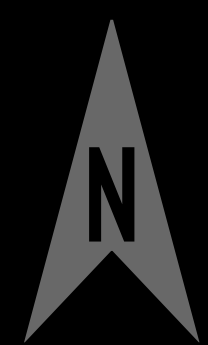


A

A

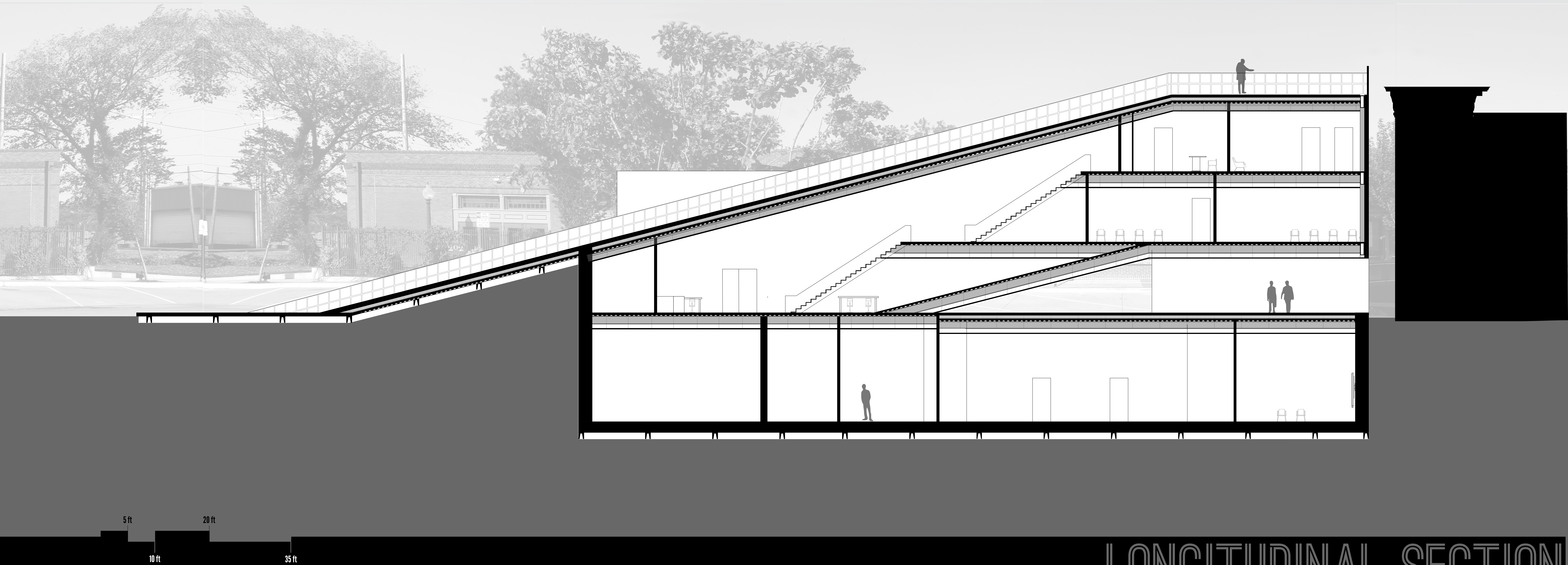
Bryan Ave

Main St



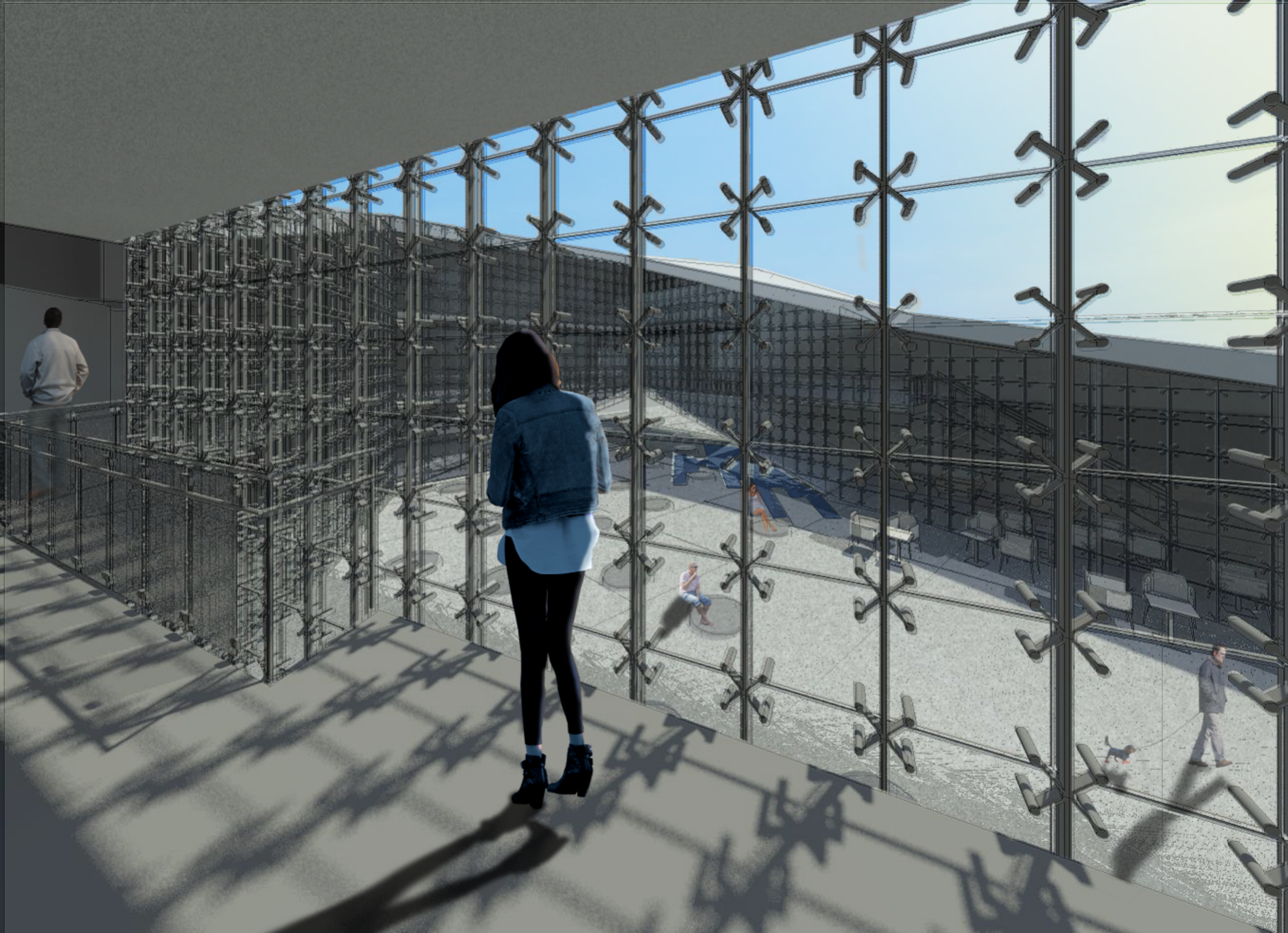
10 ft
20 ft
35 ft

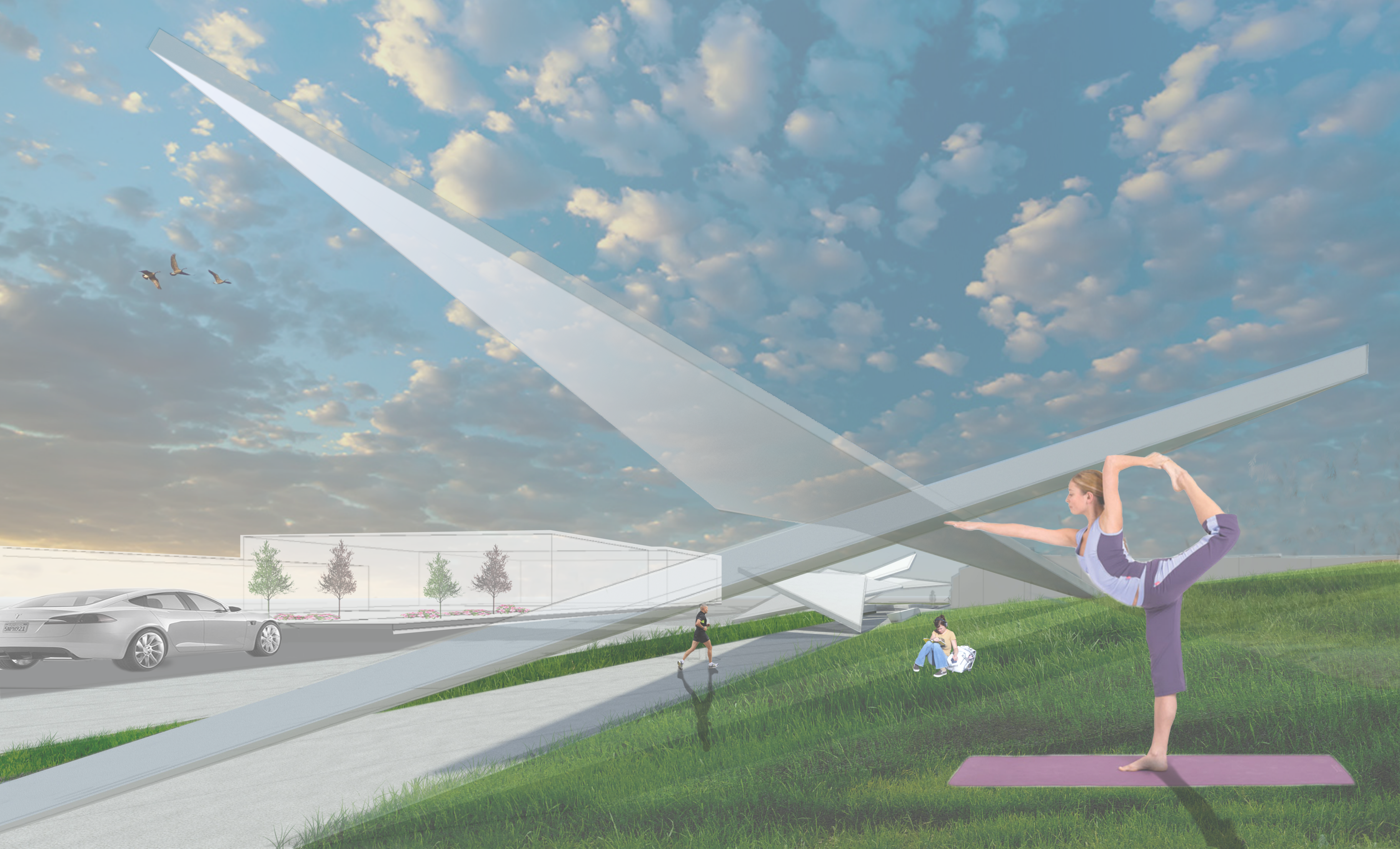
SITE PLAN
CLAUDIA RODRIGUEZ
HANNAH WOODS

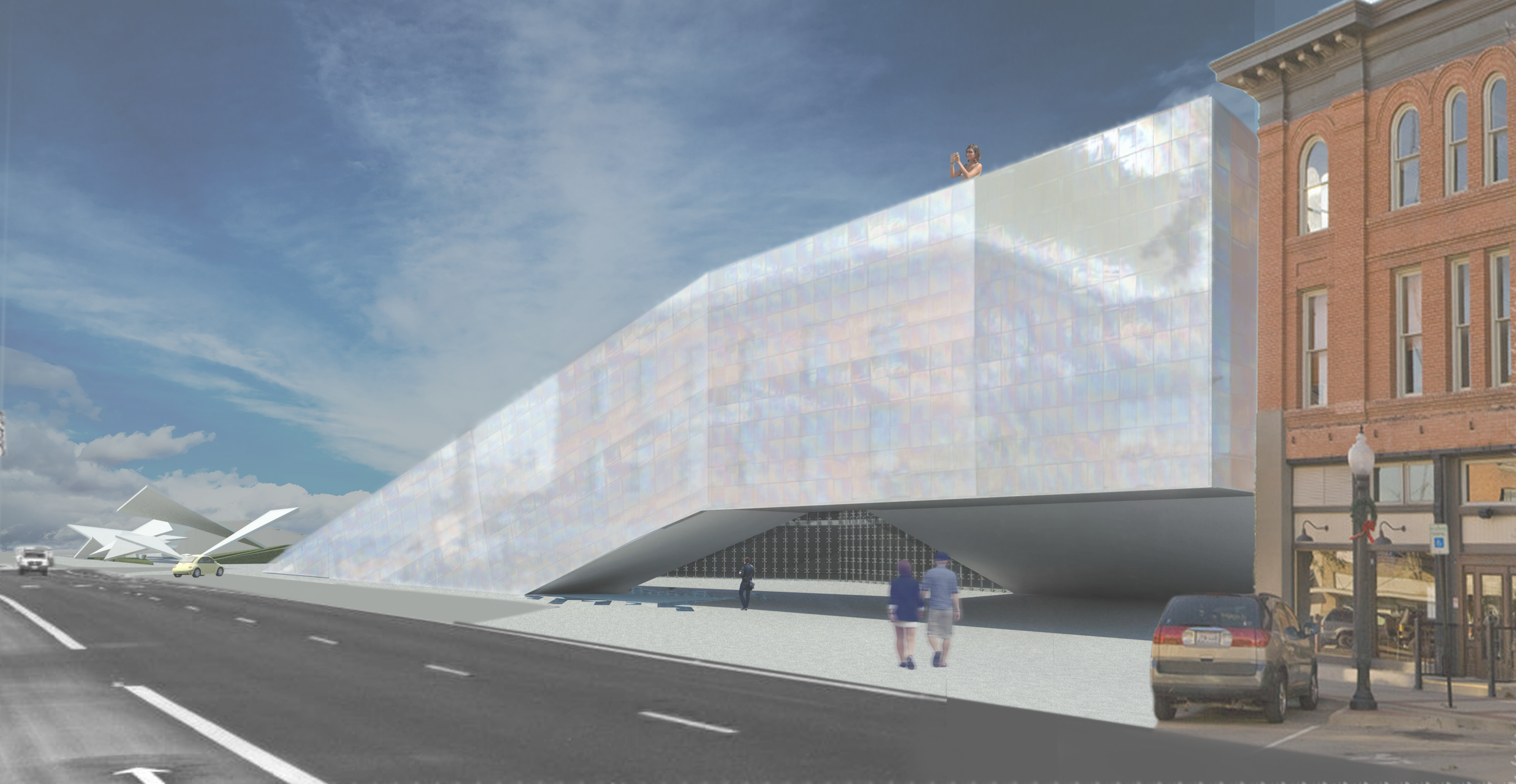


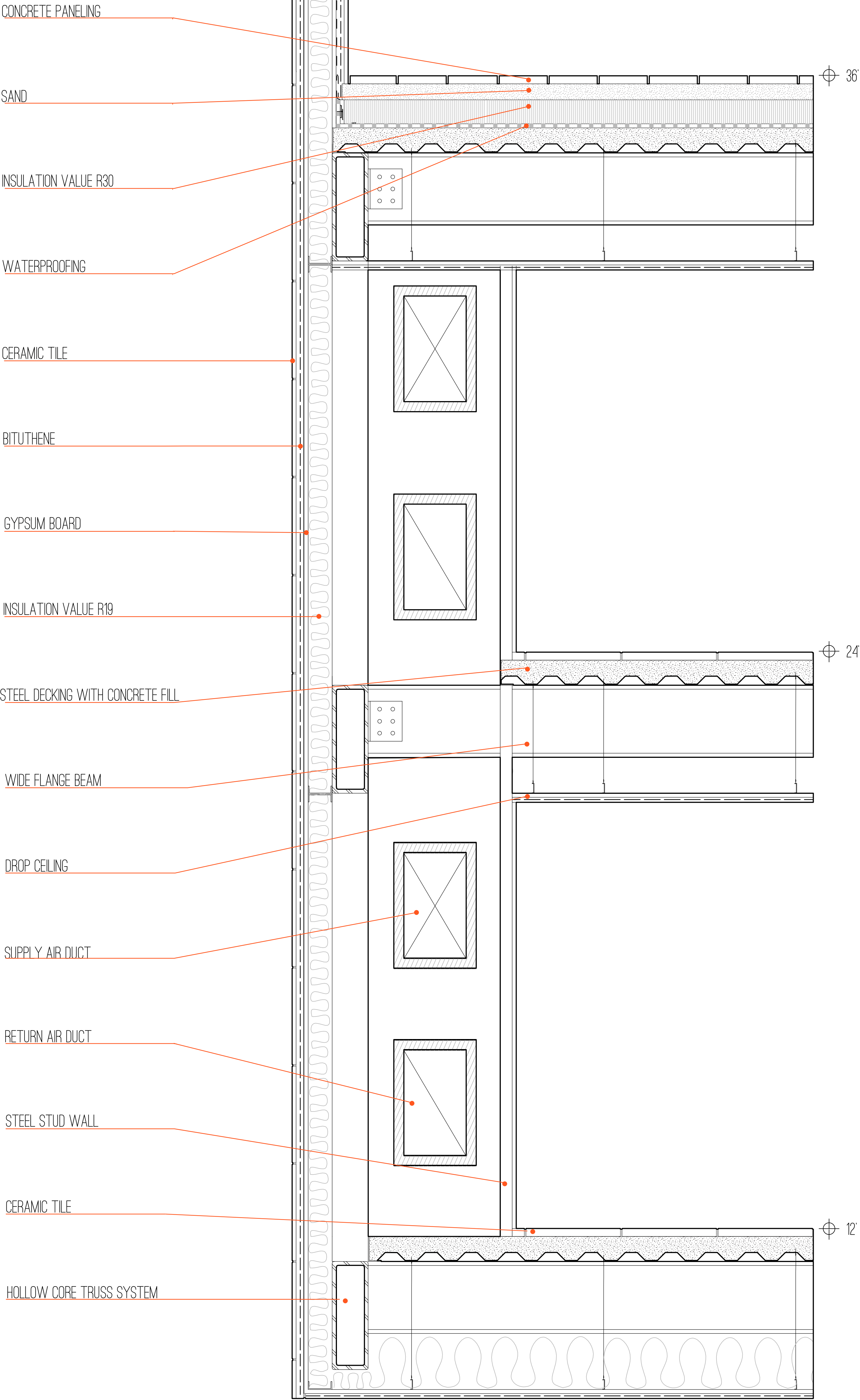
LONGITUDINAL SECTION

CLAUDIA RODRIGUEZ
HANNAH WOODS

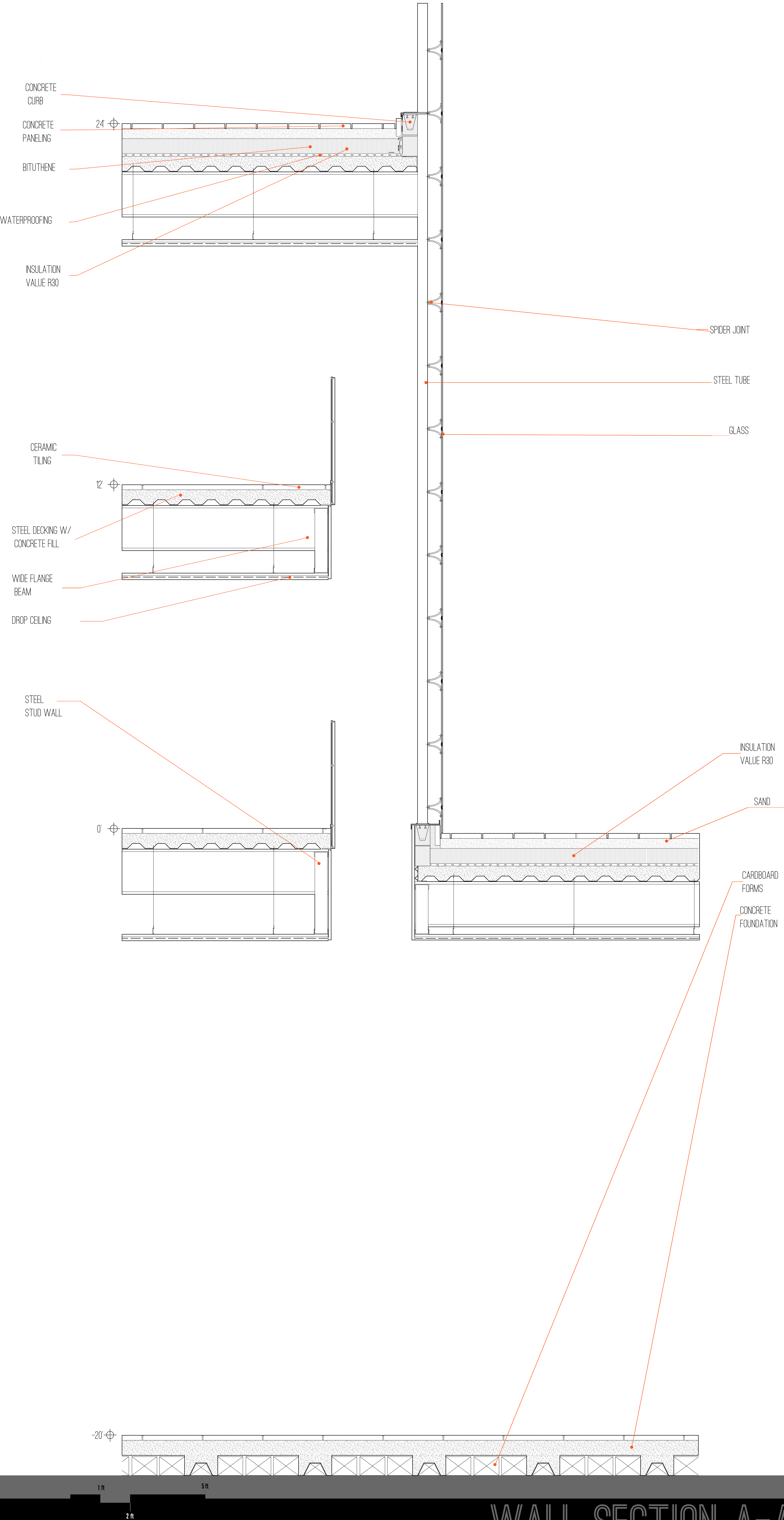






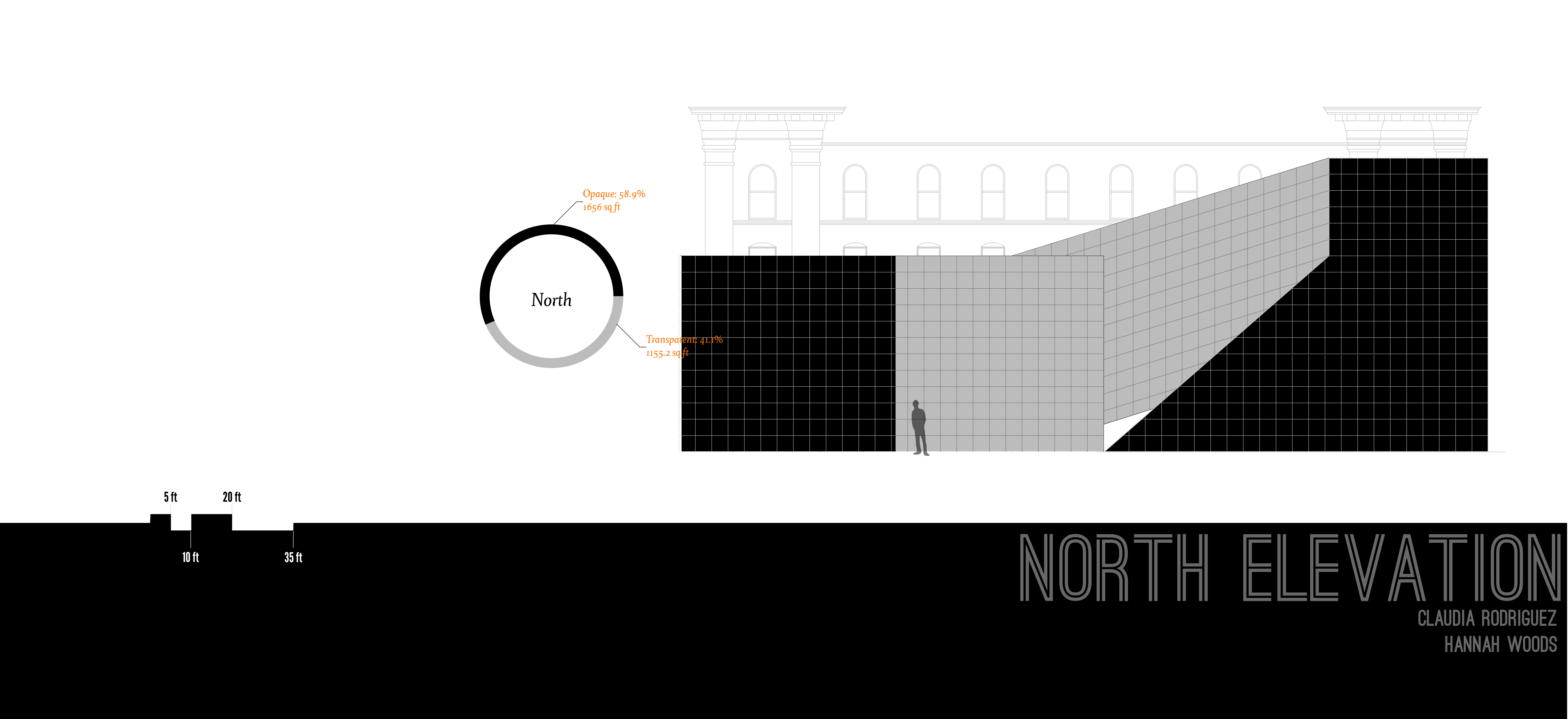


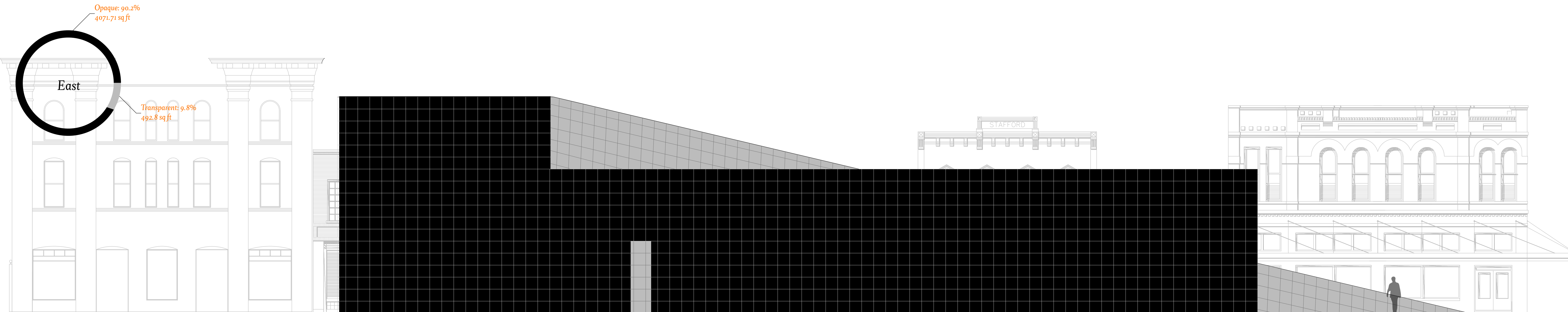
1 ft 5 ft
2 ft



WALL SECTION A-A

CLAUDIA RODRIGUEZ
HANNAH WOODS

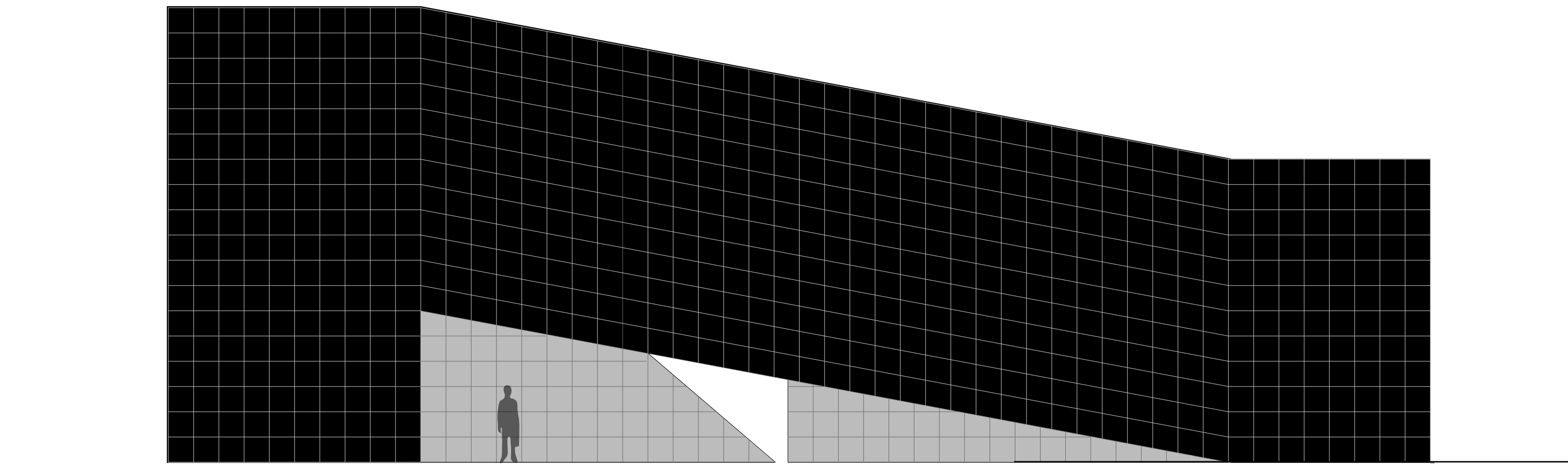
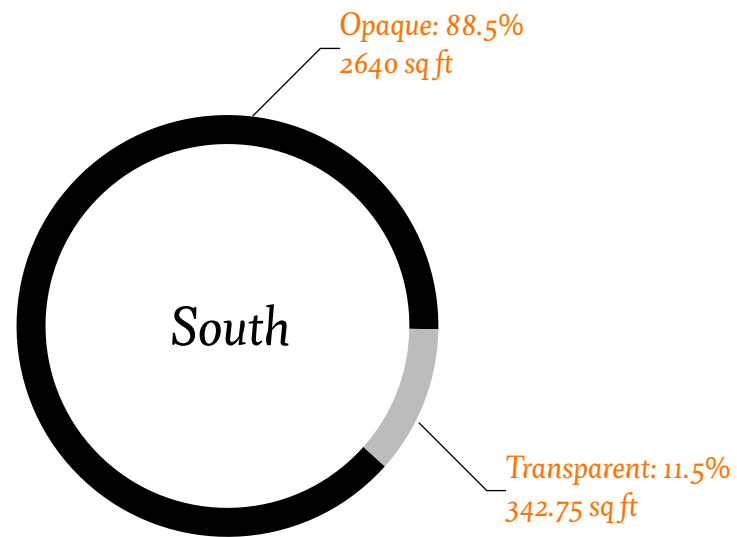




5 ft
10 ft
20 ft
35 ft

EAST ELEVATION

CLAUDIA RODRIGUEZ
HANNAH WOODS



5 ft

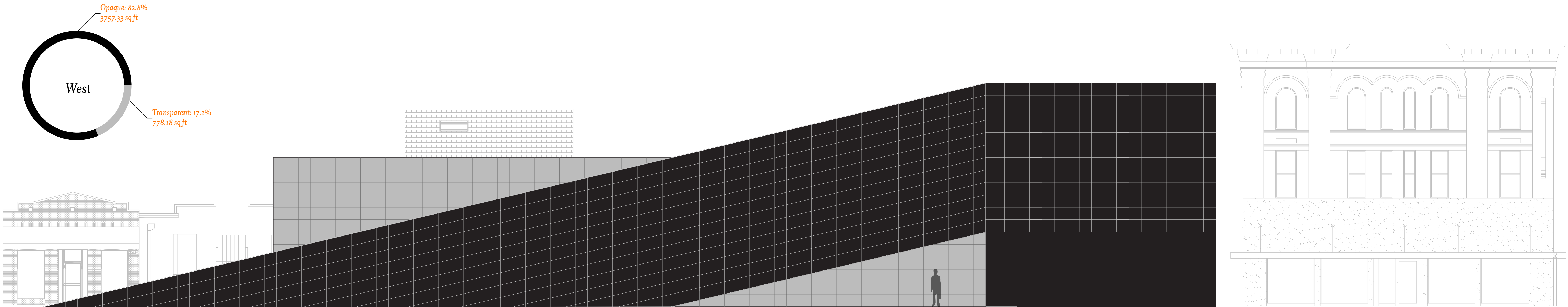
20 ft

10 ft

35 ft

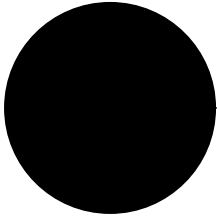
SOUTH ELEVATION

CLAUDIA RODRIGUEZ
HANNAH WOODS

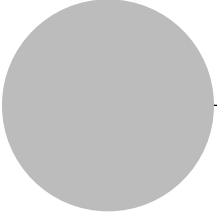


WEST ELEVATION

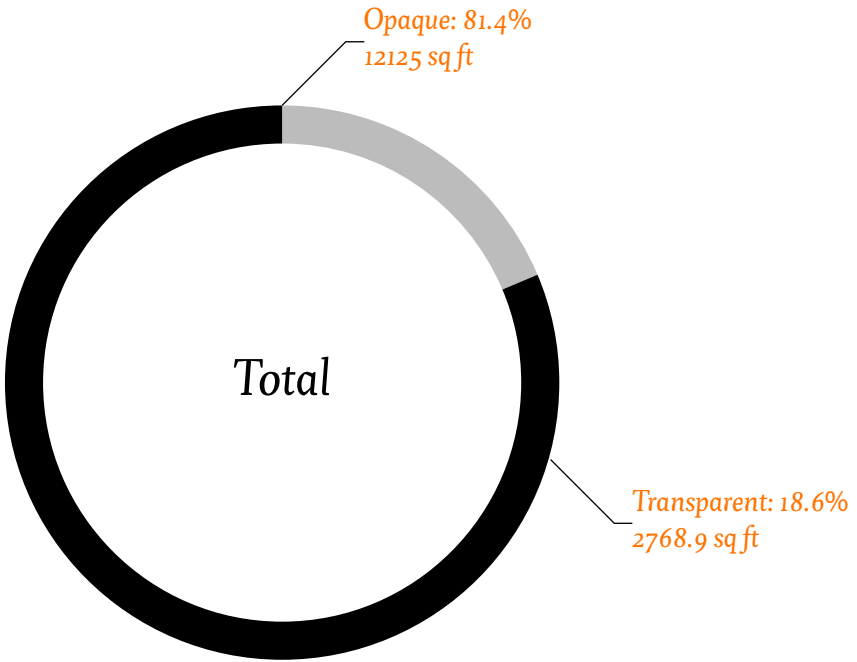
CLAUDIA RODRIGUEZ
HANNAH WOODS

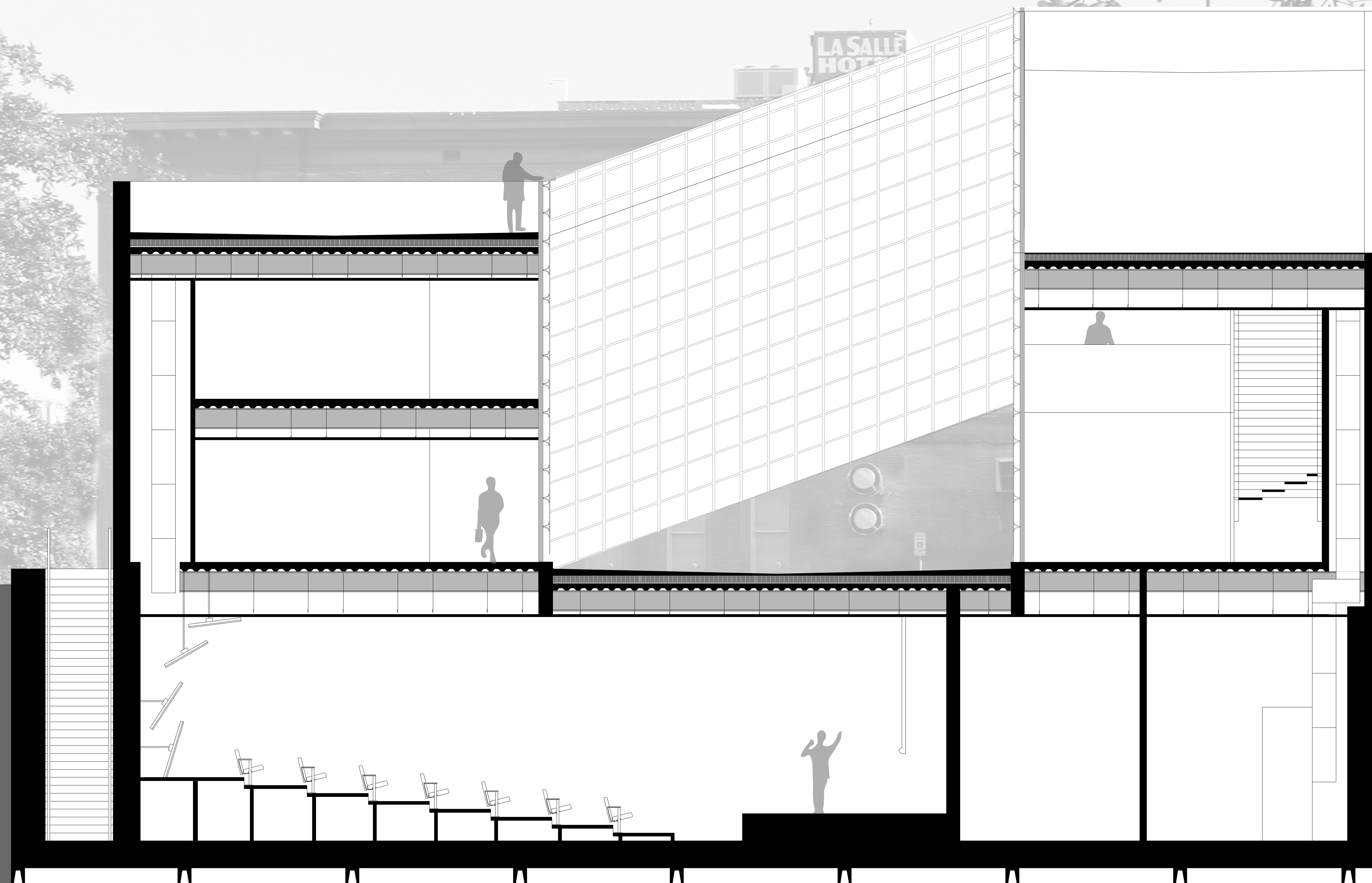


Opaque
Surface



Transparent
Surface





5 ft

20 ft

10 ft

35 ft

TRANSVERSE SECTION

CLAUDIA RODRIGUEZ
HANNAH WOODS



5 ft

20 ft

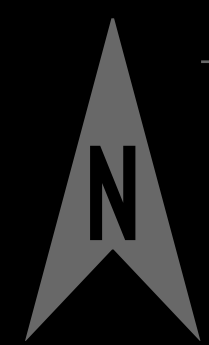
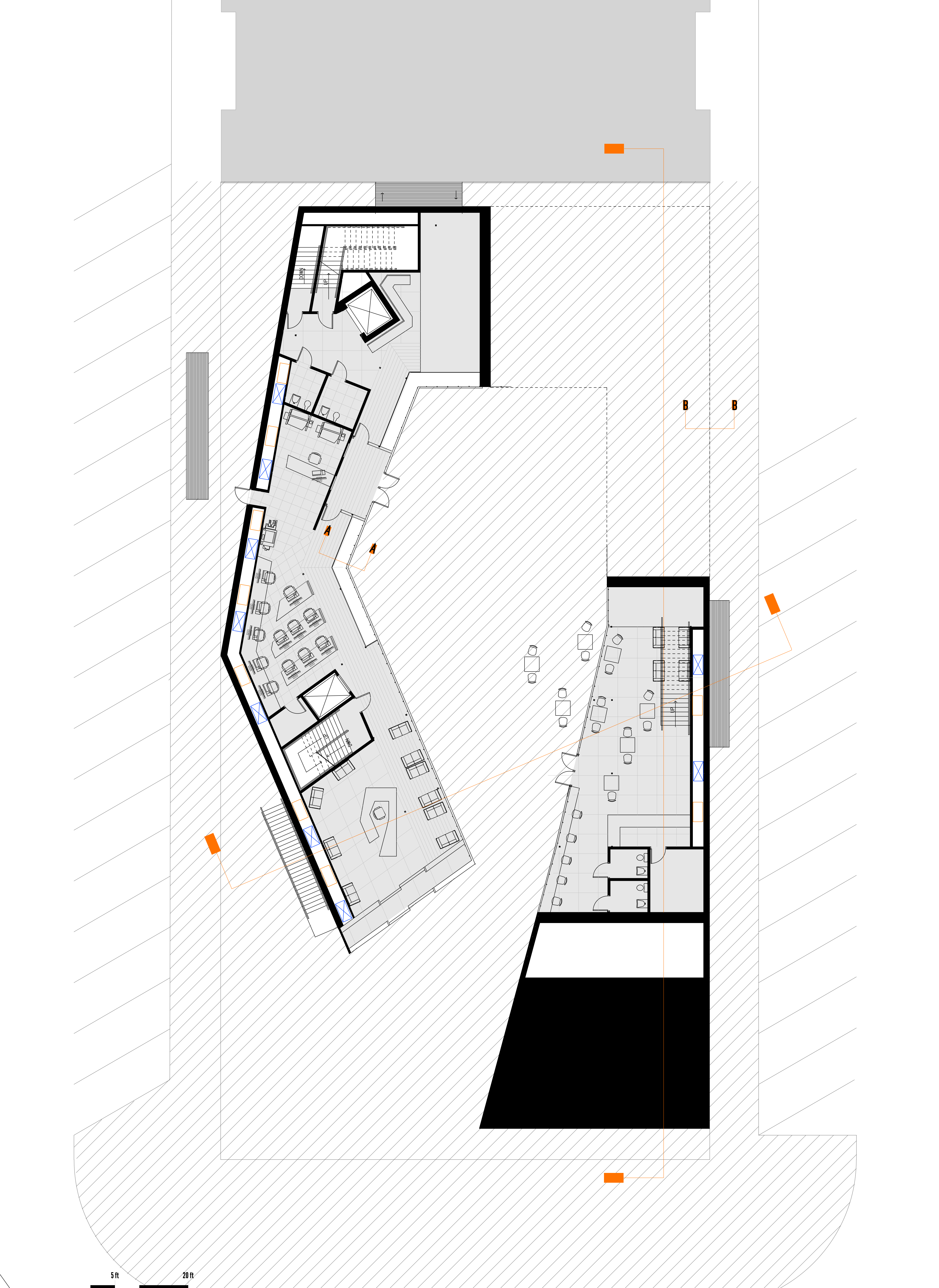
⊕ -20 FT

10 ft

35 ft

BASEMENT PLAN

CLAUDIA RODRIGUEZ
HANNAH WOODS



0 FT

5 ft

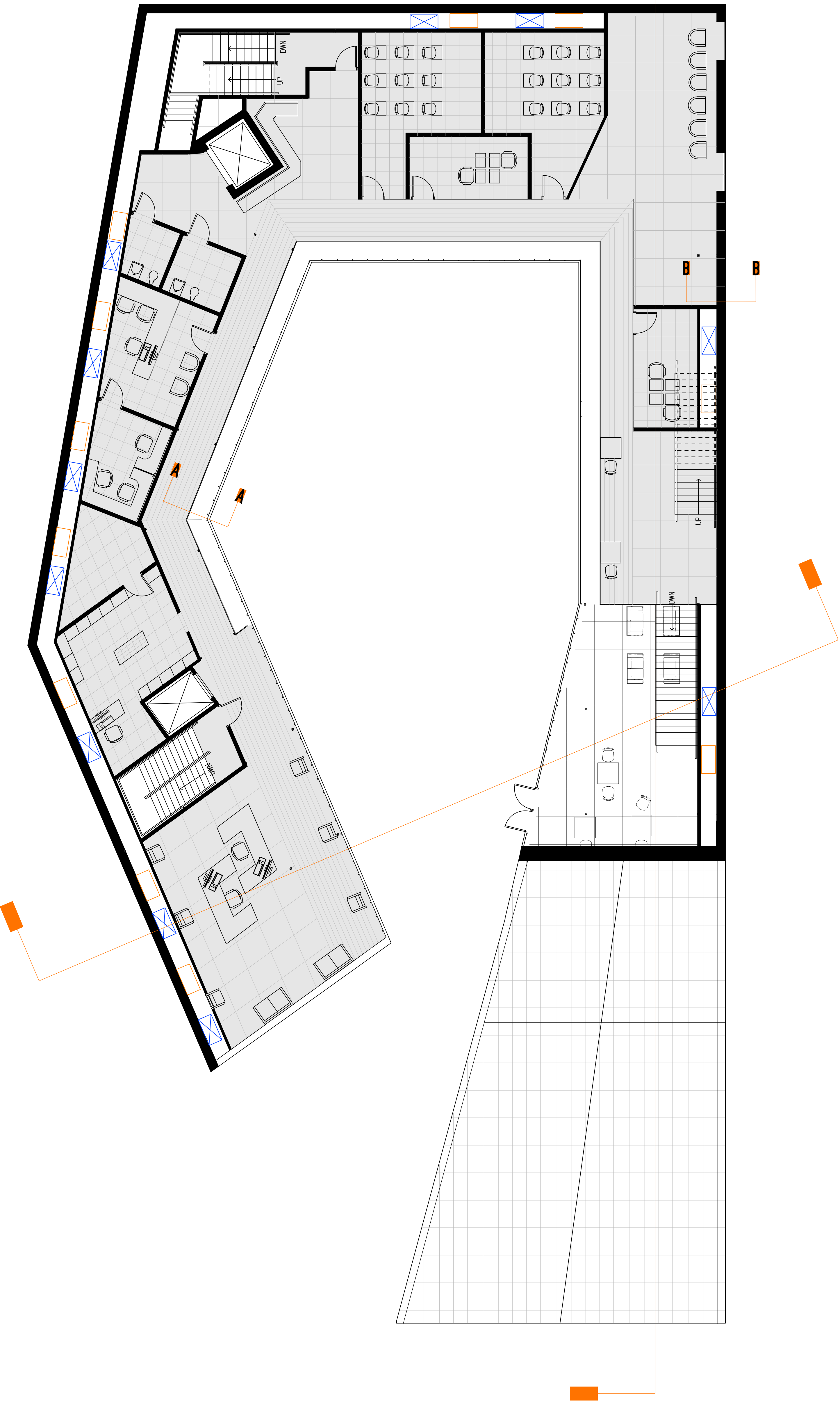
10 ft

20 ft

35 ft

GROUND FLOOR PLAN

CLAUDIA RODRIGUEZ
HANNAH WOODS



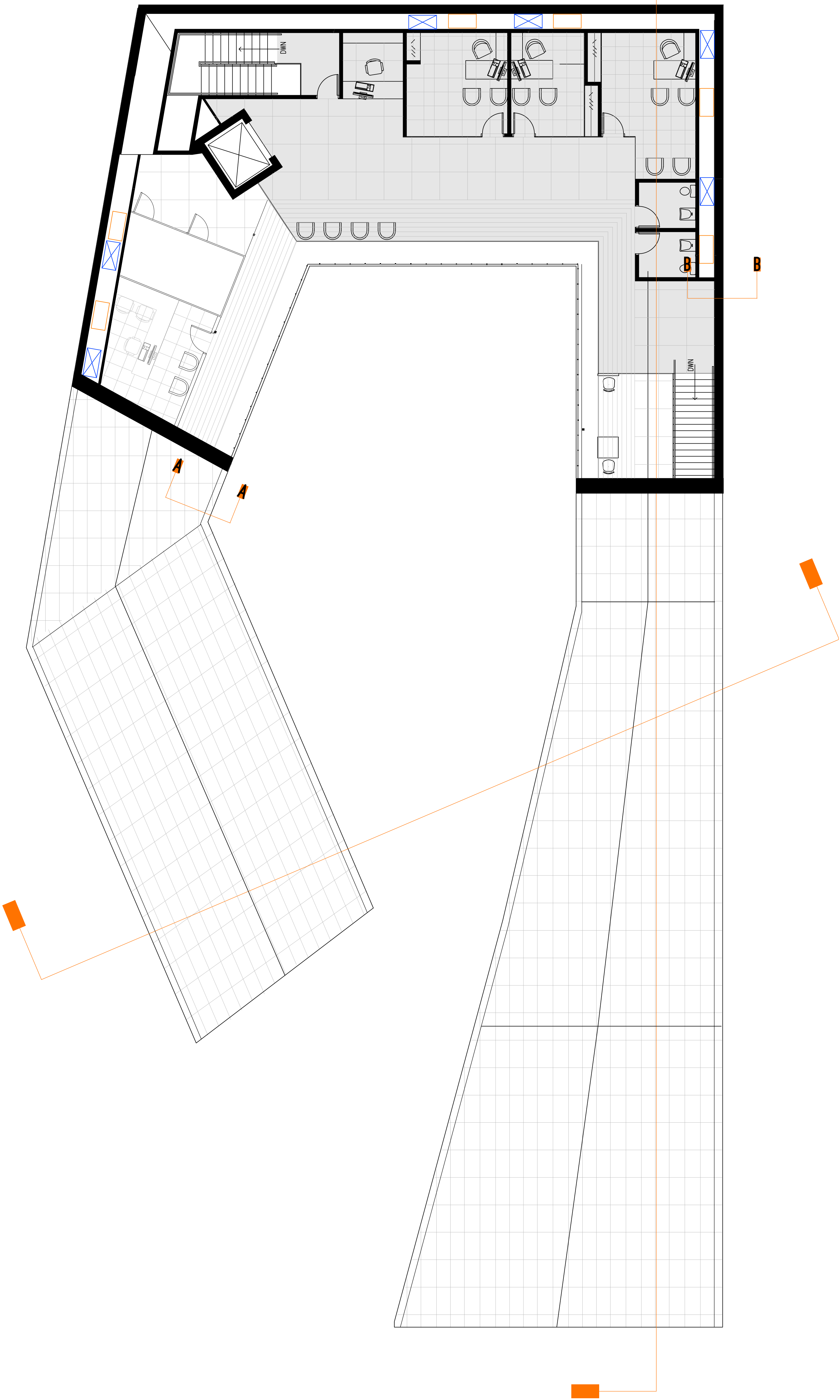
5 ft 20 ft

12 FT

10 ft

35 ft





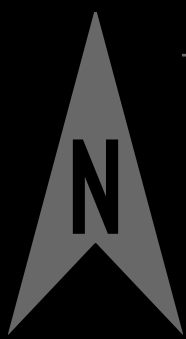
5 ft

20 ft

⊕ 24 FT

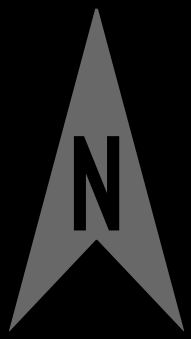
10 ft

35 ft



THIRD FLOOR PLAN

CLAUDIA RODRIGUEZ
HANNAH WOODS



5 ft

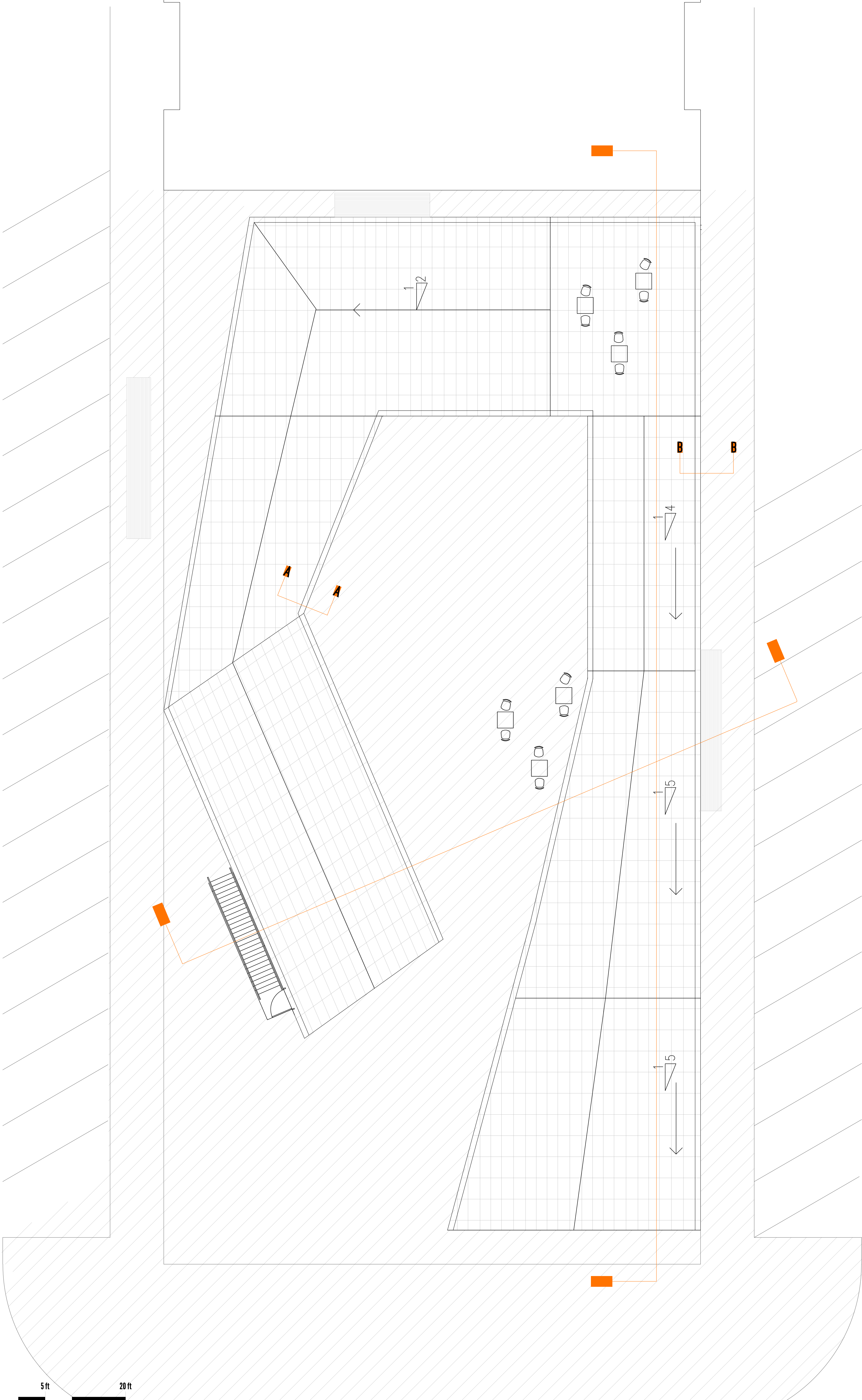
10 ft

20 ft

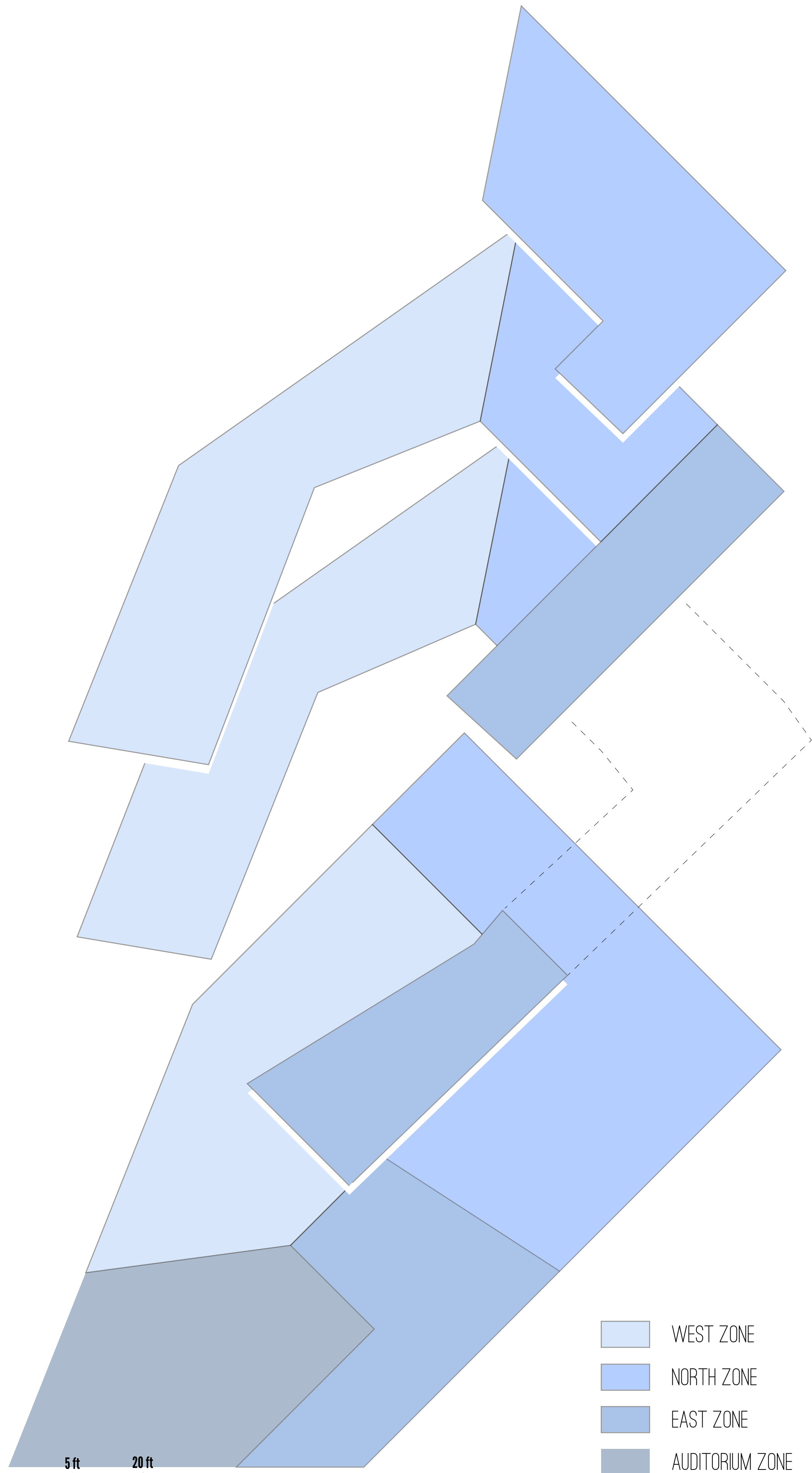
35 ft

ROOF PLAN

CLAUDIA RODRIGUEZ
HANNAH WOODS



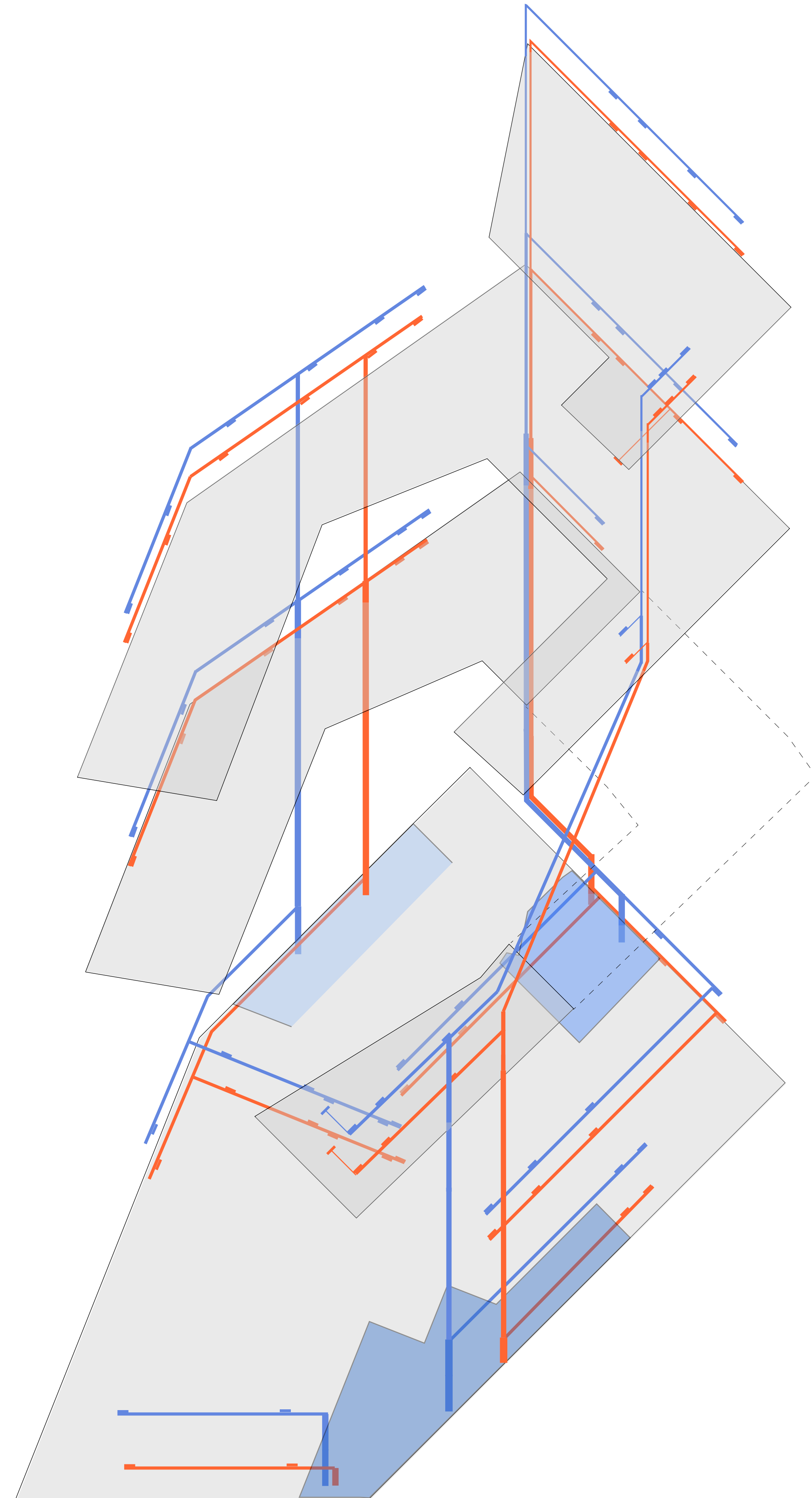
- 1 MECHANICAL ROOM
- 2 GROUP GAME ROOM
- 3 PERSONAL COMPUTER ROOM
- 4 BACKSTAGE AREA
- 5 AUDITORIUM
- 6 SERVER ROOM
- 7 STORAGE
- 8 COMMON SPACE
- 9 COMPUTER WORK STATION
- 10 PRINTING CENTER
- 11 CAFE
- 12 CAFE PREP AREA
- 13 HELP DESK
- 14 RENTAL CENTER
- 15 REPAIR CENTER
- 16 CLASSROOM
- 17 GROUP MEDIA ROOM
- 18 ZEN ROOM
- 19 OFFICE RECEPTION
- 20 IT OFFICE
- 21 DIRECTOR'S OFFICE
- 22 MARKETING OFFICE



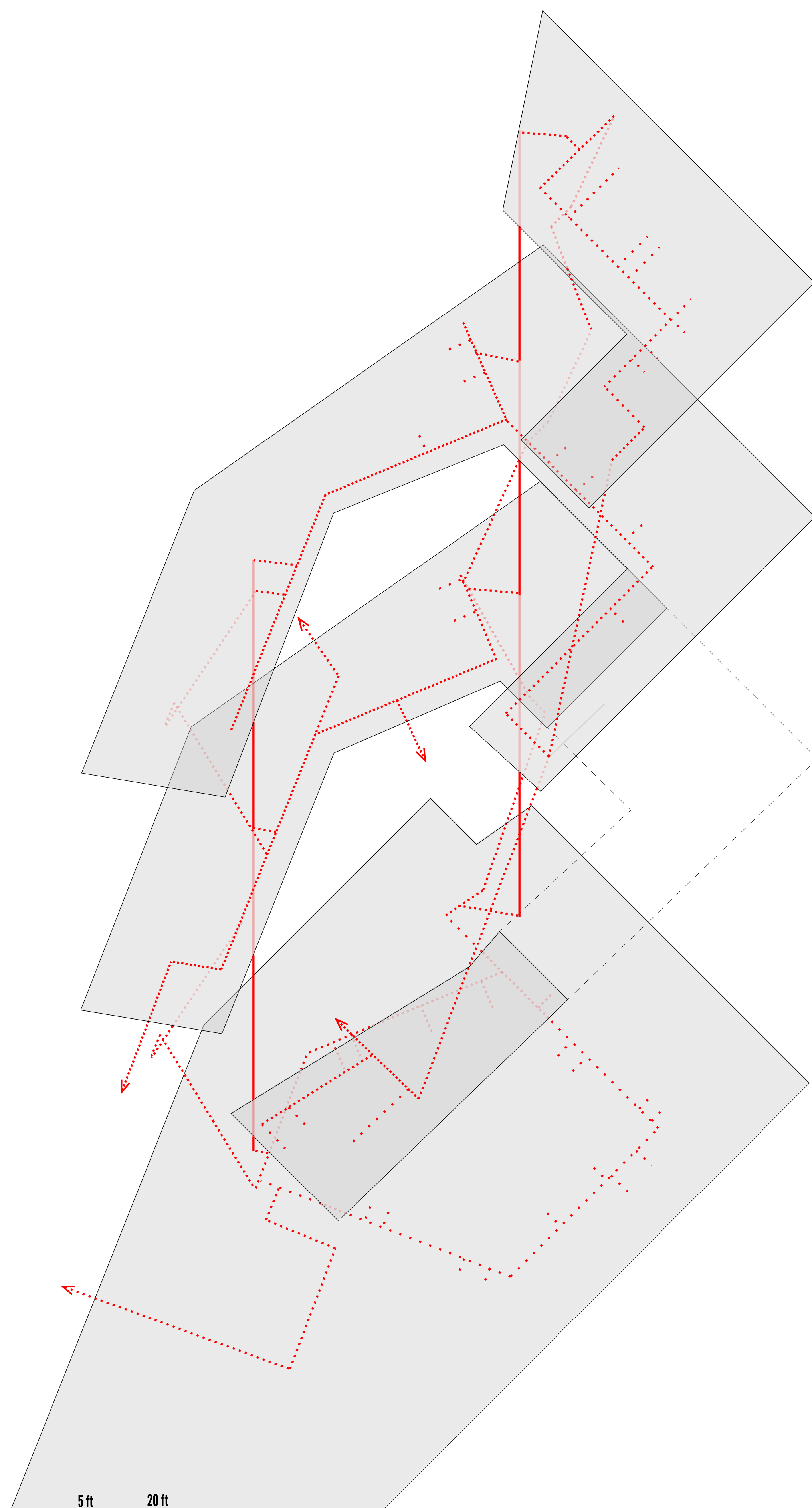
ZONING DIAGRAM

Mechanical Zoning Strategy
 The rectilinear U-shape for of our building naturally calls for separate mechanical zones. It is split up into three zones as well as a separate one for the auditorium. Zone 1 occupies the west leg of the building, and handles 12600 sq ft. Zone 2, in the north side, handles 10700 sq ft. Zone 3, the east arm, handles 6000 sq ft. A separate mechanical Zone also exists to accommodate the auditorium independently. The splitting of our building into 4 zones is mechanically easier to handle, and also accommodates the architecture efficiently. By not condensing mechanical zones, we minimize the interlacing of ductwork and therefore its presence. With 4 different mechanical zones, the maintenance also becomes less overwhelming.

Mechanical Systems Choice + Rationale
 As a source of cooling and heating we are using vertical ground closed looped geothermal heat pumps. With these, energy is derived form the earth's interior.Heat pums are made up of an outdoor condenser and an indoor evaporator. A refrigerant is in charge of carrying the heat from one area to the other. BEcause we have limited space, we are digging vertically as opposed to having a horizontal ground closed looped system. The well asre dug about 15 feet apart(on center) and go as far down as 200 feet. When wanting to cool the building, the condenser is outside and the evaporator inside. When wanting to heat the building, this works in reverse. Six feet below ground, in Bryan Texas, the temperature is about 35 degrees F.Studies show that approximately 70 percent of the energy used in a geothermal heat pump system is renewable energy from the ground. Geothermal heat pumps one of the most efficient, comfortable, and quiet heating and cooling technologies .

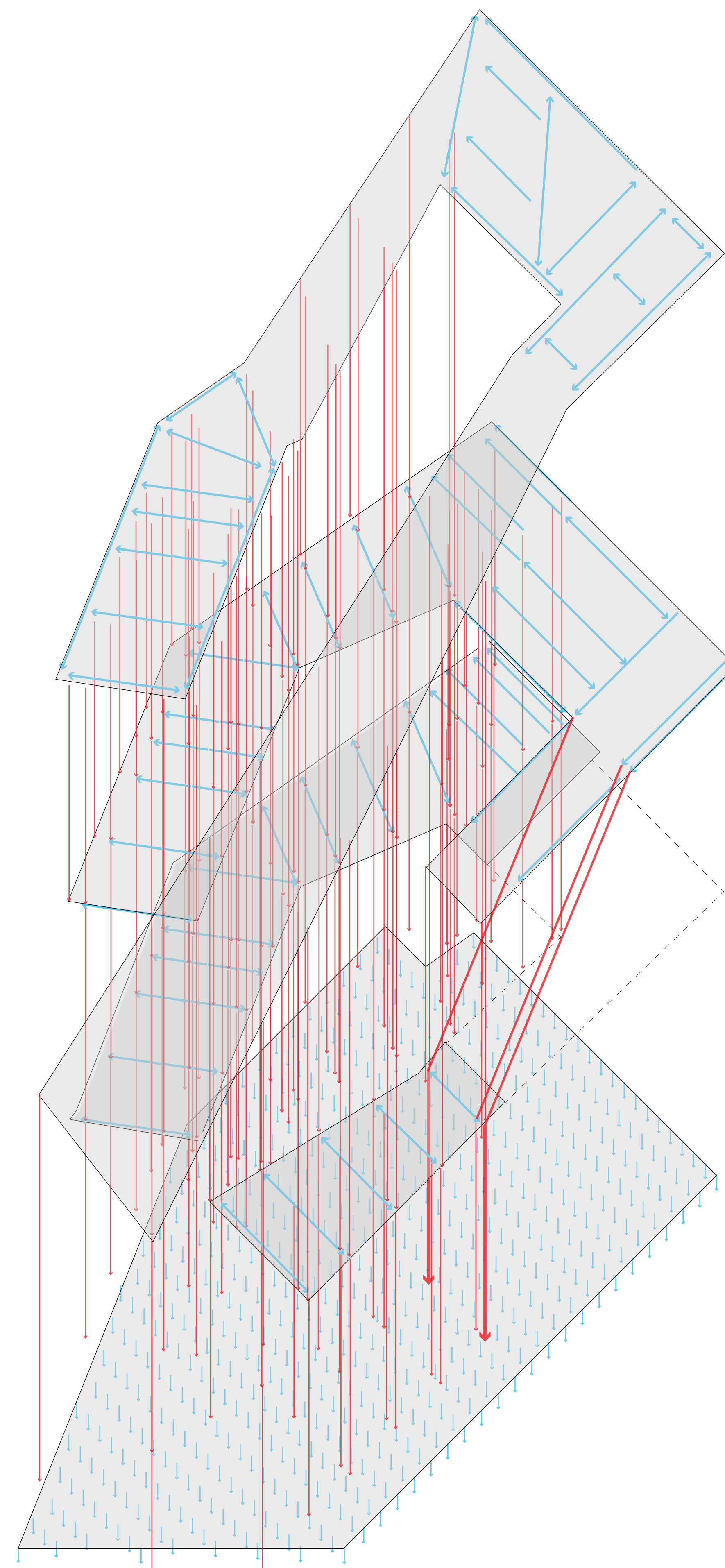


MECHANICAL DIAGRAM

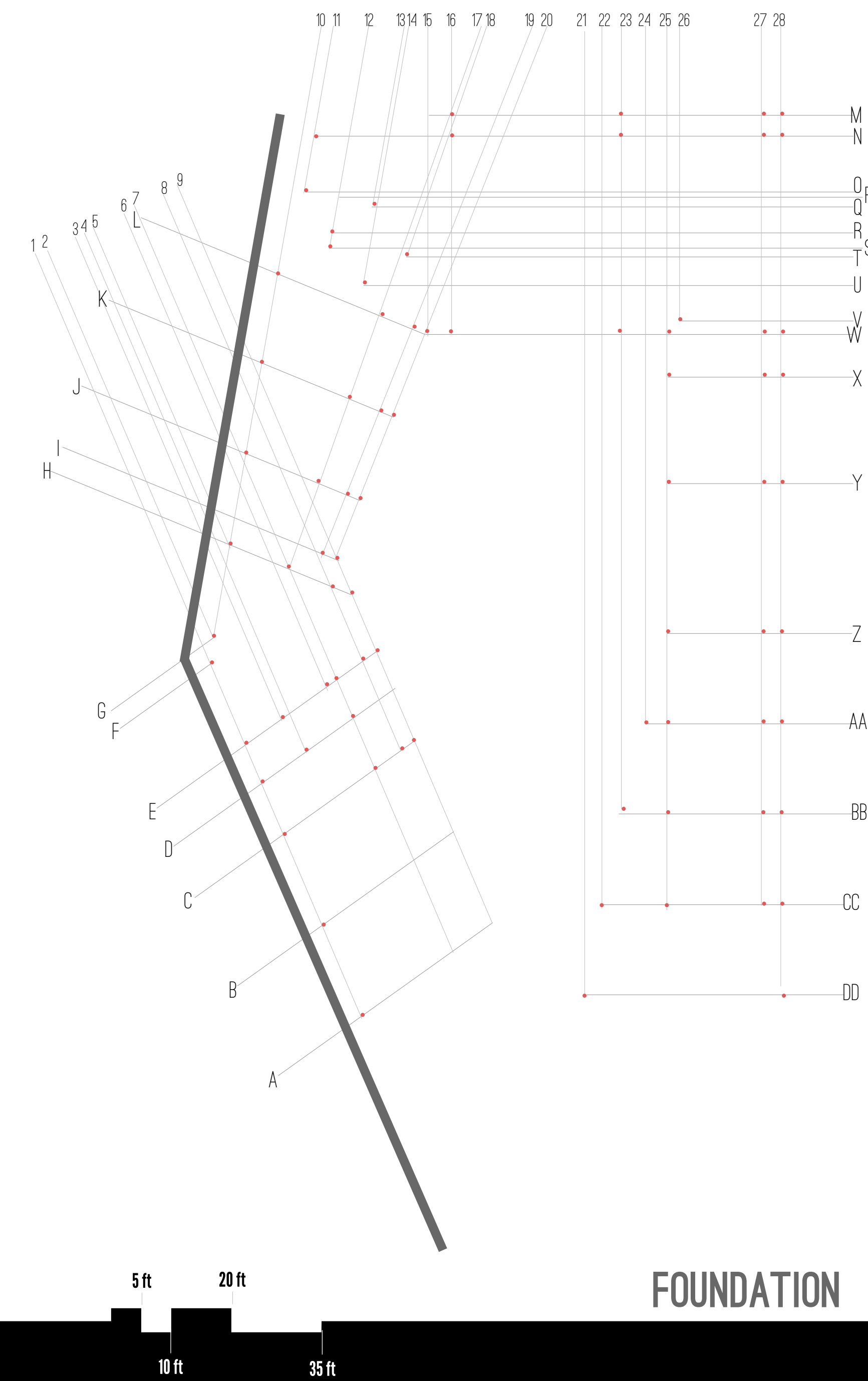


EGRESS DIAGRAM

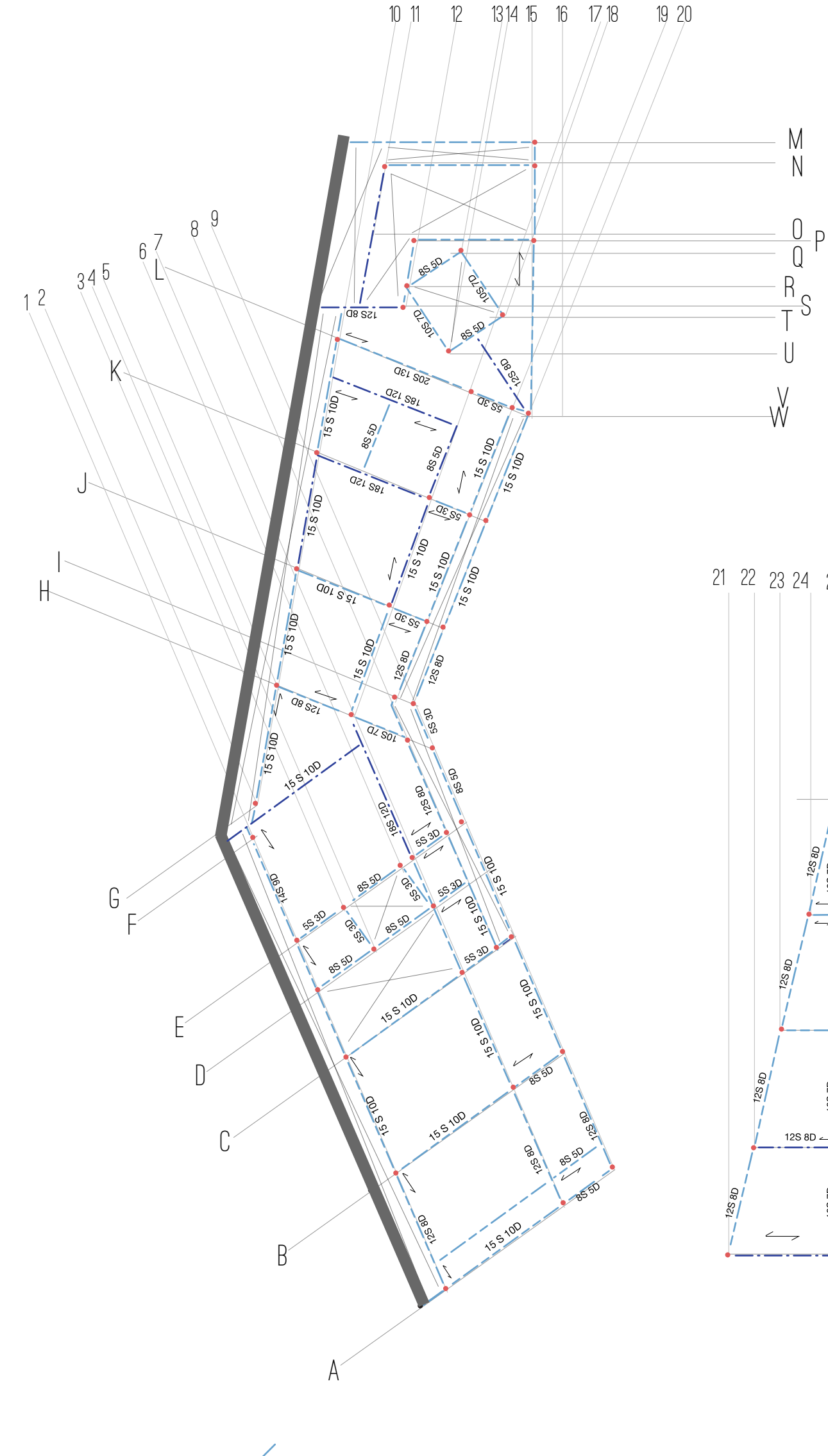
Structural Choice and Rationale
 Our building is made up of steel framing and minimal amount of concrete. The reason steel was chosen was due to its lightweight appearance. Instead of having few, big steel sections that call attention, we opted for designing with more yet thinner sections that can be hidden within. When used in small sections, like in our cybernarium, it eludes a feeling of lightness. Our building does not call for long heavy sections therefore the steel elements will not overshadow the design but with the small sections being used disappear into it. One of the biggest features in our design is a 12 foot cantilever that acts as the grand entrance and welcomes you into the building. Structurally this was our biggest challenge and steel was the most reasonable material for the job. It is able to distribute stresses when unorthodox holes are “cut” out of the structure.



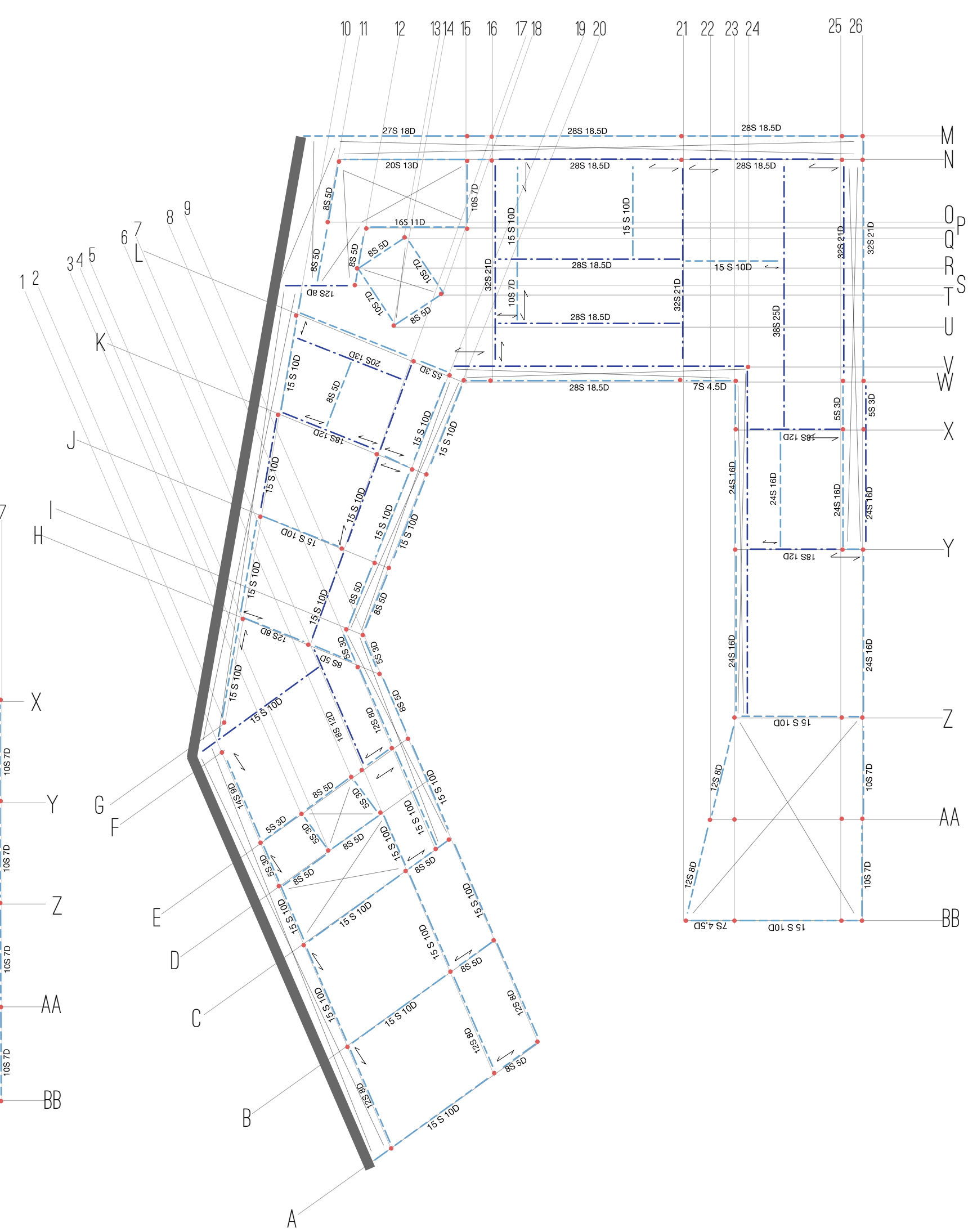
LOAD TRACING DIAGRAM



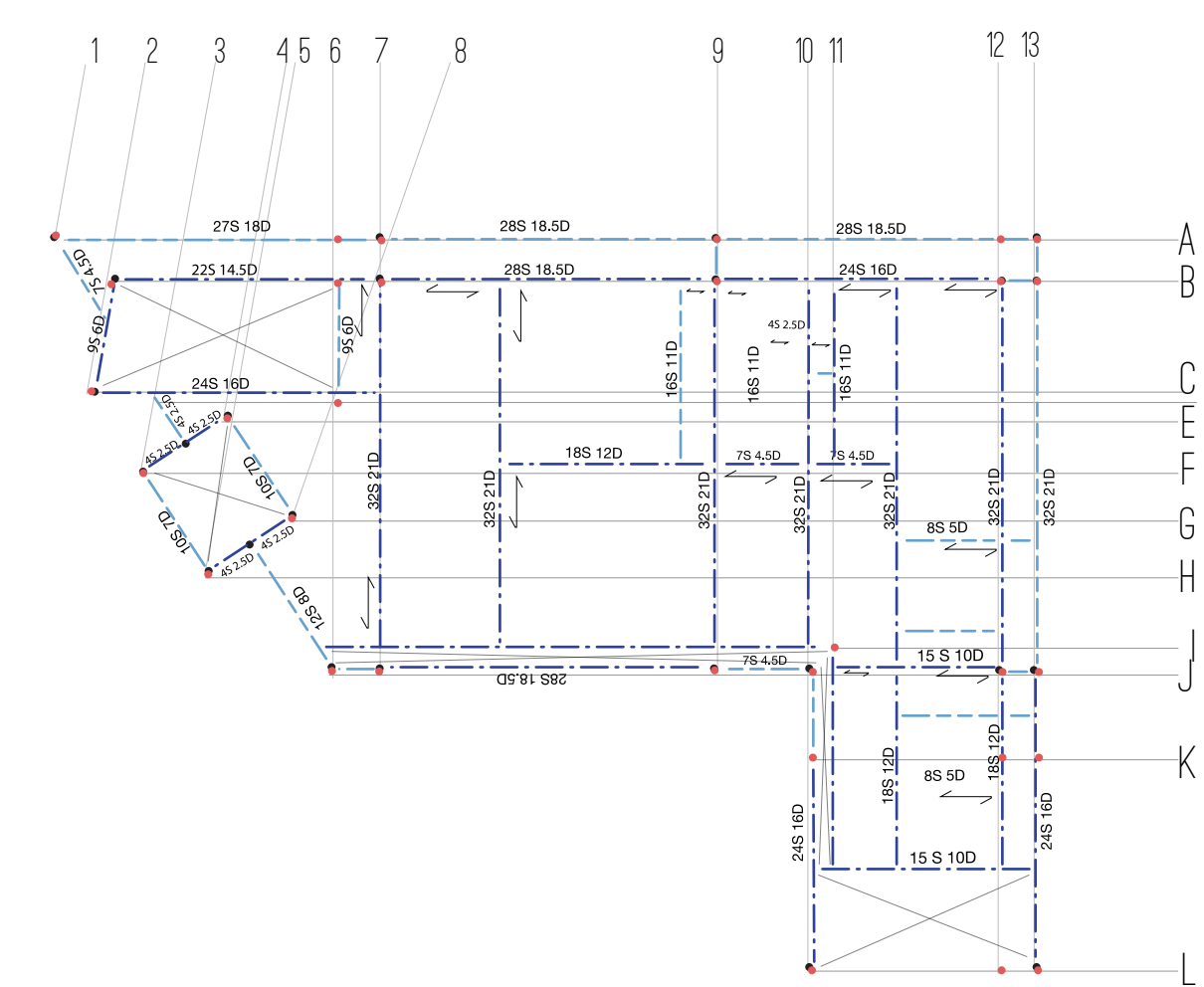
FOUNDATION



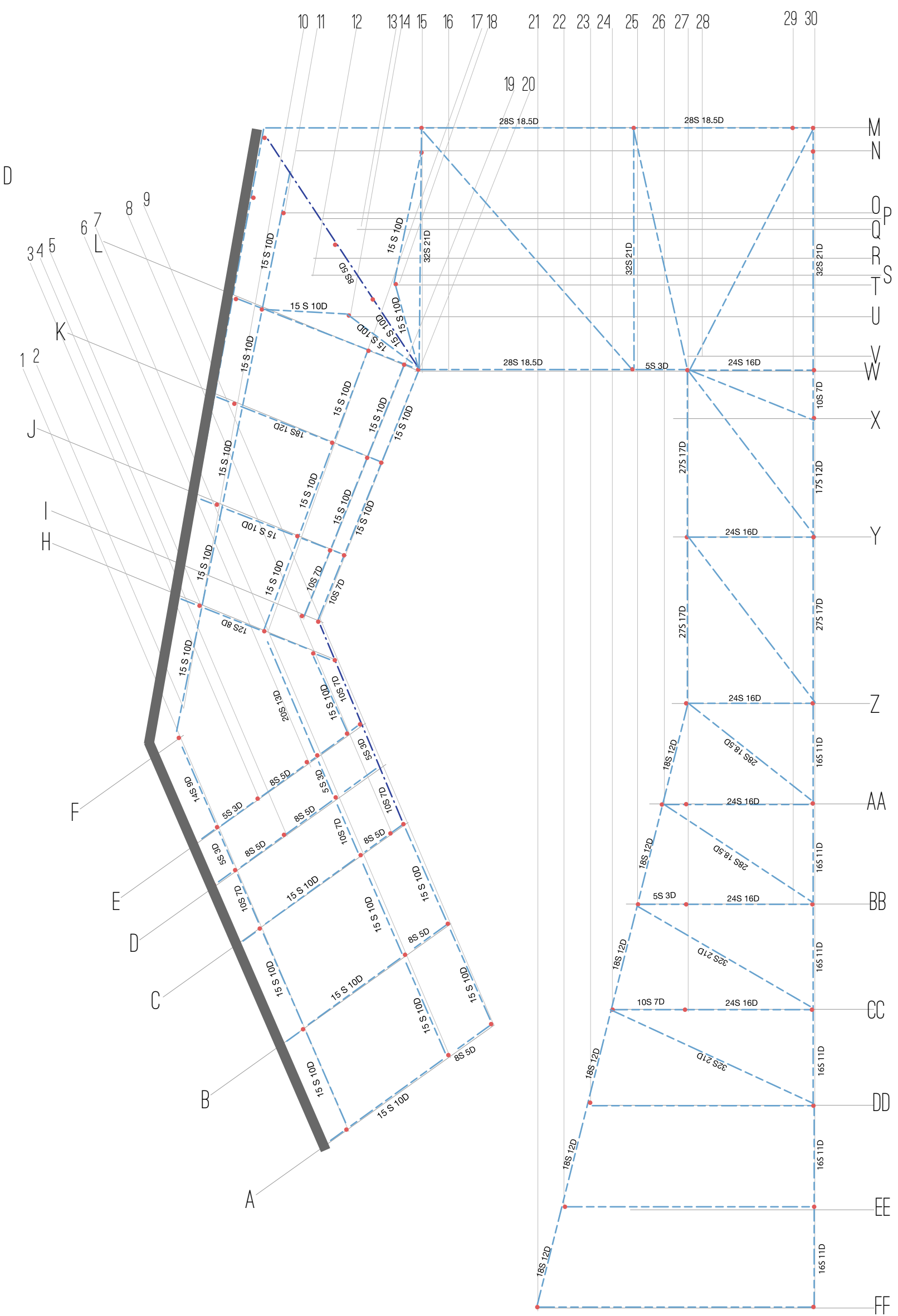
GROUND FLOOR



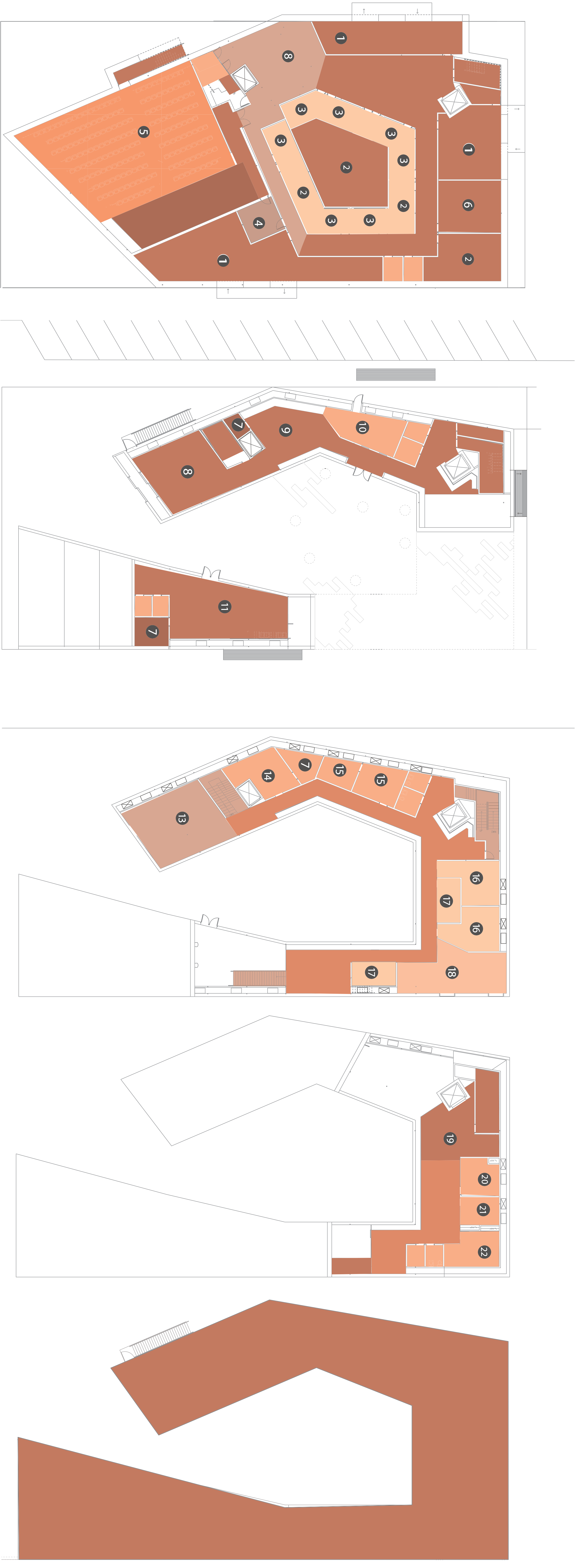
SECOND FLOOR



THIRD FLOOR



ROOF



BASEMENT

GROUND LEVEL

SECOND LEVEL

THIRD LEVEL

ROOF

5 ft 20 ft 33 ft 10 ft

40 PSF

50 PSF

60 PSF

80 PSF

100 PSF

150 PSF

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