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15United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form.* If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions.

1. Name of Property

DRAFT

Historic name: __Consolidated Orange Growers Precooling & Ice Plant_____
Other names/site number: _Ice House, Precooling & Cold Storage, Ice Plant_____
Name of related multiple property listing**:** _N/A_____
(Enter "N/A" if property is not part of a multiple property listing

2. Location

Street & number: __160 South Cypress Street_____
City or town: _Orange___ State: _California____ County: _Riverside_____
Not For Publication: ☐ Vicinity: ☐

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, 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. I recommend that this property be considered significant at the following level(s) of significance:

___national ___statewide ___local

Applicable National Register Criteria:

___A ___B ___C ___D

Signature of certifying official/Title: **Date**

State or Federal agency/bureau or Tribal Government

In my opinion, the property __ meets __ does not meet the National Register criteria.

Signature of commenting official: **Date**

Title : **State or Federal agency/bureau or Tribal Government**

4. National Park Service Certification

I hereby certify that this property is:

_entered in the National Register

_determined eligible for the National Register

_determined not eligible for the National Register

_removed from the National Register

_other (explain:) _____

Signature of the Keeper | Date of Action

5. Classification

Ownership of Property

(Check as many boxes as apply.)

Private:	x
Public – Local	
Public – State	
Public – Federal	

Category of Property

(Check only **one** box.)

Building(s)	x
District	
Site	
Structure	
Object	

Number of Resources within Property
(Do not include previously listed resources in the count)

Contributing	Noncontributing	
2	1	buildings
		sites
		structures
		objects
2	1	Total

Number of contributing resources previously listed in the National Register 0

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6. Function or Use
Historic Functions
(Enter categories from instructions.)
AGRICULTURE/SUBSISTENCE: processing
AGRICULTURE/SUBSISTENCE: storage

Current Functions
(Enter categories from instructions.)
COMMERCE/TRADE: professional
DOMESTIC: single dwelling

7. Description

Architectural Classification
(Enter categories from instructions.)
LATE 19TH AND 20TH CENTURY AMERICAN MOVEMENTS:
__Commercial_____

Materials: (enter categories from instructions.)
Principal exterior materials of the property: foundation: concrete; walls: poured and formed concrete w/cork insulation; roof: built-up asphalt composition

Narrative Description
(Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable. Begin with **a summary paragraph** that briefly describes the general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity.)

Summary Paragraph

The Consolidated Orange Growers Precooling & Ice Plant is located within the City of Orange's Santa Fe Depot Specific Plan and the National Register-listed Old Towne Orange Historic District (NRIS #97000617). The Precooling & Ice Plant is one of 1,237 contributing resources within the Old Towne Orange Historic District. The 14,400 square foot Precooling Plant was constructed in 1930, with a significant 4,400 square foot Ice Plant addition in 1939. The addition was an expansion of the machine room and had internal access to the original building, at both the machine room and the storage room. The Precooling Plant, the original facility, was built by the Consolidated Orange Growers to cool and store citrus fruit transported from the adjacent packing house, then loaded into iced rail cars on the adjacent railroad for distribution throughout the country. The Precooling Plant—constructed of poured and formed concrete exterior walls, insulated with a minimum of 4" thick corkboard—includes a full-height basement, and two full-height levels above grade. The Ice Plant addition mimicked the exterior materials, and its single story wraps the Precooling Plant in an L-shaped configuration. The style of the building is simple, its walls unadorned, responsive to the intended industrial purpose. An accessory building is contributing based upon its proximity to the Precooling & Ice Plant, its method of construction, its assumed function, and its presence during the period of significance. The small, detached, 300 square foot building is rectangular. Within the historic boundary, a

noncontributing building constructed in 1990 replaced an original worker's residence. The Consolidated Orange Growers Precooling & Ice Plant is in excellent condition and retains all aspects of historic integrity.

Narrative Description

Consolidated Orange Growers was formed February 19, 1929 from the merger of McPherson Heights Citrus Association and Red Fox Orchards. Both organizations were located along the Santa Fe Railroad in Orange. The new association moved the machinery and the equipment from the McPherson Heights plant into the Red Fox packinghouse, where 250 workers were employed. Initially, the facility consisted of the Red Fox packinghouse and office building at 128 South Cypress Street. In 1930, Consolidated Orange Growers purchased an additional 0.73 acres —the nominated property—from the Santa Fe Railroad and hired Gay Engineering Corp. of Los Angeles to design and build a $76,000 sixty-car precooling plant for the association. In late 1930, the facility included the fruit packinghouse and office building, precooling plant, and workers' homes (**Figure 1**). The ice plant addition was constructed in 1939. Outside the boundary of the Precooling & Ice Plant and accessory building, the fruit packinghouse and office building and truck repository (**Figure 2**) remain intact, although heavily altered. Within the nominated boundary, an office/industrial building was constructed in 1990 at the former location of a circa 1895 Queen Anne style packinghouse foreman's residence, purchased by the City of Tustin and relocated to its Old Towne district in 1989 (**Figure 3, Photo 10**).

The property includes two contributing buildings, the Precooling & Ice Plant and a 300 square foot accessory building with scarce documented history. It is not shown on the Sanborn Fire Insurance Maps yet is shown in historic aerial photography. The building is presumed to have functioned as an office for the fruit delivery trucks and was constructed after the Precooling Plant. There is evidence of vehicular truck circulation passing through the property over the truck scale, adjacent to the packing house, past the presumed office building, then to the street for delivery **(Figure 2)**. The Precooling & Ice Plant building is surrounded by the original fruit packinghouse to the north, historic single-family houses to the east, office/industrial buildings to the south, and an active railroad to the west. Historically, the Santa Fe Railroad owned and operated the railway **(Figure 4)**. The Santa Fe Depot, built in 1888, is located one block north of the Precooling & Ice Plant. The depot was expanded and remodeled in 1938 and served as a freight and passenger railroad station until 1971, later adaptively reused as a restaurant. The Orange County Transit Authority Metrolink, Amtrak, and BNSF freight runs along the active tracks. Train tickets are purchased at kiosks near the depot.

Precooling & Ice Plant — One Contributing Building

The Consolidated Orange Growers Precooling Plant was designed and constructed in 1930 as a cold storage facility to store crates of citrus fruit prior to being shipped on the adjacent railroad. The footprint of the building is 60' x 80', with the longest frontage facing the railroad tracks to insure greater loading facilities. Evidence of the block-and-tackle arrangement, to lower blocks of ice into rail cars, is displayed on the exterior wall facing the railroad tracks. The plans show a

twelve-room precooling plant with a capacity of five cars each, or a total storage capacity of sixty cars. The intended daily output was ten cars. [1] The rooms are stacked on three levels and all levels are identical floor plans. Two levels are above grade having a wooden interior structure, with a full basement below. The basement has raised wood floors over earth and concrete, with concrete bearing walls to support the wooden bearing walls of the upper levels. As described at the time,

> The building is to be of the latest type of packing plant architecture, embodying reinforced concrete exterior walls and mill-type interior construction. A number of new refrigeration features are to be incorporated in the plans, including installation of a brine spray system.[2] The salt brine system is said to be the most modern of its kind.[3]

The original blueprints were produced by the Gay Engineering Corp. of Los Angeles, a company specializing in refrigeration facilities. They had a facility located in nearby Fullerton, California, which enabled them to effectively supervise the construction of the building. The building was originally attached to the northerly adjacent fruit packinghouse, built in 1909. It is the oldest remaining packing house in Orange, owned and occupied by RWB Party Props, Inc. The attachment to the packing house—which served all levels of the building, including the basement—no longer exists. The packinghouse, built of wood in 1909, has weathered considerably with areas in a state of disrepair. The appendage may have been deteriorated and demolition by neglect occurred. When Consolidated Orange Growers ceased, the original property lines were reconfigured and parceled for individual ownership. The appendage between the packinghouse and the Precooling Plant was likely removed to separate the buildings and develop individual parcels for sale.

The original exterior fenestration is extant. Minor alterations of new doors and windows are evidence of accommodating subsequent use of the building. The original machine room is located at the northeast corner of the rectangular building. Its dimensions are 18’ x 25’ slab on grade, 36” below the first floor **(Figure 5)**. A tower directly above the machine room provided water to the machine room to create cool air. The cool air was circulated through a vertical plenum by a large motor fan, and into the plenum’s spray chamber. The spray chamber was insulated with 8” corkboard on the walls and ceiling, and utilized brine sprayers, heat exchanger, and a large, motorized fan. From the spray chamber, the cool air circulated via horizontal plenums, i.e., soffits, at each level. The horizontal plenums, each approximately 8’ wide by 30” deep, ran the length of the western edge of the building. The cool air flowed through the plenum and was controlled via pulleys of wooden louvers in each of the four bays. There were two louvers per bay on the western side for supply air, and two identical louvers on the eastern side of the bays for return air. The return air circulated through a vertical plenum (extant), approximately 30” wide, running the height of the building **(Figure 6)**. A state-of-the-art conveyor system conveyed the fruit from the packing house to the precooling plant. Boxes of fruit from the packinghouse were carted into the bays, stacked and stored with the cool air

[1] “Order Precooling Plant Plans,” *Orange Daily News*, March 12, 1930.
[2] Ibid.
[3] “Work Rushed on Local Pre-cooling Plant,” *Orange Daily News*, May 17, 1930.

circulating through each bay. The fruit was then carted to the western doors onto the platform, then loaded into the iced railcars via the Santa Fe Railroad's adjacent spur **(Figure 7)**.

The Precooling Plant is constructed of poured and formed concrete exterior walls, insulated with a minimum of 4" thick corkboard. The interior was kept dry to avoid latent heat transfer from humid air. The windowless construction of the main building utilized evenly spaced roof joists to support thick building walls. The plant utilized electric power. The foundation is concrete, the flat roof is built-up composition asphalt, and it has an 18" surrounding parapet.

The original precooling plant did not include an ice-making plant in its program. The packing plant purchased its ice from local plants. The plant manager opined, "sufficient property has been obtained for addition of an ice plant at some future date. An additional expenditure of between $40,000 to $50,000 would be required when the ice manufacturing unit is added."[4] In 1939, the Kohlenberger Engineering Corporation of Fullerton was hired to design and build the addition to the precooling plant to manufacture and store ice. The addition is configured in an L-shape, wrapping the east and south elevations of the original building. It is 32' wide on the east side, and 20' wide on the south side. The eastern portion of the addition is slab on grade and is the same natural grade elevation as the original machine room. The southern portion of the addition is slab on grade at the level of the main floor, 36" above the lower section. The original Precooling Plant was 14,400 square feet (4,800 square feet per floor) and the Ice Plant added 4,400 square feet.

The addition housed an expanded machine room, ice-making room, and ice storage room. A new tower was added above the new machine room to supply water. The tank room (ice-making room) expanded to the south of the machine room, and the storage room wrapped the existing building to the south. The Ice Plant addition has poured concrete floors, poured concrete steel reinforced columns, steel beams, Douglas fir tongue and groove ceilings, and a built-up composition roof. The exterior building walls match the original Precooling Plant and are poured and formed concrete. Exterior walls are punctuated by an irregular arrangement of doors and windows. Most of the machinery to produce ice no longer remains. The blueprints produced by Kohlenberger Engineering Corp in 1939, provide documentation of the layout of the addition.

The Middle West Utilities Company in *Ice: A Handbook of Ice* provides the following description of the process commonly used to manufacture ice in the early to mid-Twentieth Century. It is useful in understanding the physical layout of the Consolidated Orange Growers Ice Plant facility.

> The first step in the manufacturing of ice, was to draw water into treatment tanks where it was filtered and softened as needed. Then it was brought to cooling tanks where it was cooled close to freezing point. Ammonia pipes placed in the cooling tanks absorbed the heat of the water and cooled the water to approximately 35 degrees Fahrenheit.

[4] Ibid.

Next the water was drawn to cans to be frozen into 300- or 400-pound blocks. The individual cans were set into large freezing tanks filled with a solution of sodium chloride and water called brine. The temperature of the brine was kept at from 16 to 20 degrees by ammonia pipes. The brine extracted heat from the cans and, as the temperature of the water fell below degrees, ice would start to form along the inside walls of the cans. Air was blown into the individual cans, driving any impurities into the center or core area. This core area was then removed by suction and fresh water piped into the core to freeze into a solid block of ice.

After freezing was completed, overhead cranes would lift the cans out of the brine tanks into a dipping vat of warm water. This melted the block of ice from the can. The cans were tipped into a chute that led into an ice storage room to await distribution. Here ice could be cut into smaller blocks and delivered to customers **(Figure 8)**.

The Ice Plant addition built in 1939 is an extension and expansion of the Precooling Plant's 1930 machine room. The Precooling Plant & Ice Plant are physically connected, and the connection is extant (**Figure 5**). The addition is designed in an L-shaped configuration, wrapping the original building, and connecting to the fruit storage bay within the Precooling Plant to the southerly storage room within the Ice Plant. The original cold storage door is extant (**Photo 15**). Original concrete floors of the Ice Plant addition remain intact and have been treated and preserved.

The Precooling Plant's original spray chamber metal motor fan, and heat exchanger remain intact and have been incorporated into the re-use of the building. The 8" cork insulation on the walls remains. The circumference of the motor fan is approximately nine feet, and the length of the heat exchanger is approximately twenty-four feet.

The original interior had unique character defining features, which remain intact. The horizontal plenums at the basement and second floor remain intact. The first-floor horizontal plenum has been removed. Most of the operable wooden louvers on all three levels are extant, although some have been secured in place, altered, painted, or removed. The original pulley system for the operable louvers remains in the basement. The original cold storage doors and hardware are extant on the second level and basement. The interior of the second floor is constructed of rough-sawn wooden bearing walls and roof joists, and Douglas Fir strip wood floors. The Douglas Fir wood floors have been treated and preserved throughout the building. The original crated fruit cool storage bays are intact with original wood air control louvers, original freezer doors, and original cork insulation **(Figures 9, 10)**. Original Douglas fir wood tongue and groove ceilings remain. Bearing walls are constructed of layers of Douglas fir rough sawn panels. Some have been altered by applying drywall to the surface, and minor fenestration has occurred to allow for adaptive reuse of the building.

Accessory Building **One Contributing Building**

The accessory building was constructed in the 1940s. Its method of construction mimics the original building, utilizing the same materials and form. The form boards used for the concrete

are wider than the 1930-39 buildings. The original roof is presumed to be flat with a cornice detail similar to the cornice of the Precooling & Ice Plant. A wooden pitched, shingled roof appears to have been added later, since sheathed with corrugated metal roofing material. The level interior ceiling of the building is poured concrete, thus supporting the evidence of an original flat roof. The function of the building is presumed to be the office for fruit delivery trucks. A truck scale adjacent to the packinghouse is extant. The truck repository building was constructed on the southwestern portion of the facility, in the 1940s, on a separate parcel. Both buildings are extant, yet very little information is available.

Alterations and Integrity

The production of ice ceased in the early 1960s, and Consolidated Orange Growers closed their facility in 1964. The property was purchased and leased to industrial tenants, then purchased in 1975 by a tire re-treading plant, Pete's Road Service, using the facility for industrial purposes. The property was subsequently purchased in 2003 and re-purposed as a mixed-use facility. Despite minor alterations to accommodate adaptive reuse of the property, the Consolidated Orange Growers Precooling & Ice Plant retains its integrity as a mid-twentieth century ice plant and precooling facility **(Figures 11, 12, 13)**.

The Consolidated Orange Growers Precooling & Ice Plant retains all aspects of integrity. The building configuration remains unchanged. The historic design retains much of its material, layout, and configuration from its period of significance with relatively minor modifications. Additionally, aside from the loss of the small addition that connected the precooling plant to the packinghouse, and interior modifications made to accommodate adaptive reuse, the Consolidated Orange Growers Precooling & Ice Plant remains substantially intact. It retains a high level of integrity. The accessory building may or may not have had the same fenestration originally as extant. No drawings or photos document the original design. Metal and wood doors have been added at existing fenestration, to waterproof and protect the interior of the building from the elements. Doors are of an industrial nature and retain the architectural vocabulary of the period.

The property remains where it was originally designed and constructed, and therefore retains integrity of location. The setting continues to reflect the original design relationship of site and built environment. The important location adjacent to the railroad and packing house are for the most part unchanged from the period of significance and remain an important character-defining feature. The Consolidated Orange Growers Precooling & Ice Plant was constructed in the heart of Orange and remains in the heart of Orange's Santa Fe Depot Specific Plan and the Old Towne Orange Historic District.

The property reflects the historic function as well as original aesthetics. The structural systems, massing, arrangement of spaces, patterns of fenestration, textures of surface materials, and minimal amount of ornamental detailing remain intact. The configuration of features, style and overall form, plan, space, architectural style, and scale of buildings remain intact. The property retains integrity of design.

The pattern and configuration of the architecture survive intact. Its prominence within the Santa Fe Depot district and relationship to historic structures within the district exemplifies the original setting. The building sits along the western edge of the property and is nondescript as viewed from Cypress Street. The rhythm of the architectural pylons is evident as viewed prominently from the railroad which it originally served. The property retains integrity of setting.

The original design by Gay Engineering Corp. for the 1930 Precooling Plant, and the original design by Kohlenberger Engineering Corp. for the 1939 Ice Plant addition incorporated concrete, wood, and steel, which remain intact. The original technology used for construction remains evident. The property retains the key exterior materials dating from its original construction through its period of significance. The building maintains a sense of permanence based upon the materials used. Materials remain original and therefore the property retains integrity of materials.

The buildings are comprised of simple materials of reinforced formed concrete, wood, steel, and glass, with prominent buttresses, or pilasters. All wood throughout is actual dimensioned (not nominal), reflective of its period of construction. The building continues to express a high degree of quality workmanship typical of the period, and the property retains integrity of workmanship.

Sited on a prominent lot in downtown Orange, the Consolidated Orange Growers Precooling Plant & Ice Plant takes advantage of adjacency to the railroad, and vehicular infrastructure. The associated landscape displayed by the enormous camphor street trees in front of the property retains a high degree of integrity from the period of significance, i.e., they have grown, remain intact, and are a testament of time; Historic streetlights adorn Cypress Street and are an accurate depiction of city lighting during the period of significance. The building configuration and associated railway and street patterns remain largely unchanged, and the property retains integrity of feeling.

The Consolidated Orange Growers Precooling Plant & Ice Plant remain in the place where the original activity occurred and is sufficiently intact to convey that relationship to an observer. The property is often the subject of historic tours and talks for the Old Town Preservation Community. It was part of the Old Town Preservation Association building tour in 2007 and 2019 and has received several historic preservation awards. The property retains integrity of association with events that have made a meaningful contribution to the community.

8. Statement of Significance

Applicable National Register Criteria
(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- [x] A. Property is associated with events that have made a significant contribution to the broad patterns of our history.
- [ ] B. Property is associated with the lives of persons significant in our past.
- [ ] C. Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- [ ] D. Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations
(Mark "x" in all the boxes that apply.)

- [ ] A. Owned by a religious institution or used for religious purposes
- [ ] B. Removed from its original location
- [ ] C. A birthplace or grave
- [ ] D. A cemetery
- [ ] E. A reconstructed building, object, or structure
- [ ] F. A commemorative property
- [ ] G. Less than 50 years old or achieving significance within the past 50 years

Areas of Significance
(Enter categories from instructions.)
COMMERCE

Period of Significance
1930-1964

Significant Dates
1930
1939

Significant Person
(Complete only if Criterion B is marked above.)
N/A

Cultural Affiliation
N/A

Architect/Builder
Gay Engineering Corp.
Kohlenberger Engineering Corp.

Statement of Significance Summary Paragraph (Provide a summary paragraph that includes level of significance, applicable criteria, justification for the period of significance, and any applicable criteria considerations.)

The Consolidated Orange Growers Precooling & Ice Plant is eligible for the National Register of Historic Places at the local level of significance under Criterion A in the area of Commerce for its association with the growth of the citrus industry in both the City of Orange, and Orange County, California. Situated prominently at the heart of the city, and adjacent to the Santa Fe Railroad tracks, it played a significant role in the cold storage, shipping, and distribution of citrus fruit throughout the nation. The 1930 to 1964 period of significance encompasses design and construction from 1930 to 1939, and the active business until the facility closed in 1964.

Narrative Statement of Significance (Provide at least **one** paragraph for each area of significance.)

Criterion A: Commerce

The history of the Consolidated Orange Growers Precooling & Ice Plant followed nationwide trends in the industry. By 1920, the citrus industry reigned supreme in the town of Orange, dominating every other agricultural or industrial pursuit.

The shipping totals from the Santa Fe Depot in Orange for 1899 showed 8,957,820 pounds of oranges shipped and 344,240 pounds of walnuts shipped. Walnuts were the second most abundant products produced in Orange. By 1919, local member growers were raising 650 acres of walnuts. In 1928, a group of local walnut growers acquired one of the old packing houses near the tracks. Disease and climactic changes forced Orange County's walnut industry into decline beginning in the 1930s. Apricots, as dried fruit, were another important crop in Orange. Around the turn of the century, many apricot camps existed, and children worked the fields for extra money. The outbreak of World War I destroyed the European market for dried apricots and most of the growers switched to oranges. The last five acres of apricots were torn out in 1934.[5]

At first, picking and packing the oranges was done by the individual ranchers, and growers were on their own when it came to sell their crop. As more and more citrus fruit came onto the market in the 1890s it became harder and harder for growers to market their own crop and local, cooperative growers' associations began to spring up. A larger, stronger, regional organization to take on the job of marketing the growing citrus crop was needed, and was the founding of the Southern California Fruit Exchange.

The Exchange was made up of other regional growers' associations, which in turn were made up of local packing house associations. Among the seven original members of the Southern California Fruit Exchange was the new Orange County Fruit Exchange, which had its headquarters in Orange.

[5] Phil Brigandi, *Orange, The City 'Round the Plaza* (Encinitas, CA: Heritage Media Corp., 1997), 63, 64.

In 1905, the Southern California Fruit Exchange was reborn as the California Fruit Growers Exchange. Two years later they began their first serious advertising campaign and coined a new brand name for their fruit, Sunkist. The Sunkist name, applied to only the top grade of fruit, became so synonymous with citrus that in 1952 the Exchange changed its name to Sunkist Growers, Inc. Their first advertising campaigns were designed to shift oranges from a specialty item to an everyday part of people's diet. With help from the Southern Pacific Railroad, they created a campaign that boosted oranges and sunny California all at the same time. Their slogan was "Oranges for Health – California for Wealth."

Sunkist was not the only regional marketing organization to serve Southern California growers. The Mutual Orange Distributors (MOD) began in Redlands in 1908, marketing their fruit under the Pure Gold label. There were several MOD houses in the Orange area, including the Orange Mutual Citrus Association, Foothill Valencia Growers (which joined Sunkist in 1923), and Olive Hillside Groves. The American Fruit Growers company also began handling California citrus in 1918 under their Blue Goose logo. They were a late arrival in Orange, buying out F. R. Valentine's packing house in 1932.

Santiago Orange Growers was the biggest, and by no means the only cooperative packing house to operate in Orange. Over the years, more than forty different cooperative and private packing houses operated in Orange and the surrounding areas, as many as ten at one time. The second cooperative packing house in town was the Independent Orange Growers Association, which was incorporated in 1899. In 1900, they built a packing house at the southwest corner of Chapman Avenue and the Santa Fe tracks. By 1905, the association had closed down and early in 1906 the packing house was sold off.

Foothill Valencia Growers began in 1912 and used the old Parker packing house until it burned down in 1917, then they moved to another packing house near the southwest corner of Chapman Avenue and the tracks. When the association was reorganized in 1923 as Red Fox Orchards, they became a member of Sunkist.

To the east, growers organized the McPherson Heights Citrus Association in 1912. They built a new 130' x 70' foot packing house on the north side of Chapman Avenue, along the tracks. By the 1920s, all the cooperative packing houses in Orange were a part of Sunkist except the Orange Mutual Citrus Association, founded in 1923.

At the end of 1928, Red Fox and McPherson Heights merged to become Consolidated Orange Growers. The new association ran both packing houses for a few years, then moved their entire operation to the old Red Fox house. The old Foothill/Redfox/Consolidated packing house still stands on South Cypress Street and is the last surviving wooden packing house in Orange County. It is directly adjacent to the nominated property, Consolidated Orange Growers Precooling & Ice Plant.

After the fruit was picked it went down into the basement of the packing house. Fruit was stored

in different rooms from a week to two weeks. If it was a season of greenish fruit, ethylene gas was released into these rooms to ripen the fruit.

When the fruit was to be packed, it was raised on an elevator upstairs, and dumped into a washing container. Then it was elevated out onto a belt and airdried. In later years, the fruit ran through a machine for waxing and polishing. Then it was dumped out onto tables in front of the graders, who put #1 fruit and #2 fruit onto different belts down to the packers' bins. In later years, the fruit then went out to the pre-cooler and was stored before it was loaded into freight cars to be sent east **(Figure 14)**.

The packed fruit was destined for the auction markets of New York, Chicago, and other major cities. This was where the famous citrus labels came into play. Individual consumers rarely saw them. The lithographed labels were big, and bright, and stood out across a crowded auction room. The packing houses worked hard to ship a uniform size and grade of fruit under each label, so that buyers could tell at a glance what they were getting **(Figure 15)**.

In 1929, the local citrus industry had its biggest year ever. The six largest local packing houses were employing upwards of 1,500 men and women and the Orange County Fruit Exchange handled some $12 million worth of fruit. The new Consolidated Orange Growers packed 419,034 boxes. Thus, the demand for the pre-cooling plant ensued.

Valencia acreage in Orange County grew steadily during the first half of the twentieth century. In 1923, there were just under 40,000 acres of Valencia stock in the county. By 1928, acreage had passed 50,000. Four years later it passed the 60,000-acre mark. The peak year was 1948, when 67,263 acres of Orange County were planted to Valencia oranges.

Oranges, Orange County, and Southern California all became synonymous in the minds of people across the nation. In the City of Orange, the citrus industry was the backbone of the local economy for more than five decades. Growers, pickers, packers, pruners, fumigators, field hands, sprayers, and more worked directly with the groves, while most of the rest of the businesses in town relied on the citrus industry for their support. The packing houses paid their growers jointly out of "pools" a few times each season. Between payments, many lived on credit with the local stores, their collateral hanging on their trees. When a pool paid out, it meant flush times all around.

Orange was different from many towns in the Citrus Belt. Where some towns had a few large growers, who owned thousands of acres and hired hundreds of workers, Orange was a rather middle-class town, where hundreds of small growers owned ten or twenty acres each and did much of the work in the groves themselves.

To celebrate the success of the local citrus industry, in 1927, Orange inaugurated the Queen Valencia Pageant. Outdoor pageantry was near its peak in Southern California at the time, and there were few towns in the region that did not host some sort of outdoor pageant, fair, or festival. The first Queen Valencia Pageant was held in the Plaza Square May 3-4, 1927, just as

the Valencia picking season began. The Plaza Square was and is still located a few blocks east of the Consolidated Orange Growers Precooling & Ice Plant. A 50' x 60' foot stage was built, and thousands of seats were set up all around. The Chamber of Commerce sponsored the event, raised the money, and advertised it throughout Southern California. The faculty and students of Orange Union High School took the lead in writing and presenting the show. Nearly 10,000 people attended the first two performances of the Queen Valencia Pageant, so plans were quickly drawn up to stage it again in 1928. Some 15,000 people attended that year. The last pageant was held in 1930, and the coming of the Depression marked the demise of the show. In 1933, a new event was born in Orange, the May Festival, also held at the start of the Valencia season. The parade and festival have been an Orange tradition ever since. The year 1938 was the biggest event of all, with both the 50th Anniversary celebration of Orange's incorporation and the dedication of the newly designed Santa Fe Depot.

Although the availability of ice is easily taken for granted, in the not-too-distant past, the making of ice "was an integral part of the business community" in much of the country as well as one of the most powerful industries in the nation. The Consolidated Orange Growers, by manufacturing ice, allowed the citrus business to operate longer during the year. The impact on the growers was immense. Previously, the products had a very short shelf life and were primarily sold only in local markets. The widespread and readily available ice made it possible to ship these products regionally and then even nationally and internationally. The dependable supply of citrus fruit contributed to rapid growth of American cities, and thus significant commercial growth in the United States.

As described by Morse Scherlinder's *Chilly Reception*,

> In the early days of the ice business, purveyors harvested natural ice from rivers, lakes, and ponds. The ice was cut by hand and then hauled or floated to cities and markets and stored in "icehouses" until it was sold. The entire process was labor intensive and dangerous to those involved. By 1846, Boston was the ice capital of the world, shipping thousands of tons of New England's natural ice around the world each year. The success of the early ice business was consistently limited by weather and geography. Natural ice could only be harvested in limited regions, far from the areas that most needed the resource. Much of the product was lost during transport and natural ice could not supply buyers year-round. Entrepreneurs saw the need for an artificial means of making ice. In 1845, Dr. John Gorrie of Florida invented an ice making machine that he used to cool his exam and treatment rooms, recognizing the effect that cooler temperatures had on his patients. He was granted a patent for his machine in 1851. Gorrie's ice machine utilized the principles developed by William Cullen who had first created ice by evaporating ether in a vacuum in 1755. Instead of ether, Gorrie used regular air and worked with the Cincinnati Iron Works to create a working model of his invention. Gorrie was not commercially successful though, as he had difficulty finding and keeping investors, and he died before manufactured ice became popular.[6]

[6] Morse Scherlinder, "Chilly Reception: Dr. John Gorrie found the competition all fired up when he tried to market his ice-making machine," *Smithsonian Magazine*, July 2002.

Utilizing the technology developed by Dr. Gorrie, the first commercial ice plant in the United States opened in 1868 in New Orleans. By 1920, "manufactured" ice was a billion dollar a year business, and "ranked ninth in the investment amount American commercial enterprises." At the end of that same year, there were nearly 4,800 ice plants nationwide, producing forty million tons of ice and employing 160,000 people. Ice manufacturing was space and labor intensive. Manufacturing facilities consisted of an engine room, tank room, and a place to store the finished ice. Most companies produced 300-pound blocks of ice that measured four feet by two feet by one foot.

The boom period for manufactured ice was relatively short, from roughly 1900 to the 1940s. Utilizing the concept of the early ice boxes, inventors gradually perfected an efficient, electric alternative to ice. Subsequently, by the 1960s, fewer than sixty block ice plants remained in the United States. Most of the remaining plants produced packaged ice for sale in grocery stores and the predecessor of the convenience store.

Consolidated Orange Growers

Consolidated Orange Growers is the outgrowth of the amalgamation of the Red Fox Orchards and the McPherson Heights Citrus Association. The new association moved the machinery and equipment from the McPherson Heights plant into the Red Fox packing house at 128 South Cypress Street, predicted to employ 250 workers. They were a member of the Orange County Fruit Exchange.

During the 1930 season, the association shipped 534 carloads of Valencias and fourteen cars of navels that returned $1,346,751 to the growers. In its first nine years of operation from 1929 through 1937, the association shipped 7,014 carloads containing 3,240,468 boxes that sold for $7,863,518. The officers in 1931 were Henry Terry, President; L.W. Evans, Vice-President, Frank H. Collins secretary and manager. Other members of the board were Herbert W. Walker, Wade H. Flippen, R.Y. Williams, H.T. Thomson, Fleetwood Bell, O.E. Gunther, George Seba and C.D. Homes.[7]

Henry Terry was a charter member of Foothill Valencia Growers, Red Fox Orchards and Consolidated Orange Growers. He served these organizations as president for thirty-six consecutive terms from 1912 through 1947.

The Association shipped 907 cars, loaded 462 boxes to the car, during the past season, bringing net returns to the growers of $1,089,452. The bumper crop was shipped in four regular pools, which ran from May 7 until November 1. The general average per packed box for all Valencias shipped was $2.38.[8]

Brands who used the plant included the following:

[7] Tom Pulley, *Consolidated Orange Growers,* Collection of Citrus Packinghouse Articles, June 2, 2007.
[8] "Consolidated Growers Plan $75,000 Project," *Orange Daily News*, February 18, 1930.

Sunkist: Bow-man, Mohican, Red Fox, William Tell
Red Ball: Jim Dandy, Robin Hood,
Standard: Colony, Golden Beaver, Saddleback
Choice: Bonnie Lassie
Orchard Run: Grey Wolf, XLO

At the opening of the plant,

> Frank Collins, manager of the Consolidated plant, declared -- picking operations there are scheduled to start Wednesday, with packing following about Friday or Saturday. Work on the $75,000 precooling plant is being pushed with all haste and it is expected to be completed and ready for operation by the last of May.[9]

Collins declared, "everything has been working satisfactorily and plant officials were well pleased with the brine spray system of cooling the fruit. This is one of the most modern methods of pre-cooling."[10]

A record season, $1,346,571 paid to growers in 1931.[11] The precooling plant added immensely to the efficiency and profit of the season.

The precooling plant had been met with gratifying returns. The precooled cars arrived at their destination in a very satisfactory condition. A newspaper article proclaimed "Consolidated Growers Get $350,000 to Date," in July 1930. This caused general rejoicing among its growers and resulted in one of the largest pools ever paid by the association.[12]

Consolidated Orange Growers closed their facility in 1964, and their 1964 crop was packed by the Olive Heights Citrus Association. The association ceased in 1965.

In reference to the Precooling & Ice Plant, the *Orange Daily News* noted, "Housed in a modern plant, which has increased its capacity to meet growth of the organization, the Consolidated Growers is an important factor in Orange's economic and industrial life representing a substantial payroll during the citrus harvesting season."[13]

Gay Engineering Corp. and Kohlenberger Engineering Corp.

The *Orange Daily News* wrote, "With the Gay Engineering Corporation, of Los Angeles, engaged to prepare plans and specifications, actual construction work on the $75,000 precooling plant to be built for the Consolidated Orange Growers here is expected to commence in about two weeks. It was announced today by Frank Collins, plant manager." The building committee

[9] "Valencia Harvest Started," *Orange Daily News*, April 18, 1930.
[10] "Consolidated Moves First Cooled Fruit," *Orange Daily News*, June 10, 1930.
[11] "$1,346,571 Is Paid To Growers," *Orange Daily News*, February 17, 1931.
[12] "Citrus Pool Receipts Paid," *Orange Daily News*, July 14, 1930.
[13] "Consolidated Plant Here Formed Through Merger," *Orange Daily News*, April 30, 1938.

was authorized to proceed post-haste with plans for early construction at the precooling unit in order that it might be in readiness for the opening of the 1930 Valencia season. The Gay Engineering Corporation had recently built the $175,000 annex of the Santiago Orange Growers association, which included a new citrus refrigeration unit.[14]

As reported in the *Orange Daily News*,

> The Gay Corporation, leading Pacific coast refrigeration engineering firm has already prepared tentative plans and these were outlined at the meeting resulting in the firm being engaged to prepare definite plans at once. The Gay Engineering Corporation acts as engineer and general contractor. Work is expected to be underway in two weeks. It will require 70 working days to complete the plant.[15]
>
> Workmen of the Gay Engineering Company, Los Angeles refrigeration experts, are still on the job to see that tests are satisfactory before the project is accepted by the association principals.[16]

Work of installing the new plant began April 17, 1930 and was finished by the Los Angeles Contractor June 6, 1930.[17] **(Figures 16, 17)**.

It was a feat to construct the three-level, 14,400 square foot Precooling Plant in an approximately seven to eight-week period. The engineers, as designers and builders understood the benefit of reinforced concrete and utilized science, technology, and industrial labor to achieve the feat. As concrete replaced wood and masonry in many contexts, it brought to building an extreme division of labor that called for a relatively small set of highly trained specialists to supervise the work of many little-trained, and lower status laborers. During the period 1900 through 1930, advancements were made in the utilization of reinforced concrete that included the efficient handling of a pourable medium on projects of massive scale. Forms once erected could be filled without interruption, and on a well-organized project, pouring could continue on a portion of a building, while the other portion set. The essence of economy in concrete was to be found in the duplication of forms and the elimination of architectural details that complicate form construction. Concrete construction was greatly expedited when, after 1900, outside suppliers increasingly took over the construction of forms and the assembly of reinforcing rods.

The design of the Precooling & Ice Plant is an austere, standardized reinforced-concrete industrial building. It has withstood the test of time with its sturdiness and permanence, unlike the adjacent packinghouse, which is constructed of wood. The plant building is devoid of individualizing decoration and is recognized as a utilitarian building exemplifying form follows function. The engineers that designed and built the Precooling & Ice Plant were specialists in the

[14] "Work Started on Orange Precooling Plant," *Orange Daily News*, March 21, 1930.
[15] "Order Precooling Plant Plans," *Orange Daily News*, March 12, 1930.
[16] "New Precooling Plant is Undergoing Tests," *Orange Daily News*, June 6, 1930.
[17] "Consolidated Pre-Cooled Fruit is Well Received," *Orange Daily News*, July 10, 1930.

location of the work; the movement of tools, materials, and workers; the movements of a task, schedules, and time allotments; and inspection criteria.

Both Gay Engineering Corp. and Kohlenberger Engineering Corp. were specialists of these types of buildings, and the economies of construction derived from simplicity and duplication of forms. The Precooling & Ice Plant indicates by its exterior treatment and design the purposes for which it is intended.

Hans Henry Kohlenberger was a progressive and alert businessman, well known in the city of Fullerton, located approximately nine miles northwest of Orange. President of Kohlenberger Engineering Company, Inc., Hans was a man of widely recognized ability as an engineer, and a capable and enterprising businessman, successful in building up an extensive and prosperous business. He was born in Germany, the son of C.H. and Minnie Kohlenberger, who lived in Anaheim, Orange County, where C.H. was connected with the water department. They had brought their family from Germany to the United States in 1907 and immediately located to Anaheim. Their son Hans was well educated and when the United States became involved in the First World War he enlisted in the navy, in which he served approximately two years. In 1919, he was honorably discharged, with the rank of chief machinist. He married in 1920 and had five children.

For approximately six years, Hans was Chief Engineer for the Consolidated Ice and Cold Storage Company of Fullerton. He was a member of the Fullerton Chamber of Commerce and was quite active in community commercial affairs. In 1926, he organized the Kohlenberger Engineering Company of which he was the president in charge of sales and distribution. The company incorporated in 1929 in Fullerton, as the Kohlenberger Engineering Corporation, and had an office in Los Angeles, in which Mr. Kohlenberger spent part of his time. He was recognized as both an astute businessman and an expert mechanical engineer. Hans was Fullerton's mayor in 1940. Between 1946 and 1948, brothers Hans and Walter Kohlenberger constructed a new building at the 600 block of Commonwealth Avenue. At that time, they built industrial refrigeration and air conditioning systems for fruit packing houses, dairies, and later commercial fishing boats. The building was destroyed by fire in 2007, and the company moved to another location in Fullerton.

The company evolved into Kohlenberger Associates Consulting Engineers, Inc. specializing in the design of food processing plants and systems, industrial refrigeration and freezing, cold storage warehouses, incineration and pollution control studies and systems, thermodynamic and heat transfer analysis, cogeneration feasibility, HVAC systems, energy savings analysis and audits, energy management systems, long range planning, forensic engineering, and corporate consultation.

Timeline:

1928-1929	Red Fox Orchards merged with McPherson Heights to become Consolidated Orange Growers

1929-1930	Consolidated Orange Growers built precooling and cold storage building
1939	Consolidated Orange Growers built ice plant addition to building
1930-1965	Owned and occupied by Consolidated Orange Growers
1965	Purchased by Richard Snider, industrial use
1968	Purchased by Joseph Colagrossi, industrial use
1969-1970	The Furniture Doctor (tenant)
1972-1973	Dawn Interiors (tenant)
1974	ICE Corp. (tenant)
1975-2003	Owned and occupied by Pete's Road Service, tire re-treading plant, industrial use
2003-present	Owned and Occupied by Secoy LLC, mixed-use facility

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"Construction of New Precooling Plant Started," March 24, 1930.
"Citrus Men In Annual Gatherings," December 29, 1930.

"Orange Harvest Well Under Way," January 1, 1931.
"Orange Men Told Facts Of Season," February 18, 1931.
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"Valencia Pool Nets Growers $295,000 Sum," November 10, 1931.
"Valencia Work Starts; Will Give Jobs to 2000," May 22, 1933.
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National Register of Historic Places. Edmond Ice Company. Edmond, Oklahoma County, Oklahoma. National Register #16000371

***Orange Daily News* Articles**
"Local Citrus Plants Plan Big Merger," November 19, 1928.
"Growers Approving Merger of Two Local Citrus Plants," December 10, 1928.
"Citrus Plants Merge," February 19, 1929.
"Terry Elected President of new Consolidated Board," February 20, 1929.
"Citrus Board Meets," February 27, 1929.
"Collins Named Manager of Consolidated Growers," March 4, 1929.
"Consolidated Growers Are Undecided as to Program," March 12, 1929.
"Machinery Is Installed At Consolidated Citrus Plant," April 8, 1929.
"Valencia Season Opens," May 6, 1929.
"Citrus Program Ready," May 23, 1929.
"Citrus Closing Near," November 8, 1929.
"Consolidated Growers Get Checks for $386,271.80," November 30, 1929.
"Huge Citrus Refund Paid By Local Plant," December 23, 1929.
"Consolidated Growers Plan $75,000 Project," February 18, 1930.
"Order Precooling Plant Plans," March 12, 1930.
"Work Started On Orange Precooling Plant," March 21, 1930.
"Building Permit Issued for Precooling Plant," March 26, 1930.
"Valencia Harvest Is Started," April 18, 1930.
"Work Rushed on Local Citrus Pre-cooling Plant," May 17, 1930.

"Heavy Valencia Shipments Moved Here During May," May 29, 1930.
"New Precooling Plant is Undergoing Tests," June 6, 1930.
"Consolidated Moves First Cooled Fruit," June 10, 1930.
"Consolidated Pre-cooled Fruit is Well Received," July 10, 1930.
"Citrus Pool Receipts Paid," July 14, 1930.
"$1,346,571 Is Paid To Growers," February 17, 1931.
"Consolidated Growers To Launch 1931 Valencia Operations Tomorrow," May 11, 1931.
"$775,000 Crop Moved," February 15, 1938.
"Consolidated Plant Here Formed Through Merger," April 30, 1938.
"Consolidated Ships Huge Crop," February 21, 1939
"Consolidated Board Named At Meeting," February 22, 1939.
"Consolidated To Erect Ice Making Plant," February 23, 1939.

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Previous documentation on file (NPS):

____ preliminary determination of individual listing (36 CFR 67) has been requested
_X__ 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 # _____
____ recorded by Historic American Landscape Survey # _____

Primary location of additional data:

____ State Historic Preservation Office
____ Other State agency
____ Federal agency
_X_ Local government

___ University
_X_ Other**:** Name of repository: City of Orange, Orange Public Library and History Center, Old Town Preservation Association

Historic Resources Survey Number (if assigned): __

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10. Geographical Data

Acreage of Property __0.73 acres

Latitude/Longitude Coordinates
Datum if other than WGS84:
(enter coordinates to 6 decimal places)
1. Latitude: 33.786666 Longitude: -117.856666

Verbal Boundary Description (Describe the boundaries of the property.)

The property boundaries are all of Lots 6, 7,14 and 15 in Block B of Chubb's Addition to the Town of Orange as per Map thereof recorded in Book 12, Page 86 of Miscellaneous Records of Los Angeles County, State of California. Assessor's Parcel Numbers 390-661-04, 390-661-03.

An easement for ingress and egress over the South 10 feet of Lot 16 in Block B of Chubb's Addition to the town of Orange as per Map thereof recorded in Book 12, Page 86 of Miscellaneous Records of Los Angeles County, State of California.

Boundary Justification (Explain why the boundaries were selected.)

The boundaries are those of the 31,693 square foot parcel acquired by Consolidated Orange Growers in 1930, to build the Precooling & Ice Plant.

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11. Form Prepared By

name/title: Susan Secoy Jensen, Architect, AIA, M.Arch.,
organization: Secoy LLC
street & number: 160 South Cypress Street
city or town: Orange state: _CA zip code: __92866___
e-mail_ susan@secoyarchitects.com
telephone: __(714) 639-4367
date: ____ November 2020; Revised January 2021, April 2021

Additional Documentation

Submit the following items with the completed form:

- **Maps:** A **USGS map** or equivalent (7.5 or 15 minute series) indicating the property's location.
- **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.
- **Additional items:** (Check with the SHPO, TPO, or FPO for any additional items.)

Photographs
Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels (minimum), 3000x2000 preferred, at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map. Each photograph must be numbered and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph.

Photo Log

Name of Property:	Consolidated Orange Growers Precooling & Ice Plant
City or Vicinity:	Orange
County:	Orange
State:	California
Photographer:	Susan Secoy Jensen, Jeanine Hill, Sargeant Creative
Date Photographed:	2017-2021 as indicated

Description of Photograph(s) and number, include description of view indicating direction of camera:

1 of 22 Precooling & Ice Plant with Accessory Building, looking northwest (2020)

2 of 22 Precooling & Ice Plant looking at east elevation (2020)

3 of 22 Precooling & Ice Plant with water storage towers, looking northwest (2020)

4 of 22 Original water storage tower above machine room, looking west (2020)

5 of 22 Window of original machine room, north elevation (2020)

6 of 22 Original door and hardware, north elevation (2020)

7 of 22 Railroad and Precooling & Ice Plant, looking southeast (2021)

8 of 22 Accessory Building, looking southeast (2021)

9 of 22 Accessory Building, looking northwest (2021)

10 of 22 Noncontributing office/industrial building, which replaced the foreman's house, looking west (2021)

11 of 22 Vertical plenum, spray chamber, looking towards motor (2020)

12 of 22 Spray chamber motor, looking east (2020)

13 of 22 Spray chamber motor, looking north (2021)

14 of 22 Former machine room, looking east (2018)

15 of 22 Original cold storage door between Precooling Plant & Ice Plant storage room, looking north (2021)

16 of 22 Second floor entry above 1939 machine room, looking southeast (2017)

17 of 22 Second floor loft, original fruit storage bay, looking east towards louvers (2017)

18 of 22 Second floor loft, original fruit storage bay, looking northeast (2018)

19 of 22 Second floor loft, original fruit storage bay, looking east (2020)

20 of 22 Second floor hall with horizontal plenum above, looking north towards cold storage doors (2020)

21 of 22 Second floor cold storage door hardware, original (2020)

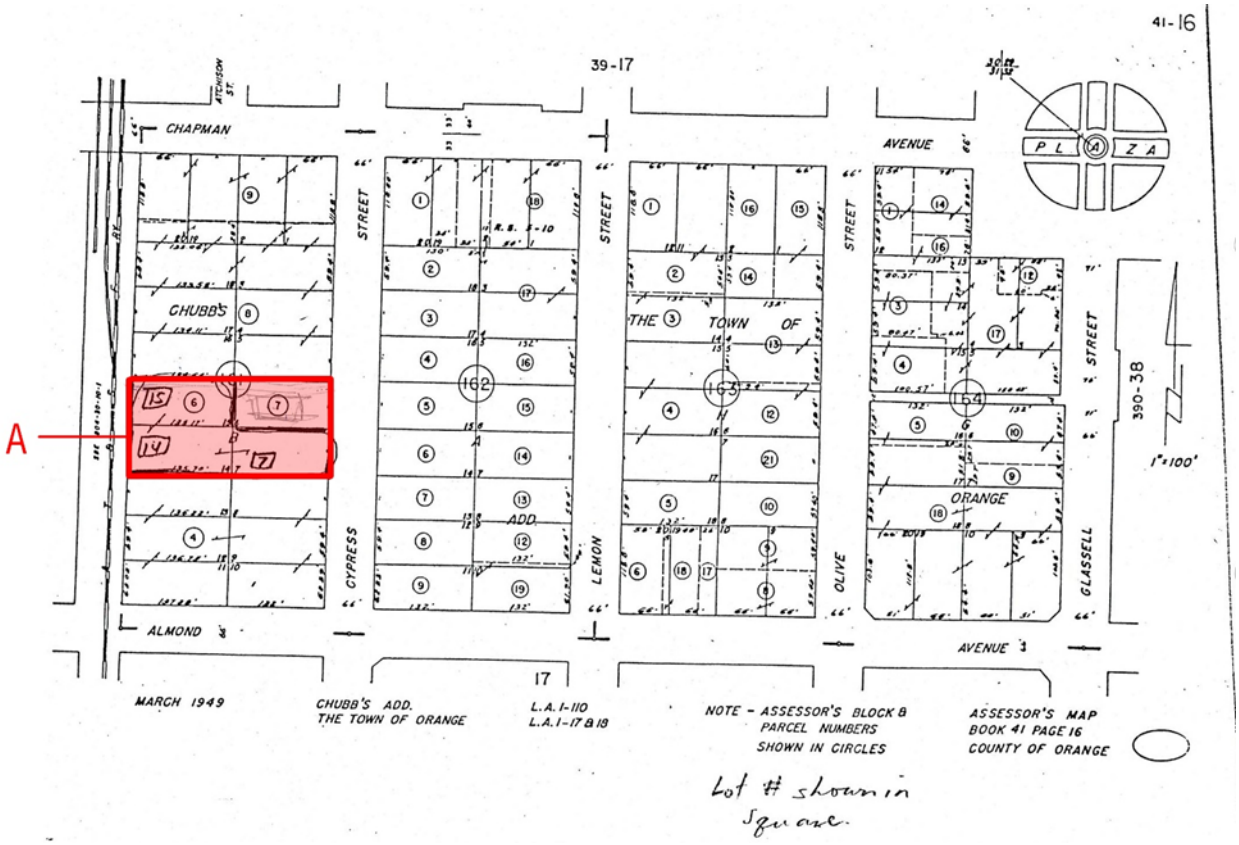
22 of 22 Second floor cold storage door, Stevensons hardware, original, typical throughout (2020)

Location Map

Latitude: 33.786666 Longitude: -117.856666

Site Map

A = Property purchased by Consolidated Orange Growers for Precooling & Ice Plant, 1930.



SOURCE: City of Orange

Sketch Map (Google Map annotated by author, 2020)

A. Consolidated Orange Growers Precooling & Ice Plant
B. Accessory Building
C. Noncontributing Building

Photo Key 1 of 3: Exterior (Google Map annotated by author, 2021)

Photo Key 2 of 3: Interior, First Floor

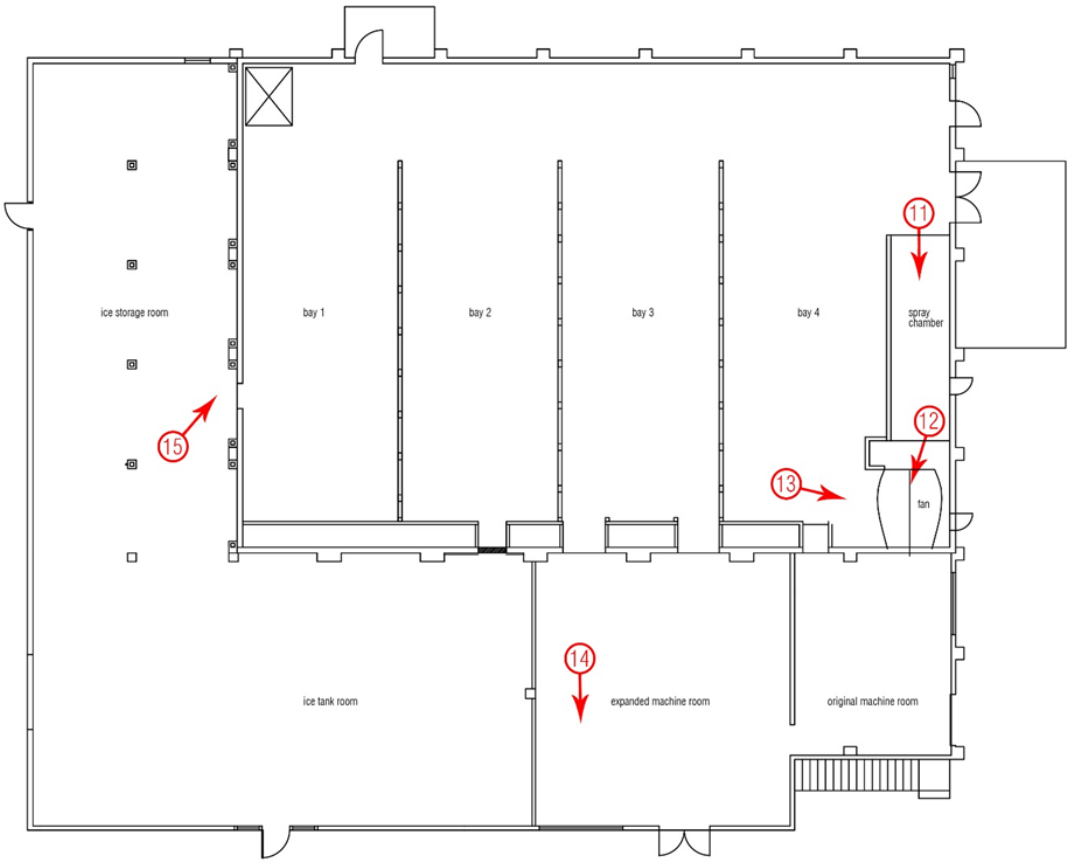


Photo Key 3 of 3: Interior, Second Floor

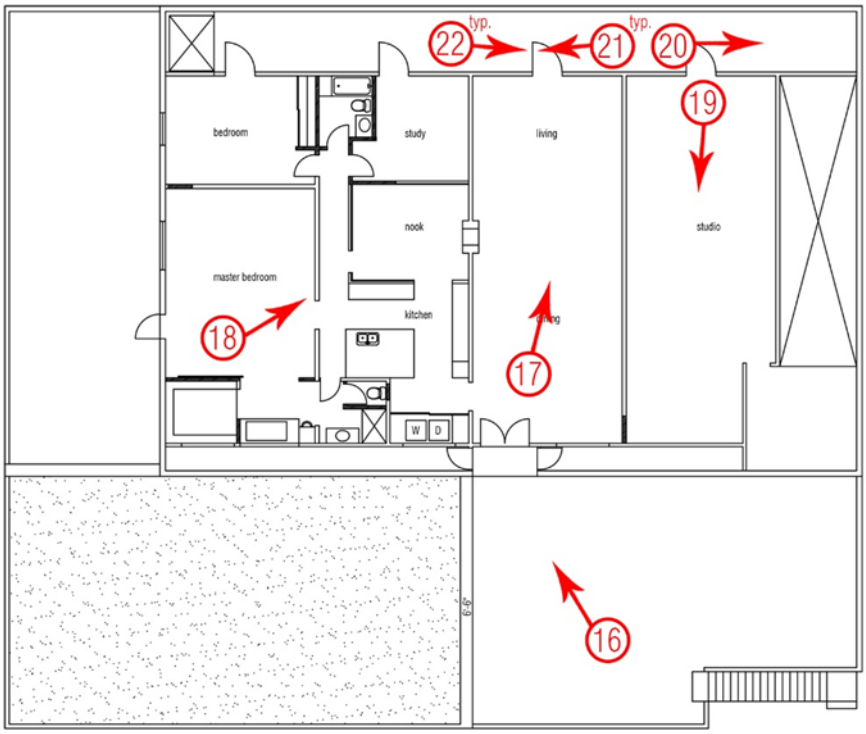


Figure 1 Aerial, 1935; Spence Air Photos. Source: "Citrus Powered the Economy of Orange County."

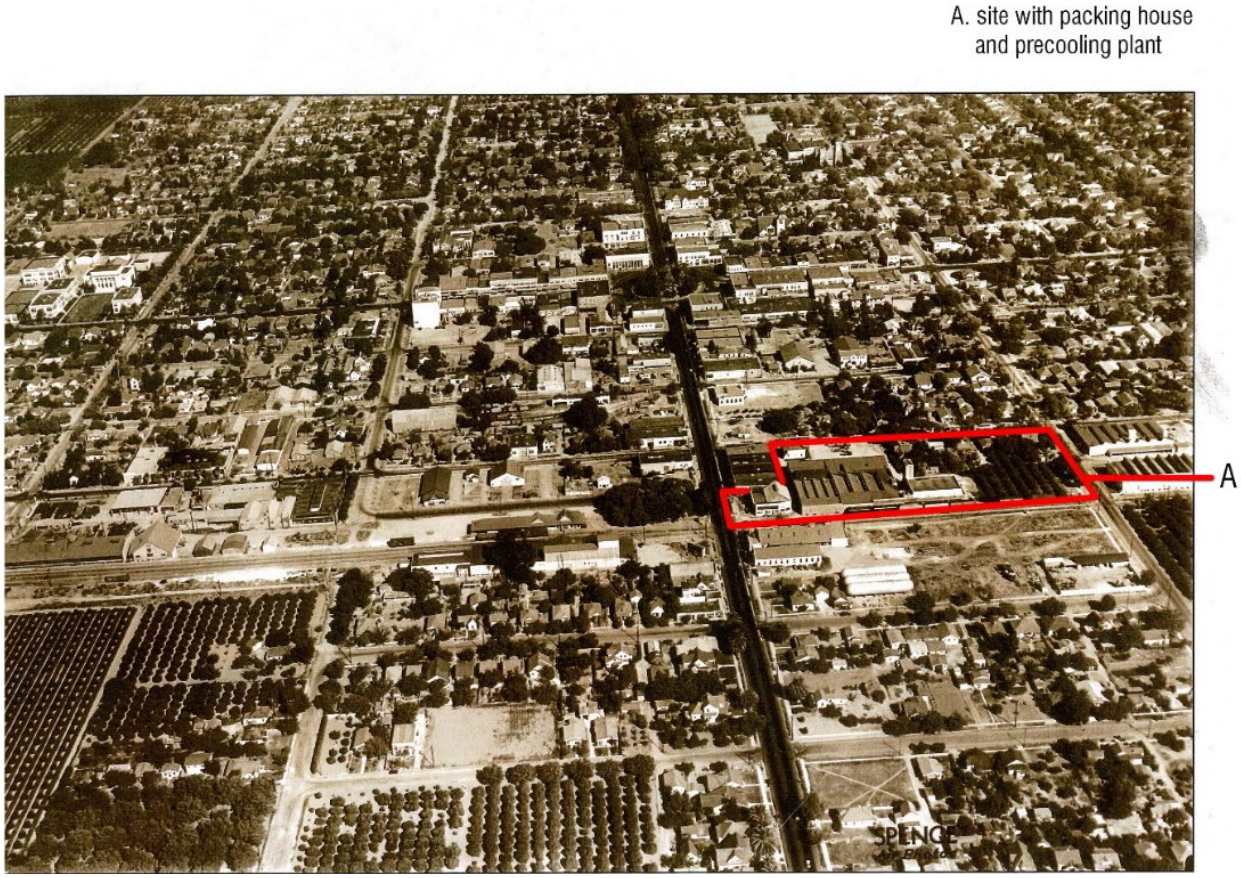


Figure 2 Aerial, 1947; photographer unknown. Source: Orange Public Library Historic Resources.

A. precooling & ice plant (1930s)
B. office
C. worker's house
D. packing house (1920s)
E. truck repository (1940s)

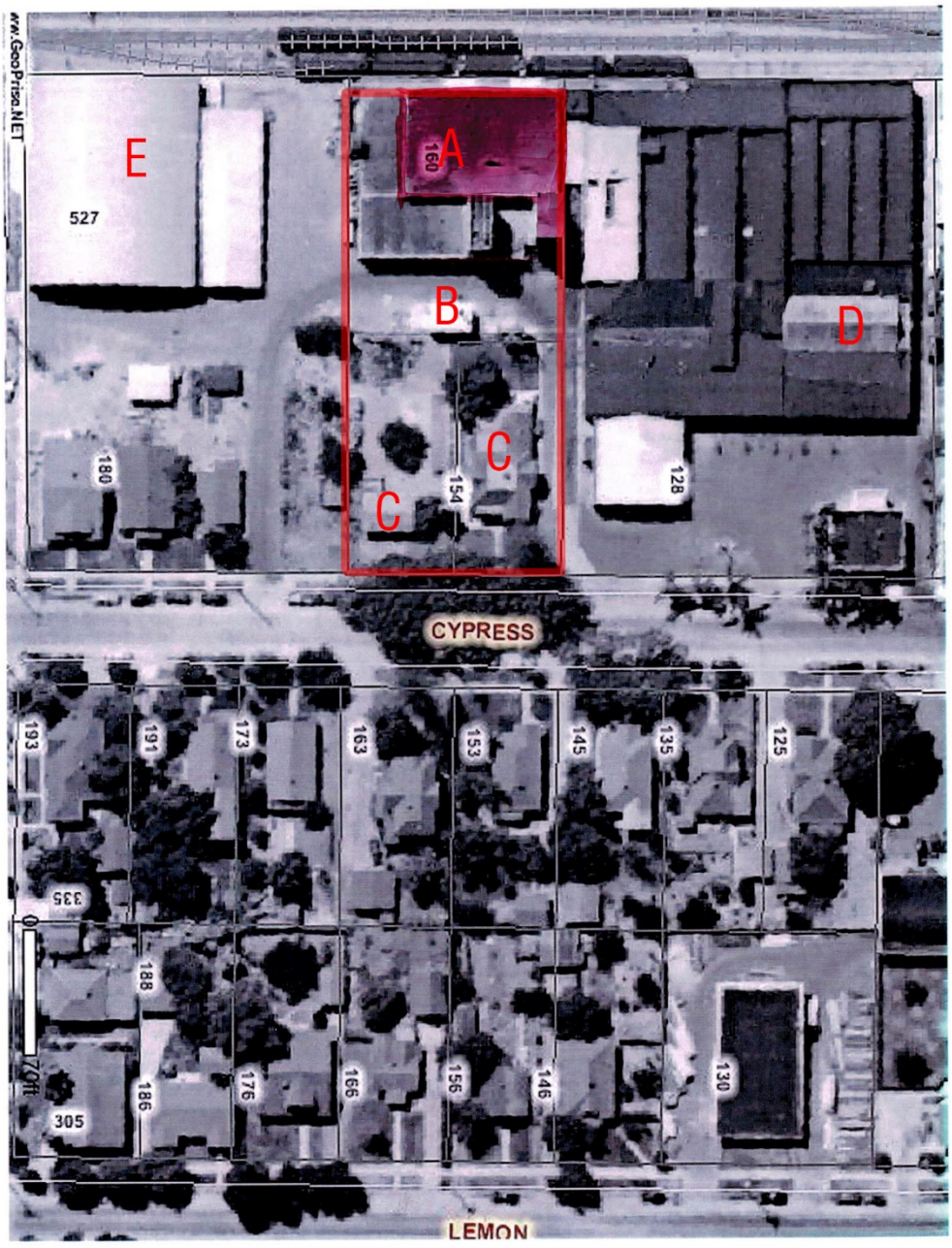


Figure 3 Packing House Foreman's Residence, 1989; Glenn Koenig, Photographer. Source: *Los Angeles Times*.

Caption: The Queen Anne house, built about 1895, will be moved from Pixley Street and Almond Avenue in Orange to Tustin.

After the house was relocated, an office/industrial building was constructed in this location in 1990 (**Photo 10**).

GLENN KOENIG / Los Angeles Times

The Queen Anne House, built about 1895, will be moved from Pixley Street and Almond Avenue in Orange to Tustin.

Figure 4 Plot Plan, 1950. Source: The Sanborn Library, LLC.

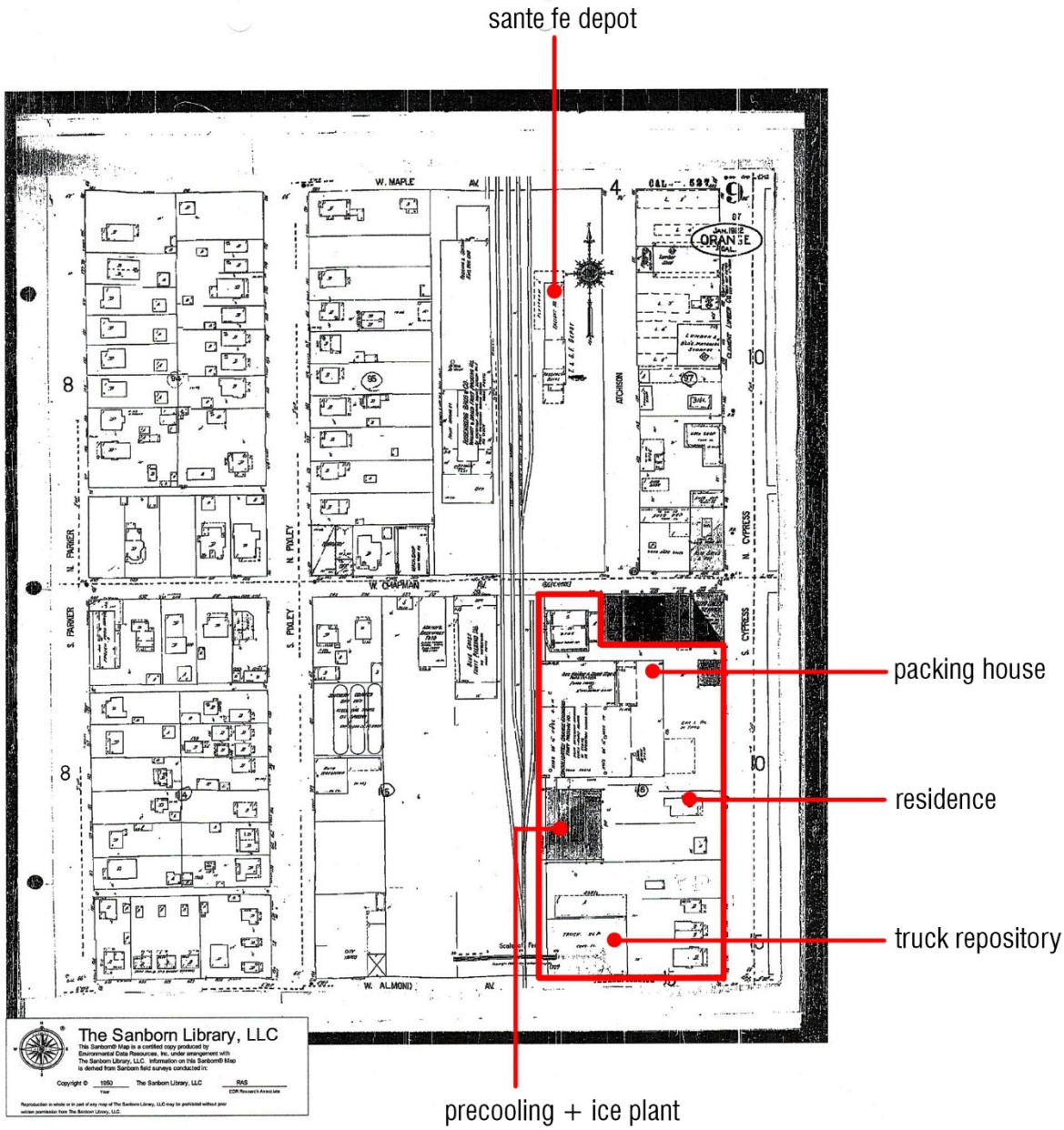


Figure 5 Floor Plan, 2020. Source: Secoy Architects, Inc.

Figure 6a Air Circulation Diagram, 2020. Source: Secoy Architects, Inc.

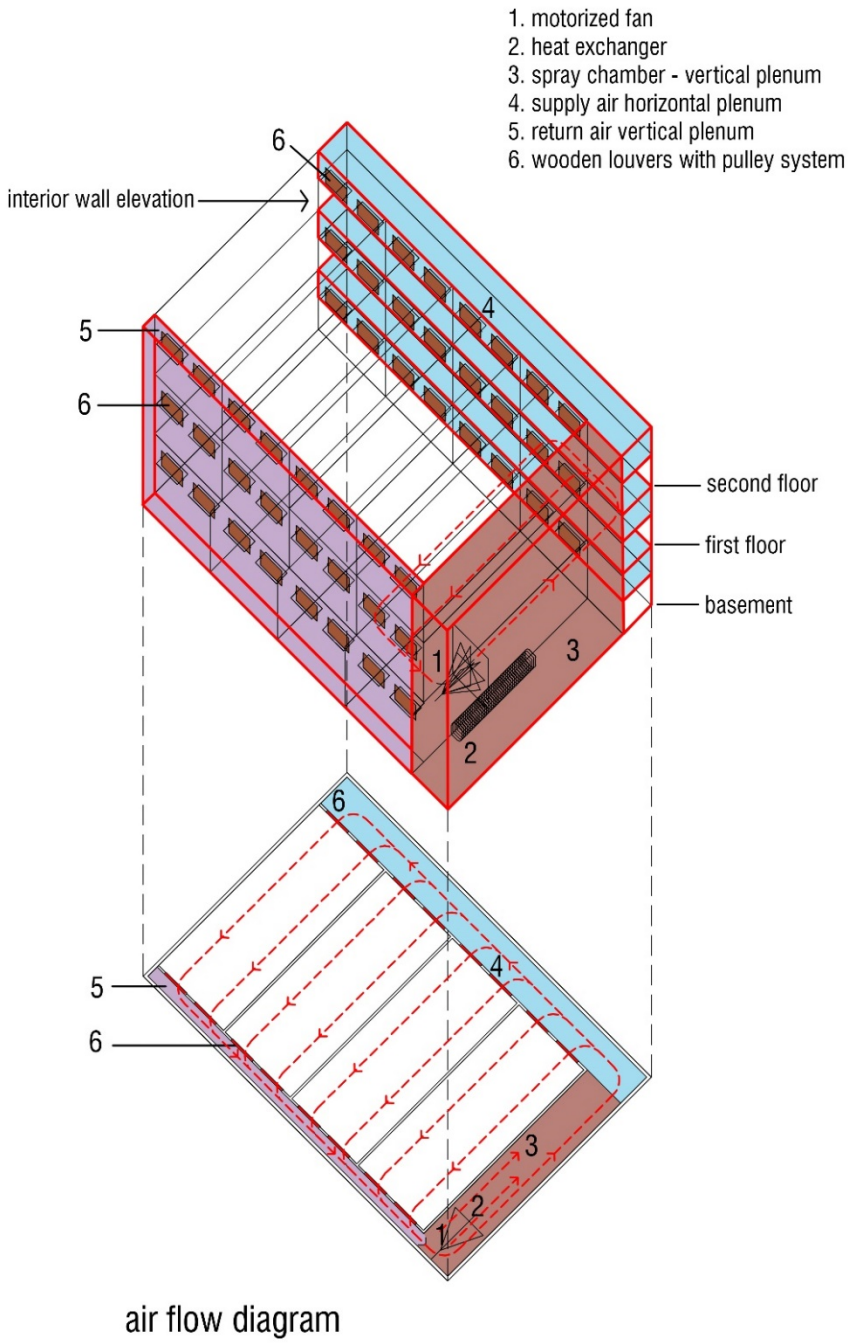


Figure 6b Air Circulation Diagram, 2020. Source: Secoy Architects, Inc.

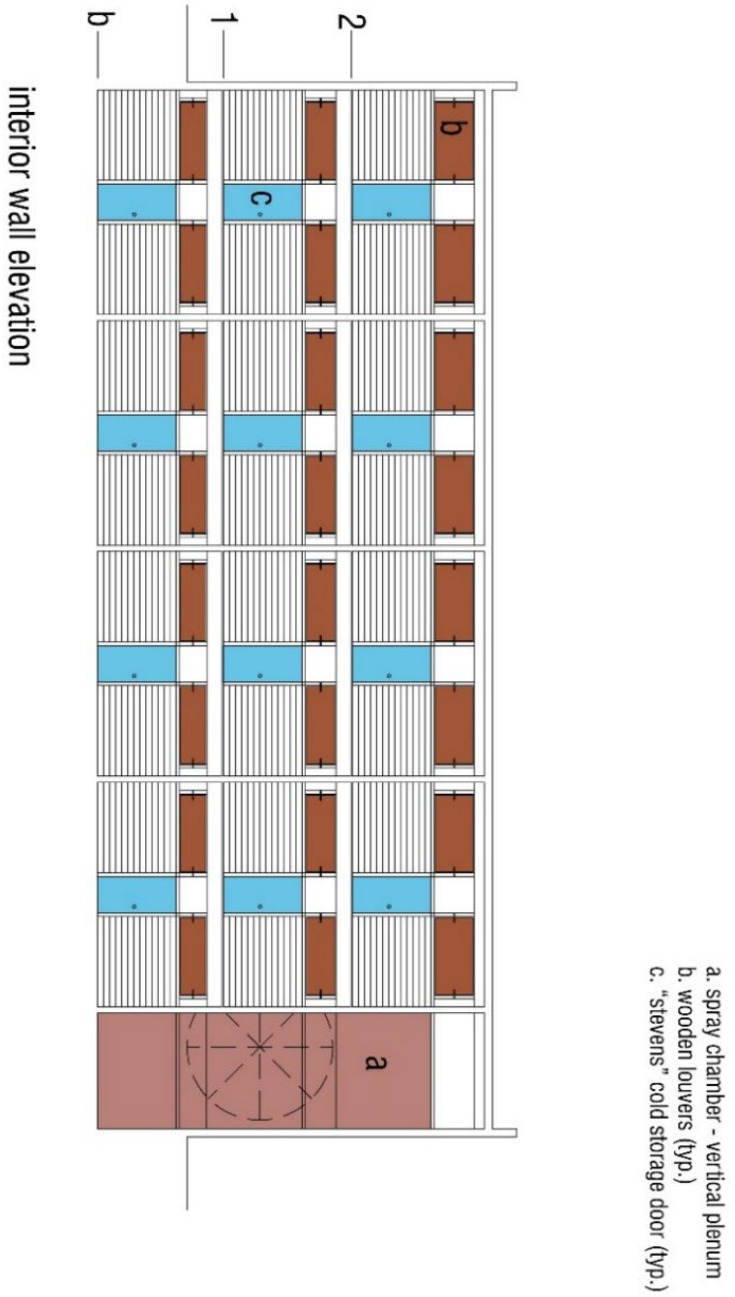


Figure 7 Loading ice into rail cars, 1930s, photographer unknown. Source: RWB Party Props (packing house owner archive)

Figure 8 Block ice and equipment, 1930s, photographer unknown. Source: RWB Party Props.

Figure 9 Advertisement, circa 1930. Source: *Steam Engines, Refrigerating Machinery* catalog.

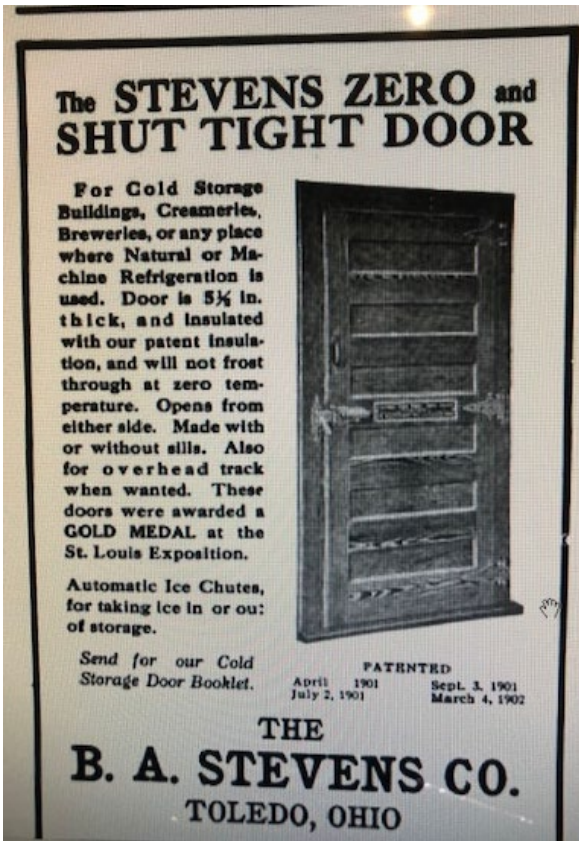


Figure 10 Advertisement, circa 1930. Source: *Steam Engines, Refrigerating Machinery* catalog.

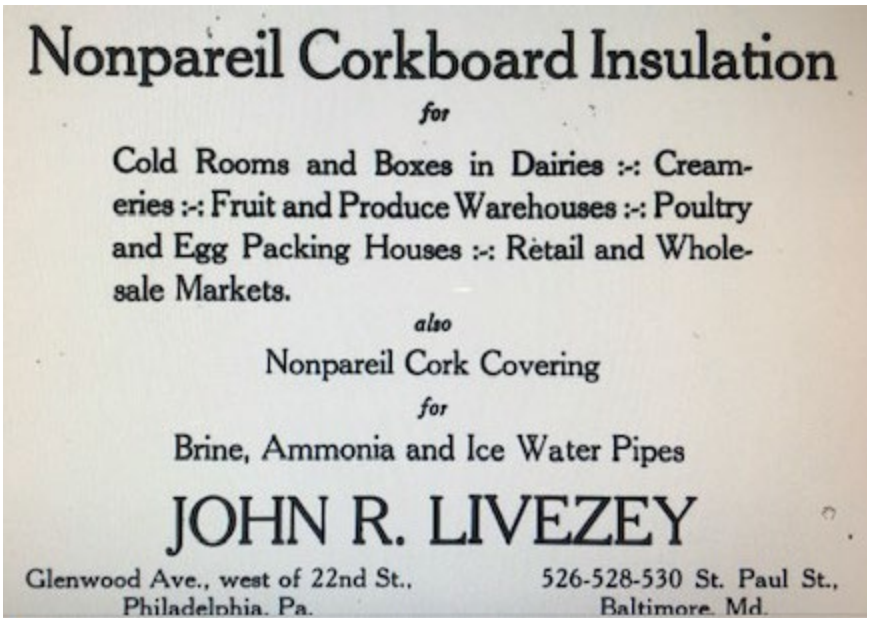


Figure 11 Current Use Floor Plans, 2020, Secoy Architects, Inc.

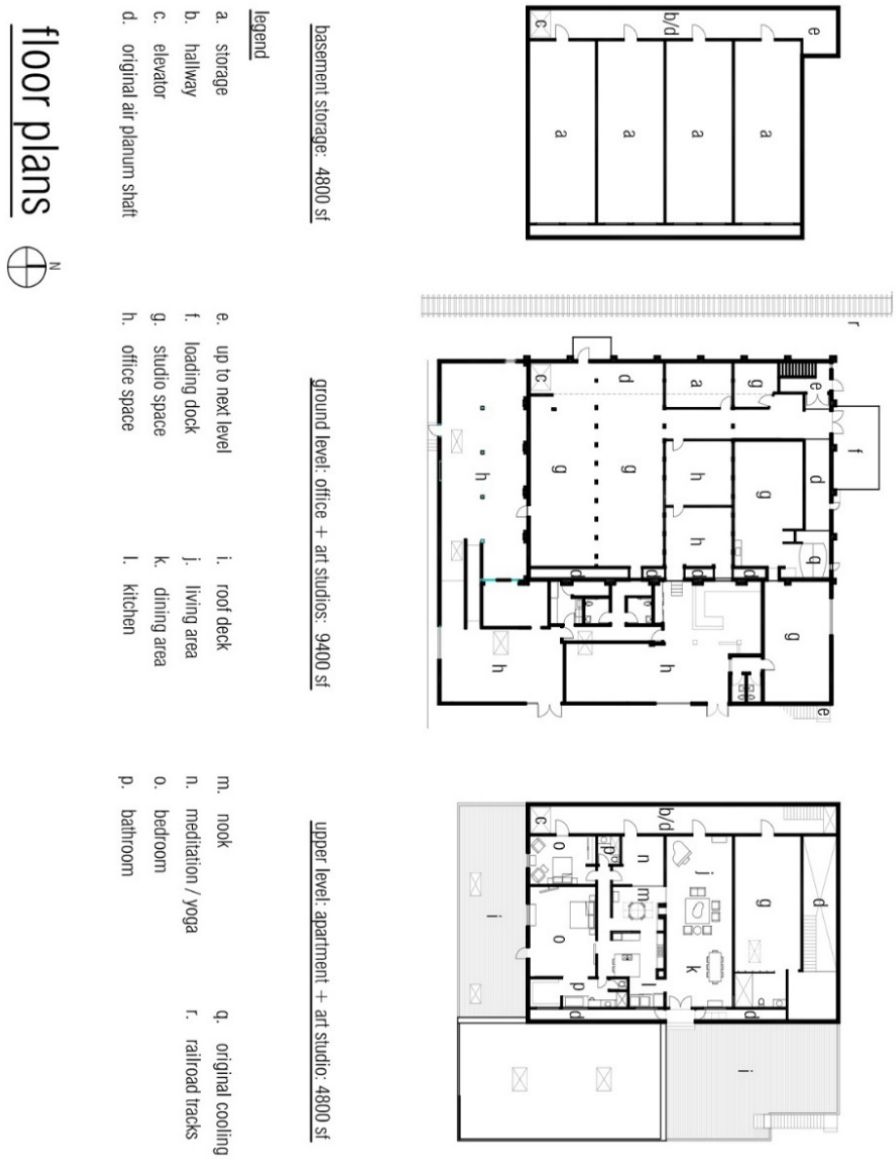


Figure 12 Current Use Elevations, 2020, Secoy Architects, Inc.

Figure 13 Railroad and Precooling & Ice Plant, looking northeast, 2015. Source: Secoy Architects, Inc.

Figure 14 Santa Fe Advertisement, 1953, *Anaheim Gazette.*

AMERICA'S NEW RAILROAD

16 of these big icing machines are in operation at ice-servicing points along the Santa Fe.

Ever see so much fuss just to chill an orange?

It's the best way there is today to refrigerate a "reefer"—but Santa Fe is developing an even newer and better way to do the job

In 60 seconds flat, the giant ice-crushing machines Santa Fe recently installed can fill the bunkers of a refrigerator car with five tons of ice!

They are the newest and fastest machines for icing cars yet devised.

And Santa Fe "reefers" are the most efficient type of refrigerator cars now on the rails.

These refrigerator cars and icing machines have carried the technique of ice refrigeration to the ultimate of present day knowledge.

WHAT ABOUT TOMORROW.

We can't be sure, BUT—

Santa Fe is now experimenting with a newer way to refrigerate cars automatically for hauling foods which may require temperatures as low as 25° below zero.

30 new experimental refrigerator cars designed by Santa Fe, built in its own shops and each with a capacity of 128,000 pounds of frozen foods, are now being utilized in the movement of frozen foods.

Each of these new cars has its own thermostatically-controlled diesel-driven compressor-type refrigerator unit. It carries 400 gallons of fuel (almost the exact amount Lindbergh used to fly the Atlantic). It can maintain sub-zero temperatures all the way from California to New York.

BENEFITS FELT ALL ALONG THE LINE

All along the line, people and communities feel the benefits of this building here wherever it actually occurs on the Santa Fe—and day-after-day, something new is done to make "America's New Railroad" a little better.

The millions of dollars this newness costs Santa Fe doesn't cost you a single penny in the taxes you pay.

Santa Fe

PROGRESS THAT PAYS ITS OWN WAY

Figure 15 Crate label, original design early 1900s. Source: Villa Park art print, reproduction.

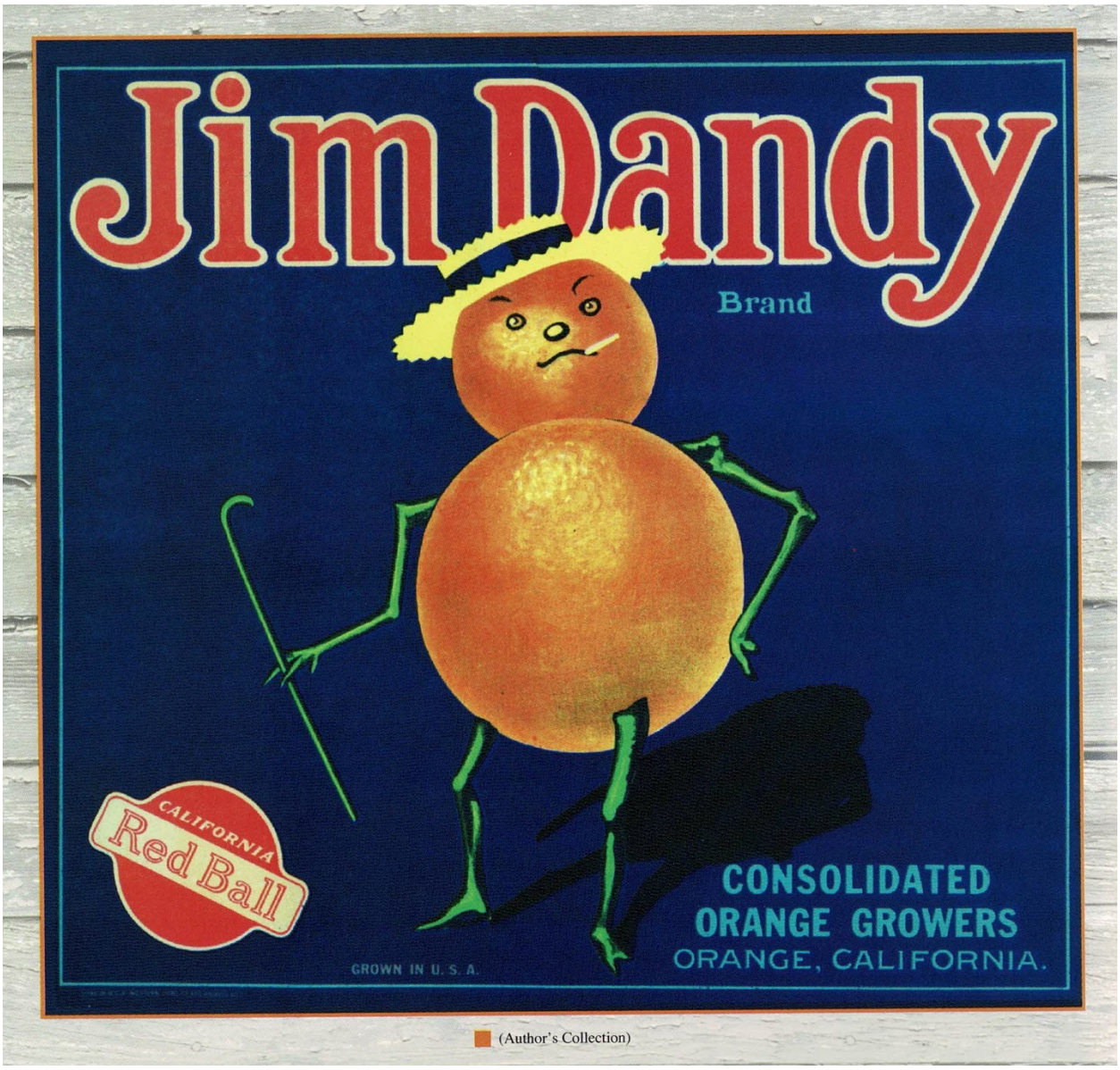


Figure 16 Gay Engineering Advertisement, circa 1930. Source: *Refrigerating Engineers and Contractors*.

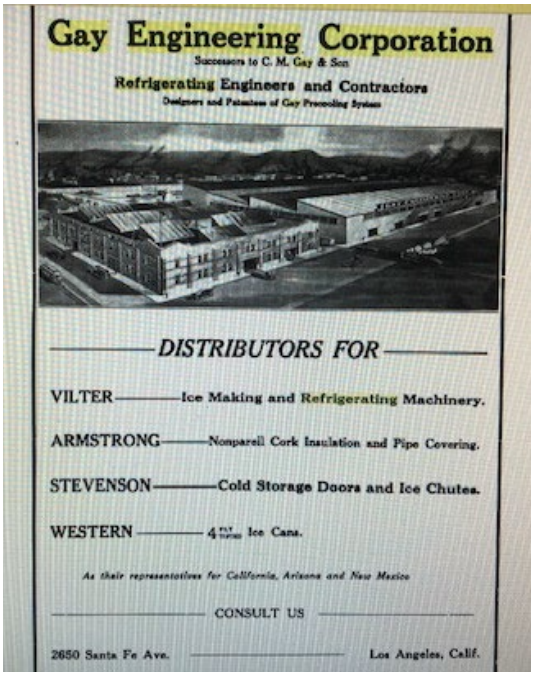


Figure 17 Vilter Advertisement, circa 1930. Source: *Steam Engines, Refrigerating Machinery* catalog.

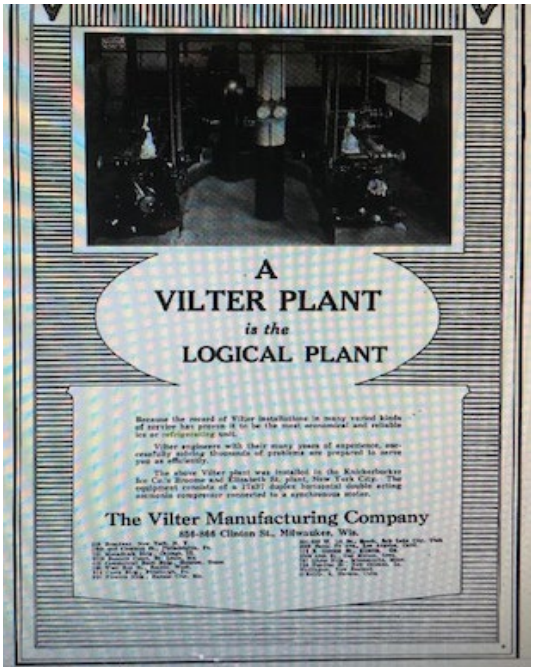


Photo 1 Precooling & Ice Plant with Accessory Building, looking northwest

Photo 2 Precooling & Ice Plant looking at east elevation

Photo 3 Precooling & Ice Plant with water storage towers, looking northwest

Photo 4 Original water storage tower above machine room, looking west

Photo 5 Window of original machine room, north elevation

Photo 6 Original door and hardware, north elevation

Photo 7 Railroad and Precooling & Ice Plant, looking southeast

Photo 8 Accessory Building, looking southeast

Photo 9 Accessory Building, looking northwest

Photo 10 Noncontributing office/industrial building, which replaced the foreman's house, looking west (**Figure 3**)

Photo 11 Vertical plenum, spray chamber, looking towards motor

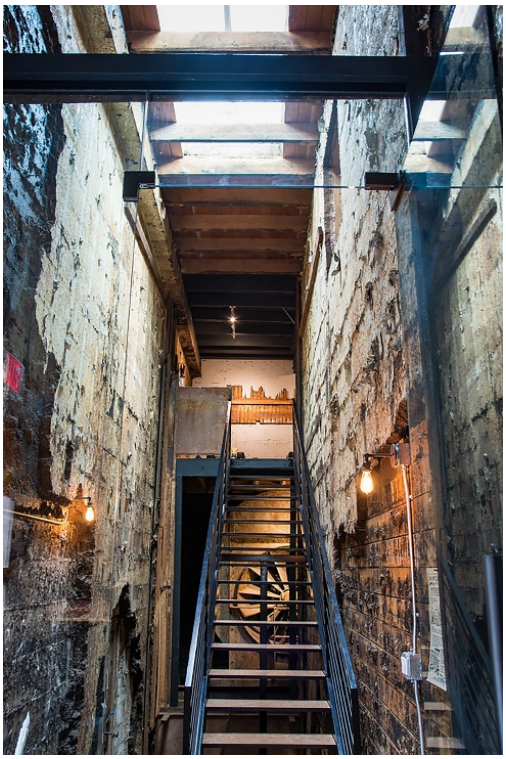


Photo 12 Spray chamber motor, looking east

Photo 13 Spray chamber motor, looking north

Photo 14 Former machine room, looking east

Photo 15 Original cold storage door between Precooling Plant & Ice Plant storage room, looking north

Photo 16 Second floor entry above 1939 machine room, looking southeast

Photo 17 Second floor loft, original fruit storage bay, looking east towards louvers

Photo 18 Second floor loft, original fruit storage bay, looking northeast

Photo 19 Second floor loft, original fruit storage bay, looking east

Photo 20 Second floor hall with horizontal plenum above, looking north towards cold storage doors

Photo 21 Second floor cold storage door hardware, original

Photo 22 Second floor cold storage door, Stevensons hardware, original, typical throughout