

# 21<sup>st</sup> Century Infrastructure for a 21<sup>st</sup> Century City

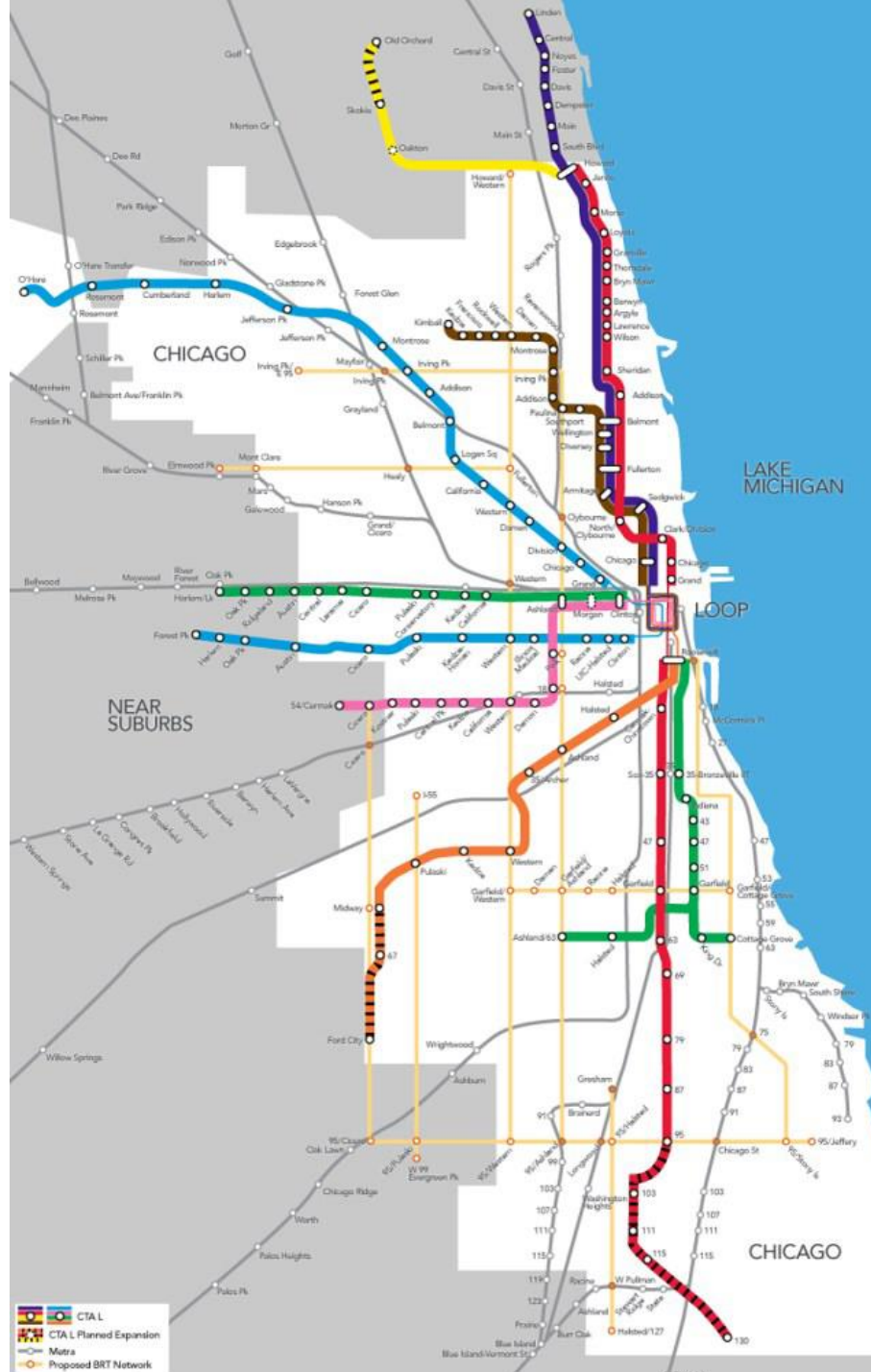




1. History + Background
2. Objectives / Program
3. Challenges
4. Design Solution / Process
5. Conclusion

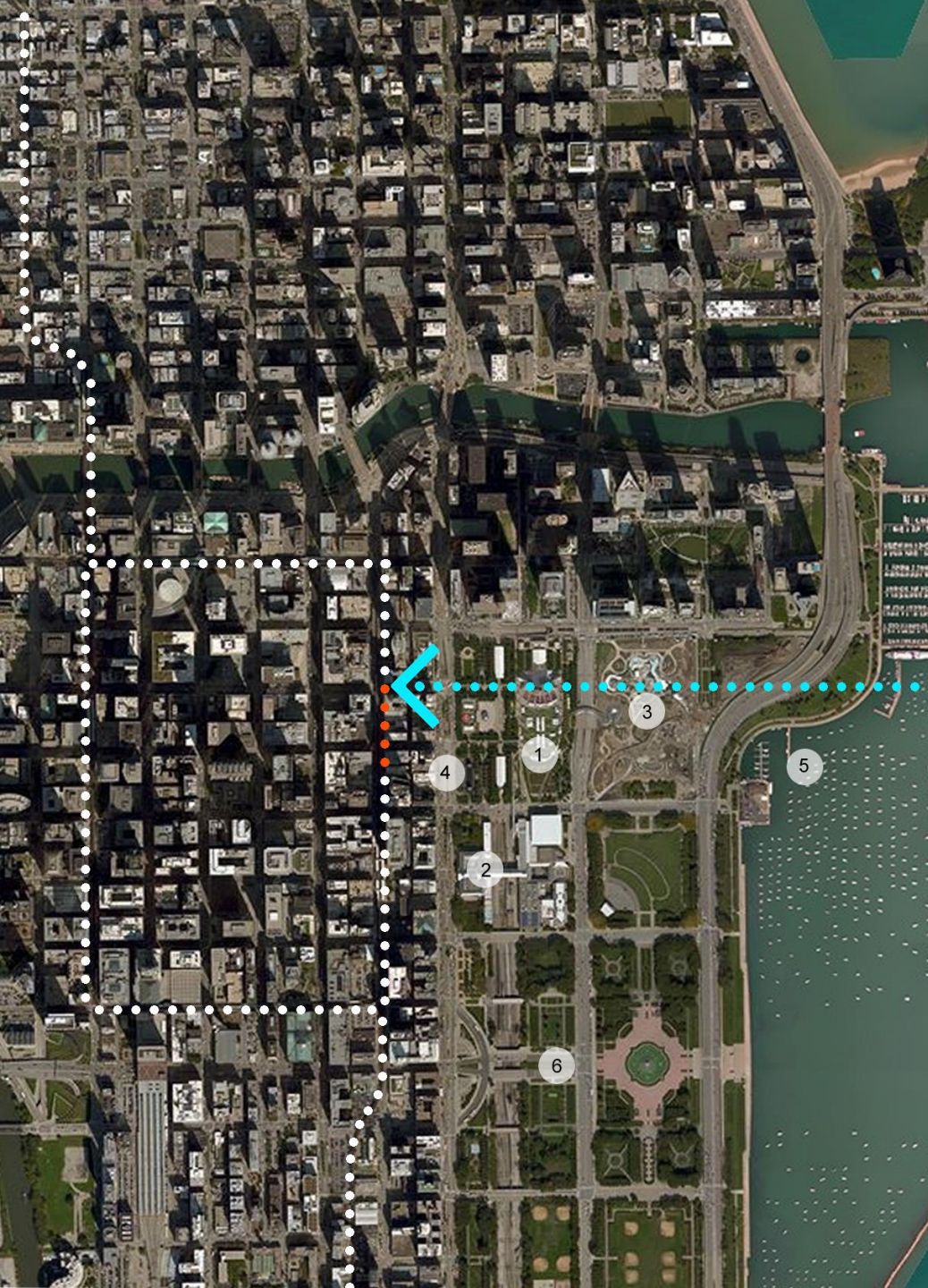


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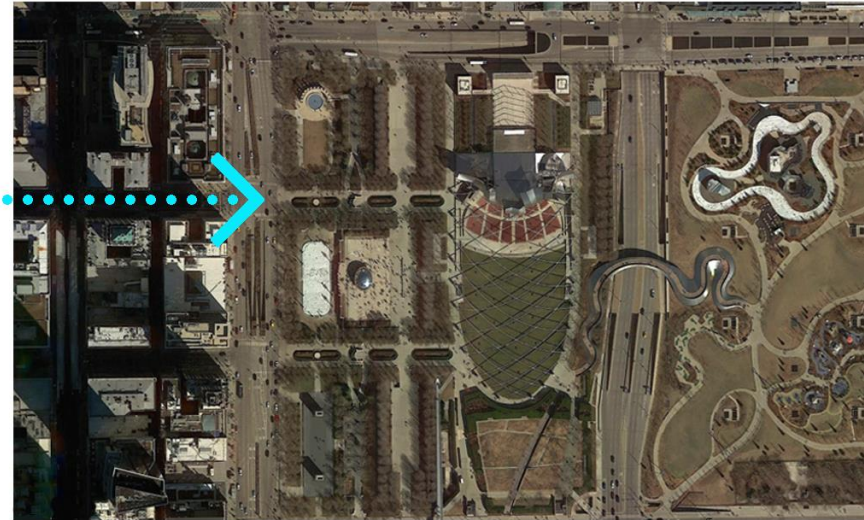
The CTA system weaves through Chicago and connects the neighborhoods of the City

- 2<sup>nd</sup> largest public transit agency in US
- 8 routes
- 1.6 million daily riders
- 220+ miles of track
- 145 stations
- Elevated, At Grade, Below Grade



Chicago Loop Aerial with CTA Elevated Train Route (left)  
Orange indicates extent of Washington/Wabash Station

Chicago Millennium Park Aerial Detail (below)  
Blue indicates path from Station to Park



1. Michigan Avenue
2. Millennium Park
3. Art Institute of Chicago
4. Maggie Daley Park
5. Lake Michigan
6. Grant Park / Buckingham Fountain



BROS. PICTURE FRAMES AND MOUNTINGS  
**DWIN & CO.**  
CTURERS OF  
**S-ORGANS**  
WABASH AVE.

THE  
BRUNSWICK  
BAIKE  
**BALDWIN**  
PIANOS  
NOTS  
OWATT

ILLINOIS  
**WHITNEY OPERA HOUSE**  
WORLD  
THE  
OPERA HOUSE

OFFICIAL FLOWERS  
MS FERNS TREES  
ance 271 Wabash Av  
ROOM 4.  
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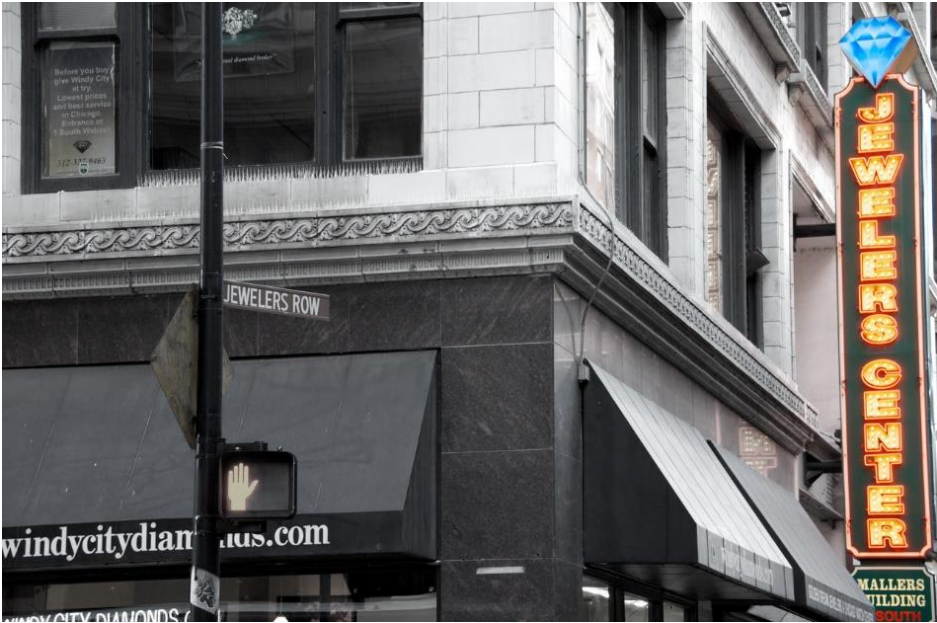
THE HOWLAND BUFFET

ROBERT

HISTORIC WABASH AVENUE



WASHINGTON AVENUE TODAY  
*Jeweler's Row*







*Madison Street Station*



*Randolph Street Station*

rlm

Linden

Madison/Wabash

ON/OS  
44E

**BULLEIT**  
BOURBON

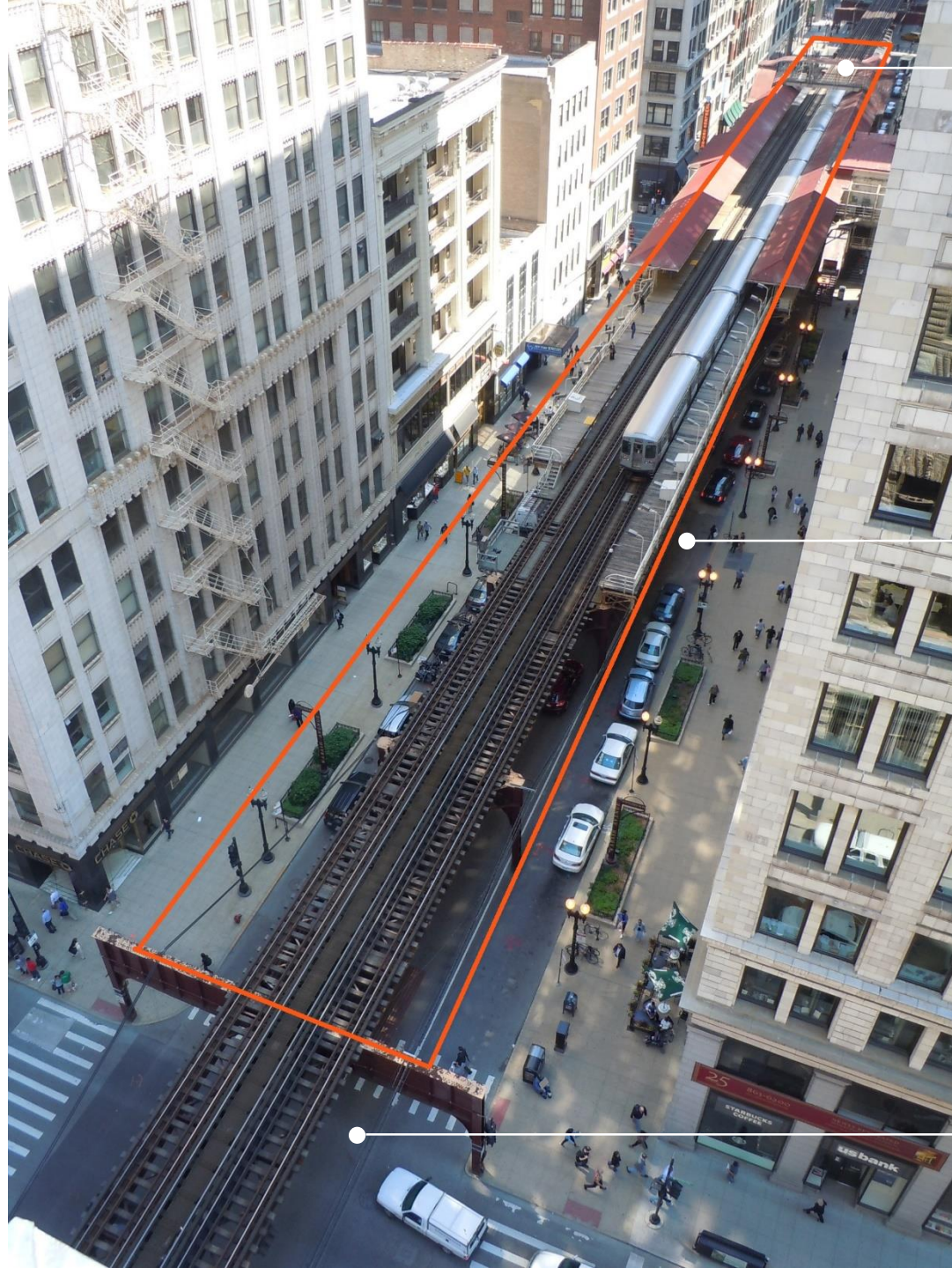
SMALL BATCH • AWARD WINNING

Transit information



 Danger - Keep Off Tracks  
Electric Current 

PROJECT AREA



Washington Blvd

Wabash Ave

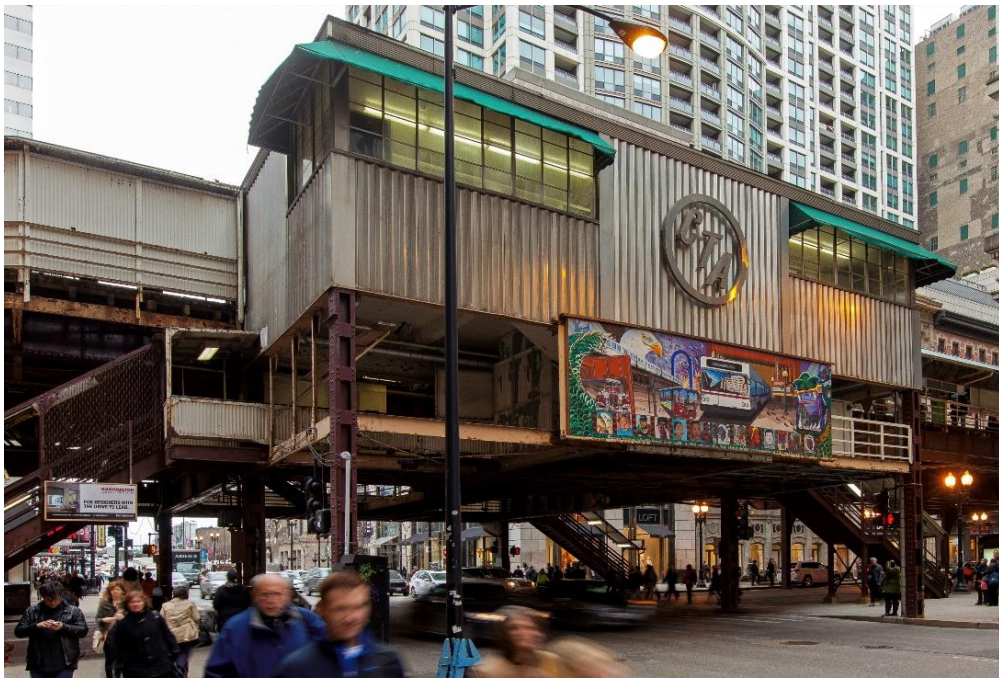
Madison St



1. History + Background
2. **Objectives / Program**
3. Challenges
4. Design Solution / Process
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- Replace Madison and Randolph Stations
- Complete Accessibility
- Passenger comfort, safety, and security
- Efficiency, safety, reliability of operations

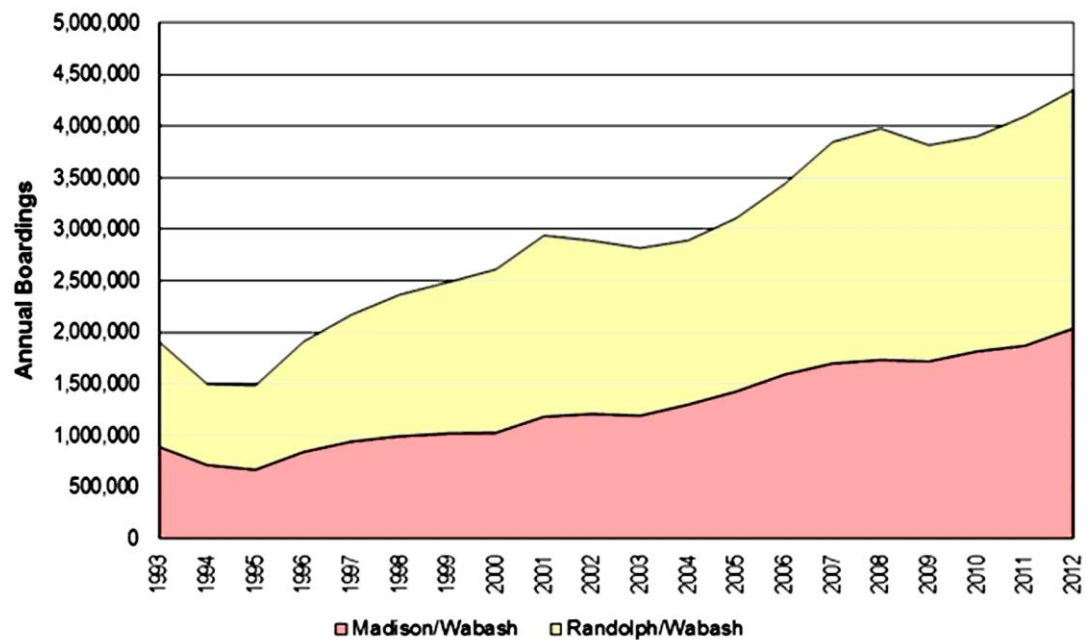




- Minimize alterations to historic track structure
- No impact to adjacent historic buildings
- Open views to Millennium Park and historic buildings
- Increase clearances over Randolph and Madison



- Support neighboring businesses and institutions
- Improve the viability and visibility of public transit
- Support long-term viability of Loop Elevated for generations to come







1. History + Background
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- 3. Challenges**
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## EXISTING SITE CONSTRAINTS

### MAINTENANCE OF OPERATIONS

- CTA Trains
- Pedestrians
- Vehicles
- Businesses



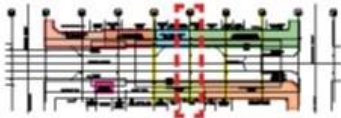
## EXISTING HISTORIC STRUCTURE

- Steel
- Foundations



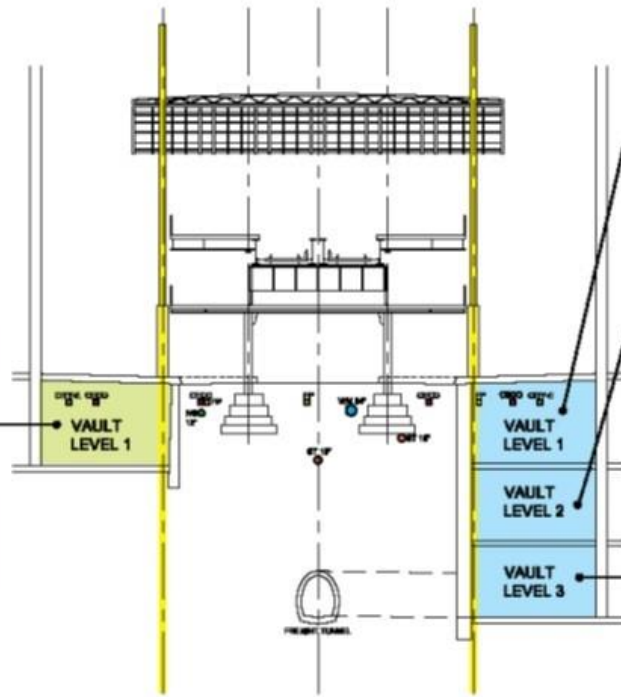
- EXISTING UTILITIES**
- NG NATURAL GAS (12")  
APPROX. DEPTH 6"
  - WM WATER MAIN (24")  
APPROX. DEPTH 5"
  - FP FIRE ALARM & POLICE  
APPROX. DEPTH 3'-6"
  - CEDD COMED  
APPROX. DEPTH 3'-6"
  - CITY-E CITY ELECTRIC  
APPROX. DEPTH 3'-6"
  - ST STORM SEWER (15"-18")  
APPROX. DEPTH 14"

NOTE: LOCATION AND DEPTH OF UTILITIES ARE APPROXIMATE. INFORMATION OBTAINED FROM OFFICE OF UNDERGROUND COORDINATION (OUC). UTILITIES LOCATED WITHIN VAULTS ARE APPROXIMATE AND REQUIRE FURTHER FIELD INVESTIGATION.



**EAST SIDE**  
17-21 N WABASH

**WEST SIDE**  
16 N WABASH  
STEVEN'S BUILDING



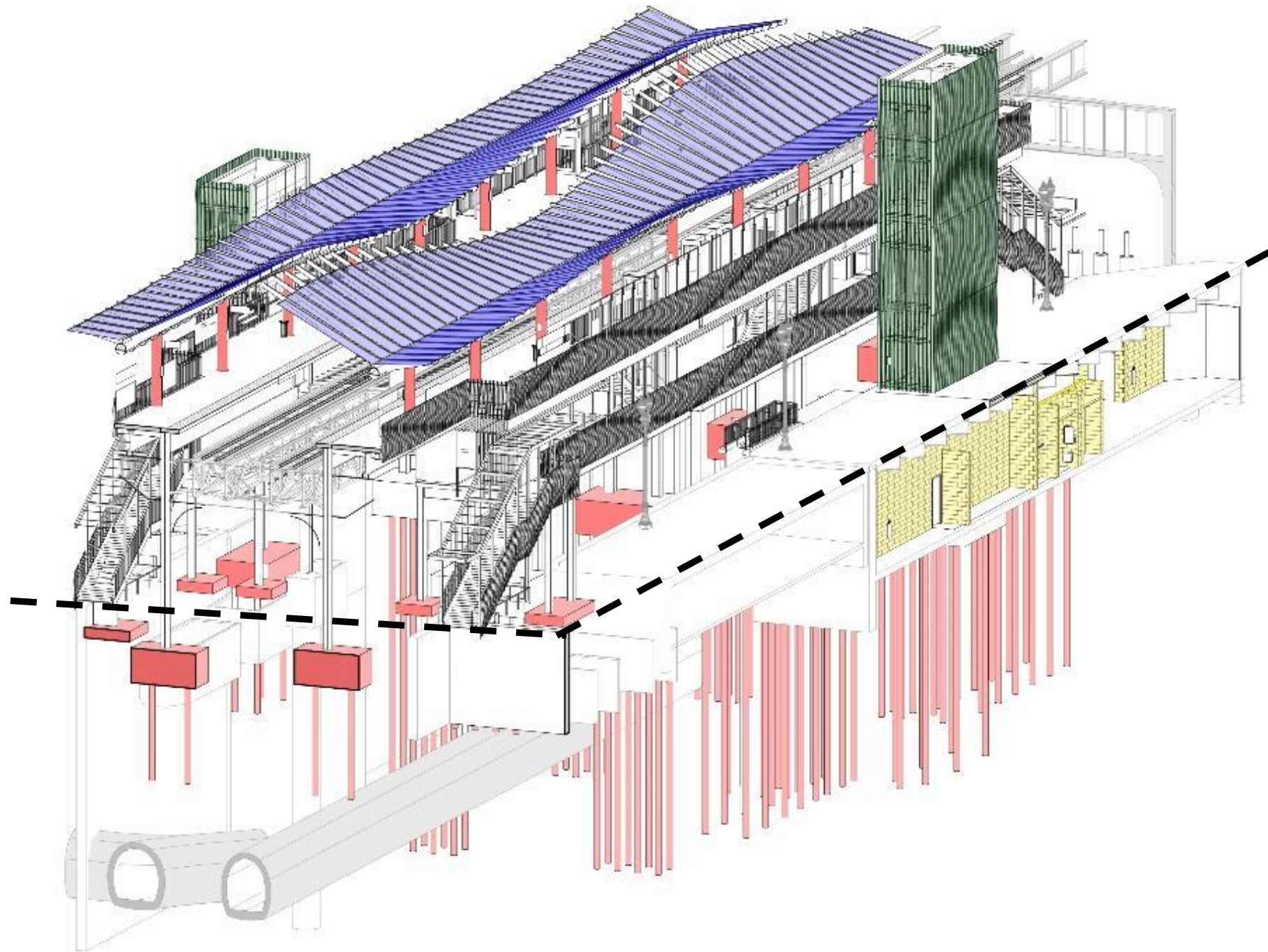
TYPICAL SECTION | COLUMN LINE 23



## UNDERGROUND CONDITIONS

- Public Utilities
- Private Utilities
- Freight Tunnels
- Vaulted Sidewalks
- Poor Soils





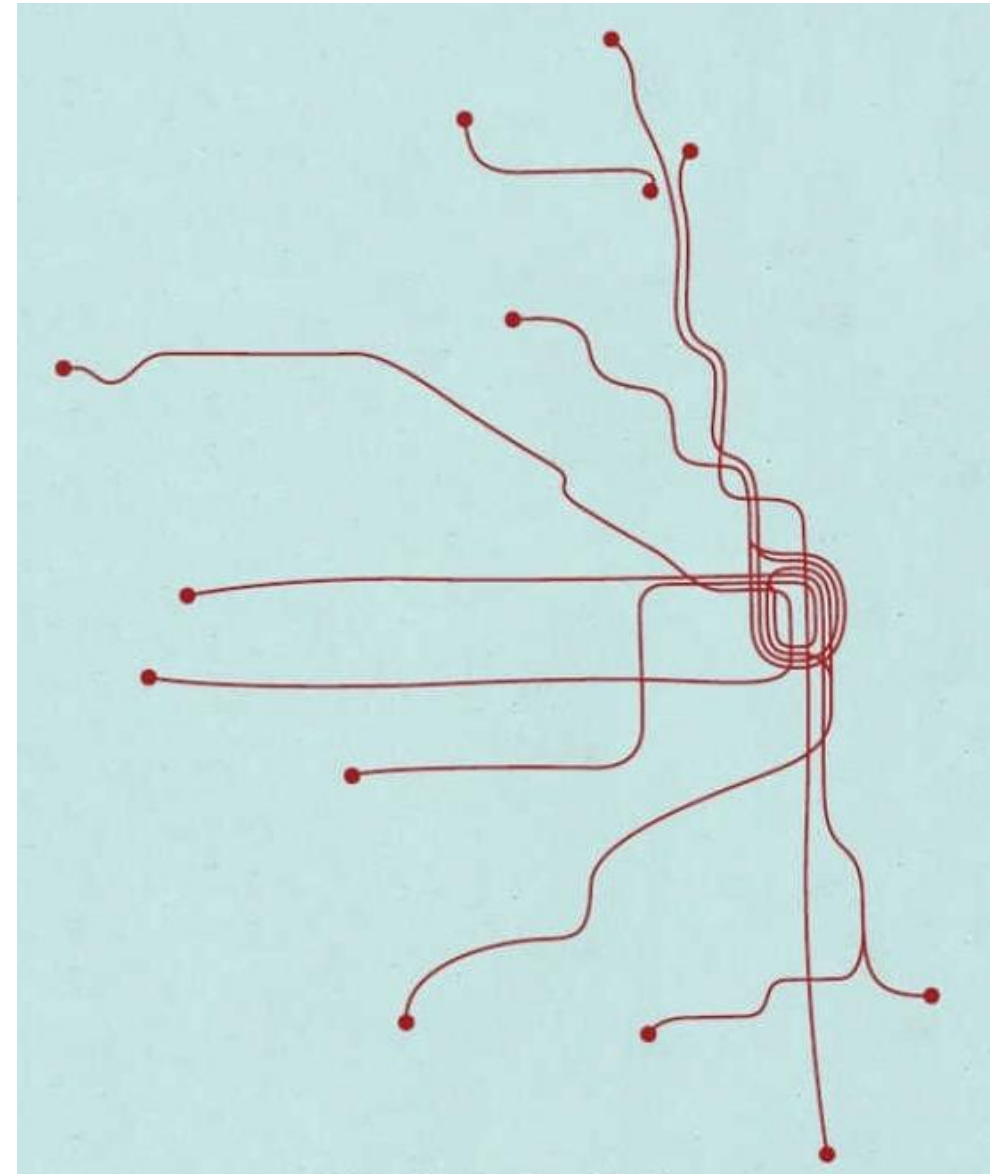
CONSTRUCTABLE / DURABLE / MAINTAINABLE / REPLACEABLE





1. History + Background
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*The thread that weaves the “City of Neighborhoods” together*



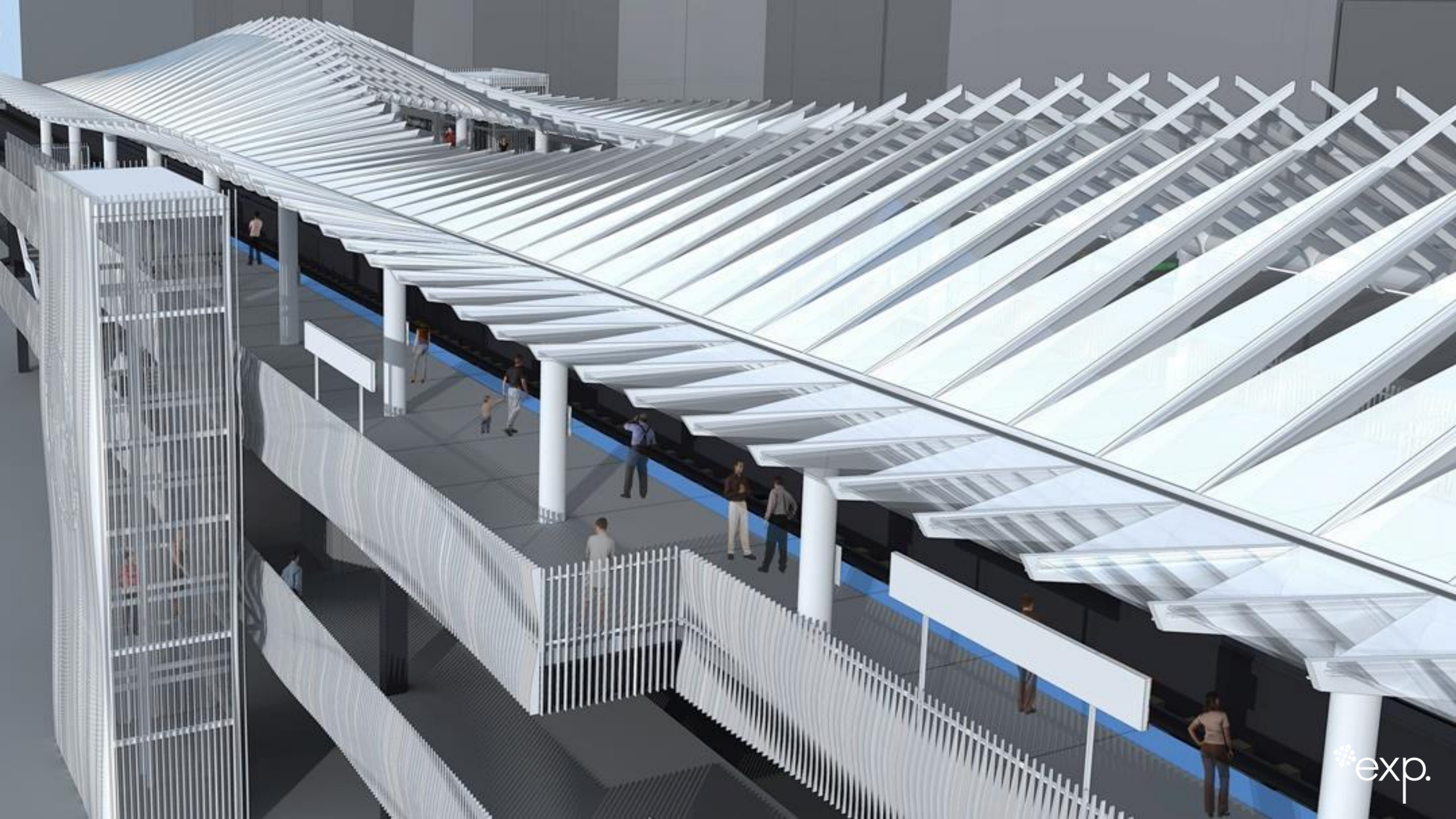
The concept of **MOVEMENT** is at the heart of the transit system; connecting people, neighborhoods and historic landmarks

This new iconic station is a  
**GATEWAY**  
for Millennium Park and many of  
Chicago's attractions;  
a transition between the urban  
grid, the Park, and the Lake;  
a juxtaposition of **rigid** and **organic**  
**forms.**









Chicago Department of Buildings

Friends of Wabash

Mayor's Office

Chicago Transit

Local Business Owners

Authority

Loop Alliance

CTA Operations

Chicago Department of  
Transportation

Private Utilities

Chicago Board of Underground

ComEd

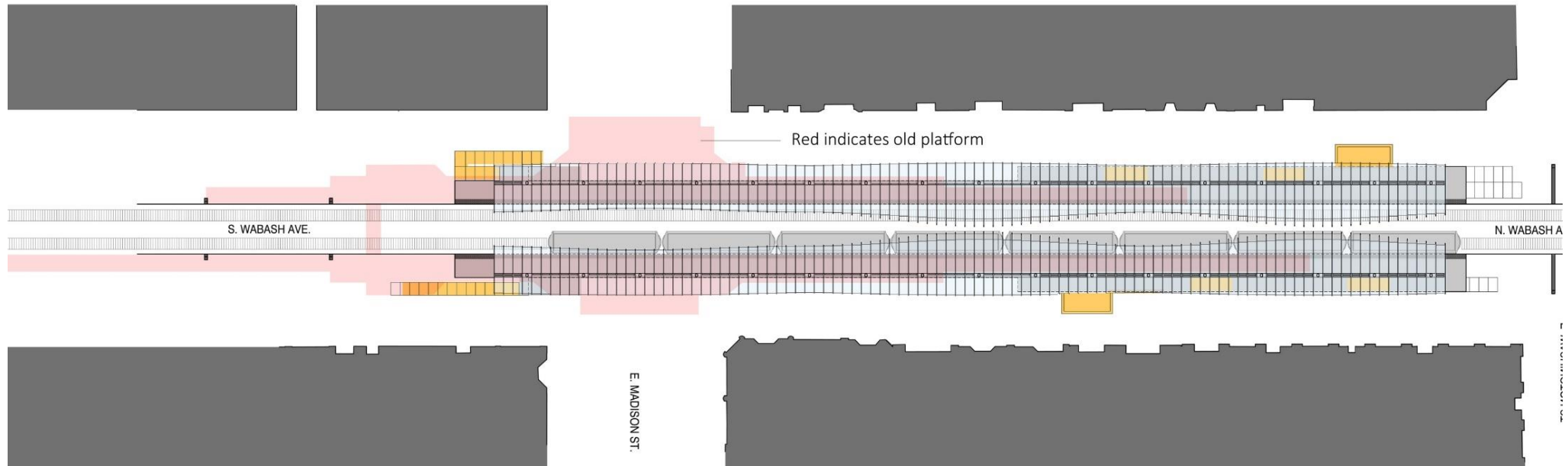


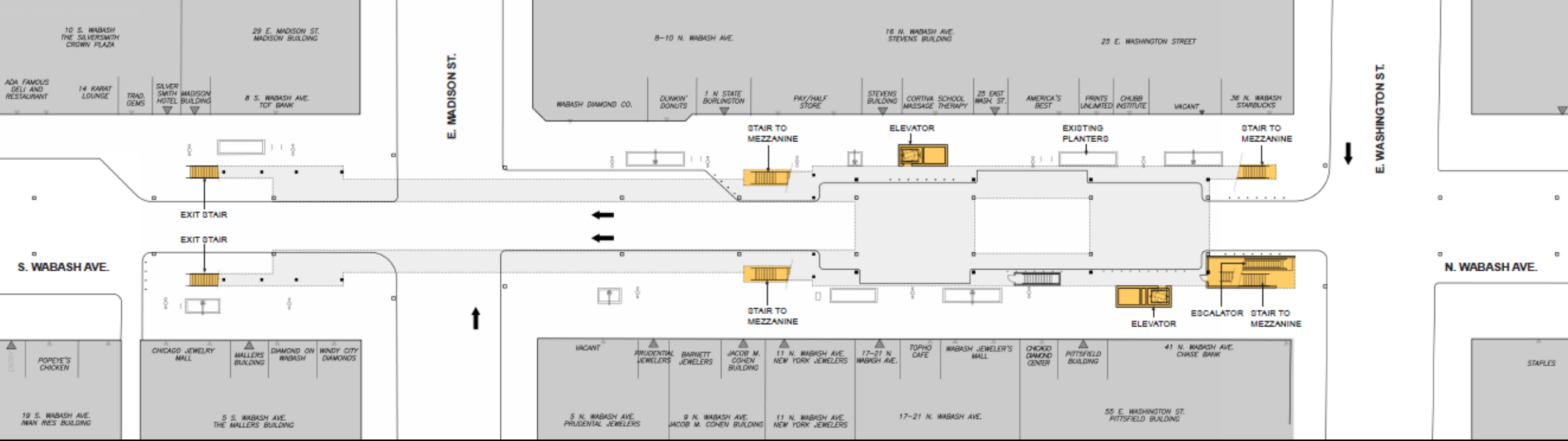
**NOT  
IN MY  
BACKYARD**



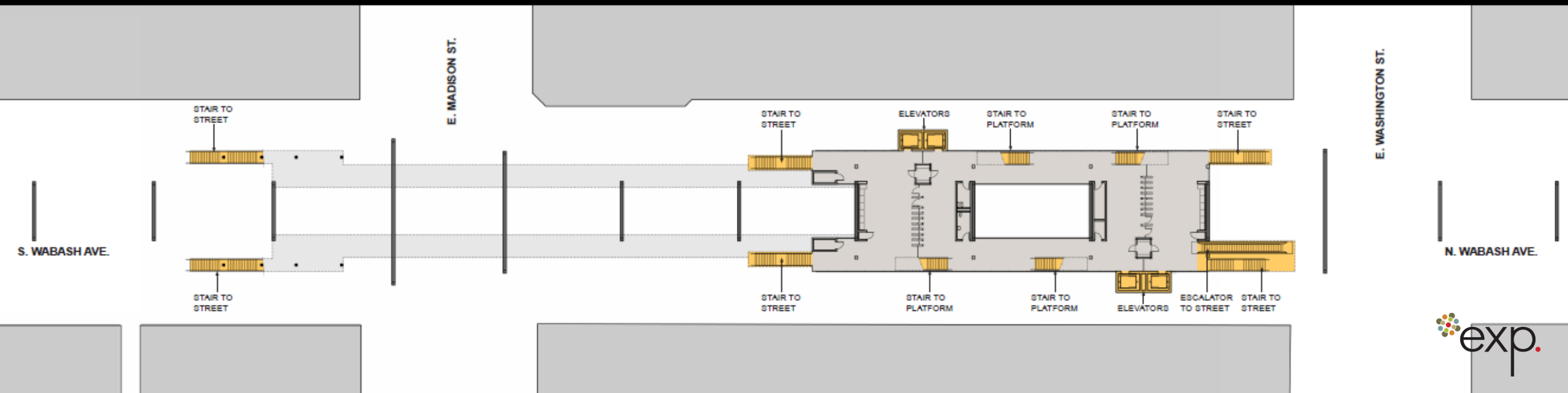


Wabash Avenue West Elevation / Section (above) + Plan (below)

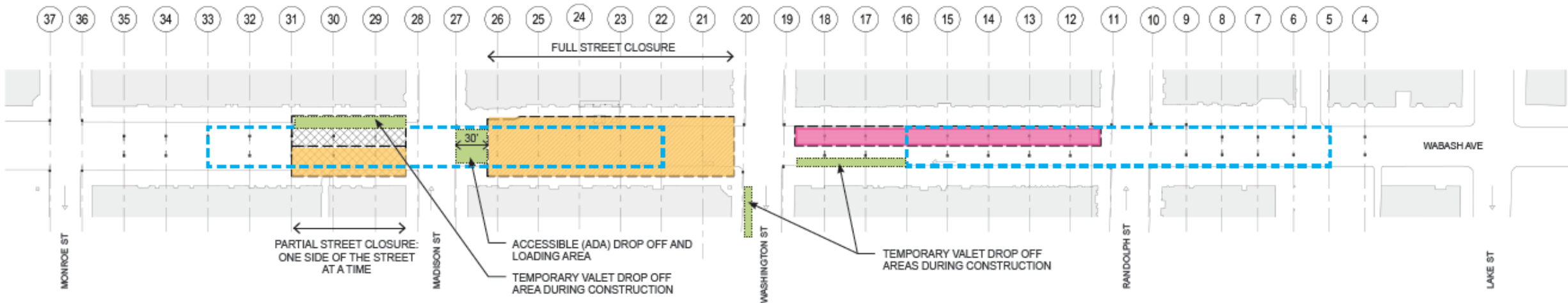








STREET LEVEL PLAN 1" = 20'



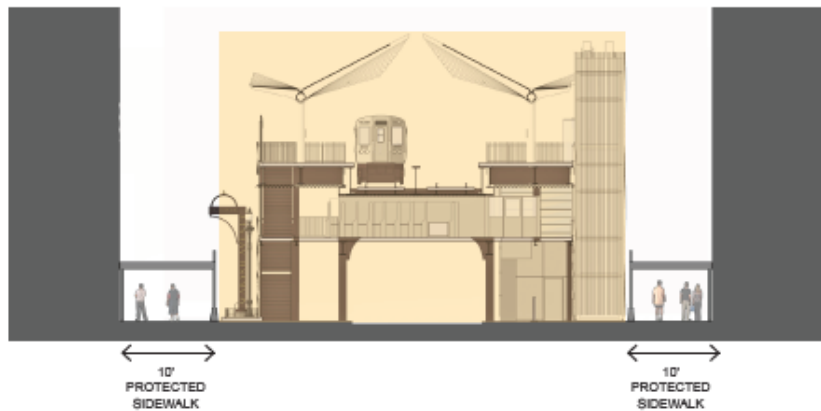
# CONSTRUCTION PHASING



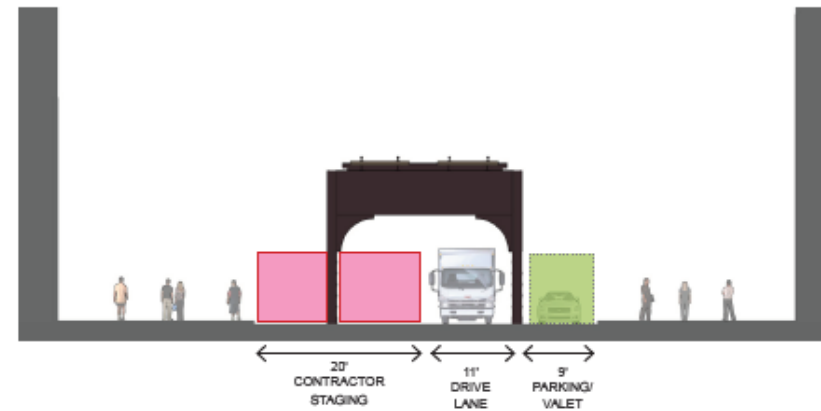
-  DEMOLITION OF EXISTING STATIONS
-  CONSTRUCTION OF NEW STATION
-  CONTRACTOR STAGING AREA
-  TEMPORARY DROP OFF / LOADING AREA

**GENERAL NOTES:**

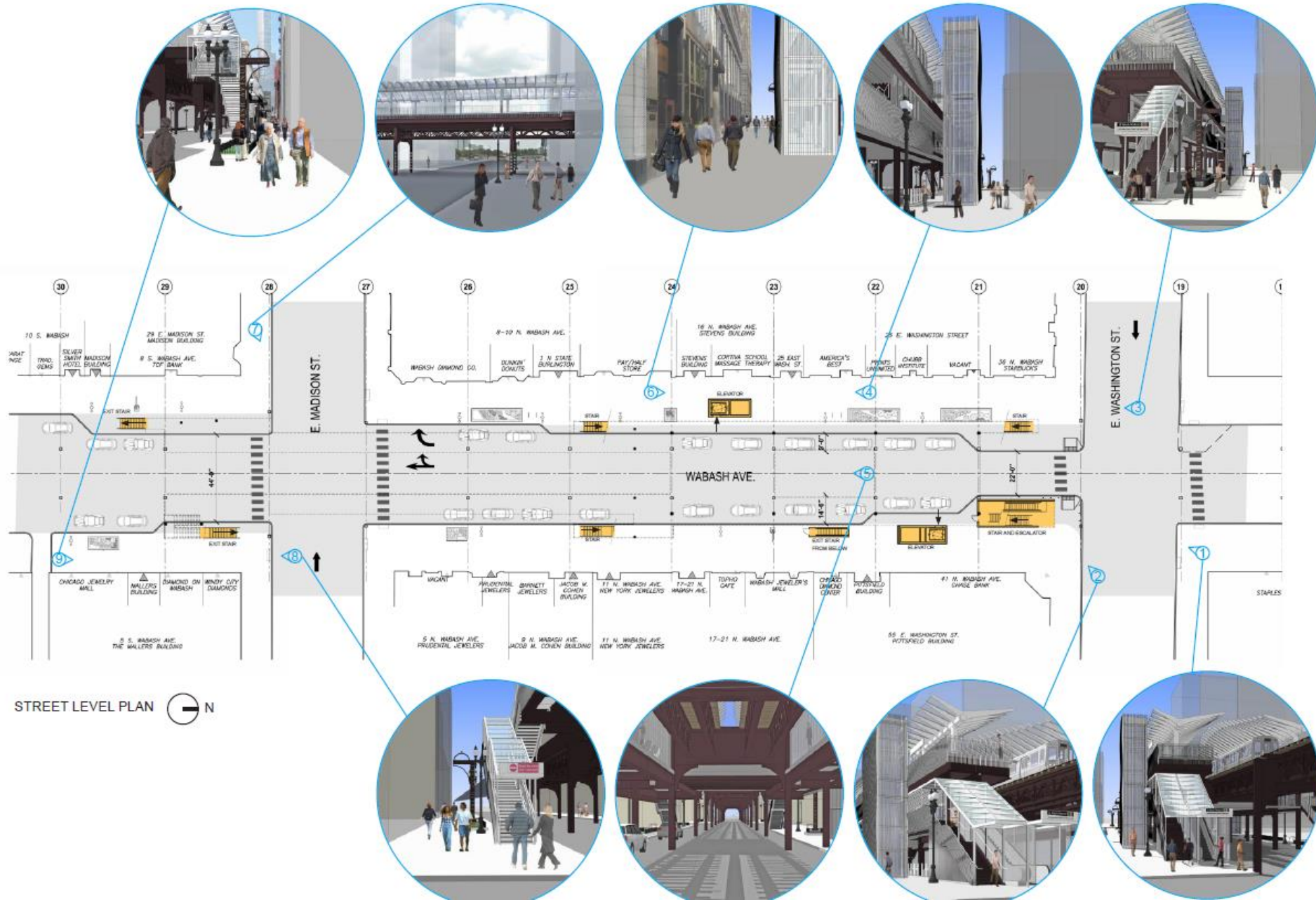
1. WABASH AVENUE TO REMAIN CLOSED FROM WASHINGTON TO MADISON FOR THE DURATION OF THE PROJECT.
2. ALL CROSS STREETS TO REMAIN OPEN WITH THE EXCEPTION OF SCHEDULED WEEKEND AND NIGHT CLOSURES.
3. ALL SIDEWALKS AND ACCESS TO ALL BUILDINGS TO REMAIN OPEN FOR THE DURATION OF THE PROJECT.

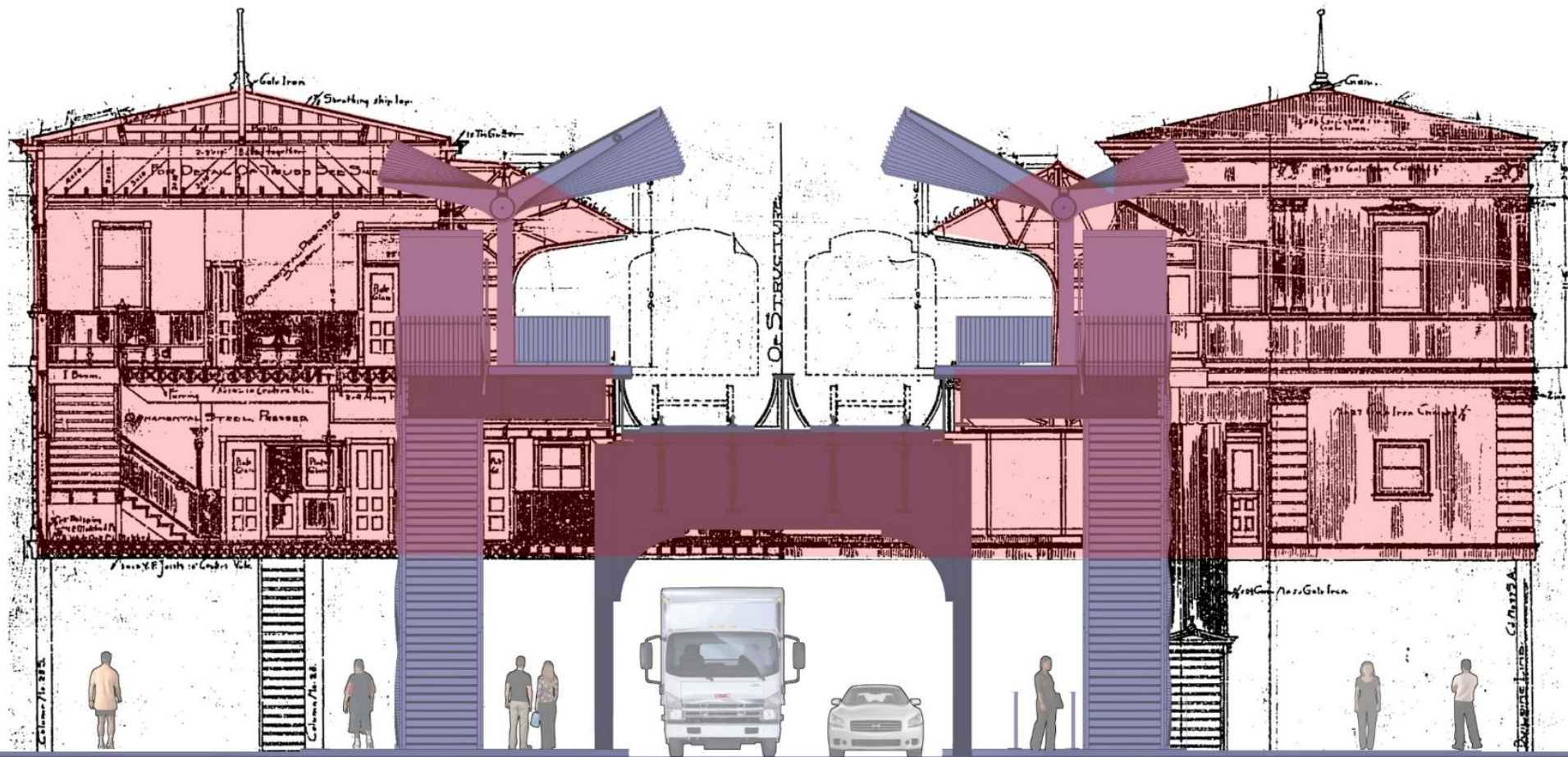


SECTION: FULL CLOSURE FOR CONSTRUCTION



SECTION: PARTIAL CLOSURE FOR STAGING





Line of Buildings

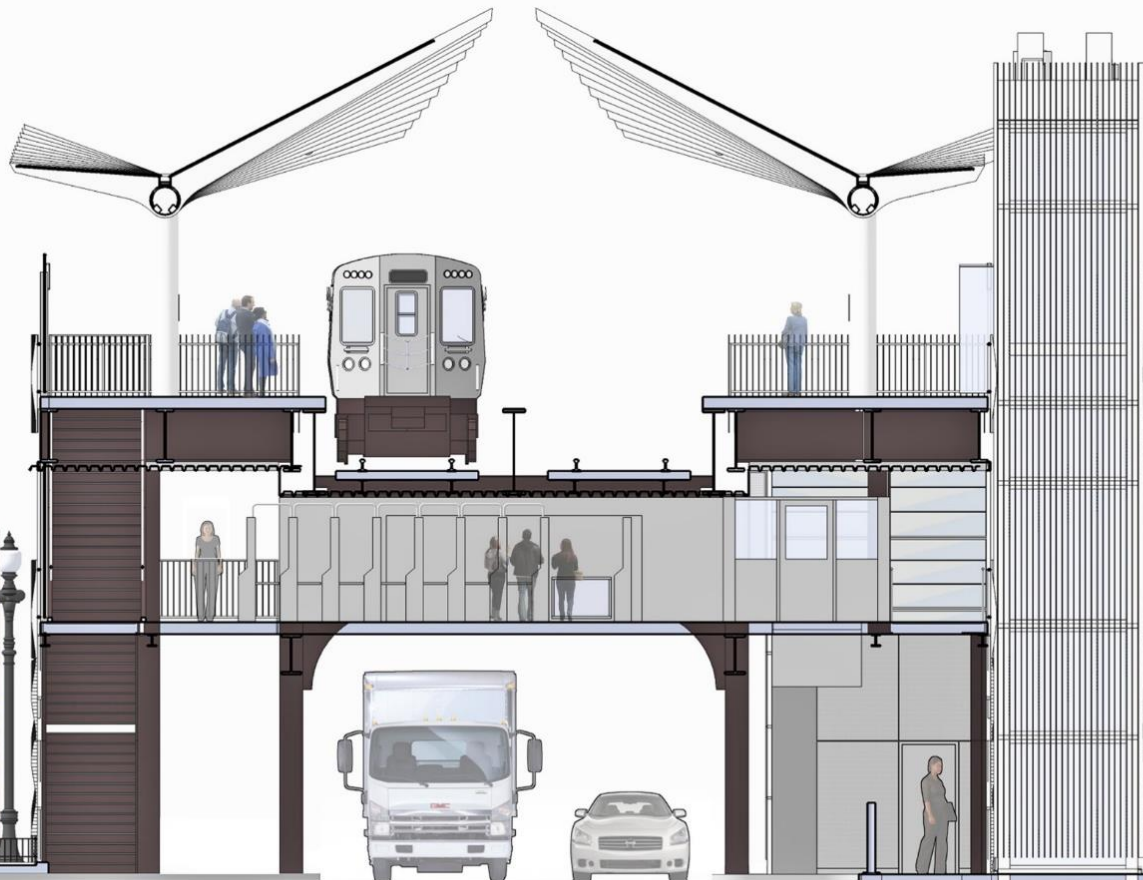
Platform Level

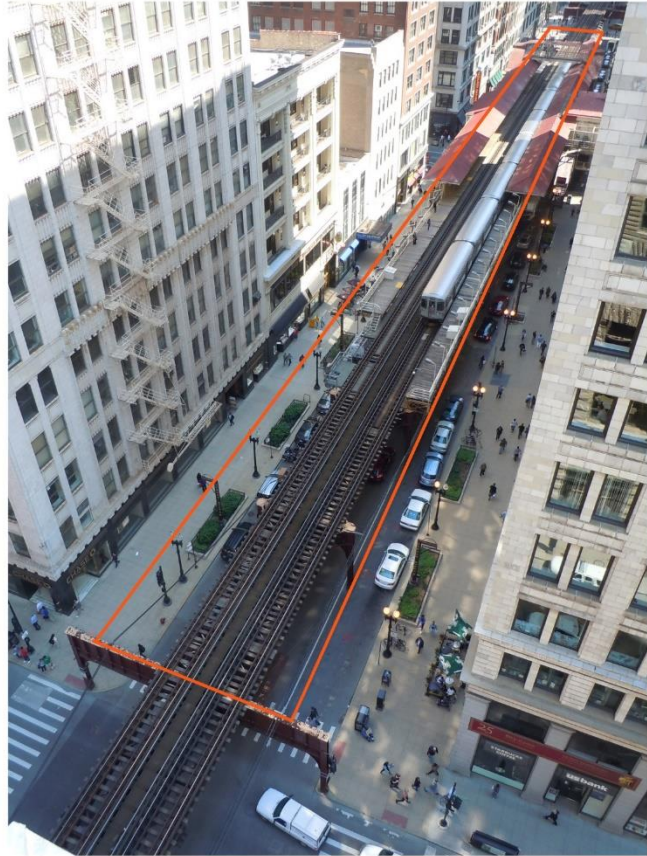
Mezzanine Level

Sidewalk

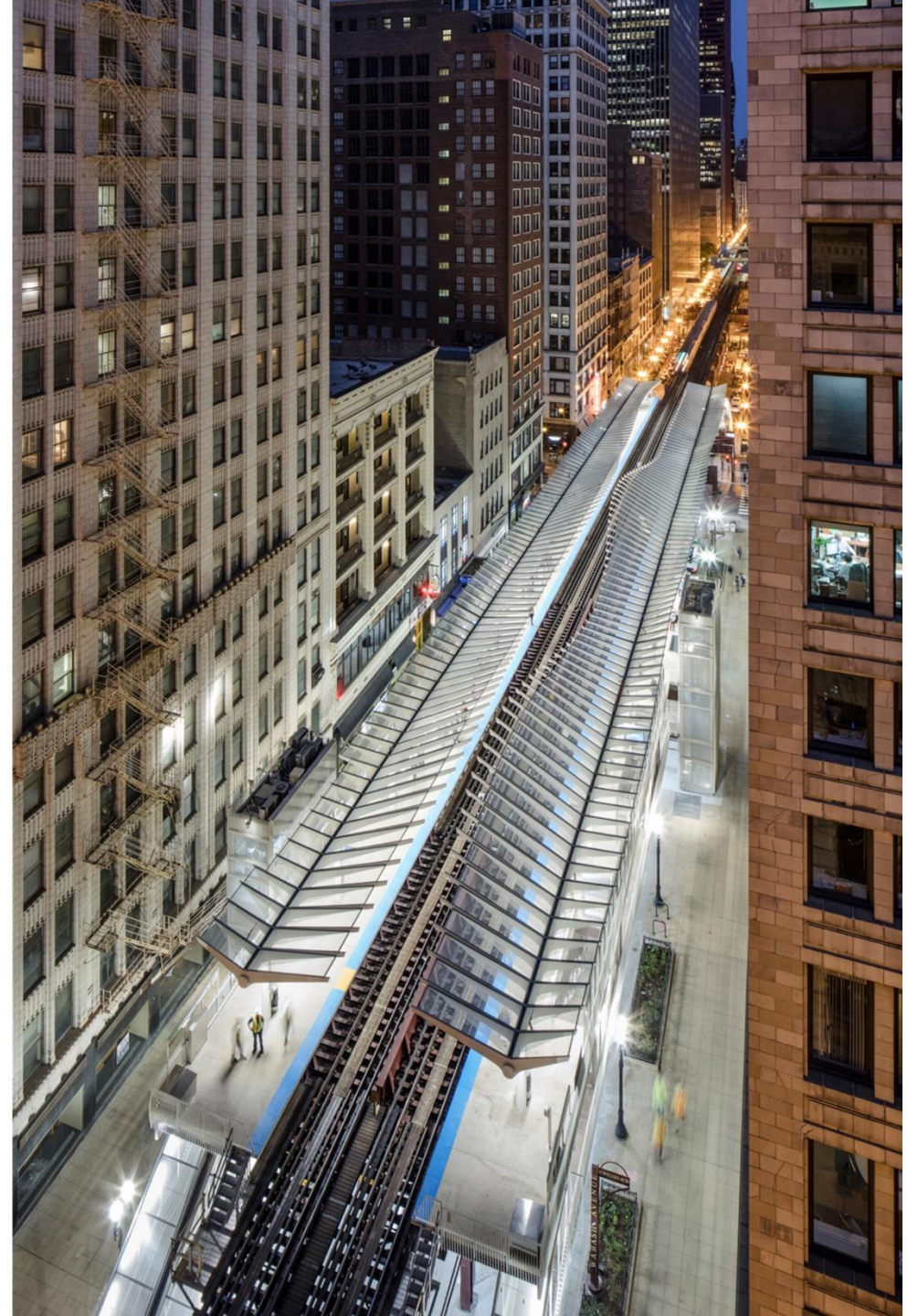
Wabash Avenue

Sidewalk





Birdseye view indicating scope before (above) and after (right).





Elevator 

EXIT

5th Street Board here

5th Street Board here

5th Street Board here

Washington/Wabash 1000 44







THE RIPS

NEW YORK JEWELERS

JEWELERS ROW

WABASH AVENUE



View from below (street) and above (buildings)





WABASH AVENUE

Washington/  
Wabash

JEWELERS ROW

Cottage Grove

5125

exp.



Washington/Wabash 100N 44E Elevator

Millennium Park  
One block east, along Michigan Avenue

Harlem 2 min  
Washington/Wabash 7 min

Abraham Lincoln Cottage Grove

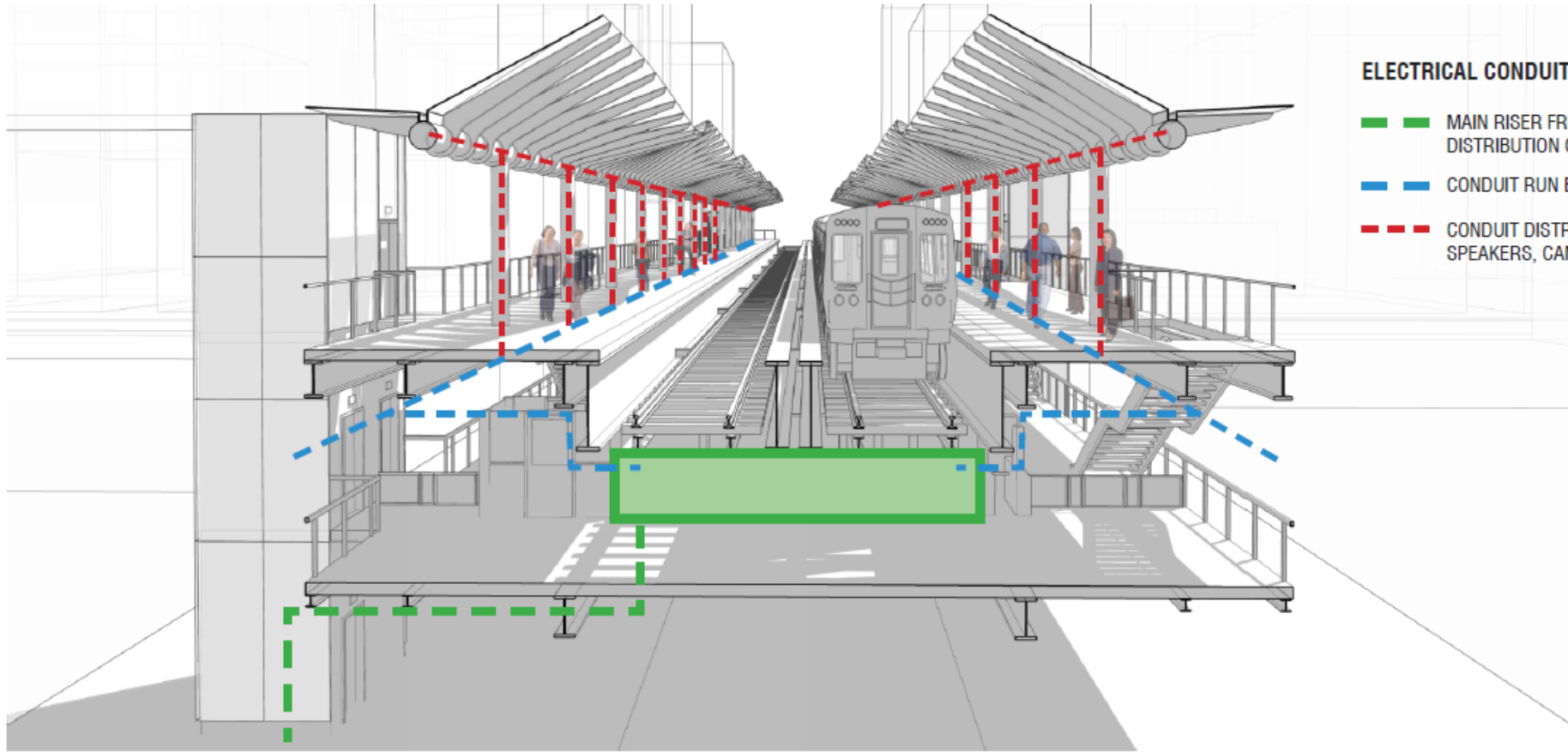
London

10th Street

Harlem

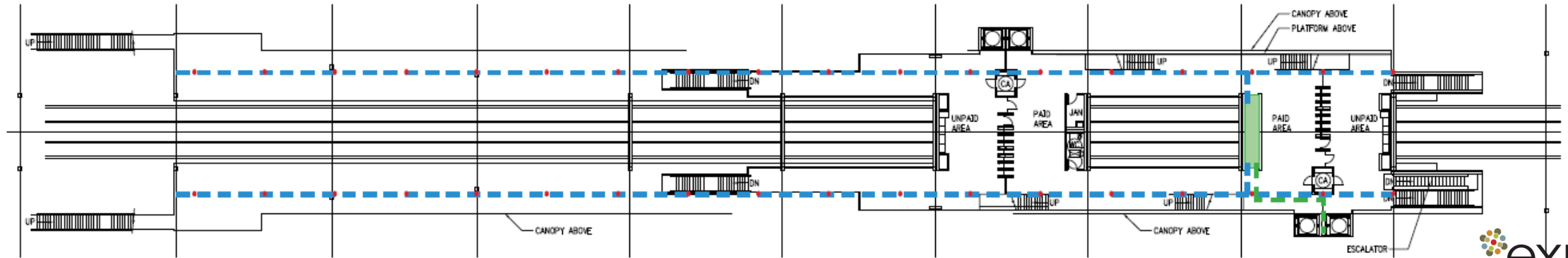
Kimball

7:23pm  
Sep 3  
80°  
Mostly Cloudy  
No smoking



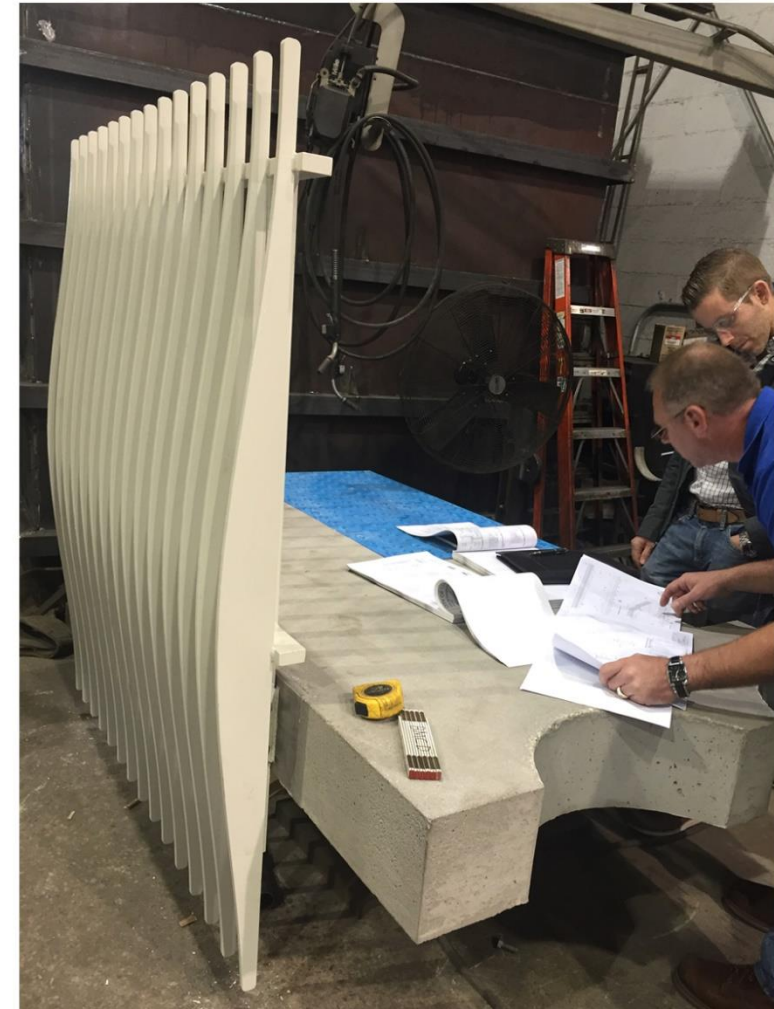
**ELECTRICAL CONDUIT DIAGRAM**

- — — MAIN RISER FROM VAULT TO DISTRIBUTION CLOSET
- — — CONDUIT RUN BELOW PLATFORM
- - - CONDUIT DISTRIBUTION TO LIGHTING, SPEAKERS, CAMERAS



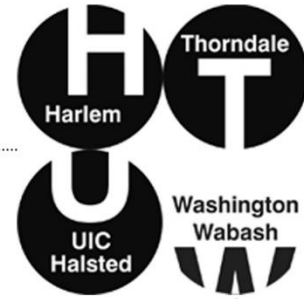
# CONSTRUCTABILITY





Railing + precast platform mockup (right) and finished project (left)





The mezzanine is animated with a light-filtering honeycomb glass mural composed of 1-1/2" round medallions representing each of the stations connected on the transit lines. The size corresponds to that of the rivet heads of the historic bent structure..



Mezzanine walkway from street (left) and mezzanine (right)



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Fares & Tickets

Washington St Overpass  
East side of Wabash Ave

CTA  
2011  
improvements

Since 2011, MTA has completed, begun, or planned more than \$8 billion in investments across the system.

*“The new CTA station at Washington and Wabash represents the best of Chicago’s heritage of architectural innovation and ingenuity while creating modern amenities for the thousands of travelers who utilize it every day.”*

*Mayor Rahm Emanuel*

*“With the unveiling of this design, tens of thousands of Chicagoans who take the El downtown every day can look forward to less congestion and a cleaner, greener, state-of-the-art platform...”*

*Senator Dick Durbin (D-IL)*

*“Modernizing our transit infrastructure is a key component of maintaining Chicago’s status as an economic engine and tourism hub.”*

*Senator Mark Kirk (R-III)*

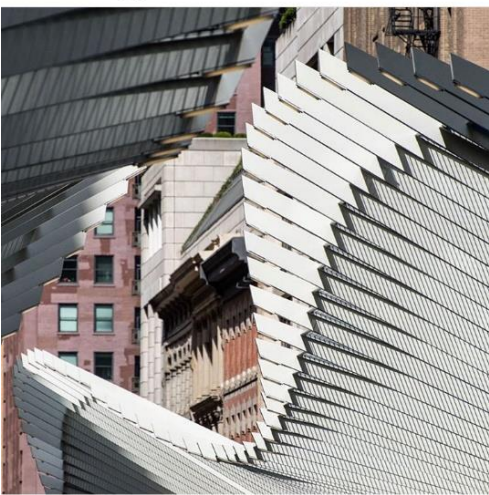
*“This modern, bright and spacious rail station is another important step toward our goal of enhancing public transit options throughout the city. We are delighted to have partnered with CDOT to create this fully accessible, architecturally significant new station that will serve Chicago and its visitors for decades to come.”*

*CTA President Dorval Carter*

*“This is a crucial investment that will pay dividends for many years...”*

*Forest Claypool, former CTA President*

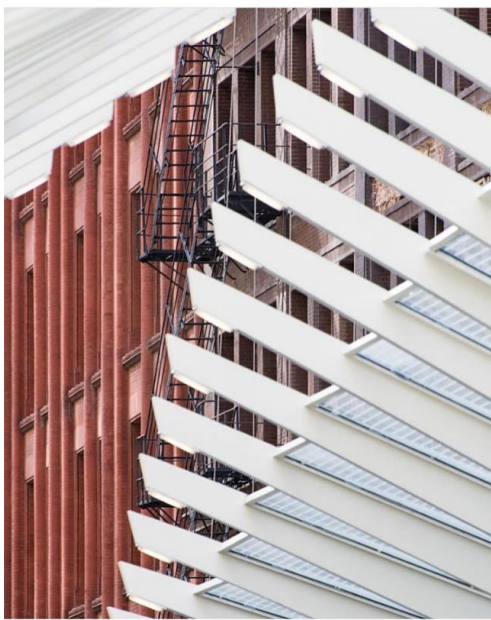
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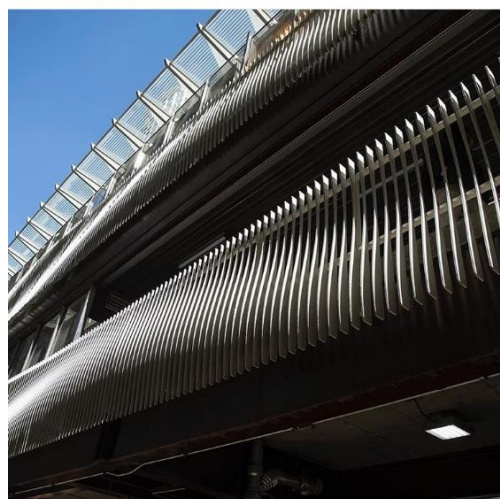
jeff\_zoline\_photos This is #washingtonwabash! #cta #chicagotransitauthority #chicagoloop #downtownchicago #chicago... more

jamestech83artstudio Exactly like the concept rendering

SEPTEMBER 5, 2017

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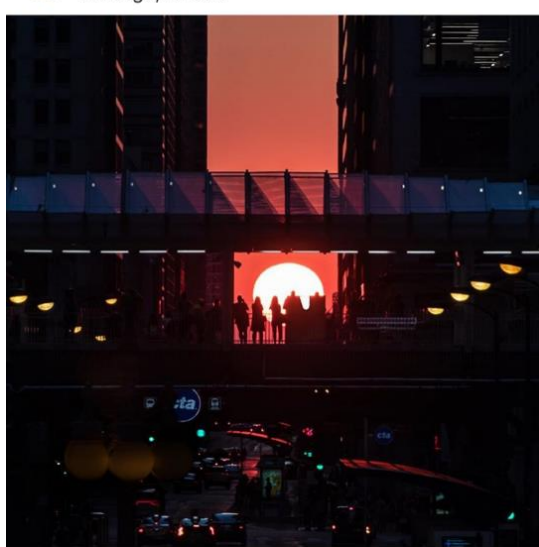


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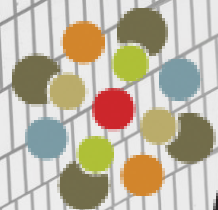
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exp.