

Tall Mass Timber in the Midwest: Designing Two of the Country's Tallest Wood Projects

**INTRO, Cleveland: Nine Stories of Type IV-B Mass
Timber in Cleveland, OH**

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*Disclaimer: This presentation was developed by a third party and is not funded by
WoodWorks or the Softwood Lumber Board.*

INTRO



HARBOR BAY

REAL ESTATE ADVISORS



Harbor Bay.

**We are relationship-focused,
and neighborhood conscious.
Shaping the future of cities
by driving innovation &
value creation at underutilized,
high-profile locations.**

We're always building,

INTRO, Cleveland *(297 units, Retail, T.O.D.)*
Cleveland, OH | Winter 2021/2022 Delivery

HUB on Campus *(700 beds, T.O.D)*
Minneapolis, MN | 2018

Newman Lofts *(91 units, Retail)*
East Lansing, MI | Sept 2019

ENDI *(168 units, retail)*
Duluth, MN | 2017

Landmark on Grand River *(471 beds, retail)*
East Lansing, MI | Aug 2019

Preserve on Maine *(200 units)*
Rochester, MN | 2017

Hilton Hotel, Mayo Clinic *(286 rooms, 5-stars)*
Rochester, MN | Apr 2019

The Boden *(300 beds)*
Grand Forks, ND | 2016



West 25th Street & Lorain Ave,
in the heart of Ohio City.

The image shows the interior of a large, historic market hall. The ceiling is a prominent feature, constructed from brick in a herringbone pattern and featuring several circular medallions. The walls are also made of brick and have arched windows. The floor is filled with various food stalls and vendors. In the foreground, there are stalls for 'URBAN HERBS' and 'MICHAEL'S BAKERY'. Other stalls in the background include 'HODDLE' and 'KARIM'S POKE'. There are also large banners hanging from the ceiling, one of which says '1908'. The overall atmosphere is one of a busy, historic marketplace.

One of Ohio's most
high profile sites.



One of the most important projects in the region.

- Atop the Ohio City transit hub (9 bus routes + light rail)
 - In partnership with the historic West Side Market
 - Adjacent to the future Irishtown Bend Park, Red Line Greenway and Lorain Ave Cycle Track
 - Cleveland's most dynamic, socioeconomically diverse neighborhood
- Linking Downtown, Tremont, Ohio City and Cleveland's near west side



Groundbreaking - FEBRUARY 2020
Completion - WINTER 2021/2022

\$135M

Investment (Phase I)

297

Apartments

40,000

Square Feet of Retail

12,500

Square Foot Rooftop Event
Venue

1+ ACRE

of Public Green space

An aerial photograph of a multi-story building under construction. The structure features a prominent yellow wooden frame with a grid of vertical studs and horizontal beams. A large white lattice crane is positioned on the left side of the building. The construction site is situated in an urban environment, with other buildings and greenery visible in the background. The word "Innovative." is overlaid in white text in the center of the image.

Innovative.

A modern kitchen with light wood cabinetry, a white countertop, and a large window overlooking a city. The word "Beautiful." is overlaid in white text.

Beautiful.



Renewable.



Safe & Efficient.

START WITH: WHY?

1. DIFFERENTIATION.
2. BEING THE LEADING EDGE.
3. PUSHING BOUNDARIES, BENDING RULES.
4. SAVING THE WORLD STARTS LOCALLY.
5. CONSTRUCTABILITY...AFTER A LEARNING CURVE.
6. HIGH PROFILE SITE. HIGH PROFILE PROJECT.
7. CLEVELAND: UNDERPERFORMING YET UNDERESTIMATED.



A modern office interior with a high ceiling made of light-colored wood. Large windows on the left side offer a view of a city street. The space is furnished with a long grey sofa, a long white bar counter with stools, and several people are working or sitting. The text "COVERING THE WOOD DEFEATS THE PURPOSE." is overlaid in the center.

**COVERING THE WOOD
DEFEATS THE PURPOSE.**

Challenges:

Is the code based on data or based on fear?

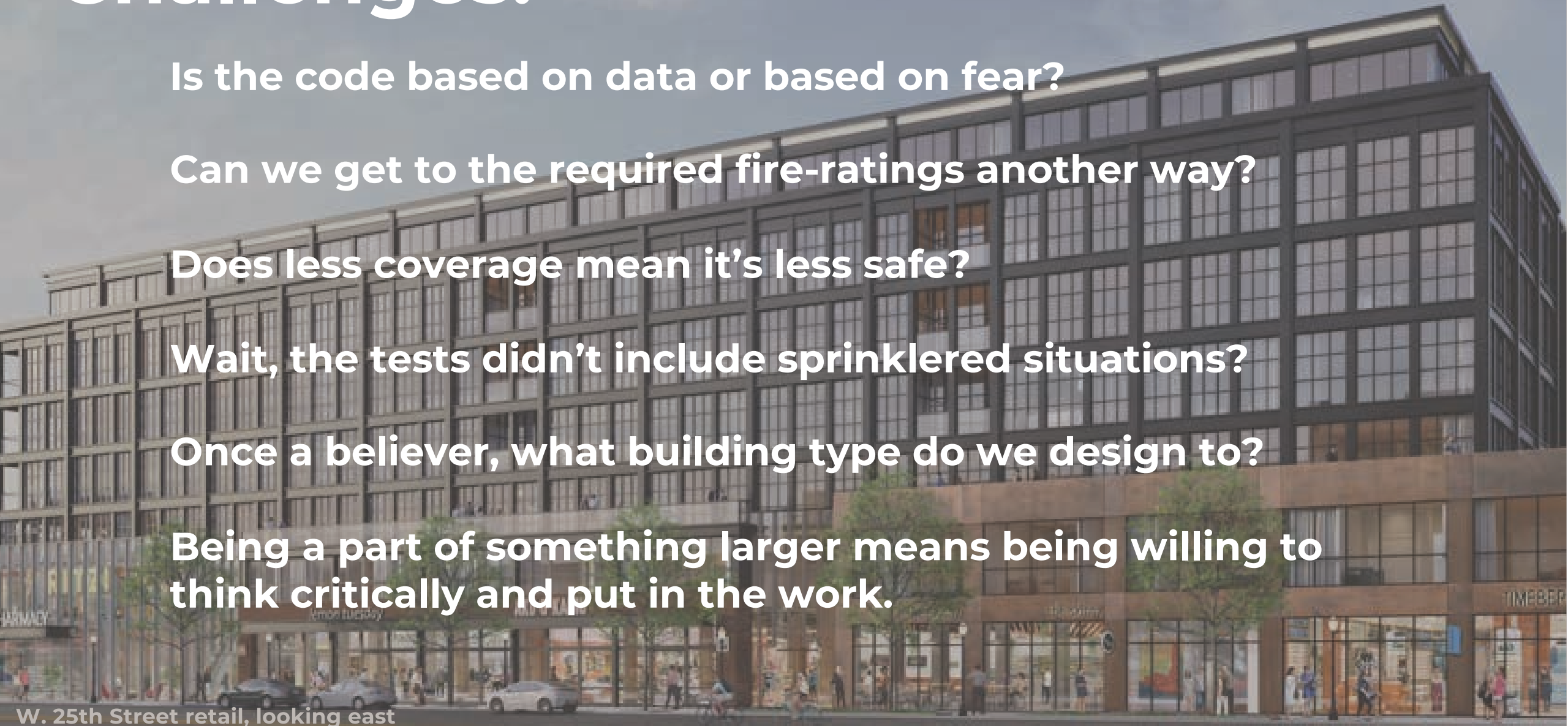
Can we get to the required fire-ratings another way?

Does less coverage mean it's less safe?

Wait, the tests didn't include sprinklered situations?

Once a believer, what building type do we design to?

Being a part of something larger means being willing to think critically and put in the work.



W. 25th Street retail, looking east

Approach:

2021 code has elements that are semi-arbitrary.

Beefed up timber members. Shorter egress distances. Redundant water supply to the building. Total fire fuel load vs. max allowed.

Does less coverage mean it's less safe? Data says: NO.

Sprinklers everywhere.

Getting the Chief Building Official to lead is imperative. Educate. Motivate. Celebrate.

Design against future code or current one? Means to the end of Alternatively Engineered Design Approval.

Integrate the building official and fire marshall as early as possible.

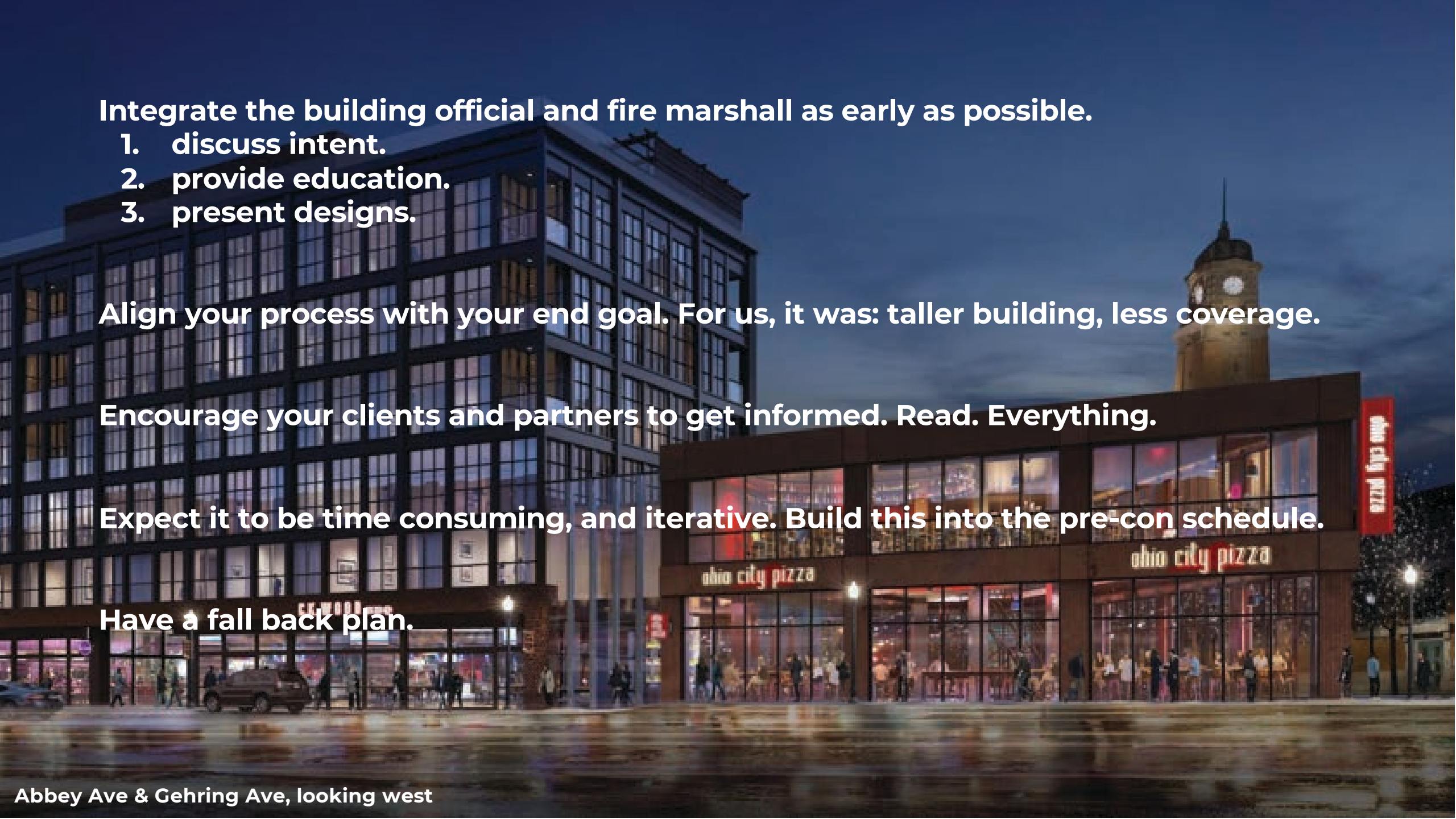
- 1. discuss intent.**
- 2. provide education.**
- 3. present designs.**

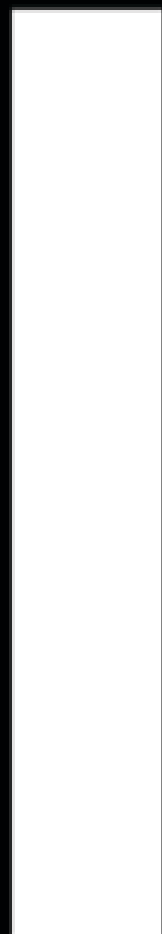
Align your process with your end goal. For us, it was: taller building, less coverage.

Encourage your clients and partners to get informed. Read. Everything.

Expect it to be time consuming, and iterative. Build this into the pre-con schedule.

Have a fall back plan.





QUESTIONS?

This concludes The American
Institute of Architects Continuing
Education Systems Course

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