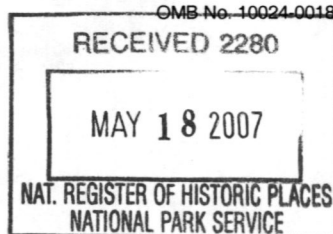


United States Department of the Interior
National Park Service

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 *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an 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. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer to complete all items.

1. Name of Property

historic name Austin, Nichols & Company Warehouse

other names/site number _____

2. Location

street & number 184 Kent Avenue [] not for publication

city or town Brooklyn [] vicinity

state New York code NY county Kings code 047 zip code 11211

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this [X] 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 as set forth in 36 CFR Part 60. In my opinion, the property [X] meets [] does not meet the National Register criteria. I recommend that this property be considered significant [X] nationally [] statewide [] locally. ([] see continuation sheet for additional comments.)

Ruth A. Perpoint
Signature of certifying official/Title

DSHPO

5/11/07
Date

New York State Office of Parks, Recreation & Historic Preservation
State or Federal agency and bureau

In my opinion, the property [] meets [] does not meet the National Register criteria. ([] see continuation sheet for additional comments.)

Signature of certifying official/Title

Date

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the property is:

- ☒ entered in the National Register
[] see continuation sheet
- ☐ 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

[Signature]

date of action

6/28/07

Austin, Nichols & Company Warehouse

Name of Property

Kings County, New York

County and State

5. Classification

Ownership of Property

(check as many boxes as apply)

- ☒ private
☐ public-local
☐ public-State
☐ public-Federal

Category of Property

(Check only one box)

- ☒ building(s)
☐ district
☐ site
☐ structure
☐ object

Number of Resources within Property

(Do not include previously listed resources in the count)

Contributing	Noncontributing	
<u>1</u>	<u>0</u>	buildings
<u> </u>	<u> </u>	sites
<u> </u>	<u> </u>	structures
<u> </u>	<u> </u>	objects
<u>1</u>	<u>0</u>	TOTAL

Name of related multiple property listing

(Enter "N/A" if property is not part of a multiple property listing)

N/A

Number of contributing resources previously listed in the National Register

0

6. Function or Use

Historic Functions

(enter categories from instructions)

INDUSTRY/manufacturing facility and industrial storage

Current Functions

(Enter categories from instructions)

VACANT/not in use

7. Description

Architectural Classification

(Enter categories from instructions)

LATE 19TH & EARLY 20TH CENTURY AMERICAN

MOVEMENTS/ No style

Materials

(Enter categories from instructions)

foundation concrete

walls concrete

roof synthetic

other

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets)

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Continuation Sheet

Section 7 Page 1

Austin, Nichols & Company Warehouse

Name of Property

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Description

The Austin, Nichols & Company Warehouse, located at 184 Kent Avenue in Kings County, Brooklyn, NY, occupies an entire block on the waterfront. Kent Avenue extends to the east; the East River borders the west side of the property; North 3rd Street frames the building to the south; and North 4th Street dead ends across the street from the building but does not continue. The landscape features are limited to concrete sidewalks surrounding three sides of the building. An empty lot is located to the north of the warehouse. The six-story-tall Austin, Nichols & Company Warehouse is constructed of steel-reinforced, poured-in-place concrete. The building's concrete exterior, patched liberally, is coated in white paint.¹ The building has a slightly irregular rectangular box shape with walls that slope inward and are crowned by a coved concrete cornice throughout. The northwest corner of the building is clipped at a slight angle. The roof is flat except for four sawtooth skylights that follow the length of the building and four gabled skylights that follow the width of the building.² Regular groupings of paired and tripartite windows arranged in columns appear throughout every elevation. Some of the original metal sash tilt windows have been replaced with double-hung aluminum sash units. The neighborhood is populated with low-rise warehouses along the water's edge; smaller-scaled late-nineteenth-century commercial and residential buildings stand nearby on North 6th and North 7th Streets.

The east elevation, facing Kent Avenue, is nine bays wide. On the upper floors, all of the windows are in tripartite groupings, except for the northernmost and southernmost bays, which are comprised of pairs of narrow windows. The first floor has several large storefront-style openings and two entrance openings: one at the southernmost bay and a garage-style door at the northernmost bay. There is a cantilevered concrete canopy above the two loading bays at the north end. The gridded metal windows, above the non-historic gates, are historic. Several openings have been sealed at the first story.

The south elevation along North 3rd Street, 26 bays wide, has a continuous concrete marquis supported by curved concrete brackets that shades the various raised loading docks from the middle to the west end of the elevation. The windows are grouped into pairs at the outer ends, followed by a group of three tripartite windows, and another set of paired windows and then a center group of sixteen bays of triple windows. All of the windows that are grouped in threes are linked by continuous rounded pilasters.

The west elevation, visible from the East River, is eight bays wide. The southernmost bay consists of paired narrow windows, while the rest of the elevation features groups of three windows. Most of the

¹ "Flake White Cement Paint" by William J. Niles of Philadelphia was originally applied to the building. The paint type was noted in various letters from Niles to Gilbert included in the Cass Gilbert Collection, New York Historical Society. This special "cold water paint" was also used on the Larkin Company Building in Buffalo, New York and on the American Hide and Leather Company in Lowell, Massachusetts.

² These were installed by the Automatic Skylight and Ventilation Company.

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Continuation Sheet

Section 7 Page 2

Austin, Nichols & Company Warehouse

Name of Property

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windows are non-historic. On the first story, there are seven raised loading bays, all of which have been blocked up. The gridded glass above the fourth and fifth bay (from the south) is historic.

The north elevation is 26 bays wide and follows the same fenestration patterning as the south elevation. The westernmost five bays are located on a stretch of wall that is canted slightly towards the south. The first story has a series of loading bays that are nearly all blocked up.

The interior of the building is primarily open in plan with each floor having a grid of concrete columns with square capitals, which become narrower as the floors increase.³ The floors are all accessed by five stairways, seven freight elevators and one passenger elevator. The stairways are located in the southeast corner, the center of the south wall, the southwest corner, the west side of the north wall and the east side of the north wall. Although the stairway in the southeast corner is a "U" return stair, the other four stairways are all double-"U" return stairs. All have concrete pan treads and risers and painted pipe metal railings. The freight elevators and passenger elevator are scattered throughout each floor.⁴ There is a small elevator lobby in the southeast corner of the building that is present on each floor. The building has concrete floors throughout.

The first floor is predominantly a two-story space except for the southwest corner of the floor, which is single story. The two-story portion is only interrupted by a grid of double-height square concrete columns. Along the north wall is a series of inoperable loading bay doors. The northwest quadrant of the floor has been walled off in a later alteration. The north third of the floor is walled off from the rest of the floor by a multi-light glass wall, which has since been painted white. There are also four submerged loading docks on the first floor: two in the southwest corner, one on the east end of the south wall and one in the northeast corner.

Because much of the first floor is two stories in height, the second floor only exists in the southwest corner of the building. The space was converted into apartments in a late twentieth century alteration. The second floor features drywall partitions throughout, round concrete columns, concrete perimeter walls, exposed concrete ceilings with concrete girders, and concrete floors. Some of the apartments feature wood flooring in the living areas.

The third floor has also been converted into apartments in a later alteration and features a double-loaded corridor extending from east to west in the center of the floor, with apartments on either side. Side hallways also provide access to other apartments. Like the second floor, the space has been somewhat partitioned by new drywall walls. The third floor retains round concrete columns, concrete perimeter walls, exposed concrete ceilings with concrete girders, and concrete floors.

The fourth floor was planned for a similar conversion as that on floors 2 and 3, but the project was never completed. Consequently, the fourth floor has a similar layout to that of the third floor, but much of the drywall remains uninstalled or unpainted and few of the systems have been connected.

³ The columns were originally to have a steel core, but were eventually produced as reinforced concrete.

⁴ The elevators were manufactured and installed by the Gurney Elevator Company.

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Austin, Nichols & Company Warehouse
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The fourth floor also has round concrete columns, concrete perimeter walls, exposed concrete ceilings with concrete girders and concrete floors.

The east and west halves of the fifth floor have been totally separated by a wall that was introduced in a later alteration during the 1990s. The southeast quadrant of the floor is currently being used as office space and has been completely renovated as such. The northeast quadrant is untouched warehouse space. The entire west half of the fifth floor has also been converted into apartments, which are primarily located off of a double-loaded corridor.

The entire sixth floor has round columns and is untouched warehouse space with one small room partitioned off in a later addition and located in the southeast corner.

184 Kent Avenue retains integrity, as the significant architectural features on both of the interior and exterior remain intact. On the exterior, the only significant changes are the removal of the Austin, Nichols & Company signs on the south and east rooflines of the building, the removal of the marquis on the west elevation below the first floor windows, the addition of the balcony railing above the concrete marquis on the south elevation and the removal of the remainder of the concrete marquis, which originally extended the length of the south elevation.⁵ On the interior, there are virtually no alterations to the concrete floors, columns and perimeter walls of the first or sixth floors. Although floors 2 through 5 have undergone some recent partitioning, none of the original concrete elements have been disturbed or removed and the alterations are mostly reversible.

⁵ Above the South roofline was a sign reading: "Austin, Nichols & Co., Inc.". Above the west roofline was a large electrical sign in three lines reading: "Sunbeam/ Pure Foods/ - The World's Best". This sign was to be the same size and lettering as that on the Colgate Building in New Jersey. Electricity for this sign, and throughout the building, was provided by the Edison Company.

Austin, Nichols & Company Warehouse
Name of Property

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County and State

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.)

- ☒ **A** Property 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 that 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 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 of age or achieved significance within the past 50 years

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographical References

Bibliography

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

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 Building Survey

- ☐ recorded by Historic American Engineering Record

Areas of Significance:

(Enter categories from instructions)

Architecture

Engineering

Industry

Period of Significance:

1914-1939

Significant Dates:

1915

Significant Person:

N/A

Cultural Affiliation:

N/A

Architect/Builder:

Gilbert, Cass (architect)

Aus, Gunvald (structural engineer)

Turner Construction Co. (contractor)

Primary location of additional data:

- ☐ State Historic Preservation Office

☐ Other State agency

☐ Federal Agency

☒ Local Government – NYC LPC

☐ University

☒ Other repository:

New York Historical Society

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Austin, Nichols & Company Warehouse
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Significance

Summary

Built in 1914-1915, the Austin, Nichols & Company Warehouse in Brooklyn is nationally significant in architecture and engineering for its pioneering use of reinforced concrete technology on an unprecedented scale in building one of the largest and most integrated food storage and distribution facilities of its day in the nation. Designed by the nationally-prominent architect Cass Gilbert, the 78,800 square foot warehouse is remarkable not only for its engineering technology and planning, but also for its architectural design. The warehouse design relies heavily on simple lines, proportions and rhythmic fenestration expressive of the properties of reinforced concrete in contrast to the elaborate decoration typical of Gilbert's more conventional commissions. The design celebrated the strength and beauty of reinforced concrete at a time when it was far more common practice to conceal structural elements in other materials and detail exteriors with historicist facades. The design illustrates an unusually thorough understanding of the integration of warehouse and transportation technology of the period while remaining inherently flexible for adaptation. Gunvald Aus, Project Engineer and the Turner Construction Company, General Contractors, used their pioneering experiences with reinforced concrete and the patented Ransome system innovatively on this industrial scale project to ensure its rapid construction and extraordinary strength and durability. The building was widely acclaimed as a success in contemporaneous architectural and engineering journals and remains widely recognized today as a landmark of progressive engineering and architecture. The warehouse, situated on the Brooklyn waterfront, is also significant in a regional context in representing one of the largest and most progressively planned distribution operations in the Port of New York during the First World War era. The period of significance spans from 1914 to 1939, the date when Austin, Nichols & Co. sold its grocery business.

Building History

In 1912, Harry Balfe, the vice president and general manager of Austin, Nichols & Company, expressed his interest in moving the entire wholesale groceries distribution company from Manhattan to Brooklyn. He selected a new site on the Brooklyn waterfront, on a block bounded by Kent Avenue, North 3rd and North 4th Streets and the East River.⁶ He wished to consolidate the company's various departments dispersed through nine separate buildings in Manhattan into one building to save expenses, chiefly in the area of transportation of goods to and from the warehouse. Balfe stated to the *New York Times*: "I have figured out that the saving to our firm will be \$170,000 in trucking charges alone. Then there will be a saving in clerical work, shipping clerks, and other items of expense in the distribution, and eventually the consumer will get the benefit of all this saving."⁷ The Brooklyn waterfront property was also ideal for its accessibility to water, rail and road. In 1913, Havemeyer & Elder, which owned the land and the nearby American Sugar Company, entered into a contract with Austin, Nichols to build a state-of-the-art customized headquarters, factory, and

⁶ Frederick Walter, *The History of the Austin, Nichols & Co., Inc: 1855-1955* (n.p., 1955), p. 28.

⁷ "Plan Big Terminal for Grocery Houses," *New York Times*, June 27, 1912, ProQuest Historical Newspapers. The New York Times (1851-2003).

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Austin, Nichols & Company Warehouse
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warehouse, which Austin, Nichols would lease.⁸ Havemeyer & Elder assembled a team of seasoned professionals to design and build the structure.

In January 1914, construction began on the warehouse. Cass Gilbert was selected as the architect; Turner Construction Company served as the general contractor with project engineer Gunvald Aus.⁹ The resulting six-story industrial building, designed as a combined warehouse, factory and office building, measures 179' by 440', is 80' tall in the front and 92' tall in the rear, and provides approximately 78,800 square feet of space or about 14 acres.¹⁰ Reinforced concrete was selected as the primary building material for its load bearing and fireproof qualities.¹¹ The simplistic design of the building was summarized by Gilbert when he said, "It may be taken as an axiom in concrete construction that the simpler the form the better the design. The nature of the materials dictates the form of all its parts, and assuming that the purpose of the structure is kept in mind, as it should be, this purpose is necessarily expressed in very simple terms."¹² The building was completed on September 1, 1914 for a final cost of \$866,005.23 for the entire building including the equipment.¹³

The new building was equipped with the latest technology inside, including spiral chutes, gravity conveyors, overhead conveyors, lowerators (vertical conveyors), and pneumatic tubes.¹⁴ A quadratic rail system accommodating 60 railcars directly accessed the ground floor of the building from carfloats. Inside the building, food stuffs such as dried fruits, coffee, cheese, olives, caviar and peanut butter were prepared, processed and packaged under the Sunshine Foods label. The company also imported fancy groceries from Europe and elsewhere. In addition to food, sundries such as cigars, soaps, wooden utensils and twine were manufactured in the building.¹⁵ All of the processed items were shipped out of the building by truck and rail.

⁸ "Important Trade Movement to the Waterfront of the Boroughs of Brooklyn and Queens," *New York Times*, November 8, 1914, ProQuest Historical Newspapers. The New York Times (1851-2003).

⁹ Aberthaw Construction was originally approached, but they could not work outside of Boston. Turner Construction Company also worked on the Loft Building for the Bush Terminal. Gunvald Aus Company Consulting Engineers also worked on the Federal Building in Hilo, Hawaii, the dome for the Federal Building in San Juan, Puerto Rico and the Woolworth Building, Gilbert's most famous work.

¹⁰ The lot measured 179' by 463' and the building also had a basement and a mezzanine. "Statistical Data on the Austin, Nichols Warehouse. September 18, 1914." Cass Gilbert Collection, New York Historical Society.

¹¹ "Advocacy: Austin, Nichols & Company Warehouse," *Society for Industrial Archeology Roebling Chapter Newsletter* (July 2004) 13, 2, page 3. World Wide Web, accessed July 24, 2006.

¹² Cass Gilbert, "Industrial Architecture in Concrete." *Architectural Forum* 39:3 (Sept. 1923): 83. 83,000 cubic yards of concrete was used in all.

¹³ "Statistical Data on the Austin, Nichols Warehouse. September 18, 1914." Cass Gilbert Collection, New York Historical Society.

¹⁴ "Big Grocery Firm to Leave New York." The gravity conveyors were supplied by Alvey Machinery of St. Louis, Missouri; the pneumatic tubes were supplied by Lamson Company; the chutes and other conveyors were supplied by Haslett's Spiral Chute Company. There were three chutes, 100' apart; one terminated in the packing room, one in the first floor for city deliveries and another in the first floor for country deliveries. Cass Gilbert Collection, New York Historical Society.

¹⁵ "Advocacy: Austin, Nichols & Company Warehouse," p. 3.

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Austin, Nichols & Company Warehouse
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Each floor of the building was designated for specific tasks involving the production, packaging and shipping of wholesale goods.¹⁶ The basement was used for an engine room, fish storage, and olive storage.¹⁷ The first floor included the shipping and receiving departments and some administrative offices. The Mezzanine had bathrooms, employee lockers and a restaurant. The second floor had the olive department, cereals, can labeling, tea and spice packing, green fruit storage, the exporting department, a stockroom for canned goods, olive bottling, and a laundry room. The third floor contained the extract and syrups department, the dried fruit department, the coffee packing department for small orders. The fourth floor included rooms for coffee packing for larger orders and spice packing, and storage for flour, extracts, syrups, dried fruits and spices. The fifth floor had more administrative offices and processing and shipping departments, as well as storage for butter, cheese, imported goods, woodenware, olives, dried fruit, cigars, spices, preserves, cereals, nuts, peanut butter, tea, sugar and coffee, coffee roasters, and an employee restaurant. The sixth floor also had coffee roasters, storage rooms for the green coffee and rooms for spice grinding and cutting.¹⁸ The coffee was kept on the north side of the floor, while the spices were kept on the south end of the floor so as to keep the coffee and spices as separate and as fresh as possible.

A rectifying plant to produce and distill alcohol was installed in the building in 1934 by Austin, Nichols & Company.¹⁹ In 1939, Austin, Nichols & Company sold off the grocery business entirely and focused only on the production and distribution of wine and spirits.²⁰ The company exclusively manufactured and distributed liquor in the building for about twenty years.²¹

In 1955, Austin, Nichols & Company vacated the building and moved its headquarters offices, import division, distilling and bottling plant and wholesale division to Maspeth, Queens at 58th Street and 55th Drive.²² From the late 1950s through the mid-1980s, the building was used by several different manufacturing concerns.

After a few years of vacancy, the Kestenbaum family purchased the building in 1986 and converted it into apartments.²³ The present owner plans to rehabilitate the building using the Federal Historic Preservation Tax Incentives Program.

¹⁶ Letter to Cass Gilbert regarding pneumatic tubes, March 18, 1914. Cass Gilbert Collection, New York Historical Society.

¹⁷ There were 111 bathrooms in the building.

¹⁸ The machinery for the coffee, spices and flour was supplied by the Jabez Burns Company, which was founded in 1864.

¹⁹ Matthew Postal, "Austin, Nichols & Company Warehouse," Submission to the Landmarks Preservation Committee (September 20, 2005), p. 7.

²⁰ Postal, p. 7. It was primarily sold to Francis H. Leggett & Company of New York on December 18, 1938.

²¹ Postal, p. 7.

²² "Austin, Nichols Buys Maspeth Building," *New York Times*, July 10, 1955, ProQuest Historical Newspapers. The New York Times (1851-2003).

²³ Emily Kumler, "Battle over 184 Kent," *The Real Deal* (February 2006), World Wide Web, accessed on July 19, 2006, http://www.therealdeal.net/issues/FEBRUARY_2006/1138309895.php.

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Austin, Nichols & Company Warehouse

Name of Property

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Brief History of Austin, Nichols & Company

The wholesale grocery firm of Austin, Nichols & Company was founded by Friend P. Fitts in 1855, a Manhattan grocer, and was soon after known as Fitts & Austin. The company specialized in the sale and distribution of teas, coffees and spirits but had the approach that "expansion was the keynote of the firm's business from the very start."²⁴ On January 1, 1879, James E. Nichols, Robert F. Austin and four of their associates from Fitts & Austin founded Austin, Nichols & Company.²⁵ Beginning in the mid-1860s, the company began packaging groceries and "was among the first grocery houses to put up goods or have them packaged for them under their own brands."²⁶ From 1890 to 1914, the company headquarters was located a 5-story building at 55-61 Hudson Street in Manhattan that was originally built for the American Express Company. The company also occupied eight other structures, with its fifty departments distributed in these buildings throughout Lower Manhattan, Greenwich Village and Harlem and had overseas offices in Bordeaux, France, Seville, Spain and London, England.²⁷ Its canned goods division, which was established in 1900 and was the largest department owned by Austin, Nichols & Company, was manufactured under the Sunbeam Pure Foods label. It was during the period of Nichols' leadership from 1885 to 1909 that Austin, Nichols & Company experienced its golden age: "it was perhaps better known than any other house in the same line of business."²⁸ Following the death of James E. Nichols in 1914, company vice-president Harry Balfe assumed the leadership of the firm.²⁹

Between 1913 and 1915, Austin, Nichols & Company continued their expansion and purchased such grocery businesses as: Clark, Chapin & Bushnell; Stoddard, Gilbert & Company; and Johnston & Murray. Austin, Nichols & Company also opened a branch office in Minneapolis, MN and acquired the brokerage house of Meyer & Carmody Import Company.

During World War I, Austin, Nichols & Company operated an extremely successful exporting business, primarily caused by the shortage of food and supplies in Europe and was soon exporting average shipments of approximately 5,000 cases.³⁰ Nonetheless, the Company did not neglect its local market and added facilities for the manufacture of peanut butter, pickles, baked beans and jam and opened a department for tires.³¹

On July 9, 1919, Austin, Nichols & Company purchased Wilson & Company, a large packing business based in Chicago, and its allied companies, including Fame Canning Company in the

²⁴ Walter, p. 7. The best known brands were Arica, Morning Glory and Broadway for coffee, and Sunbeam for tea.

²⁵ "James E. Nichols Dies in Austria," *New York Times*, July 22, 1914, ProQuest Historical Newspapers. The New York Times (1851-2003).

²⁶ Walter, p. 10.

²⁷ "Plan Big Terminal for Grocery Houses."

²⁸ Walter, p. 14.

²⁹ Robert F. Austin died in New York in March, 1885.

³⁰ Walter, p. 31.

³¹ Walter, p. 31.

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Austin, Nichols & Company Warehouse

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Midwest and the Wilson Fisheries Company on the Pacific Coast.³² The sale was financed by the sale of Austin, Nichols & Company stock. However, with significant losses in profit, the company closed its wholesale grocery branch in Chicago in 1926, and focused its jobbing operations in Brooklyn.³³

Throughout the 1920s business continued at a steady pace, but was slightly hindered by the shift from the focus on the wholesale grocer to the chain store. As a result, Austin, Nichols & Company consolidated some of their business ventures such as the Minneapolis office, Meyer & Carmody Import Company and several canneries.

Following the repeal of Prohibition with the 21st Amendment in 1933, Austin, Nichols & Company added liquor production and distribution to their beverage department, which had previously been limited to fruit juices and soft drinks.³⁴ After selling off the grocery business in 1939, Austin, Nichols & Company produced and distributed wine and spirits. Of Austin, Nichols & Company's departure from the grocery business, the *Journal of Commerce* announced that Austin, Nichols & Company was "one of the foremost wholesale houses, with branches throughout the interior servicing a widespread trade. The name of A.N and the brand which it created were of national importance in the food field. ...Its influence in the food field will long be felt."³⁵

Consequently, Austin, Nichols & Company rented out three floors of the Brooklyn facility to Lehigh Warehouse & Transportation Company of Newark, NJ in 1939 and the remainder of the space was used for the exclusive production of "beer, wine and liquor and a few related products."³⁶ The rectifying plant contained "adequate stocks of bulk whiskies for aging; an import department with the exclusive distribution of many well known brands; and the general wholesale distribution of many important and domestic brand."³⁷ The production of Wild Turkey brand bourbon at the Austin, Nichols & Company Warehouse began in the 1940s.³⁸

Austin, Nichols & Company vacated the building in 1955, but continued to produce alcohol in their other plants, including Maspeth, New York and Coral Gables, Florida. In 1980, Austin, Nichols & Company was purchased by Groupe Pernod-Ricard, an international spirits company.

³² "New Yorkers Buy Great Canneries," *New York Times*, July 21, 1919, ProQuest Historical Newspapers. The New York Times (1851-2003). The best known brand of this division was "Ocean Gem."

³³ "Austin Nichols' Program," *New York Times*, October 27, 1926, ProQuest Historical Newspapers. The New York Times (1851-2003).

³⁴ The first liquor to be produced was 3.2% beer.

³⁵ Walter, p. 50.

³⁶ Walter, p. 51.

³⁷ Walter, p. 51.

³⁸ Wild Turkey was so named by Thomas McCarthy, the president of Austin, Nichols & Company at the time, for the private supply of bourbon he traditionally took on turkey hunts. "History of Wild Turkey," World Wide Web, accessed on July 21, 2006, <http://www.wildturkeybourbon.com/nest/history.asp>. Other prominent brands were Grant's Scotch Whiskey, Metaxa, and Charles Heidsieck Champagne.

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Austin, Nichols & Company Warehouse
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Cass Gilbert

The Austin, Nichols & Company Warehouse is significant as an outstanding example of industrial work by nationally recognized architect Cass Gilbert. Moreover, the Austin, Nichols & Company Warehouse is Gilbert's first warehouse constructed on the East Coast and served as a prototype for many other reinforced concrete warehouses.

Cass Gilbert was born in Zanesville, Ohio in 1859.³⁹ Introduced to architecture as a draughtsman and carpenter's assistant in the office of A.M. Radcliffe, Gilbert enrolled at the Massachusetts Institute of Technology in 1878 as a pupil of William R. Ware and Eugene Letang. After studying for two years, he took a European tour in France and Italy. Upon his return he joined the firm of McKim, Mead & White. In 1882 he established a partnership with architect James Knox Taylor in St. Paul, Minnesota.⁴⁰ This partnership lasted until 1892, after which Gilbert continued to practice alone, winning such important commissions as the Beaux-Arts style Minnesota State Capitol in Minneapolis, MN (1895-1905; NR, 1972). Gilbert left for New York City in 1899, where his career continued to flourish and he completed his most famous works, including the Beaux-Arts style United States Custom House in New York City (1901-1907; NHL, 1972), the Gothic style West Street Building at 90 West Street in Manhattan (1905-07; NR, 2007), the Gothic style Woolworth Building at 233 Broadway in Manhattan (1911-1913; NHL, 1966), the Gothic style New York Life Insurance Building in New York City at 346 Broadway (1925-1928; NR, 1982); and the Neoclassical style United States Supreme Court Building in Washington, D.C. (1933-1935).

Throughout his illustrious career, Gilbert's project type was diversified and included utilitarian buildings, such as warehouses, and highly-visible civic structures and skyscrapers. His aesthetic choices also varied by project: rather than having a single definitive aesthetic, Gilbert's style ranged from Beaux Arts to Italian Renaissance to French Gothic.⁴¹ In 1908, he made this statement about his aesthetic flexibility: "My friends have sometimes wondered why I do not always work in one style, but my response to this is that I find beauty in so many different things that I like to develop a subject in the style which seems best adapted to the purpose."⁴²

Many of Gilbert's buildings were Gothicized skyscrapers, the most famous of which was the Woolworth Building in New York City. As the tallest building in the world until 1930, the Woolworth Building earned Gilbert lasting fame both at home and abroad. Other notable works by Gilbert include the Beaux-Arts style state capitols in Arkansas (1899-1915; NR 1974) and West Virginia (1924-1932; NR, 1974); the modern industrial United States Army Military Ocean Terminal (also known as the Brooklyn Army Terminal), in Brooklyn, NY (1918; NR, 1983); the Neoclassical style United States Chamber of Commerce Building in Washington, D.C. (1922-1925; NR, 1992); three

³⁹ Zanesville, OH was partially laid out by Gilbert's grandfather, who was also the Mayor.

⁴⁰ During this time, Gilbert primarily designed residences, churches and office buildings in the Shingle Style or Richardsonian Romanesque. NR Nomination, p. 5.

⁴¹ Although Gilbert did not study at the Ecole des Beaux-Arts himself, he did study with several who did or who themselves studied with attendees, including Eugene Letang, William R. Ware and Charles McKim.

⁴² Postal, p. 4. To this end, most of his government buildings were done in the Beaux-Arts Style.

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Italian Renaissance style public libraries in St. Louis, MO (1909-1912), Detroit, MI (1915-1921; NR 1983) and New Haven, CT (1908-1911); the Beaux-Arts style Essex County Court House in Newark, NJ (1901), the Roman Revival style St. Louis Art Museum (1904), and the Beaux-Arts style Federal Courthouse in New York (1934; NR, 1987).

Gilbert chose the architectural expression of each project to suit its underlying purpose. A grand public monument like the United States Custom House should be classically adorned and draped in statuary because such a building would honor the nation and educate the public. A privately built skyscraper like the Woolworth Building should soar in Gothic, because an aesthetically pleasing building would earn a greater return for its owner. In line with that approach, Gilbert felt perfectly comfortable designing reinforced concrete industrial buildings in such a way as to express the simplicity and strength of the material.

Gunvald Aus⁴³

By mid-1913, specifications for the warehouse had been determined and several buildings on the site were demolished. Gunvald Aus (1861-1950) was hired as structural engineer and Gilbert asked him to prepare separate plans for reinforced concrete and steel. Aus collaborated with Gilbert on many projects, beginning with the dome of the Minnesota State Capital. Most of these projects were steel framed but Aus told Havemeyer that he felt comfortable with either material. Though concrete was used widely by 1910 and acknowledged to be less expensive than steel, Gilbert hoped that "suggestions from contractors" could be used to their advantage. The warehouse was put out to bid in October 1913 and by late November, the Turner Construction Company, specializing in reinforced concrete construction, had been selected.

Turner Construction Company⁴⁴

Founded by Henry Chandlee Turner in 1902, the firm was responsible for many of the largest and most important buildings in New York and New Jersey. Trained as a civil engineer, after college he worked with Ernest L. Ransome, the first major American builder to use reinforced concrete (see section below for more information on Ransome). Through an agreement with his former employer, Turner enjoyed exclusive patent rights to the Ransome system in the metropolitan area. This arrangement greatly benefited Turner, who following minor jobs for the new IRT subway system, built numerous structures for J. B. King & Co., Robert Gair, Irving Bush, and the Great Atlantic & Pacific Tea Company. To highlight the company's record, frequent letters and postcards were sent to Gilbert, including images of the recently completed A & P warehouse in Jersey City, which received an award from the art and architectural committee of the National Association of Cement Users in 1913. In subsequent years, Turner was responsible for many important structures, in both reinforced concrete and steel. Notable examples include the Breakers Hotel (Schultz & Weaver, 1926) in Palm Beach, Florida; Bloomingdale's Department Store (Starrett & Van Vleck, 1930); the General Motors Pavilion (Norman Bel Geddes) at the 1939 New York World's Fair; the Chase Manhattan Bank

⁴³ Postal, p. 4.

⁴⁴ Postal, pp. 4-5; based on Donald E. Wolfe, *Turner's First Century: A History of the Turner Construction Company* (Greenwich Publication Group, 2002) and "Special Centennial Issue," *Turner News*, March 2002.

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Building (Skidmore, Owings & Merrill, 1955-60; NR in Wall Street Historic District, 2007); Lincoln Center (various architects, begun 1960); and the Hearst Headquarters (Norman Foster, 2006). The firm celebrated its centennial in 2002.

Gilbert worked closely with Aus and Turner to meet the deadline. Plans, filed with the Brooklyn Bureau of Buildings on January 12, 1914, after some adjustments, were approved on April 22, 1914. Two mixing plants were installed at the site and the concreting began in March 1914. The number of workers gradually increased during the year, reaching a height of 672 men by June 1914. Construction was substantially complete in September 1914 and by March 1915 the plant was fully operational.⁴⁵ The rapid pace of construction did not go unnoticed. *Engineering News* reported that "records in concrete construction were made . . . the remarkable progress made in its construction is indicative of what can be done in reinforced concrete with proper organization and supervision."⁴⁶

Simplicity is the keynote of the Austin, Nichols & Company Warehouse which features broad concrete facades with a rhythm created by paired and tripartite windows, piers, and spandrels. The use of concrete was hardly surprising in such a building, as referenced by the Turner Construction Company in a letter to Gilbert on April 3, 1913, when they said: "Concrete, for grocery warehouses, has become almost the standard form of construction throughout the century."⁴⁷ Likewise the building's lack of ornamentation was referenced by Gilbert when he summarized that a building's "principle claim to beauty lies in its proportions, not in its adornment" and that "simplicity [should be] the basic principle in design in concrete."⁴⁸ He believed that simple, austere forms were the most appropriate for functional, industrial buildings and that any embellishment on such would be insincere.⁴⁹ Gilbert's design has been noted by the NYC Landmarks Preservation Commission to exhibit a few key Egyptian-inspired elements, namely a coved concrete cornice, battered walls, and wide expanses of unbroken wall.⁵⁰ In 1921, *Architecture* critic Arthur J. McEntee stated that the Austin, Nichols & Company Warehouse is "an excellent example of the modern adaptation of Egyptian architecture to the present requirements of commercialism."⁵¹

⁴⁵ "Big Grocery Concern Formally Opened at Kent Ave. & N. Third St.," *Brooklyn Daily Eagle*, March 25, 1915; "World's Greatest Grocery Business is Located Here," *Brooklyn Daily Eagle*, April 4, 1915.

⁴⁶ *Engineering News*, Vol. 72, No. 20., 966.

⁴⁷ Letter from Turner Construction Company to Cass Gilbert, April 3, 1913. Cass Gilbert Collection, New York Historical Society.

⁴⁸ Cass Gilbert, "The Greatest Elements of Monumental Architecture." *American Architect* 136: 2574 (August 5, 1929): 141; Gilbert, "Industrial Architecture in Concrete," p. 84.

⁴⁹ Barbara S. Christen and Steven Flanders, eds. *Cass Gilbert, Life and Work: Architect of the Public Domain*. New York: W.W. Norton and Company, 2001, p. 78-79.

⁵⁰ See Matthew A. Postal, Austin, Nichols & Co. Warehouse designation report. NYC Landmarks Preservation Commission, September 20, 2005.

⁵¹ Arthur J. McEntee, "Recent Developments in the Architectural Treatment of Concrete Industrial Buildings," *Architecture* 43 (Jan. 1921): 20.

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Reinforced Concrete Design

Thanks to engineer Ernest L. Ransome major advances in reinforced-concrete technology occurred in the United States in the late nineteenth and early twentieth centuries. These advances led to the increasing popularity of the material in the United States.

The reinforced concrete construction system patented by Ernest L. Ransome utilized iron bars that were cold-twisted much like licorice to create an irregular surface that would improve bond strength between the reinforcement bars and the concrete The merits of the Ransome system included ease and speed of construction, structural strength combined with an economic use of materials, and improved characteristics of fire resistance⁵²

In 1892, Ransome began construction of two important early concrete buildings in Palo Alto, California. Ransome's engineering design for the Leland Stanford J. Museum, built in 1892, featured a roof made entirely of concrete. The nearby women's dormitory at Stanford University was also built using Ransome's reinforced concrete system and was noted for its swift construction time. Ransome also experimented with concrete mixers, securing the first of several patents in 1884. In 1897 Ransome served as engineering and contractor for the Pacific Coast Borax Works in Bayonne, New Jersey with the floor slabs poured integrally with the building's framework; the floor slabs were supported on solid concrete columns. In 1902, Ransome sold the patent rights for his reinforced concrete construction system to Henry C. Turner.

Reinforced concrete created a major architectural revolution, but predominantly, at least at first, in industrial architecture. In the words of historian Reyner Banham:

Around 1900...the action and the excitement were not in iron and steel but in concrete, which was about to take off into the most spectacular stage of its development in the United States. The new men...were above all specialists in concrete, and their subject matter – the Daylight factory and the grain elevator – was to be (along with bridge building) concrete's primary province.⁵³

Banham argued that these structures constituted

...some of the true sources of the International Style, which will remain, as far as anyone can yet see, the dominant style of the high art of architecture in the twentieth century.⁵⁴

The architects of these structures – the “specialists in concrete” – tended to be lesser known practitioners, often working in industrial districts far from the major metropolitan areas of New York and Chicago. Surprisingly, however, one of the earliest such practitioners (whom Banham tellingly

⁵² John G. Waite Associates, Architects. “Old Nassau County Courthouse Historic Structure Report,” (March 2003), p. 7.

⁵³ Reyner Banham, *A Concrete Atlantis: U.S. Industrial Building and European Modern Architecture 1900-1925* (Cambridge, Mass: MIT Press, 1986), p. 106.

⁵⁴ *Ibid.*, p.107.

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neglected to include in his study) was a high-profile, high-style architect, based in New York City, who had a prominent national practice better known for traditional styles and materials: Cass Gilbert.

By 1923, Gilbert's work in concrete was well recognized in America. In that year, the *Architectural Forum* devoted its September issue entirely to the subject of concrete construction, and invited Cass Gilbert to write the opening essay, "Industrial Architecture in Concrete." The premise of the entire issue, according to an "Editorial Comment" at the end, was that such buildings had the potential to create an "original" American architecture:

The great outstanding promise that industrial building holds for the profession is the opportunity of creating a style of architecture that will truly interpret modern conditions. Without precedent to fetter the hand of the designer, the simple requirements of industrial buildings should suggest appropriate forms that may eventually lead the way to the long sought American style.⁵⁵

Gilbert, in his opening article, took a less ideological stance, discussing not what opportunities concrete offered American architecture, but rather how American architects ought to design concrete structures. His approach was quite straightforward:

It may be taken as an axiom in concrete construction that the simpler the form the better the design. The nature of the material dictates the form of all its parts, and assuming that the purpose of the structure is kept in mind, as it should be, this purpose is necessarily expressed in very simple terms.⁵⁶

Coming from the designer of such grand, high-style and highly decorative buildings as the Custom House and the Woolworth Building, such sentiments might sound surprising. But Gilbert was, among other things, a pragmatic architect, who once defined a building as "a machine that makes the land pay." He believed economy of cost to be an unavoidable consideration in architecture:

As we build with a primary view to low cost (a matter which concerned the ancients very little, as they had slave labor for their larger enterprises), we are forced to consider economy at every stage.⁵⁷

If economy led to the use of concrete, then so be it. And if so, rather than attempting to adapt concrete to existing architectural notions, architects needed to adapt their designs to the nature of concrete:

If concrete, after full trial, proves to be the economical material for use, it will in time be well designed. One thing we may be sure of, and that is that for the present at least the evidence before us points toward simplicity as the basic principle of design in concrete, and that is a lesson much needed in this complex, restless age. Why not make simplicity, then, the keynote, and welcome it as a help and not an obstacle to good design? Why attempt to adorn this simplicity with trinkets and gewgaws and patterns and raw bits of colored tiles or panels of

⁵⁵ "Editorial Comment," *Architectural Forum*, Vol. 39, September 1923, p. 152.

⁵⁶ Cass Gilbert, "Industrial architecture in concrete," *Architectural Forum*, Vol. 39, September 1923, p.83.

⁵⁷ Gilbert, "Industrial architecture in concrete," *op. cit.*, p. 84:

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brick, or fictitious corbels, cornices, capitals or other details culled from traditional architecture constructed of other materials? In short, the logic forbids such intrusions.⁵⁸

This approach did not make Gilbert an ideologue for concrete, or, by extension, for the Modern movement:

"I hold no brief," as the phrase is, for concrete as against other useful materials. In other words, I do not prefer it above others, except in certain specific cases where the nature of the structure or economic reasons imply its use. It is not always the most economical material, though it frequently is so, and as a structural material it requires very expert handling. Bad concrete is not only worthless; it is dangerous, and concrete buildings should not be attempted by incompetent or negligent builders. I remember my old friend George B. Post making a brief speech on the subject of reinforced concrete some years ago in London, in which he summarized the whole matter by saying: "Concrete is, as Sam Weller said of veal pies, 'veal pies is werry good things when you knows the lady as made 'em.'"

But even as he proposed "simplicity" as the guiding principle for designing in concrete, he also believed in the material's aesthetic possibilities:

There is no reason why our industrial buildings should be ugly. It is not necessary for a building to be ugly in order to be useful. That's why skillful architects should design these buildings.... In the fact that it is difficult to design an industrial building and make it look well, lies the very reason why a highly expert architect should be retained, and most of the best concrete construction contractors know this and prefer to work under, or with, such an architect.⁵⁹

How then should concrete buildings be designed?

There are great possibilities of texture in concrete, as yet untried, and texture is needed to dispel a barrenness of effect in broad surfaces. In stone masonry or in brickwork the joints alone would give a certain quality of "texture" in the surface of a wall, but while there are no joints in concrete (except those widely spaced for expansion) there is no reason why the texture of the surface may not be made beautiful.... I have seen a concrete bridge where the aggregate was of a trap rock or granite that gave a rich, warm color and a beautiful texture to the surface that could scarcely be rivaled by any other material.... There is something very fine about a great gray mass of building, all one color, all one tone, yet modified by the sunlight or shadow to pearly gray of wonderful delicacy. It is the big simplicity of the thing that counts, and if there may be projections for necessary fire towers or elevator shafts, or other salients, if there may be low roof structures for tank houses or machinery, and if the glass surfaces are kept in scale, there may be silhouette, and light and shade and shadow and reflected light that will make a picture not easily to be forgotten. Such effects may occasionally be seen in concrete industrial buildings.⁶⁰

⁵⁸ *Ibid.*

⁵⁹ *Ibid.*, p. 86.

⁶⁰ *Ibid.*, p. 84-85.

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Comparisons

The Austin, Nichols & Company Warehouse served as a prototype for two of Gilbert's later commissions: the Brooklyn Army Terminal (NR, 1983) and the R.C. Williams Warehouse (NR, 2005). The nationally significant Brooklyn Army Terminal (1916-1919) resembles the Austin, Nichols & Company Warehouse in its austerity and innovative use of reinforced concrete construction. Located between 58th and 65th Streets and 2nd Avenue in Brooklyn, NY, the Brooklyn Army Terminal was one of the largest reinforced concrete complexes built at the time of its construction with two warehouses, two storehouses, adjoining structures, bridges and piers.⁶¹ The 93-acre site was used as warehouses and as a point of embarkation for military troops and supplies.⁶² Like the Austin, Nichols & Company Warehouse, the complex was carefully integrated with several modes of transportation, including railroad tracks that went beneath the building so that train cargo could be directly accessed from the loading docks.

The two reinforced concrete warehouses on the Terminal site are the most similar to the Austin, Nichols & Company Warehouse. These warehouses are both eight stories with open floors plans that are only interrupted by evenly spaced, reinforced concrete capitals. As for the exterior, the Brooklyn Army Terminal buildings are similar in the austere appearance and form to the Austin, Nichols & Company Warehouse, with modestly ornamented rectangular box shapes, flat roofs and stripped down pilasters and concrete projections. For the Brooklyn Army Terminal complex design, Gilbert took the rectangular box shape of the Austin, Nichols & Company Warehouse a step further by embellishing the corners of the buildings with tower-like projections. These fortress-like projections served to emphasize the vertical circulation patterns and broke up the massive block-like horizontal storage spaces.⁶³ Gilbert wrote that the building was characterized by "extreme simplicity...the structures are impressive and majestic because of their vast scale, severe design and fine proportions."⁶⁴ The evenly punctuated vertical bays with three narrow windows in each strongly resemble those of the Austin, Nichols & Company Warehouse. While the Brooklyn Army Terminal and the Williams Warehouse both employ "mushroom" columns with flared capitals, Gilbert used simpler columns for the earlier Austin, Nichols & Company Warehouse.

The Brooklyn Army Terminal complex received praise early on from internationally acclaimed architect Le Corbusier who cited it in *Towards a New Architecture* (1923) as a prototype for international modernism; late-twentieth-century architect Robert A. M. Stern, commented that the Brooklyn Army Terminal was "one of the most aesthetically compelling industrial complexes ever erected in the United States." Gilbert himself described the use of concrete and austere appearance of the warehouses at the Brooklyn Army Terminal by saying,

there is something very fine about a great gray mass of building, all one color, all one tone, yet modified by the sunlight or shadow to pearly gray of wonderful delicacy. It is the big

⁶¹ The contractor was the Turner Construction Company, who also worked on the Austin, Nichols Warehouse.

⁶² The complex was also built with the idea that it could later be easily converted into an industrial use.

⁶³ Sharon Irish, *Cass Gilbert, Architect* (New York: Monacelli Press, 1999), 148.

⁶⁴ Margaret Heilbrun, editor, *Inventing the Skyline, the Architecture of Cass Gilbert* (New York: Columbia University Press, 2000), 135.

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simplicity of the thing that counts...there may be silhouette, and light and shade and shadow and reflected light that will make a picture not easily to be forgotten. Such effects may occasionally be seen in concrete industrial buildings. ...It was this sort of thing I sought to achieve in the Army Supply Base in Brooklyn, and these are among the considerations that dictated its design. If it has in any respect been successful as a work of architecture (aside from its practical efficiency), it is because of its manifest simplicity.⁶⁵

The R.C. Williams Warehouse, constructed in 1927 for another large wholesale grocer is a 10-story, 20,000 square foot building occupying the entire blockfront of Tenth Avenue between West 25th and West 26th Streets in Manhattan.⁶⁶ The R.C. Williams Company was established in 1809 on Long Island, NY, by Richard S. Williams and John Mott and was one of Austin, Nichols & Company's largest competitors.⁶⁷ The R.C. Williams Company undoubtedly knew of Cass Gilbert from his national reputation, but the company also knew about his earlier warehouse for Austin, Nichols and Company. As part of the planning process for the Williams Warehouse, John Rockart of Cass Gilbert's office, took Williams on a tour of the Austin, Nichols warehouse, where they inspected everything from tanks for olive oil storage to peanut butter machinery to the caviar room.⁶⁸ Like the Austin, Nichols & Company Warehouse, the R.C. Williams Warehouse has a reinforced concrete façade broken up by broad columns in bays comprised of three rectangular windows.⁶⁹ However, the overall appearance of the building more closely resembles the Brooklyn Army Terminal with tower-like projections at the corners with narrow slit windows that give the building the appearance of a fortress. The interior of the building has reinforced concrete mushroom columns (nine running North to South, four running East to West), which are the only interruption to the otherwise open floor plan. In the center of each floor is a shaft area that contains the elevator shafts, staircases and fire towers. Instead of having the rail lines that ran through Austin, Nichols & Company Warehouse, 259-273 10th Avenue had its own elevated electrified private right-of-way.⁷⁰ In contrast, the Austin, Nichols & Company Warehouse is more austere in its ornamentation, with the overall appearance of a large rectangular box with a slightly splayed base and coved cornice.

⁶⁵ Gilbert, "Industrial Architecture in Concrete," p. 84-85.

⁶⁶ R.C. Williams, one of the oldest grocers in the country, was established in 1811.

⁶⁷ National Register Nomination. "R.C. Williams Warehouse," 2005, 8/1. R.C. Williams, like Austin, Nichols & Company, capitalized on the profitable liquor industry, when they began distributing liquor c. 1933.

⁶⁸ John R. Rockart Report, December 31, 1926, in the Cass Gilbert Papers at the New York Historical Society.

⁶⁹ The contractor was the Barney-Ahlers Construction Company.

⁷⁰ National Register Nomination. "R.C. Williams Warehouse."

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Conclusion

"The Austin, Nichols & Co. Warehouse remains one of the most impressive structures on the East River; not only is it a superb and highly visible example of early twentieth century engineering, but it is also one of the earliest reinforced concrete warehouses in the United States designed by a nationally prominent architect."⁷¹ The warehouse is a masterful example of how Gilbert successfully merged aesthetic, functional, and fiscal considerations. Built to house the largest grocery wholesaler of its time, the building was an engineering marvel, satisfying programs of food processing, storage, refrigeration, and delivery through a host of the latest transport mechanisms of the day. His design provided an efficient, economical reinforced concrete building with a clean, austere style that was a forerunner to the warehouses and factories common from the mid-twentieth century to the present day.

⁷¹ Postal, p. 2.

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10. Geographical Data

Acreage of Property less than one acre

UTM References

(Place additional UTM references on a continuation sheet.)

1 18 587416 4507824
Zone Easting Northing

3 18
Zone Easting Northing

2 18

4 18

Verbal Boundary Description

(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification

(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By (*See continuation sheet for author)

name/title Contact: Kathleen A. Howe, Historic Preservation Specialist
NYS Office of Parks, Recreation and Historic Preservation
organization Bureau of Historic Preservation date April 16, 2007
street & number Peebles Island, P.O. Box 189 telephone 518-237-8643, ext. 3266
city or town Waterford state NY zip code 12188

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A **USGS map** (7.5 or 15 minute series) indicating the property's location
A **Sketch map** for historic districts and properties having large acreage or numerous resources.

Photographs

Representative **black and white photographs** of the property.

Additional items

(Check with SHPO or FPO for any additional items)

Property Owner (Complete this item at the request of the SHPO or FPO)

name 184 Kent Fee, LLC attn: Thomas O'Gara
street & number 300 East 42nd Street telephone (212) 687-3444
city or town New York state NY zip code 10017

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10. Geographical Data

Verbal Boundary Description

The boundary of the nominated property is shown as the heavy black line on the accompanying map. The property is known as 184 Kent Avenue. Borough of Brooklyn Tax Map Block 2348, Lot 1.

Beginning at the corner formed by the intersection of the westerly side of the Kent Avenue with the northerly side of North 3rd Street, running thence northwardly along the westerly side of Kent Avenue, 178 feet and 67 one-hundredths of a foot, thence westwardly and at right angles to the said westerly side of Kent Avenue 365 feet and 36 one-hundredths of a foot to a stake, thence westwardly at an angle of 171deg20'20" with the last course, 84 feet and 63 one-hundredths of a foot to the existing bulkhead line 166 feet and 16 one-hundredths of a foot to the northerly side of North 3rd Street (or a projection westwardly on a straight line thereof) meeting said north side of North 3rd Street at an angle of 93deg0'45", thence eastwardly along the north side of North 3rd Street 460 feet and 32 one-hundredths of a foot to the said westwardly line of Kent Avenue at the point or place of beginning, said premises containing in area 82,857 square feet.⁷²

Boundary Justification

The nominated property includes the entire parcel on which the building is situated and historically associated with the nominated property. No historically associated resources have been excluded.

⁷² Cass Gilbert Collection, New York Historical Society.

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Section 11 Page 1

Austin, Nichols & Company Warehouse

Name of Property

Kings County, New York

County and State

Form researched and prepared by

Sheryl Jaslow

Powers & Co., Inc.

211 North 13th Street, 5th Floor

Philadelphia, PA 19107

215-636-0192

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Section 11 Page 2

Austin, Nichols & Company Warehouse
Name of Property
Kings County, New York
County and State

PHOTOGRAPH LIST

Austin, Nichols & Company Warehouse
Kings County, NY
Logan McClintic-Smith
October 2006 (photos 1-20)
January 2007 (photos 21 & 22)

Negatives on file: Powers & Company, Inc., 211 North 13th Street, 5th Floor, Philadelphia, PA 19107

<u>Photograph #</u>	<u>Description of View</u>
1	View facing southwest at East and North Elevations
2	View facing northwest at East and South elevations
3	View facing northwest at East and South elevations
4	View facing northwest at South elevation, West end
5	View facing north, Detail of Window, South elevation, West end
6	Roof, View facing west
7	Roof, View facing east
8	6 th floor, view facing northwest
9	5 th floor, view facing west
10	4 th floor, view facing west
11	3 rd floor, Stairway B, view facing northwest
12	2 nd floor, Stairway C, view facing south
13	1 st floor, view facing east, East end
14	1 st floor, view facing east
15	1 st floor, view facing east
16	1 st floor, view facing north, Detail of Loading Bay
17	1 st floor, view facing west
18	1 st floor, view facing west, West end
19	1 st floor, view facing southwest, West end
20	1 st floor, view facing north
21	North elevation and partial east elevation, looking southwest
22	North and west elevations, looking southeast

Appendix A

"Rapid Construction of a Large Reinforced-Concrete Warehouse." *Engineering News*, November 12, 1914, Vol. 72, No. 20; pp. 966-67.

OASIS Map

Austin, Nichols & Company Warehouse, 184 Kent Ave., Brooklyn, Kings Co., NY



width of map is 0.44 miles.

- | | | |
|-----------|----------------------|----------------------|
| Streets | Bridges / Overpasses | Block/Lot Boundaries |
| Buildings | NJ Forested Areas | |

nyc oasis
 Map provided by the
Open Accessible Space
Information System
 (www.OASISnyc.net)
 of New York City

NYC Basemap copyrighted by the New York City
 Department of Environmental Protection, 2000.

The Bytes of the Big Apple (TM) PLUTO (TM) and Tax
 Block & Tax Lot files are copyrighted by the New York
 City Department of City Planning.



Austin, Nichols & Co. Warehouse
 Kings Co, NY

Brooklyn Block 2348 Lot 1
 Lot frontage: 178.67 feet Lot Depth: 460.25 feet



Site Plan (n.t.s.)

The Austin, Nichols Warehouse

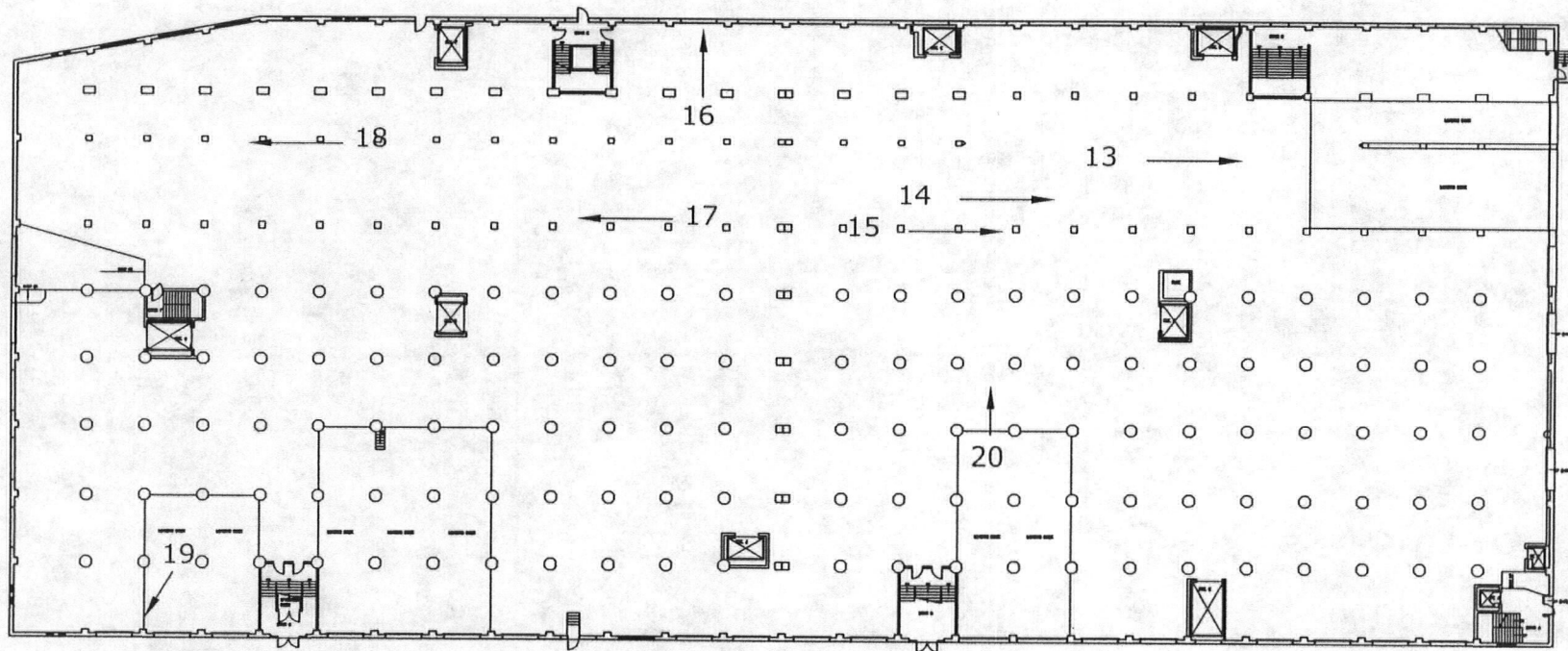
184 Kent Avenue

Brooklyn, NY 11211

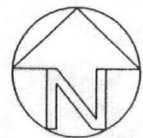
Kings County

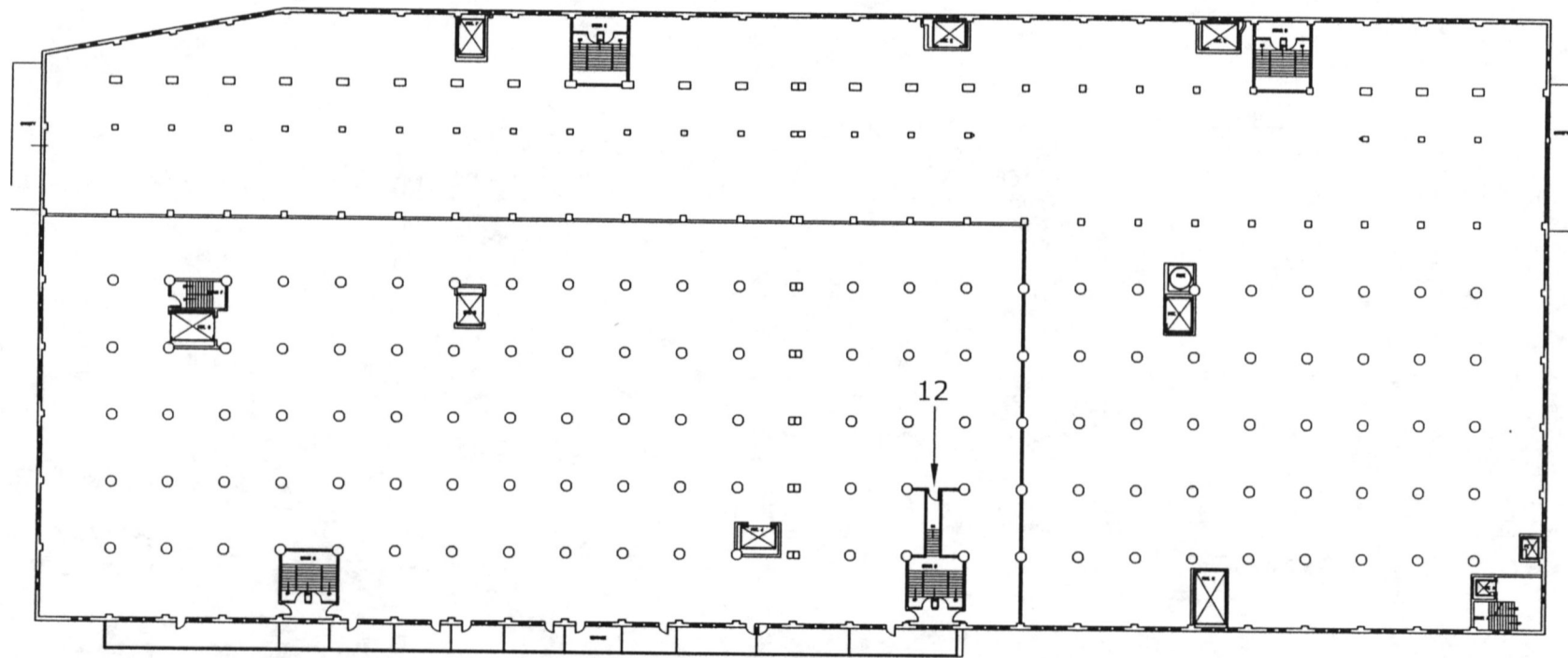
National Register Boundary





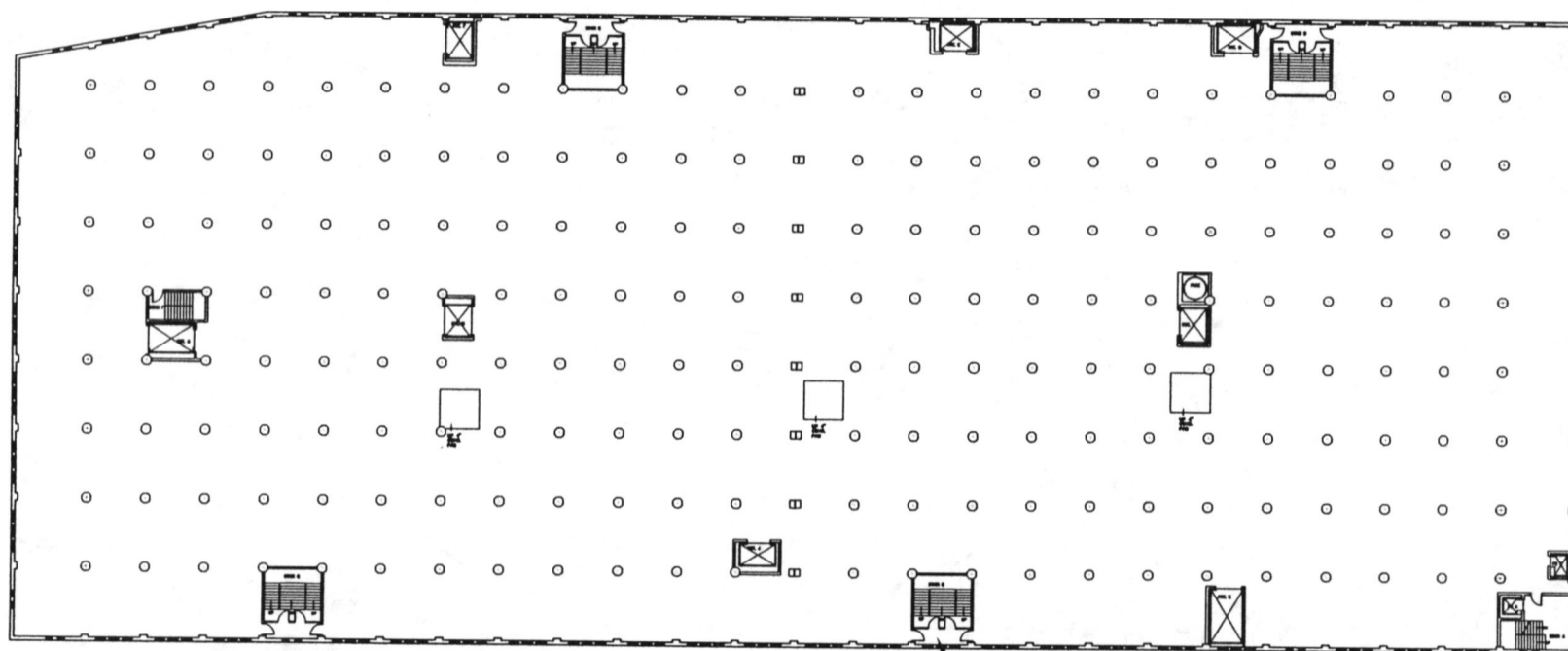
Existing Plans
 1st Floor
 Austin, Nichols & Co. Warehouse
 184 Kent Avenue
 Brooklyn, NY





Existing Plans
2nd Floor
Austin, Nichols & Co. Warehouse
184 Kent Avenue
Brooklyn, NY

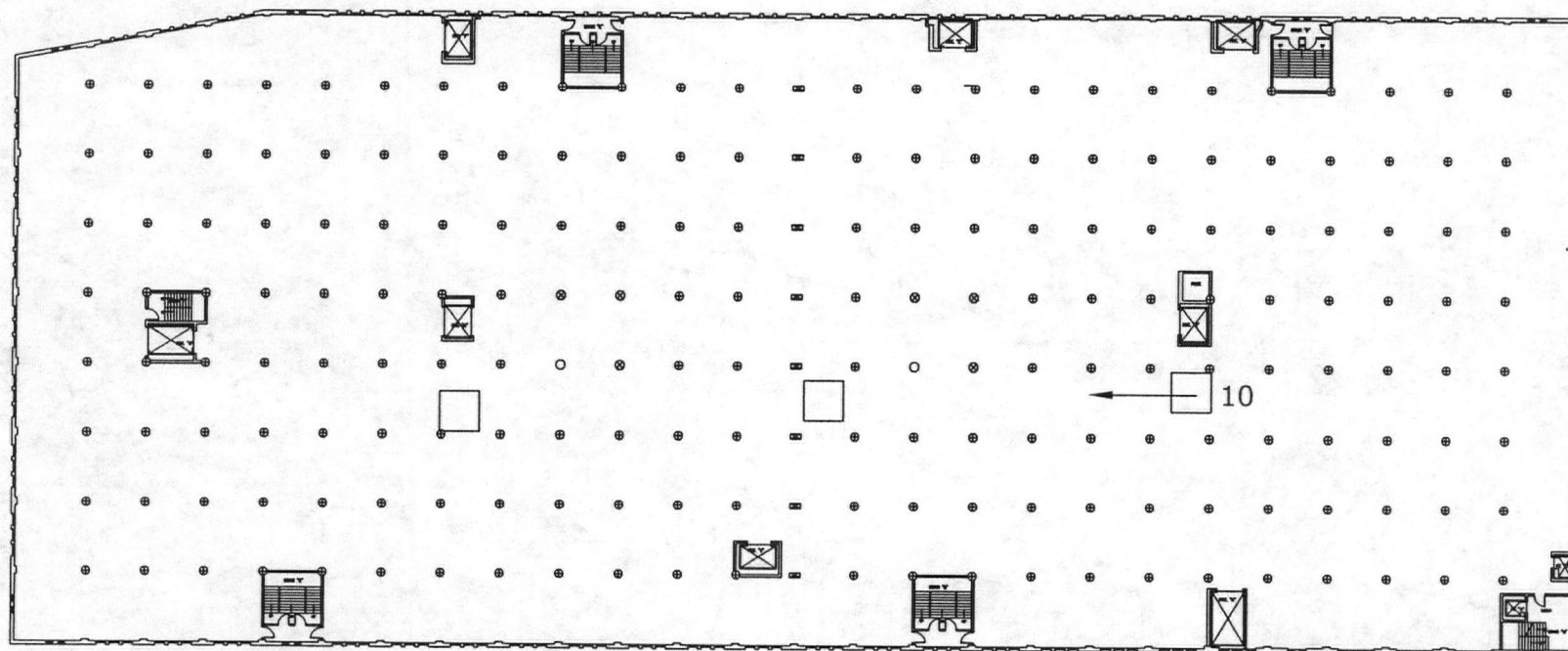




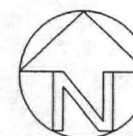
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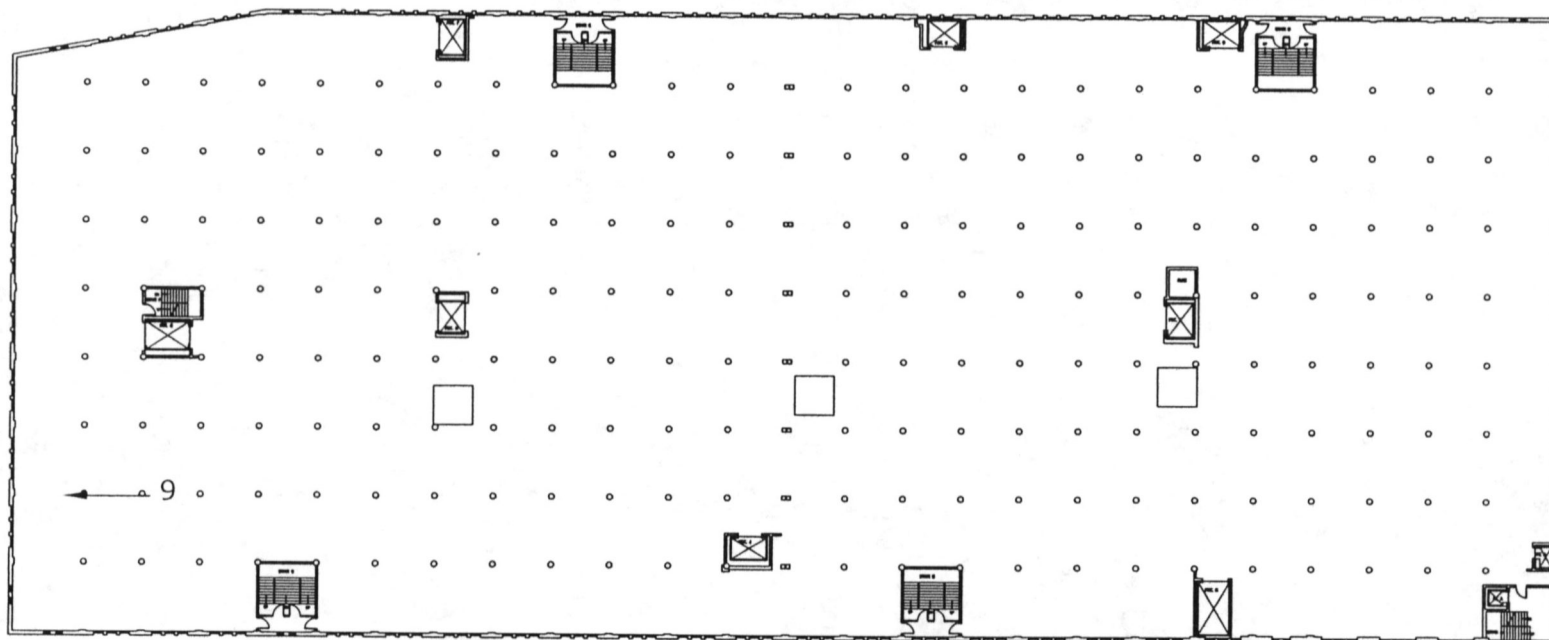
Existing Plans
3rd Floor
Austin, Nichols & Co. Warehouse
184 Kent Avenue
Brooklyn, NY





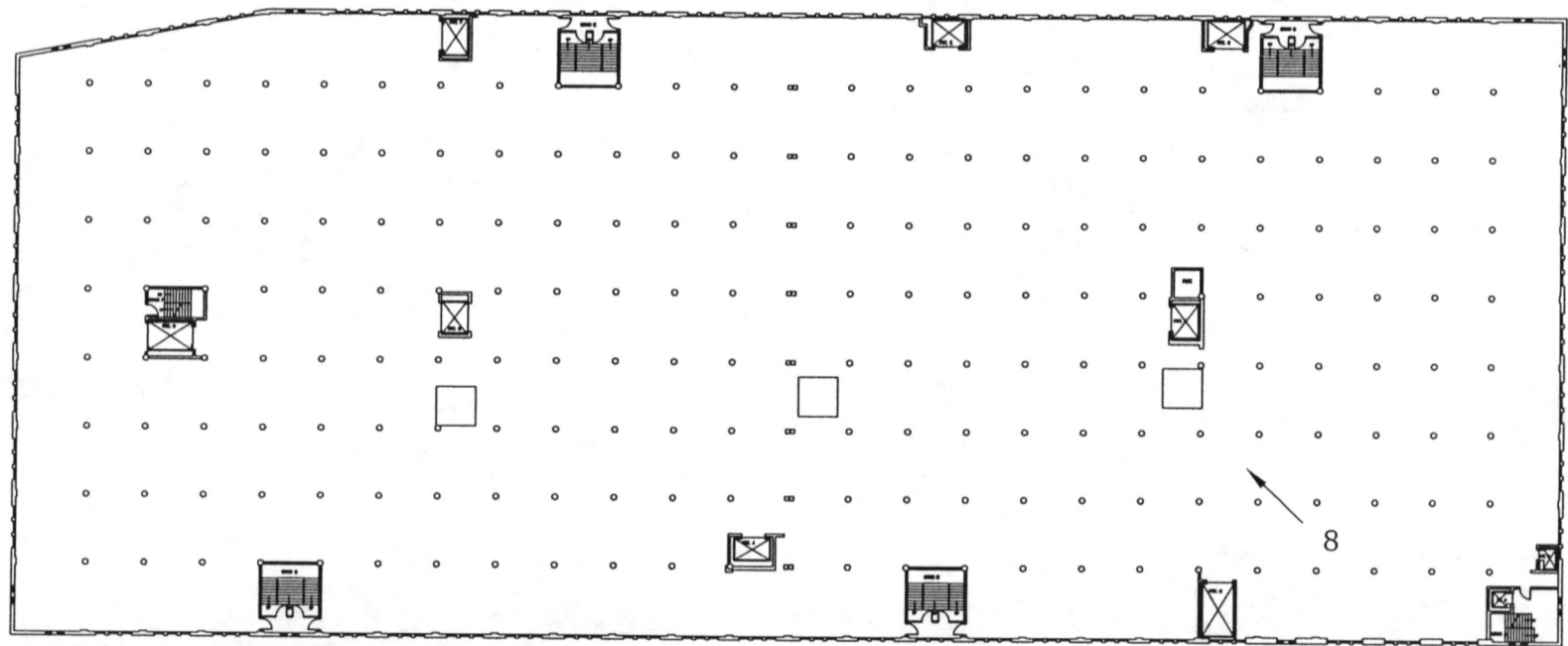
Existing Plans
4th Floor
Austin, Nichols & Co. Warehouse
184 Kent Avenue
Brooklyn, NY



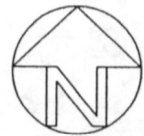


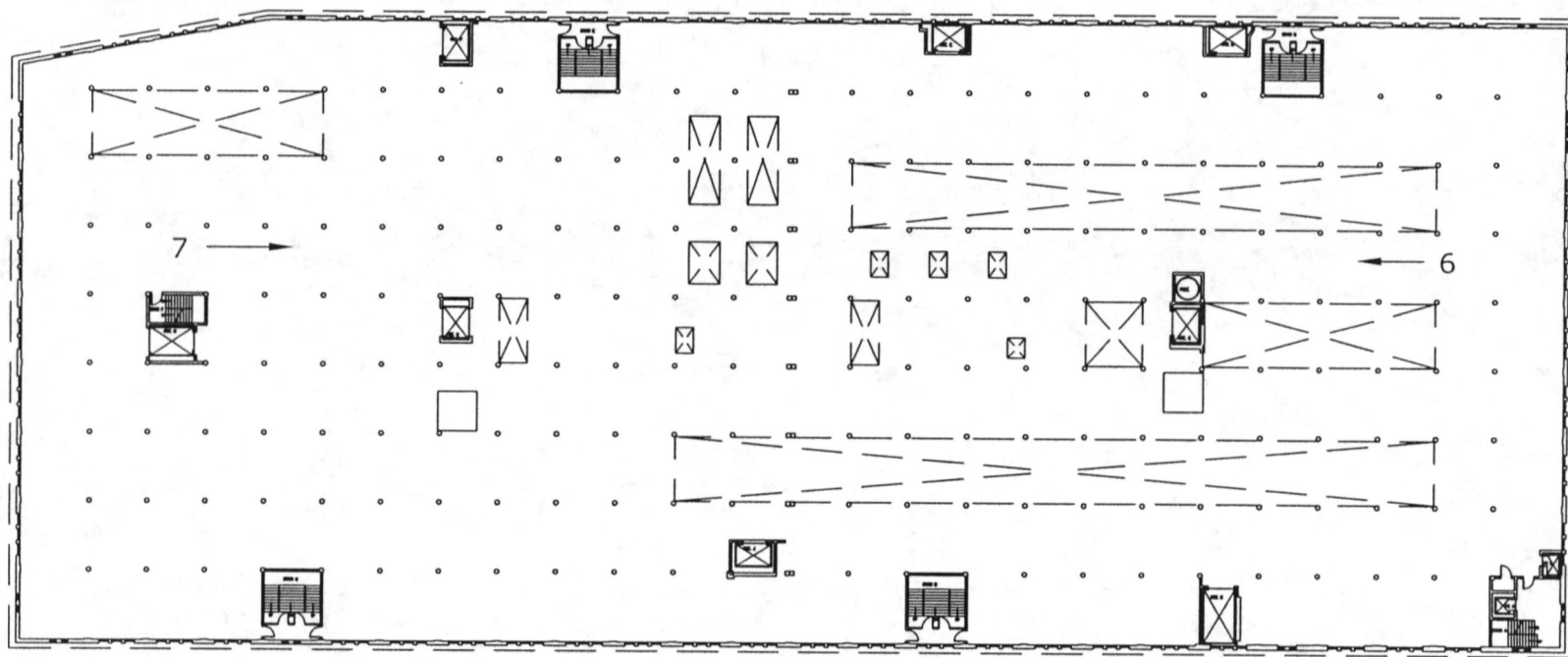
Existing Plans
5th Floor
Austin, Nichols & Co. Warehouse
184 Kent Avenue
Brooklyn, NY





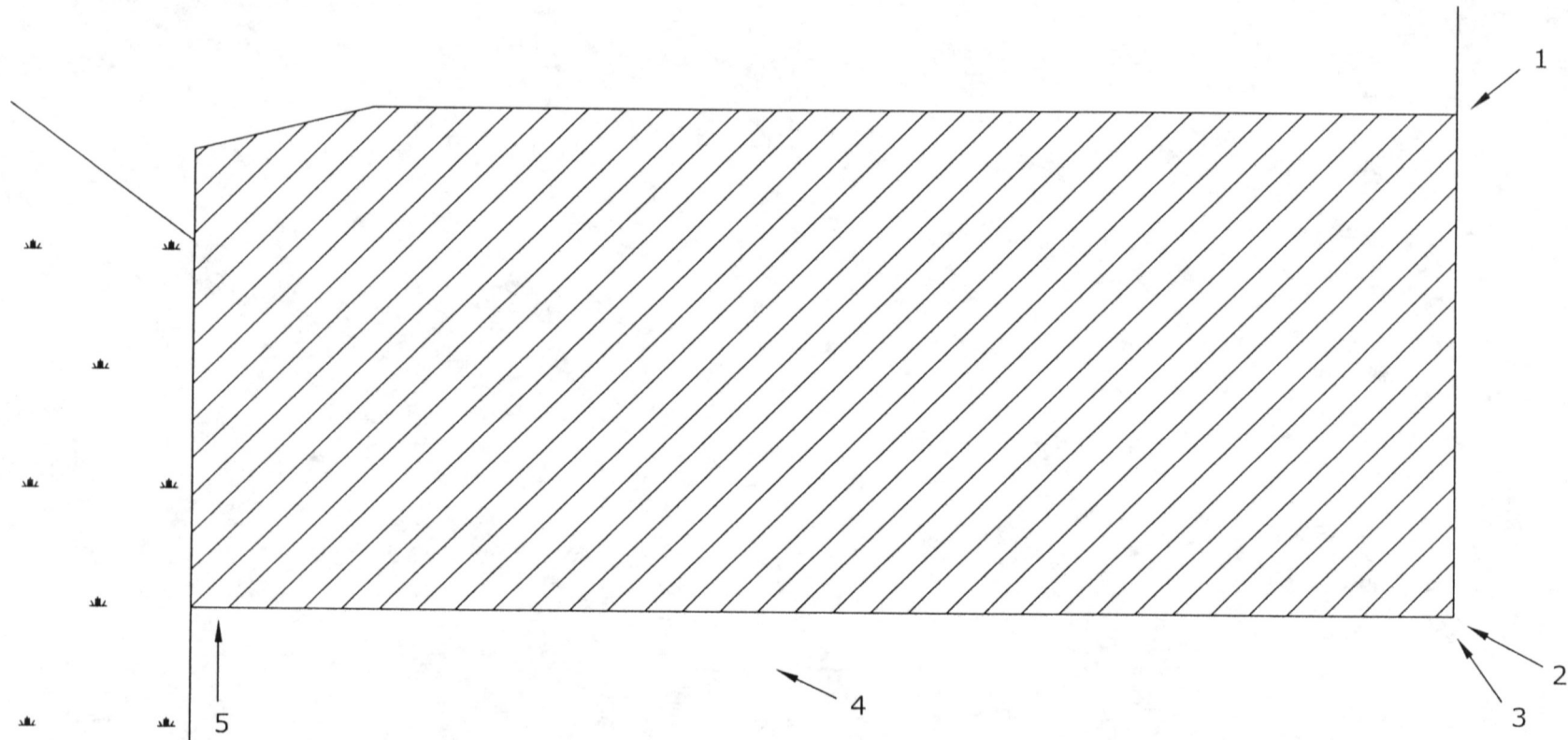
Existing Plans
6th Floor
Austin, Nichols & Co. Warehouse
184 Kent Avenue
Brooklyn, NY





Existing Plans
Roof Plan
Austin, Nichols & Co. Warehouse
184 Kent Avenue
Brooklyn, NY





Existing Plans
Site Plan
Austin, Nichols & Co. Warehouse
184 Kent Avenue
Brooklyn, NY



UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY Austin, Nichols and Company Warehouse
NAME:

MULTIPLE
NAME:

STATE & COUNTY: NEW YORK, Kings

DATE RECEIVED: 5/18/07 DATE OF PENDING LIST: 6/05/07
DATE OF 16TH DAY: 6/20/07 DATE OF 45TH DAY: 7/01/07
DATE OF WEEKLY LIST:

REFERENCE NUMBER: 07000629

REASONS FOR REVIEW:

APPEAL: N DATA PROBLEM: N LANDSCAPE: N LESS THAN 50 YEARS: N
OTHER: N PDIL: N PERIOD: N PROGRAM UNAPPROVED: N
REQUEST: N SAMPLE: N SLR DRAFT: N NATIONAL: Y

COMMENT WAIVER: N

☒ ACCEPT ☐ RETURN ☐ REJECT 6/28/07 DATE

ABSTRACT/SUMMARY COMMENTS:

*Significant on the state level
for architecture Engineering or
industry*

RECOM./CRITERIA A+C

REVIEWER Abernathy DISCIPLINE _____

TELEPHONE _____ DATE _____

DOCUMENTATION see attached comments Y/N see attached SLR Y/N

If a nomination is returned to the nominating authority, the nomination is no longer under consideration by the NPS.



ASTIN, NICHOLS & CO. WAREHOUSE
KINGS COUNTY, NY
PHOTO # 1



AUSTIN, NICHOLS & CO. WAREHOUSE

WINGS COUNTY, NY

PHOTO #2



ASTIN, NICHOLS & CO. WAREHOUSE
WINGS COUNTY, NC
PHOTO #3



AUSTIN, NICHOLS & Co. WAREHOUSE
WINGS COUNTY, NY
PHOTO #4



AUSTIN, NICHOLS & CO. WAREHOUSE
WINGS COUNTY, NT
PHOTO # 5



AUSTIN, NICHOLS & CO. WAREHOUSE
KINGS COUNTY, NY
PHOTO # 6



AUSTIN, NICHOLS & CO. WAREHOUSE
ULINGS COUNTY, NY
PHOTO #7



AVSTIN, NICHOLS & CO WAREHOUSE
WINGS COUNTY, NY
PHOTO #8



AUSTIN, NICHOLS & CO WAREHOUSE
KINGS COUNTY, NY
PHOTO #9



AUSTIN, NICHOLS & CO. WAREHOUSE
KINGS COUNTY, NY
PHOTO # 10



ASTIN, NICHOLS & CO. WAREHOUSE
KINGS COUNTY, NY
PHOTO # 11



ASTIN, NICHOLS & CO. WAREHOUSE
KINGS COUNTY, NY
PHOTO #12



NO PARKING
8 AM - 6 PM
←
(N. on 17th)

AUSTIN, NICHOLS & CO. WAREHOUSE
KINGS COUNTY, NY
PHOTO #13



AUSTIN, NICHOLS & CO. WAREHOUSE
KINGS COUNTY, NT
PHOTO # 14



ARTIN, NICHOLS & CO. WAREHOUSE
KINGS COUNTY, NY
PHOTO # 15



AUSTIN, NICHOLS & CO. WAREHOUSE
WINGS COUNTY, NY
PHOTO #16



AUSTIN, NICHOLS & CO. WAREHOUSE
WINGS COUNTY, NY
PHOTO # 17



AUSTIN, NICHOLS & Co. WAREHOUSE
LINCOLN COUNTY, NT
PHOTO #18



ASTIN, NICHOLS & CO. WAREHOUSE
KINGS COUNTY, NY
PHOTO #19



ARTIN, NICHOLS & CO. WAREHOUSE
KINGS COUNTY, NY
PHOTO #20



IMG_4811ed1.jpg 003 © CD
*25-2001 168 N N N N N 0224 02.05.07 AS+01 Z348.8/100.0

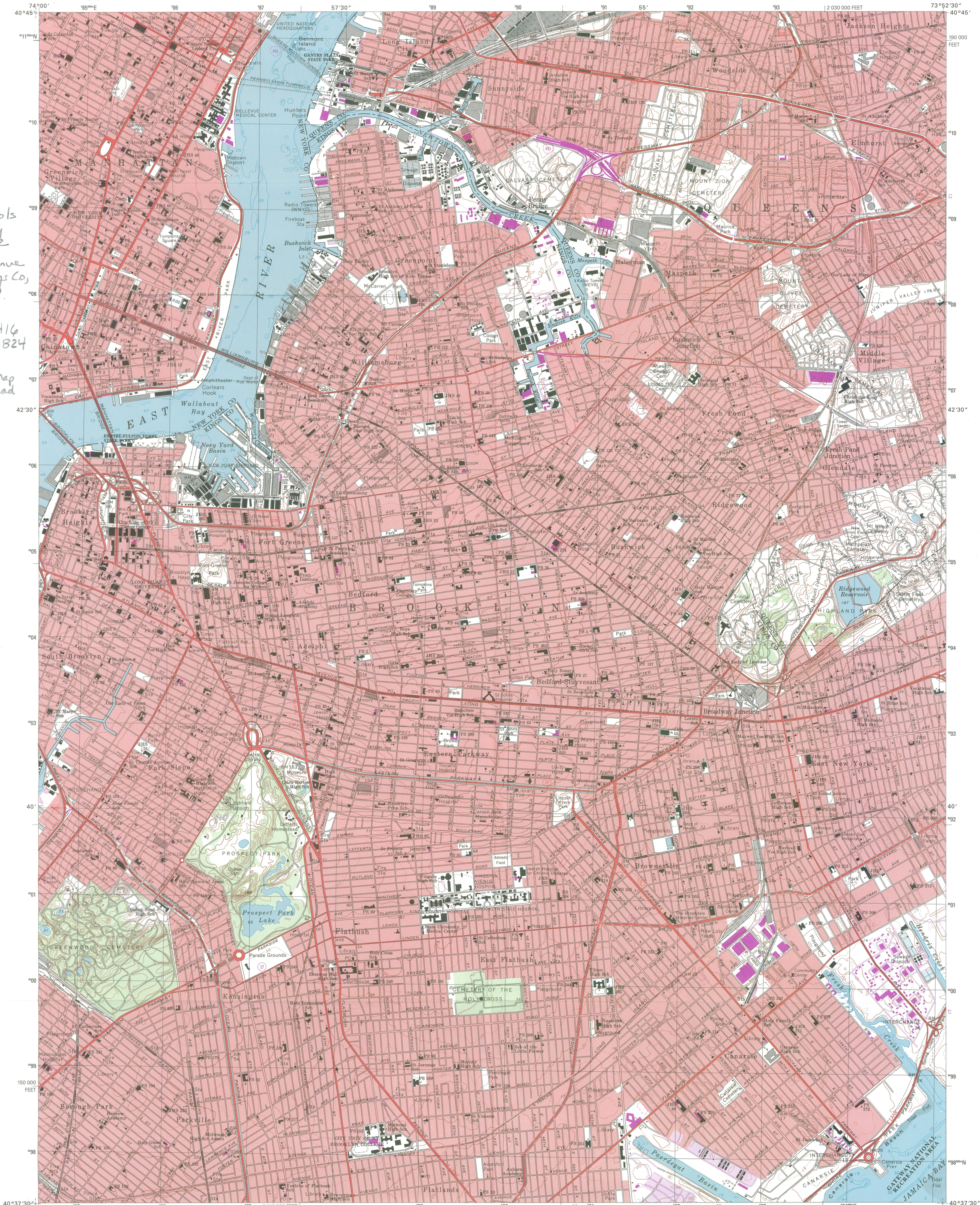
AUSTIN, NICHOLS & Co. WAREHOUSE
KINGS COUNTY, NY
PHOTO # 21



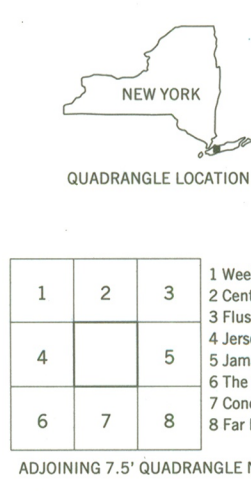
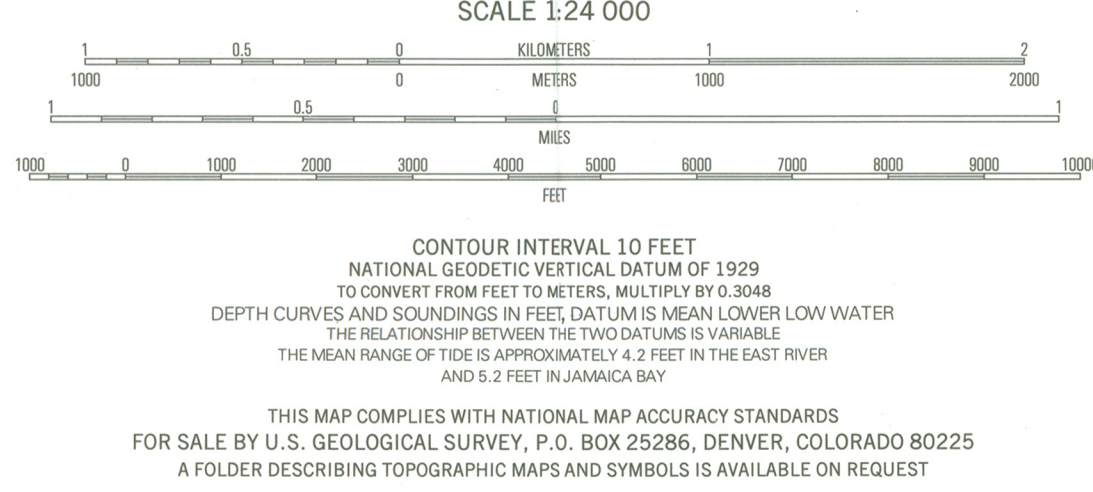
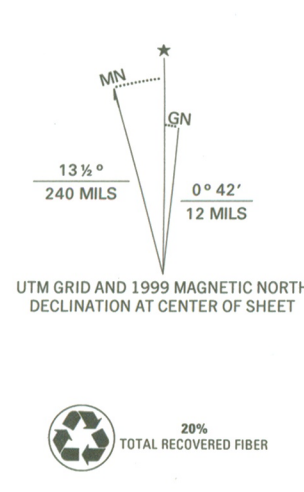
Austin, Nichols
& Company
Warehouse
184 Kent Avenue
Brooklyn, Kings Co.,
NY

Zone 18
Easting 587416
Northing 4507824

USGS Topo map
Brooklyn Quad
1:24000



Produced by the United States Geological Survey
Topography compiled 1966. Planimetry derived from imagery taken 1977 and other sources. Photomaps using imagery dated 1995; no major culture or drainage changes observed. Survey control current as of 1967. Boundaries, other than corporate, revised 1999
Selected hydrographic data compiled from NOS charts 275 (1964), 542 (1967), and 745 (1966). This information is not intended for navigational purposes
North American Datum of 1927 (NAD 27). Projection and 10 000-foot ticks: New York coordinate system, Long Island zone (transverse Mercator)
1000-meter Universal Transverse Mercator grid, zone 18
North American Datum of 1983 (NAD 83) is shown by dashed corner ticks. The values of the shift between NAD 27 and NAD 83 for 7.5-minute intersections are obtainable from National Geodetic Survey NADCON software
There may be private inholdings within the boundaries of the National or State reservations shown on this map
Entire area lies within New York City
Information shown in purple may not meet USGS content standards and may conflict with previously mapped contours



1	2	3
4	5	6
7	8	9

BROOKLYN, NY
1995
NIMA 6265 III NW-SERIES V821





The New York City Landmarks Preservation Commission

1 Centre Street, 9th Floor North, New York NY 10007 TEL: 212-669-7922 FAX: 212-669-7797

<http://nyc.gov/landmarks/>



RONDA WIST
EXECUTIVE DIRECTOR
rwist@lpc.nyc.gov

January 19, 2007

JAN 25 2007

Ms. Ruth Pierpont, Director
New York State Office of Parks, Recreation
and Historic Preservation
P.O. Box 189
Peebles Island
Waterford, New York 12188-0189

Re: Austin, Nichols & Company Warehouse, 184 Kent
Avenue, Brooklyn, New York

Dear Ms. Pierpont:

I write on behalf of Chair Robert B. Tierney in response to your request for comment on the eligibility of the Austin, Nichols & Company Warehouse at 184 Kent Avenue in Brooklyn for the State and National Registers of Historic Places.

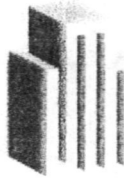
The Commission strongly supports the nomination of the Austin, Nichols & Company Warehouse. On September 20, 2005, the New York City Landmarks Preservation Commission voted to designate the Austin, Nichols & Company Warehouse an individual New York City landmark. Designed and built in 1914-15 to serve the world's largest wholesale grocery business, this rare Egyptian Revival style industrial building is one of the largest and most significant structures on the Brooklyn waterfront.

Therefore, based on the Commission's review of the property and the materials submitted by the Historic Preservation Field Services Bureau, the Commission has determined that the Austin, Nichols & Company Warehouse appears to meet the criteria for inclusion on the State and National Registers of Historic Places.

Sincerely yours,

Ronda Wist

cc: Robert B. Tierney, Chair
Mary Beth Betts



J M H D E V E L O P M E N T

March 7, 2007

Kathleen A. Howe
Historic Preservation Specialist
NYS Office of Parks, Recreation & Historic Preservation
Field Services Bureau
Peebles Island
P.O. Box 189
Waterford, NY 12188-0189

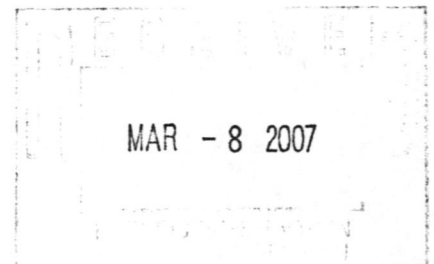
RE: 184 Kent Avenue Nomination for National Register

Dear Ms. Howe,

On behalf of 184 Kent Fee, LLC I gladly approve this building's nomination to the National Register to be declared a certified historic structure. As a tribute to its architectural heritage, an original 1913 Cass Gilbert structure should only find itself comfortably suited under the National Register of Historic Places.

Best regards,

Jason M. Halpern
Member, 184 Fee, LLC.



A Real Estate Development Company
300 East 42nd Street, 16th Floor
New York, NY. 10017

Tel: 212-687-3444

Fax: 212-883-8267

Inclined screens of the bar type have the further objection of permitting a large percentage of over-size material to pass through the bar spacings. Neither can a thorough washing and cleansing of the material be effected on this type of screen. I have yet to see anything like a well graded and washed material produced over gravity screens.

A NEW TYPE OF SCREEN—Mention should be made here of a washing screen that has been in service in a large number of plants throughout the country during the past two years. This screen is giving such satisfactory results that it is worthy of a brief description. One of the largest plants in the country with a daily capacity of 3000 cu. yd. is now installing a battery of 21 of these screens.

This type of screen is in many respects an improvement over the Gilbert screen. Referring to Fig. 5, the screens of a single battery are all mounted on the same shaft. A single pair of gears is used to drive all the screens, thus dispensing with a separate drive for each screen, with the attendant line shafting, bearings, gears, sprockets and chains. The material also travels differently in this style of screen, being delivered into the large end and traveling toward the small end as shown in Fig. 4.

The feature that appeals to the writer in this type of screen, however, is that the large end of the screen does the principal work. The large end has more perforations, more screening surface and consequently a greater ca-

capacity than the Gilbert screen. Greater screening efficiency, less power and small upkeep expense are claimed for this type of screen.

The screen has longitudinal joints and can be dismantled from the shaft without disturbing the shaft. Pipe nozzles are placed at the discharge end of the screens for injecting water to prevent the material from discharging too rapidly and carrying over some of the finer parts. This screen is patented and manufactured by the Raymond W. Dull Co., of Chicago, Ill.

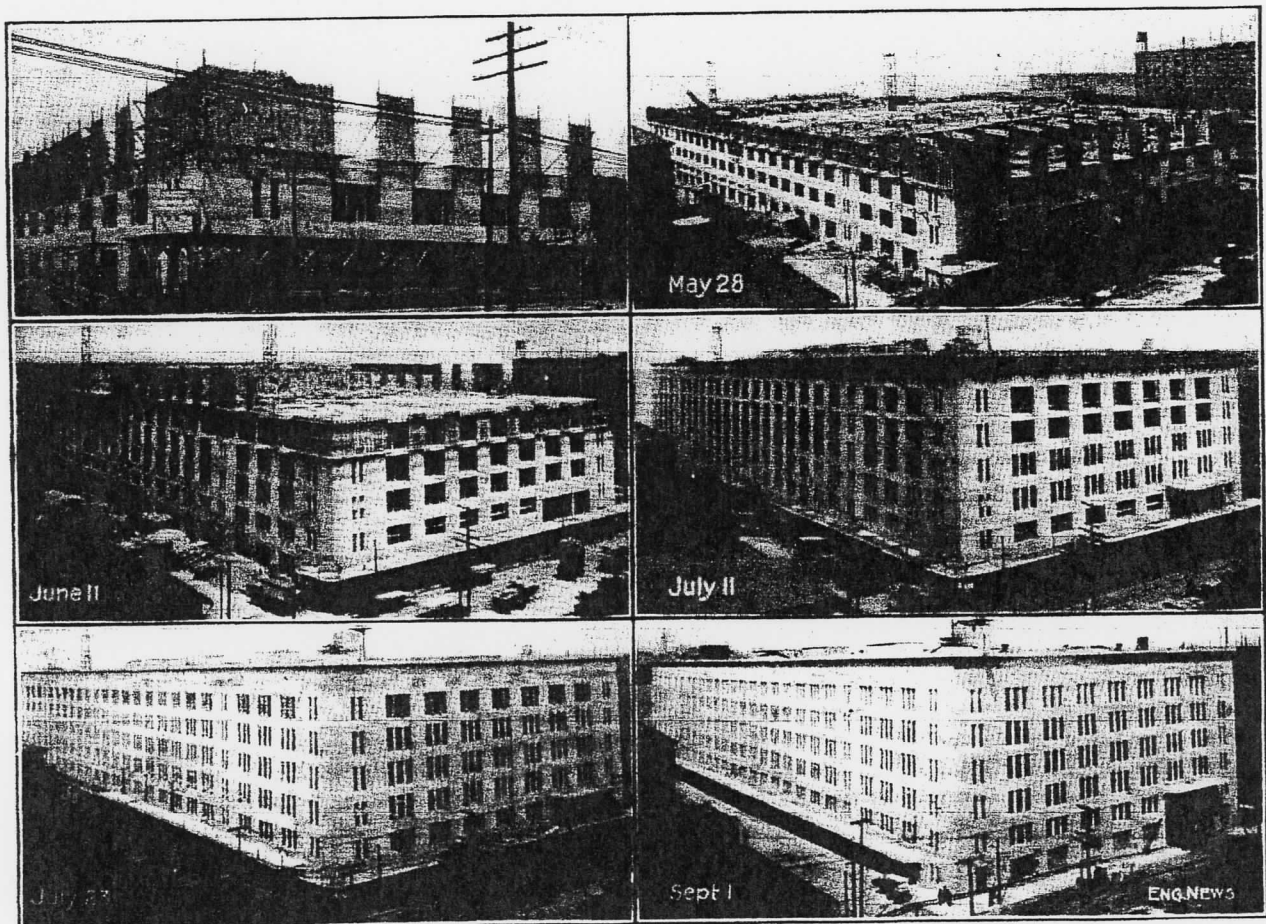
[This article will be concluded in a forthcoming issue.—Ed.]

E

Rapid Construction of a Large Reinforced-Concrete Warehouse

The Austin-Nichols warehouse, which has just been completed at North Third St. and Kent Ave., in Brooklyn, N. Y., is a good example of a modern reinforced-concrete building of the warehouse type, and the remarkable progress made in its construction is indicative of what can be done in reinforced concrete with proper organization and supervision.

The building is located on the East River waterfront, immediately alongside of one of the railway terminals, tracks from which enter the second story of the



FIGS. 1 TO 6. PROGRESS VIEWS OF CONSTRUCTION OF AUSTIN-NICHOLS GROCERY WAREHOUSE, EAST RIVER WATERFRONT, BROOKLYN, N. Y.

(Date of each view marked on cut; entire building completed in nine months.)

warehouse. These tracks are carried on steel girders and columns, but the entire remainder of the building is of reinforced concrete, the structure being of the regular column, girder and slab type. The building is 440 ft.

by gravity. The other mixing plant, a duplicate of the first, was located at the other end of the building, and was approached from the storage bin by narrow-gauge tracks, on which cars, driven by an endless cable, carried

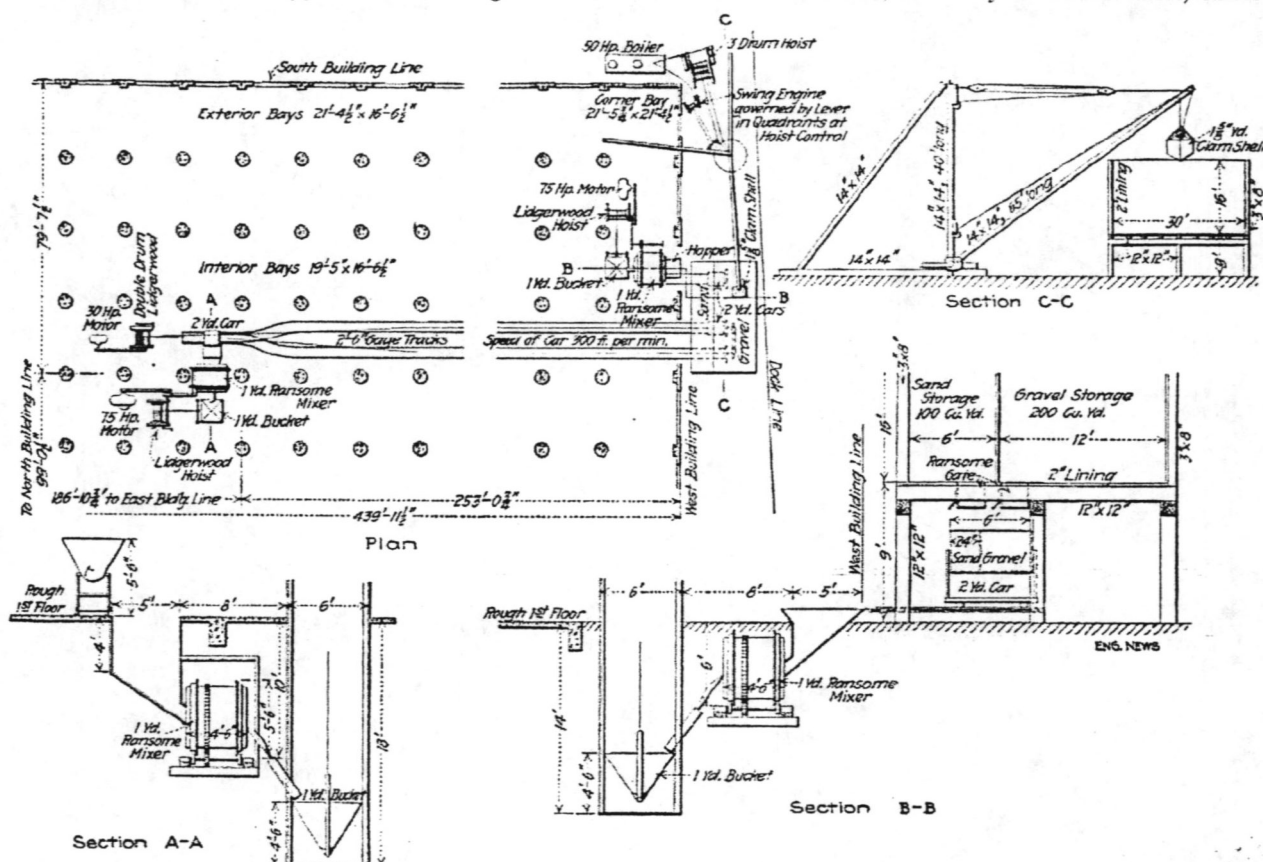


FIG. 7. DETAILS OF CONCRETING PLANT ON AUSTIN-NICHOLS BUILDING

long and 178 ft. 8 in. wide, and has six stories and basement, the story height being 12 ft. 6 in. from floor to floor. It is to be used as a storage warehouse for the large grocery firm, Austin Nichols & Co. Each typical floor bay is 16 ft. 6 1/2 in. by 19 ft. 5 in. and is carried on 2-ft. x 7-in. beams framing into 2-ft. 5-in. x 12-in. girders, which frame into the columns. It was erected on soft foundations, which required timber piles and reinforced-concrete grillages carrying the column footings. It contains 23,000 cu.yd. of reinforced concrete, which required 32,200 bbl. of cement and 1567 tons of reinforcement. There were over a million square feet of lumber in the forms and some 2500 piles used in the foundation, which had 26,400 cu.yd. of excavation. These figures will give some idea of the size of the building.

The contract for the building was awarded on Dec. 1, 1913, and called for substantial completion on Sept. 1, 1914. Work was started on the foundations very soon after the awarding of the contract, but concreting was not commenced until March, 1914. From that time on, speed records in concrete construction were made. The mixing plants were installed as shown in the accompanying Fig. 7. One plant was located at the dock line of the building, and here was placed the storage for the concrete material, which was brought in by barges, and loaded directly above the mixer in sand and gravel bins. Alongside of the storage plant was located a mixer and a concrete elevator. Into this mixer the materials were chuted

the material to the mixer. All machinery was electrically driven. With these two plants, 695 cu.yd. of concrete were placed in one 8-hr. day.

The progress in carrying up the building is shown in the accompanying views, Figs. 1 to 6, which give approximate monthly progress on the work. As a rule, one entire floor, including columns, beams, girders and floor slabs of 80,000 sq.ft. of floor space, was concreted in five days at the rate of 16,000 sq.ft. of floor per working eight-hour day, with 600 men working on the building. One set of side-wall forms was used and the stated progress permitted the removal of the first placed side forms on any one floor for the beginning of the next floor by the time the first floor had been finished; that is, the side forms were allowed to stay in about five days. The struts supporting the floor system were, of course, allowed to stay in the regulation three weeks.

The architectural design of the building, which was made by Cass Gilbert, of New York City, is somewhat unique, as Fig. 6 will show. The grouping of small windows in parallel lines in both directions gives a different appearance to the building than is common in reinforced-concrete buildings. This was permissible, of course, on account of the nature of the building, which did not require any very great amount of natural light.

The entire contract was carried out by the Turner Construction Co., 11 Broadway, New York City, in the contract period of nine months.