

United States Depart
National Park Service

National Register of Historic Places
Registration Form

ENTERED MAY 01 2003 03000322

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 N. J. Rich and Co. Building
other names/site number Printz-Biederman Co. Bldg., Ohio Knitting Mills Bldg.

2. Location

street & number 1974 East 61st Street n/a not for publication
city or town Cleveland n/a vicinity
state Ohio code OH county Cuyahoga code 035 zip code 44103

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 nationally statewide locally. (See continuation sheet for additional comments.)
Barbara Power Dept. Head
Signature of certifying official/Title Planning, Inventory Date March 12, 2003
Ohio Historic Preservation Office OH SHPO
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:

	Signature of the Keeper	Date of Action
<input type="checkbox"/> entered in the National Register. <input type="checkbox"/> See continuation sheet.	_____	_____
<input type="checkbox"/> determined eligible for the National Register <input type="checkbox"/> See continuation sheet.	_____	_____
<input type="checkbox"/> determined not eligible for the National Register.	_____	_____
<input type="checkbox"/> removed from the National Register.	_____	_____
<input type="checkbox"/> other, (explain): _____	_____	_____

Name of Property

County and State

5. Classification

Ownership of Property (Check as many boxes as apply)

Category of Property (Check only one box)

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

- private, public-local, public-State, public-Federal

- building(s), district, site, structure, object

Contributing 1 Noncontributing 0 buildings, sites, structures, objects, 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

N/A

6. Function or Use

Historic Functions (Enter categories from instructions)

INDUSTRY/PROCESSING/EXTRACTION

Manufacturing facility

Current Functions (Enter categories from instructions)

VACANT

work in progress: Commerce/Trade Industry/light manufacturing

7. Description

Architectural Classification (Enter categories from instructions)

LATE 19TH AND EARLY 20th CENTURY

AMERICAN MOVEMENTS

Other: Industrial vernacular

Materials (Enter categories from instructions)

foundation CONCRETE/BRICK

walls BRICK

roof ASPHALT

other

Narrative Description

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

See continuation sheets.

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.
X 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.)

Property is:

- 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.

Areas of Significance

(Enter categories from instructions)

INDUSTRY

ENGINEERING

EDUCATION

Period of Significance

1911 - 1952

Significant Dates

1911, 1934

Significant Person

(Complete if Criterion B is marked above)

Cultural Affiliation

Architect/Builder

Wilbur J. Watson & Co., Architects
The National Concrete Fireproof Co.
Contractors, Cleveland.

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 Buildings Survey #
recorded by Historic American Engineering Record #

Primary location of additional data:

- State Historic Preservation Office
Other State agency
Federal agency
X Local government
X University Case Western Reserve Univ
X Other
Name of repository:
Western Reserve Historical Society

N. J. Rich and Co. Bldg.

Cuyahoga, Ohio

Name of Property

County and State

10. Geographical Data

Acreege of Property 1.16 acres

UTM References

(Place additional UTM references on a continuation sheet.)

1 17 445875 4594875
Zone Easting Northing
2

3
Zone Easting Northing
4

See continuation sheet

Verbal Boundary Description

(Describe the boundaries of the property on a continuation sheet.) Permanent Parcel No.: 118-04-034

Boundary Justification The nominated property includes the entire parcel historically associated with the garment factory. (Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title Ted Sande, AIA, Historic Preservation Consultant
organization Ted Sande, AIA date 9 November 2002
street & number 13415 Shaker Boulevard telephone 216-561-3689
city or town Cleveland state Ohio zip code 44120

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 the SHPO or FPO for any additional items)

Property Owner

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

name James A. Haviland, Executive Director, Lassi Enterprises, L.L.C.
street & number 4019 Prospect Ave., Suite 200 telephone 216-391-5080
city or town Cleveland state Ohio zip code 44103

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reduction Projects (1024-0018), Washington, DC 20503.

**United States Department of the Interior
National Park Service****National Register of Historic Places
Continuation Sheet**The N. J. Rich and Co. Building
Cleveland, Cuyahoga, OhioSection number 7 Page 1**Narrative Description**Summary

The N. J. Rich and Company Building is located on the west side of East 61st Street between Euclid Avenue, to the south, and Chester Avenue, to the north, in the Midtown Cleveland area. To the immediate north is an abandoned four-story brick factory building at Chester Avenue. The loading dock that joins the N. J. Rich and Company Building to the abandoned factory was constructed in 1970. These two northerly structures are not part of this nomination. The terrain is flat. This section of the city was once densely industrial. However, during the past forty years it has declined significantly as residents, business and industry have moved from the central city to the surrounding suburbs. Factory buildings and small, wood frame houses that once existed shoulder to shoulder have been demolished and there are now vacant lots where they once stood, notably on the present vast expanse to the west of this site. Older low-rise, two and three story, masonry industrial and commercial buildings stand on the east side of East 61st Street. To the south is a vacant lot between this site and Euclid Avenue.

The N. J. Rich and Company Building is a rectangular redbrick, flat-roof structure. It has a unique reinforced concrete structural system, which is discussed in the Statement of Significance. The building measures 370 feet in length (north/south) and 100 feet in width (east/west). There is a full basement; one-half level below grade, and three floors above, rising to approximately 50 feet above grade to the top of the parapet wall. The overall condition of the property is fair on the exterior and good on the interior. (See photos 1-23.)

Description

The building stands on a reinforced concrete foundation, with redbrick masonry walls above grade. The four exterior walls are similar, divided into bays that are 10 feet on center, defined by redbrick piers. Where stairwells and toilet rooms occur, the bays are filled with masonry and small windows. The vast majority of the bays were originally filled with large, wood-frame industrial double-hung windows with fixed transoms above. Most of these windows have been replaced by, first, steel sash on all four walls of the third floor in 1938-39, and second, by Cal wall translucent panels on most of the first and second floors in the 1960s and 1970s. The north half of the first floor, east wall, still retains the original wood-frame industrial windows. The main entrance to the building is located at the southeast corner of the east wall. A simple canopy over the door originally identified the main entrance at the corner bay. A concrete finish was applied to the two southeast bays at the first floor level and two pairs of doors were installed to give the

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Continuation Sheet**The N. J. Rich and Co. Building
Cleveland, Cuyahoga, OhioSection number 7 Page 2**Narrative Description (continued)**

main entrance prominence at some time after 1934, probably at the time the steel sash was installed in the late 1930s. (See photos 3,4.) The proposed rehabilitation of this building includes removal of the third-floor steel sash and all Cal wall panels, retention of the original wood sash on the east wall, first floor, and installation of new aluminum sash that matches the profile of the original wood sash in place of the steel sash and Cal wall panels.

The flat roof is asphalt applied over a concrete slab. There are redbrick elevator and utility penthouses in the center of the south wall, the southwest corner, and together with a brick chimney, at the northwest corner of the building. At the center of the building, on the north/south axis of the roof, are two steel-frame trapezoidal structures, side by side, that originally supported circular wood-frame water tanks. The tanks were removed in the 1970s. There are two reinforced-concrete rectangular roof monitors, 50 feet long (n/s axis) and 20 feet wide (e/w axis), placed in the center of the roof that admit additional light to the third floor. They project approximately six feet above the roof surface. The exterior brick is in fair to good condition; the industrial sash is in fair to poor condition. (See photos 1,2,6,7,8.)

The interior of the N. J. Rich and Company Building is an important early example of a reinforced concrete slab and "mushroom" capital structural system (see Statement of Significance). The structural bays are 20 feet square and the structure is exposed in open, universal manufacturing space on all floors, except for wood-frame and plaster partitions in the basement, where part of the south half has been subdivided for storage; in the southeast section of the first floor, where the administrative offices are located; and on all floors where toilet rooms are located. The floors are industrial-grade hardwood on sleepers over the concrete floor slabs. The floor-to-floor heights are: basement, 10 feet 6 inches; first, second and third floors 14 feet. There is textile machinery throughout the three upper floors that will be removed for the proposed new interior uses of office and laboratory space. (See photos 9-23.) The main entrance at the southeast corner of the building contains a 20-foot wide terrazzo-finish stair from grade to the first floor level. Brass trimmed, pendant lights that appear to date to the early 1930s, and an art deco chevron design cornice provide decorative relief to this otherwise austere entry. There are two pairs of steel main entrance doors at grade, which are repeated at the first floor landing and that open into a 30 feet long (north/south) by 20 feet wide lobby. The lobby has a terrazzo floor, rendered in a diamond pattern, a marble wainscot and marble door frames, plaster walls that are capped by an art deco chevron design cornice, and a plaster ceiling. Frosted globe pendant lights illuminate the space. The entry and lobby clearly date to the 1933-34 renovations that were made to accommodate the Printz-Biederman Company when it moved to this building in 1934. The overall condition of the interior is good. (See photos 13-18.)

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Continuation Sheet**The N. J. Rich and Co. Building
Cleveland, Cuyahoga, OhioSection number 8 Page 1**Statement of Significance**Summary

The N. J. Rich and Company Building is significant under Criterion A because: 1) it represents a unique policy of real estate investment and property development that was pursued by the Case School of Applied Science to both strengthen its endowment and to encourage industrial enterprise in Cleveland, and 2) the Printz-Biederman Co., the primary tenant, was a major textile manufacturer with a national reputation, representative of Cleveland's key role in the American textile industry. Under Criterion C, the building is significant because: 1) it is the work of a pioneering structural engineering firm, Wilbur J. Watson and Company; and 2) it is the earliest documented example of that firm's development and use of a continuous reinforced concrete "mushroom" capital and two-way reinforced concrete slab structural system.

The Case School of Applied Science.

The Case School of Applied Science was established in 1880 by a bequest from Leonard Case, Jr., who had inherited a considerable fortune from his father that came, in part, from real estate investment. The School was created to foster learning in the sciences and the practical application of that learning to industry, which was central to the economy of late 19th Century Cleveland. The School's name was changed to the Case Institute of Technology in 1947 and it merged with Western Reserve University to become Case Western Reserve University in 1967. The Case School earned an international reputation for academic excellence early in its existence through its distinguished faculty and its exceptional graduates. Albert A. Michelson's invention of an interferometer and his collaboration with Edward W. Morley of the Western Reserve University faculty, exemplifies the former. Their experiments with light waves to detect the earth's motion relative to the ether provided scientific confirmation for Albert Einstein's later development of his special theory of relativity in 1905. Herbert H. Dow, Class of 1888, the founder of Dow Chemical Company, and Kent H. Smith, Class of 1917, who, together with his brothers Albert Kelvin and Vincent, created the Lubrizol Corporation, are indicative of the latter. 1

Leonard Case, Jr. (1820-1880) was a Yale educated lawyer. Due to ill health, he never practiced law and he never married. He devoted his life to scholarship with a special interest in natural science. On his father's death in 1864 he inherited \$15 million, which he viewed as a philanthropic trust. In February, 1877, Case executed a Trust Deed which contained the following provision: "...to cause to be formed and regularly incorporated under the laws of Ohio, an institution of learning to be called the "Case School of Applied Science" located in the said City of Cleveland, in which shall be taught by competent professors and teachers, mathematics, physics, engineering -mechanical and civil engineering, chemistry, economic geology, mining and metallurgy, natural history, drawing, and modern languages. And immediately upon the regular organization of such corporation to convey by sufficient deed in fee simple, and free and clear of all

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Continuation SheetThe N. J. Rich and Co. Building
Cleveland, Cuyahoga, OhioSection number 8 Page 2**Statement of Significance (continued)**

incumbrances whatever, the said premises to such corporation, to be held and enjoyed by it in perpetuity for the sole and only purpose of collecting and receiving the rents, issues, and profits thereof, and applying the same, or the proceeds of said property, to the necessary costs and expenses of providing for and carrying forward in a thorough and efficient manner the teaching above named, and such kindred branches of learning as the Trustees of said institution may deem advisable; and to the payment of such other costs and expenses as may be necessary for the general uses and purposes of such an institution." The deed ends with the admonition that: "the expenditures for such institution be not permitted to exceed the annual income derived from said property." An anonymous gift from Case of \$1 million accompanied the Trust Deed when Case died in 1880. 2

The deeded property was located in the heart of the central business district, between Superior and St. Clair Avenues. The Case School was opened in 1881 on Rockwell Street, in this vicinity. It moved to its present campus at University Circle in 1885.

Additionally, Leonard Case, Jr. left to the City of Cleveland 200 acres between East 40th Street and East 53rd Street, north of St. Clair Avenue for industrial firms and railroad rights-of-way, which became the city's first industrial district. A review of 1921 plat maps shows 50 industries located in this area, including: American Steel & Wire Co., Brown Hoisting Machinery Co., Cleveland City Forge, The Otis Steel Co., Patterson-Sargent Co. (paints and colors), Bethlehem Steel Co., and the Osborn Manufacturing Co., just to name a few of the better-known firms. 3

A key figure in the growth of the Case School of Applied Science was Eckstein Case, a cousin of Leonard Case, Jr., whom he much admired. Eckstein Case was the twelfth child in a family of thirteen children born into the Zophar Case family in Illinois. Zophar was a younger brother of Leonard Case. Eckstein referred to Leonard as "uncle" due to the 38-year difference in their ages. He attended West Point for two years, but withdrew due to injuries suffered in artillery maneuvers. In Cleveland, he studied law in the office of Judge Rufus Ranney and then completed his education at the University of Michigan, where he graduated with a degree in law in 1884. He was appointed secretary-treasurer of the Case School in 1887 and remained its secretary until his retirement at the age of seventy-nine in 1937. He died in 1944. During his tenure, he exerted enormous influence upon the Case School, especially with respect to its fiscal policies. Quoting from C. H. Cramer's history of the Case School: "His [Eckstein Case's] power was based in minor part on his name but largely rested on his particular knowledge and command of the Case endowment. It was in land—and the rental, improvement, and disposal of so many separate parcels of property required a tremendous knowledge of detail; in years when accounting and budgeting systems were elementary or nonexistent, Case kept most school accounts in his head." 4 (Emphasis added.)

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Continuation Sheet**The N. J. Rich and Co. Building
Cleveland, Cuyahoga, OhioSection number 8 Page 3**Statement of Significance (continued)**

It was Eckstein Case, more than any other person associated with the Case School, who fostered his cousin's deep interest in real estate and the potential it held during Cleveland's period of industrial growth to benefit the school that he founded. The N. J. Rich and Company Building is a prime surviving example of the Case School of Applied Science's land utilization endowment policy as it was practiced under Eckstein Case's administration for nearly fifty years, during which Cleveland grew to become one of the nation's leading manufacturing cities.

The Cleveland Garment Industry.

Cleveland has a long history of garment manufacturing, dating back to the making of ready-to-wear clothing just prior to the Civil War, peaking in the 1920s and continuing on a diminished scale up to the present. The Civil War (1861-1865) provided the stimulus to clothing manufacture in Cleveland with the huge demand for Union army uniforms and accessories. This growth continued afterward with civilian clothing for the rapidly growing population of an expanding United States during the last quarter of the 19th Century. Cleveland was second only to New York City in clothing manufacture during the 1920s.

The major firms that were essential components of the Cleveland garment industry and that established national reputations in the business include: Joseph & Feiss Co., men's clothing. (The firm dates to 1845 as a clothing store. It began manufacturing in 1897 and continues today as a subsidiary of T.J.F.C., New York.) H. Black & Co., women's suits and cloaks. L. N. Gross Co., women's shirtwaists. The Richman Bros. Co., men's suits, furnishings and hats. (1879 - 1992.) Bobbie Brooks, Inc., women's apparel. (Founded in 1939 and continuing today under the ownership of Pubco.) And, the Printz-Biederman Co., women's suits and coats. (1893 - 1978.) 5

The Tenants of the N. J. Rich and Co. Building.

All of the tenants of this building have been in the textile industry. Information on the first tenant, the N. J. Rich and Co., is sparse. It is known that the business was a knitting mill and that they leased the building from its completion in 1911 until the company went out of business in 1928. The factory stood vacant until 1934, when the Printz-Biederman Co., cited above, moved into it after the Case School had made renovations to suit the tenant. Printz-Biederman remained in this building, with diminishing occupancy following World War II, until the firm closed in 1978. The Ohio Knitting Mills, a maker of knitted goods for the garment industry, began leasing portions of the interior in the early 1950s and eventually acquired the building in 1960, under the style: R. G. A. Co. They, in turn, sold the building to Lassi Enterprises, L.L.C. in 2002. (The post-1952 developments are not discussed in detail in this narrative, since they are beyond the period of significance of this nomination.) 6

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Cleveland, Cuyahoga, OhioSection number 8 Page 4**Statement of Significance (continued)**

The prime tenant was the Printz-Biederman Co., which was one of the principal garment manufacturers in Cleveland and one of America's oldest manufacturers of women's apparel. Moritz Printz, a master tailor, formed the company in partnership with his two sons, Alexander and Michael, and his son-in-law, Joseph Biederman, in December 1893. He had been the head designer for D. Black & Co., makers of women's cloaks. The firm was incorporated in 1904. Alexander Printz was president and he remained so until 1954. The company originally occupied a loft at 102 St. Clair Avenue. In 1902 and 1903, it moved to 425 Lakeside Ave. and to 71 Bank Street (1213 W. 6th Street), where it remained and apparently expanded, until it moved to this building at 1974 East 61st Street in 1934. The firm merged with H. Black & Co. in 1922 and had sales offices in Cleveland, New York, Boston and Chicago during its peak in the early 1930s. In 1954, Max Reiter, co-founder of Ritmore Sportswear Co., which later became Bobbie Brooks, Inc., acquired the Printz-Biederman Co. At that time it employed 1,000 workers, 600 of whom worked in this building. The company began to decline in the 1960s and closed in 1978. 7

The Wilbur J. Watson & Associates Company.

The engineering firm that designed the N. J. Rich and Co. Building was the Wilbur J. Watson Company. It earned an international reputation in the design of bridges and in pioneering the use of reinforced concrete following Watson's explicit philosophy that engineering and aesthetics should be carefully interrelated in structural design. Bridges that the company designed in the Northeast Ohio area include: the Rocky River Bridge (1910), Akron's Howard Street Bridge (1912), the Cleveland & Youngstown Railroad bridges (later the Shaker Rapid Transit Line) (1916), the Lorain-Carnegie Bridge (1932, NR 1976), the Main Avenue Bridge (1939), and the bascule bridge in Lorain (1940). The firm also undertook other kinds of challenging structural commissions, the most impressive of which is the Akron Goodyear Zeppelin Dock (1929, NR 1973), the largest clear-span structure in the world, enclosing 8 and ½ acres. Of particular interest with respect to the N. J. Rich and Co. Building, is their early exploration of the use of reinforced concrete "mushroom" columns and two-way reinforced concrete floor slabs for industrial structures, which dates from 1910-1911, the time that this factory was constructed. 8 Wilbur Jay Watson, (1871-1939) the founder of this engineering firm, was born in Berea, Ohio. He attended Baldwin Wallace College and received a B.Sc. in Engineering from the Case School of Applied Science. He worked initially for Osborn Engineering Co. in Cleveland and established his own firm in 1907. As early as 1908, the company saw the possibilities in using precast concrete beams in bridge construction and pioneered in the use of steel centering for building concrete bridges. He maintained close ties with his alma mater, which conferred upon him the honorary degree of Doctor of Engineering in 1930. Watson's publications include: Bridge Architecture (1927), A Decade of Bridges: 1926-1936 (1937), and Bridges in History and Legend (1937). 9

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Continuation Sheet**The N. J. Rich and Co. Building
Cleveland, Cuyahoga, OhioSection number 8 Page 5**Statement of Significance (continued)**The N. J. Rich and Company Building's Structural System.

This building is in an industrial vernacular style that grew from the Factory Mutual Fire Insurance Company's requirements for fire-resistant construction. This style appeared first on the Eastern Seaboard in the post-Civil War period and rapidly spread west into the emerging industrial cities of the mid-west. Similar buildings predominated in the manufacturing sections of major mid-west cities such as Buffalo, Pittsburgh, Cleveland, Detroit, Chicago and St. Louis from the 1870s until the 1930s. 10

Fires plagued the early textile mills from their first appearance in the 1790s due to their highly combustible interiors, resulting from the combination of open-flame illumination, machinery with exposed working parts, machine oil and the thousands of particles of fiber in the air. Literally hundreds of these buildings burned in the period from 1790 to 1860. Beginning in the 1830s, the Factory Mutuals began to define a form of factory construction that came to be known as "slow-burning". It consisted of heavy timber beams and posts supporting heavy industrial plank floors with load bearing masonry exterior walls. Early experiments with cast iron beams and posts proved ineffectual, due to their immediate failure when subjected to the extreme temperatures that fires produce. Steel, insulated with fireproof materials (clay tile or concrete) was available in the latter part of the 19th century, but it was expensive. The dense, thick wood of slow-burning construction, on the other hand, tended to char on the exterior rather than burn through or deflect and collapse, if the fire was detected early, and it became the industrial standard for most factory buildings, regardless of what was made in them, from the 1860s well into the first quarter of the 20th century. It was a conservative, dependable and relatively inexpensive method of construction. 11

Interest in reinforced concrete factory construction appears in the United States in the early 1900s. However, the idea of combining steel rods or a steel mesh with concrete dates to 1849 and France, where Joseph Monier used this combination of materials to make tubs for orange trees. By the 1870s, Monier and others, in France, England and Germany, were developing patents for structural systems, including reinforced concrete thin-shell structures. Reinforced concrete was utilized in European bridge design, under the Monier System, beginning in the mid-1870s. The first American reinforced concrete bridge dates to 1894,12 Later in that decade, Wilbur Jay Watson appears on the scene to begin an illustrious career building reinforced concrete bridges worldwide.

The "mushroom" column and two-way reinforced concrete slab structural system was invented by C. A. P. Turner, who first applied it in the Johnson-Bovey building, Minneapolis, in 1906. It soon became a competitive, indeed superior, alternative to the conventional slow-burning timber system, since it was easy to form and pour and provided a durable, finished surface when the formwork was removed. 13

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Continuation Sheet**The N. J. Rich and Co. Building
Cleveland, Cuyahoga, OhioSection number 8 Page 6**Statement of Significance (continued)**

Watson was undoubtedly aware of Turner's achievement and began to develop his own form of "mushroom" and two-way slab reinforced concrete system during the next four years. The evidence strongly suggests that this is the first instance of his use of this system in any of his buildings. Dr. Sara Ruth Watson, a daughter and biographer of Wilbur Watson, states that: "Watson also developed the so-called 'mushroom' type of construction - a column of reinforced concrete with the embedded rods spreading out from the capital of the columns into the ceiling slabs. While others were working on the concept simultaneously, Watson introduced this type of construction in Cleveland in 1911." 14 The N. J. Rich and Co. Building was designed in 1910 and constructed in 1911. It is the only known factory building that the Watson firm built in Cleveland at this time.

The minutes of the Case School of Applied Science Board of Trustees for Monday, 7 November 1910, written in Eckstein Case's small, precise script, reads, in part:

"The Secretary [Eckstein Case] reported that the President and he had contracted with the National Concrete Company 15 for the erection of a building 100 x 360 feet of Brick and concrete fireproof construction. Three stories and basement in height on the property known as the Root purchase at a cost not to exceed \$132,467.00 with certain reservations for taking our own bids for the heating, plumbing and electric wiring and elevator fully set forth in the contract. The building to be completed on or before June 1st 1911. And that they had executed and delivered to the N. J. Rich Co. a lease of the building for fifteen years commencing at its completion, at an annual rental of \$15,706.00, of which sum \$2400.00 covers 6% upon the value of the land occupied by said building and \$13 306.00 10% on the estimated cost of the building itself. with provisions in the lease to increase or decrease the amount under certain conditions understood in the lease. Also that they had entered into an agreement with the Hasbeth Land Co. owner of the land adjoining on the east to open and dedicate to the public a street 44 feet in width it to pay one half and the School one half the cost of improving the same to the satisfaction of the City. Upon motion this action was approved by the Board." 16

The City of Cleveland Application for Permit, New Structure No. 34162, dated 2 November 1910, confirms that the architect for this building was Wilbur J. Watson, the contractor the National Concrete Fireproofing Company and the owner the Case School of Applied Science. Further, the experimental nature of the building's structural system is highlighted by the following extraordinary statement under Remarks:

"Mushroom System Design. This set of drawings is approved with the understanding that the reinforced concrete work will be tested where we deem it necessary to 2 ½ times its calculated live load [125 lbs/sq.ft.]. Furthermore that additional outside stairs will be added if conditions change in occupancy etc." 17

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Continuation SheetThe N. J. Rich and Co. Building
Cleveland, Cuyahoga, OhioSection number 8 Page 7**Statement of Significance (continued)**

It is evident from the reservations expressed in this application for a building permit that this was not a structural system that the Cleveland Building department had encountered before and they wanted to be absolutely sure that it was structurally sound.

The H. Black and Co. Building (1906, NR 2002) at 2010 Superior Avenue has been identified as the first reinforced concrete structure in Cleveland. 18 The structure consists of reinforced concrete columns, beams and slabs, which, in effect serve as a translation of the traditional slow-burning, heavy-timber structural system into the new material. Both the Richman Brothers Company (1916), 1600 East 55th Street, considered the best designed factory of its time in Cleveland, 19 and the Ford Motor Car Factory (1914, NR 1976), 11610 Euclid Avenue, by Detroit architect Albert Kahn, 20 followed the N. J. Rich and Company building as important reinforced concrete industrial structures in Cleveland. Reinforced concrete technology was quickly adopted locally and nationally by a number of manufacturing firms in the 1920s. The Wilbur J. Watson Company and its initial use of the "mushroom" capital, two-way reinforced continuous concrete slab method of construction in the N. J. Rich and Co. Building helped significantly to pave the way for its popular acceptance by industry throughout the nation.

End Notes.

- 1 Van Tassel, David D. and Grabowski, John J. The Dictionary of Cleveland Biography. Pages 314-315, 323, 130 and 420.
- 2 Case Western Reserve University Archives. Léonard Case to Henry G. Abbey [grantor]: Trust Deed dated 24 February 1877.
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Statement of Significance (continued)

End Notes (continued)

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Cleveland, Cuyahoga, Ohio

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List of Photographs: N. J. Rich and Company Building, Cleveland, Cuyahoga, Ohio

Photographer: Ted Sande, AIA
Date of Photography: 31 October 2002
Original Negatives: Ted Sande, AIA

1. Exterior: West Wall, looking northeast.
2. Exterior: South Wall, looking north.
3. Exterior: South and East Walls, looking northwest.
4. Exterior: East Wall, Main Entrance Detail, looking northwest.
5. Exterior: East Wall, Original Windows Detail, looking west.
6. Exterior: North Wall, looking southwest.
7. Exterior: Roof, looking north.
8. Exterior: Roof, looking southwest.
9. Interior: Basement, south meeting room, looking northwest.
10. Interior: Basement, looking north.
11. Interior: Basement, looking south.
12. Interior: 1st Floor, Main Entrance Stairway, looking southwest.
13. Interior: 1st Floor, Main Entrance Stairway, Pendant Lights, looking southwest.
14. Interior: 1st Floor, Main Entrance Lobby, looking southwest.
15. Interior: 1st Floor, Main Entrance Lobby, looking east.
16. Interior: 1st Floor, Main Entrance Stairway, looking east.
17. Interior: 1st Floor, Office Corridor, East, looking north.
18. Interior: 1st Floor, Original Window Detail.
19. Interior: 2nd Floor, Typical Manufacturing Floor, looking north.
20. Interior: 2nd Floor, Typical Mushroom Capital Detail, looking southeast.
21. Interior: 3rd Floor, Clerestory Monitor Detail, looking northeast.
22. Interior: 3rd Floor, Typical Manufacturing Floor, looking southwest.
23. Interior: 3rd Floor, Typical Interior Secondary Stairway, looking northwest.

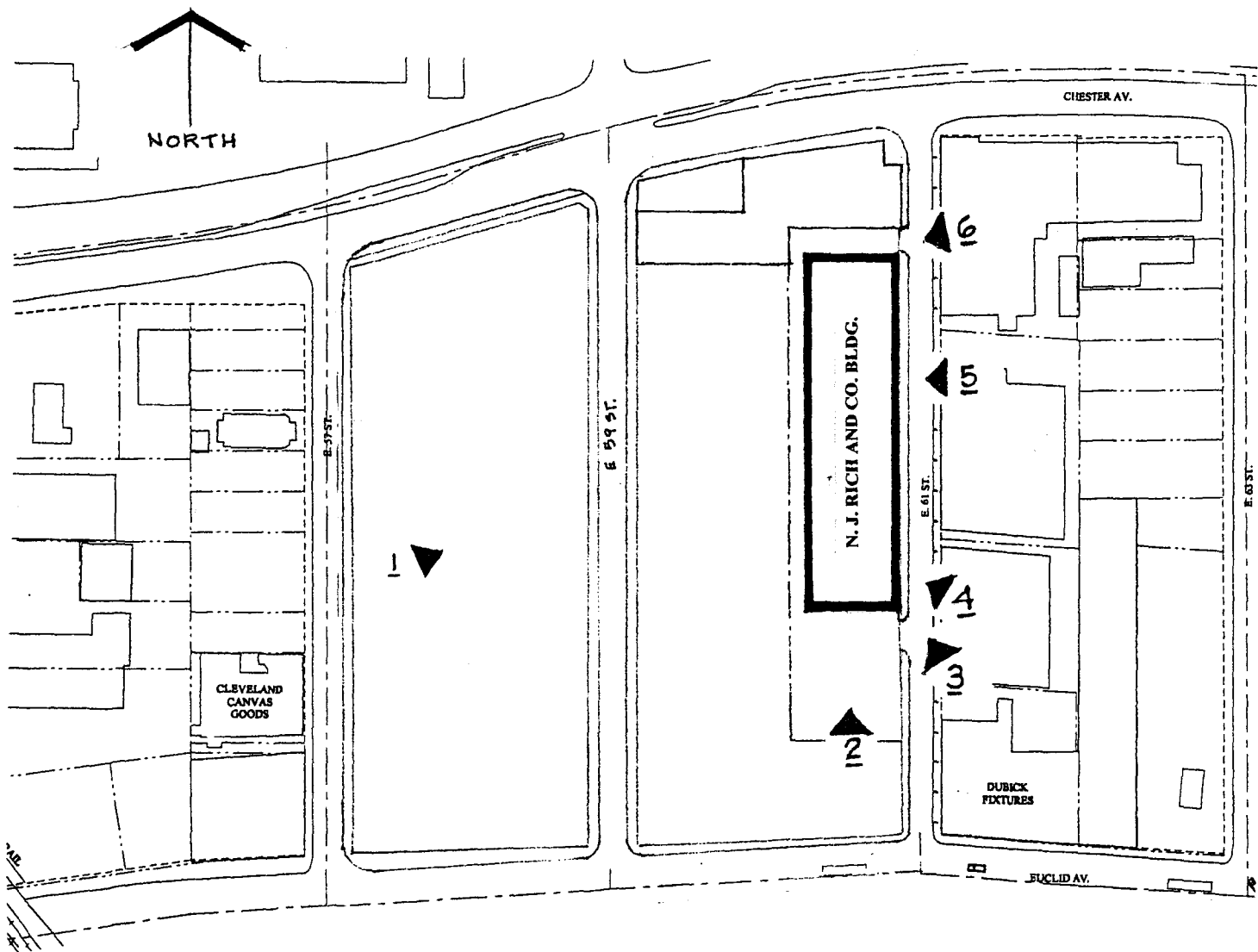
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Cleveland, Cuyahoga, Ohio

Section number 7,8 Page 2

Site Orientation Plan and Photographic Location Key
(City Architecture computer drawing, 2002. Reduced, do not scale.)



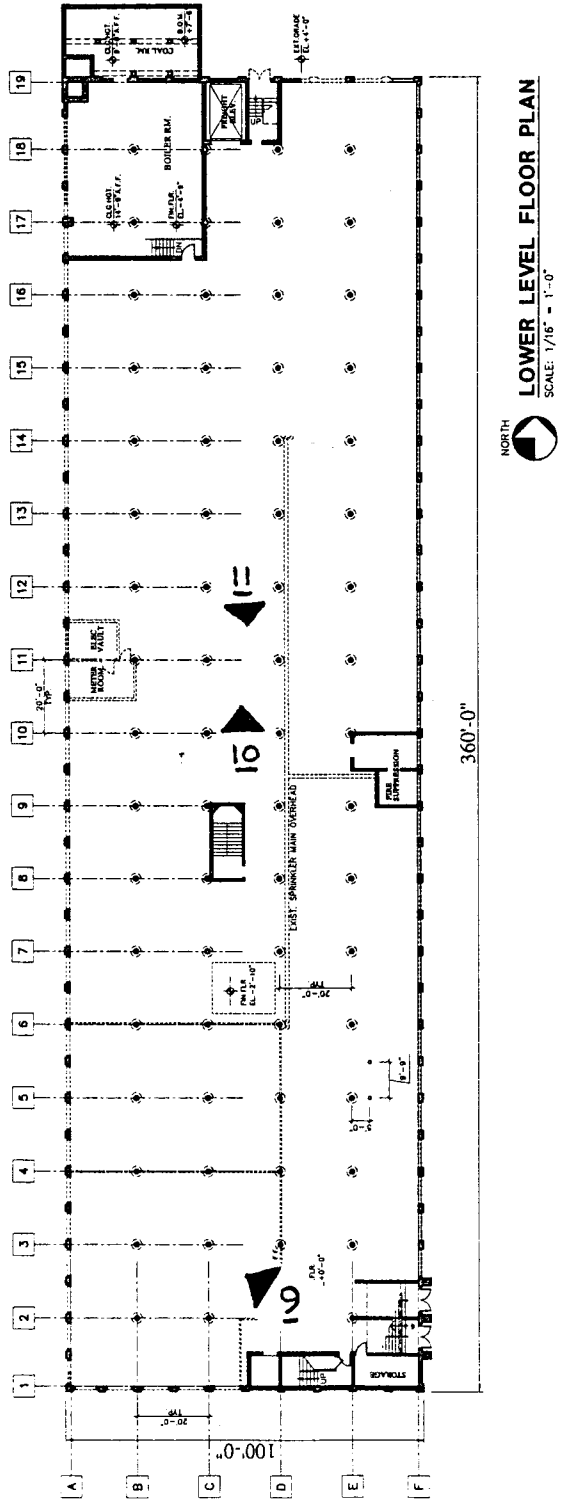
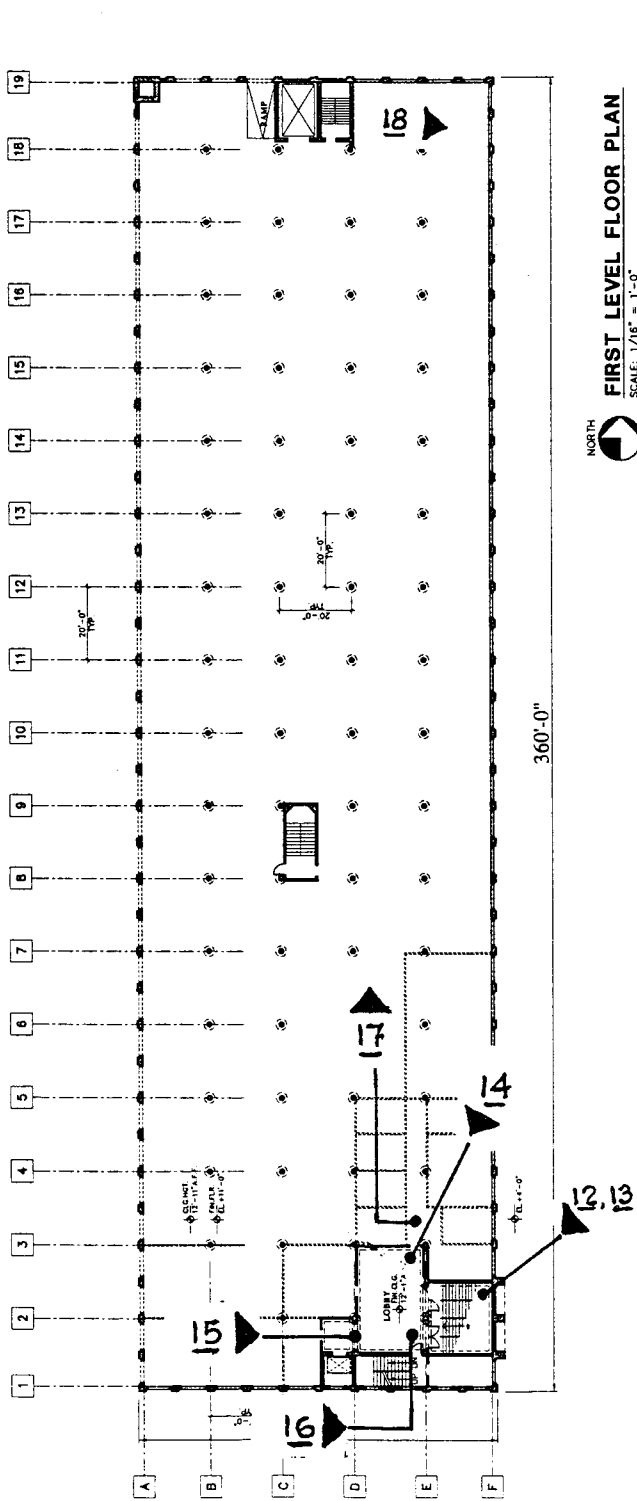
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Continuation Sheet

The N. J. Rich and Co. Building
Cleveland, Cuyahoga, Ohio

Section number 7, 8 Page 3

Lower and First Level Floor Plans and Photographic Location Key
(City Architecture computer drawing, 2002. Reduced, do not scale.)



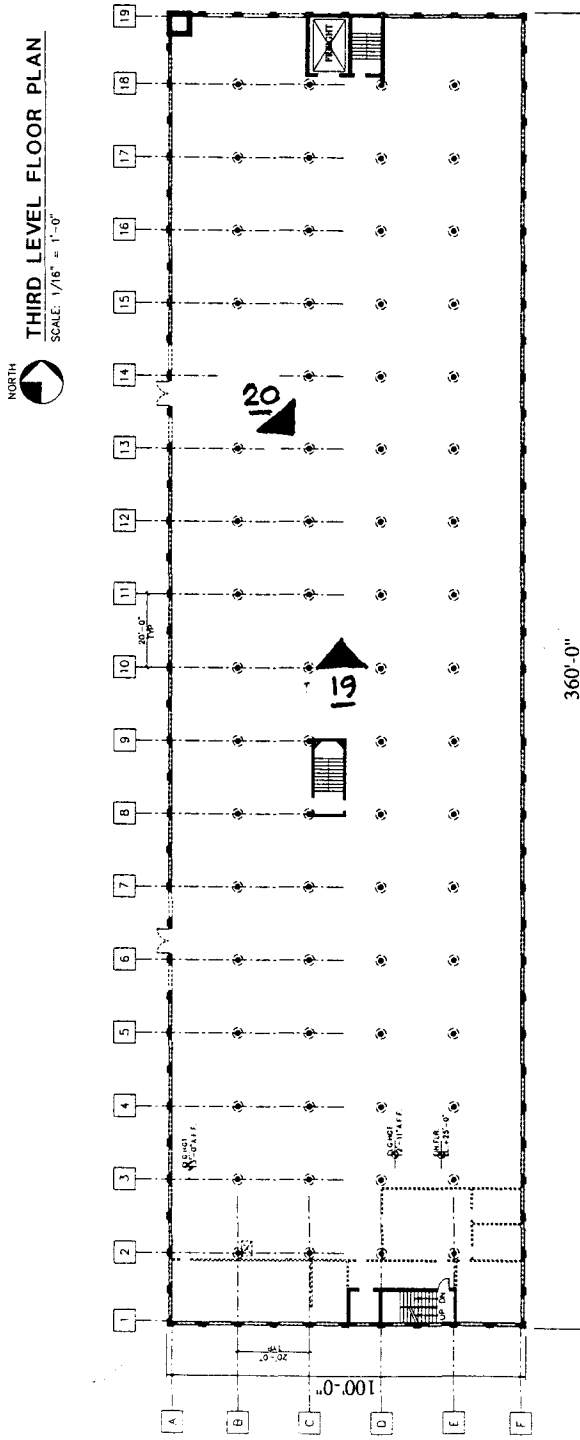
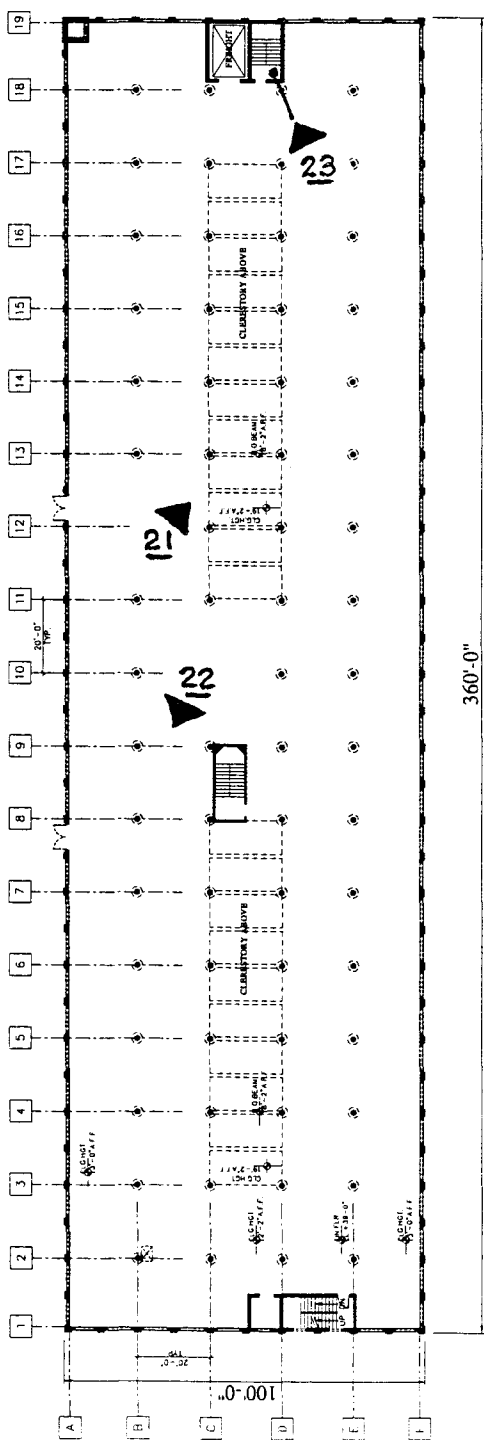
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The N. J. Rich and Co. Building
Cleveland, Cuyahoga, Ohio

Section number 7,8 Page 4

Second and Third Level Floor Plans and Photographic Location Key
(City Architecture computer drawing, 2002. Reduced, do not scale.)



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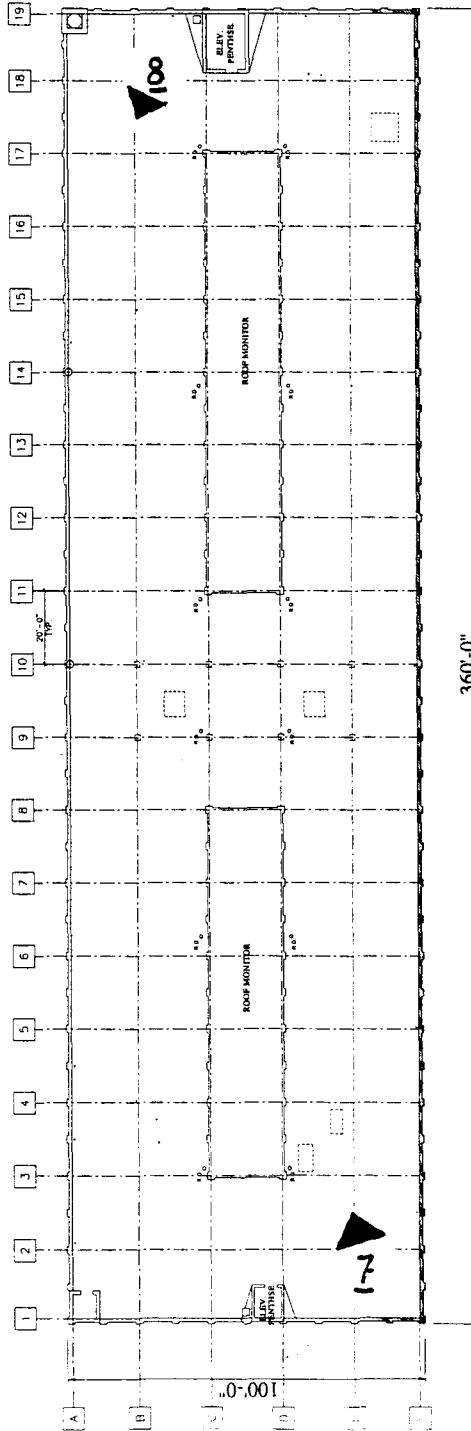
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Continuation Sheet

The N. J. Rich and Co. Building
Cleveland, Cuyahoga, Ohio

Section number 7, 8 Page 5

Roof Level Plan and Photographic Location Key

(City Architecture computer drawing, 2002. Reduced, do not scale.)



NORTH
ROOF LEVEL FLOOR PLAN
SCALE: 1/16" = 1'-0"

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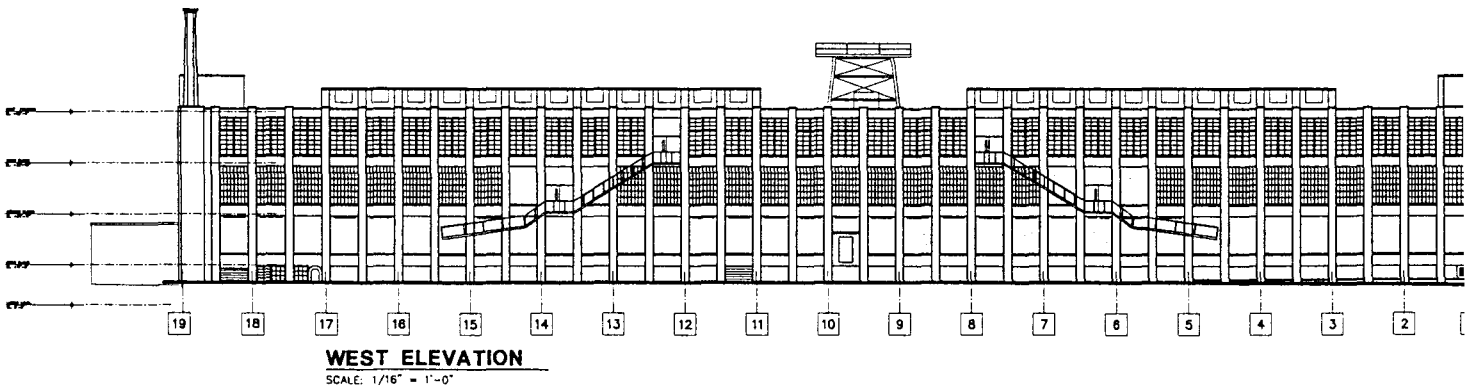
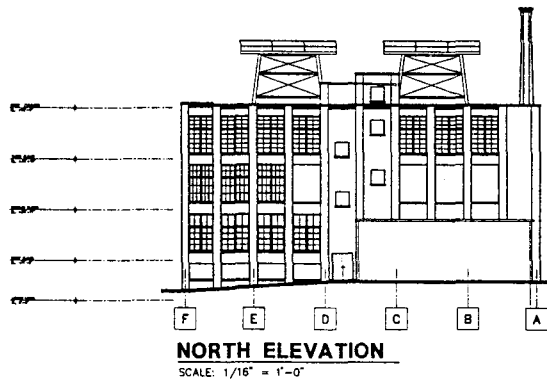
**National Register of Historic Places
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The N. J. Rich and Co. Building
Cleveland, Cuyahoga, Ohio

Section number 7, 8 Page 6

North and West Walls

(City Architecture computer drawing, 2002. Reduced, do not scale.)



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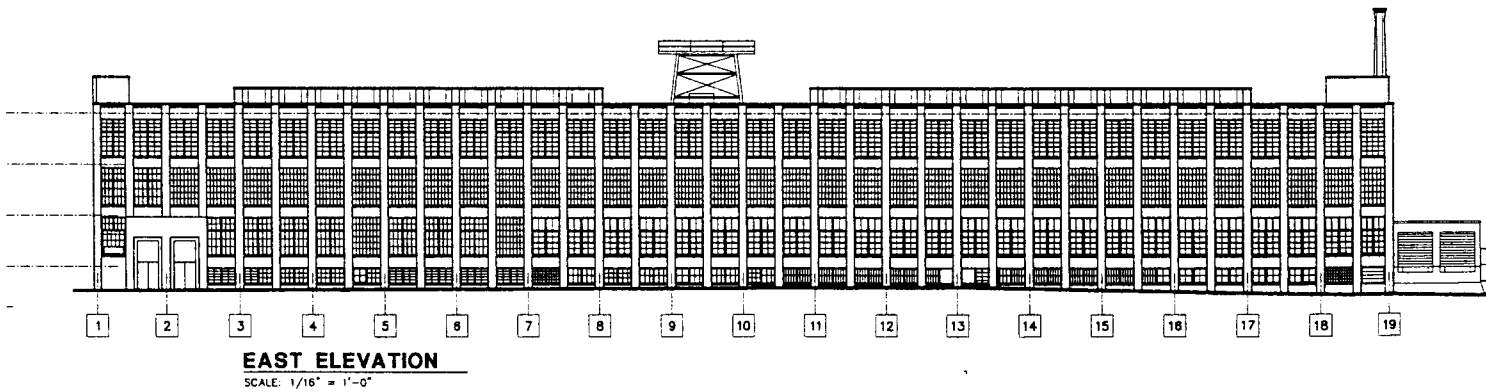
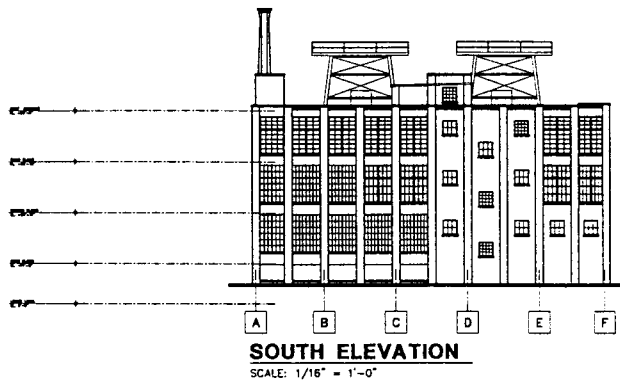
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The N. J. Rich and Co. Building
Cleveland, Cuyahoga, Ohio

Section number 7, 8 Page 7

South and East Walls

(City Architecture computer drawing, 2002. Reduced, do not scale.)



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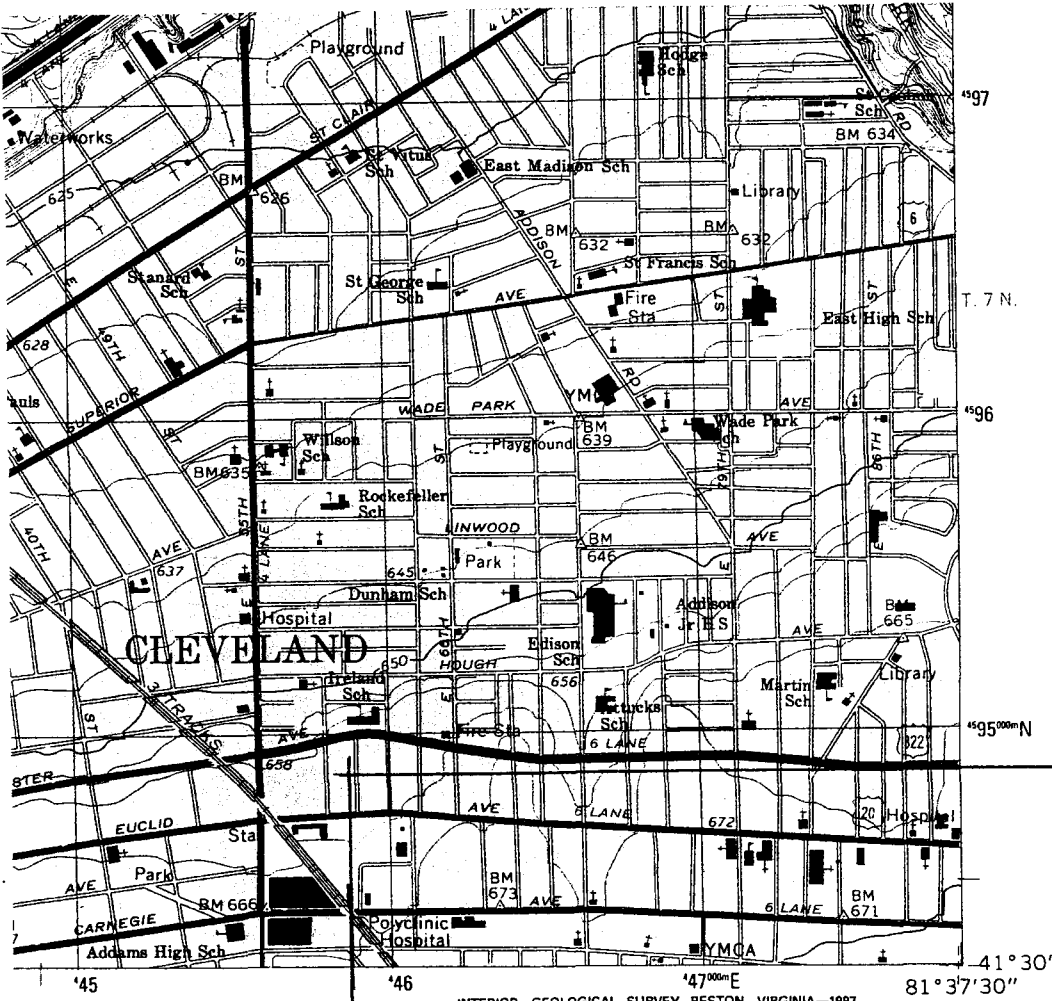
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The N. J. Rich and Co. Building
Cleveland, Cuyahoga, Ohio

Section number 10 Page 1

Geographical Data.

(U.S.G.S. 7.5 Minute Series Map: CLEVELAND NORTH QUADRANGLE,
Reduced in size, do not scale.)



N.J. RICH AND CO.
BUILDING
1974 EAST 61ST ST.
CLEVELAND, OHIO
UTM REFERENCE:
17/448875E/4594875N

INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1997

ROAD CLASSIFICATION

Primary highway, hard surface _____ Light-duty road, hard or improved surface _____

Secondary highway, hard surface _____ Unimproved road _____

○ Interstate Route ○ U. S. Route ○ State Route

(SHAKER HEIGHTS)
4661 NE



CLEVELAND NORTH, OHIO

1994



United States Department of the Interior
National Park Service

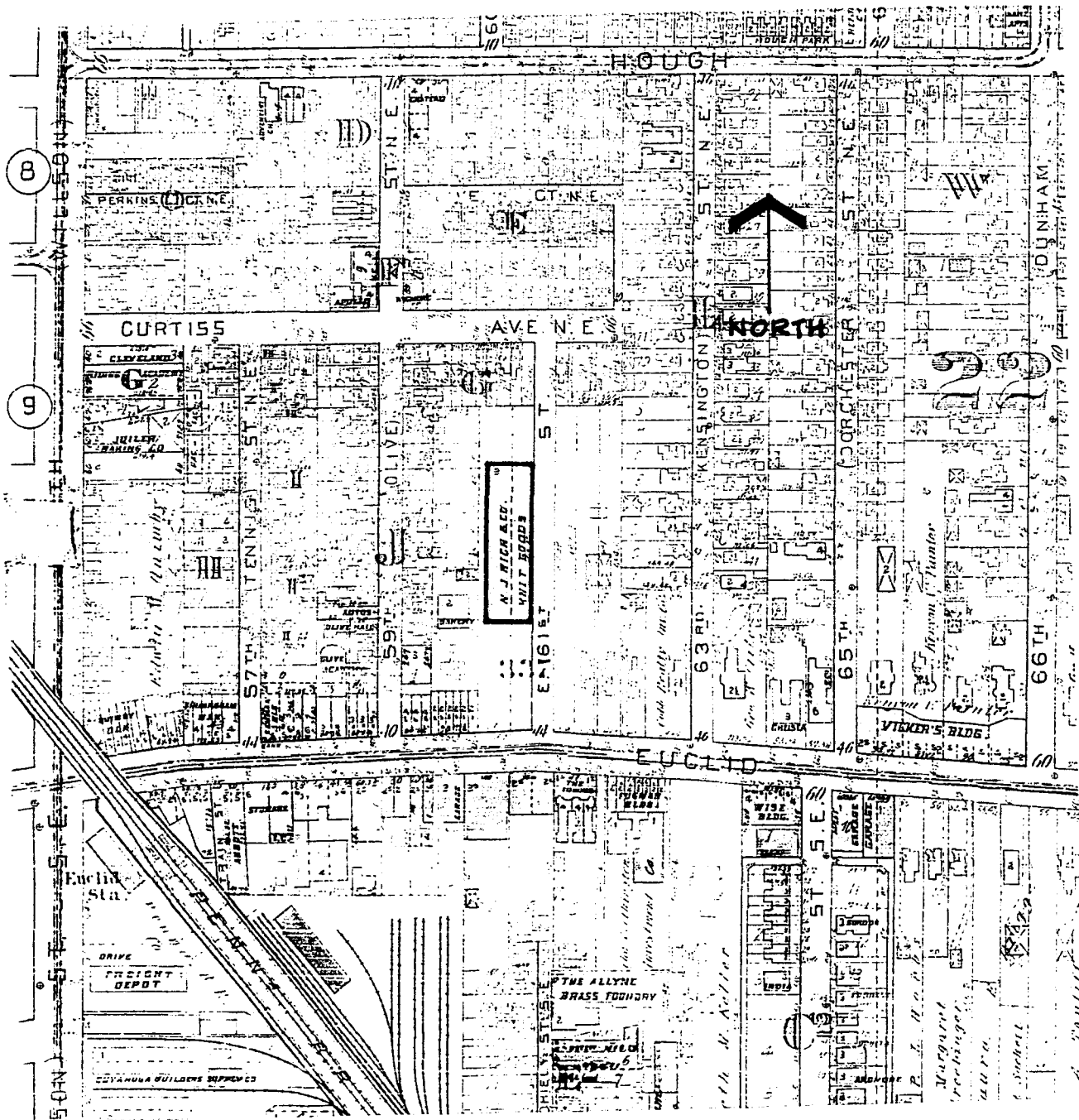
National Register of Historic Places
Continuation Sheet

The N. J. Rich and Co. Building
Cleveland, Cuyahoga, Ohio

Section number 10 Page 2

Geographical Data (continued)
(Hopkins Plat Books, Cleveland, Volume 1, 1912, Corrections 1915.)

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National Register of Historic Places
Continuation Sheet

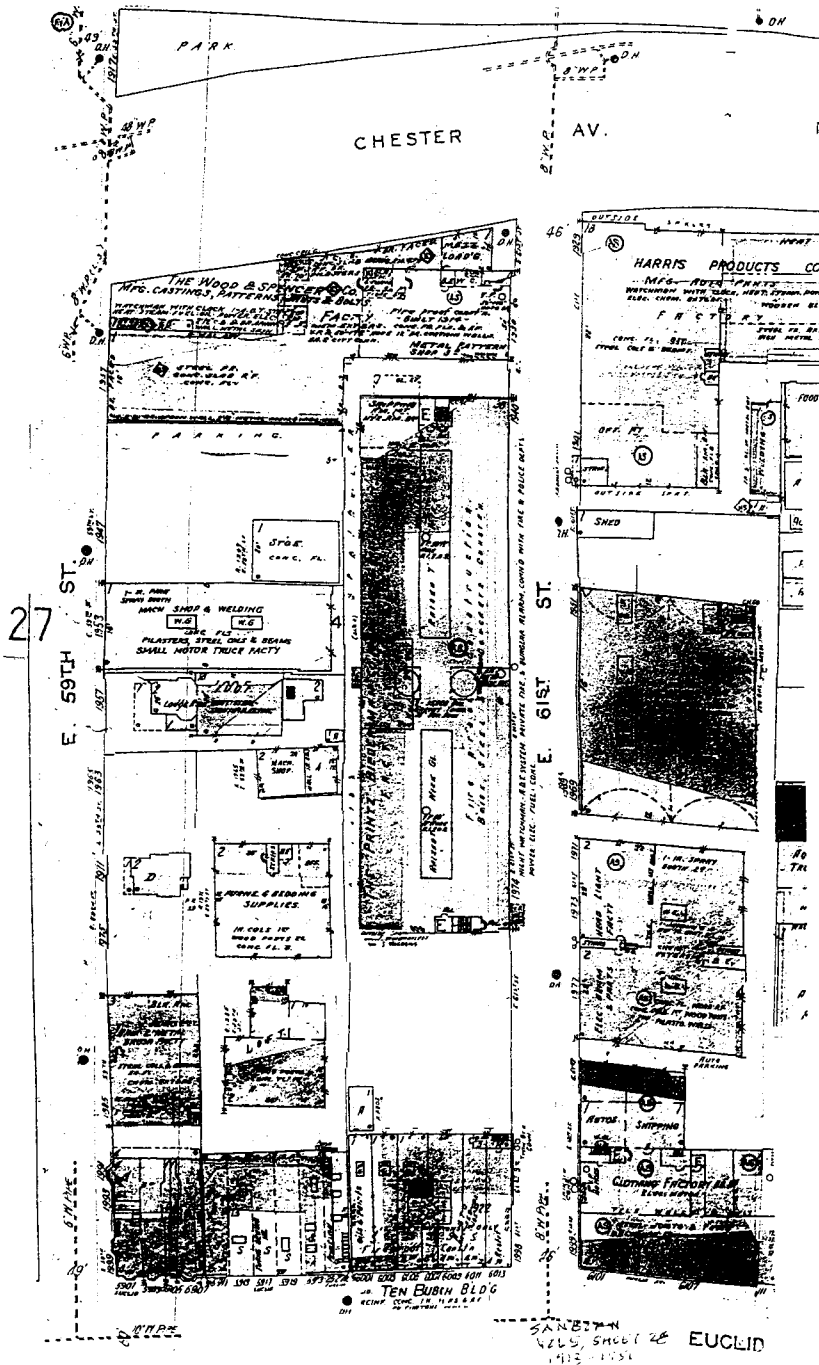
The N. J. Rich and Co. Building
Cleveland, Cuyahoga, Ohio

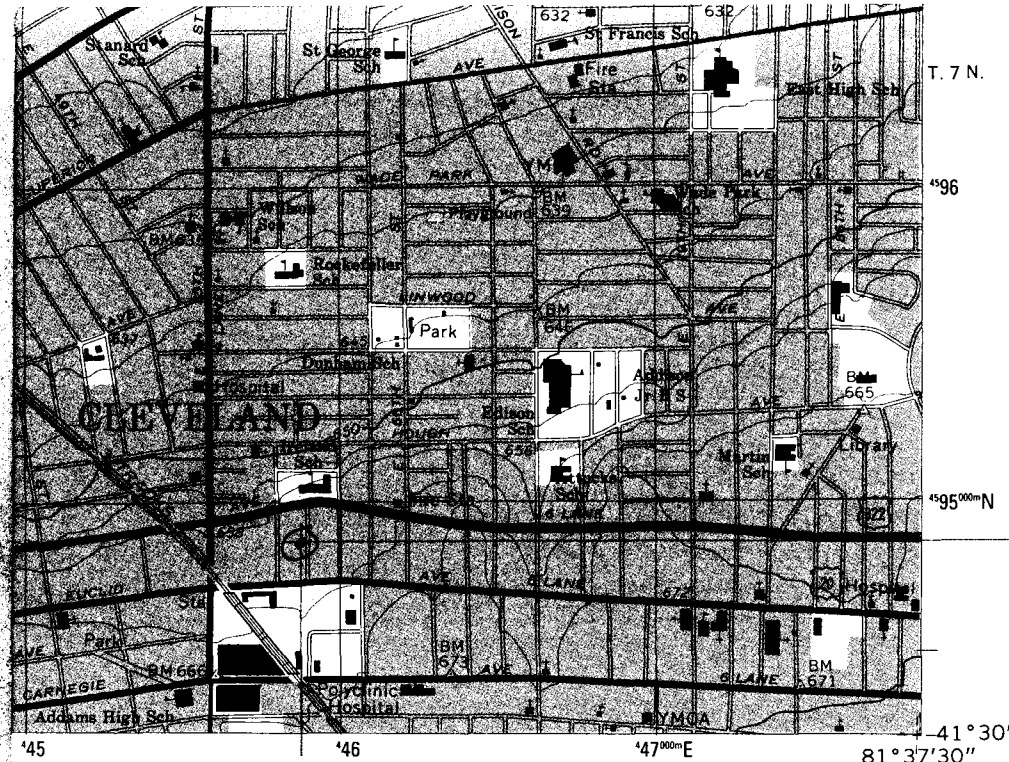
Section number 10 Page 3

Geographical Data (continued)

(Sanborn Fire Insurance Maps, Cleveland, Volume 5, Sheet 28, 1913-1951.)

Reduced in size, do not scale.





N. J. RICH AND CO.
 BUILDING
 1974 EAST 61ST ST.
 CLEVELAND, OHIO
 UTM REFERENCE:
 17/445875E/4524375N

INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1997

ROAD CLASSIFICATION

- Primary highway, hard surface Light-duty road, hard or improved surface
- Secondary highway, hard surface Unimproved road
- Interstate Route U. S. Route State Route

(SHAKER HEIGHTS)
 4666 / NE



CLEVELAND NORTH, OHIO

COMMERCIAL SURVEY CO.
 203 Coxton Bldg. 812 Huron Rd. 1994
 Cleveland, Ohio 44115
 (216) 771-3995 DMA 4667 II SW—SERIES V852

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SINCE 1885

May 23, 2003

James A. Haviland
4019 Prospect Avenue, Suite 220
Cleveland, Ohio 44103

Dear Mr. Haviland:

Congratulations on the recent listing of your property into the National Register of Historic Places!

The National Park Service, United States Department of the Interior listed the **N.J. Rich and Co. Building** at 1974 E. 61st Street in Cleveland, Ohio on May 1, 2003. The nomination was made in connection with a state plan to identify and document prehistoric and historic places in Ohio which qualify for National Register status under provisions of the National Historic Preservation Act of 1966 as amended.

The Ohio Historic Preservation Office (OHPO) is available to advise you in maintaining the historic character of your property. As you know from previous mailings received from this office, there are no restrictions placed on your property following the National Register listing. However, the OHPO strongly encourages owners of historic properties to consider all options before completing work that could damage the structure or impair its historic integrity. Careful planning can facilitate the sensitive incorporation of contemporary alterations with the historic fabric. The OHPO provides free information on how to sensitively rehabilitate and repair historic properties, upon request.

Thank you for your interest in historic preservation and the National Register of Historic Places.

Sincerely,

Barbara A. Powers
Department Head
Planning, Inventory, and Registration

Cc: Ted Sande, Form Preparer
The Honorable Jane Campbell, City of Cleveland
Senator C.J. Prentiss, District #21
Representative Shirley Smith, District 10
Robert Keiser, Cleveland Landmarks Commission
Northeast Ohio Areawide Coordinating Agency
Paul Graham, Ohio Department of Transportation