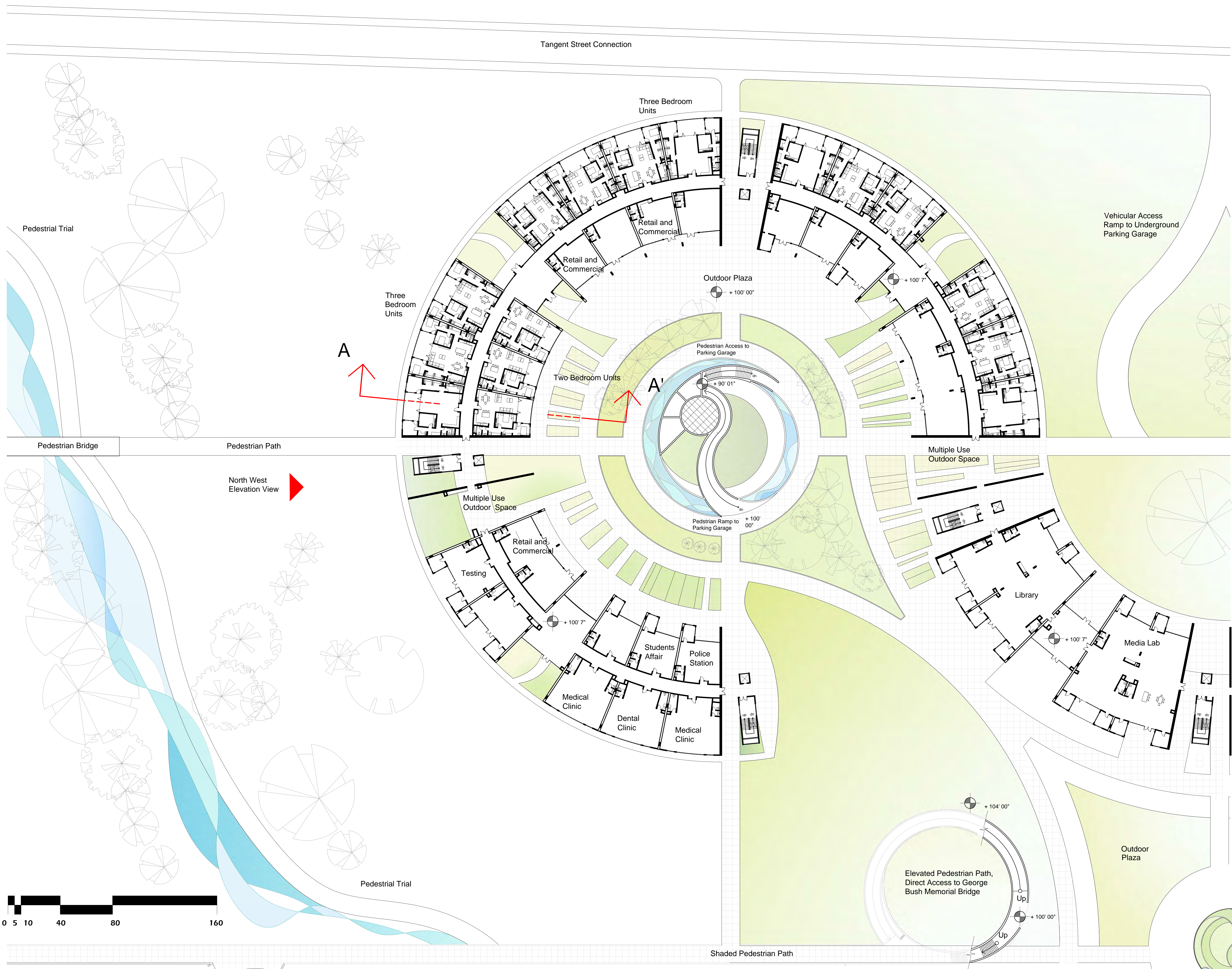


**Radial  
Living**

# Master Plan Proposal

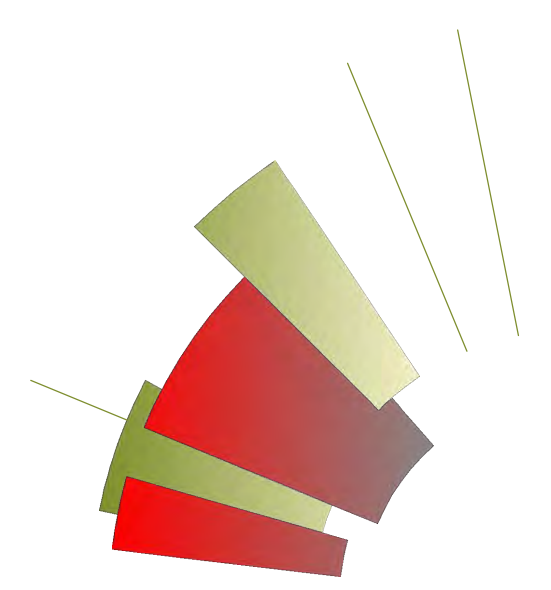
. Arch 605 . Sandra M Hernandez .



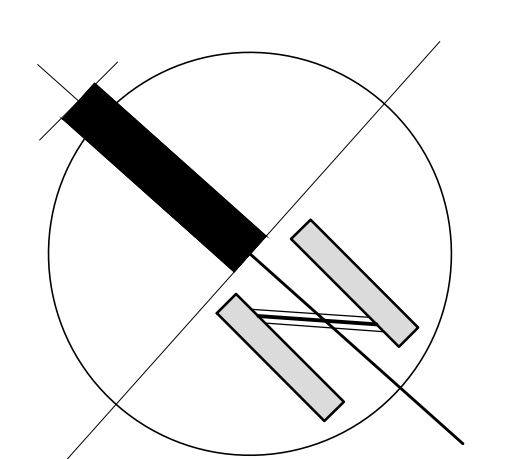


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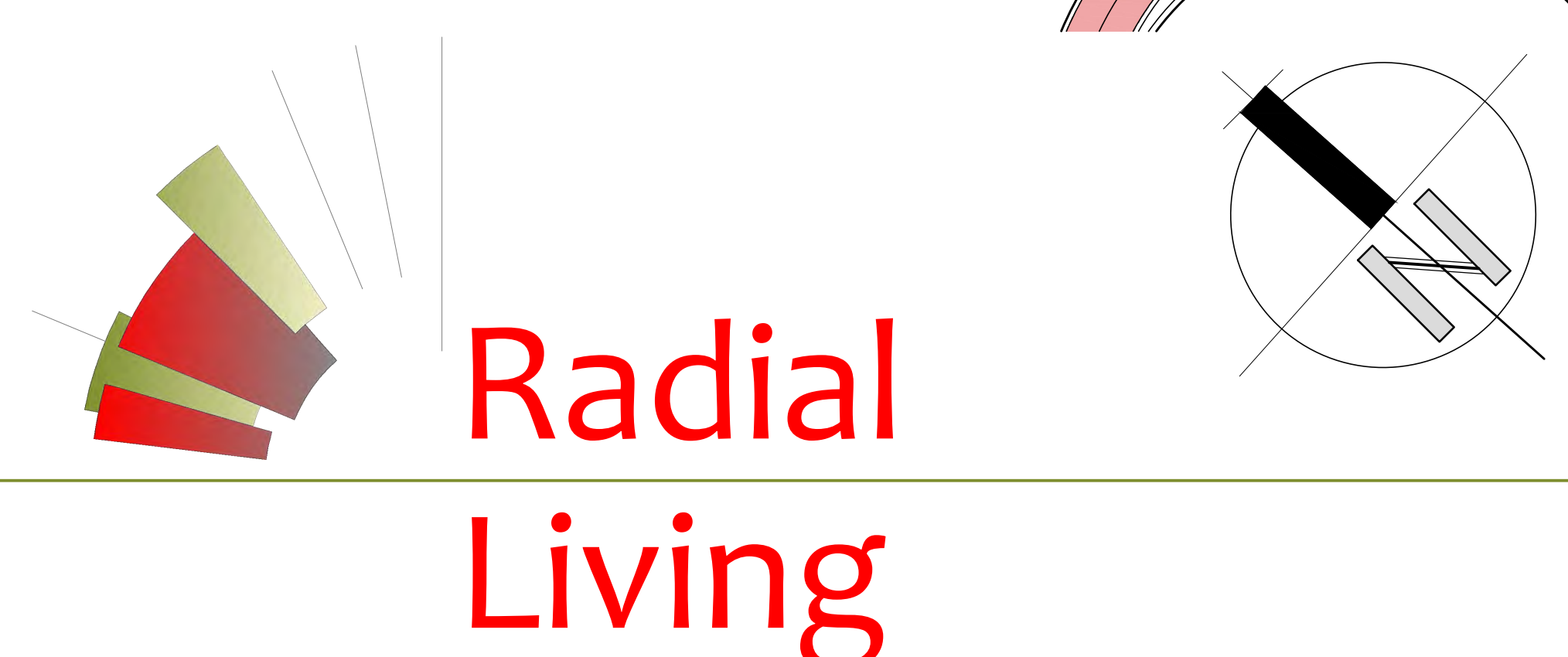
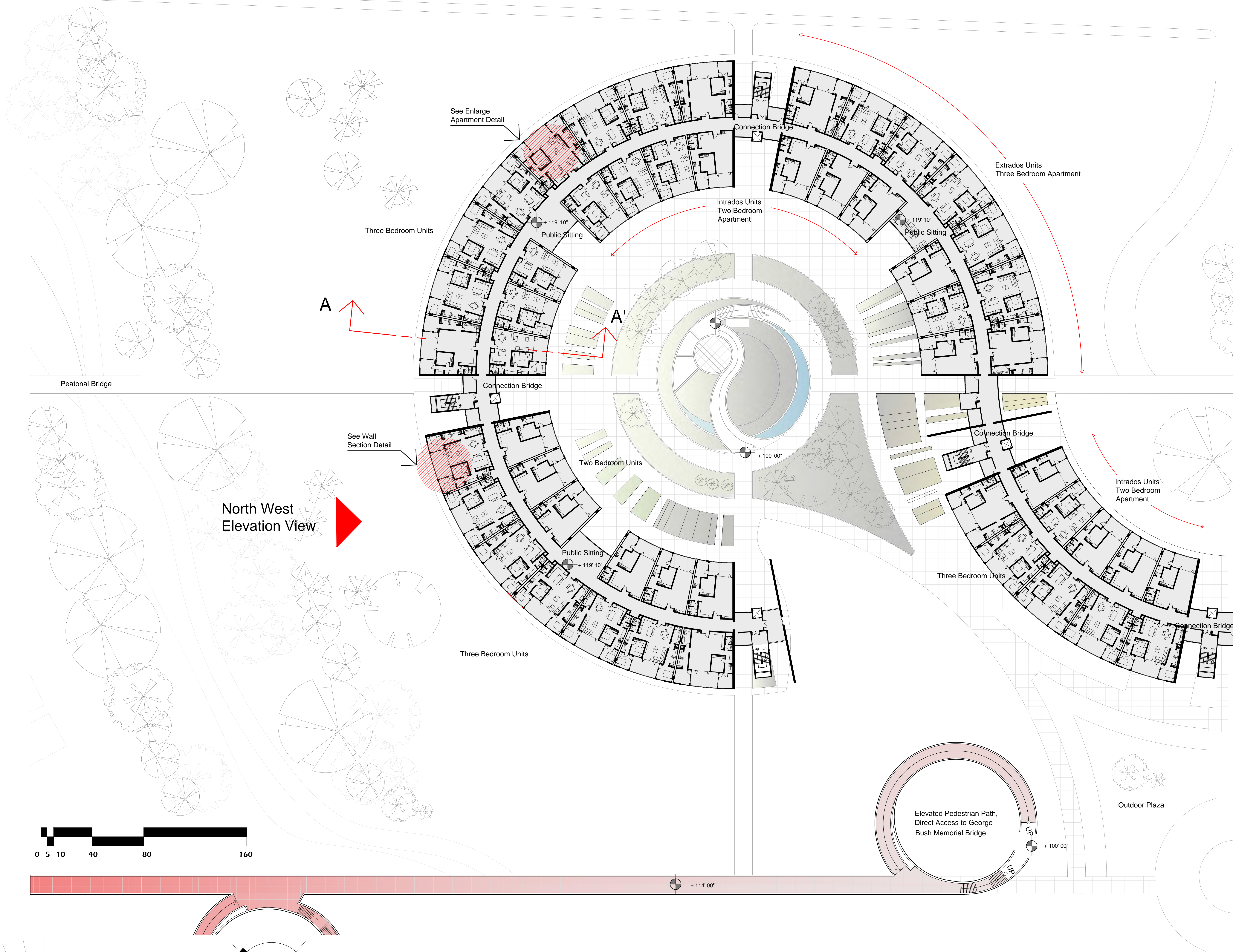
**Radial  
Living**



**Ground Level + 100' 00"**  
 . Arch 605 . Sandra M Hernandez .



Tangent Street Connection

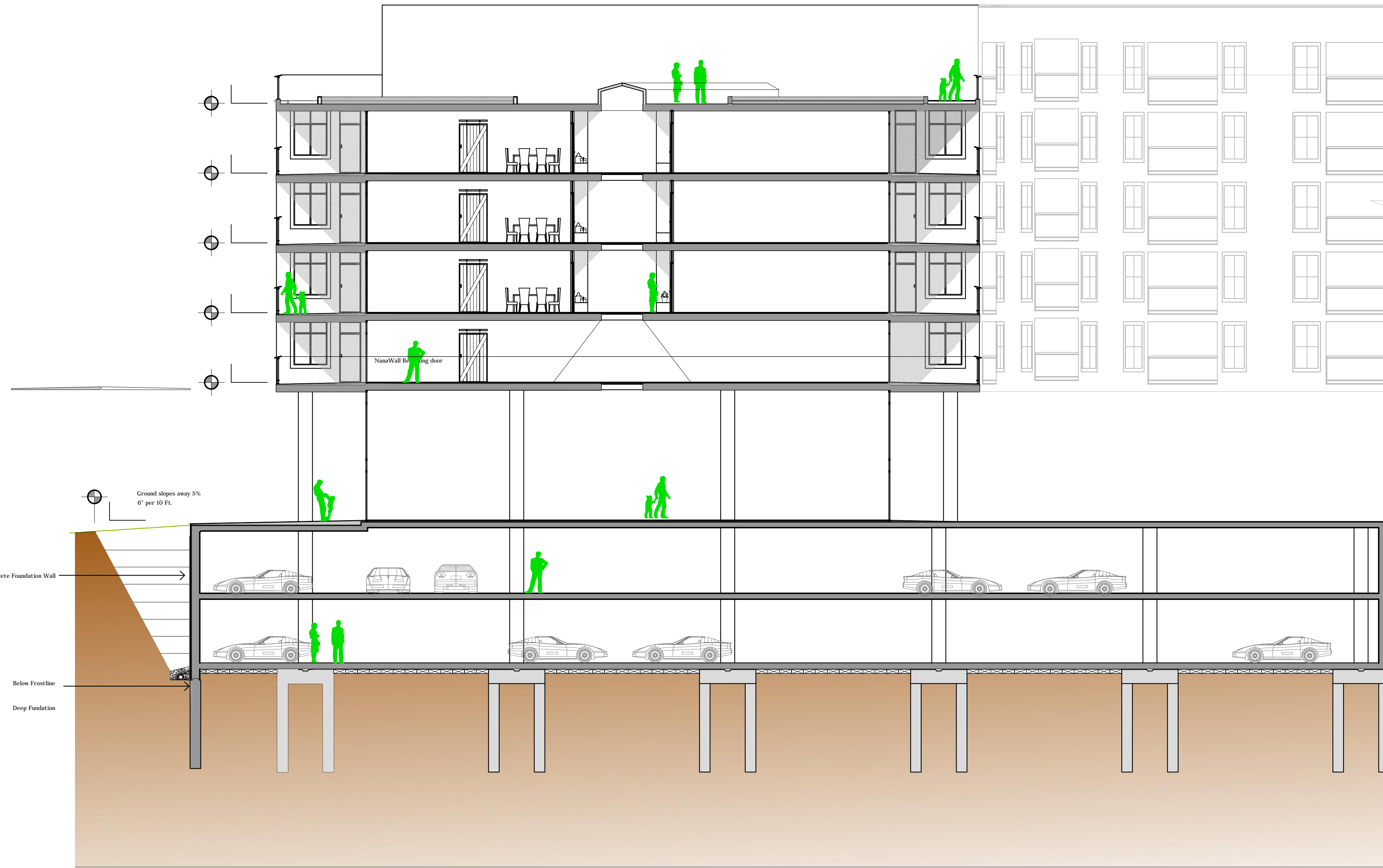


**Radial Living**

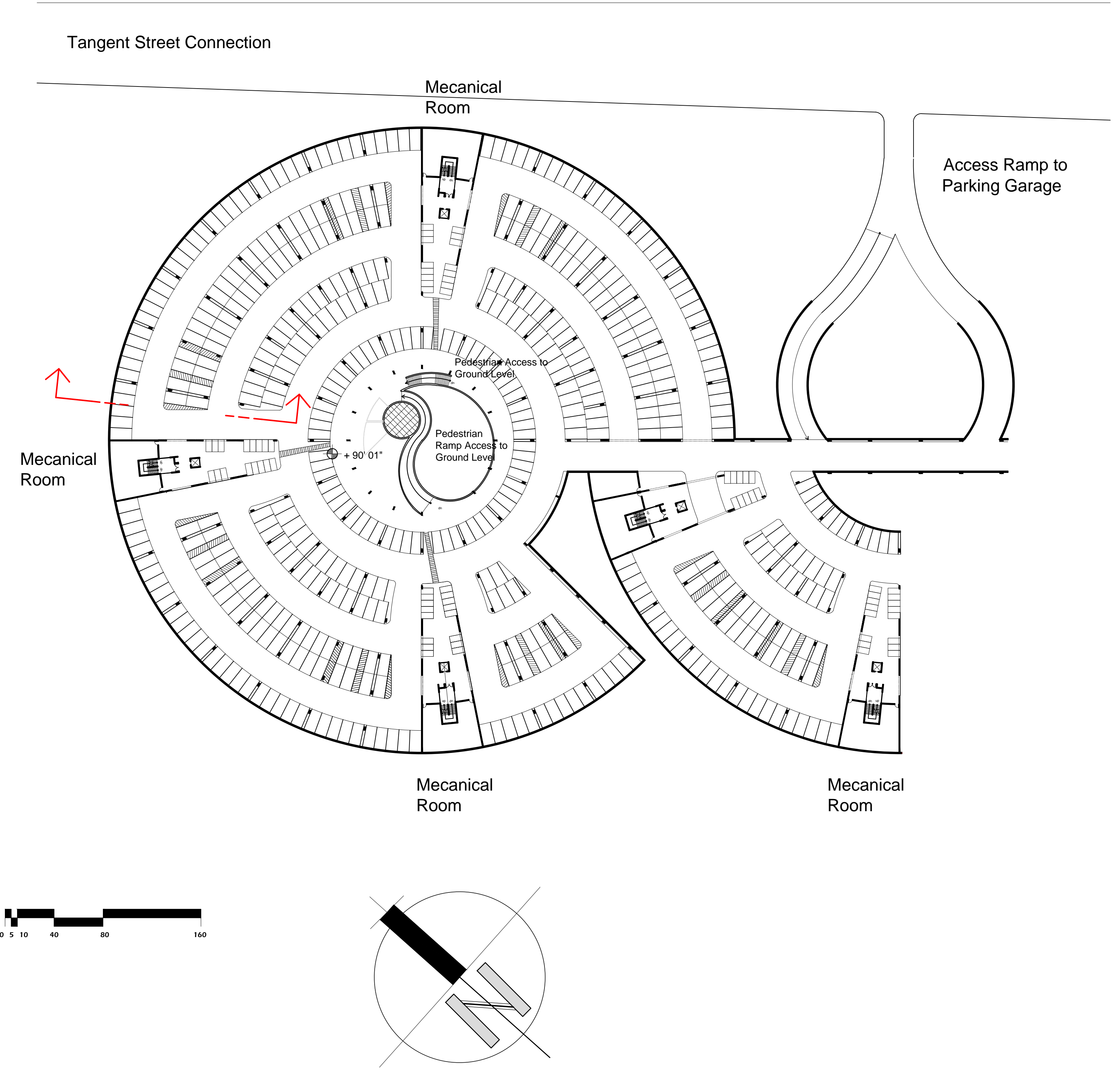
# Second Level (Typical Plan) + 119' 10"

. Arch 605 . Sandra M Hernandez .





# Section A- A'



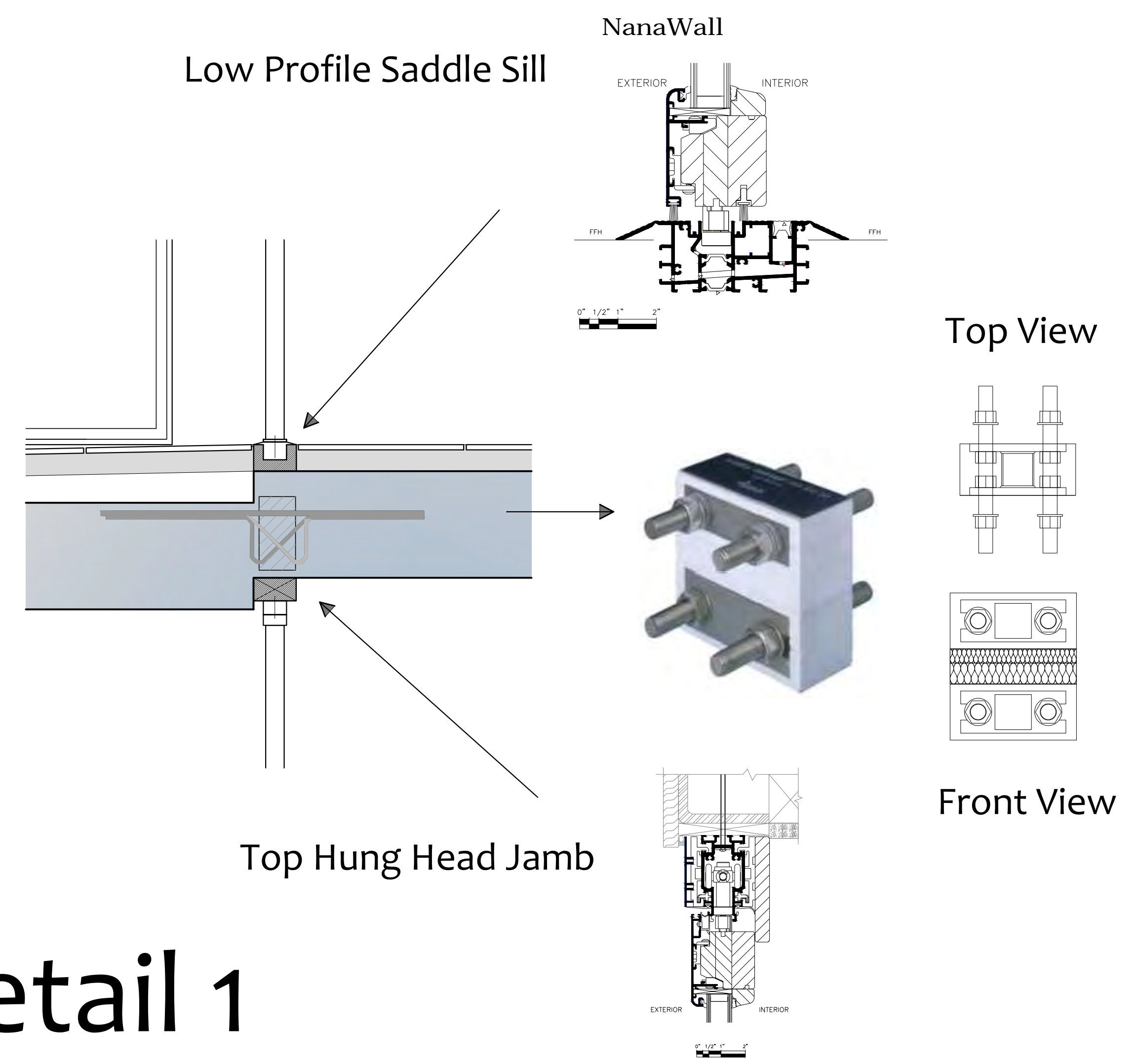
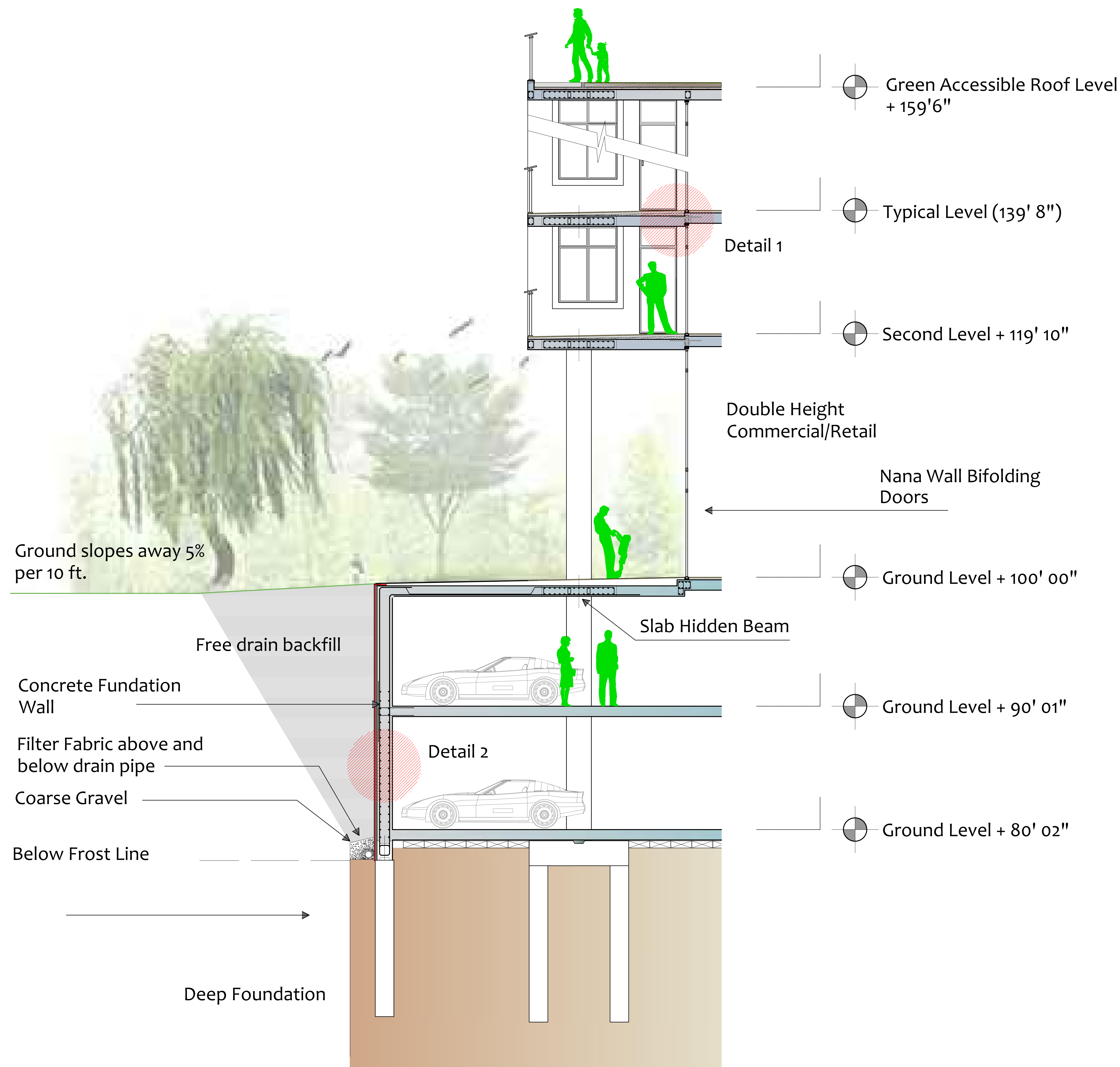
# Parking Level + 90' 01"

(Typical Plan) . Arch 605 .

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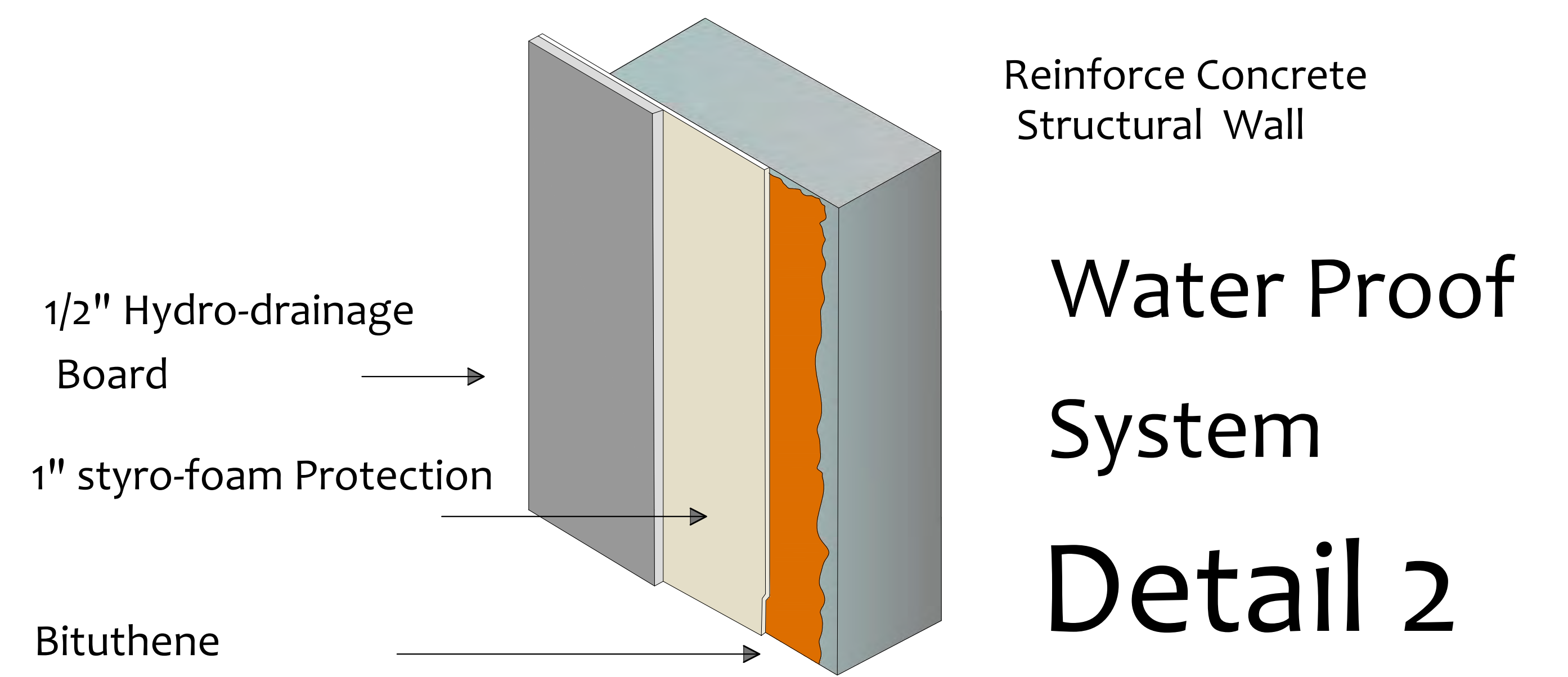




# Detail 1

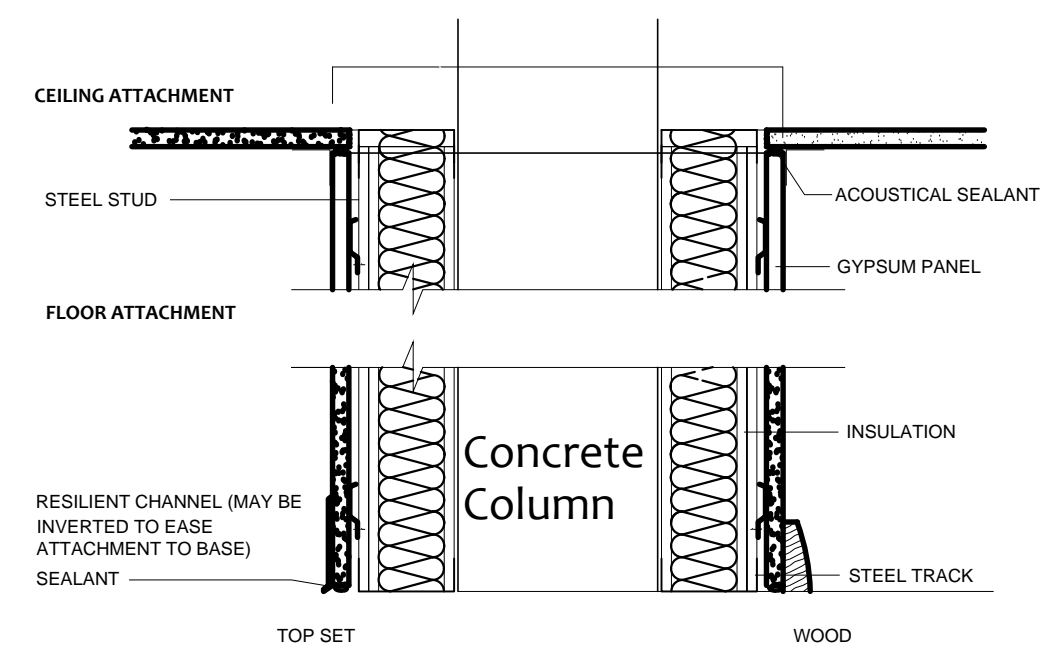
## SCI Thermal Break

The schock Isokorb Type CM for Concrete Balcony are high performance thermal insulators used between horizontal and vertical connections of internal and external elements to prevent thermal / cold bridging. They provide a simple, economical and extremely effective solution to meeting Part L of the Building Requirements by way of reducing heat loss and the risk of internal condensation.

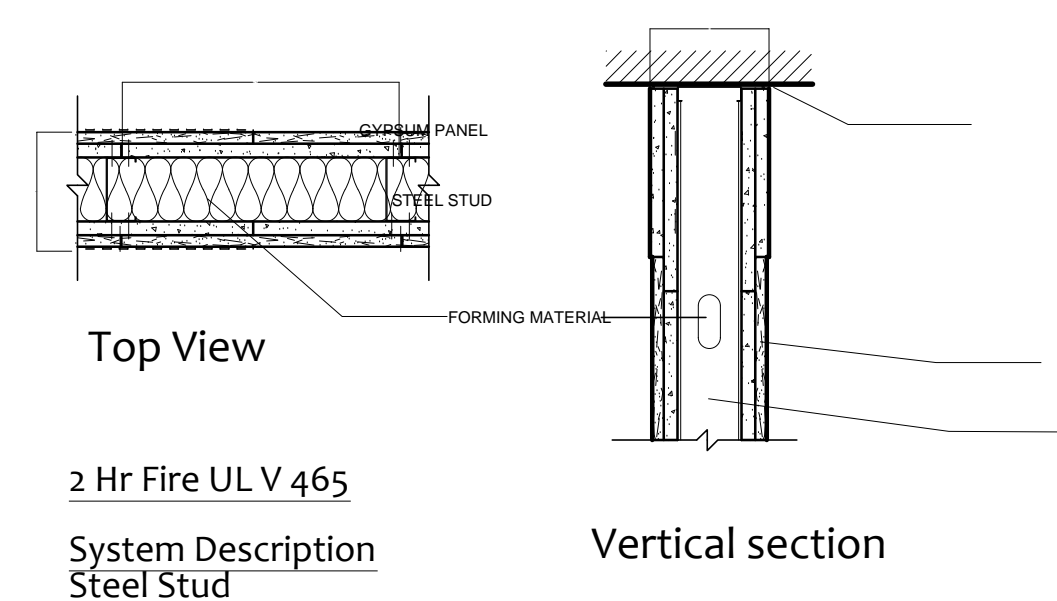


# Wall Section Detail



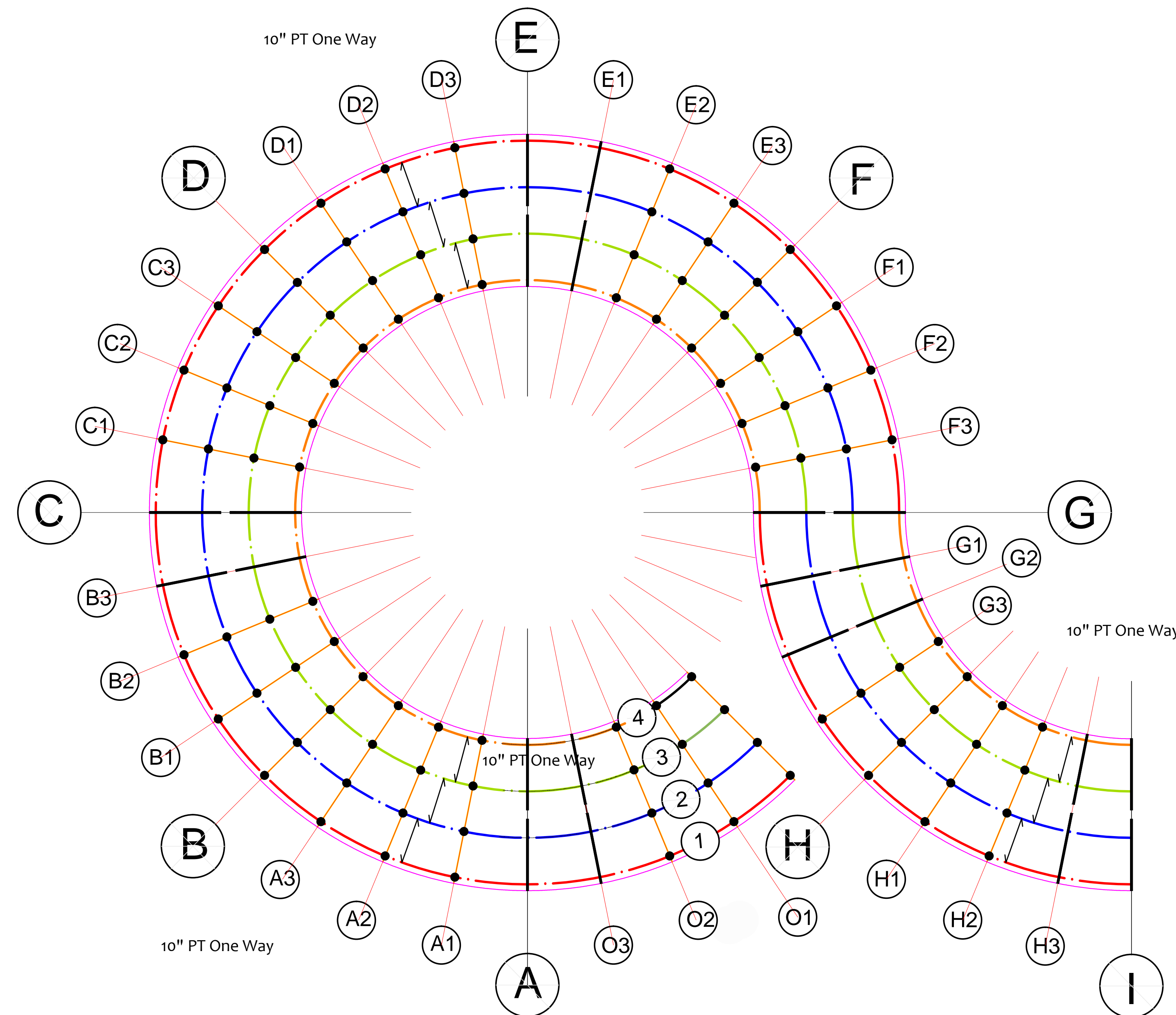


### Acoustical Wall System Between Apartment Units



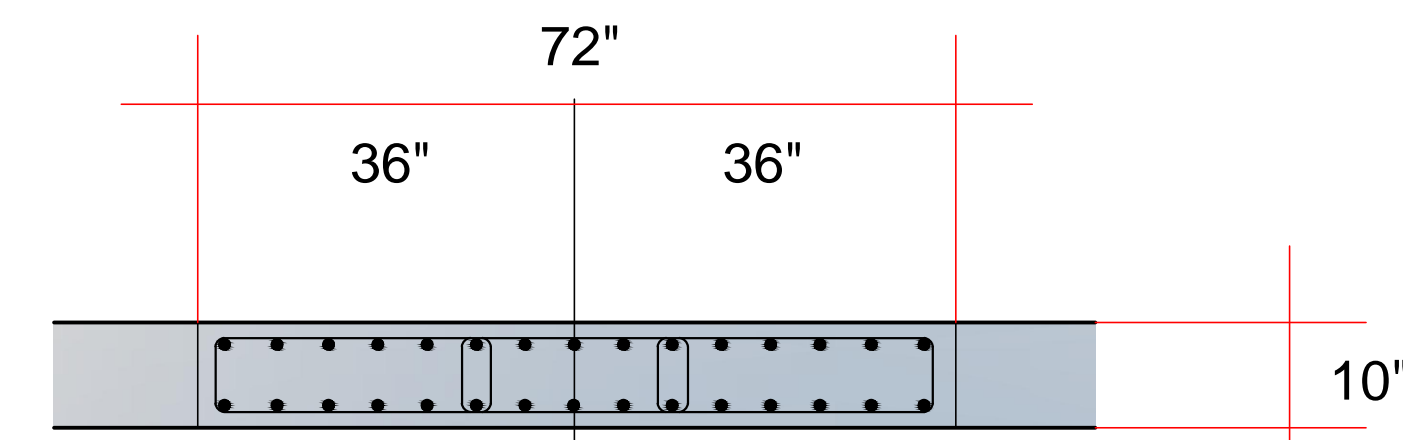
- 2 Hr Fire UL V 465 System Description Steel Stud
- 3/4" STRUCTO-CRETE® Base Layer
  - 3-1/2" Min. Steel Stud
  - 3-1/2" Glass Fiber Insulation
  - 5/8" SHEETROCK® FIRECODE® Core Type X Face Layer
  - 3/4" STRUCTO-CRETE® Face Layer at Top of Wall

### Fire Rated Interior Wall System



#### Symbology

- 10" X 40" Slab Hidden Beam 29' Span
- 10" X 40" Slab Hidden Beam 28' Span
- 10" X 56" Slab Hidden Beam 41' Span
- 10" X 72" Slab Hidden Beam 47' Span
- One way Slab 30' Span
- Braced Frame Wall / Shear wall



#### Reinforced Concrete Hidden Beam Cross Section Detail (flat slab beams)

Placed within the 10" slab thickness, to create a continue smooth ceiling surface and increase height clearance. To maintain the beam's strength, the height size of the original beam was increased twice to the horizontal axial for example: Original beam height 36" now it is 10" X 72"

### One Way Beam and Slab System

#### Description:

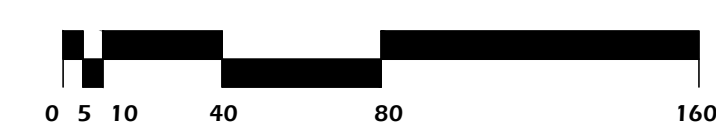
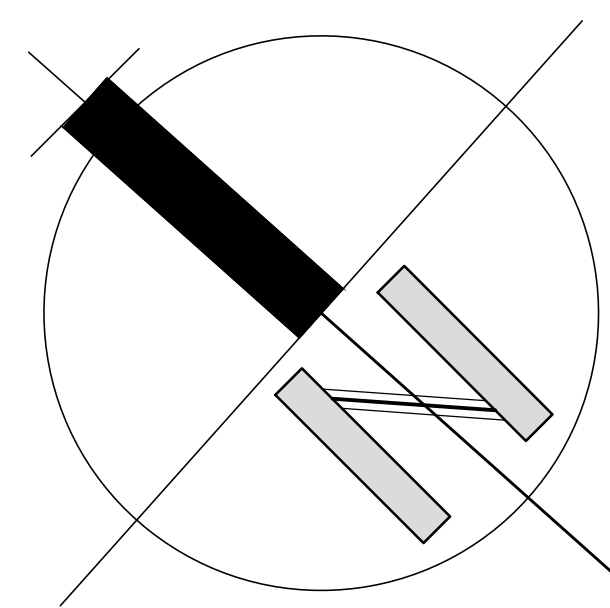
The post-tensioned structural system was selected after consider different pros and contras. One of the most important factor to adopt this system is it versatility, it provides the necessary flexibility to achieve the architectural curvilinear shape and form. It allow to design highly precise, customizable forms. This versatility makes cast-in-place concrete appropriate for this large, architectural project. The thickness of the concrete slab is 10". The one way slabs have spans of 30 ft. while the typical beams range between of 20 to 47 ft. spans. The irregular shape of the bays increase as they go farther of the centrifugal point.

#### Other Considerations:

- Strong and solid construction that provides comfortable shelter from typical weather, and minimizes property damage while protecting occupants from extreme weather, like natural disasters. A major advantage of concrete construction for high-rise buildings is the material's inherent properties of heaviness and mass, which create lateral stiffness, or resistance to horizontal movement.
- Low maintenance cost and low energy bills. The tight-form building envelope minimize air infiltration, simplify the addition of insulation, and provide thermal mass for more consistent temperatures and decreased energy usage. This is beneficial from an environmental and can contribute toward a building's greenness in many rating systems and some codes.
- Smooth riding surface, by minimize joints.
- Fire resistance ratings to meet code requirements.
- Provides long, column-free spans easy to adapt to the building's framing form and parking requirements.

#### Disadvantage:

- Initial cost
- Labor requirements to cast-in-place concrete is high. Builders must first construct forms for the walls and then install the forms and mix the concrete. Pouring the concrete and waiting to remove the forms all take time that extends the length of a construction and results in more hourly pay for work crews.

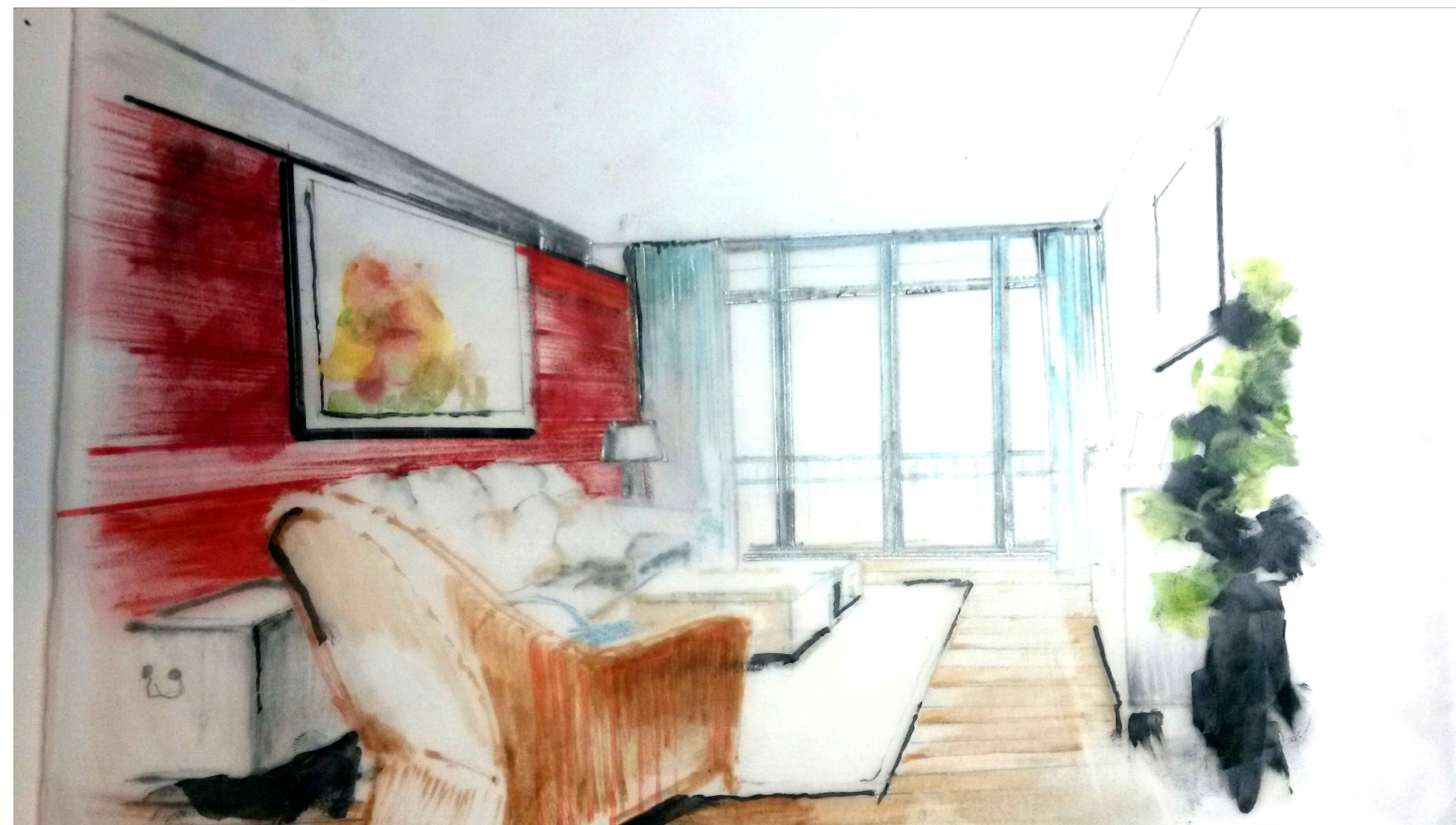


# Typical Structure Diagram (Typical Plan) . Arch 605 . Sandra M Hernandez .





# West Elevation

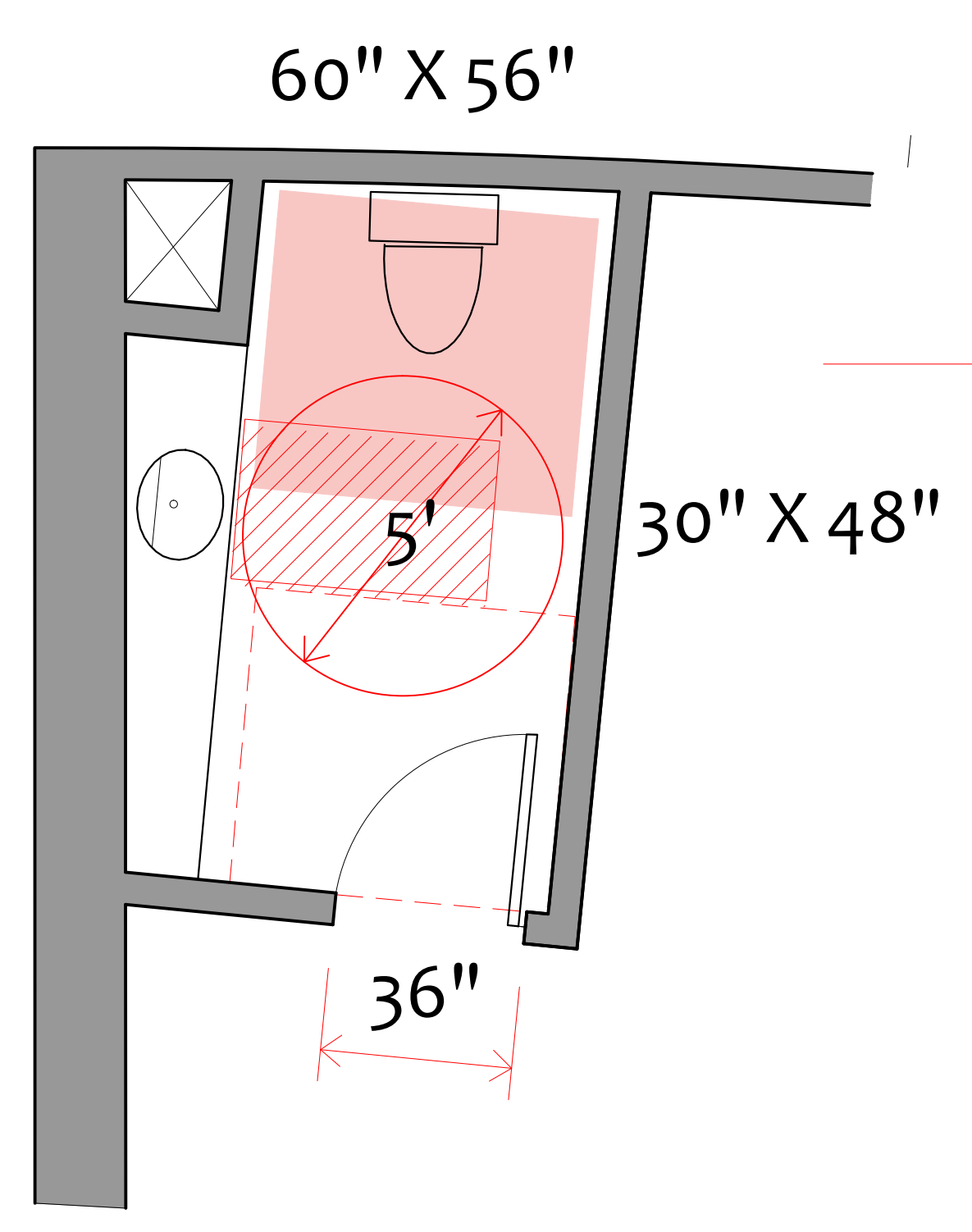


# Interior Apartment

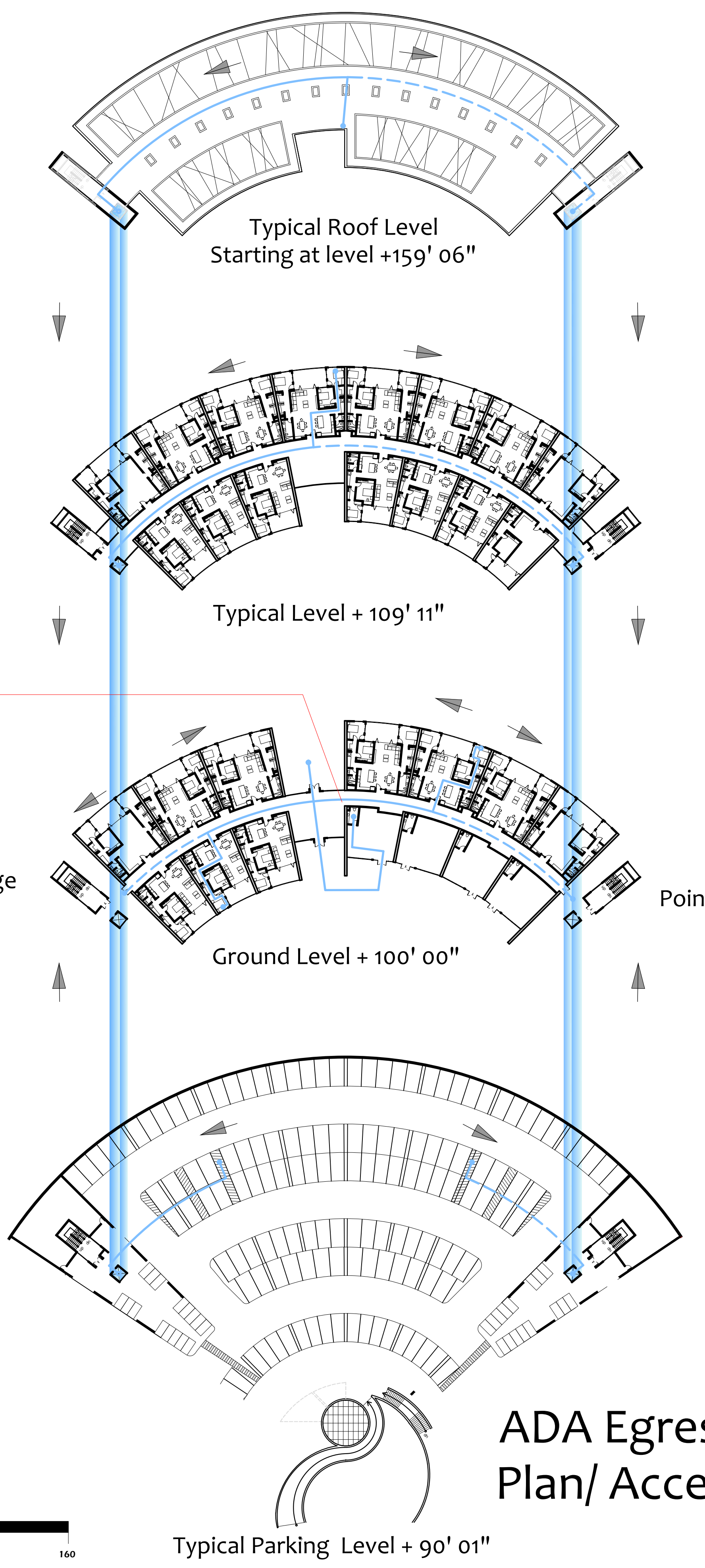
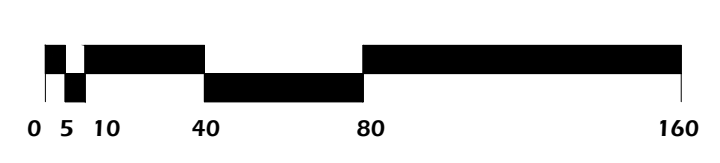
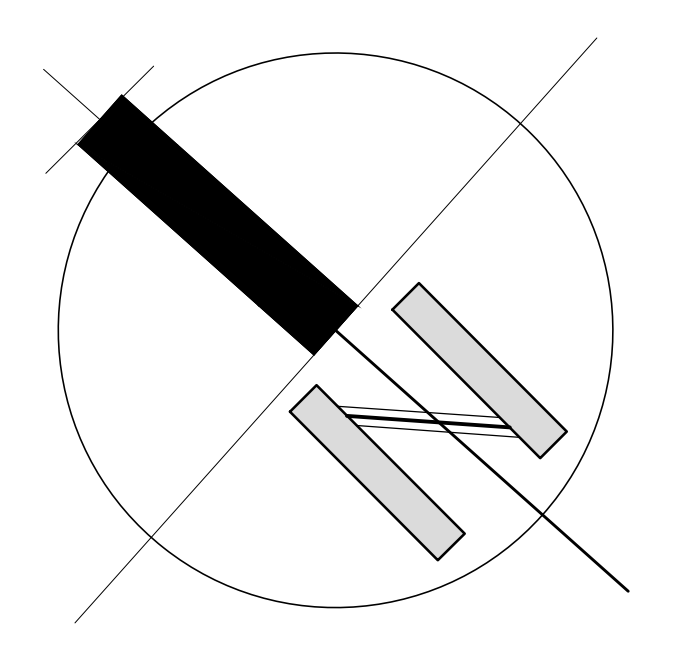
. Arch 605 . Sandra M Hernandez .



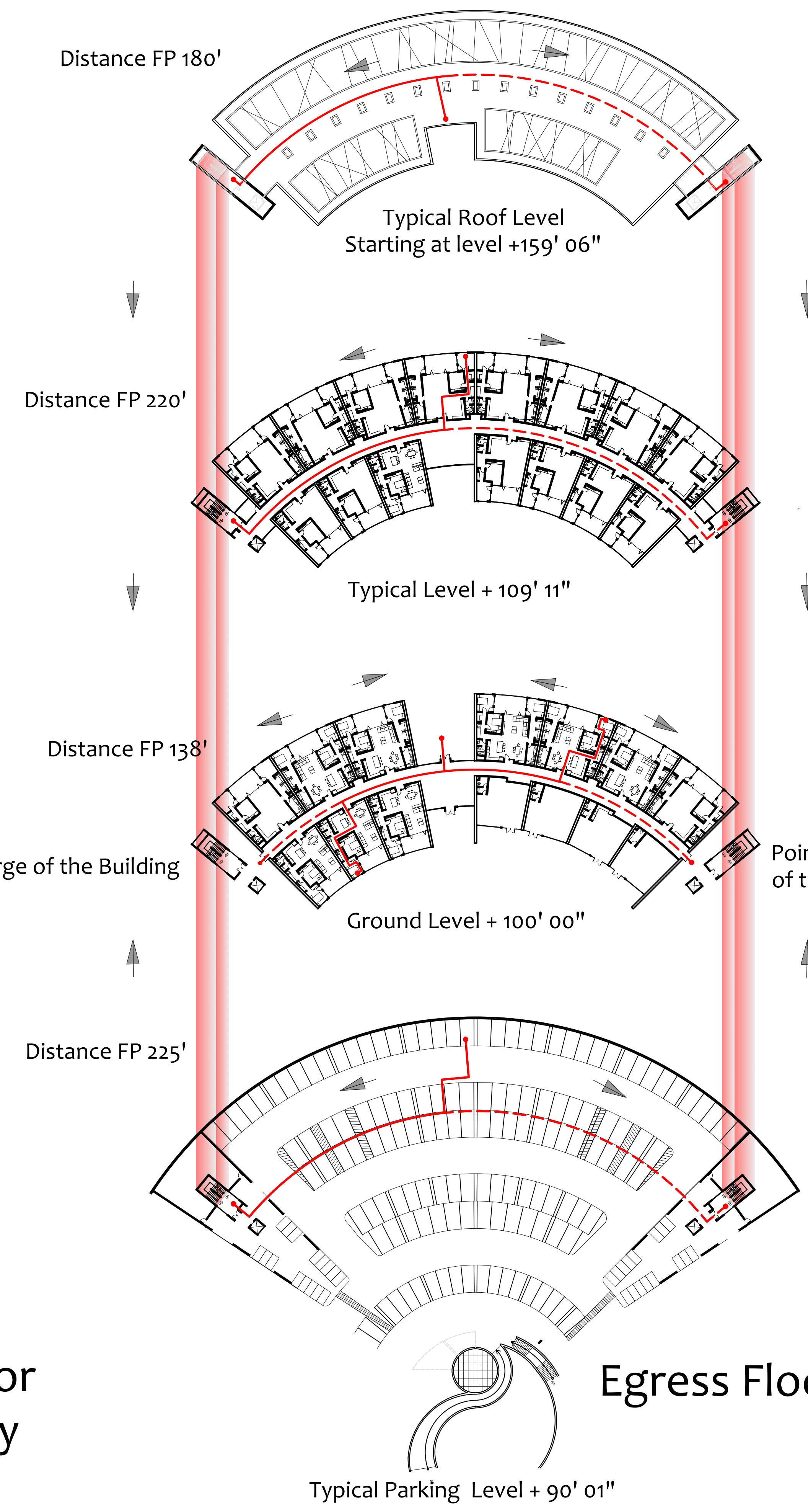
- Horizontal Fire Evacuation Route
- Horizontal Fire Evacuation Route, Alternative
- Vertical ADA Circulation
- Horizontal ADA Evacuation Route
- Horizontal ADA Evacuation Route, Alternative
- Vertical ADA Circulation
- Egress Direction



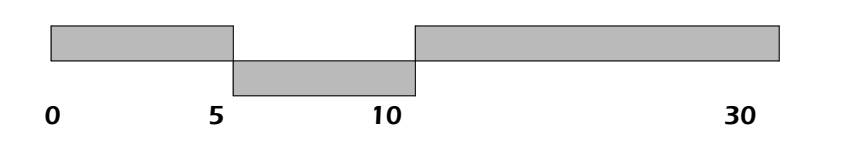
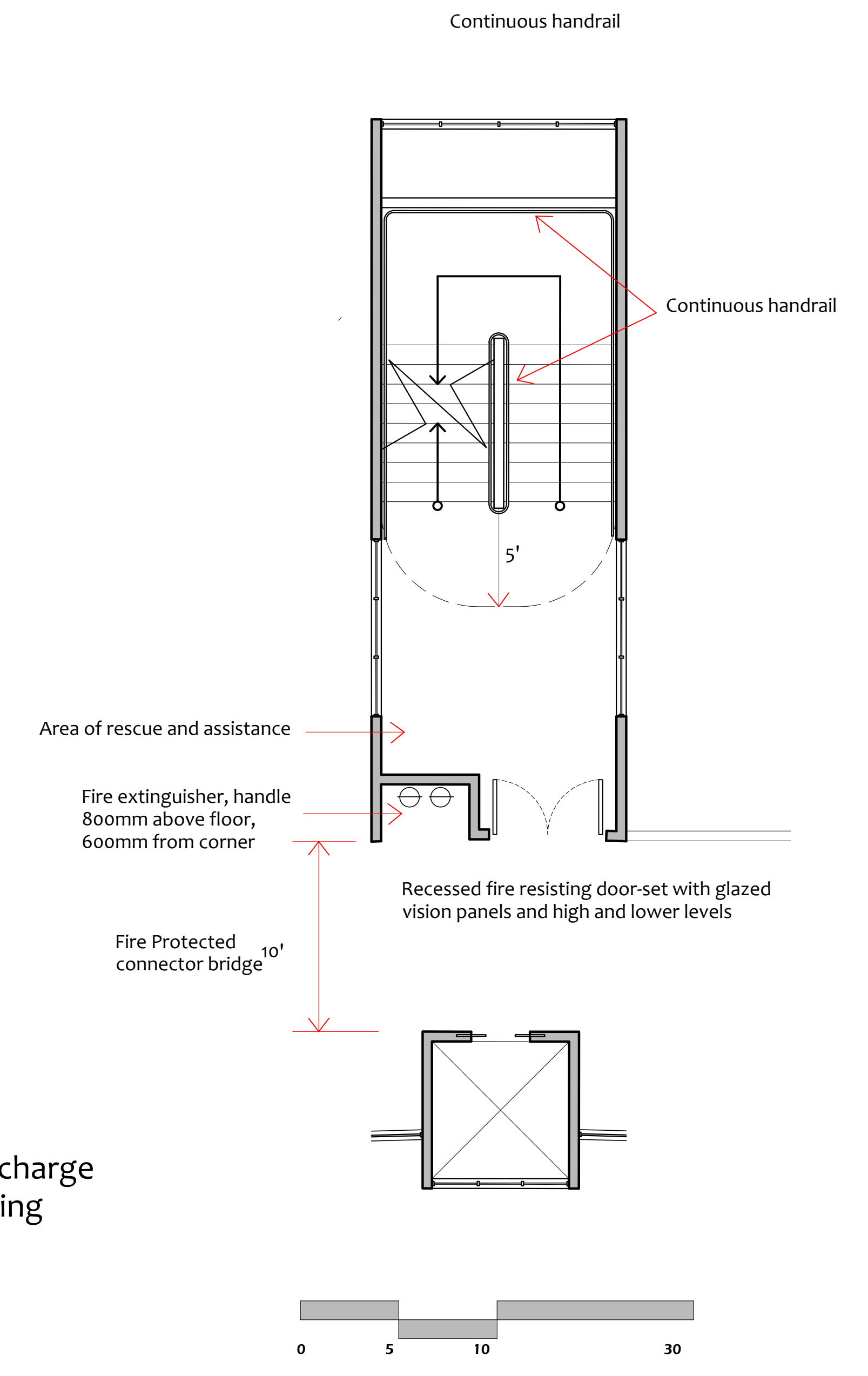
Accessible Restroom



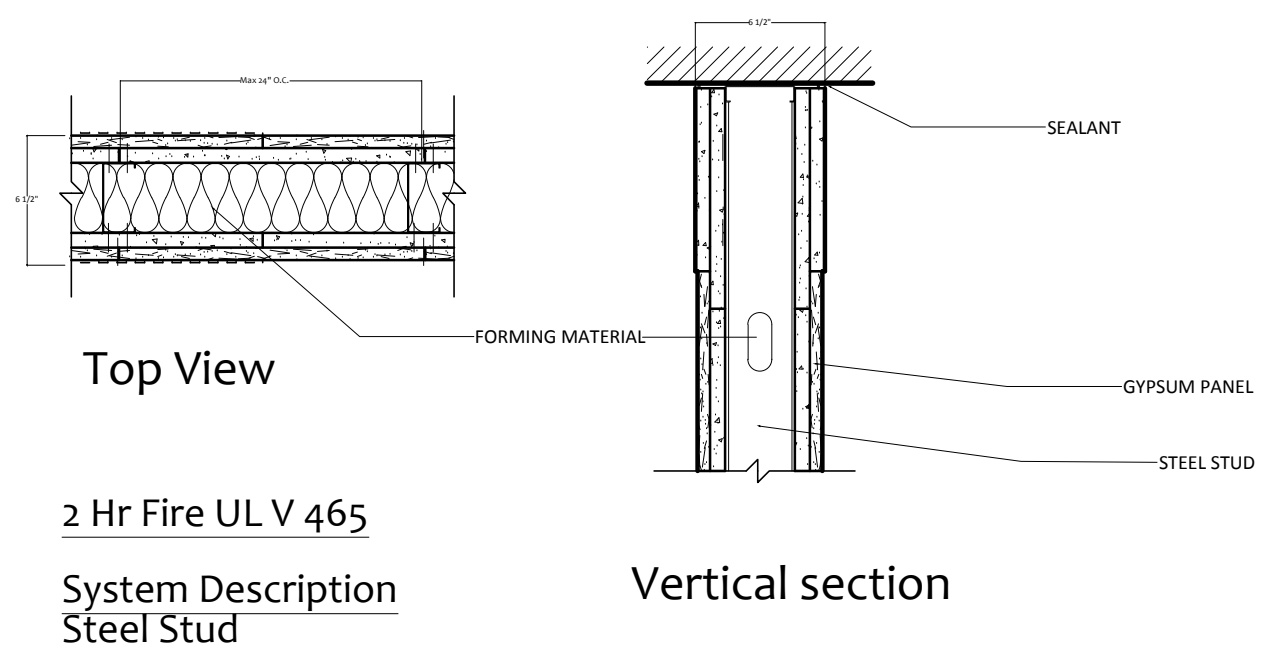
ADA Egress Floor Plan/ Accessibility



Egress Floor Plans



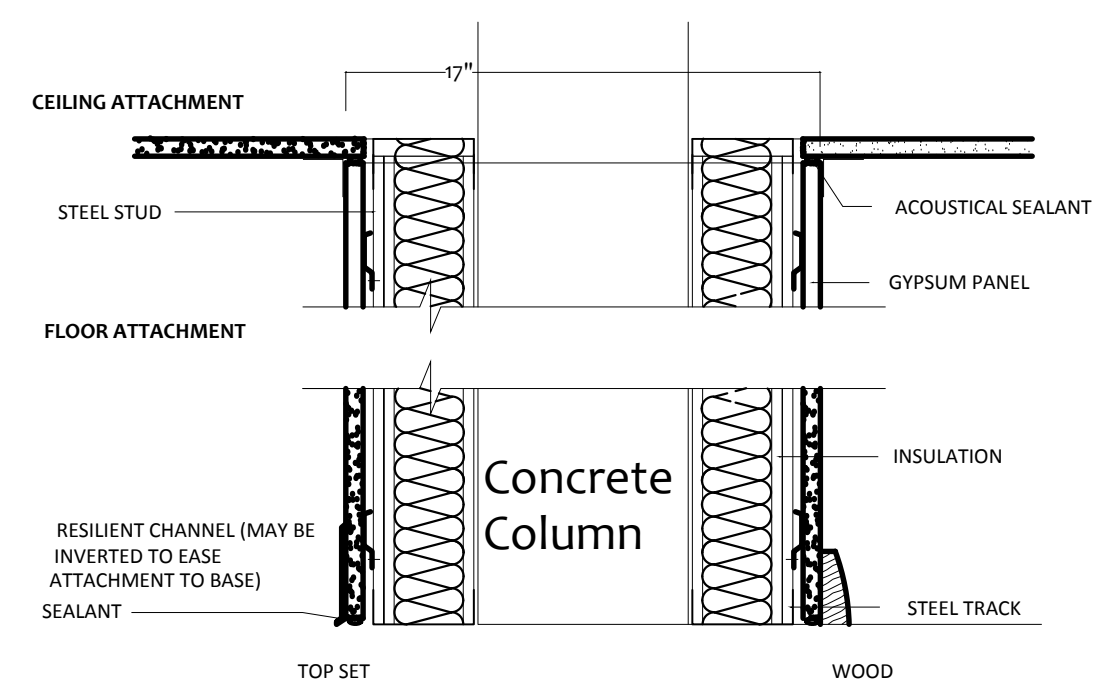




2 Hr Fire UL V 465  
System Description  
Steel Stud

- 3/4" STRUCTO-CRETE® Base Layer
- 3-1/2" Min. Steel Stud
- 3-1/2" Glass Fiber Insulation
- 5/8" SHEETROCK® FIRECODE® Core Type X Face Layer
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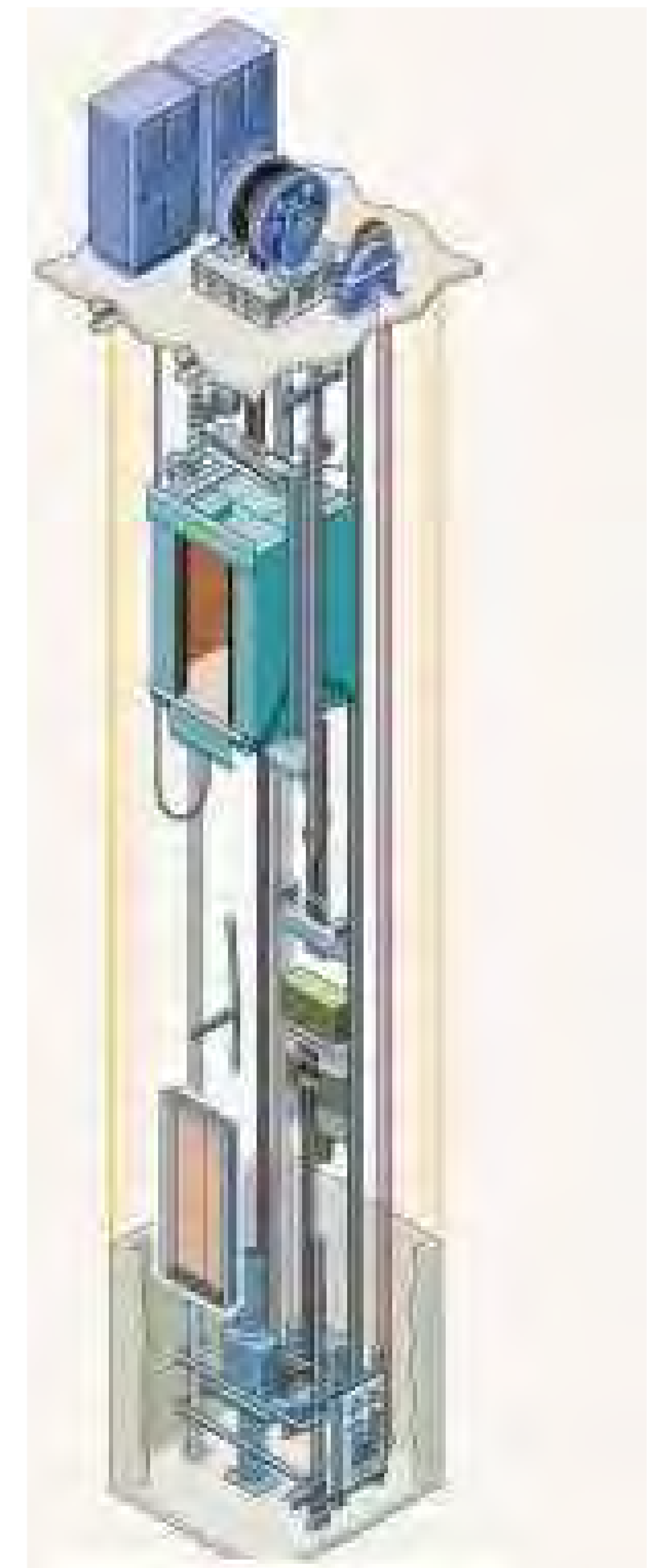
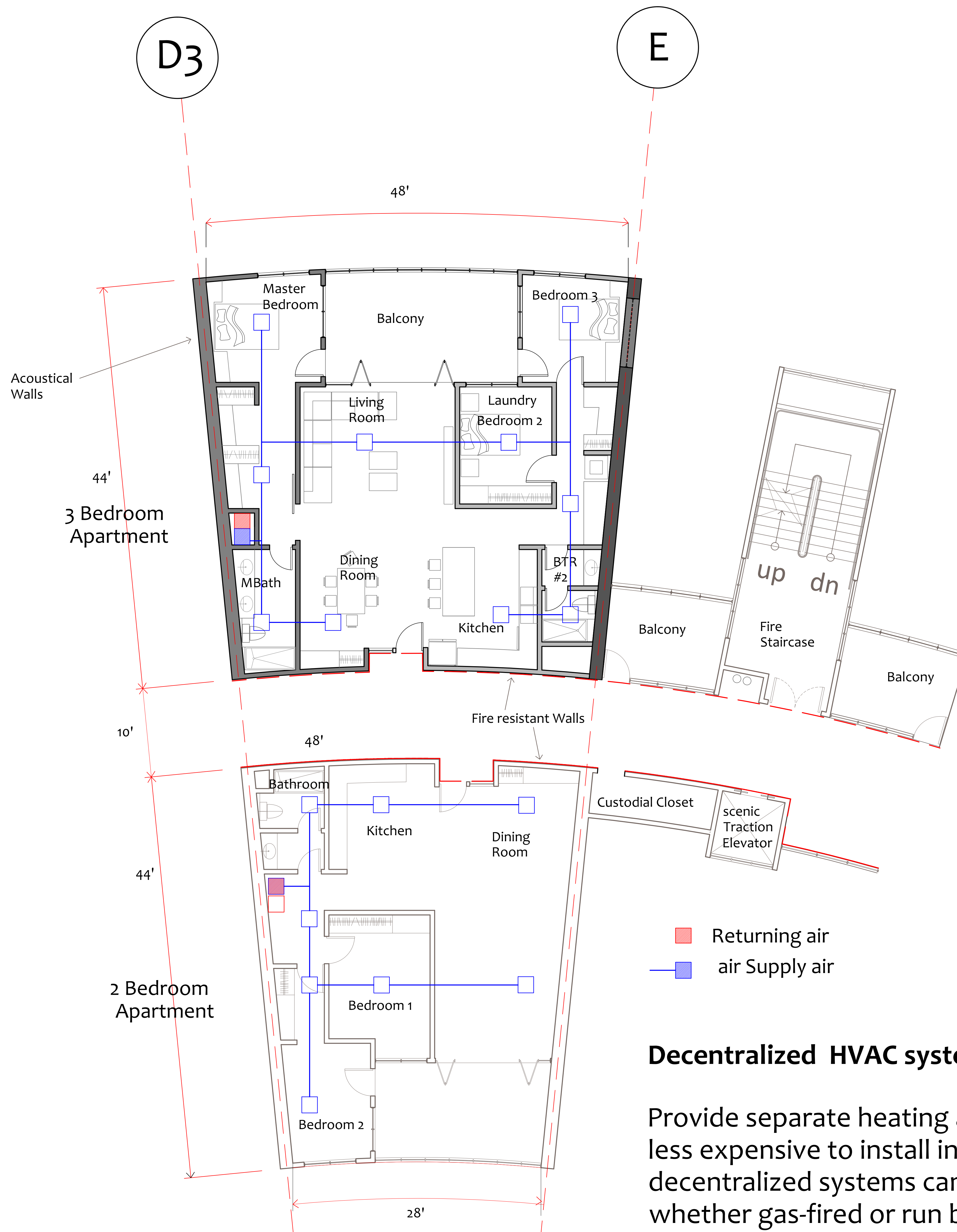
## Fire Rated Interior Wall System



GENERAL NOTES:

Install with slotted holes over the framing members.  
Gypsum panels type and thickness as required by required performance.

## Acoustical Wall System Between Apartment Units



**Elevator Machine Room:**  
Located at the bottom level.

### Decentralized HVAC systems

Provide separate heating and cooling equipment for each unit, are less expensive to install initially, and to prevent stack effect. Also decentralized systems can be individually metered at the unit, whether gas-fired or run by electricity.