School in Connecticut in 1937.

New research on tolerable levels of light, temperature, and ventilation, combined with technological advances in lighting and environmental controls, enabled the new architectural forms to be successful and prolific. As artificial lighting and mechanical ventilation were relied upon more in the designs, architects during the later part of the post-war era also began to focus on the acoustical design principles for school classrooms, affecting roof and ceiling forms. Some schools' designs did focus on bringing natural light into the buildings, such as John Carl Warneke's Portola Junior High School (1951) in El Cerrito, California and Mira Vista Elementary (1951) in East Richmond Heights, California.

During this period, new school designs accommodated new functions and frequently separated structures for auditorium/lunchroom, gymnasium, and covered outdoor play

areas. In some schools, specialized classrooms for music, art and science were built, while portables were often retained for art and music. Separate functions such as wood shops, band rooms and theater areas were especially important in high schools and junior high schools.

As concerns arose during the Cold War era of the 1950s and early 1960s, there was an increased focus on exit routes and shelter areas within enclosed restrooms and locker rooms, guided by instructional publications such as the 1953 "Safety for Survival, A Civil Defense Guide for Schools in Washington State."

Seattle Post-War School Buildings and Their Designers

In Seattle, as World War II ended, the school district shifted from a centralized system of school design overseen by an official school architect to a system of individually designed school buildings in the Modern style by selected architectural firms led by individual architects embracing Modernism.

In the Pacific Northwest, a new generation of architects emerged from architectural schools, including the University of Washington, where early Modernist adaptors challenged traditionalist professors. These new practitioners including Victor Steinbrueck (1911-1985), Paul Hayden Kirk (1914-1995), Omer Mithun (1918-1983), and Roland Terry (1917-2006), emerged from their apprenticeships immediately embracing a new Northwest Modernism. Steinbrueck's and Kirk's University of Washington Faculty Center was widely admired and published at the time as an example of a Northwest interpretation of the work of Mies van der Rohe. Kirk would expand his practice designing several clinics throughout the Northwest including the Group Health Cooperative Northgate Clinic completed in 1958, and the Goiney/Roedel Clinic in Lake City completed in 1952, both studies of Miesian principles interpreted into Northwest Modernism.

Seattle architect John Morse cited the origins and formal principles of Modern school designs in a 1957 publication:

After the doldrums of the Depression, the Second World War waked architect and public alike: new designs for one-story schools came out of Michigan, Texas and California – plans based on groups of classroom wings and landscaped courts, together with a complete restudy of assembly and athletic rooms. The following terms became well known: single-loaded corridors, bilateral lighting, sky-lighting, radiant heating unit ventilation, the finger plan, the campus plan, multipurpose room, slab-ongrade, brightness ratios, color harmony; and still later: luminous ceilings, window walls, audio-visual techniques, resilient playground surfacing, flexible special-purpose rooms, student activity rooms. Washington State contributed to the national wakening with pioneering work in top-lighting, color design and concrete design in both pre-stressed and shell design. The principal changes in regular classrooms have been these: more floor area per pupil – minimum 30 sq. ft., square rooms, sinks in all primary classrooms, day-lighting from above or from two sides, lower ceilings – down from 12 feet to 8 or 9 feet, mechanical ventilation, more tackboard – less chalkboard, more positive colors on walls and floors, higher illumination – 40 foot candles minimum, sun control outside the windows, all furniture movable.

School design in Seattle followed the national pattern, with school districts struggling to accommodate rapid population growth resulting from the post-war baby boom. Between 1945 and 1965 most school architects designed one-story elementary schools with ribbon windows and a Modern expression. Several incorporated covered exterior walkways that replaced interior corridors as circulation spaces. All were purposely residentially scaled to fit better within their neighborhoods, and to be perhaps less intimidating to younger children.

Although each new school was designed separately, Mallis, Stoddard, and John Graham & Co. adopted the flat roof "finger plan" innovated by Saarinen, Kump, and other California architects, as a model for the first elementary school designs of this period in Seattle. In two of Graham & Co.'s elementary schools, north-facing roof monitors attempted to resolve the need for additional natural light. Although Paul Thiry introduced sloped roofs to his Northgate Elementary (1956) and Cedar Park Elementary (1959) designs, the designs for elementary schools during this period were similar in their approaches. Because of the booming student population, portable school units were used at all schools to ease overcrowding.

Jeffrey Ochsner, an architectural historian at the University of Washington, has cited Seattle's Modern-style school buildings as derived from Bauhaus and International Style precedents, with some exemplifying a distinct regional style:

Most of [Seattle's] elementary schools ... were rectilinear designs with flat roofs, often with individual functional components expressed as distinct boxy volumes... This design approach juxtaposing individual rectilinear volumes serving different functions was used for many Seattle institutional buildings of this era. This compositional approach derives from Modern buildings such as the Bauhaus (with its rectilinear design and functional expression) and was an early post-World War II version of the International Style. In contrast to the International Style, many Seattle architects in the years after 1945 explored the approach now recognized as Northwest Regional Modernism. Typically applied to residences and smaller institutional buildings (like suburban churches), Regional Modernism is characterized by sloped overhanging roofs, strong relationships to sites (and, if available, views), use of natural materials, revealed structure (often regularly spaced post-and-beam) and selective use of transparency to link inside and outside. It was in the junior high and high school designs that real departures were made from the single-level ribbon window idea for school design, using more two-story sections, concrete roof form technologies, and different plan types. Maloney's Asa Mercer Junior High School (1957) used a thin plate concrete roof technology in a barrel vault-type form along with a square, more monolithic plan. A variation of this roof form is also used in NBBJ's Sealth High School (1957), which also had a rectangular plan punctuated with courtyards. DeHart, Lands & Hall's Nathan Hale High School (1963) used a "T" plate roof technology with a courtyard plan. Again, several incorporated covered exterior walkways rather than interior corridors as circulation spaces.

Each of these schools was a Modern-style structure with formal similarities, despite their having been the work of different Pacific Northwest architects. The buildings shared many of the same post-war materials, such as glass block, Roman-style brick masonry, and aluminum frame windows, and each clearly expresses its structural system and internal functionality. These school designs reflect a range of interests and approaches within the realm of Modernism.

Adoption of interscholastic sports programs by Seattle School District in 1948, following the sharing of sports programs by the Public Schools and Seattle Parks Department during the war years, also led to changes in both school design and school site planning. This effort reflected a national interest, advanced by the National Education Association and others, to meet the needs of teenagers as a distinct category of youth. Thus the postwar schools also accommodate more sports and play, with a typical emphasis on indoor/outdoor connections, and additional paved outdoor recreation and equipment areas, along with athletic fields and gyms with bleacher-type seating at junior high schools and high schools. While many schools were fenced, play areas were typically accessible for neighborhood use. School sites were also expanded for larger paved parking lots for teachers, staff, service vehicles, and visitors. Landscaping plant beds were placed typically along the primary façades and entries of classroom and administrative buildings and within courtyards.

Building Owner: Seattle School District Number 1

(For a complete overview of the District history please see Appendix 4 of this report.)

Post-World War II Seattle Schools, 1946 to 1965

After World War II, enrollment swelled to a peak of approximately 100,000 students by the early 1960s. Between 1946 and 1958, six separate bond issues were approved for new school construction. Samuel Fleming, employed by the district since 1908, succeeded Worth McClure as superintendent in 1945. After Fleming retired in 1956, Ernest Campbell became superintendent.

In 1945, the Seattle School District Board commissioned a study of population trends and future building needs. One proposal called for the modernization of all existing schools and the addition of classrooms, along with multi-use rooms for lunch and assembly purposes, covered and hard-surfaced play areas and play courts, and expanded gymnasia.

Improvements in lighting, heating, plumbing systems, and acoustical treatments were sought as well. This survey was conducted at a time when student enrollment in Seattle was stable, at around 50,000. By this time the school district was overseen by a five-member Board of Directors, and employed approximately 2,500 certified teachers, with an average salary of about \$2,880.

In 1947 the district completed a large stadium, designed by George W. Stoddard, with reinforced concrete stands, adjacent to the National Guard Armory at Harrison Street and Fourth Avenue N., at the former Civic Field. In 1951 a war memorial shrine bearing the names of 762 Seattle schools graduates killed in World War II was dedicated at Memorial Stadium.

In 1949, a 6.8 Richter-scale earthquake damaged several elementary schools, resulting in their subsequent replacement by temporary portables. The 1950s saw increased use of these structures as a way to address enrollment increases with quick, flexible responses to overcrowding. In 1958, an estimated 20% of the total Seattle student body was taught in portable classrooms. Despite their popularity, however, the occupants of the portables suffered from inadequate heating, lack of plumbing, and distance from other school facilities.

Elementary schools included separate gymnasia and auditorium/lunchrooms. Older high schools gained additions of gymnasia and specialized classroom space. Despite all of the construction, there were still extensive needs for portable classrooms for excess enrollment.

During this period the quality of construction gradually improved. The earliest school buildings, put up as rapidly as possible, included the three schools constructed in 1949. Designs prepared by George W. Stoddard for these schools were essentially linked portables with a fixed administrative wing. Each of the district's thirty-five new school buildings was individually designed in the Modern style, with nearly all of the elementary schools constructed with one story, or on sloping sites, each classroom having direct access to grade, conforming to changes in building code.

The twenty-two new elementary schools built by the district between 1948 and 1965 included:

School	Year	Address	Designer	Notes
View Ridge School	1948	7047 50 th Ave. NE	William Mallis	
Arbor Heights School	1949	3701 SW 104th St.	George W. Stoddard	Demolished
Briarcliff School	1949	3901 W Dravus St.	George W. Stoddard	Demolished
Genesee Hill	1949	5012 SW Genesee St.	George W. Stoddard	Demolished

Lafayette School	1950	2645 California Ave. SW	John Graham & Co.	
Van Asselt School	1950	7201 Beacon Ave. S	Jones & Biden	Closed, vacant
Olympic Hills School	1954	13018 20 th Ave. NE	John Graham & Co.	Demolished
Viewlands School	1954	10523 3 rd Ave. NW	Mallis & DeHart	
Wedgwood School	1955	2720 NE 85 th St.	John Graham & Co.	
Northgate School	1956	11725 First Ave. NE	Paul Thiry	
John Rogers School	1956	4030 NE 109th St.	Theo Damm	
North Beach School	1958	9018 24 th Ave. NW	John Graham & Co.	
Roxhill School	1958	9430 30 th Ave. SW	John Graham & Co.	
Sand Point School	1958	6208 60 th Ave. NE	G.W. Stoddard w/ F. Huggard	
Cedar Park School	1959	13224 37 th Ave. NE	Paul Thiry	Seattle Landmark
Sacajawea School	1959	9501 20 th Ave. NE	Waldron & Dietz	
Decatur School	1961	7711 43 rd Ave. NE	Edward Mahlum	Vacant
Graham Hill School	1961	5149 S Graham St.	Theo Damm	
Rainier View School	1961	11650 Beacon Ave. S	Durham, Anderson & Freed	
Schmitz Park School	1962	5000 SW Spokane St.	Durham, Anderson & Freed	Vacant
Broadview- Thomson School	1963	13052 Greenwood Ave. N	Waldron & Dietz	
Fairmont Park School	1964	3800 SW Findlay St.	Carlson, Eley & Grevstad	

One of the first priorities during this period was the building of new junior high schools. Between 1950 and 1959, ten new junior high schools were completed:

School	Year	Address	Designer	Notes
Eckstein Jr. High School	1950	3003 NE 75 th St.	William Mallis	Seattle Landmark
Blaine Jr. High School	1952	2550 34 th Ave. W	J. Lister Holmes	
Sharples Jr. High School	1952	3928 S Graham St.	William Mallis	Now Aki Kurose Middle School
David Denny Jr. High School	1952	8402 30 th Ave. SW	Mallis & DeHart	Demolished
Asa Mercer Jr. High School	1957	1600 Columbian Way S	John W. Maloney	
Whitman Jr. High School	1959	9201 15 th Ave. NW	Mallis & DeHart	
Louisa Boren Jr. High School	1963	5950 Delridge Way SW	NBBJ	Now Boren K-8 STEM
George Washington Jr. High School	1963	2101 S Jackson St.	John Graham & Co.	
Worth McClure Jr. High School	1964	1915 First Ave. W	Edward Mahlum	

During this period the District also constructed three new High Schools, including:

School	Year	Address	Designer	Notes
Chief Sealth High School	1957	2600 SW Thistle St.	NBBJ	Altered
Ingraham High School	1959	1819 N 135 th Street	NBBJ	Altered
Rainier Beach High School	1960	8815 Seward Park S	John W. Maloney	Altered
Nathan Hale High School	1963	10750 30 th Ave. NE	Mallis & DeHart	Altered

Between 1943 and 1954, voters in the rapidly growing unincorporated areas north of Seattle, feeling the burden of new special school levies, and believing that there were

advantages to Seattle's transportation services and police and fire protection, approved at least twelve annexations to the City of Seattle. This pushed the city limits northward from a line near N 85th Street, to a uniform north border at N 145th Street. These annexations brought an additional ten schools into the district from the struggling Shoreline School District.

Building Architect: Naramore, Bain, Brady & Johanson

The architectural firm today known as NBBJ was formed in 1943 by Seattle architects Floyd Naramore, William Bain, Clifton Brady, and Perry Johanson, to combine forces in the design of housing and other support facilities at the naval shipyard in Bremerton. The team was known informally as "The Combine." Each partner brought a specialty to the firm: Naramore was known for his educational projects, Bain had residential and general commercial experience, Brady was both an architect and engineer, and Johanson specialized in health care facilities. The combined talents of the four offered a multidisciplinary, collaborative approach to projects.

In the early years, Naramore, Bain, Brady & Johanson grew as a regional leader in the Pacific Northwest, forming lasting relationships with local businesses, institutions, and governments. Major projects of their first decade include the University of Washington Health Sciences Complex and Medical Center and the Public Safety Building in Seattle, along with the Federal Reserve Building of San Francisco, Seattle Branch Bank. Smaller projects included the King County Blood Bank (1945, demolished) and the S.L. Savidge Auto Showroom (1947).

In the 1970s and 1980s, NBBJ pioneered the expansion of traditional architectural practice into a firm offering comprehensive and full-service consultation in all elements of the built environment. Large-profile projects completed by the firm during these years in Seattle include the IBM Corporation Office Building and Garage (1963, with Minoru Yamasaki, Seattle, WA), the Seattle First National Bank Building or Sea-First Tower (1969, now 1001 Fourth Avenue), and the King County Domed Stadium (1972, Seattle, WA, demolished).

In 1976, the architectural firm of Godwin-Nitschke-Bohm from Columbus, OH collaborated with NBBJ on a large project and later merged with NBBJ. In 2002, NBBJ was the second-largest architectural firm in the United States and the fifth largest in the world, employing more than 900 people in Seattle, Columbus, San Francisco, Los Angeles, and New York, with international offices in London and Shanghai.

Recent notable projects in Seattle by the firm include Safeco Field (1999), the United States Federal Courthouse (2003-04), WAMU Center (2005-06), and the Bill & Melinda Gates Foundation Headquarters (2010).

Selected List of Naramore/NBBJ Attributions

1914-15	Couch Elementary School	Portland, OR
1935-36	Bagley Hall, University of Washington, with	Seattle, WA
	Grainger & Thomas, Bebb & Gould	

1938	Bellingham High School	Bellingham, WA
1941-42	East Park Community Center	Bremerton, WA
1948-49	McKinley Elementary School	Olympia, WA
1951	King County Blood Bank (NBBJ)	Seattle, WA
1953	Clyde Hill Elementary School (NBBJ)	Bellevue, WA
1957	Ashwood Elementary School (NBBJ)	Bellevue, WA
1963	IBM Building (NBBJ w/Minoru Yamasaki)	Seattle, WA

Project Engineer: Helge J. Helle of Worthington, Skilling, Helle & Jackson Structure Engineers

The Seattle engineering firm of Worthington, Skilling, Helle & Jackson, consulting structural and civil engineers, designed Ingraham High School in 1958, with Helge J. Helle signing the drawings. The firm changed its name to Skilling, Helle, Christiansen & Robertson in 1967 when Worthington retired. Helle retired from the firm in 1979, after which the firm name changed again to Skilling Ward Rogers Robertson, Engineers, which operated between 1983 and 1987. This firm later evolved into Skilling Ward Magnusson Barkshire (SWMB) Inc., Engineers, which operated between 1987 and 2003.

Helge J. Helle was born and raised in Seattle. After serving in the Navy during World War II, he graduated in 1949 from the University of Washington with both bachelors and masters degrees in Engineering. Directly after graduation Helle joined an engineering firm known as W. H. Witt Co. By 1959 the firm had evolved into Worthington, Skilling, Helle & Jackson, with Helle as one of the principal engineers. He headed the design team for construction of Children's Orthopedic and Swedish hospitals, as part of his focus on hospital design. He was also part of the design team for the IBM Building in Seattle (1962-64, Minoru Yamasaki), the Rainier Tower (1972-77, Minoru Yamasaki with NBBJ, Seattle, WA) and World Trade Center towers I and II (1963-77, Minoru Yamasaki, New York, NY), along with many other projects designed by the firm.

Helle served a term as President of the Construction Engineers Council of Washington and was a member of the Structural Engineers Association of Washington. During his career he received a special citation award from the Western Concrete Reinforcing Steel Institute for its northern division and was named Engineer of the Year by the Consulting Engineers Council of Washington. Helle consulted with the firm after his retirement.

Representative Buildings designed by Worthington, Skilling, Helle & Jackson

Date	Project	Location	Design Architect
1959-60	West Seattle Congregational	West Seattle,	Kirk Wallace
	Church	WA	McKinley
1960	Chief Seattle Council Service	Seattle, WA	Nelson and Sabin
	Center, Boy Scouts of America		
1960	Shannon and Wilson Properties	Seattle, WA	NBBJ
	Incorporated Geotechnical		

	Engineers Office and Laboratory Building		
1961-62	Fine Arts Pavilion, Seattle World's Fair	Seattle, WA	Kirk Wallace McKinley
1962-64	International Business Machines (IBM) Corporation Office Building and Garage	Downtown Seattle, WA	NBBJ
1963-64	City of Seattle Public Library Branch #3	Magnolia, Seattle, WA	Kirk Wallace McKinley, building architect; Richard Haag, landscape architect
1964-68	Rivergate Exhibit Facility	New Orleans, LA	Curtis and Davis
1967-69	University of Washington Child Development and Mental Retardation Center	Seattle, WA	Arnold G. Gangnes & Associates
1966-73	Port Authority of New York and New Jersey World Trade Center Towers I and II	New York, NY	Minoru Yamasaki
1972-76	Kingdome, King County Department of Stadium Administration Domed Stadium	Pioneer Square, Seattle, WA	NBBJ
1972-77	Rainier Bank Tower	Downtown Seattle, WA	Minoru Yamasaki with NBBJ
1979-81	Seattle First National Bank Incorporated Fifth Avenue Plaza Building	Downtown Seattle, WA	Natalie de Blois of 3D/International
1985	Columbia Seafirst Center	Downtown Seattle, WA	Chester L. Lindsey

Building Contractor: Sound Construction

John Hastie (b. 1863–d. 1930) and Henry Lohse, Jr. (1873-1938) incorporated the Sound Construction and Engineering Co. in 1909. John Hastie arrived in Seattle from Ohio in 1886. He was in business as early as 1907 heading the firm Hastie & Dougan, General Contractors.

Henry Lohse, Jr. was born in Olympia and was in business as a contractor as early as 1906, when he was the contractor for the Hemrich Brothers Brewing Company building located at Third Avenue and James Street, designed by Josenhans & Allen, along with another building on Pike Street by the same architect. Sound Construction continued after the deaths of its founders, with former presidents including Okey O. Gregg (1880-1963), and construction superintendents William Howard Padden (1895-1963), later of the Austin Company, and Frank Hulvey (1896-1966). After 1966, Sound Construction seems

to have gone out of business.

Examples of the work of Sound Construction includes:

Courthouse in Butte, Montana, 1910

Joshua Green Block, at Fourth and Pike, John Graham Architect, 1912

West Wheeler Street Bridge (Smith Cove to Magnolia Bluff), 1913

Post office and federal building in Medford, Oregon, 1915

Grunbaum Brothers Furniture Company at Sixth Avenue and Pine Street, 1921-22

Pacific Telephone Building, 1922

Decatur Building, 1922

New Bigelow Building, 1924

Northern Life Insurance Company Office Building #2, now known as Seattle Tower, 1212 Third Avenue, City of Seattle Landmark, 1928-29

City Light Building, 1935

Health Science Building at University of Washington (w/ J.C. Boespflug Construction Co.), 1957

Moses Lake Flight Center Boeing Airplane Hangar, 1957

Exhibits for World Fair foreign commerce and industry, Walker McGough, architects, 1961

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The features of the Landmark to be preserved include*: the exterior of the gymnasium, and the exterior of the auditorium and its associated foyer and lobby wing.*

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Sarah Sodt City Historic Preservation Officer

Cc: Eric Becker, Seattle Public Schools Rich Hill, McCullough Hill Leary Ellen Mirro, The Johnson Partnership Jordan Kiel, Acting Chair, LPB Nathan Torgelson, SDCI Tina Capestany, SDCI Ken Mar, SDCI