

The Port Authority of
New York & New Jersey's

World Trade Center
Transportation

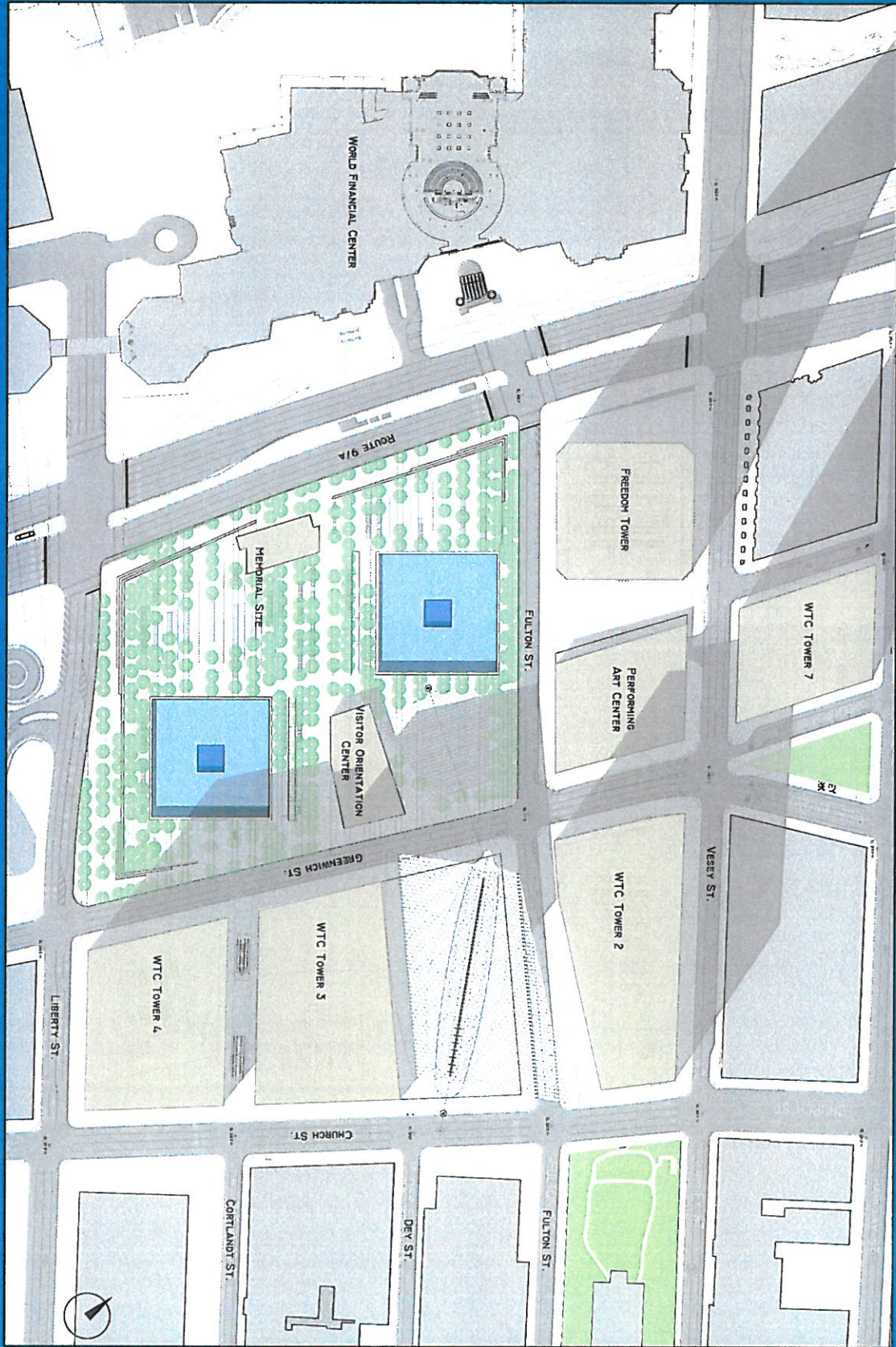
HUB

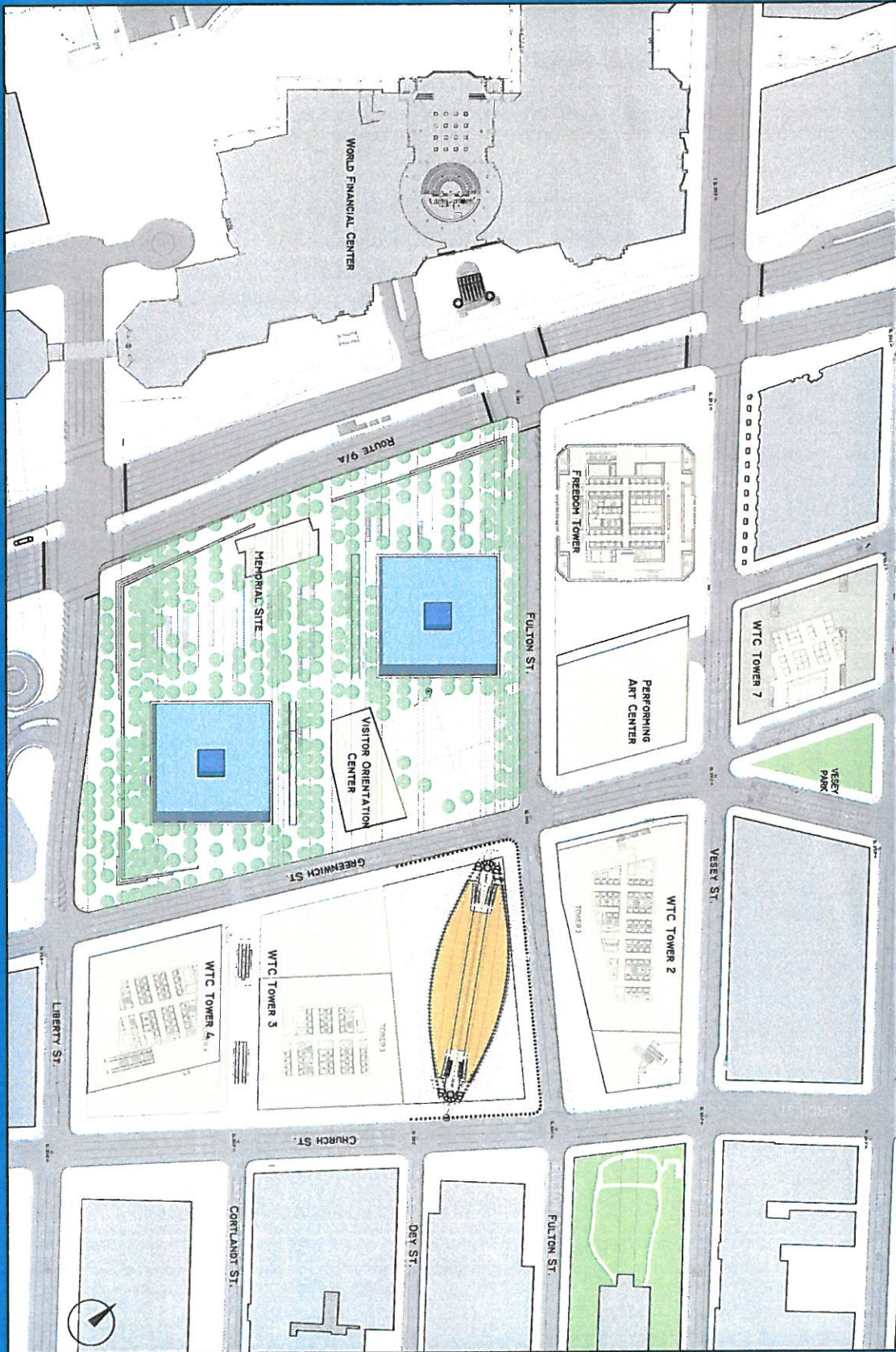
Presentation to New York City
Department of Buildings
August 16, 2011

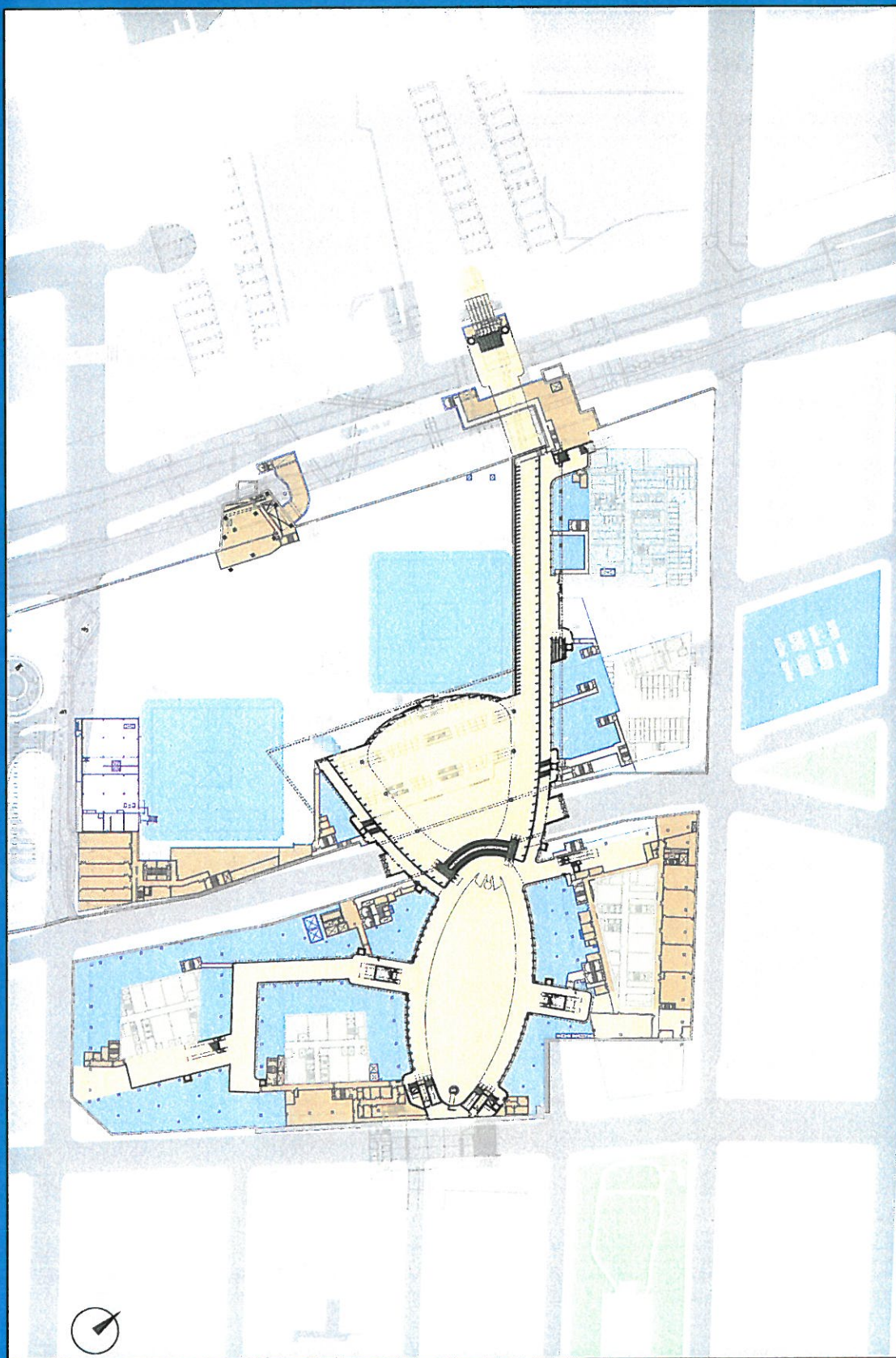
DOWNTOWN DESIGN PARTNERSHIP

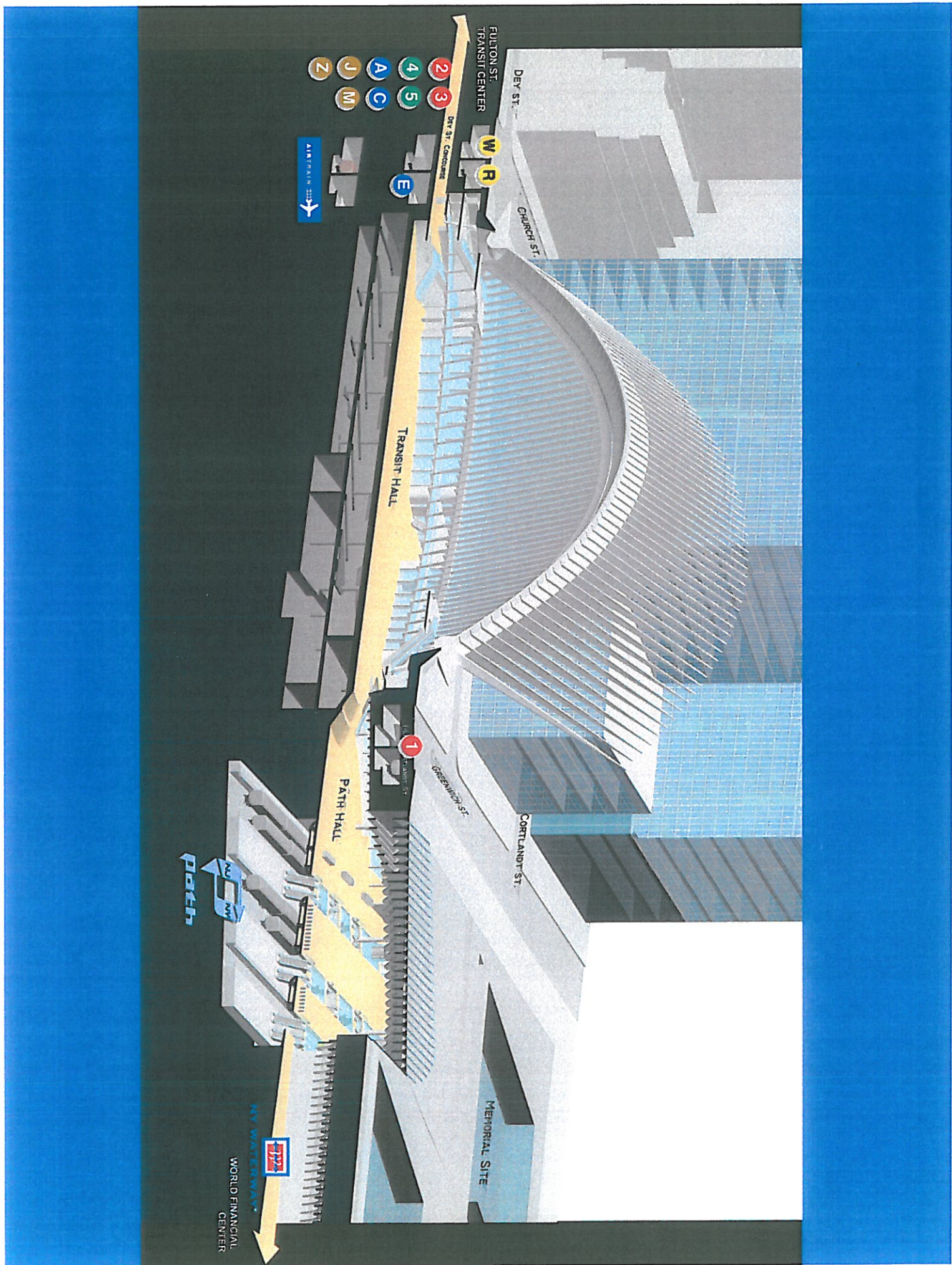
A Joint Venture of DMJM+HARRIS and STV
in association with

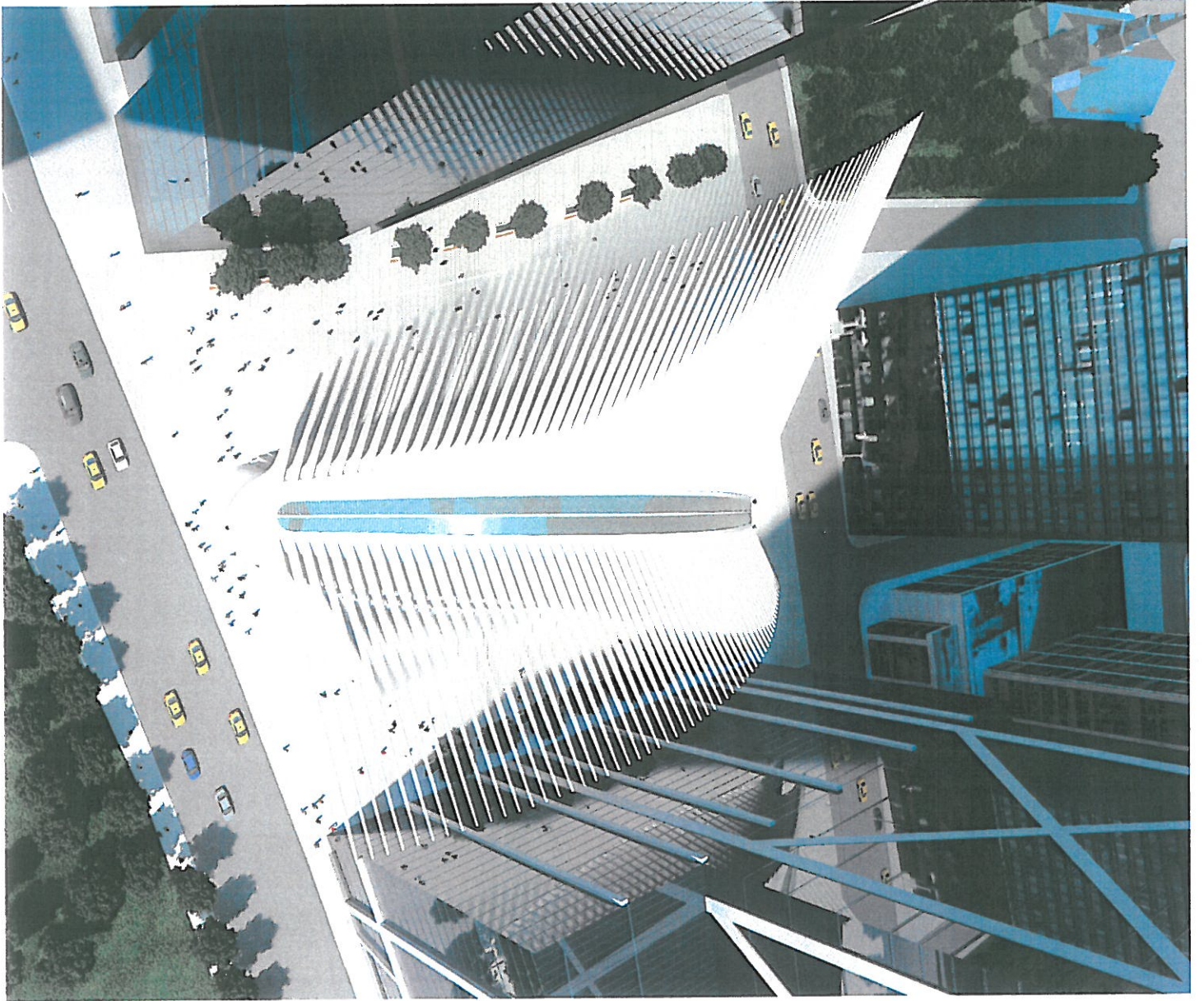
SANTIAGO CALATRAVA

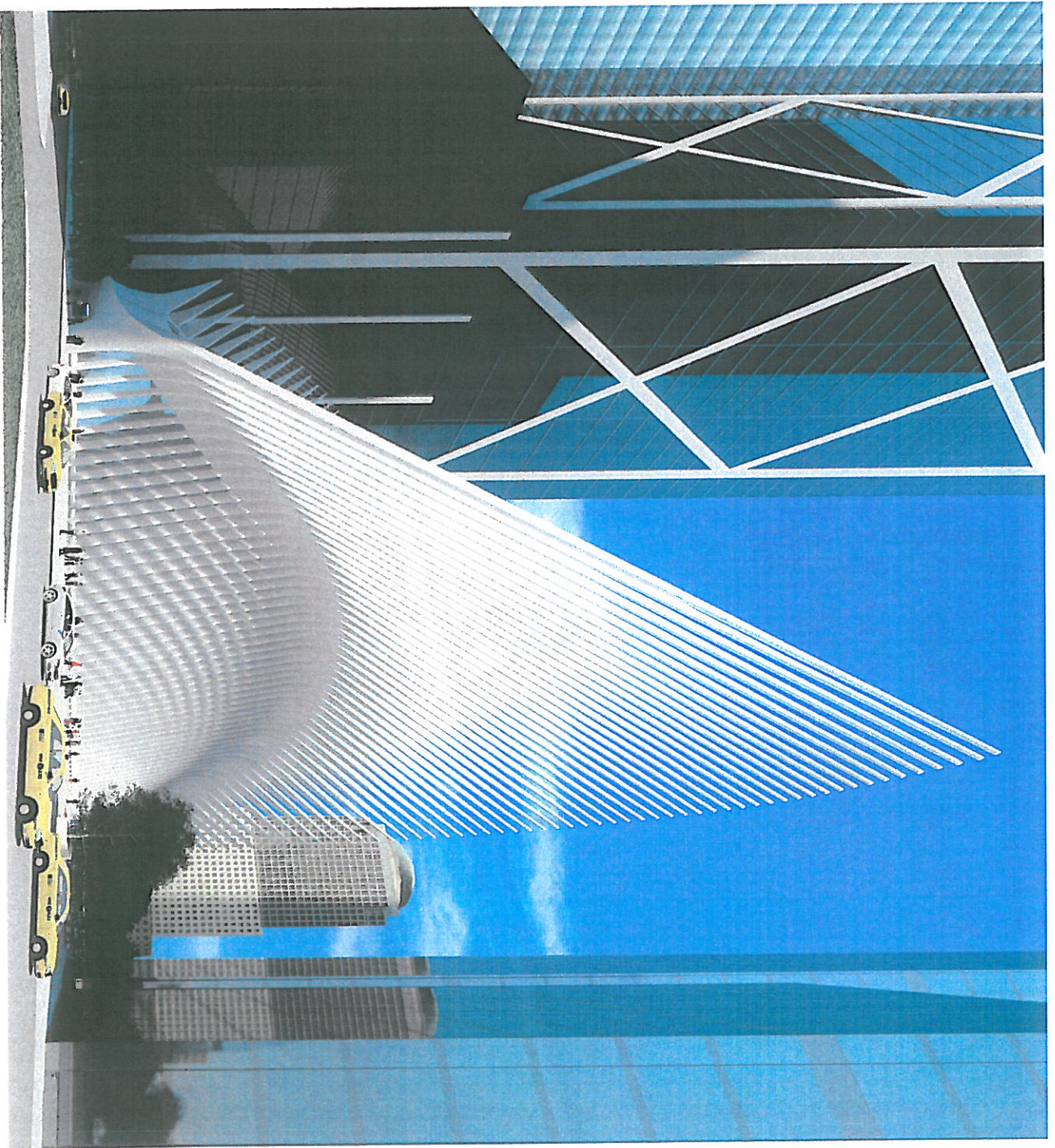


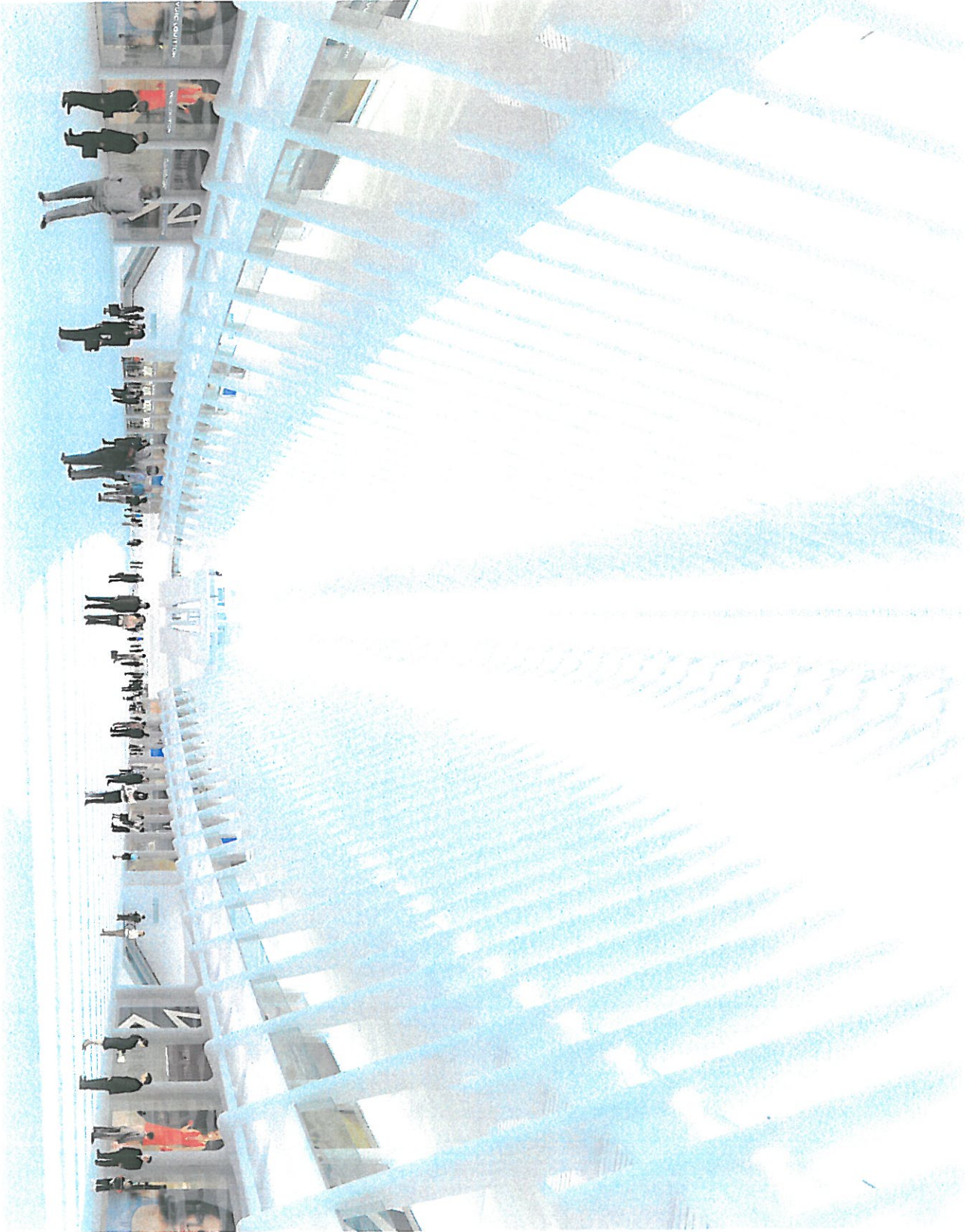


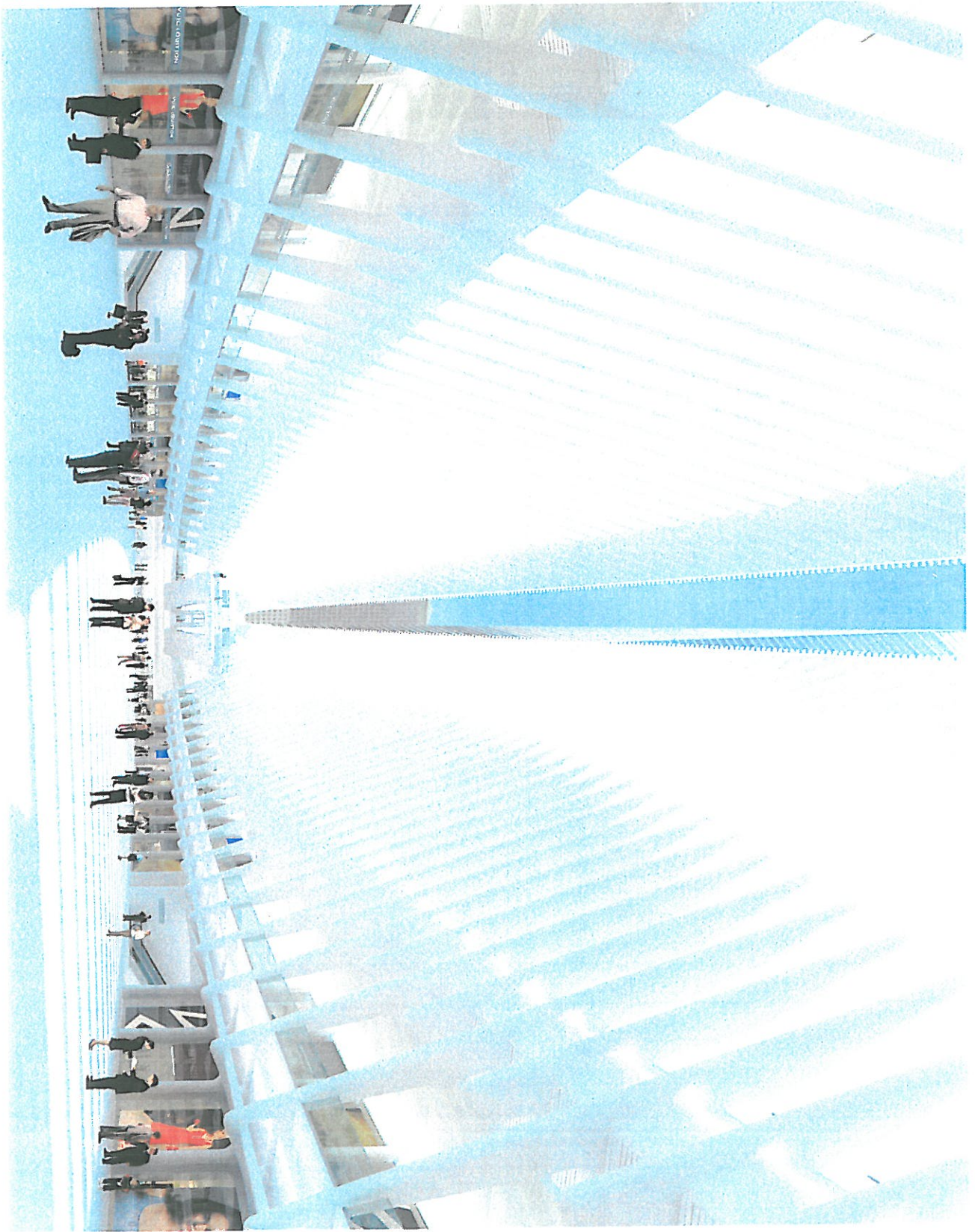


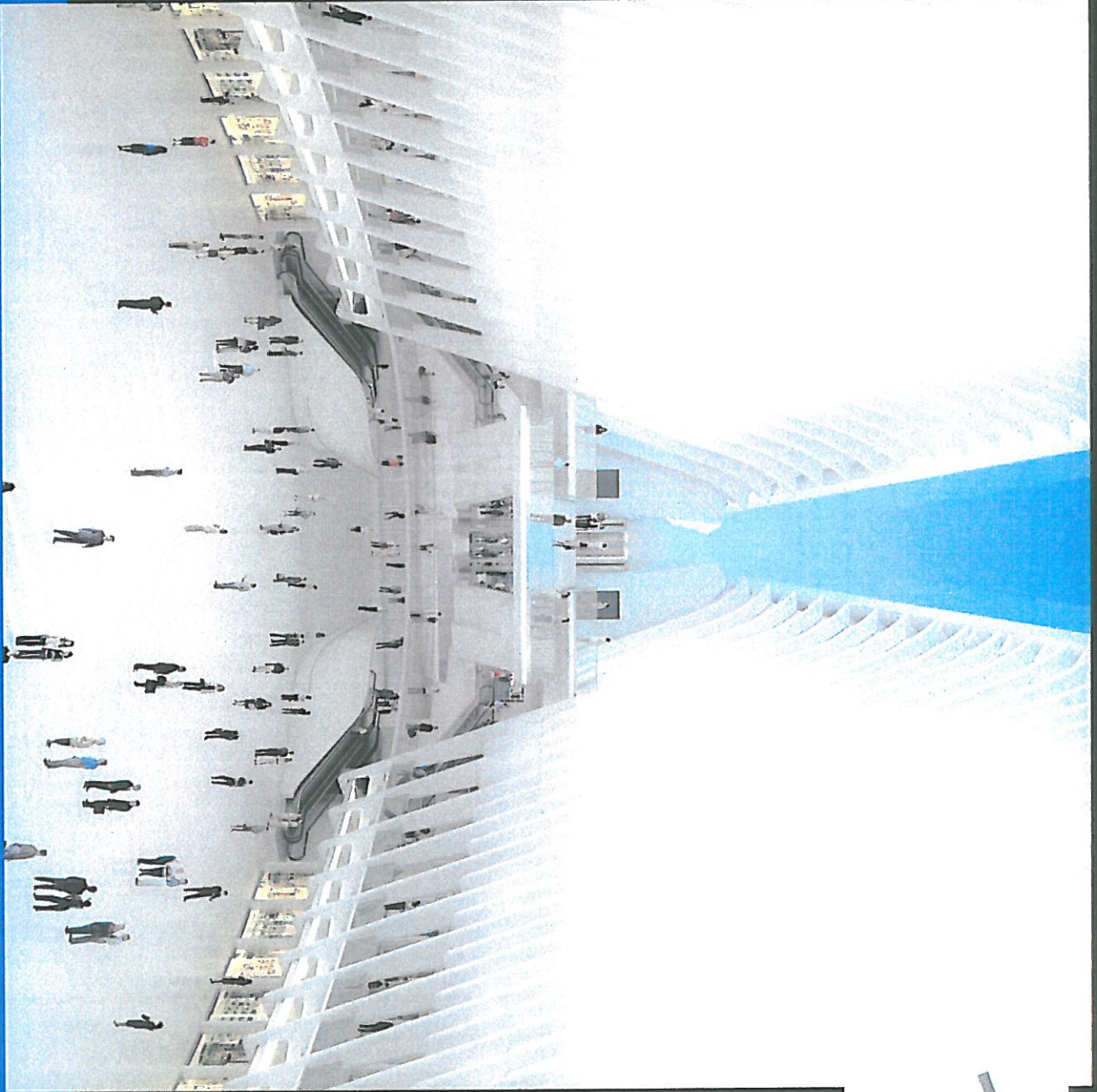


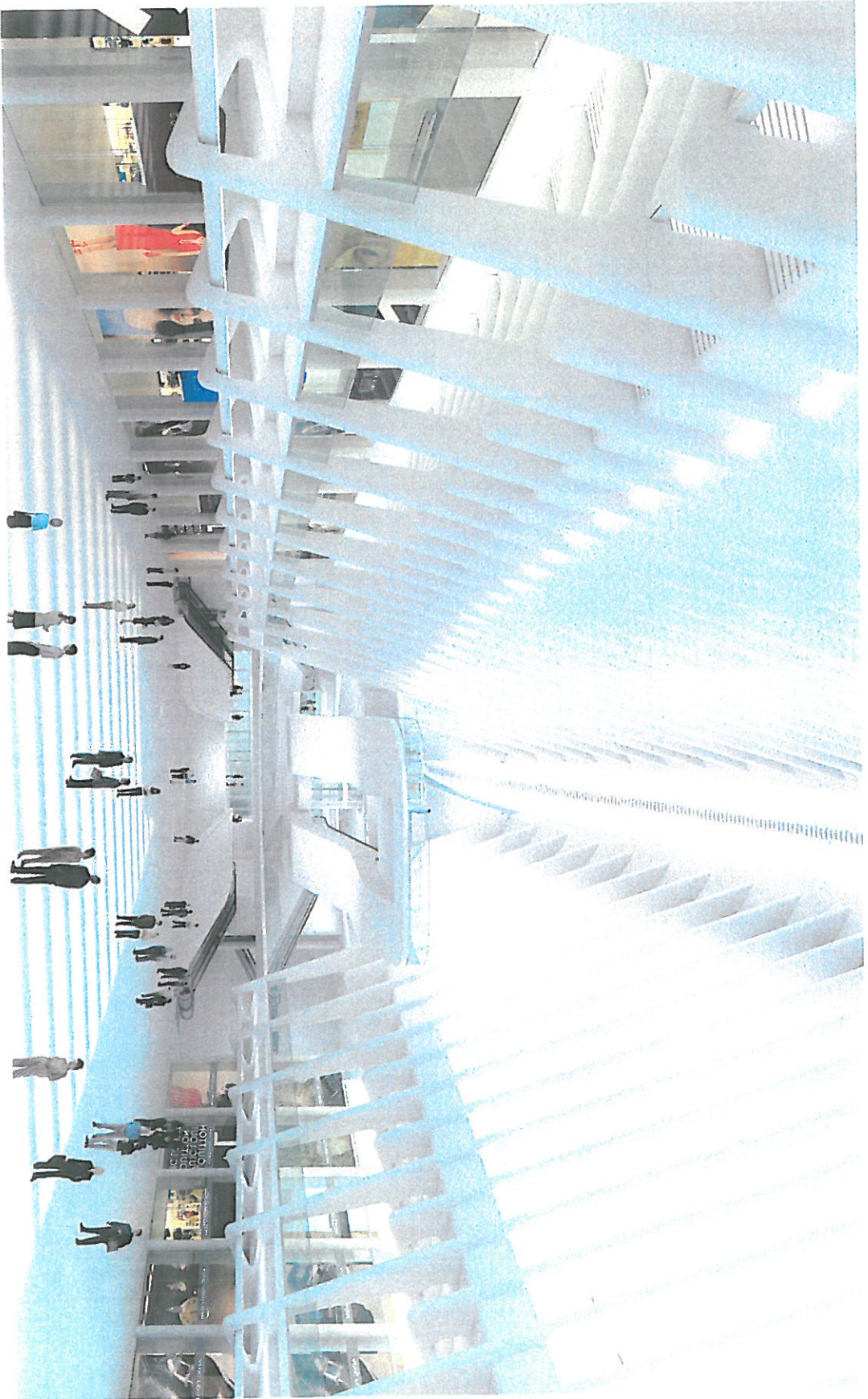


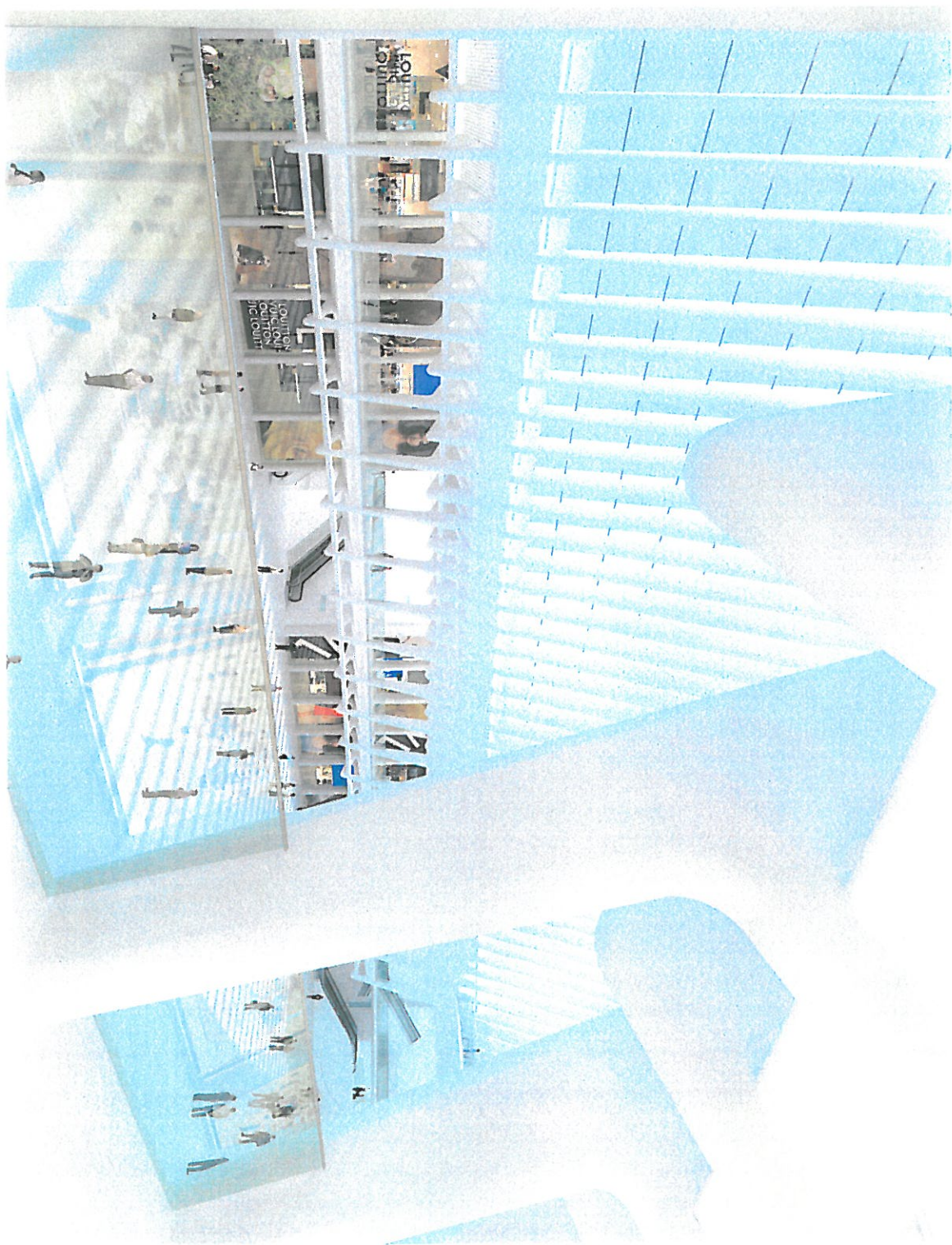






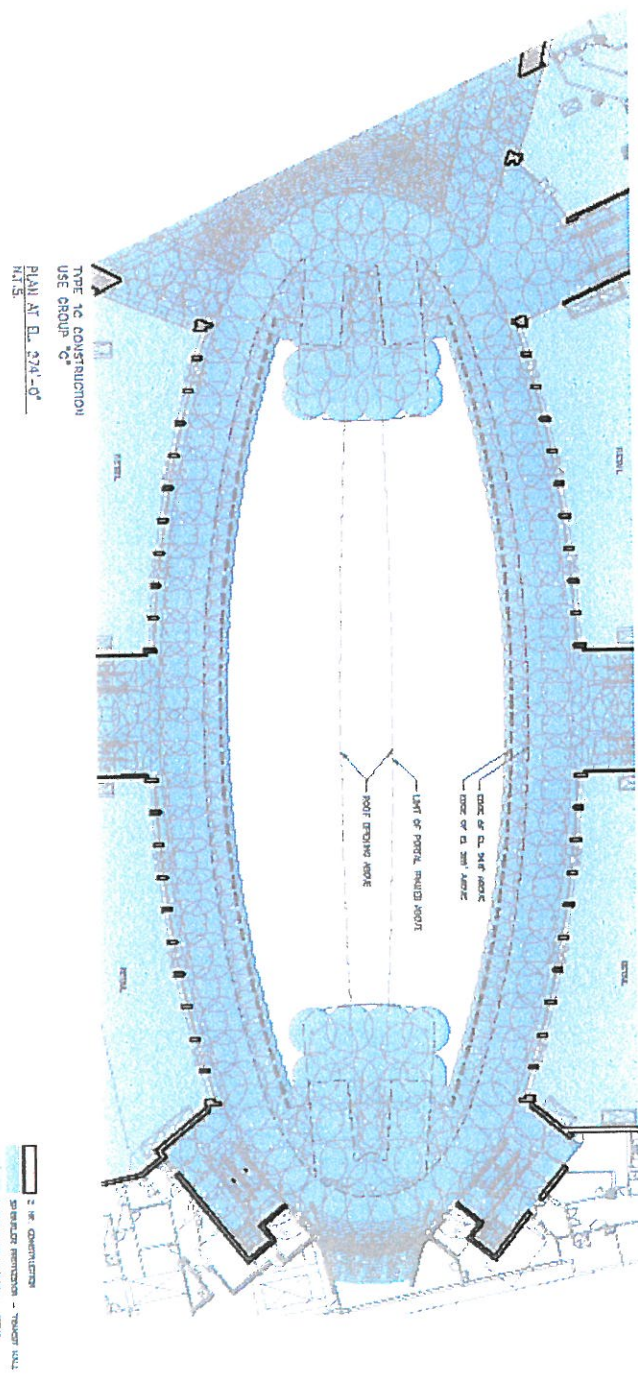






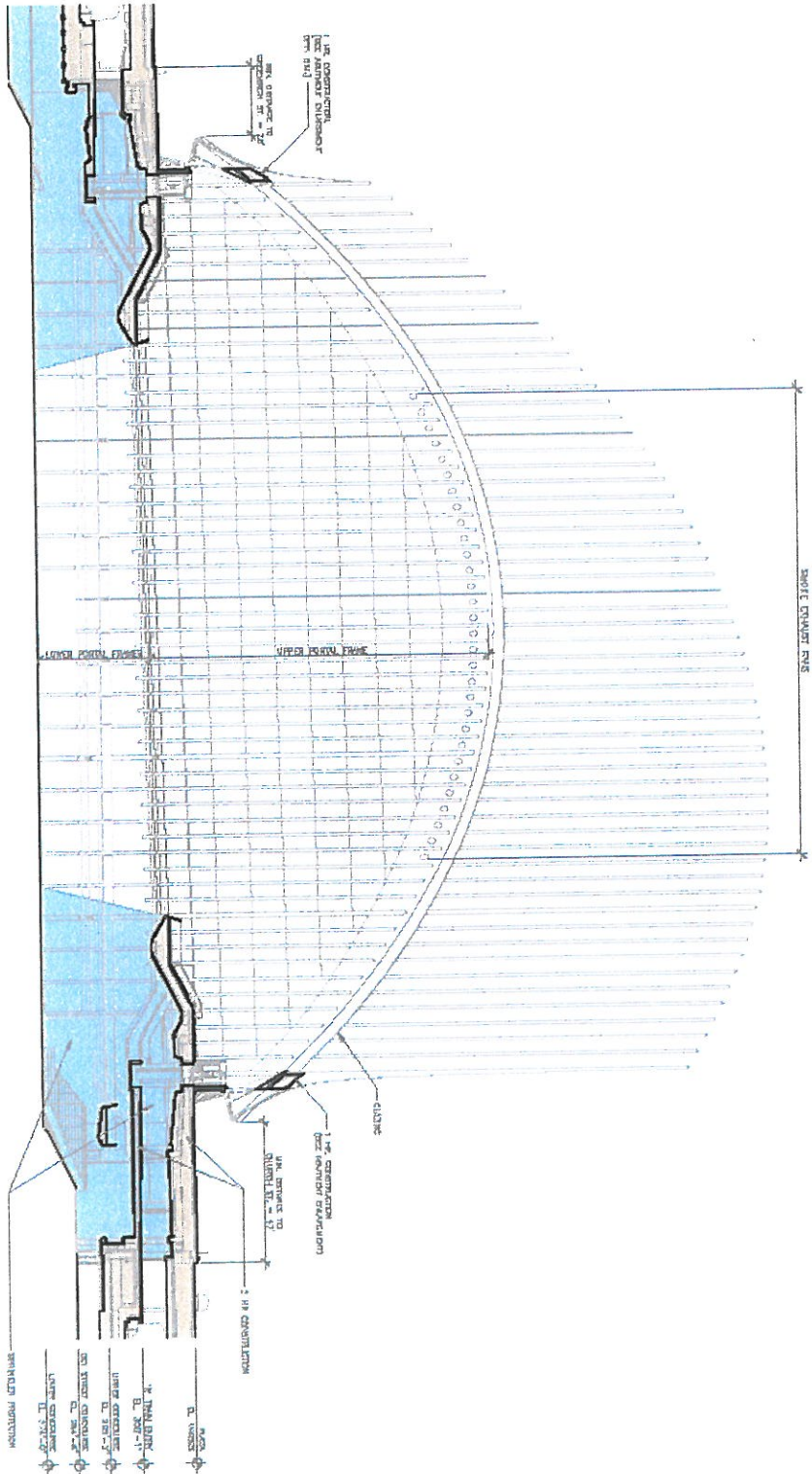






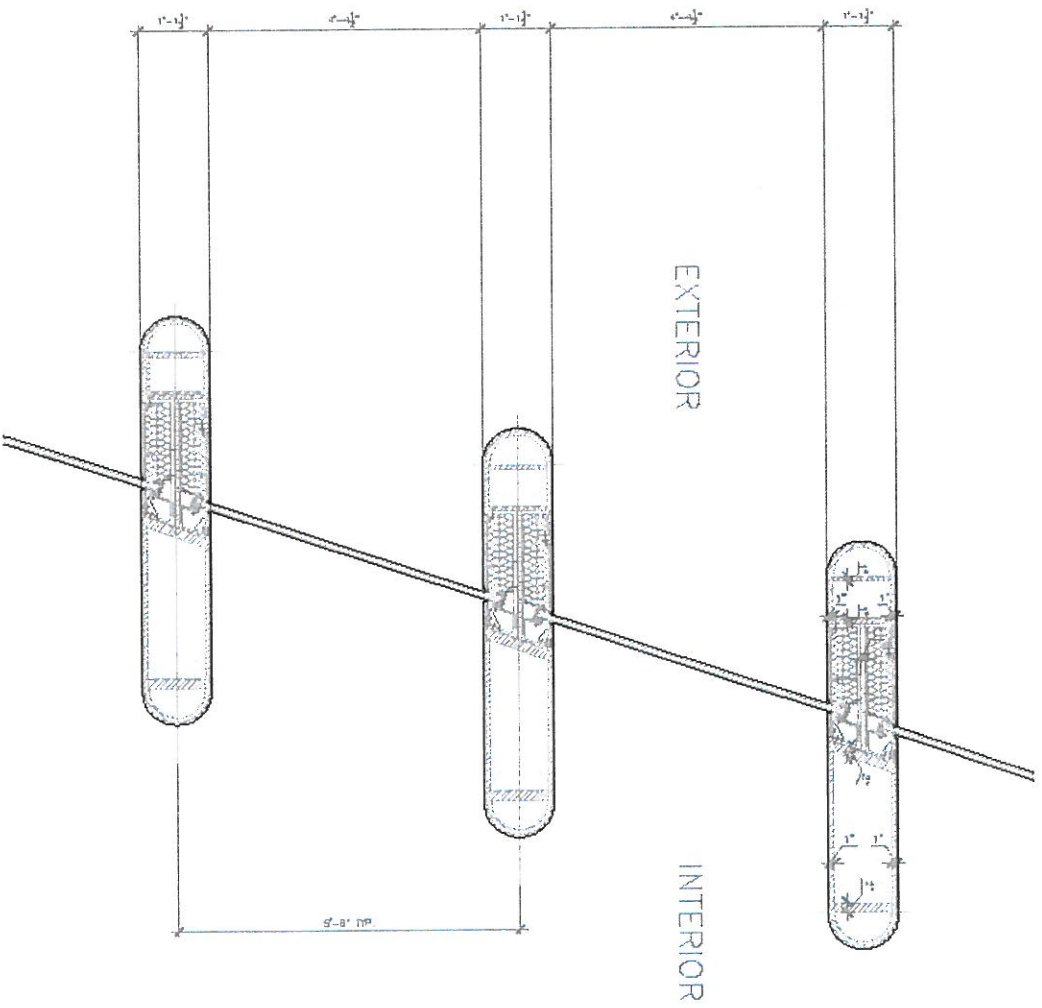


2. H.E. CONSTRUCTION
RESPONSIBLE PROTECTION - TRASH/DEBRIS
2.0000 L.E. SPECIALTY - SPECIAL

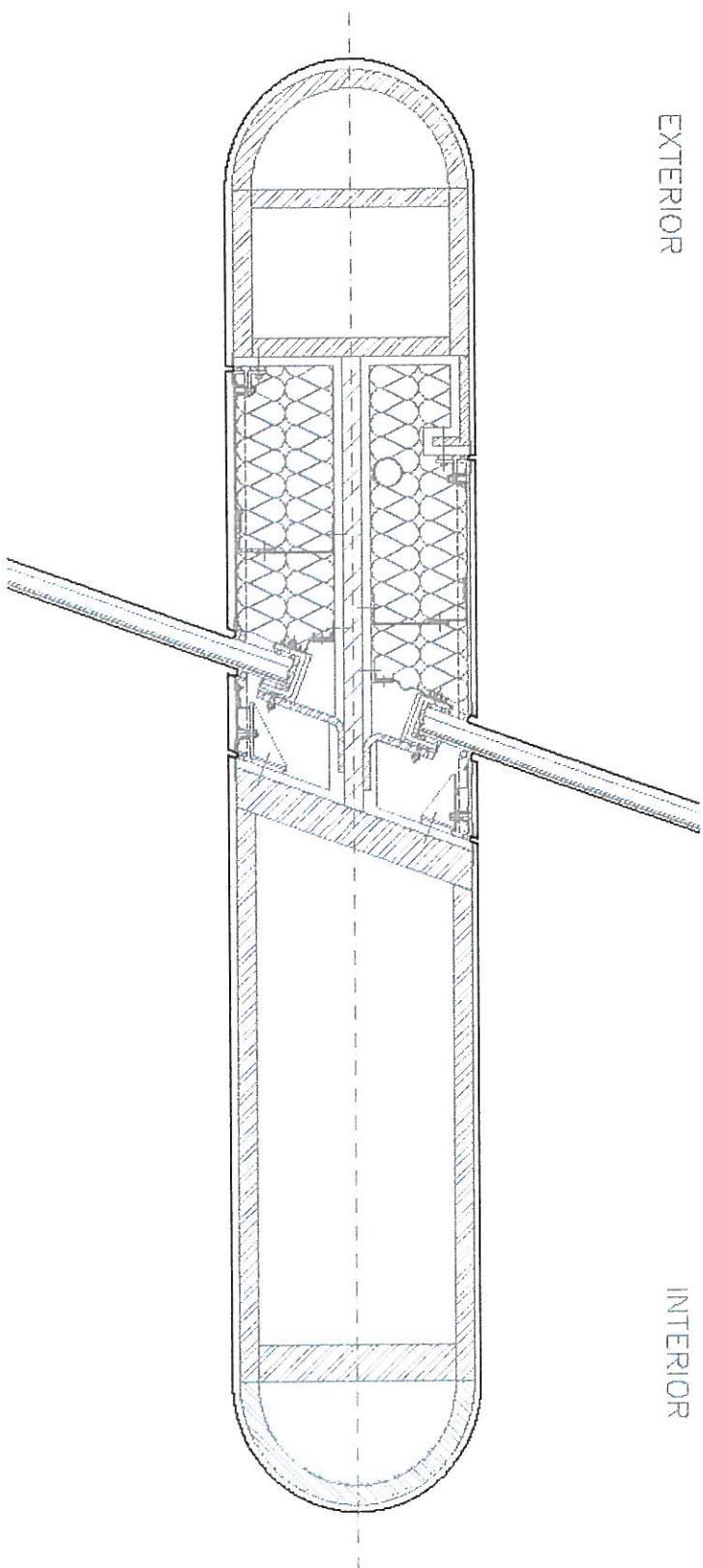


TYPE 10 CONSTRUCTION
USE GROUP "C"
SECTION AT AXIS "V"
N.T.S.

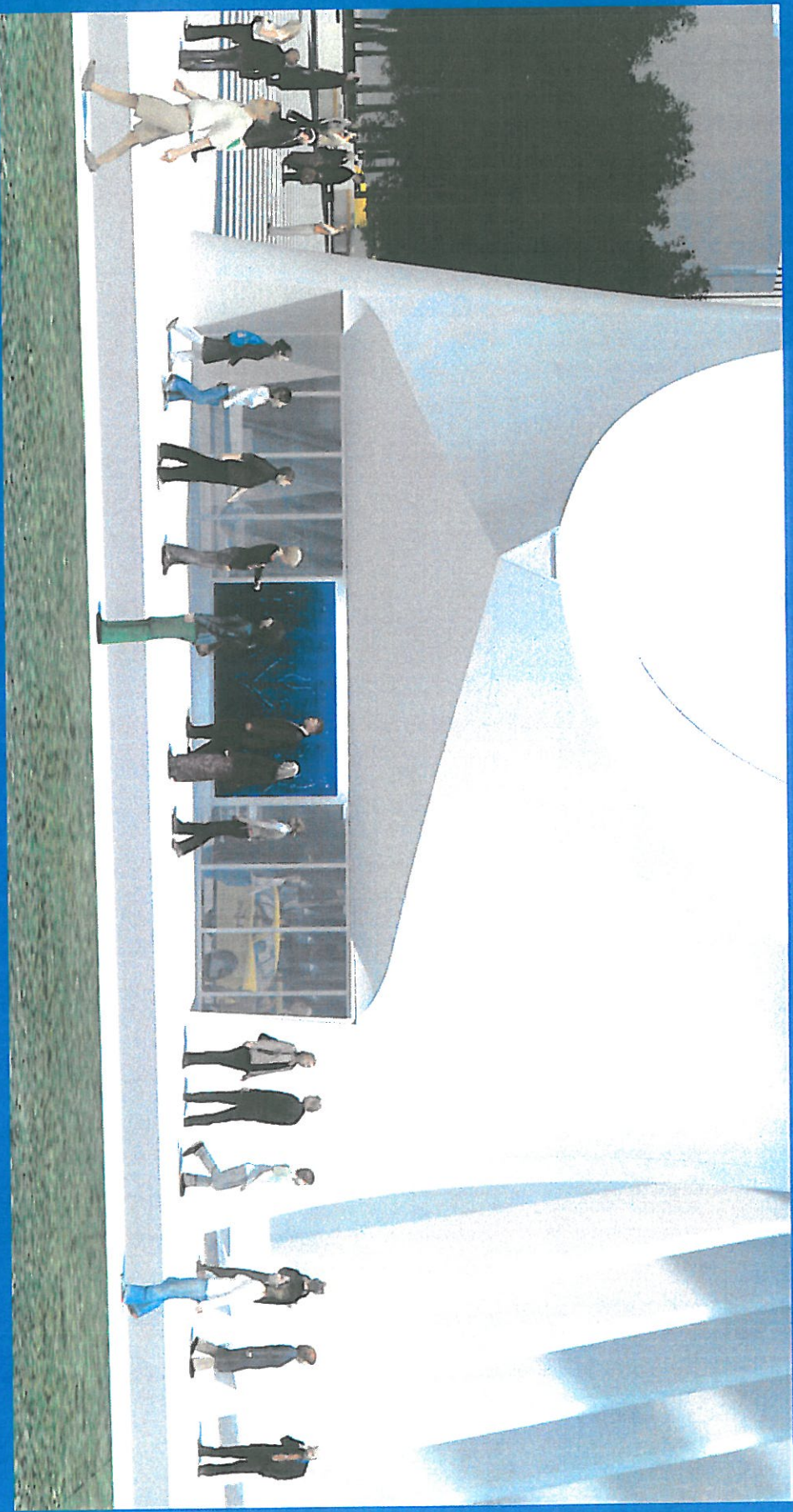
2nd CONSTRUCTION (Hatched area)
3rd CONSTRUCTION (Dotted area)
4th CONSTRUCTION (Cross-hatched area)
5th CONSTRUCTION (Diagonal lines)
6th CONSTRUCTION (Horizontal lines)
7th CONSTRUCTION (Vertical lines)
8th CONSTRUCTION (Wavy lines)
9th CONSTRUCTION (Stippled area)
10th CONSTRUCTION (Solid black area)



EXTERIOR



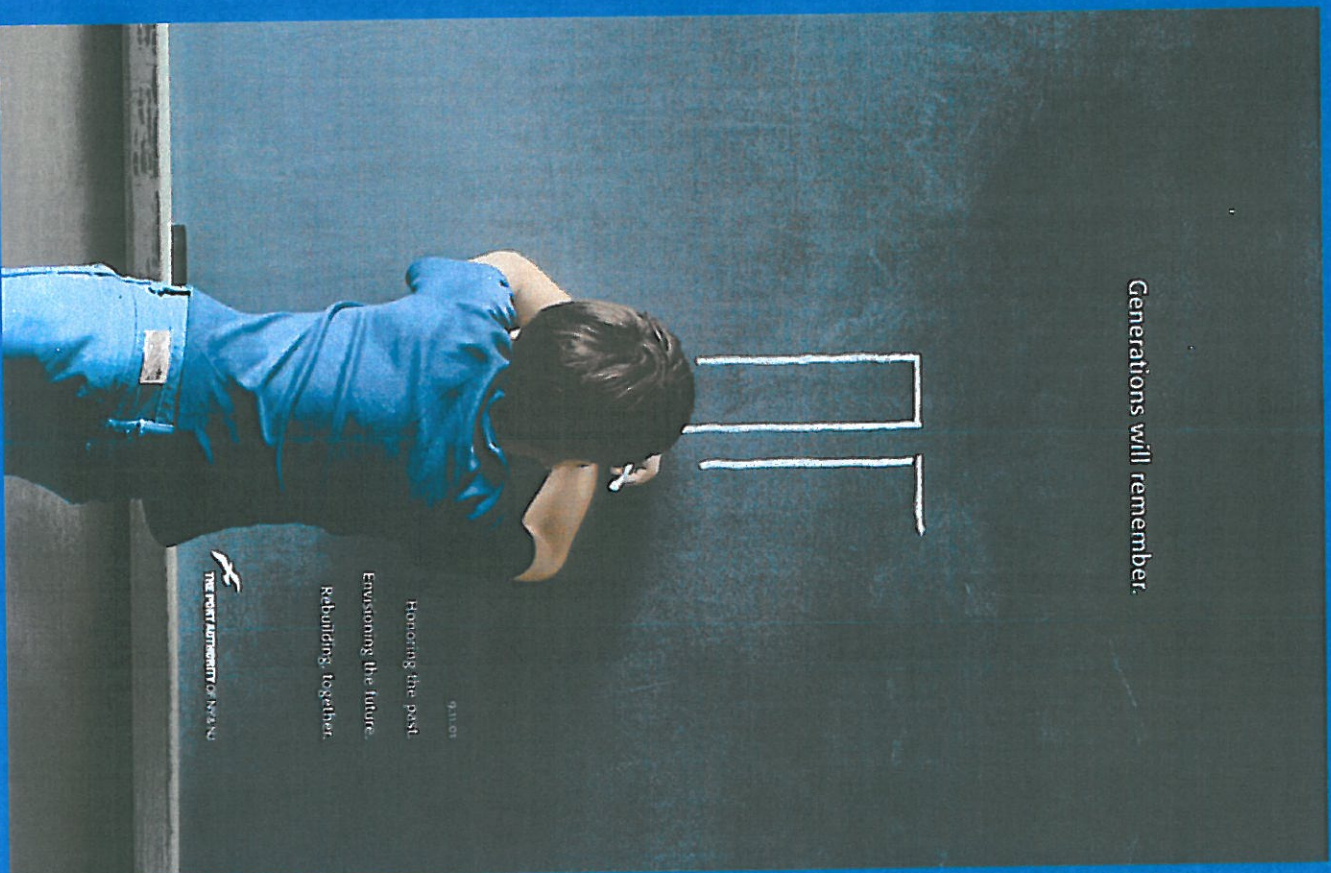
INTERIOR



OCULUS ENTRANCE



Generations will remember.



9.11.08

Honoring the past.
Envisioning the future.
Rebuilding, together.



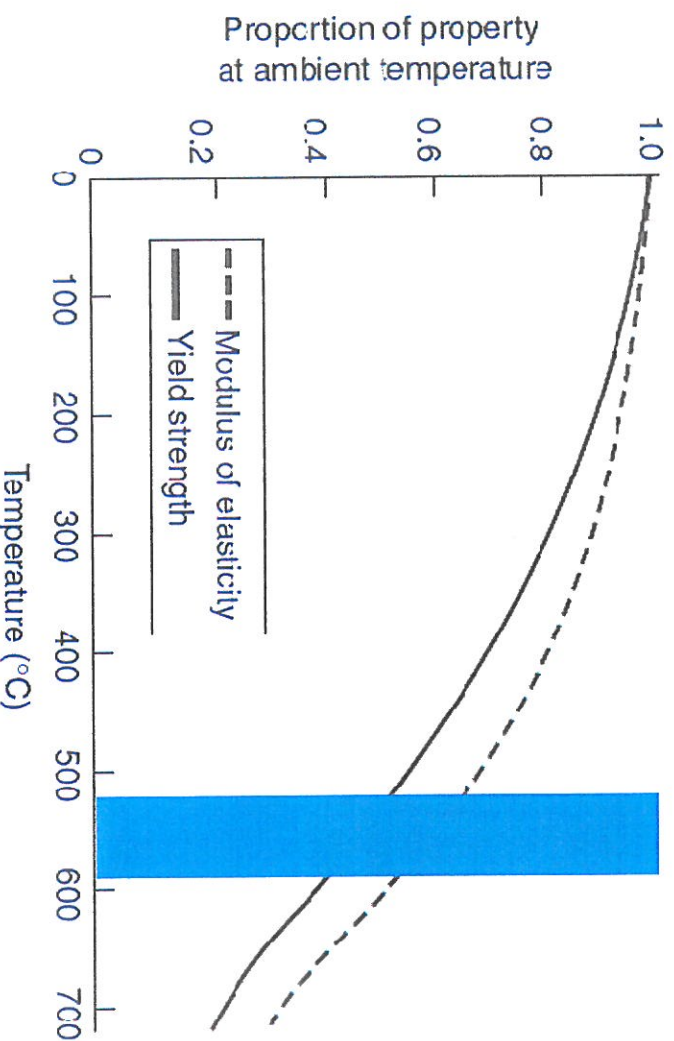
WTC Oculus Portal Frames Structural Fire Engineering

16 August 2011

ARUP

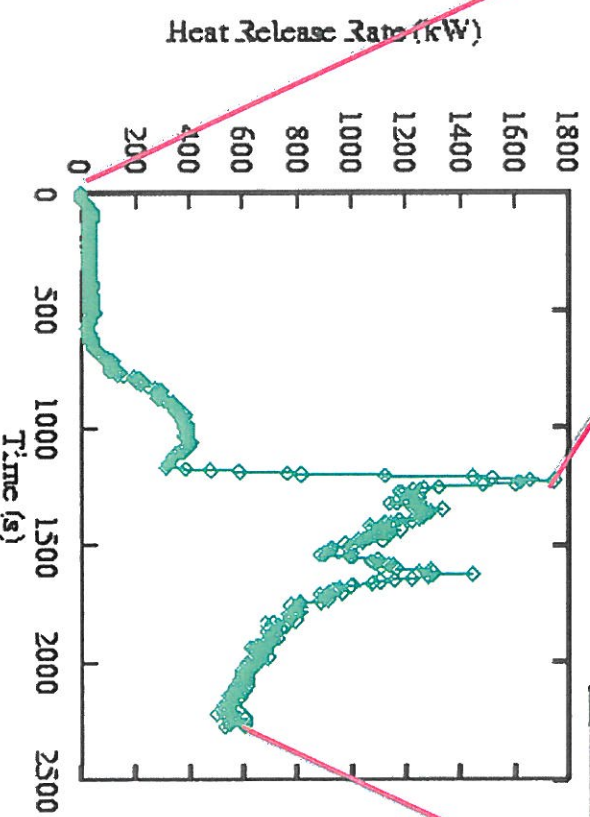
ASTM E119 Steel Temperature Limits

Member Type	Average Steel Temperature Limit	Single Point Temperature Limit
Column	538°C	649°C
Beam/Girder	593°C	704°C
Floor and Roof Assemblies	593°C	704°C



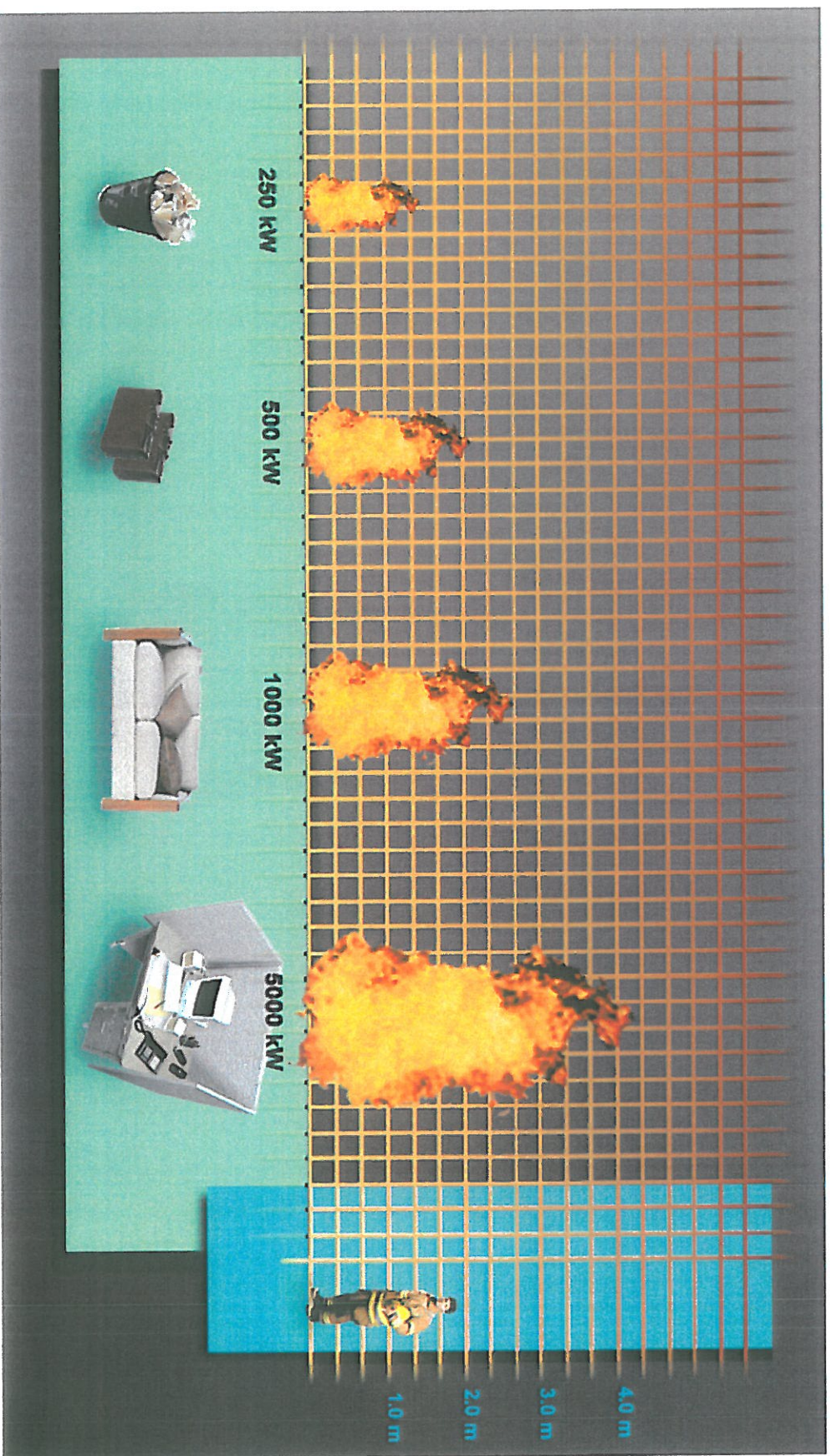
WTC Design Fire

- Nominal 2 MW steady-state fire
- Peak similar to NIST kiosk fire test

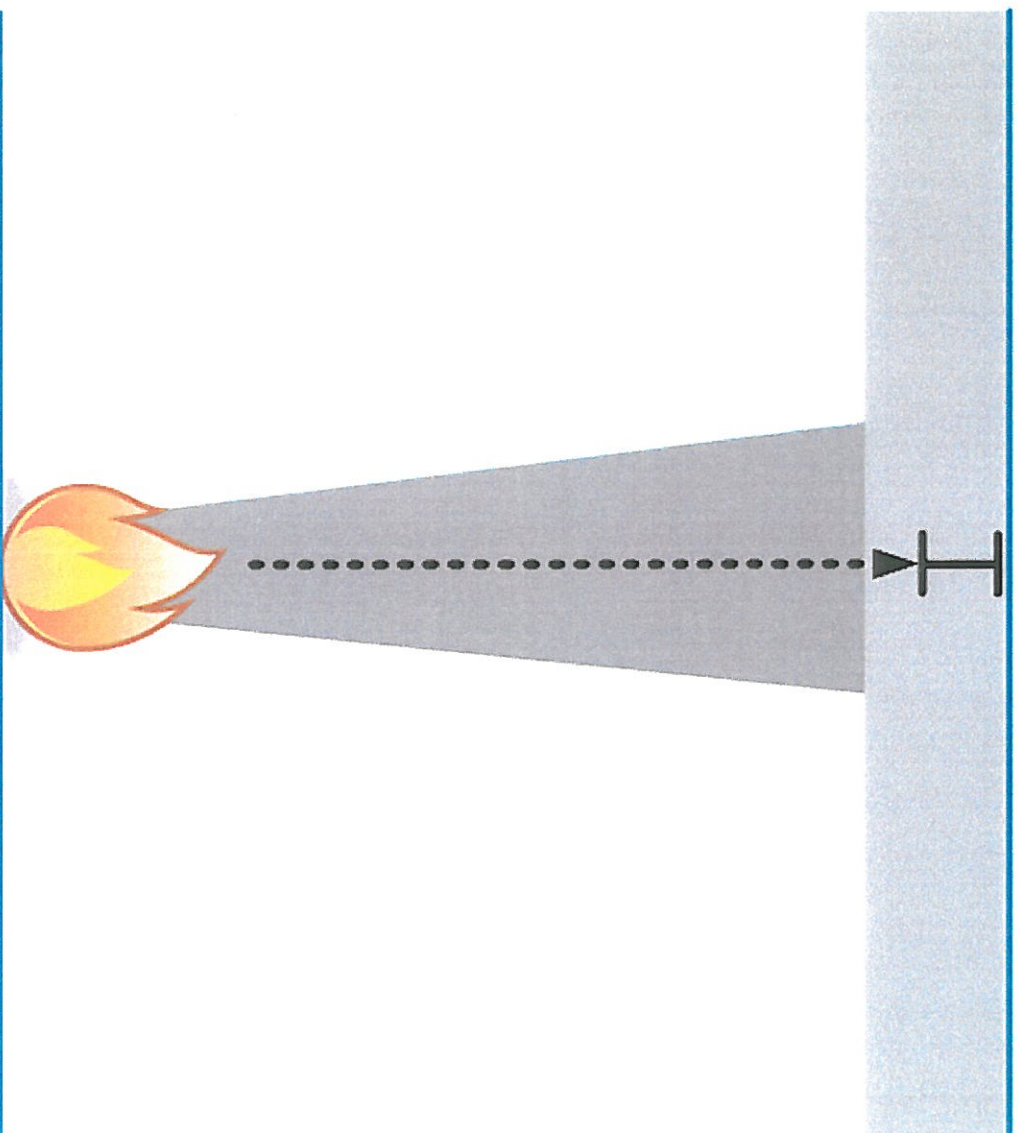


Source: <http://fire.nist.gov/>

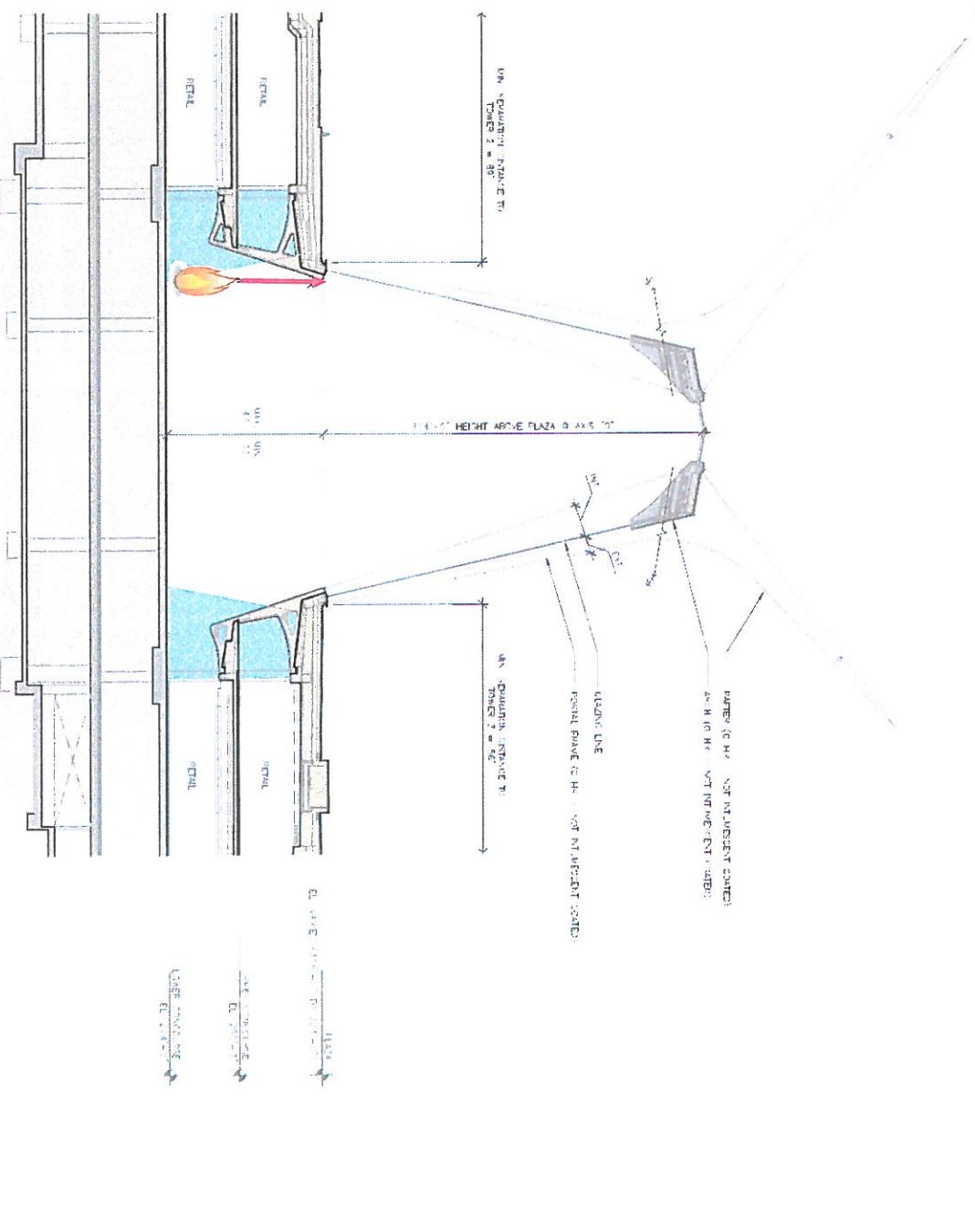
Relative Fire Sizes



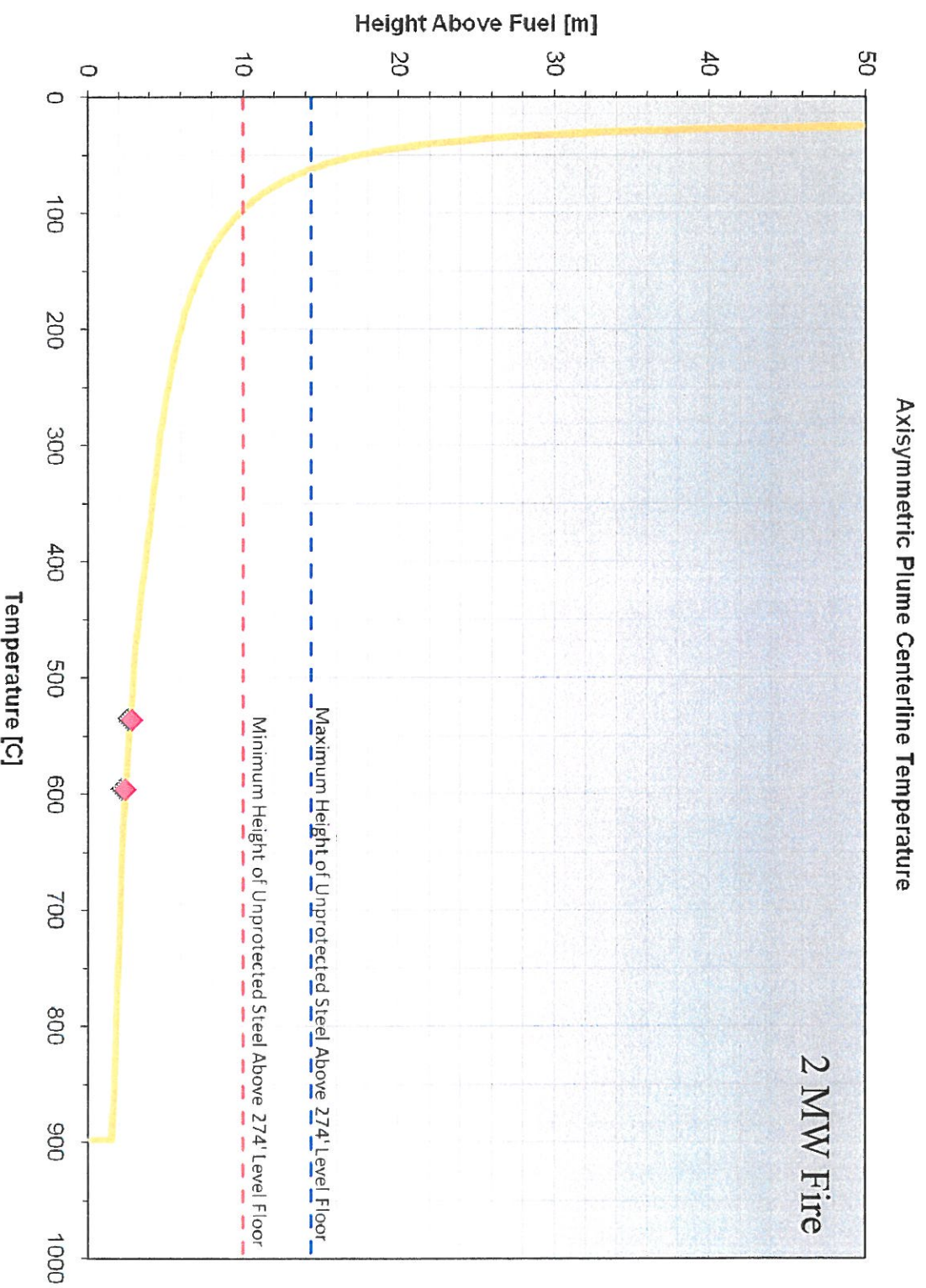
First-Order Assessment



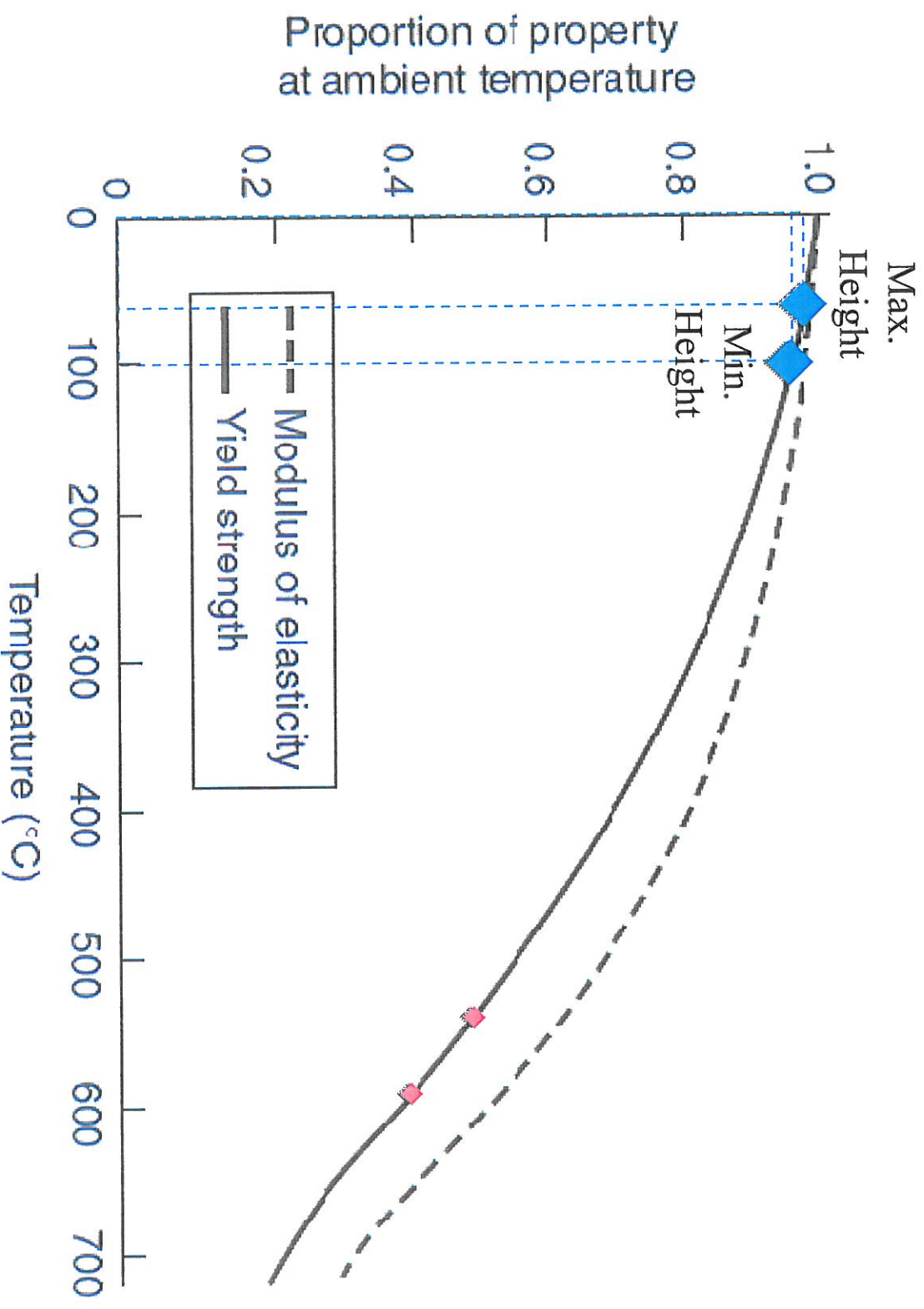
WTC Analysis



Estimated Exposure Temperatures

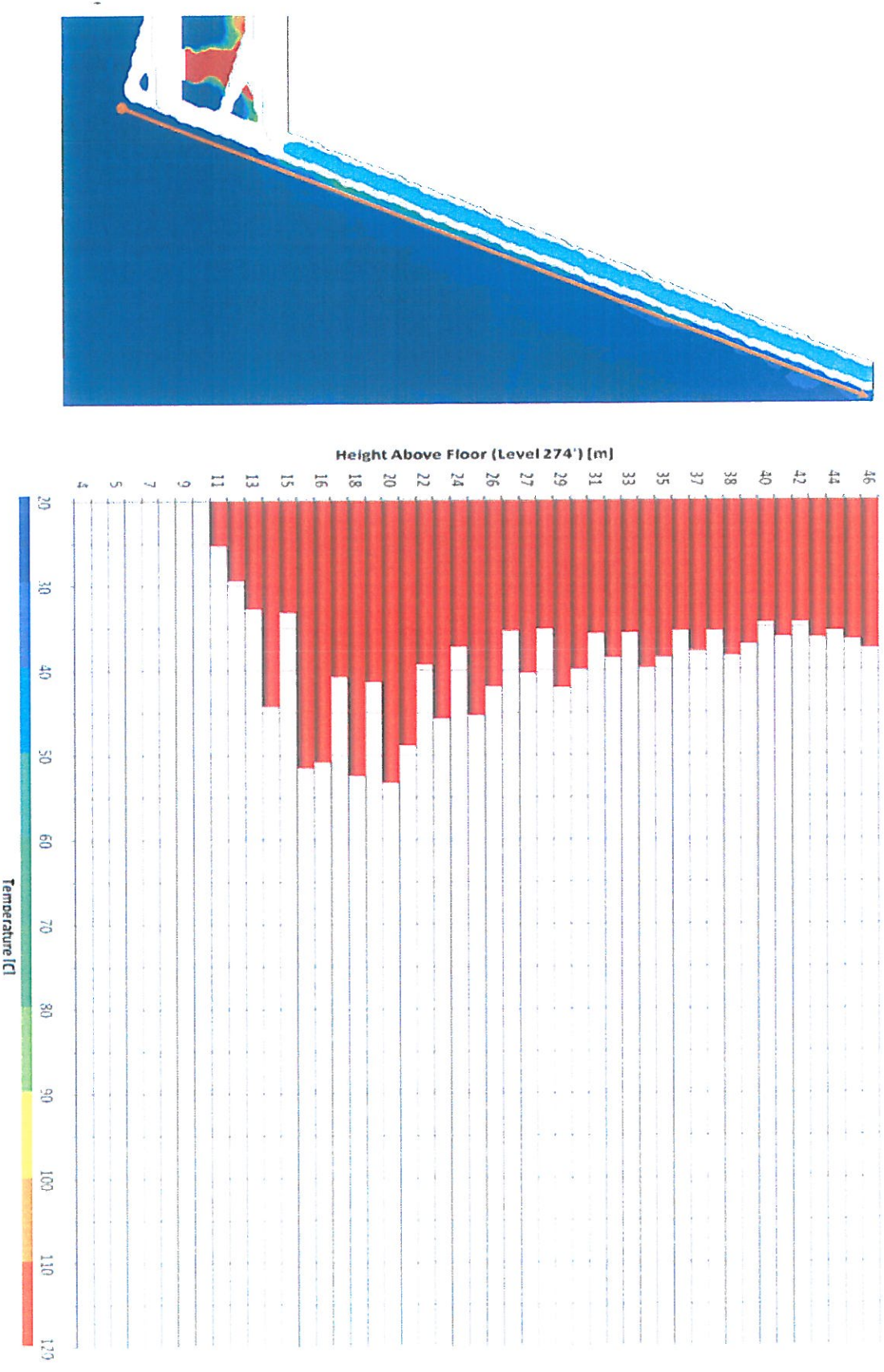


Estimated Residual Strength

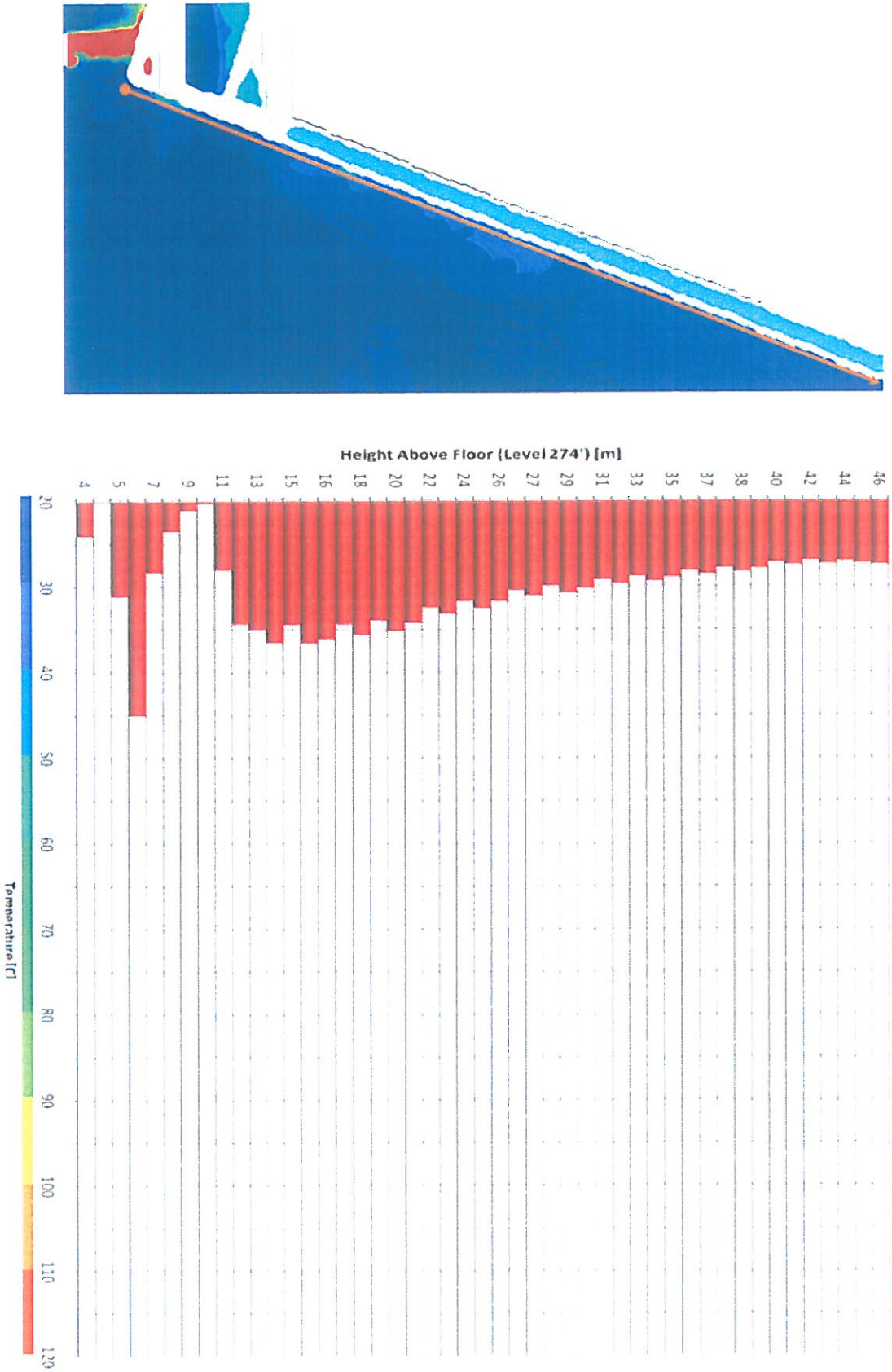


[illegible]

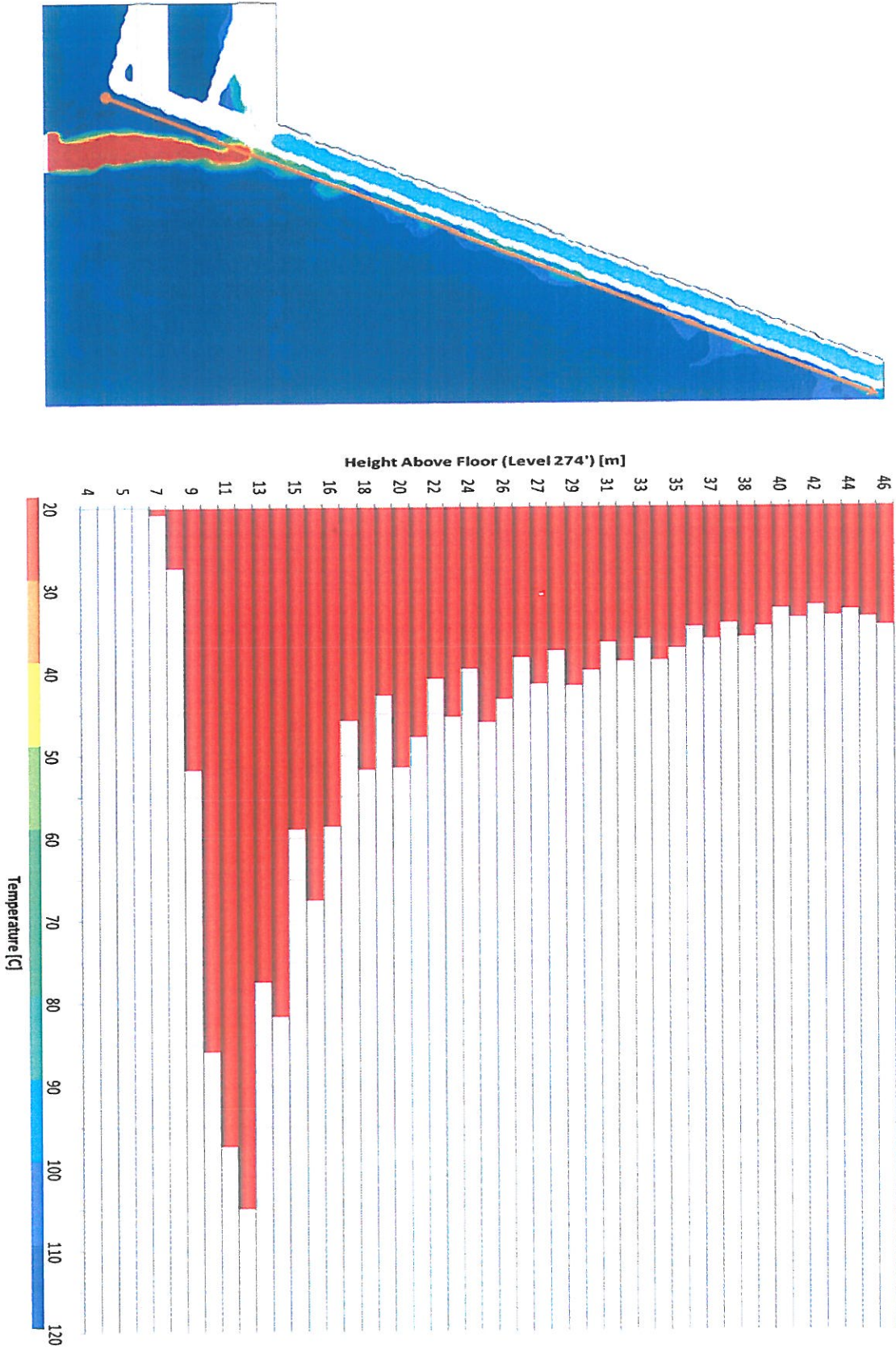
Scenario 1: On Level 296' Balcony



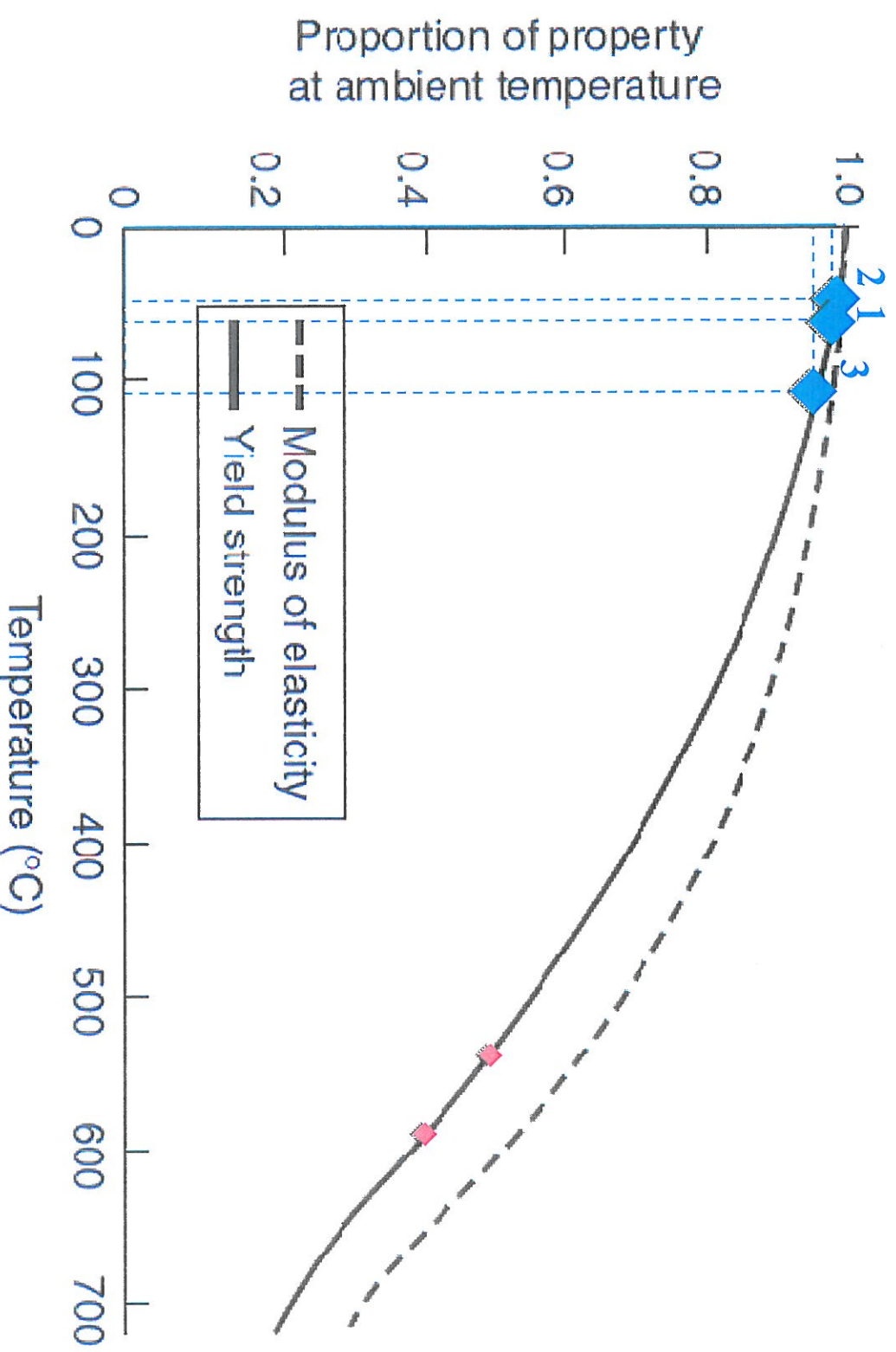
Scenario 2: Level 274' Under Balcony



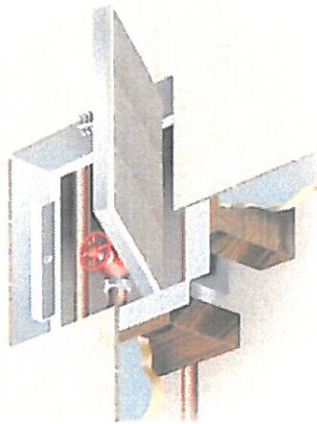
Scenario 3: Under Lowest Proposed Unprotected Structure



Estimated Residual Strength



Home » PLASTERING TOOLS » Access Panels » Metal » Tile Access Panel - non fire-rated... / 300x300mm



PRODUCT CODE: SEL7158-300

SEL7158 - Tile-on Metal Access Panel. These Tile Access Panels are designed to provide access in ceramic, marble or slate tiled walls. Providing lockable access to building engineering services. read more...

Our Price: £100.32

Variations

300x300mm

1 Buy Now

Share:



Found a better price?

- ACCESS PANELS
- AUTOMOTIVE TOOLS
- CORDESS TOOLS
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- Hop Up
- Mixing Tub & Bucket
- Plaster Mixer
- Plasterboard Cutting
- Plastering Stills & Lifters
- Plastering Trowels
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- WORKWEAR CLOTHING
- INNOVATIVE TOOLS
- TCD - TV
- OFFERS



FREE chat by Volusion

Previous products

Tile Access Panel - non fire-rated metal

Our Price: £100.32

Sizes are of door opening

1. 300 x 300mm
2. 450 x 450mm
3. 600 x 600mm

3 Standard sizes available:

- Concealed frame fixed into wall before tiling
- Touch catch as standard
- Removable door with no need for tools
- Easy installation
- Budget and key lock available on request
- Fire-rated available on request
- Overall depth 55mm - excluding tiles
- NOTE Add approximately 23mm to above sizes for structural Opening

Other features include:

These Tile Access Panels are designed to provide access in ceramic, marble or slate tiled walls. Providing lockable access to building engineering services. This access panel is precision manufactured in Zinc (Electro-Zinc Coated Steel), and is designed to hold tiles up to 10mm thick to finish flush with surrounding tiles. This panel must be fixed into the wall prior to tiling for a totally invisible, easy to reach access area.

Available on the App Store



FREE

Also available in custom sizes - please call 01803 666630 for more information on prices and lead times. This product has a minimum 3-5 day delivery period. For more information about our range of access panels visit our access panels information section

Ask a Question

If you have a question regarding this product, click here to let us know.

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