

Union Elevated Railroad:
Randolf Street Station
Wabash Ave. @ Randolf St.
Chicago
Cook County
Illinois

HAER No. IL-1D

HAER
ILL,
16-CHIE,
108D-

PHOTOGRAPHS
WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
Washington, D.C. 20240

HAER
ILL,
16-CHIG,
108D-

HISTORIC AMERICAN ENGINEERING RECORD

IL-1D

UNION ELEVATED R.R.
RANDOLF ST. STATION (ON WABASH)

Date: 1897

Location: Randolph St. on Wabash Ave. Chicago, Cook Co. IL.

Owned by: Originally: Union Elevated R.R.
Presently Chicago Transit Authority

Significance: One of the stations along the Uion Elevated Railroad's Loop. The Loop is part of one of the oldest elevated rail systems still in operation in the United States. This station served an itegral part in its operation.

Transmitted by: Dan Clement, 1983 with historical data drawn from the National Register of Historic Places Determination of Eligibility file.

For additional photographs and data on the Union Elevated R.R., see: IL-1
Union Elevated R.R.
The Union Loop

Union Elevated Railroad, Randolph
/Wabash Avenue Station
(Union Elevated Railroad, Randolph
Street Station)
Randolph and Wabash Avenue
City of Chicago
Cook County
Illinois

HAER No. IL-1-D

HAER
144
16-CHIG,
108D-

ADDENDUM TO:
Union Elevated Railroad, Randolph Street
Station
Randolph and Wabash Avenue
City of Chicago
Cook County
Illinois

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
Rocky Mountain System Support Office
National Park Service
P.O. Box 25287
Denver, Colorado 80225-0287

UNION ELEVATED RAILROAD, RANDOLPH
/WABASH AVENUE STATION
(UNION ELEVATED RAILROAD,
RANDOLPH STREET STATION

HAER
ILL
16-CHIG,
108D-

ADDENDUM TO: UNION ELEVATED RAILROAD,
RANDOLPH STREET STATION
HAER No. IL-1-D
Page 2

HISTORIC AMERICAN ENGINEERING RECORD
UNION ELEVATED RAILROAD, RANDOLPH/WABASH AVENUE STATION
(UNION ELEVATED RAILROAD, RANDOLPH STREET STATION)

This report is an addendum to a one (1) page report previously submitted to the Library of Congress in 1983.

Location: Randolph Street and Wabash Avenue, Chicago, Cook County, Illinois

Present Owner: Chicago Transit Authority

Present Use: Rapid Transportation

Significance: Significant in the history of American industrial archaeology, the Union Loop Elevated is also important for its association with financier and traction magnate, Charles T. Yerkes and for its role in defining and shaping Chicago's downtown. According to Theodore Anton Sande, author of *Industrial Archeology: A New Look at the American Heritage*, to "the industrial archeologist, the Chicago Loop provides an ideal case study" (1976, 113). Having made its first run in 1897, the Union Loop Elevated is one of only a few extant examples of transit systems that have remained in continuous operation for nearly a century. A "massive web of riveted steel girders and shining tracks," the Loop Elevated was designed by John Alexander Low Waddell, a Canadian-born engineer who played an important role in the history of American bridge design.

PART I. HISTORICAL INFORMATION

A. Physical History

1. Date of Erection: 1897

2. **Architect:** The designer of the Loop Elevated and the Randolph/Wabash station was John Alexander Low Waddell (1854-1938), Consulting Engineer of Kansas City, Missouri. For additional information on Waddell, see HAER No. IL-1.
3. **Builder, contractor, suppliers:** Construction materials acquired from Pencoyd Iron Works, Pencoyd, Pennsylvania. (CTA 1981, 3). Some of the architectural/engineering drawings specify re-use of materials from older stations in the process of demolition. (CTA Engineering Archives, reviewed by E. Goldsmith September 3, 1996).
4. **Original plans and construction:** A set of original plans for the Randolph/Wabash Avenue Station were developed in 1896 by John Alexander Low Waddell. The client's name is listed as Northwestern and Union Elevated Railroad, Chicago, Illinois. The drawings are on microfilm in the archives of the Chicago Transit Authority (CTA Archives, Engineering Dept., reviewed by Julia Schneiderman July 1, 1994).

It is unclear whether or not all of the planned construction and modification was implemented. The accompanying photographic documentation intends, among other goals, to show some of the modifications, phases in construction and materials replacement that resulted from the architects/engineering drawings as they were executed.

5. **Alterations and Additions:** The Randolph/Wabash Street Station has had numerous alterations over the years, however, its overall appearance and character is quite intact. Below is a chronological list of the more extensive alterations to the station:

1919: Platform extensions were drawn. As with other Wabash Avenue stations, these extensions nearly doubled the carrying capacity of the station and allowed longer trains access to the platforms at peak use periods. (CTA Engineering Archives, reviewed by E. Goldsmith 3 September 1996).

- ca. 1920 Heating and plumbing mechanical drawings were produced for this station. (CTA Engineering Archives, reviewed by E. Goldsmith 3 September 1996)
- 1926-1930 Marshall Field & Company, department store, planned a direct access staircase leading from the northeast corner of the store to the west station house. During the same period, a wider staircase at the southwest entrance to the station was proposed. (CTA Engineering Archives, reviewed by E. Goldsmith 3 September 1996).
- 1956 The entire west station house was replaced with a structure completely different in both design and construction from that which had been designed by Waddell, the original being virtually identical in design and execution to the standing west station house at the Madison/Wabash station. Plan and elevation drawings show reconfigured seating areas, ticket booths and stairway locations. The specifications for the Randolph/Wabash stations call for material that would have been unavailable and/or unpopular three or four decades earlier, e.g., neoprene, and acoustic tile.
- In addition, brushed aluminum and stainless steel, enameled metal paneling and prefabricated plastic for the waiting lounge seats were modern materials chosen to execute this contemporary building. The arcade of windows on the west, south and north sides of the station house is comprised of multi-pane panel sliding windows. (CTA Engineering Archives, reviewed by E. Goldsmith 3 September 1996).
- 1967 The east platform station house was demolished, and the width of the platform and mezzanine shortened by half. The columns which had been necessary as supports for the eastern edge of the east platform and had overhung the pedestrian crosswalk, were also removed. (City of Chicago September 1981, II-4)

PART II ARCHITECTURAL INFORMATION

A. General Information:

1. Engineering Character: The Randolph/Wabash Station is of engineering merit based on four criteria. First, the station is of merit in the history of American industrial archaeology. Second, it is of merit for its association with financier and traction magnate, Charles T. Yerkes. Third, it is of merit for its role in defining and shaping Chicago's downtown. Fourth, from its inception, the Randolph/Wabash Station was a key portion in a system that serves as an extant example of the nation's second oldest elevated rail mass transit system.

2. Condition of Fabric: The condition of the fabric at the Randolph/Wabash station is fair to poor. In general, the material exhibiting the greatest extent of deterioration is that used for roofing, a function of exposure to the elements more than as a result of prolonged use by commuting passengers.

3. Summary Description: The Randolph/Wabash Station is a two level station that is elevated over the street by steel buttressing girders. The elevated is divided into two portions, the substructure and the superstructure. The substructure consists of a foundations, tress elevations, transverse sections, and a structural system. On older drawings, the substructure is referred to as the "subway." It is designated as substructure in this report to distinguish it from the underground subway mass transit system that was built in the 1930s and 1940s.

The superstructure consists of two levels. Although structurally unrelated to the surrounding buildings, it is clear from both profile and elevation perspectives that the station house -- at least the extant west station house -- bears an intentional visual relationship to the adjacent architecture. With an unbroken sight line between the buildings to its south and north, the station house gives the appearance of belonging to the architectural cityscape as much as it does to an elevated rail system. The first level serves as a transitional level for elevated passengers. The second level, or platform level, consists of two mirrored platforms separated by the elevated tracks. One platform serviced the Randolph/Wabash Station to the west, the mirror platform serviced the Randolph/Wabash Station to the east.

In general, the integrity of the Randolph/Wabash Station remains intact despite general maintenance deterioration and numerous minor alterations

(see Alterations and Additions section for discussion).

B. Description of Substructure:

1. Overall Dimensions: Not applicable. The Randolph/Wabash Station's substructure constitutes an integral and dependent segment of the overall Union Loop elevated substructure. As such, the Randolph/Wabash Station's overall dimensions are not applicable because they cannot be considered independent of the entire system.
2. Foundation: The structural system is anchored in the street below the Union Loop elevated system and is surrounded by asphalt and/or concrete.
3. Structural system: The station is supported by a steel buttressing girder system. This buttressing girder system in part consists of vertical I-beam sections that are rooted into the street below and surrounded by asphalt. These vertical I-sections measure 1'3" x 1'4 1/2". The vertical I-sections directly support closely spaced flat I-beams. These closely spaced flat I-beams in turn form part of the inverted tress elevation. Specifically, the elevated tracks are superimposed on the tress elevations which in turn is supported by the vertical I-sections. Additionally, the first level of the station is framed within the buttressing system, crossing the center line of the tracks at the street intersection. The second level is supported and extended out from the buttressing system.

C. Description of Superstructure:

1. First level: The building's first level interior is in fair condition. It is apparent that there has been some attempt to repair damages throughout the years.

The first level of the station is accessed via stairways which originate from the street level. There is one staircase on each corner of the Randolph/Wabash intersection. Each of these four staircases features twenty-five stairs leading from the concrete sidewalk pavement to mezzanine, or first level, of the station. These steps measure 4' x 11" x 7". An additional, unusable staircase leading directly from ground level to the platform level is located along the pavement due north of the northwest corner staircase on Wabash Avenue. The locations of the interior staircases leading from mezzanine to platform levels is asymmetrical from east to west: on the east side of the platform are two sets of stairs. On the west is an enclosed single stairwell that divides at a lower landing midway between mezzanine and platform levels.

There are no ticket booths or turnstiles at the first, mezzanine level. In general, the entire first level serves as a transition bridge that provides access to the east and west bound trains. The first-level provides this access above the street level and reduces passenger and vehicle traffic at the Randolph/Wabash intersection. The girders and columns themselves have also provided structural support for billboard advertising, traffic lights and window and masonry cleaning equipment.

2. Second level station: The second level station is in fair to good condition. The layout of the second level station varies from east to west platform. With the demolition of the east platform station house, the current east structure features a wooden ticket booth, an east wall constructed in plywood and fiberglass paneling, four-pane casement window panels.

The west platform is dominated by the station house. Within this building are two ticket booths, each with two adjacent ticket booth turnstiles, and a row of seats facing east. Behind the row of seats is a dividing railing, in a horizontal line with the configuration of ticket booths and turnstiles, separating the paying passengers on the eastern half of the west station from those who have just entered the station house on the western half.

3. Second level train loading platforms: The roof of the station is slanted at each side and meets at a point in the middle. It is made of corrugated sheet metal. The roofs that cover the stairways are flat, slant down towards the street and are also made of corrugated sheet metal. The roofs that cover the stairs are in poor condition, the paint is peeling and the corrugated sheet metal is heavily oxidized.

D. Site and Surroundings:

1. General Setting and Orientation: The Randolph/Wabash Station is located in the heart of downtown Chicago and contributes to the definition of the Loop area. Regional mass transit stations, buses and the underground subway system are within close proximity to the elevated trains at Randolph and Wabash Avenue. In particular, this station has enjoyed long-standing association with

the Marshall Fields department store that has served as a commercial anchor in the central downtown business district for a century. At present, the Randolph/Wabash station is girded by commercial buildings and parking garages.

PART III. SOURCES OF INFORMATION

A. Architectural Drawings and Photographs:

Chicago Transit Authority Archives, Engineering Department, drawings on microfilm and photo-reproducible drawings made available by mssrs. Clifford Hayes and Moses Sampson, reviewed by E. Goldsmith September 3, 1996.

Chicago Transit Authority Library, photographs and reports made available by CTA staff librarian Violet Brooks, reviewed by E. Goldsmith September 4, 1996.

B. Bibliography:

A History of the Yerkes System of Street Railways (from the Earliest Organization of the Horse Railway to the Present Development of Cable Electric and Elevated Railway of the North and West Districts) Chicago, 1897.

Bach, Ira J. and Susan Wolfson. *A Guide to Chicago's Train Stations Past and Present*. Athens, Ohio: Ohio University Press, 1986.

Brown, Kathi Ann. *Diversity by Design: Celebrating Seventy-Five Years of Howard Needles Tammen & Bergendoff 1915-1989*. Kansas City: HNTB, 1989.

"Chicago Elevated Terminal Railway Ordinance," as passed by the City Council of the City of Chicago, November 5, 1981 and approved by His Honor the Mayor, November 9, 1981, by its President, Joseph T. Torrence and attested by its corporate seal.

Chicago Rapid Transit Company. Annual Reports for the years 1924, 1925, 1926, 1928, 1929, 1931, 1933, 1934.

Chicago Transit Authority. "The Story of the Chicago Rapid Transit Lines: The "L" System." *37th Anniversary Year Book of Division 308*, Elevated Railway Employees, reprinted May 1, 1940.

City of Chicago. "The Chicago Union Loop Elevated Structure: Reasons for Not Listing on the National Register of Historic Places" Submitted to the Illinois Historic Sites Advisory Council, October 13, 1976.

City of Chicago and Chicago Transit Authority. *Master Plan for the Loop Elevated: Rehabilitation and Historic Preservation*. September, 1981.

Clement, Dan. HAER IL-1 "Written Historical and Descriptive Data for the Union Elevated Railroad." *Historic American Engineering Record*, United States Department of the Interior, National Park Service, 1983.

Cudahy, Brian J. "Chicago's Early Elevated Lines and the Construction of the Union Loop," *Chicago History* Volume VIII, Winter 1979-80, pp. 194-205.

Cudahy, Brian J. *Destination Loop: The Story of Rapid Transit Railroading in and Around Chicago*. Brattleboro, VT: The Stephen Green Press, 1982.

Duis, Perry. "Whose City? Part Two," *Chicago History* Volume XII, No. 2, 1983.

The Economist. Street Railway Supplement. 1896.

Hayes, Dorsha B. *Chicago: Crossroads of American Enterprise*. A Cities of America Biography. New York: Julian Messner, Inc., Publishers, 1944.

Hirsch, Susan E. and Robert I. Goler. *A City Comes of Age: Chicago in the 1890s*. Chicago: The Chicago Historical Society, 1990.

Hood, Clifton. *722 Miles: The Building of the Subways and how they Transformed New York*. New York: Simon & Schuster, 1993.

The Inter-Ocean. "Lease of Loop is Signed: Elevated Trains will Soon be Running Down Town," Volume XXVI. Number 193, Chicago, Sunday, October 8, 1897.

The Lakeside Annual Directory for the City of Chicago. Chicago: Illinois: The Chicago Directory Company, 1897, 1898.

Malone, Dumas, ed. *Dictionary of American Biography*, Volume XX,
New York: Charles Scribner's Sons, 1936.

Mayer, Harold M. and Richard C. Wade. *Chicago: Growth of a Metropolis*.
Chicago: University of Chicago Press, 1969.

Missouri Highway and Transportation Department, "Written Historical and
Descriptive Data for the Armour, Swift, Burlington Bridge (A.S.B.);
Winner Bridge; Missouri River Bridge; Fratt Bridge; North Kansas City
Bridge," *Historic American Engineering Record*, United States Department of
the Interior, May, 1982.

Miszcuk, Edward J. "Fratt Bridge; Armour-Swift-Burlington Bridge,"
National Register of Historic Places nomination form, National Park Service,
United States Department of the Interior, 1976.

Platt, Harold L. "Samuel Insull and the Electric City," *Chicago History*,
Volume XV, No. 1, Spring 1986, pp. 20-35.

Sande, Theodore Anton. *Industrial Archeology: A New Look at the American
Heritage*. Brattleboro, VT: The Stephen Greene Press, 1976.

Sinkevitch, Alice. *ALA Guide to Chicago*. San Diego: Harcourt Brace & Co.,
1993.

Weber, Harry P. "An Outline History of Chicago Traction," (compiled for
Chicago Railways Co. and Walter J. Cummings and Guy A. Richardson,
Its Receivers and Chicago City Railway Co., Calumet & South Chicago
Railway Co., and Edward E. Brown and Harvey B. Fleming, Their
Receivers). Chicago, 1936.

Weese, Harry. "Chicago Loop Elevated," National Register of Historic Places
nomination form. National Park Service, United States Department of the
Interior, 1978.

Prepared by:

Archaeological Research, Inc.
900 West Jackson Boulevard, Suite 6E
Chicago, Illinois 60607

PART IV. PROJECT INFORMATION

This project was undertaken by the City of Chicago as it fulfilled Section 106 compliance requirements for a project that will affect the Randolph/Wabash Station. The station is slated for demolition. The firm of Ross-Barney Jankowski contracted Archaeological Research, Inc. for the HAER documentation. Key project personnel included Elizabeth Goldsmith, historical researcher, Karen Poulson project manager, Ron Gordon, photographer, and David Keene, principal investigator.

Union Elevated Railroad,

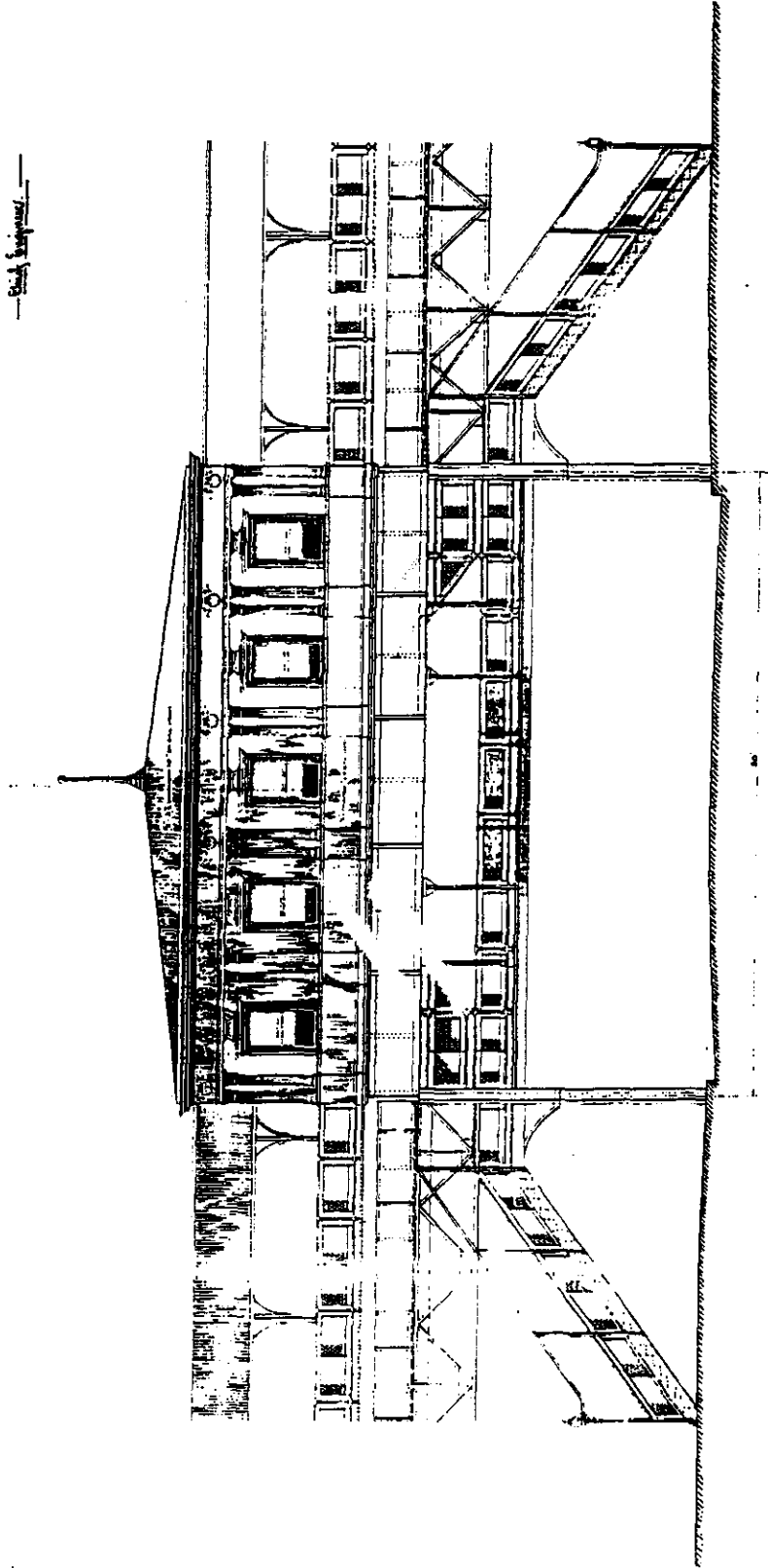
Randolph ~ Street ~ Station.

— Chicago 246 October 20 1906. —

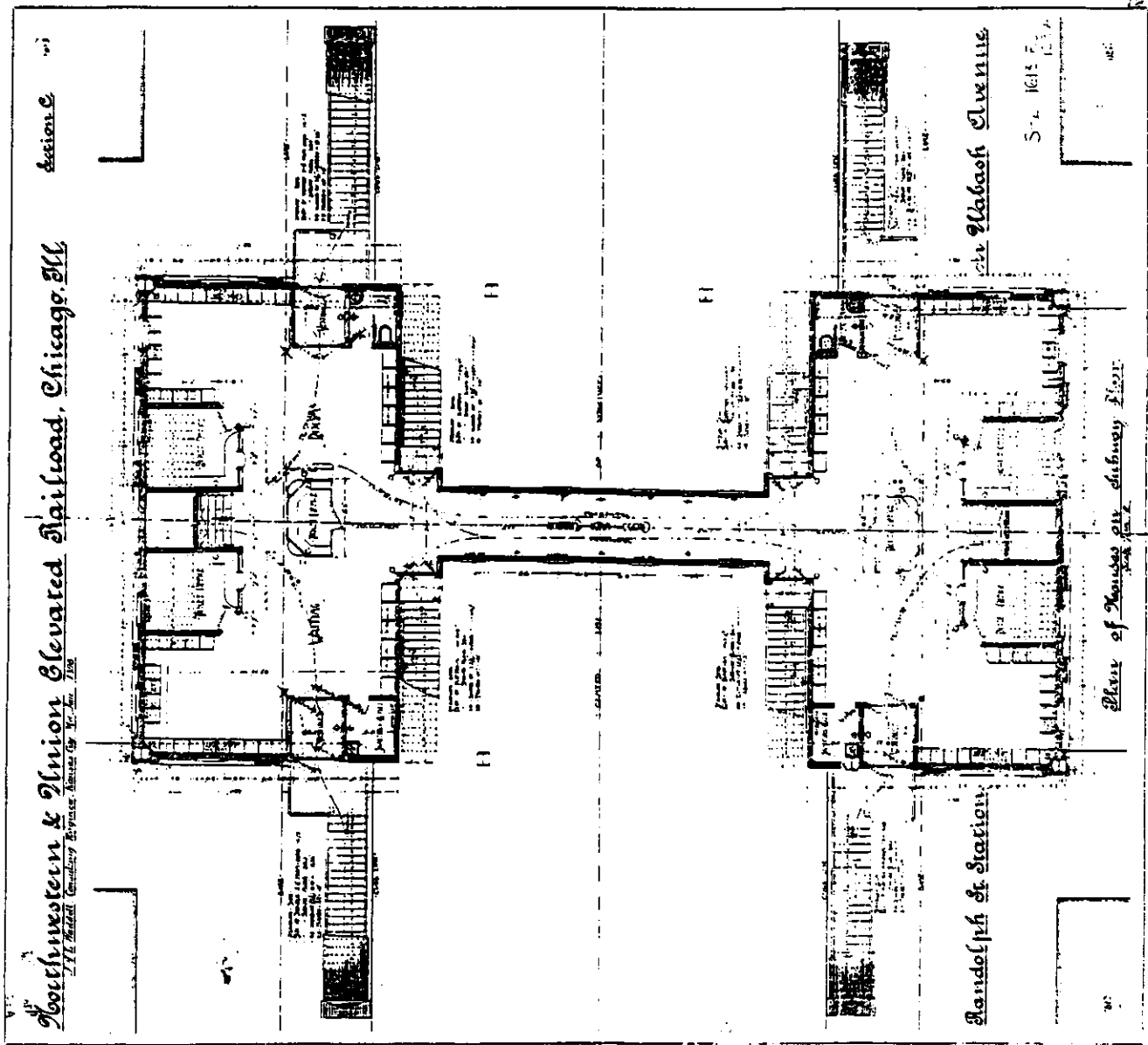
— Scale 1/4" = 15' 0". —

— Architect Charles McKim. —

— Steel Structure. —



Side - Side - Elevation.
(Showing alterations.)



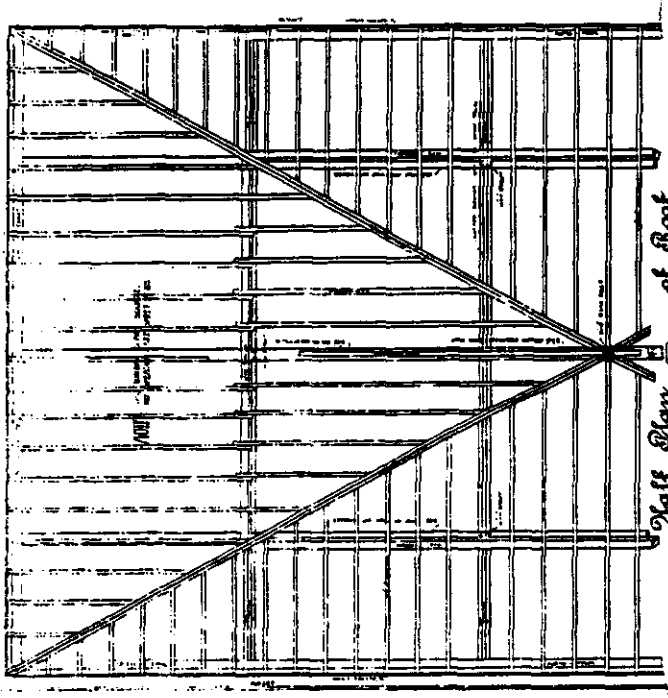
Northwestern & Union Elevated Railroad Chicago Ill.

11. Haddell Consulting Engineer, Kansas City, Mo. 1914. E. I. A. 202.

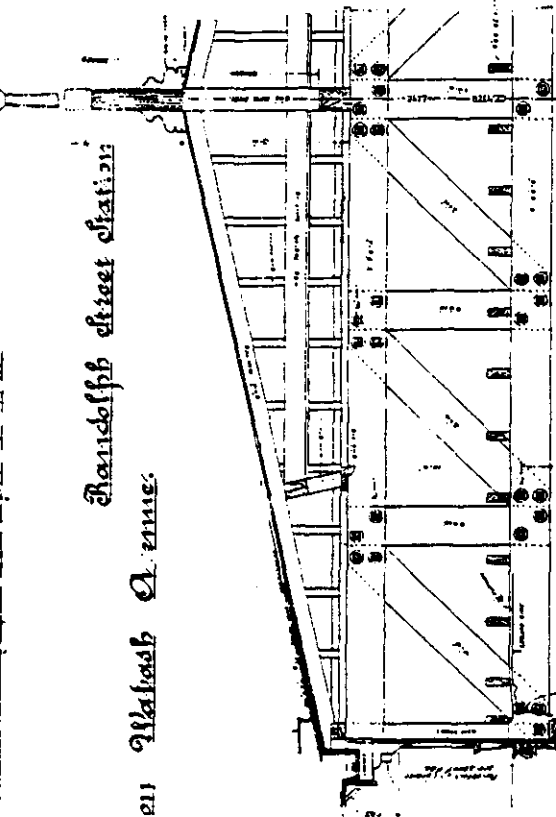
Randolph Street Station

211 Wabash Avenue

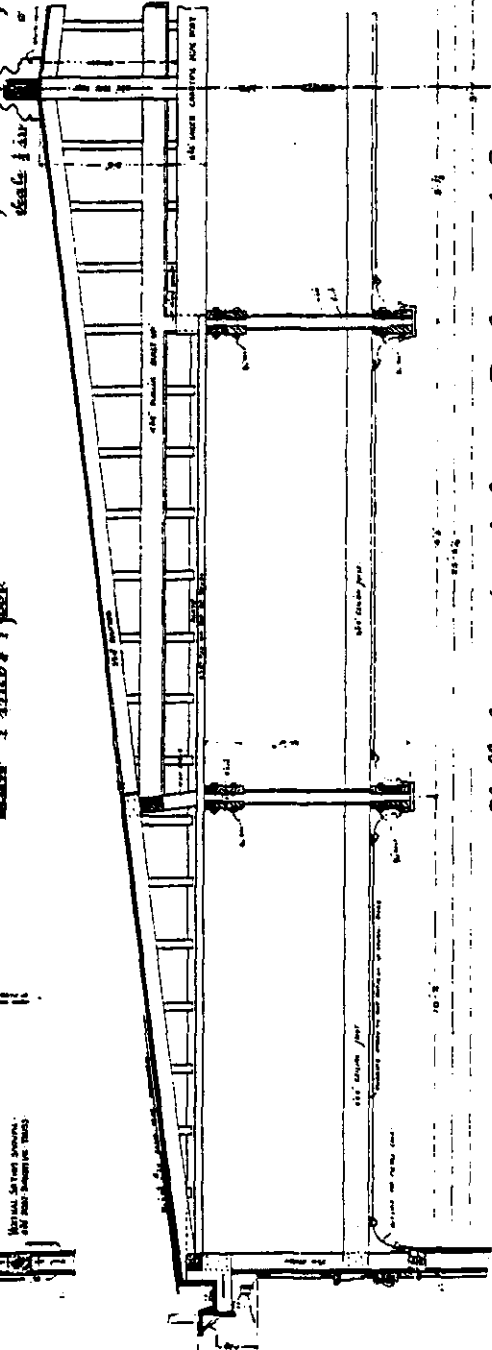
Section C



Half Plan of Roof
 scale 1 inch = 1 foot.



Half Cross Section & Elevation of Truss
 scale 1 inch = 1 foot.

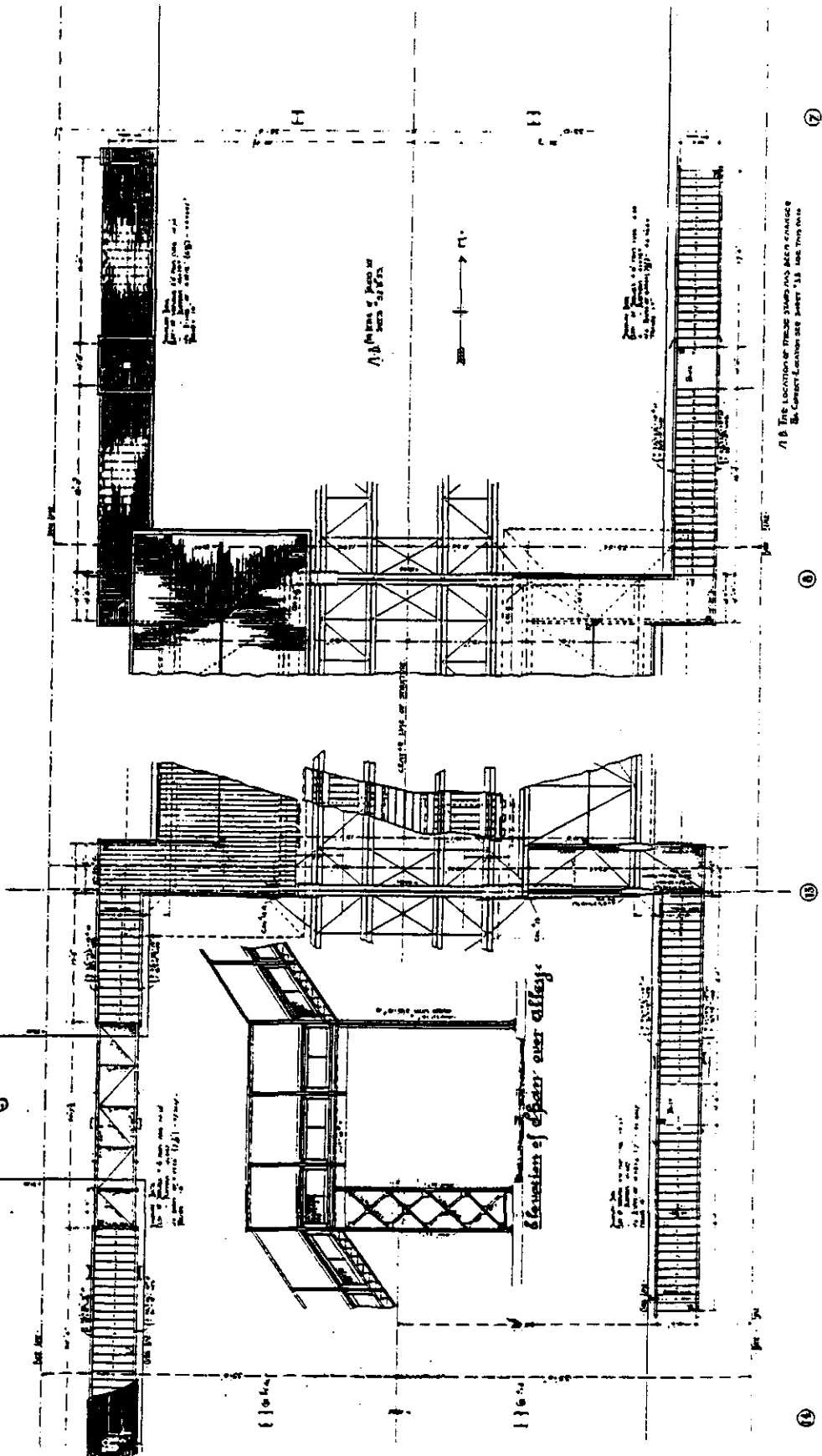


Half Longitudinal Section & Elevation of Trusses
 scale 1/2 inch = 1 foot.

Sta. 161
 File 1

Northwestern & Union Elevated Railroad, Chicago, Ill. Section C.
 City of Chicago, Illinois
 J.M. Woodruff Consulting Engineer, Chicago, Ill.

Randolph Street Station on Wabash Ave.
 Scale 1/4" = 1'-0"



Plan showing final location of exit stairways

Scale 1/4" = 1'-0"
 SHEET NO. 15
 DRAWING NO. 15