



NOVEMBER 7, 13, & 20, 2024

Evolution of Structures

Steel Castings in the Eye of the Design Team

Featuring Speakers from:

ELENA  **M^{de}AS**

Severud Associates
CONSULTING ENGINEERS P.C.

Industry leaders use steel castings to turn bold visions into reality.

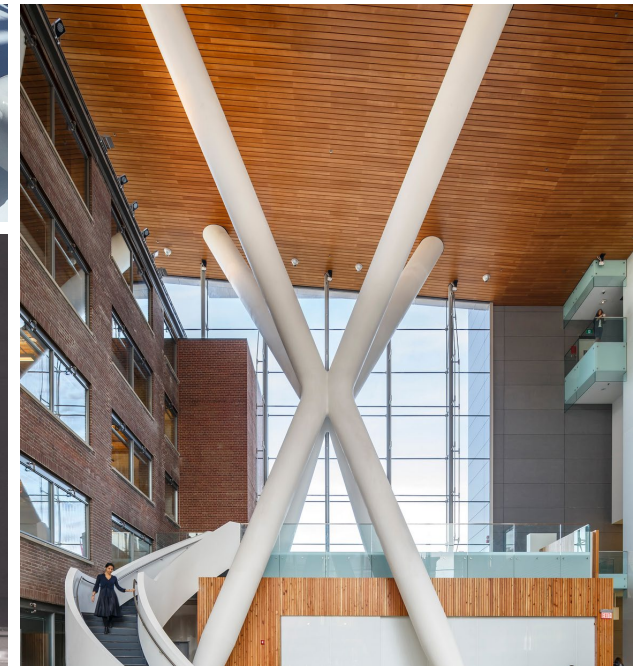
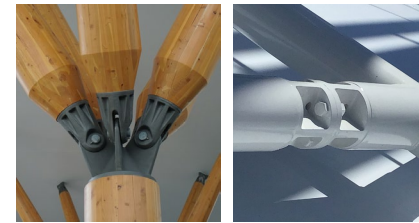


CASTCONNEX[®]

innovative components for inspired designs

We simplify the design and enhance the performance of structures by enabling Architects and Engineers to use cast steel connections.

We take pride in collaborating in the creation of safer, innovative, and more beautiful built environments.



Evolution of Structures

Steel Castings in the Eye of the Design Team

PENN 2:

Creating a Future Destination

CASTINGS303-24 | 1LU/HSW | Live Webinar | Introductory | Prerequisites: None
AIA CES PROVIDER NUMBER:404108320

Speakers:

Mike Zaborski, RA
Principal | MdeAS Architects

Matthew Peitz, PE, SE
Principal | Severud

Moderator:

Jennifer Pazdon, P.E., M.Sc.Eng
Vice President, USA & Director, UK
Division | CAST CONNEX

MdeAS

Severud Associates
CONSULTING ENGINEERS P.C.

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COURSE DESCRIPTION

This presentation will describe the design and engineering process behind the renovation and expansion of PENN 2, a 1960s office building positioned directly above the largest public transportation hub in the Western hemisphere: Penn Station. The addition to the building, dubbed The Bustle, is perched nearly 50 feet above the ground and supported by sloping columns that rest upon the original station's foundations. The top and bottom cast steel pin connectors of these columns are celebrated as a beautiful architectural element of the project, connecting to custom-formed gusset plates that elegantly engage with the plaza below and the LED ceiling above. The double-height, free-spanning floors of The Bustle are also supported by chevron bracing HSS columns with cast steel pin connectors. The column-free space within is unlike anything else in New York City, spanning 430 feet long by 75-feet wide by 25-feet high.

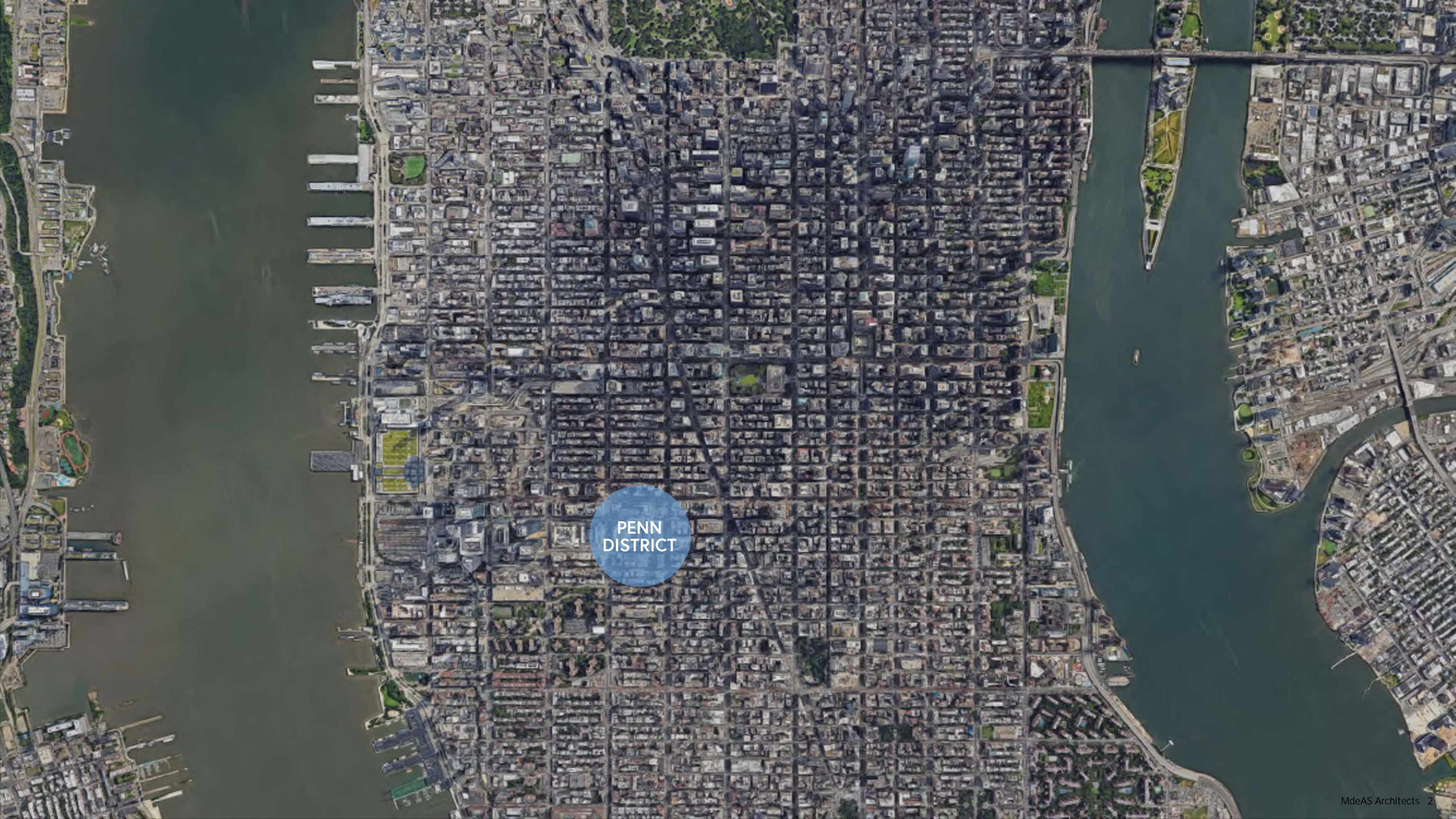
This presentation will also discuss major design elements such as the new triple-height glass fin lobby and the over-cladding of the existing building's façade with a new high-performance curtain wall. Ultimately, the strategic repositioning of the building has created a new building without demolishing the existing structure.

LEARNING OBJECTIVES

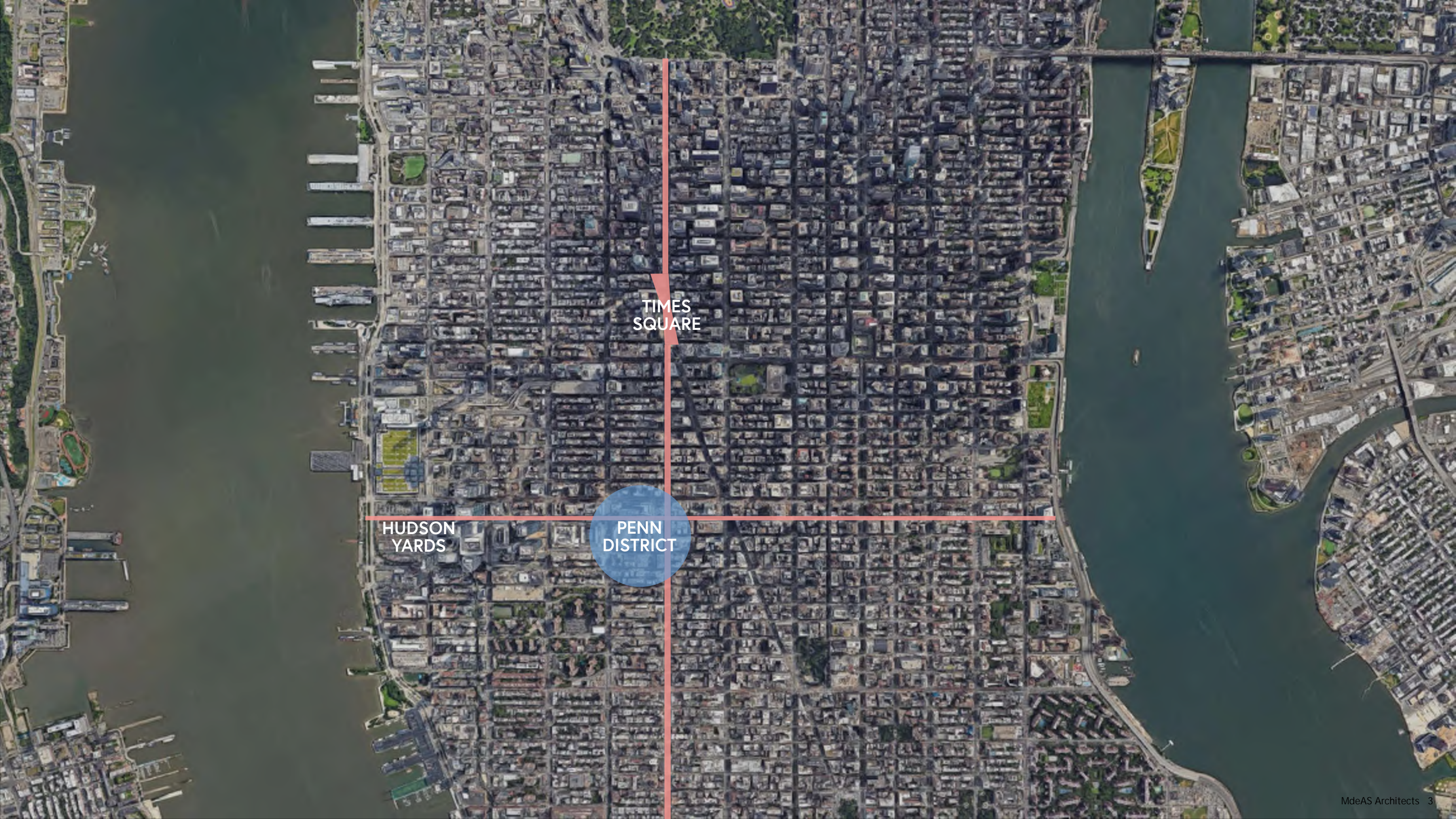
1. Understand strategies for structural modifications of existing buildings.
2. Examine repositioning as a sustainable strategy for preserving embodied carbon and improving the energy performance of buildings.
3. Identify design elements that create successful retail, workspace, and public space projects.
4. Explore architectural and structural applications of standardized cast steel pin connectors.

PENN 2: Creating a Future Destination

Mike Zaborski Principal, MdeAS Architects + Matt Peitz, Principal, Severud Associates



PENN
DISTRICT



TIMES
SQUARE

HUDSON
YARDS

PENN
DISTRICT

HUDSON RIVER



HUDSON RIVER

HUDSON YARDS

HUDSON RIVER

HUDSON YARDS

MANHATTAN
WEST

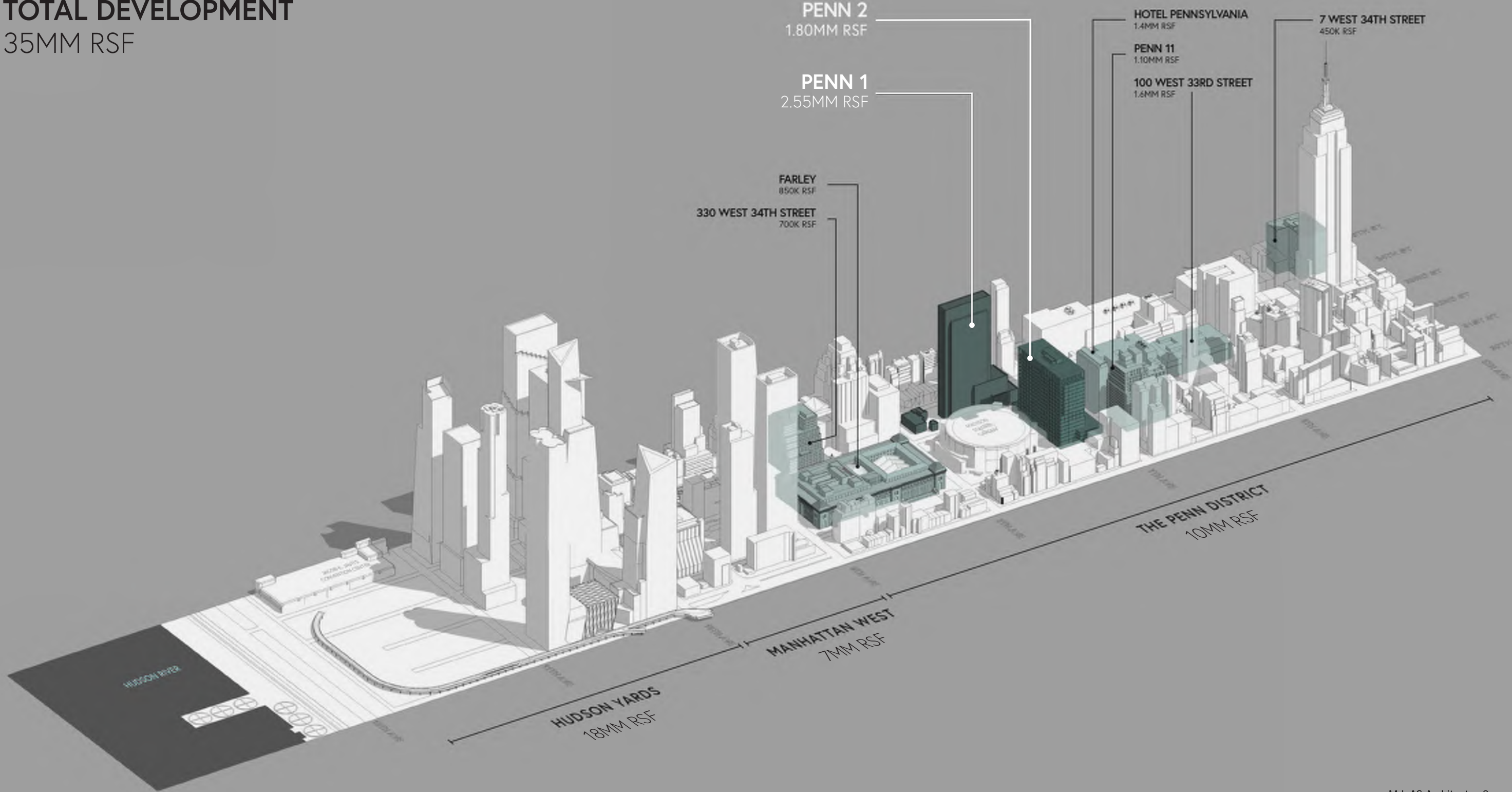
HUDSON RIVER

HUDSON YARDS

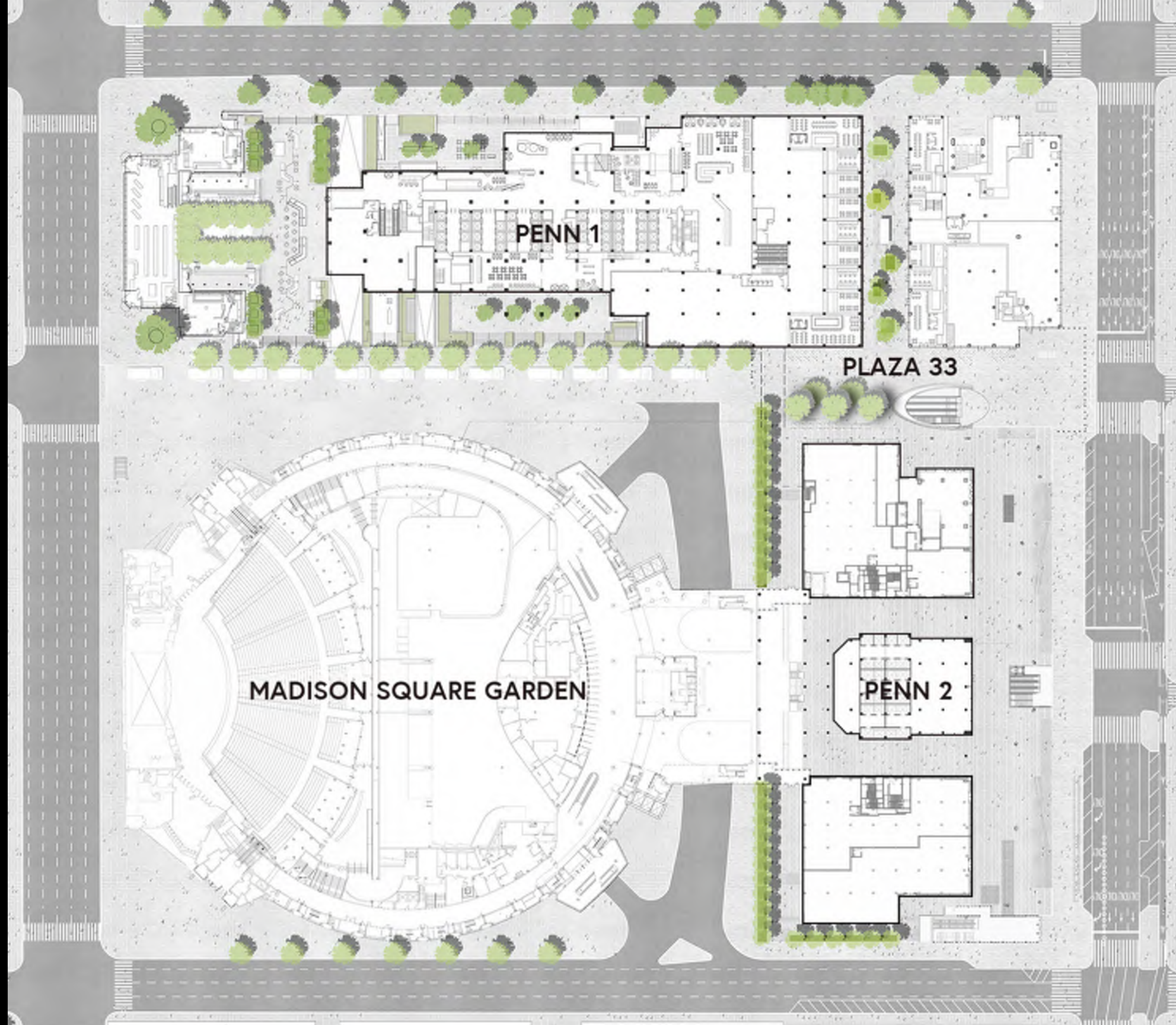
MANHATTAN
WEST

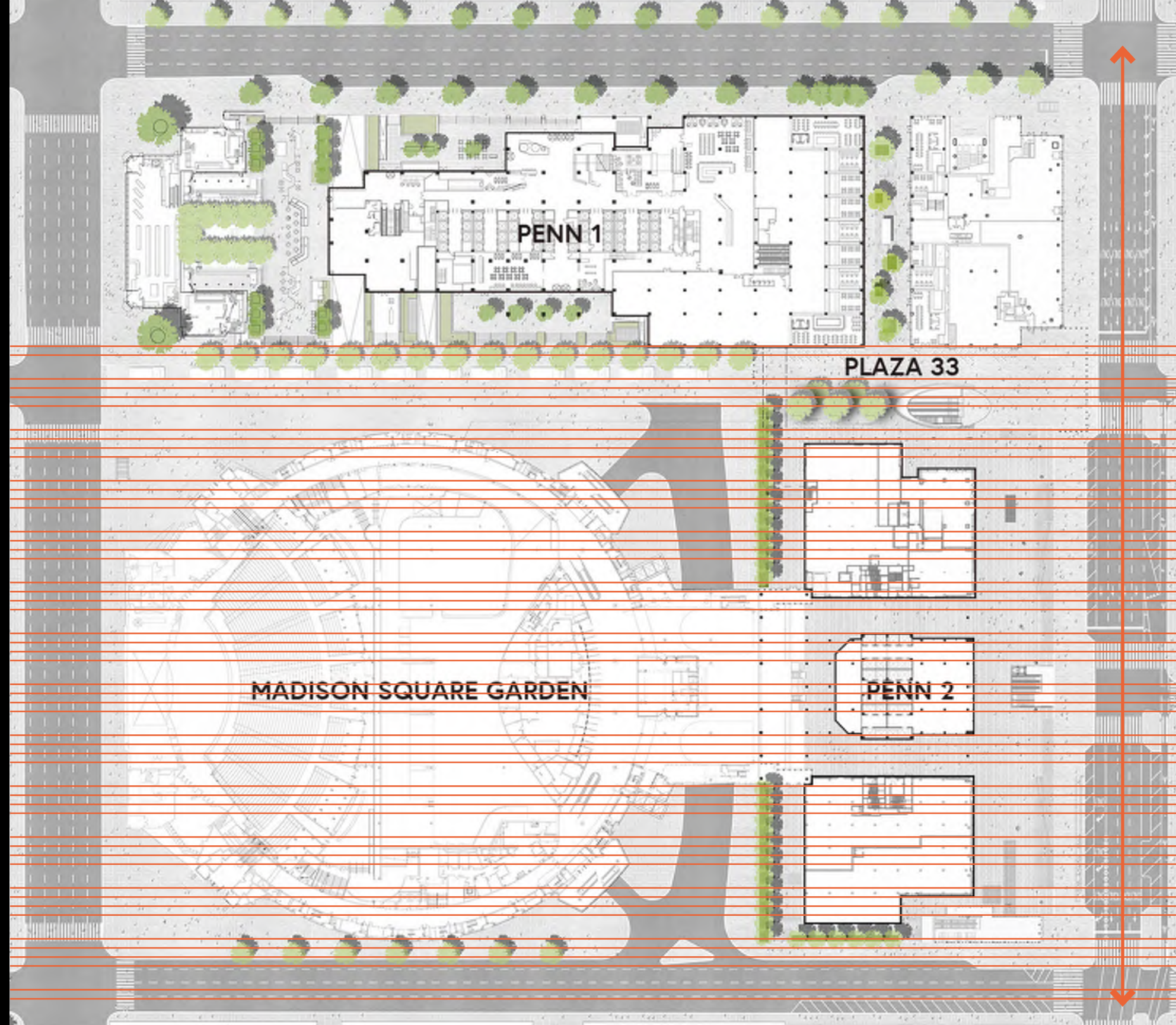
PENN DISTRICT

TOTAL DEVELOPMENT
35MM RSF













CHASE
MADISON SQUARE GARDEN

TISSOT

8:36

AMTRAK

PENN STATION

AMTRAK

CHASE
Seventh Ave
Joe Louis Plaza

verizon
Best in New York.
Best where it matters.

UNDERWEST DONUTS

verizon
Best in New York.
Best where it matters.

verizon
Best in New York.
Best where it matters.

RUN DAILY

LIVE
Meet your favorite
characters from
the hit TV series

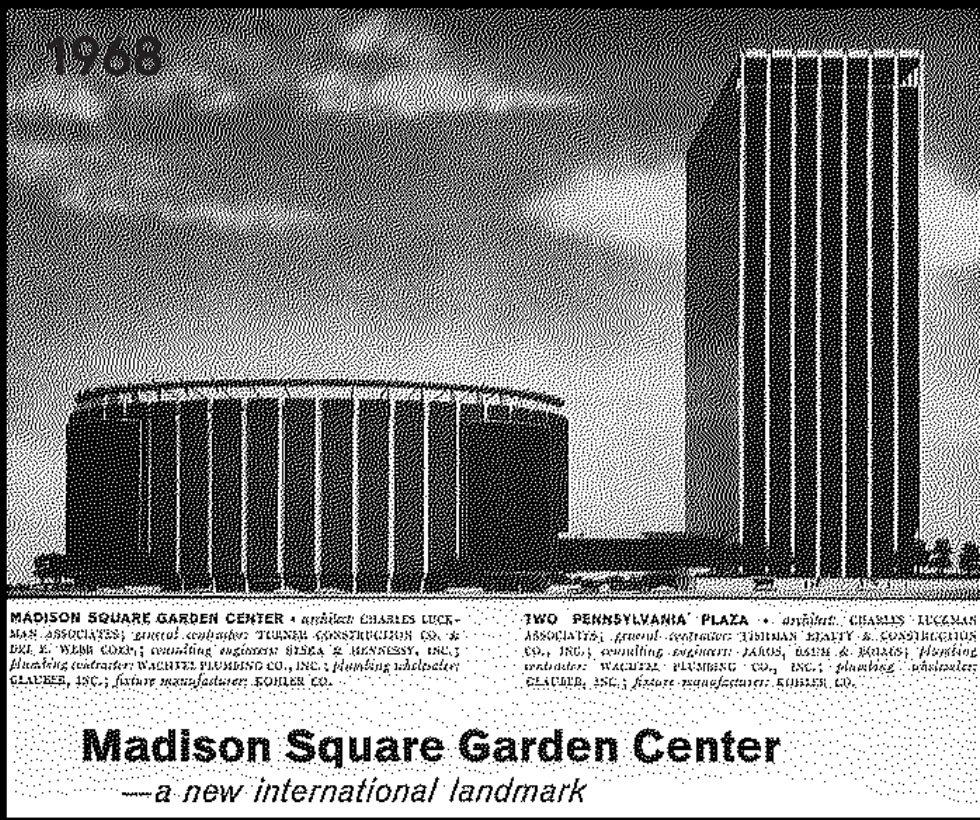
Going to
the office?
Meet your favorite
characters from
the hit TV series



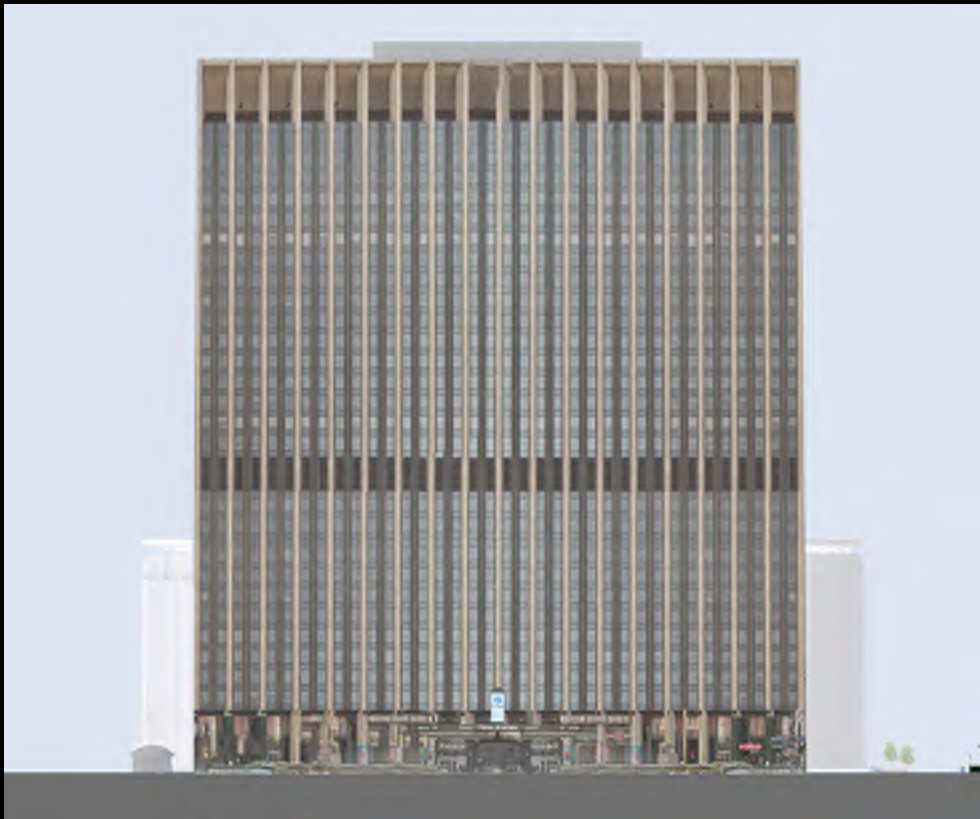
1910



1968



2024





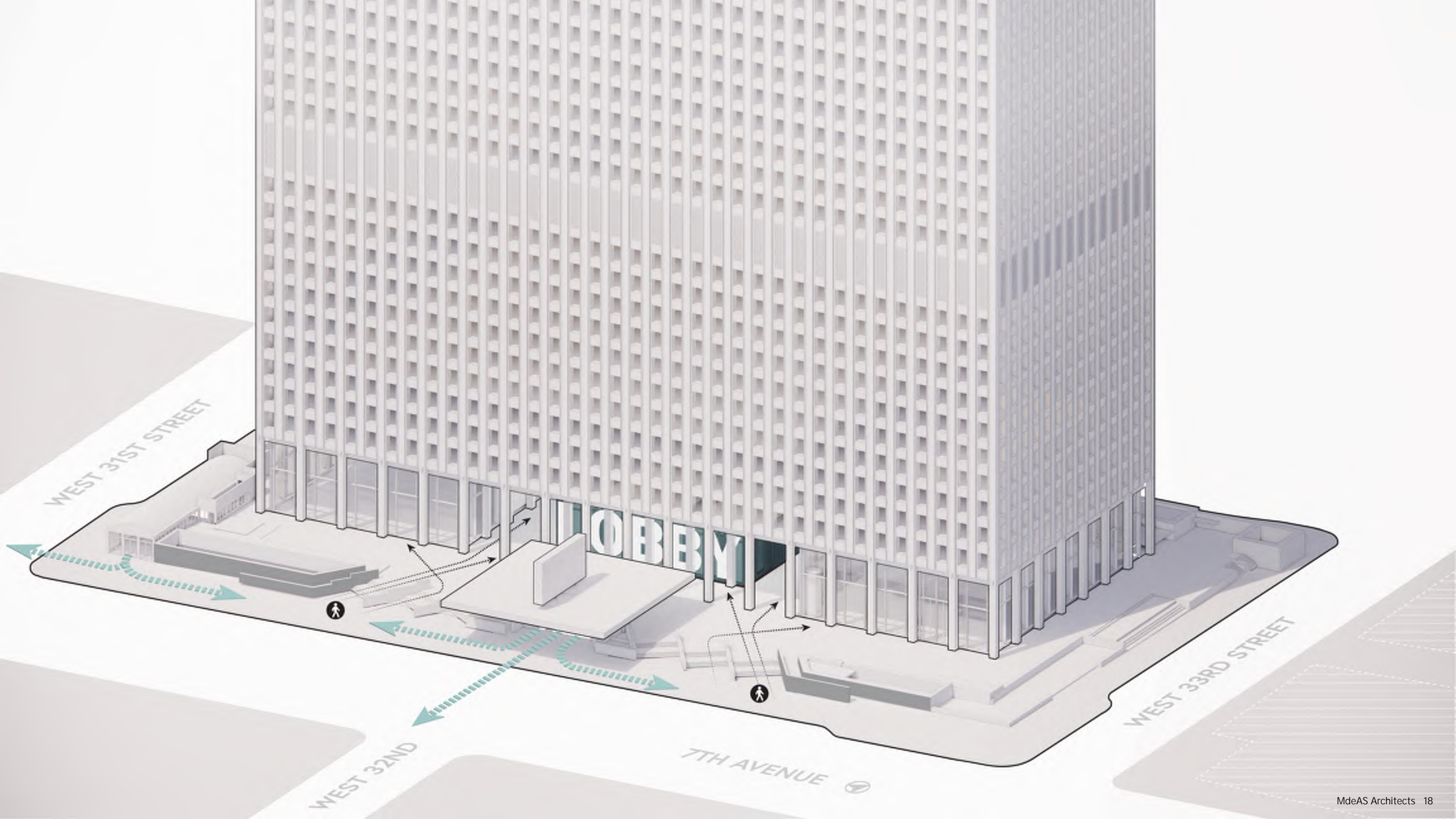


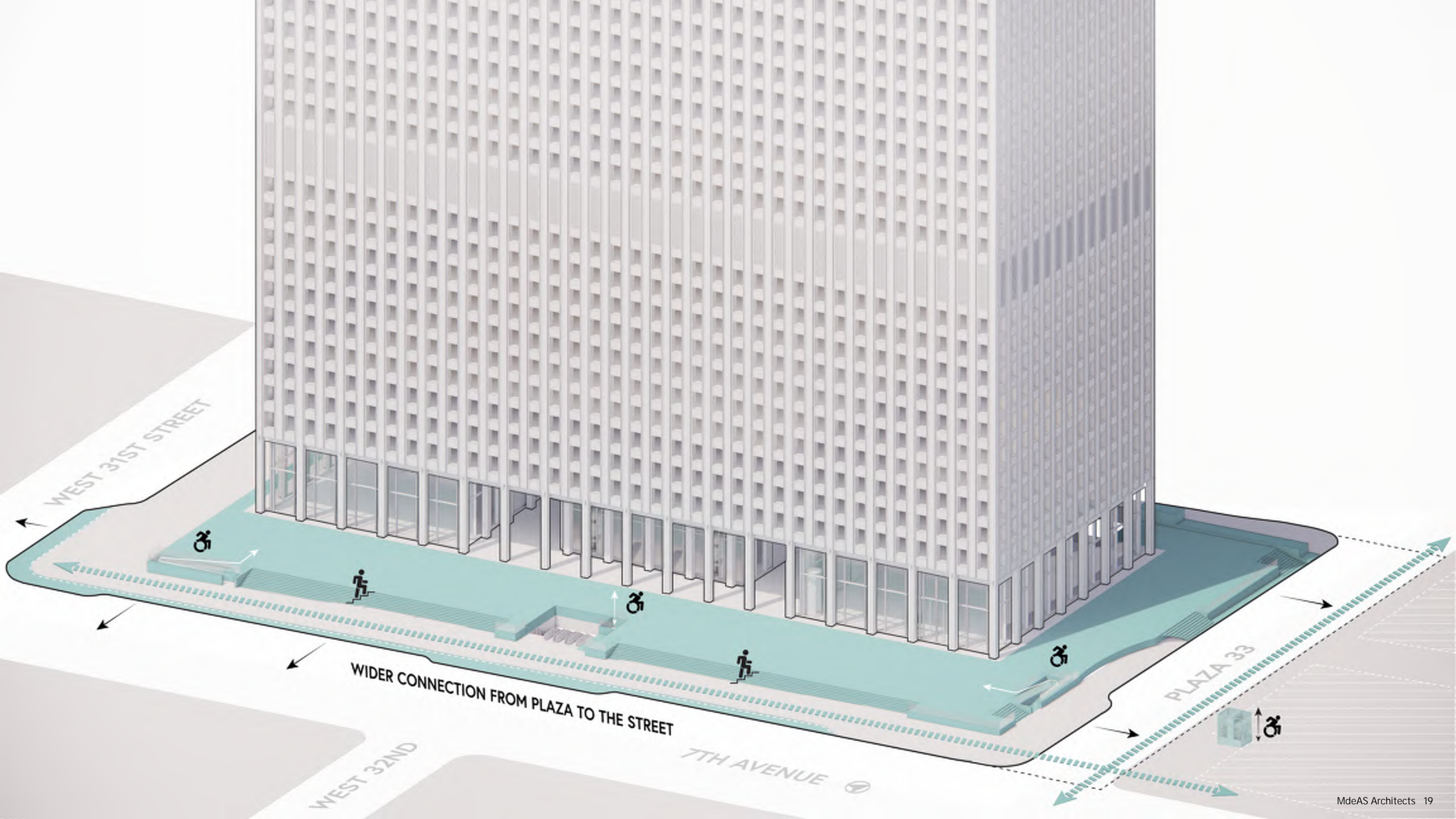
TRANSFORM WORKPLACE

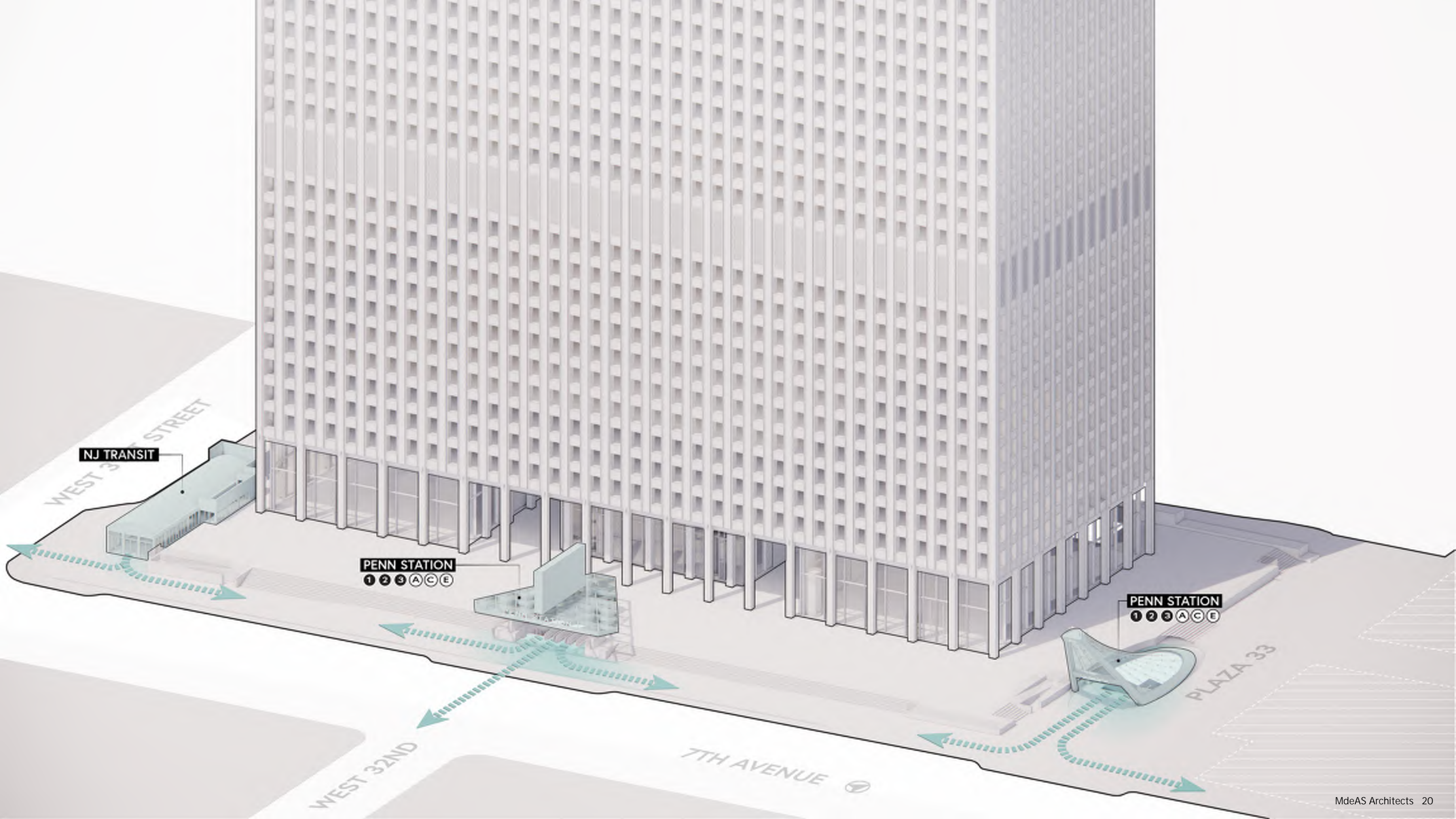
CREATE A ONE-OF-ONE SPACE

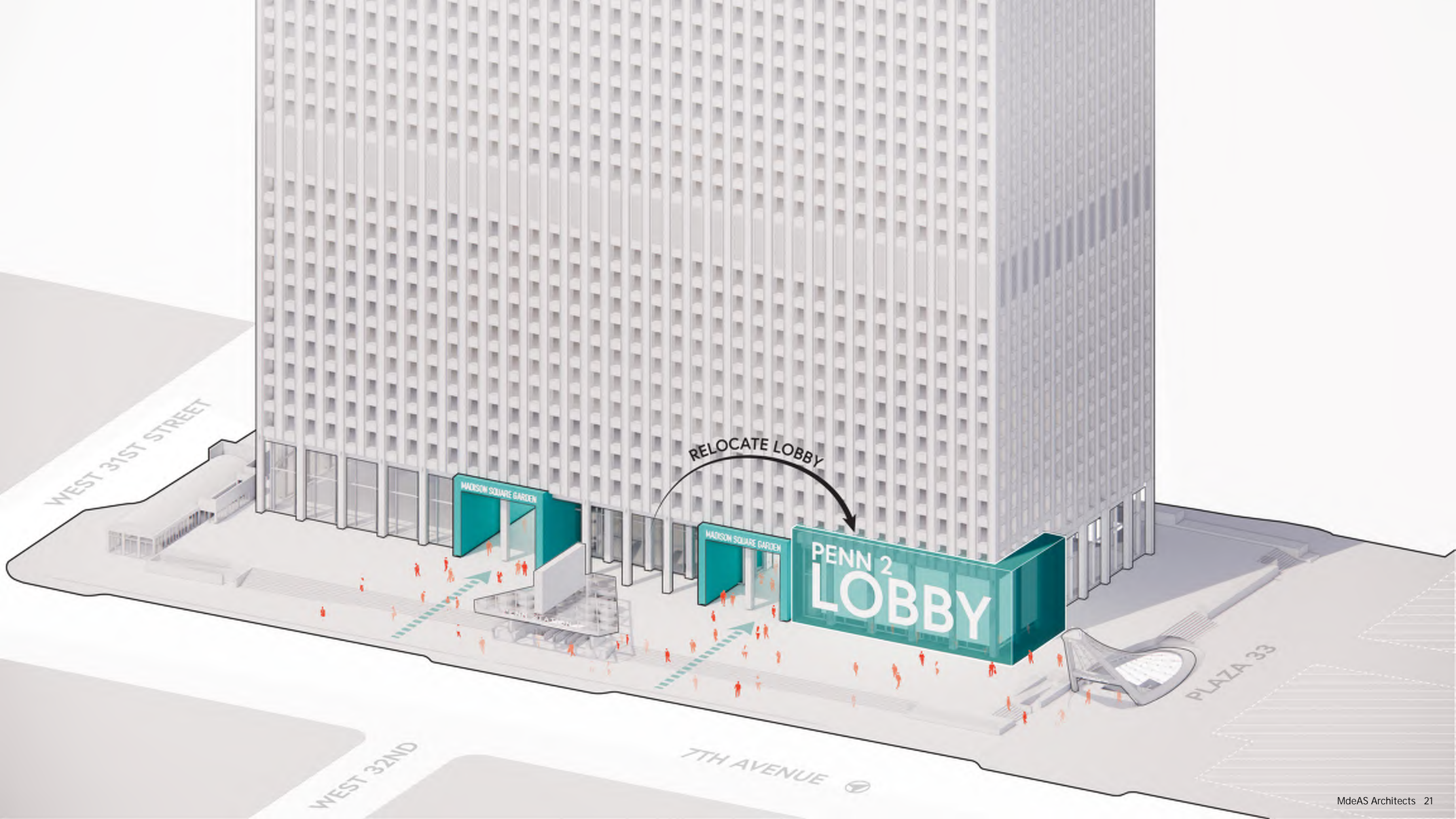
ACTIVATE FIRST 50'

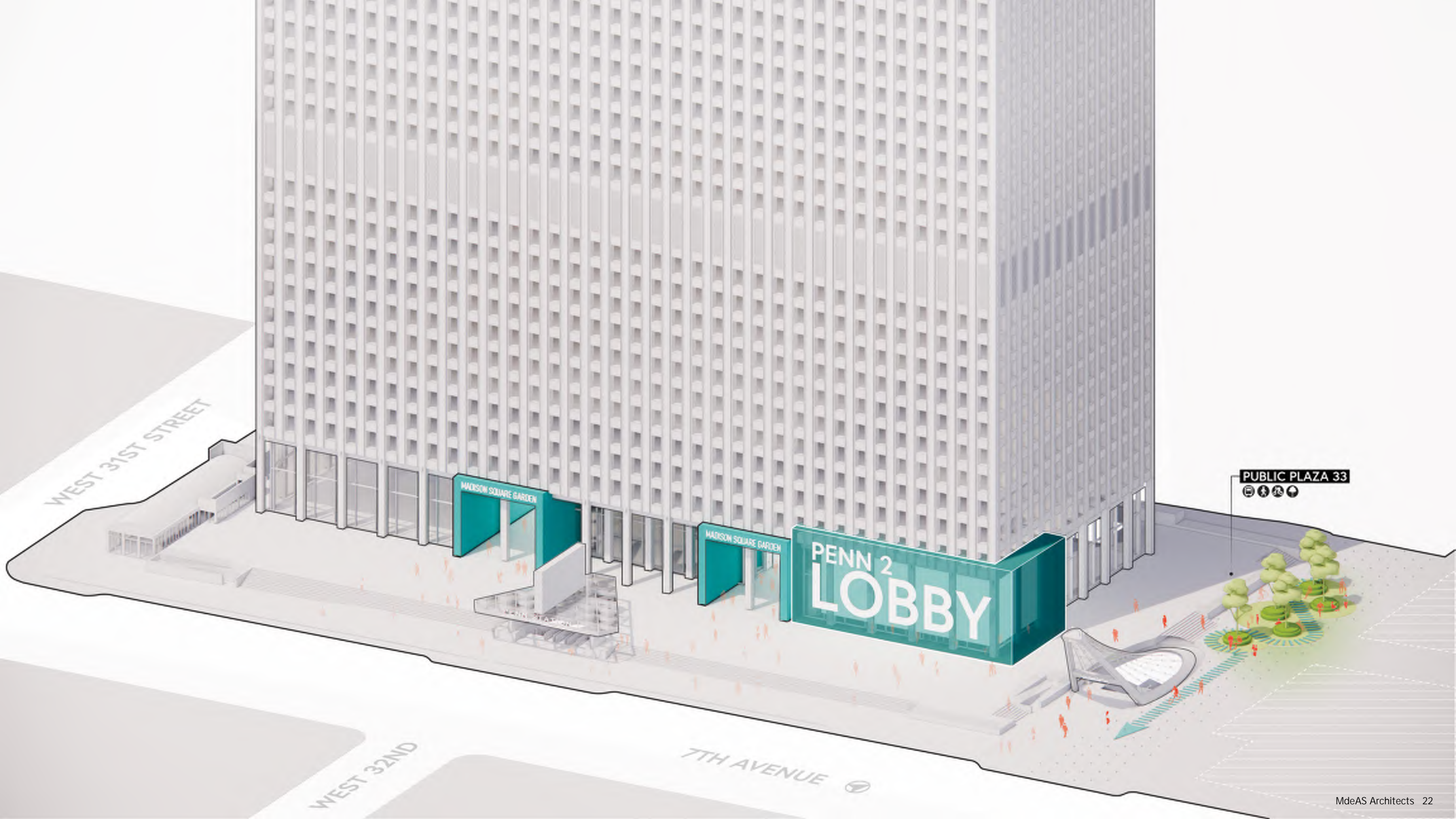
UNTANGLE URBAN EXPERIENCE

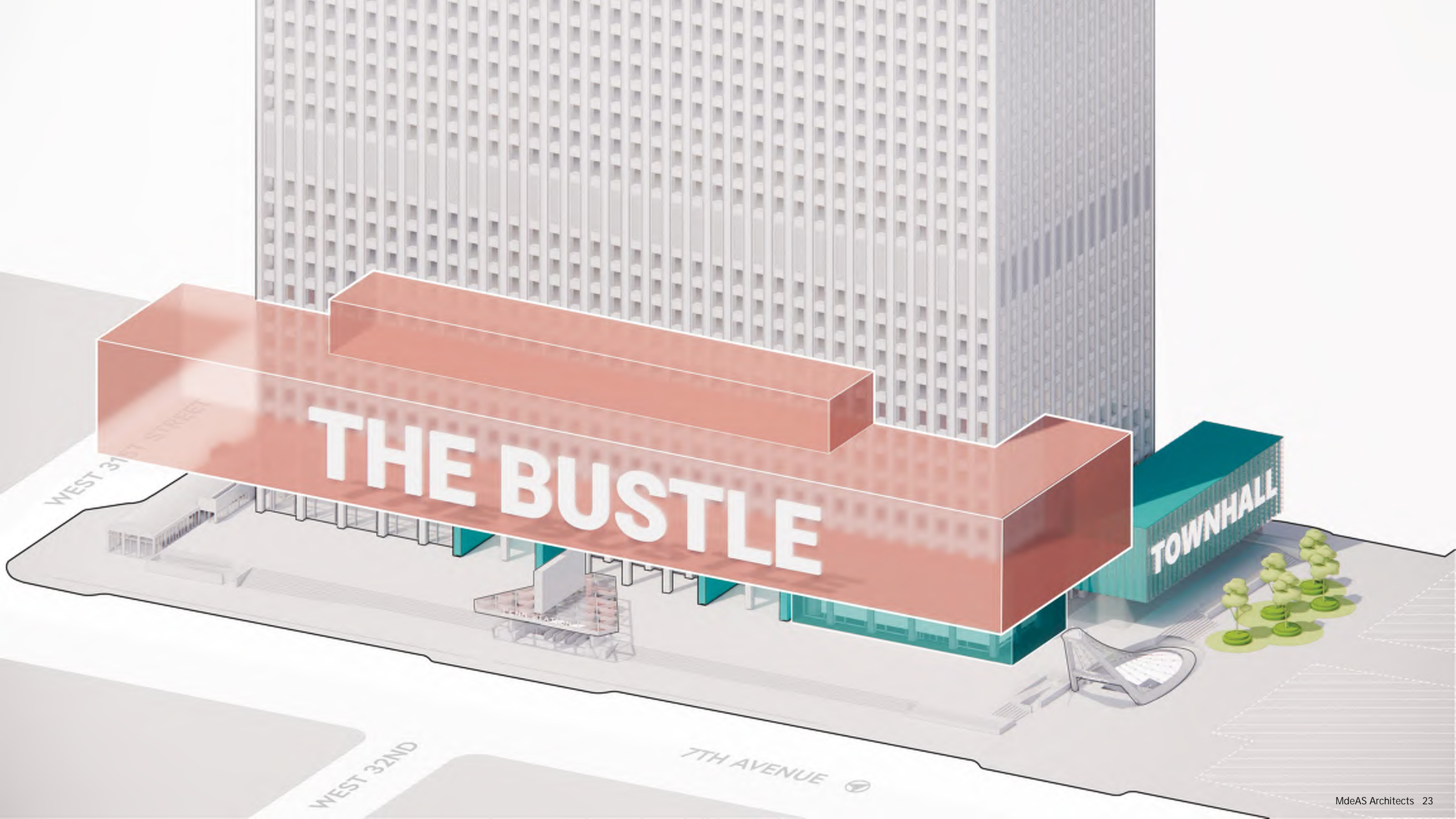


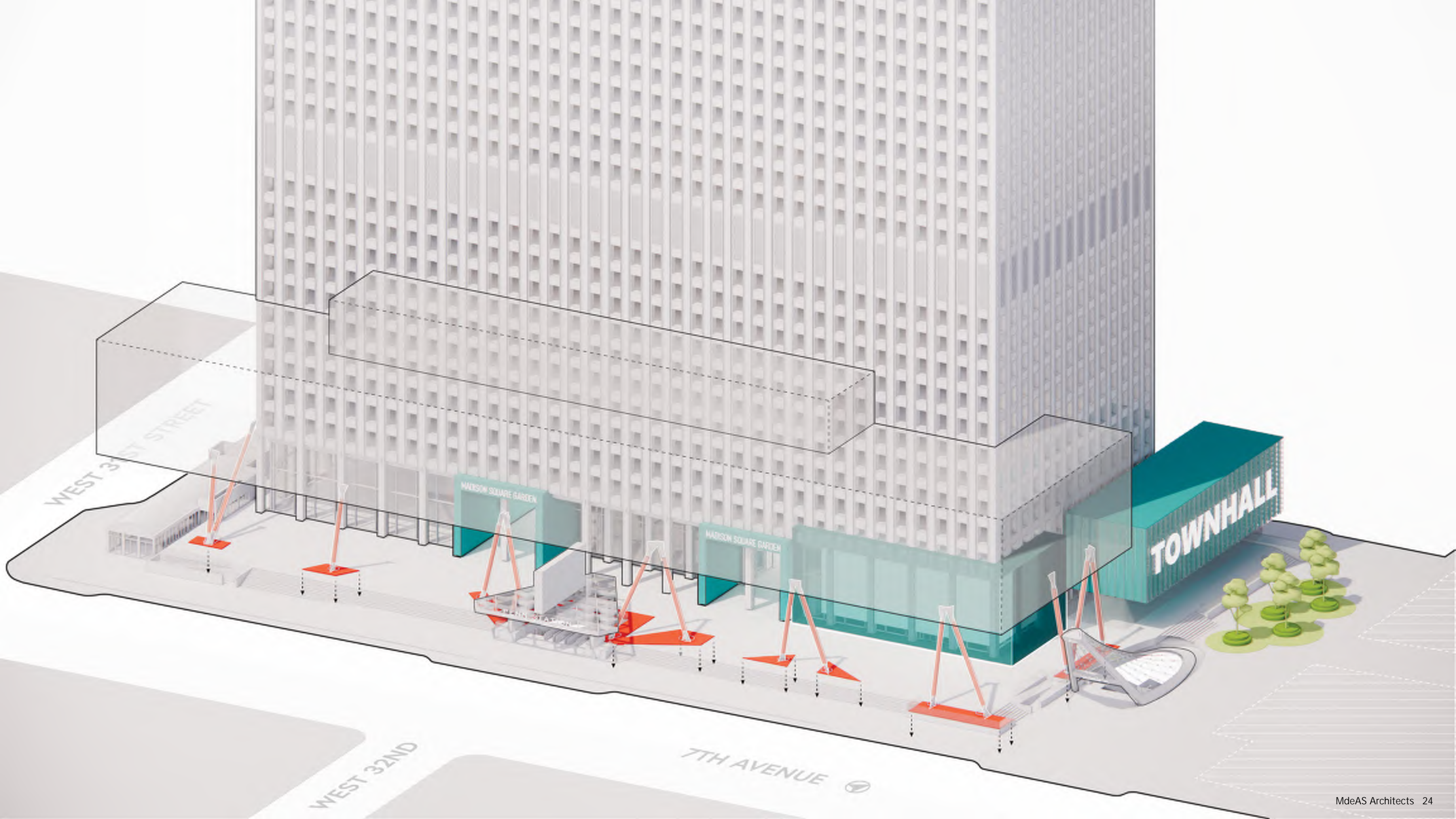


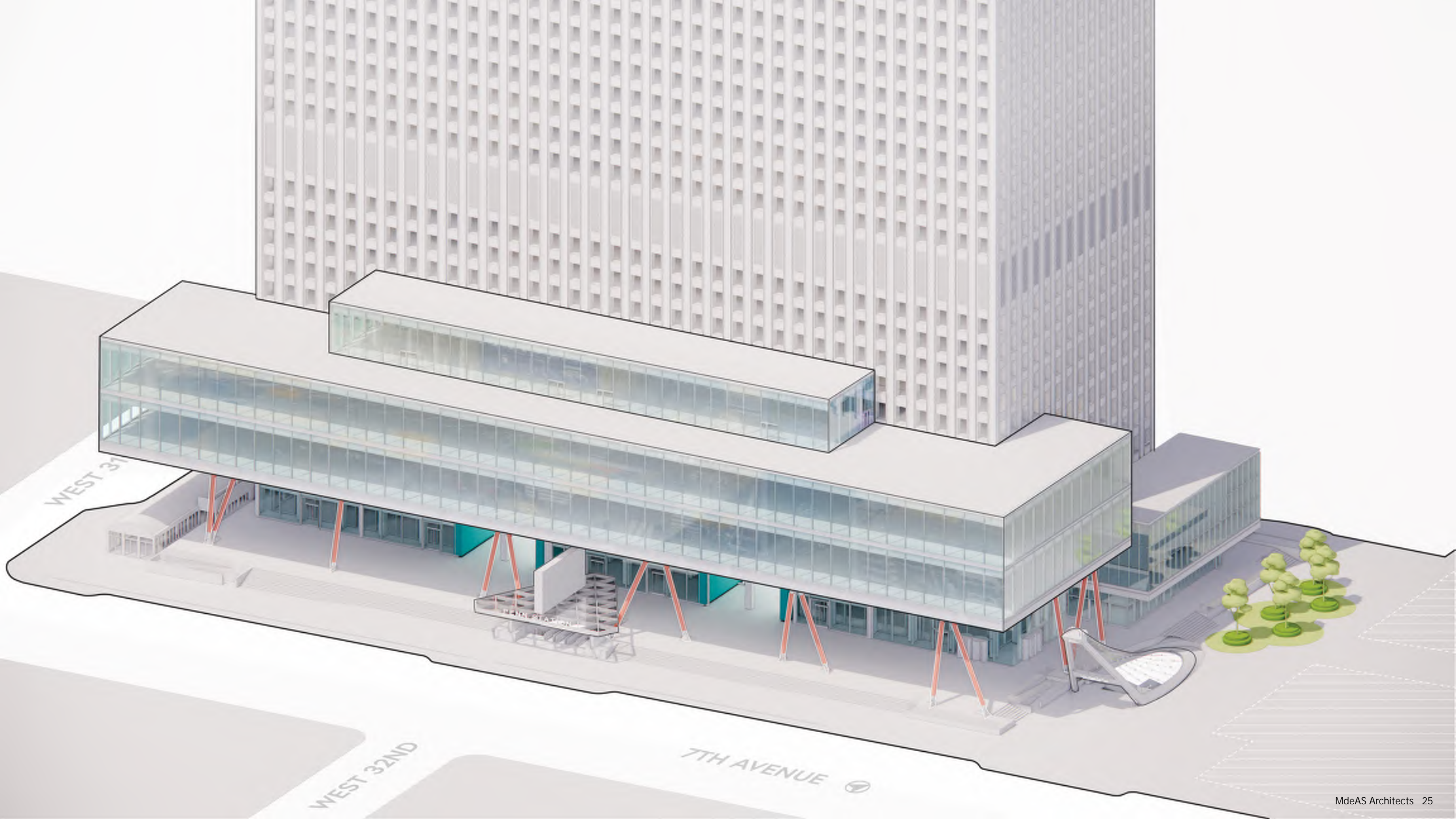


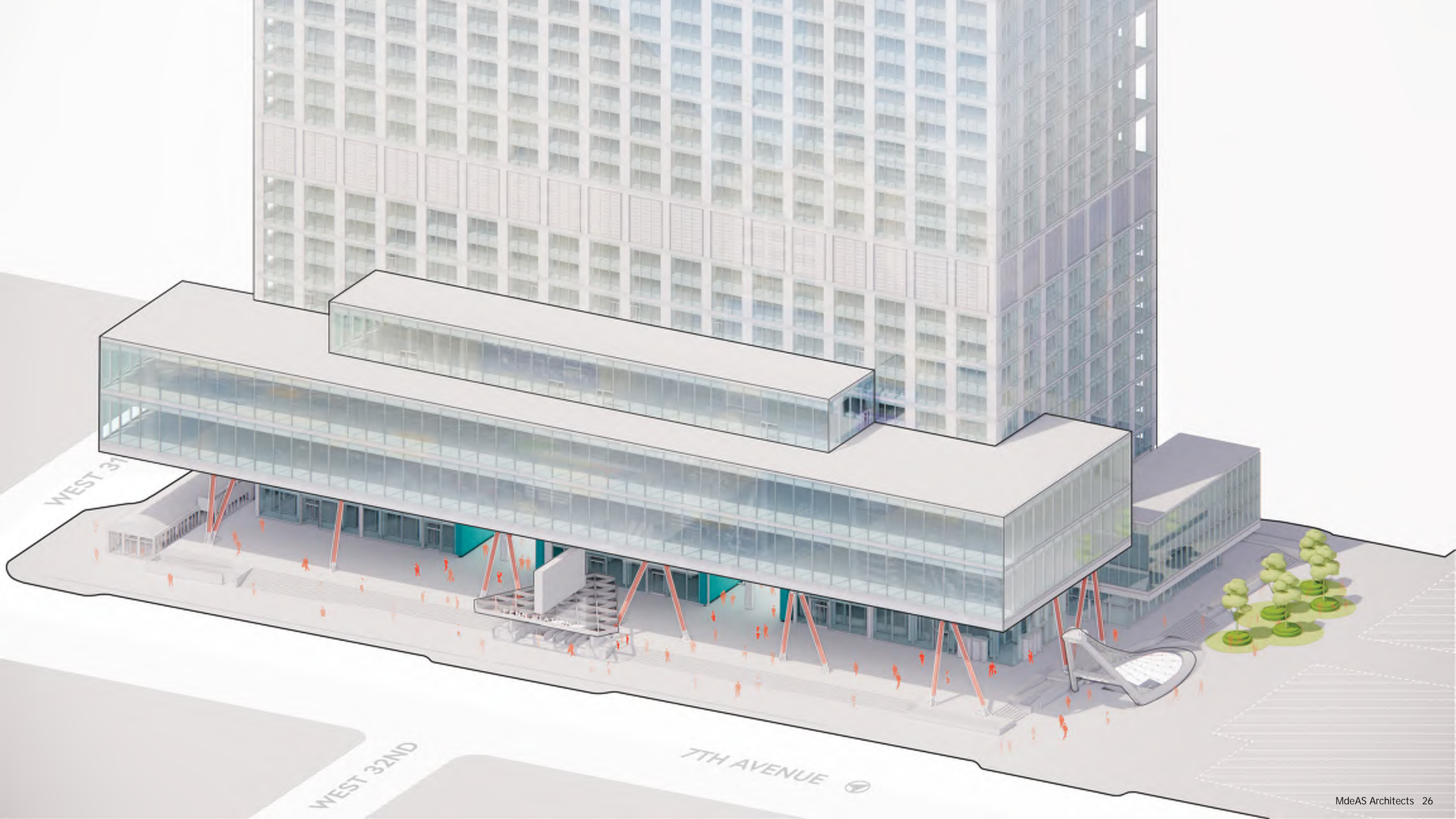


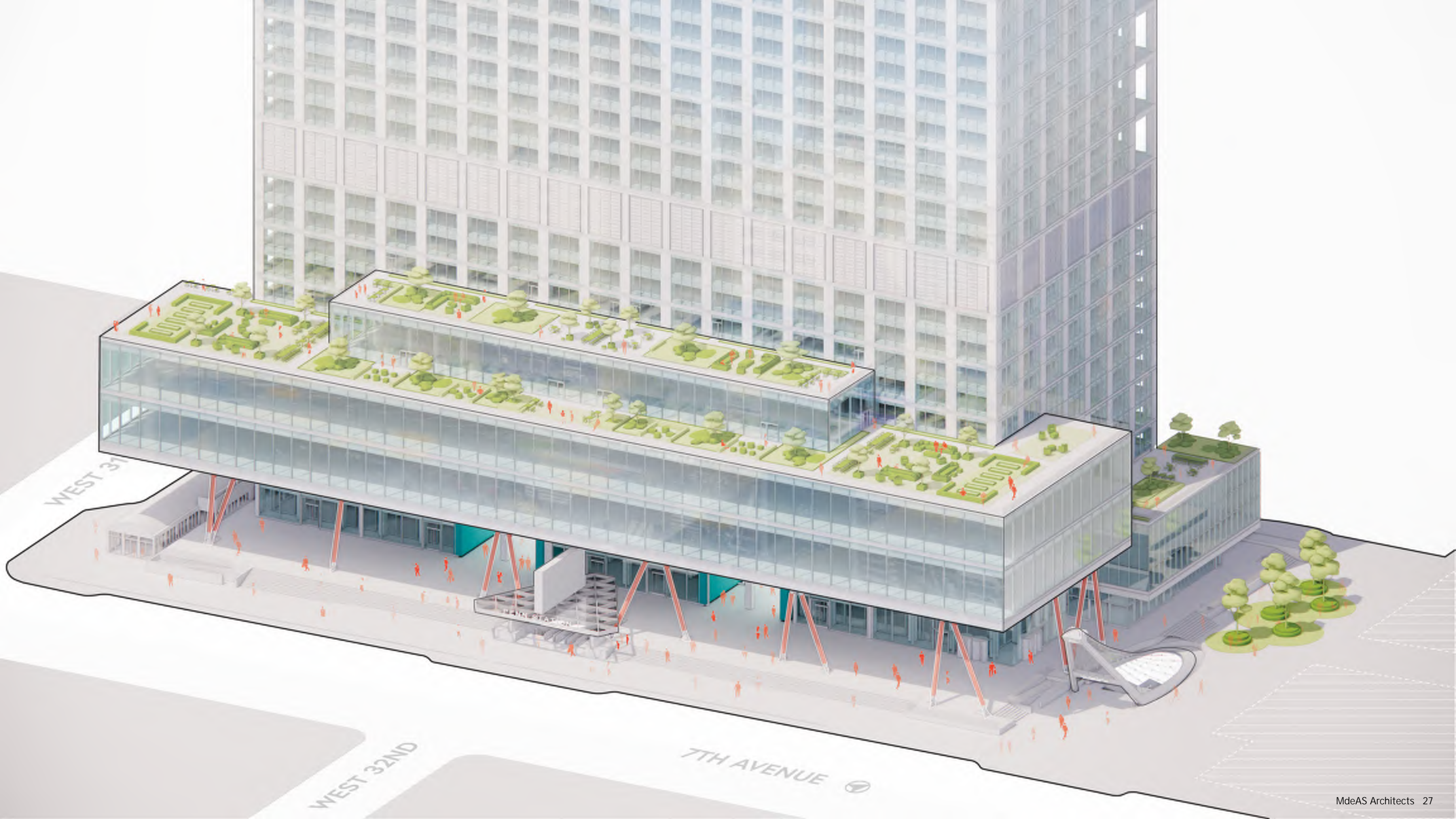
















239'

23'-6"

55'-8"

433'

44'-3"



10TH FLOOR

62,000 RSF of column free space

8,800 SF of outdoor space

8TH FLOOR

13,000 RSF of column free space

21,000 SF of outdoor space

6TH FLOOR

44,000 RSF of column free space

4TH FLOOR

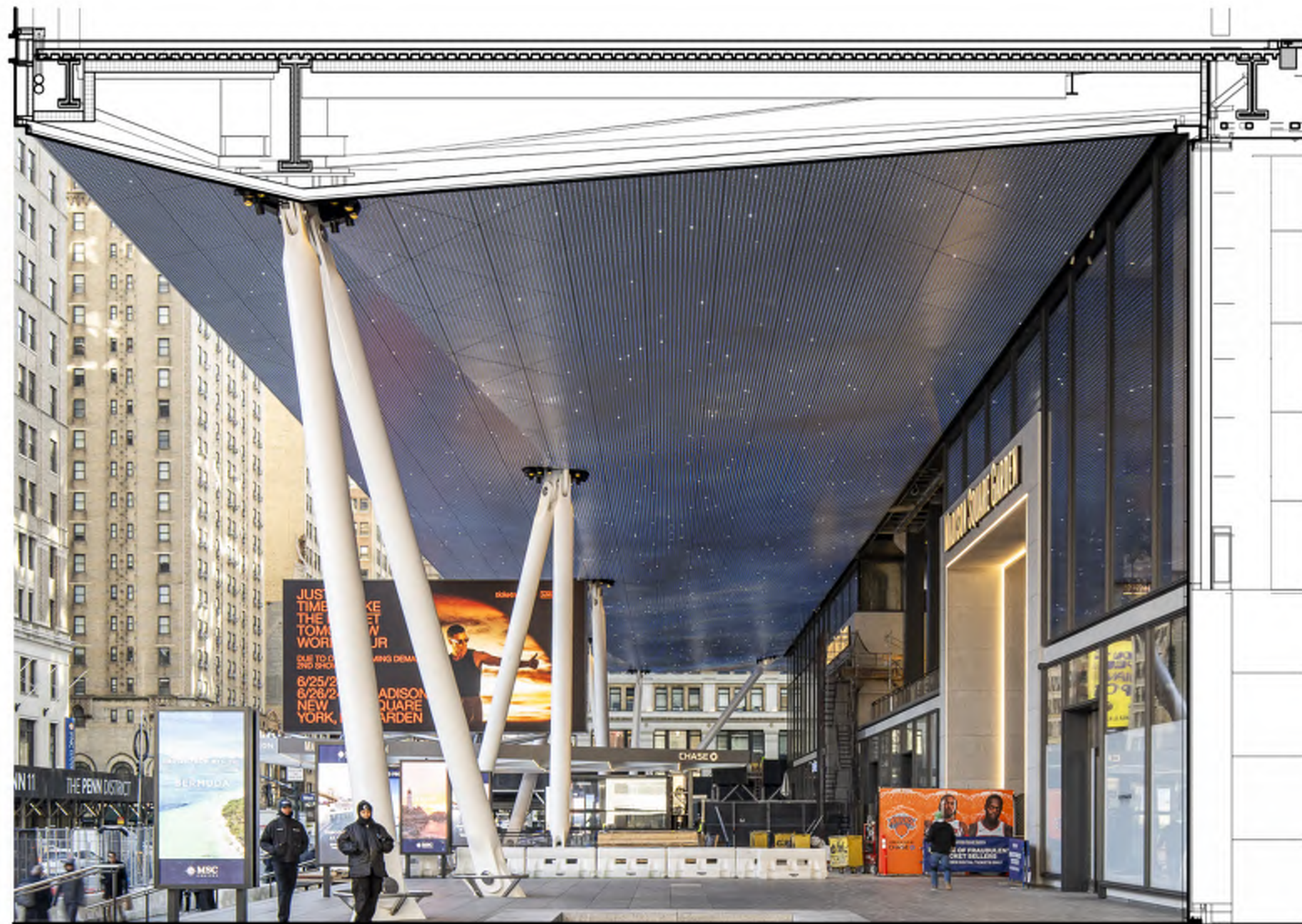
44,000 RSF of column free space

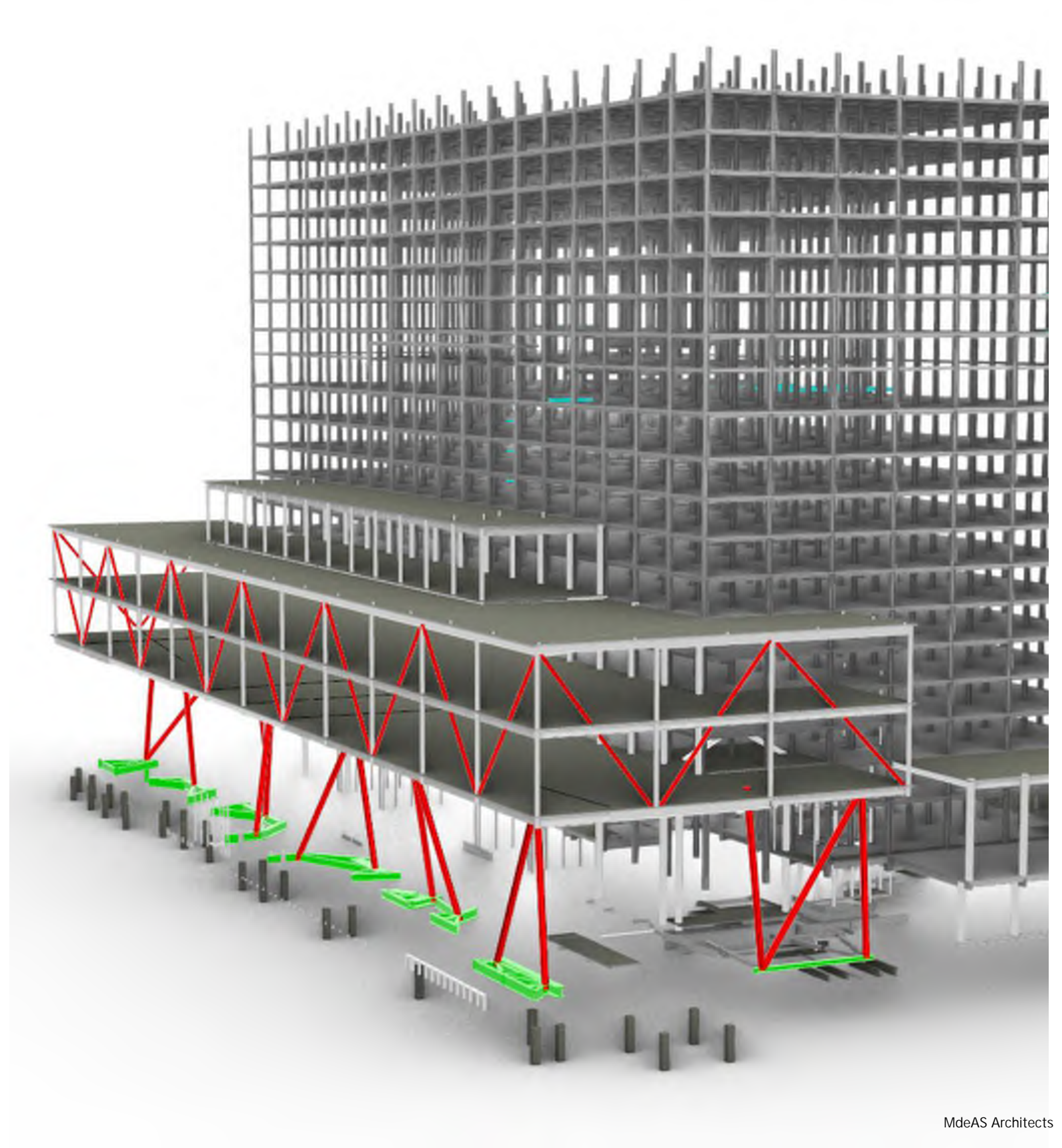
3,600 SF of outdoor space

MADISON SQUARE GARDEN

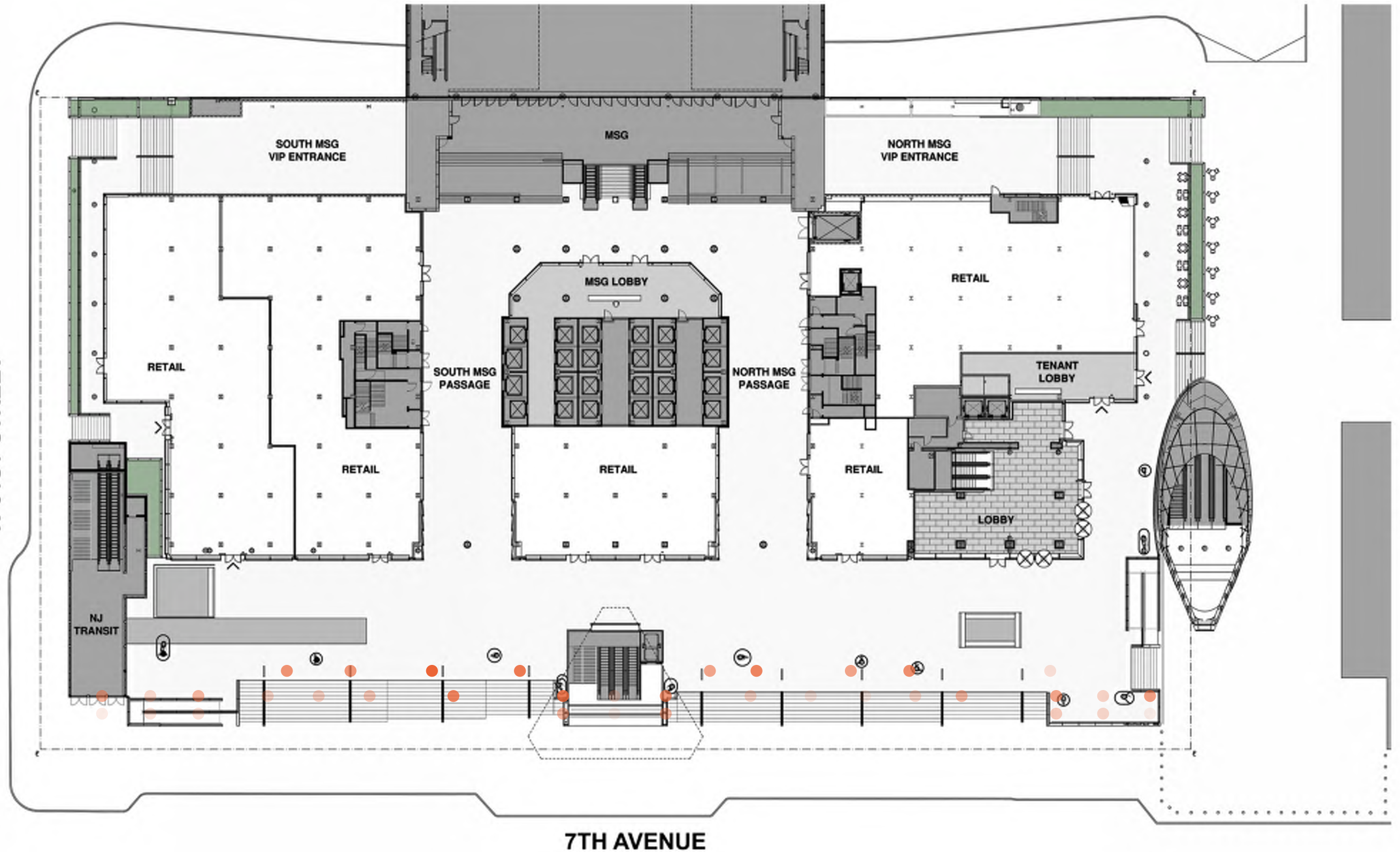






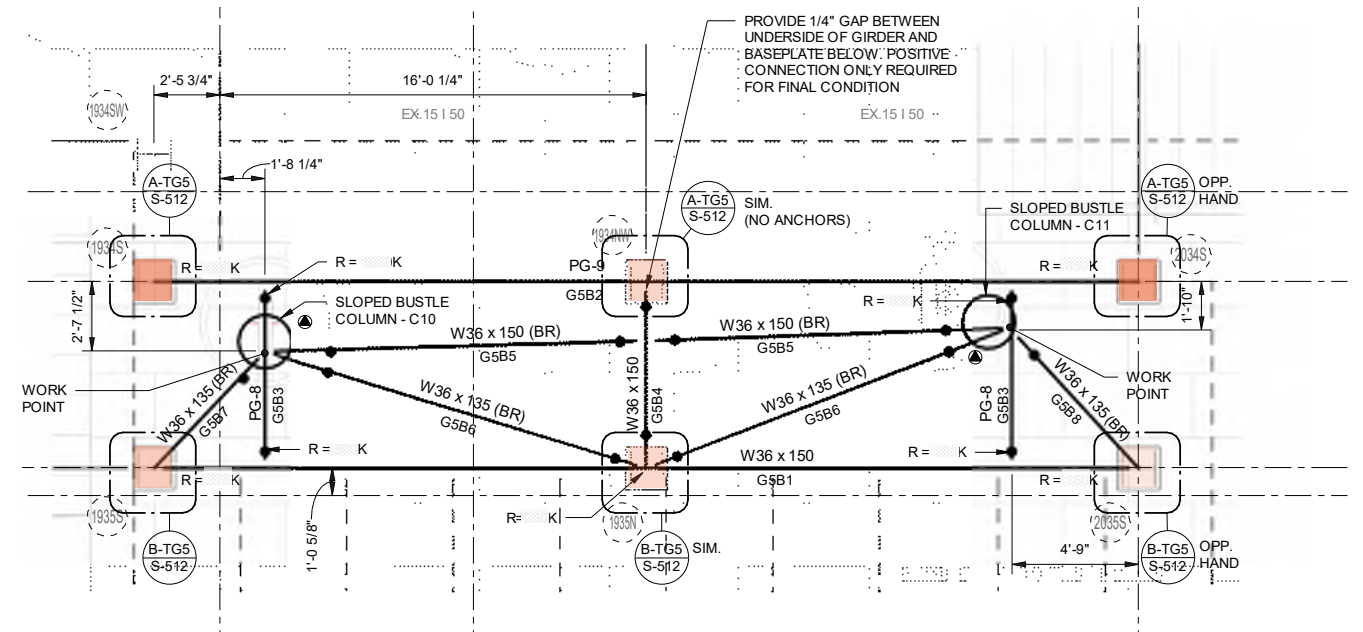
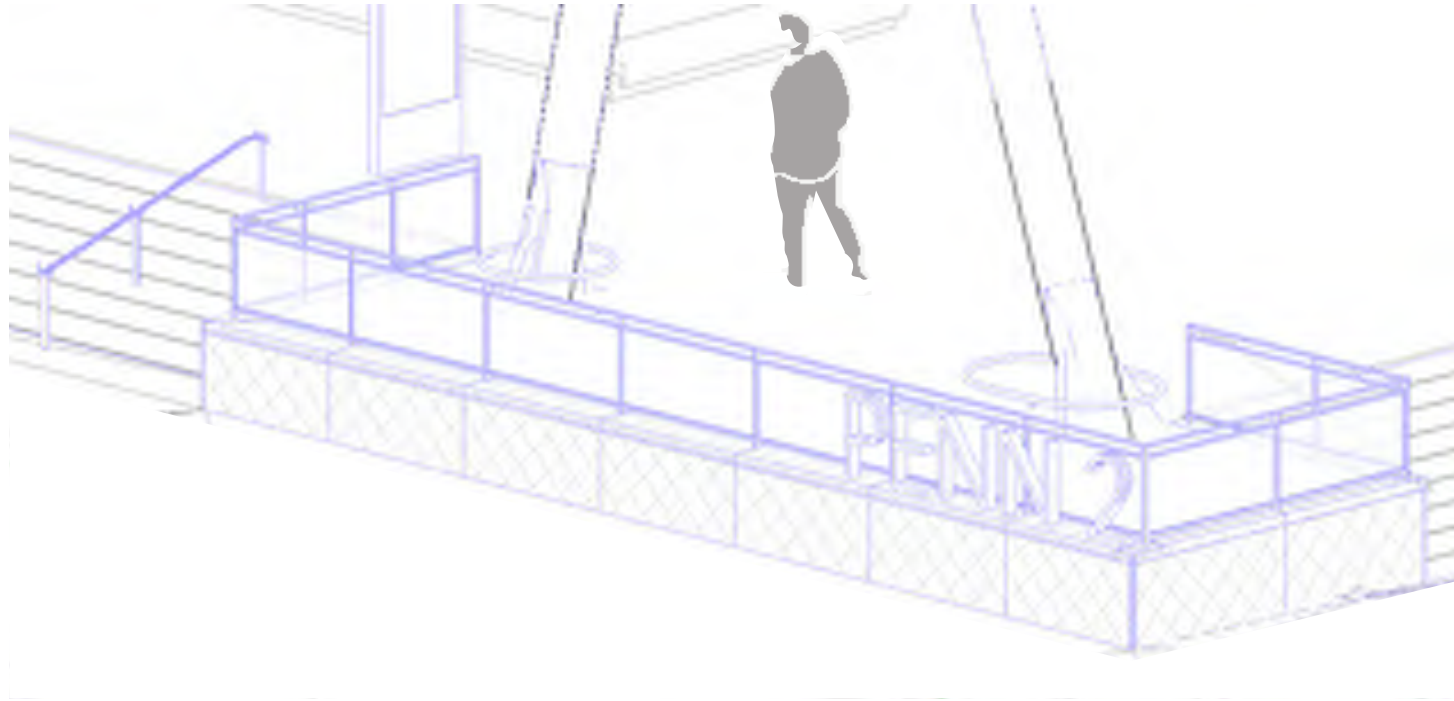


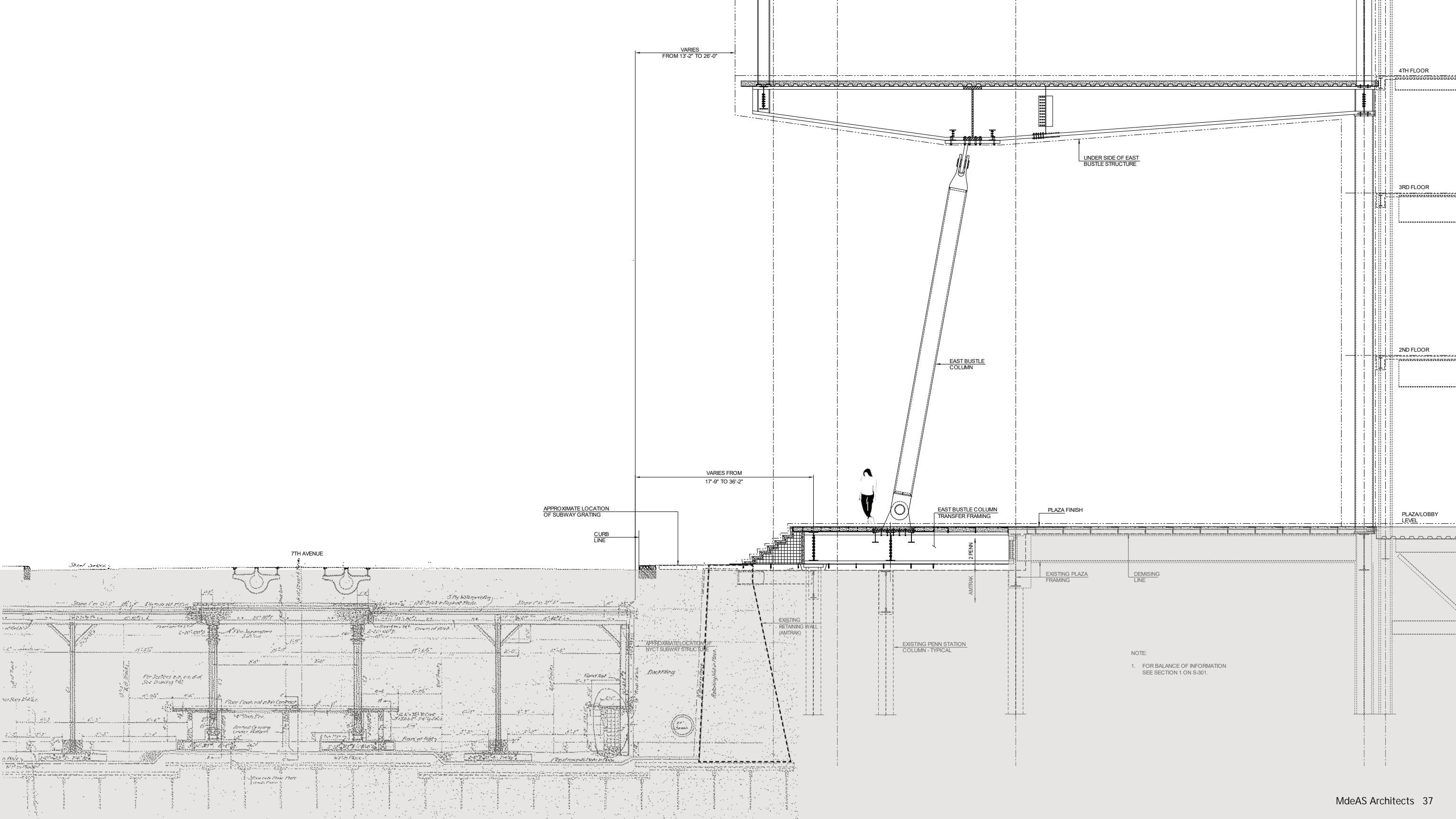
W 31ST STREET

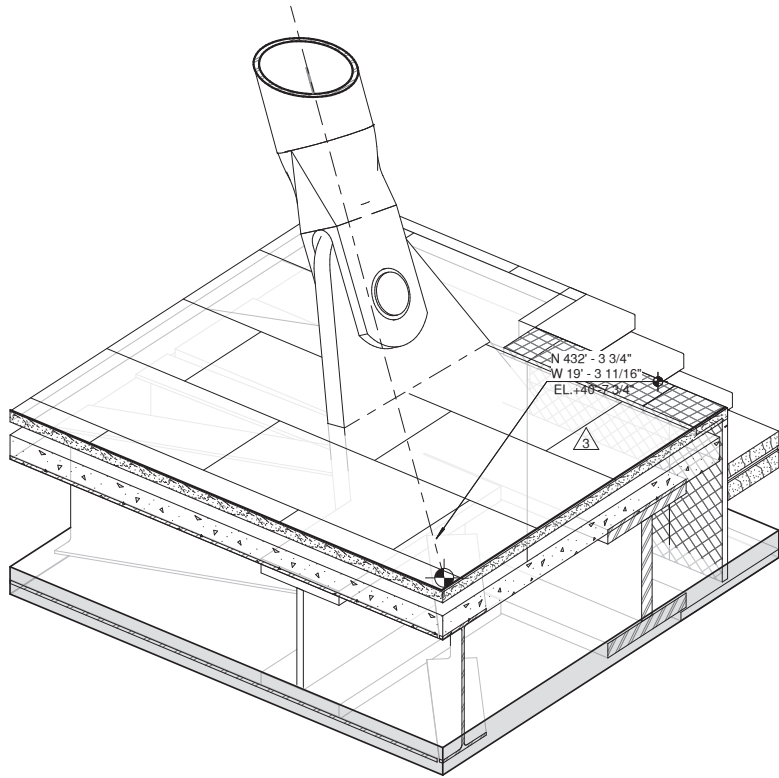
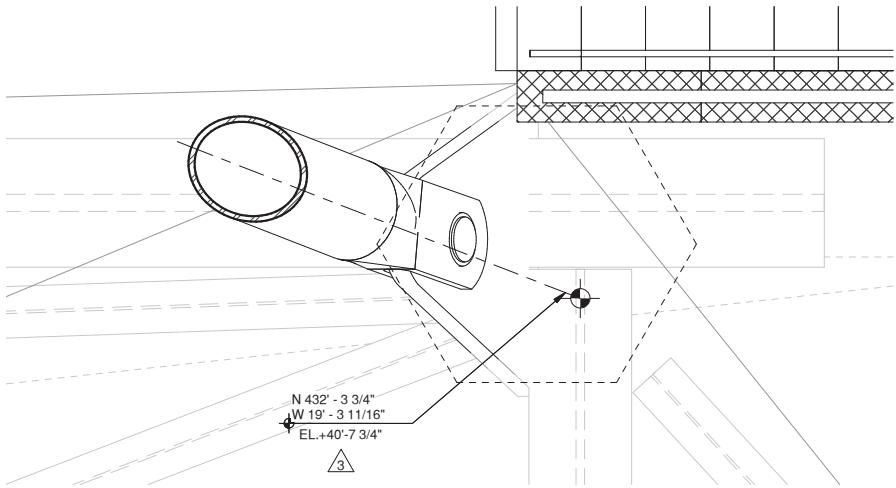
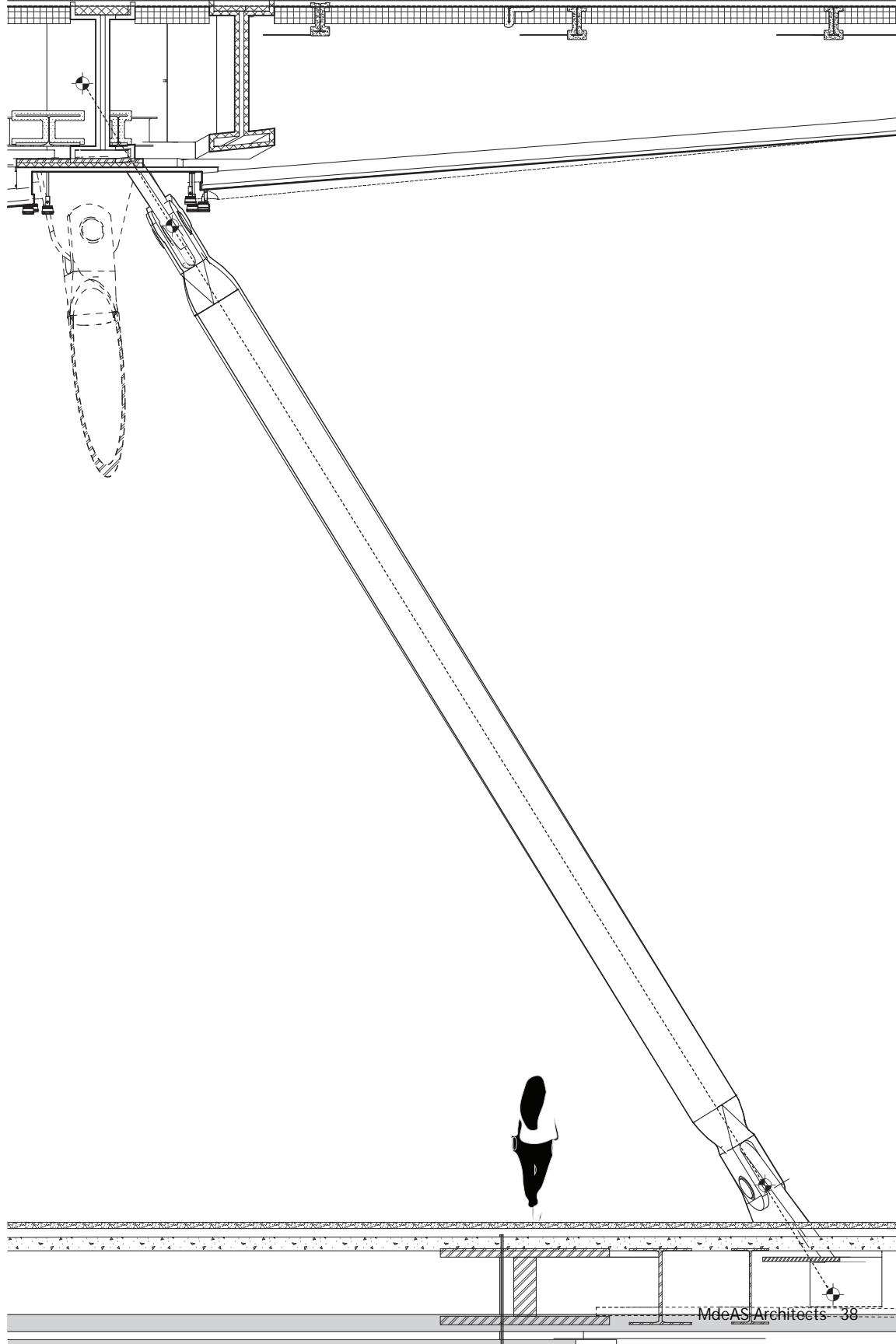
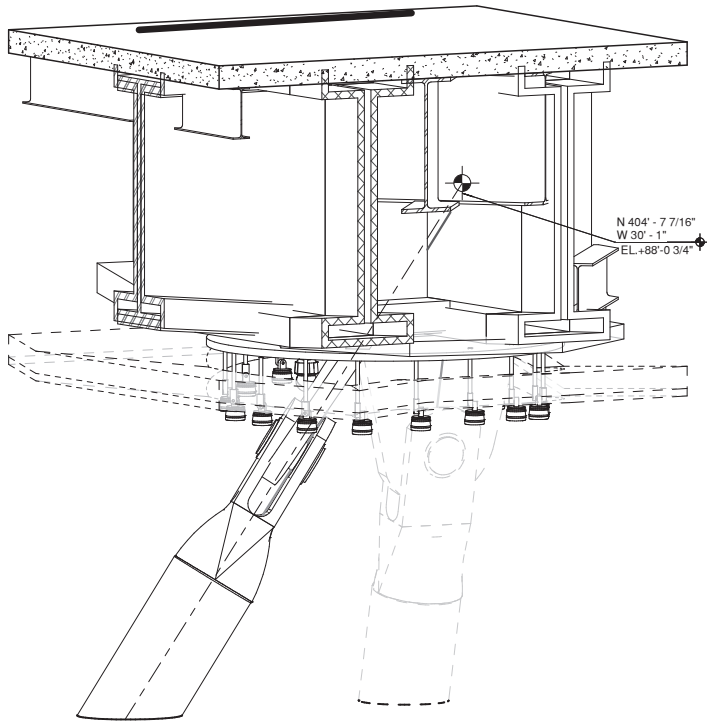
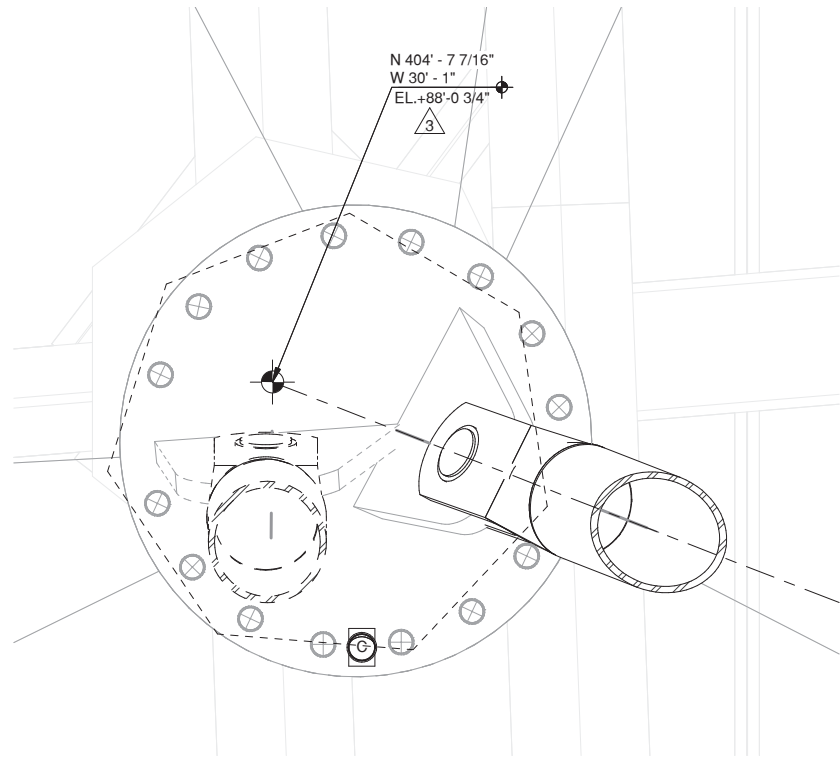


W 33RD STREET

7TH AVENUE





















VORNADO
REALTY TRUST

PENN 2

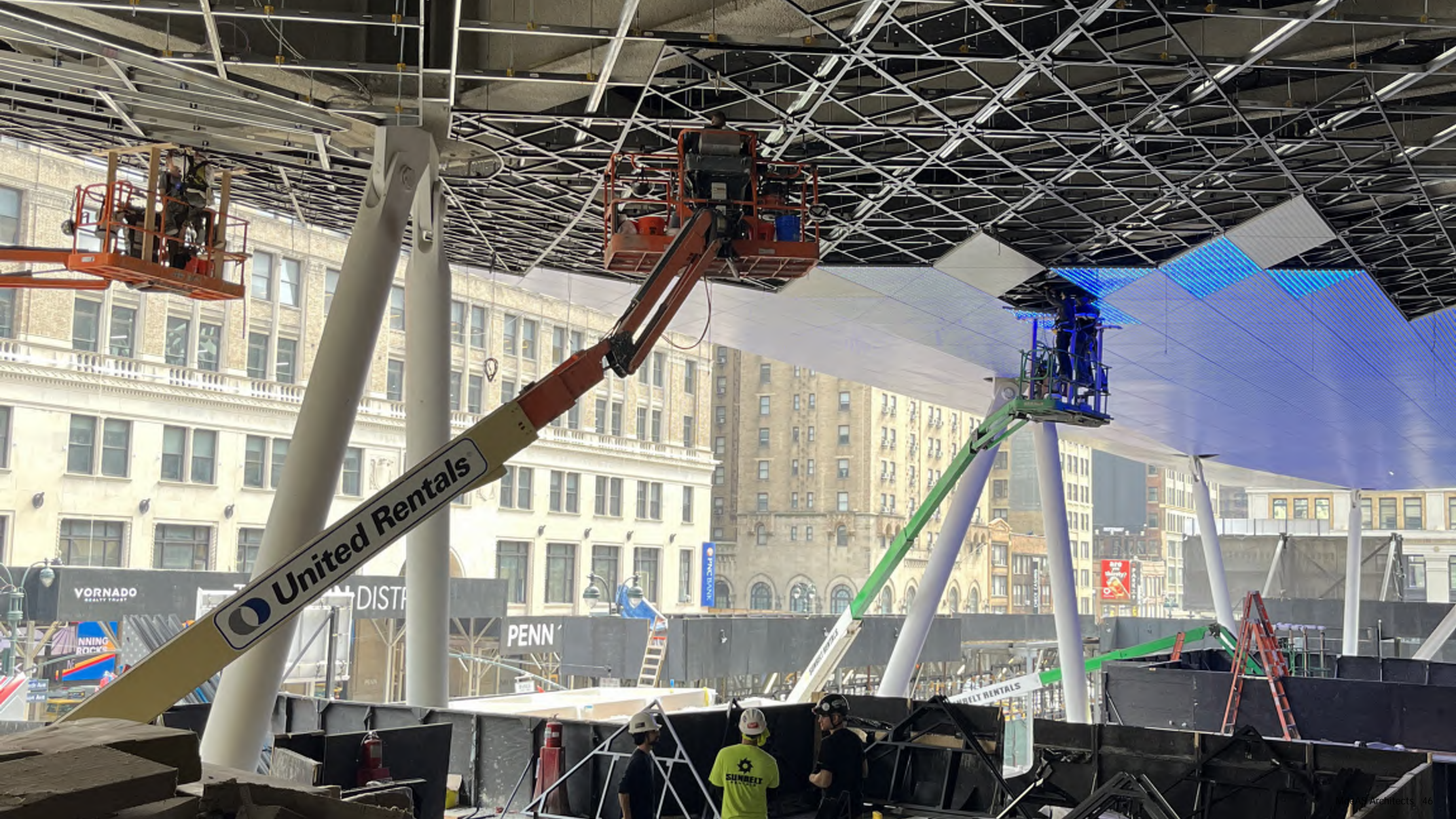
MADISON

TION

NITRANSIT

AMTRAK

Long Island Rail Road











MADISON SQUARE GARDEN

2

LOS TACOS No.1

Robit

WENN2



MdeAS
VORNADO
REALTY TRUST

A
+

Foster +
Partners

ama
design build

GILLMAN CONSULTING INC

cdb

Turner

GMS

Severud Associates
CONSULTING ENGINEERS P.C.

FUTURE GREEN

MNLA



CODEGREEN

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Evolution of Structures

Steel Castings in the Eye of the Design Team

CASTCONNEX[®]
innovative components for inspired designs

THANK YOU!

Contact Us:

info@castconnex.com | +1 416-806-3521

Toll-Free - US: 1-888-681-8786 | UK: +44 0808-196-8162

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