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NPS Form 10-900
(Rev. 8-86)

OMB No. 1024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

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NATIONAL REGISTER

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

1. Name of Property

historic name: Jantzen Knitting Mills Company Building
other names/site number:

2. Location

street & number: 1935 NE Glisan Street — N/A ☐ not for publication
city, town: Portland — N/A ☐ vicinity
state: Oregon code: OR county: Multnomah code: 051 zip code: 97208

3. Classification

Ownership of Property	Category of Property	Number of Resources within Property	
		Contributing	Noncontributing
☒ private	☒ building(s)	1	____ buildings
☐ public-local	☐ district	____	____ sites
☐ public-State	☐ site	____	____ structures
☐ public-Federal	☐ structure	____	____ objects
	☐ object	1	____ Total

Name of related multiple property listing: N/A

Number of contributing resources previously listed in the National Register: N/A

4. State/Federal Agency Certification

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

Signature of certifying official — Date: May 1, 1991

Oregon State Historic Preservation Office
State or Federal agency and bureau

In my opinion, the property ☐ meets ☐ does not meet the National Register criteria. ☐ See continuation sheet.

Signature of commenting or other official — Date

State or Federal agency and bureau

5. National Park Service Certification

I, hereby, certify that this property is:

☒ entered in the National Register. ☐ See continuation sheet. — 6/24/91
☐ determined eligible for the National Register. ☐ See continuation sheet.
☐ determined not eligible for the National Register.
☐ removed from the National Register.
☐ other, (explain:) _____

Signature of the Keeper — Date of Action

6. Function or Use

Historic Functions (enter categories from instructions)

Indsutry/Processing/Extraction:
manufacturing facility

Current Functions (enter categories from instructions)

Vacant: not in use

7. Description

Architectural Classification (enter categories from instructions)

Modern Movement : Art Deco

Materials (enter categories from instructions)

foundation concrete
walls concrete
roof asphalt, built-up
other

Describe present and historic physical appearance.

[X] See continuation sheet

DESCRIPTION OF PRESENT AND ORIGINAL PHYSICAL APPEARANCE

The Jantzen Knitting Mill building is an example of an early Portland industrial building in the Art Deco or Modernistic style. The building is also an example of a building designed and built in three stages over a period of nearly 20 years from a design that was begun in 1929 and completed by 1945.

The first stage of the Jantzen Knitting Mill was built between August and December of 1929 (see historic photo #2). Rectangular in plan, measuring 100' x 180', this manufacturing building was built of reinforced concrete with a partial basement in the southeast corner. The floor and walls are concrete with concrete columns in 20' by 20' bays (see photo #15).

The second floor is concrete with concrete columns at 20' on center north to south and 20', 40' and 40' on center, west to east. The concrete sawtooth roof provides north facing clerestory type skylights for the yarn spinning operation (see historic photo #4 and photo #13). The first floor is of concrete with concrete columns. This was the original dyeing room (see historic photo #3). The primary windows are steel sash, with operable awning segments on both floors. Later alterations of the first floor windows included covering the steel sash with metal panels. Steel sash windows were also used in the skylights (see photo #14).

The exterior wall finish is a textured stucco with painted window sash. Pilasters at 20' centers frame the window bays on all of the building elevations. The cornice line is defined by a low-relief zigzag pattern. A large parapet wall is used that encloses the sawtooth roof and gives the impression of a flat roofed building. The parapet wall has decorative rectangular panels placed between the line of the pilasters. These panels have an arrangement of decorative fan and shell shapes bounded by a raised border (see photo # 11).

Each corner of the building is recessed nearly a full bay width, with a narrow band defining the window bay rather than a full pilaster. The parapet wall at each building corner has a 5' diameter Diving Girl medallion (see photo #12). The corner element below the parapet wall reads as a large square column.

The capitals have low-relief sculpted capitals with stylized scallop shells and wave patterns (see photo #10). Between the capitals at the tops of the second floor windows is a crested wave decoration, meeting at mid-point at a raised circular element (see photos #9, #10).

The window areas are divided vertically by a large spandrel, set between pilasters, that defines the level of the second floor. There is a scupper indicated on the plans that may have been intended to facilitate washing down the second floor or was in lieu of an internal floor drain. The pilasters rest on a visually strong base sill element that provides a base for the architectural organization of the building (see photo #4).

Cantilevered metal canopies define building entrances, both pedestrian and vehicular (see photo #8), some of which have been altered due to later stages of construction.
The second stage of construction of the Jantzen Knitting Mill was built between July 1937 and March 1938 by Dougan-Hammon Construction Co. for $50,000 according to the building permit records. Rectangular in plan and built of reinforced concrete, the second stage building is a copy of the first stage but with a basement in the south half of the building. The most notable exception is the wood post and beam framing on the second floor and a wood plank roof (see photo #16). The concrete columns on the first floor are in 20' x 20' bays (see photo #18). The wood columns on the second floor are spaced at 20' on center north to south, but at 40', 20' and 40' on center, east to west. The wood beam depth is reduced at the shorter span, an unusual architectural expression of the structure (see photo #17). The function of the stage two building was clearly as a warehouse to complement and allow expansion of the manufacturing uses in the stage one building (see historic photo #1).

Exterior elements of the stage two building follow the precedent of stage one exactly. The cornice is of the zigzag pattern, with a studious use of all other decorative elements, panels, capitals and details. The primary windows of stage two are also steel sash with operable awning segments. Later alteration of the windows on the first floor included replacement of the steel sash with glass block on the east elevation; covering windows on the south elevation with metal panels (see photo #4).

As in the first stage building, building entrances are marked by projecting metal canopies which have in some cases been altered due to later construction.

The third and last stage of construction of the Jantzen Knitting Mill, begun in 1945 but delayed for over a year by a lumber strike, contributes as much as either of the earlier two stages to the overall architectural quality through the integrity of its design and consistency of scale, detailing and engineering innovations.

The third stage building is rectangular in plan, measures 150' x 200', and when combined with the earlier stages results in a building that covers almost two Portland city blocks. The building is located from property line to property line between northeast 19th Avenue on the west and northeast 20th Avenue on the east, and northeast Glisan Street on the south. The building does not extend the full two blocks to northeast Irving Street, with the north wall ending in mid-block (see historic photo #6). The north-south dimension of the building site was also reduced by the widening of northeast Glisan Street in 1927, with 20' taken from the south edge. The third stage was built over northeast Hoyt Street, vacated by the Portland City Council in November 1946. A picture of the third stage of construction was used as the cover of the Jantzen Company Annual Report for 1945, and it was reported that "Plant expansion begins for manufacturing, warehousing. . .purposes. The cover illustration shows. . .66,000 square feet total with the final addition. . .."

The third stage of the Jantzen Knitting Mill is constructed of reinforced concrete with a partial basement extending under the sidewalk on northeast 19th Avenue on the west side of the building. This was to provide for access for fuel to the basement boiler. Considered by some as two buildings, the third stage has some unusual aspects as a result of some innovative design solutions to satisfy use requirements. The western portion of the third stages measures 120' west to east, 150' north to south. The floor and walls are concrete with concrete columns on the first floor in 20' x 20' bays.

The second floor of the western portion of the third stage is also concrete, with roof framing of bowstring trusses that have a 110' span. This provides a large clear floor area for the yarn spinning machines, an expansion of the use of the second floor of the first stage building (see photo #21). The trusses are on 20' centers. The roof itself is 2" wood, laminated on edge over 4" nominal pylons (see photo #22). The second floor has offices and employee services on the perimeter (see photo #23).

The western portion of the third stage of construction of the Jantzen Knitting Mill measures 80' east to west, and 150' north to south. Also of reinforced concrete, the eastern portion is two stories in height, with glue laminated beams at 10' centers spanning east-west between the central dividing wall and the exterior wall with intermediate pilasters. The roof is wood plank (see photos #19, #20).

A good description of the three construction stages is provided by Lewis L. McArthur in his essay in Space, Style and Structure.

> "The first unit (stage) in the southwest corner was reinforced poured-in-place concrete including interior columns, beams, floors and the distinctive sawtooth skylights. Bays varied, with a maximum span of 40 feet. Steel sash were used throughout, including the sawteeth. Next to be built was the southeast corner. This section was originally designed as a warehouse area. The exterior walls were matching poured-in-place concrete but the interior framing was wood post and beam, including the roof framing. The third unit was the dyeing operations. Again the matching exterior wall construction was used with the typical steel sash. The northwest part housing the spinning department is two stories and the second floor area has a nominal 100 foot clear span, using bow string trusses with arched top chords cut from heavy timbers and spliced at third points, which gives a completely clear floor for the spinning machines. This second floor is reinforced concrete supported on concrete columns, round like all the other columns but lacking the identical precision of those cast in today's sonotubes. The final quarter is the same height as the other portions but all one story to accommodate the dyeing room. Here we have a fourth type of roof construction: glue-laminated beams, timber joists and heavy plank decking. The beams were the longest "glu-lams" that had been produced up to that time and Mr. Sundeleaf was the first to specify waterproof glue (because of concern over the possible effects of moisture from the dyeing operation). The entire structure is an instructive example of maintaining design integrity while varying construction to suit manufacturing requirements and changing relative costs."

The exterior of the third stage has all of the detail and ornamentation of the earlier stages with strict adherence to all of the elements found on the exterior of those two buildings. The differences between the three stages of construction are imperceptible on the south and west elevations where a design consistency is maintained that assures that each stage contributes equally in scale, detailing and exterior finish to the overall building design (see photo #7). As an example of the architectural intent to integrate all stages of the knitting mill design and construction, plan notes for the 1946 stage three building call for the removal, repair and reuse of metal sash windows from existing walls, and for the reuse of other elements.

Only on the east elevation is the division between the second and third stages discernible (see photo #5). In the northeast portion of the third stage, the window bay rhythm has changed through the use of intermediate pilasters to accommodate the spacing of the glue

laminated beams; the elevation composition rests upon a larger base sill element; the large window areas are filled with glass block between the full and intermediate pilasters and form a fenestration element that is narrower, more rectangular (see photo #6). But the overall effect of a common architectural style is maintained. Changes, prompted by interior use requirements, are enclosed with the same rich decorative elements common to earlier stages, including the zigzag low-relief at the cornice, "watery" motif of the geometrically decorated capitals and decorative panels, and the Jantzen Diving Girl, an oft repeated relief sculpture found at building corners and over some entrances. These decorative elements are all found in this architectural style. The decorations, including the Jantzen Diving Girl medallion was sculpted by Gabriel Lavare, a Portland sculptor. All of the medallions found in all three construction stages are from the same mold, which was retained for this purpose.

All building elevations present a rhythm of verticality with regularly spaced pilasters with shell shaped capitals. Decorations have a low-relief water motif including stylized scallop shells, waves and general "liquid" patterns. Only the north elevation remains as an undecorated facade, quite likely in anticipation of future expansion.

The wall area between pilasters has either windows or access below windows. All windows in each stage are of metal sash and primary window type, except on the east elevation of the dyeing room, built in the third stage. In this building, the window area is filled with glass block, which maintains the rhythm and pattern of the adjacent metal sash on the exterior, but provides a design solution to an interior use, in that the dyeing room operation required temperature and humidity control, but with natural light. The glass block also demonstrates the emerging architectural language that expresses an exterior element based upon an interior requirement, within an overall architectural organization.

Two interior features contribute to the building's architectural significance. The first is the integration of the new to the existing interior spaces in each stage of construction to maintain specialized industrial uses. The second is the high quality and design innovation to satisfy the functional use requirements that varied greatly during the three construction stages. For example, the large "sawtooth" clerestory skylighting in the first stage building; the unusual framing of the second floor warehouse built in the second stage; the ceiling heights, temperature and moisture control requirements of the dyeing room; the long bow-string trusses used in stage three to gain the 100' clear span floor space for the spinning machinery; the longest glue laminated beams used to date with waterproof glue specified to counter any adverse effect of moisture from the dyeing operation.

The architect, Richard W. Sundeleaf, maintained the design elements found in the Art Deco style throughout the three design and construction stages he undertook, while providing interior spaces for the special industrial manufacturing needs of his client, the Jantzen Knitting Mill.

The Jantzen Knitting Mill is located in an area that had been considered for and was developing as industrial and manufacturing since East Portland joined the City of Portland in 1891. Despite a mix of some residential units, the significant land use of John Kern's plat of Timothy Sullivan's donation land claim was unrestricted industrial. The installation of the Sandy Road (Boulevard) street car line in 1906 and a bond measure approved in 1926 provided, among other things, for the widening area as industrial. Just prior, real estate development interests had constructed speculative industrial buildings intended for manufacturing uses. With the announced public improvement of area streets, speculation increased dramatically (see historic photo #1).

Into this environment stepped Jantzen Knitting Mill; first into a speculative industrial building at northeast 20th Avenue and Sandy Boulevard, then to the first stage of their planned manufacturing complex. Other structures involved in the manufacture, warehousing, and distribution of Jantzen merchandise are secondary in speculative venture of lesser architectural quality. Other adjacent buildings were of the same ilk, having been built on a speculative bases (see photos # 1, 2, 3). The knitting mill building however, at every stage, was intended and became central to the operation of the Jantzen company, and the architecture of the knitting mill reflects the period of greatest expansion and manufacturing of Jantzen.

8. Statement of Significance

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

☐ nationally ☐ statewide ☒ locally

Applicable National Register Criteria ☒ A ☐ B ☒ C ☐ D

Criteria Considerations (Exceptions) ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☒ G

Areas of Significance (enter categories from instructions)	Period of Significance	Significant Dates
Architecture	1929-1946	1929
Industry		1937-1938
		1945-1946

Cultural Affiliation

N/A

Significant Person

N/A

Architect/Builder

Richard W. Sundeleaf, Architect

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

☒ See continuation sheet

9. Major Bibliographical References

☒ See continuation sheet

Previous documentation on file (NPS):

- ☐ preliminary determination of individual listing (36 CFR 67) has been requested
- ☐ previously listed in the National Register
- ☐ previously determined eligible by the National Register
- ☐ designated a National Historic Landmark
- ☐ recorded by Historic American Buildings Survey # _____
- ☐ recorded by Historic American Engineering Record # _____

Primary location of additional data:

- ☐ State historic preservation office
- ☐ Other State agency
- ☐ Federal agency
- ☐ Local government
- ☐ University
- ☐ Other

Specify repository: _____

10. Geographical Data

Acreage of property 1.56acres Portland, Oregon-Washington 1:24000

UTM References

	Zone	Easting	Northing		Zone	Easting	Northing
A	10	527750	5041370	B			
C				D			

☐ See continuation sheet

Verbal Boundary Description

The nominated area is legally described as Lots 1 through 8, Block 7, Lots 3 through 6 of Block 16, together with the intervening section of vacated NE Hoyt Street, in Sullivan's Addition to the City of Portland, Multnomah County, Oregon. The building fronts NE Glisan Street on the South, NE 20th Avenue on the East, and NE 19th Avenue on the West.

☐ See continuation sheet

Boundary Justification

The nominated area measuring 200 x 340 feet represents the entire extent of historic development of the main plant of the Jantzen Knitting Mills Company between 1929 and 1946. Owing to the exceptional significance of the plant in local economy and regional architecture, each of three sections erected 1929, 1937-1938 and 1945-1946 is considered contributing.

☐ See continuation sheet

11. Form Prepared By

name/title Ted R. Schneider, reformatted and presented by John Tess

organization Heritage Investment Corporation date December 15, 1990

street & number 123 NW Second Avenue telephone (503) 228-0272

city or town Portland state Oregon zip code 97209

The two-story Jantzen Knitting Mills Company Building, erected of reinforced concrete in three separate episodes between 1929 and 1946, covers a one and a half-acre parcel on NE Glisan Street at 19th Avenue in northeast Portland, Oregon. In all three phases, development was guided by the young Portland architect, Richard Sundeleaf, whose industrial designs for the Jantzen Corporation won acclaim and established his wider reputation. Trained in the Beaux Arts tradition under Ellis F. Lawrence at the University of Oregon School of Architecture and Allied Arts, Sundeleaf had received a strong background in integrating all the arts. He followed the Modern Movement by expressing the function of the manufactory in structural terms and providing a dignified comprehensive decorative program having Classical organization yet featuring low-relief machine-age motifs in the Art Deco style. The building is of exceptional significance to Portland under National Register Criterion C as the preeminent, well-preserved example of Art Deco industrial architecture. It meets National Register criteria for exceptional significance under Criterion A also as the parent plant of what grew to become an international garment manufacturing concern that contributed to the city's base economy with mounting importance in the period between the World Wars.

The Jantzen Knitting Mills Company came to be recognized not only as an innovator in mechanized production of swimwear and specialty clothing, not only for its commitment to quality of design, but also for enlightened and benevolent employer policies that contributed to the safety and welfare of its employees. Carl C. Jantzen (1883-1939), one of Oregon's leading industrialists, was a native of Denmark who emigrated to America in 1890. In 1910 he and J. A. and C. R. Zehntbauer incorporated the Jantzen Knitting Mills Company which commenced the production of knitted swim wear in 1918 and, through astute merchandising practices, developed an international market supported by factories worldwide. The firm was an innovator in the early years of the mechanized garment industry owing to Carl Jantzen's development of a continuous knitting machine.

The original unit of the plant, constructed of stuccoed, reinforced concrete in 1929, measures 100 x 180 feet in plan and occupies the southwest corner of the parcel. Its floors are of reinforced concrete, and its loads supported by concrete columns. The distinctive sawtooth-profile roof provided north-facing clerestory skylights for the yarn spinning operation of the second story. Steel sash windows provided light to the ground story dyeing room.

The factory was doubled in size when the warehouse unit was added to the original longitudinal volume in 1937-1938. It has a wood post and beam framing system on the second floor, concrete columns on the first. Master molds used for the cast stone medallions and pilaster ornament of the original unit were re-used in finishing the warehouse addition. Thus, in its exterior elevations, the building became an integrated whole, with 20-foot structural bays rhythmically framed by shell-terminated pilasters. Imagery of the sea appropriate to the swimwear industry was used in other ornament, such as Vitruvian, or wave scroll string courses, scallop shell and fan inset panel motifs, and the company logogram, the diving lady, in circular frieze medallions. Street elevations are finished with a straight parapet.

The third section, measuring 150 x 200 feet, was constructed of reinforced concrete in 1945-1946 over vacated Hoyt Street and the south lots of an adjoining block to the north. On the second story, in the west potion, the rear extension of manufacturing and warehousing facilities contains a roof-framing system of bowstring arch trusses having a 100-foot span, north to south. The roof framing system of the east portion consists of 80-foot long glue-laminated beams, timber joists and heavy plank decking. The final addition is counted as a contributing section along with the previous two units, notwithstanding its construction date of slightly less than 50 years. The significance of the building, structurally, owes to such features as the glue-laminated beams which were the longest of the kind fabricated to that time. The architect specified for their manufacture a special waterproof glue to counteract moisture that would be rising from the dyeing operation. This experimentation expanded the bounds of practice in structural design in wood in the Pacific Northwest.

The Jantzen Knitting Mill building is not the first plant occupied by the company in the neighborhood north of Sandy Boulevard that developed for industrial use after 1926. The company's manufacturing complex expanded over the years into a number of buildings in the immediate area. The nominated building, however, best represents the growth and prosperity of the Jantzen Knitting Mills Company in the historic period 1929-1946 because it, unlike the others, was specifically designed to house the core of the operation and establish a high standard of functional and aesthetically pleasing design.

Little, if any historic equipment and machinery remains in the building, which is being rehabilitated for mixed-use tenancy. The Ted R. Schneider Company prepared an initial registration form in 1987. The application was reformatted and presented by the current owner's representative, Heritage Investment Corporation.

The Jantzen Knitting Mill building is an intact example of an early Portland industrial building used for manufacturing; designed in the Art Deco style by a leading architect of the time, Richard W. Sundeleaf (1900-1987); built in three stages over a 17-year period, and possessing a design integrity that remains today. The Jantzen Company, begun in 1909 as the Portland Knitting Company, moved in 1929 into the first building of the three stages of construction of their knitting mill, expanding their manufacturing facilities for nearly two decades as the company became national and international in scope. The company quickly became recognized as leading innovators in the manufacture of specialized clothing, as a benevolent employer through its employee policies, and as having a distinctive design sense as reflected in their products and buildings. The Portland Knitting Company became Jantzen Knitting Mill in 1918. Jantzen used Sundeleaf throughout the company's growth periods from pre-Depression until after the second World War. Sundeleaf, trained under Ellis Lawrence in the Beaux Arts tradition at the University of Oregon and an apprentice of A.E. Doyle, was part of the national movement seeking to express the influences of mechanization and industrialization on modern architecture. The Jantzen Knitting Mill, which includes the earliest example of Sundeleaf's eventual design specialty of industrial buildings, is not only one of a few of Sundeleaf's Art Deco industrial buildings remaining intact, the Jantzen Knitting Mill is the best architectural example representing the period of the company's growth, success and expansion that result in an internationally acclaimed manufacturing endeavor.

The Portland Knitting Company was founded by John A. Zehntbauer (1884-1969) after his unsuccessful attempt to buy out his former employer, the Luke Knitting Company. Portland Knitting Co. incorporators included John and C. Roy Zehntbauer and Carl C. Jantzen. Officially incorporated in March, 1910 with capitalization of $10,000, their first day of business resulted in the sale of one pair of gardening gloves for $0.35. Those early days included Carl Jantzen, John Zehntbauer, a knitter, and John's sister Minerva Zehntbauer as the sole employees. Knitting machines were added to the second floor within the next year in order to expand the retail business to include the manufacture of heavy sweaters, gloves & socks. The total sales volume at the end of the first year was $7,000.
By 1913, the Portland Knitting Company began the production of specialty clothing for the Portland Rowing Club. The comfortable, warm and lightweight garment became very popular in local, regional and national markets, resulting in sales in 1917 of 600 suits to 431,000 suits in 1925. Heralding the era was the slogan: "The suit that changed bathing to swimming." During this growth period, the Portland Knitting company changed its name to jantzen Knitting Mills, launched the famed Jantzen Diving Girl logo, and in 1921, in one of eight moves to new facilities, occupied new quarters one block south of the subject building

of this nomination. By John Zehntbauer's own accounts, they moved ". . .from the downtown retail location to our present one. . .on 20th and Sandy, known as the Simon Building. It was built for us by Senator Joseph Simon and we still rent it from his estate." Joseph Simon was land owner, entrepreneur, attorney and mayor of Portland from 1909-11, and a very influential figure in the Republican party of Oregon for 34 years.

Intent on upgrading the company offices, Jantzen built an administration office building on 18th Avenue between Sandy Boulevard and northeast Glisan Street. Company records show that very soon after the completion of their Sundeleaf designed headquarters building in 1928, work began on the first of Sundeleaf's Art Deco industrial buildings designed as the Jantzen Knitting Mill on 19th Avenue. As described in the Portland Oregonian, the Jantzen company intended a multiple stage industrial development to become their manufacturing complex when they announced in early 1929, ". . .a major new manufacturing facility, covering tow City blocks to begin immediately on their site on 19th Street. . .the cost to be $500,000." The announcement went on to state that ". . .with completion of the $100,000 administration building. . .move personnel from the Simon building. . .will add more machines there to increase production."

The Portland Oregonian reported in September 1919, "...work began for the Jantzen Company on a 2-story building by Robertson, Hay & Wallace, contractors...at a cost of $85,000...it will be so constructed that an addition of similar dimensions may be added later. With this, the structure will cover an entire City block..." Begun in late August 1929 and completed in September the same year, this two-story, 100' x 180' rectangular building was the first stage of the planned industrial complex announced earlier that year that would become the Jantzen Knitting Mill. The earlier announcement was optimistic in its time schedule, not anticipating the economic downturn of the Depression and the suspension of domestic production during World War II. When economic conditions allowed, the 1937 stage two building was completed, and immediately upon reconverting for peacetime manufacturing after WW II, stage three was begun in 1945 to complete the central building in the Jantzen manufacturing complex.

The stage one building is located on the southwest corner of the block bounded by 19th Avenue on the west and northeast Glisan Street on the south. The walls, floors, beams and columns were concrete with a unique sawtooth concrete roof that provided north facing clerestory skylighting through steel sash windows for the entire second floor spinning operation.

During a decade of explosive growth, Jantzen opened factories in Vancouver, B.C. in 1924; in London and Sydney, Australia in 1930; Barcelona, Spain in 1932; and plants in Argentina and France by 1934. The factories in England and Australia were designed by Sundeleaf, who by this time was described as Jantzen's "in-house architect."

Jantzen Knitting Mills suffered along with other businesses during the depression years. For the time, Jantzen had enlightened employee policies that included a payroll deduction plan for the employee purchase of common stock. By July 1928, 62.7% of the employees were stockholders in the company. Despite a large reduction in orders and sales by 1930, some layoffs and other cost reduction measures, a company policy of maintaining assets as current assets allowed stockholder dividends to be paid, directly benefitting all employees. By late 1931, Jantzen Knitting Mills was forced to reduce the earnings of all salaried employees, with the factory worker base rate remaining. The 1932 annual audit reflected a loss of $118,192 compared with an after-tax profit of $597,000 four years earlier. The company was able to maintain its peak factory wage scale of 1929 for two more years, with a 10% reduction in 1932. The company, known for its shrewd financial planning, had at the depths of the depression ear nearly $700,000 in cash on hand and over a half-million dollars surplus. This made it possible to continue to pay stock dividends, to buy new equipment, to modernize the manufacturing process and to continue with advertising and to make whatever adjustments were necessary to meet rapidly changing economic conditions.

In 1937 Sundeleaf designed the second stage of the Jantzen Knitting Mill at their northeast Portland location, at 1935 northeast Glisan Street. The second stage, costing $50,000, was principally a two-story warehouse building, rectangular in plan, measuring 100' x 180', and occupying the southeast corner of the block. Begun in July 1937, the second stage building was completed in March 1938. The design was marked by its exterior treatment similar to the first stage, to the extent that the Jantzen Knitting Mill now presented a building unified in design with a common exterior finish, decoration and detailing in the Art Deco style. The interior was wood post and beam construction.

According to company records and consistent with the Jantzen Knitting Mill reputation for innovation and pioneering work in the manufacture of specialty clothing, the 1939 line of merchandise was the finest that Jantzen ever offered. The new ideas for manufacturing brought cost-cutting methods triggering Jantzen's customary price reductions and therefore more sales. The economic corner had been turned, only to face the specter of the second World War and its economic impact.

Accounts show that along with limited production of swim wear, the Jantzen Knitting Mill was reported to "...run twenty-four hours a day making clothing needed for the war..." which included a knitted gas mask bag noted for its strength and durability. Later records stated "...upon reconversion to peacetime production, 1946 was Jantzen's best year, with sales in excess of $4 million.

The post-World War II growth of the Jantzen Knitting Mills, with 1600 Portland employees and 6000 persons employed throughout the Jantzen organization, prompted the beginning of the third stage of construction in March 1946, immediately north of the existing building and covering an area over Northeast Hoyt Street to a point at mid-block to the north, and from property line to property line west to east. This addition, also designed by Sundeleaf, called for design solutions of industrial manufacturing needs for which Sundeleaf was becoming skilled and known. The third stage was actually two separate structures, one to house the expanded spinning operation and the other to contain the dyeing processes. The spinning area was placed on the second floor of the western half of the addition and utilized reinforced concrete floors and walls with concrete columns in the first floor warehouse. The roof over the spinning area, however, is supported on enormous bowstring trusses that have a nominal 100' clear span. On the eastern half of the third stage addition, an equally impressive roof structure was devised by Sundeleaf. The dyeing operation required a large volume of space, and so the eastern half is one story but matches the rest of the building in height. The dyeing area roof structure is a system of glue laminated beams, the longest to be produced up to that time, with the further distinction of having waterproof glue. Sundeleaf was the first architect known to specify this due to his concern about the high humidity level associated with the dyeing operation.

The Jantzen red Diving Girl came into being in the latter part of 1915. Attributed to freelance artists Frank and Florence Clark of Portland, the Diving Girl was featured on their design of the cover of the 1915 Portland Knitting Company catalogue which was very nearly the extent of company advertising at that time. Almost immediately the figure of a beautiful black-haired girl in a red swim suit, red stockings and matching swim cap, portrayed in a graceful curved position diving through the air, became identified with the company. A phenomenal popularity followed with cutouts of the Diving Girl made available to satisfy the fad of pasting her on the windshields of thousands of cars; demands were made that she be sewn in a 10" size across the chest of each swim suit, later to be woven as a smaller but equally distinctive logo into the fabric of the swim suit itself; decals were provided throughout the world to satisfy the craze to display the Diving Girl. Registered with the U.S. Patent Office in December 1924, the Diving Girl, although modernized several times, became and remains as the established Jantzen swim wear trademark. By 1931 Jantzen asked the marketing firm Newell-Emmett Company just how well is the Diving Girl

known; their survey reported that she was the seventh best known pictorial trademark in the United States. The Jantzen Knitting Mill building is still identified by the distinctive Diving Girl medallions adorning three facades.

Ever vigilant to the changing public tastes in swimming and the necessary swim wear, Jantzen in 1933 became concerned about the growing interest in nude bathing and the possibility that it would become popular in America. Advertising began to feature a new product line hailed as "The Answer to Nude Bathing." The accompanying pictorial showed a Jantzen swim suit that fitted so perfectly that it "gave the comfort of swimming in the nude." The copy also noted that the "New Molded-Fit Jantzen gives a thrilling sensation of swimming with no suit on at all--yet assured fashionable and modest appearance." The advertisement showed ark, nude-appearing shadow figures with the headline, "Eight Ounces of Jantzen Molded-Fit."

John A Zehntbauer (1884-1969), the founder of the Portland Knitting Company, was the eldest of four children who included brothers Roy and Harry and sister Minerva. John was born August 4, 1884 near Purdin, Missouri where his father was a cooper. In addition to barrel making the family occupied and operated a small farm with most of the work falling to the boys as they grew older.

In 1889 John moved to Denver, living with friends and working for a printing company. In 1901 the friends decided to move to Portland and advanced John Zehntbauer the funds necessary to make the trip with them. The day after arriving in Portland, John started working for the Luke Knitting Company running a sock knitting machine for $3 a week. For the next three years Zehntbauer worked as many hours as he could, learning much about the knitting business including retailing. He attended night school studying spelling, writing, English and mathematics.

In 1904 John Zehntbauer joined his family for a five-month stay in the Hood River area. It was while there that he became acquainted with a Pregge family and later on through Emma Pregge, who in 1909 became Mrs. Carl Jantzen, he met Mr. Carl Jantzen. During a trip to Portland, Zehntbauer made an offer for the purchase of the Luke Knitting Company, his former employer. Zehntbauer discussed his business plans later with Carl Jantzen during a fishing trip. The offer to Luke was not accepted and the stage was set for Zehntbauer and Jantzen to go into business for themselves. John Zehntbauer died on September 3, 1969. He was a past president of Associated Oregon Industries, a member of the Portland School Board, the Portland Dock Commission, the Rotary Club of Portland,

and the Central Presbyterian Church. Zehntbauer was a director of Equitable S&L Association, Standard Insurance Co., Commonwealth Inc., U.S. National Bank and Lewis and Clark College.

Carl C. Jantzen (1993-1939) was born in Aarhus, Denmark on March 8, 1883. He, his parents, brother and three sisters arrived in Portland in 1890. The first years in Portland were very difficult for the Jantzen family; work for Carl's father, a carpenter, was scarce; the family could not speak English upon their arrival, and despite this Carl entered public school. By 1903 the family was beginning to flourish and the Jantzens bought 20 acres of rich Hood River fruit land.

The family knew nothing about farming but they learned rapidly. Within several years their farm was clear of debt and the family was in comfortable circumstances. Carl was the family member credited with a neat and orderly business approach to the family farm, a skill he brought to his later business associations with John Zehntbauer.

By 1909 Carl Jantzen had married Emma Pregge and sold his interest in the family farm in Hood River in order to come to Portland and go into business with John Zehntbauer. Ill health forced Jantzen to cease his business activities in 1934, but his 29-year association with the company utilized his gift for management, personnel relations and humor. Jantzen died of heart failure on May 30, 1939. He was a member of the Portland Chamber of Commerce and the Multnomah Amateur Athletic Club.

Richard Wilhelm Sundeleaf (1900-1987) was born on February 8, 1900 in Portland, Oregon. His mother was from Astoria, his father an immigrant from Sweden. Sundeleaf attended the University of Oregon School of Architecture which was at its zenith as one of the most innovative schools of architecture in the United States under the leadership of Ellis Lawrence and W.R.B. Wilcox. Sundeleaf graduated in 1923 and began working in Portland for A.E. Doyle, one of the most prestigious and talented firms in the city. Sundeleaf was the first University of Oregon graduate employed by Doyle. The association was not entirely a good one, however, for at one point Doyle advised Sundeleaf to "get out of architecture for eveyone's good."

Sundeleaf, however, went to work for Sutton & Whitney, another talented and active Portland architectural firm, where he remained for four years receiving his architectural license in 1928. While at Sutton & Whitney, Sundeleaf befriended Irwin Adams who was the assistant to the president of the Jantzen Knitting Mill, John Zehntbauer. Irwin introduced the two men and Sundeleaf was hired to remodel the Zehntbauer home which

had been designed by Ellis Lawrence. The client was very pleased with the work and offered Sundeleaf the design commission for a vast recreation and amusement park on an island in the Columbia River to be known as Jantzen Beach.

Jantzen's promotion of outdoor activity in general and swimming in particular was the job of Paul H. Huedepohl. He envisioned a place for thousands to swim, picnic, be thrilled by amusement rides and dance the night away to popular big bands. Sundeleaf designed an amusement park on 125 acres with four swimming pools and natatorium large enough to accommodate 2500 bathers participating in "Jantzen's Learn to Swim" program; the Golden Canopy Ballroom held 4000 dancers; the 25 acres of picnic grounds had accommodations for 20,000 persons and there was 15 acres of parking.

Jantzen Beach, an enormous success as a recreational spot and promotional enterprise of swimming and of swim wear, opened on May 28, 1928. Over 30 million people swam, danced and ate during those 40 years with three-quarters of a million visitors each season. Jantzen Beach closed a portion at a time with the huge natatorium demolished and the swimming pools filled with dirt and concrete on March 8, 1976.

The manufacturing thrust of Jantzen continued to change form a local industry to an international entity. The aggressive and popular support of Jantzen for community based swimming programs, pools and water safety spread throughout the world. The emphasis was now to increasing manufacturing capability and this led Sundeleaf in 1928 to the design of the Jantzen Knitting Mill headquarters building, one block to the west of the knitting mill itself. A finely detailed, two-story, concrete building with a brick facade in the Romanesque style, the administration headquarters contained many details that would become hallmarks of the Jantzen Knitting Mill and become company trademarks; the most famous was the Diving Girl medallion which would later be used so effectively on the industrial centerpiece building, the knitting mill itself.

Richard Sundeleaf continued as Jantzen's architect throughout construction of the knitting mill building with other Jantzen commissions later for remodeling or upgrading of portions of the knitting mill. During the slow economic times of the depression, Sundeleaf and others worked for the Historic American Building Survey (HABS) in 1933-35 under architect Jamieson Parker.

Sundeleaf died on March 8, 1987 at the age of 87. The Oregonian hailed him as "...a leading local proponent of the 'Streamline Modern' style in which the spirit of the machine

age...shaped the design of the building." The Oregonian continued, "Sundeleaf became well known in the 1920s and '30s for his imaginative work in industrial architecture. He combined his decorative training with a rugged functionalism in...distinctive warehouses..."

All original drawings held by Sundeleaf were donated to the architecture library, School of Architecture, University of Oregon. Jantzen, Inc. has retained a full set of prints of all stages of construction of the knitting mill.

The completion of the Jantzen Knitting Mill building culminated the industrial expansion of Jantzen at that site, and the total building represents the greatest era of Jantzen's manufacturing period. The third stage, begun in 1945, with its unique design solutions to manufacturing requirements, was wrapped in an exterior treatment that still embodies the architectural elements of the Art Deco style and strengthens the Jantzen Knitting Mill placement as the centerpiece manufacturing building during the company's prime growth period. The overall design, indicated at the first announcement in 1929 of the construction of a major manufacturing facility, has been steadfastly adhered to during the period of construction that was interrupted by two world-wide cataclysmic events. Today the total building stands as it was intended when originally conceived. Retention of Richard Sundeleaf as the architect, his own directives to "remove, repair and return" used building elements to stages of new construction and the design consistency of materials, scale, decoration and integrity of architectural style are further examples of qualities of the Jantzen Knitting Mill.

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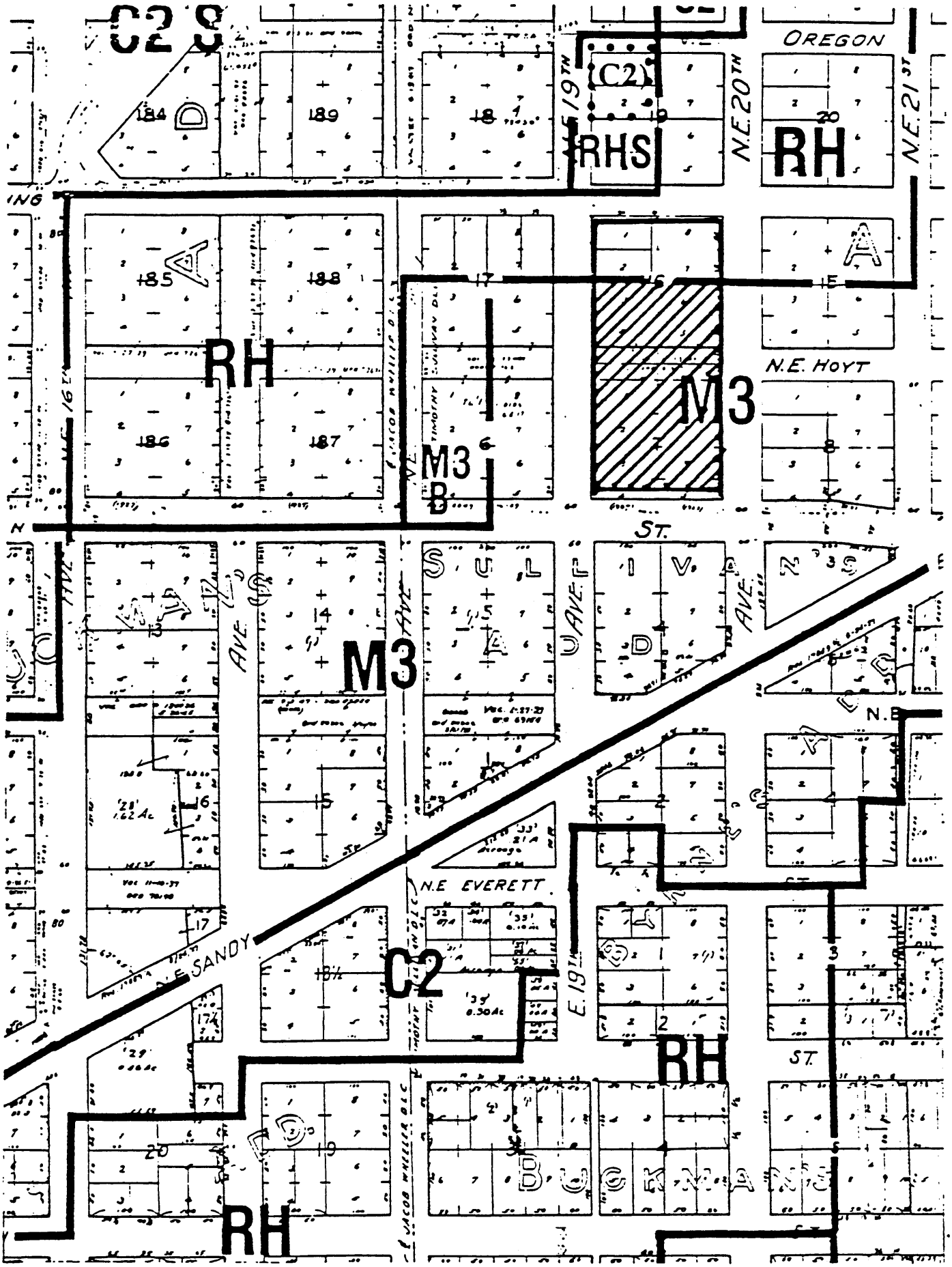
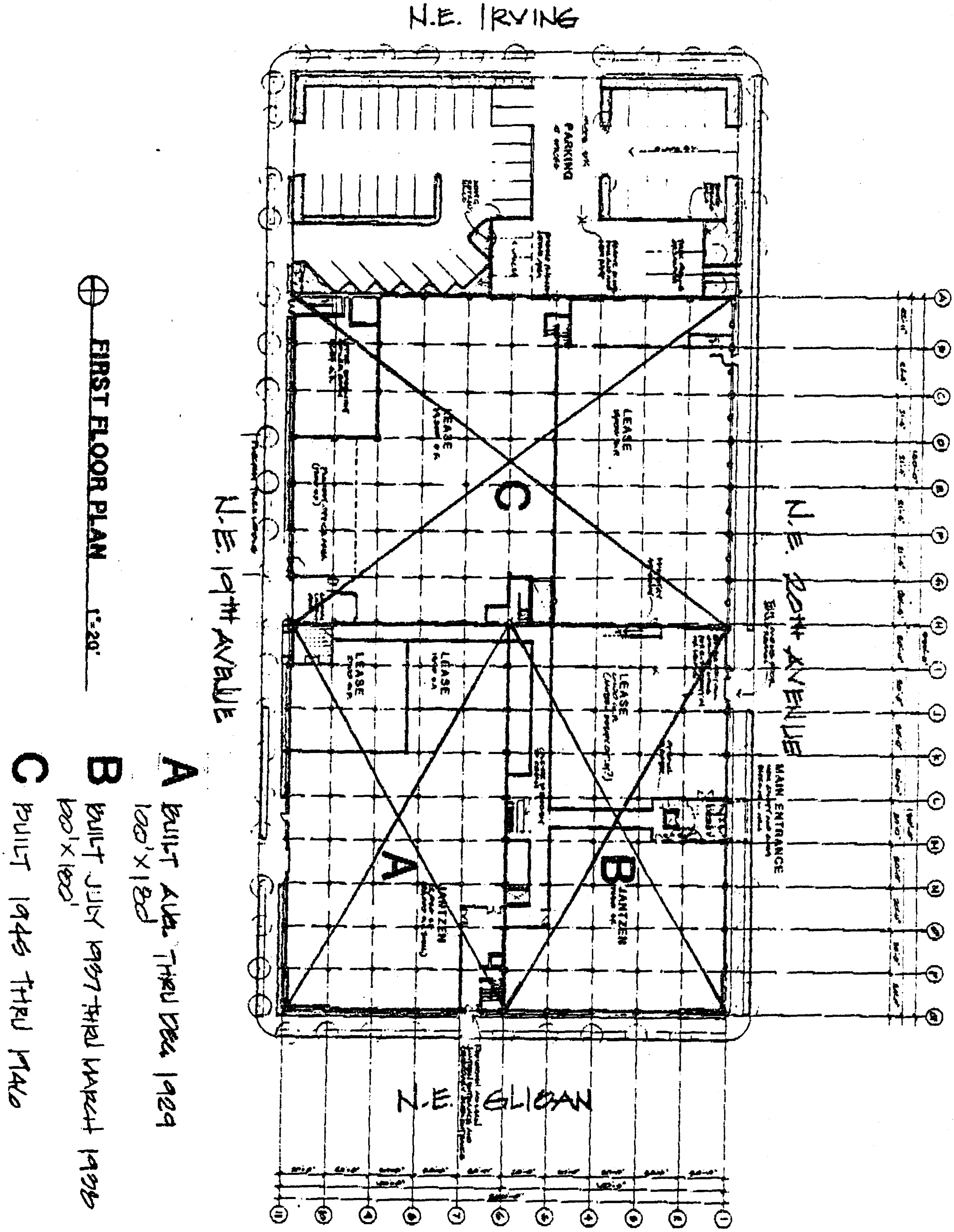
JANTZEN KNITTING MILL SITE





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REVISIONS

DATE
JOB NO
DWN

"JANTZEN KNITTING MILL" BUILDING

N.E. TWENTIETH & N.E. GLISAN PORTLAND, OREGON

PRELIMINARY LEASE PLAN

Griggs & Associates Architects
Suite 101
Portland, Oregon