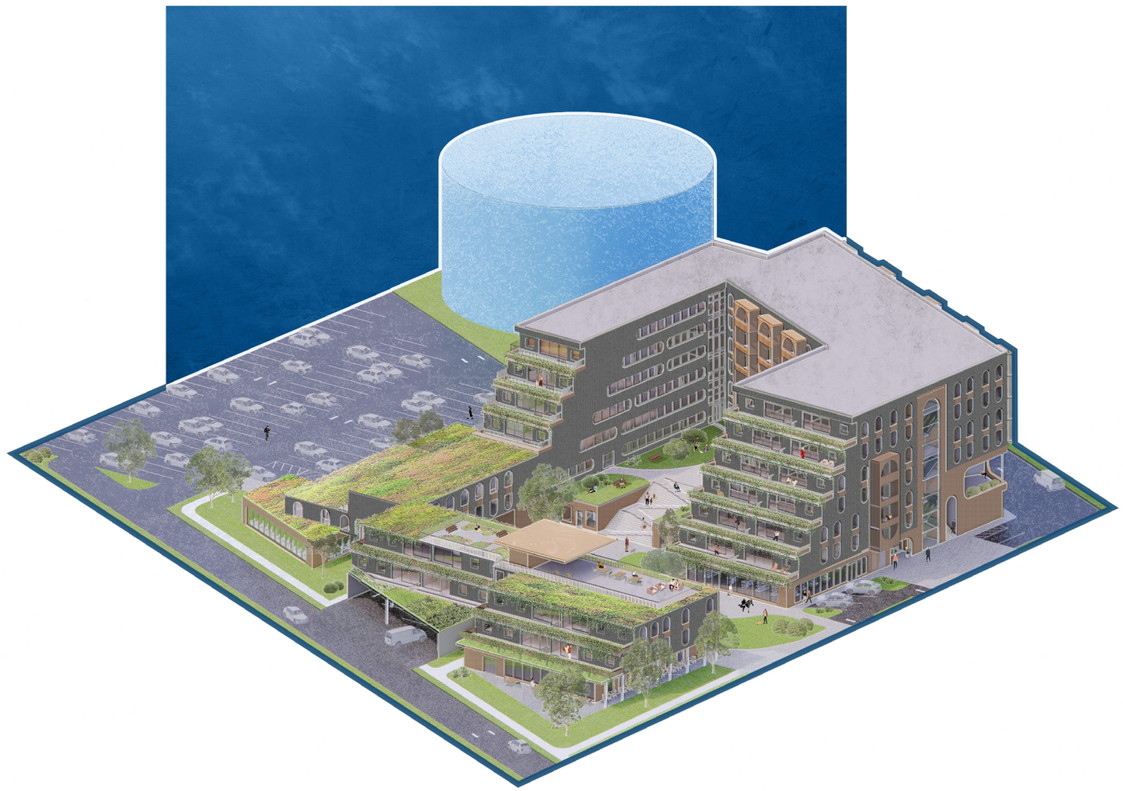


TERRACOMM

Project Location: 2000 S. Industrial Hwy
Ann Arbor, MI, 48106

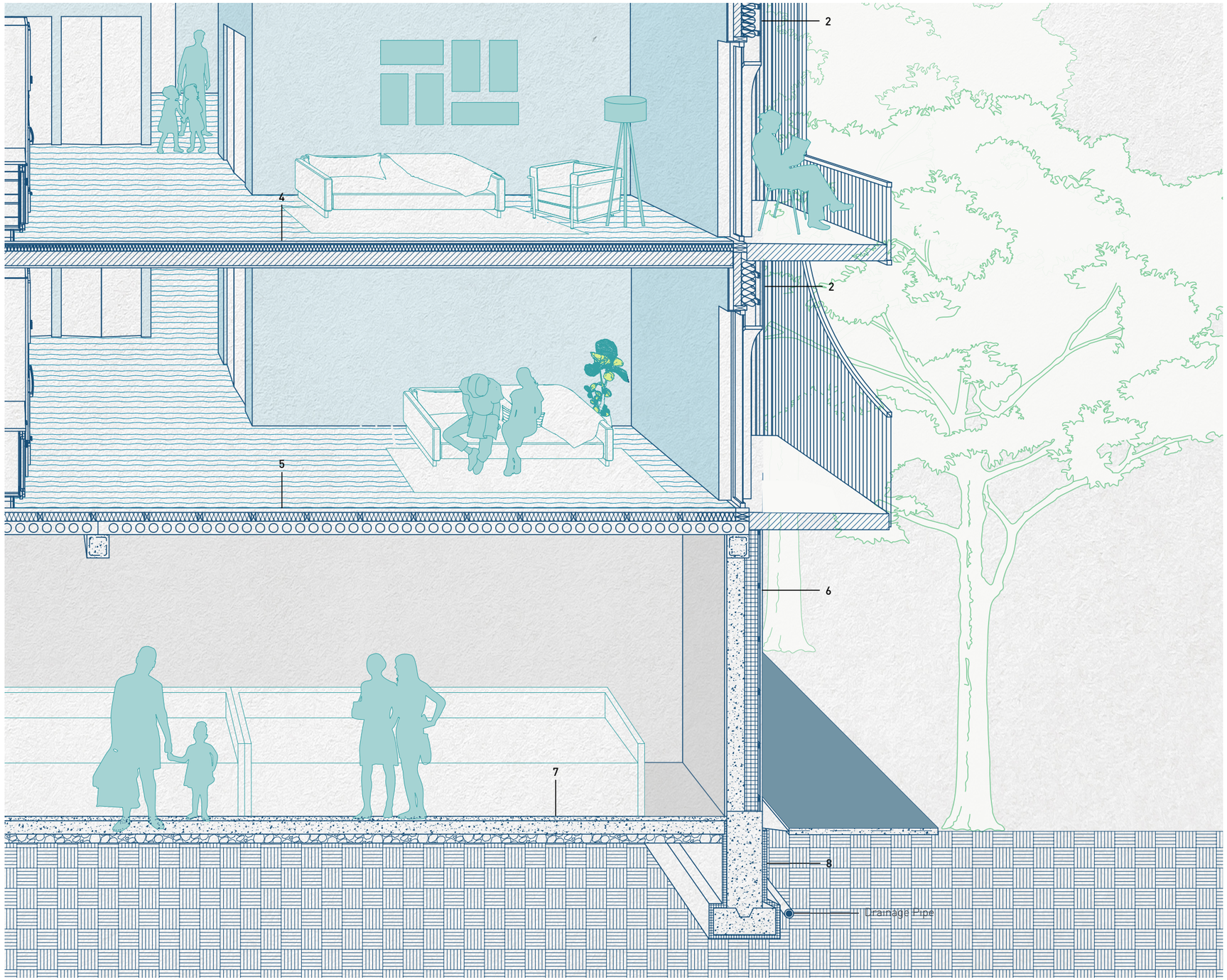
Project Team Members:

Karel Venegas-Cabrera
Xin Li
Yikai Su

Systems Studio Section:

Ellie Abrons
Meredith Miller

Taubman College of Architecture and Urban Planning
University of Michigan
Arch 672 Systems Studio Fall 2022



CONTENTS

TERRACOMM

Karel Venegas, Xin Li, & Yikai Su

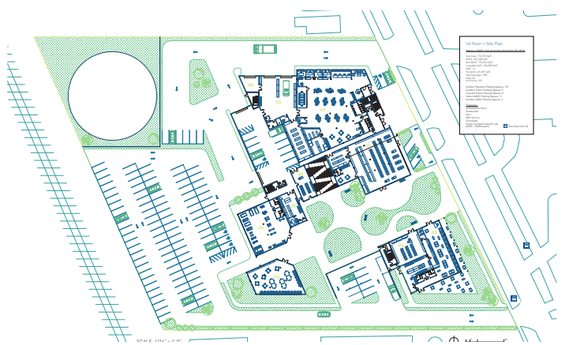
Abrons/Miller

PROJECT NARRATIVE

Located at 2000 S Industrial Hwy, our site is aimed to provide affordable housing and services for families and individuals looking to live with other people. This site is currently home to the Ann Arbor Housing Commission main office, parking for maintenance vehicles, maintenance department, gas pumps, and charging stations for City EVs.

Our group decided to develop a mixed-use building to bring the community together to one location and draw connections between residence, neighborhood, and environment.

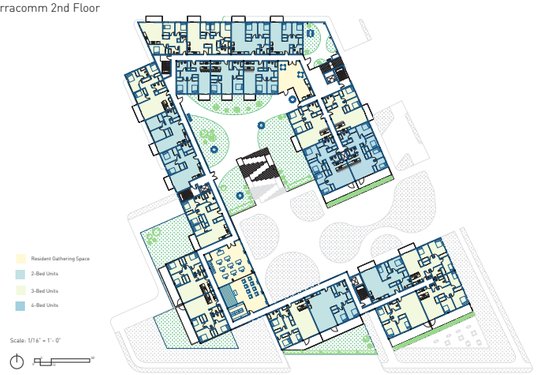
Keeping the AAHC and all maintenance facilities on the north side allows foreasier access for the people who work there. As well as maintaining easy access to the water tower on site. There is a separate road and parking spaces for all vehicles related to the AAHC and its visitors. There is about one parking spot per unit plus more for visitors and parking for people accessing our commercial programs. There is also bike parking on site for residents and visitors.



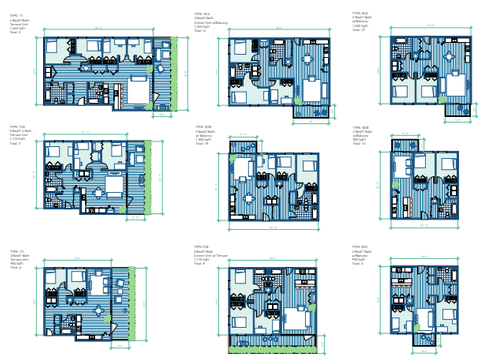
We aim to develop accessible welcoming spaces for our residents. The Building has a total of 7 stories, with the ground floor being commercial and office space. Floors 2-7 are all residential. Our ground floor programming includes a Convenience store, a food bank, mail service, a restaurant, a gym, and a study lounge.

We hope to connect residents to the natural environment by providing different scales of outdoor space within the building. There is a ground level courtyard for residents and visitors to interact with. There is a second floor courtyard mainly for residents to use and access their units.

Terracomm 2nd Floor



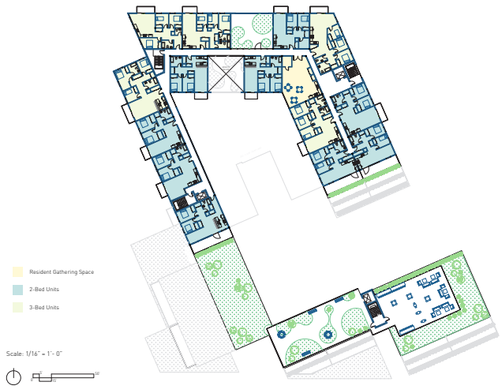
All south facing units have a terrace which provides a bigger more private outdoor space within your unit/home. Every unit aside from the "Terrace Units" have a balcony for immediate and private access to the outdoors.



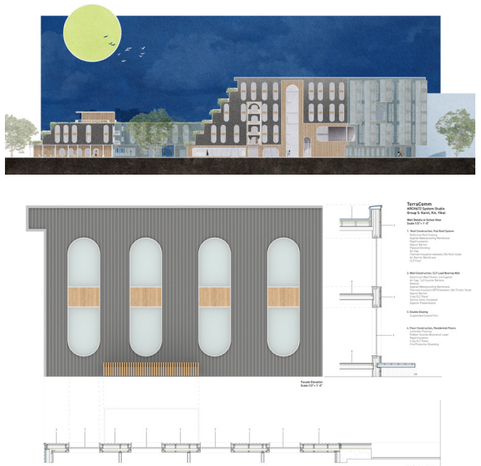
Total # of Units in Building: 101

There are 9 unit types. with bedroom ranging from 2-4 bedrooms. Sprinkled throughout the building there are 2 story voids that act as covered outdoor spaces. These voids are to be used by residents and their guests. The voids can be used as an open air lounge, spaces to host private parties/events, as well as gardening.

Terracomm 4th Floor



Our windows are all rectangular double-hung windows. Our facade is made of corrugated metal panels (grey). Which create the pill shape of the windows seent hroughout the entirety of the building. Our balconys are wrapped with Wood slats to create contrast on the facade as well as privacy for residents.



Project Statistics

Total gross floor area	227,648 sf
Lot area	174,733 sf 4 acres
FAR	1.3
Number of floors	7
Building height	75'-0"
Dwelling unit count and bedroom count	101 Units 2-4 Bedrooms
Dwelling units/acre	20
Total area of commercial space	47,269 sf
Total net leasable area	186,098 sf
Efficiency rate in %	68%
Unit Access typology	
Building Typology	Single and Double loaded corridor
Number of on-site parking spaces	130
Parking spaces per unit	1.0

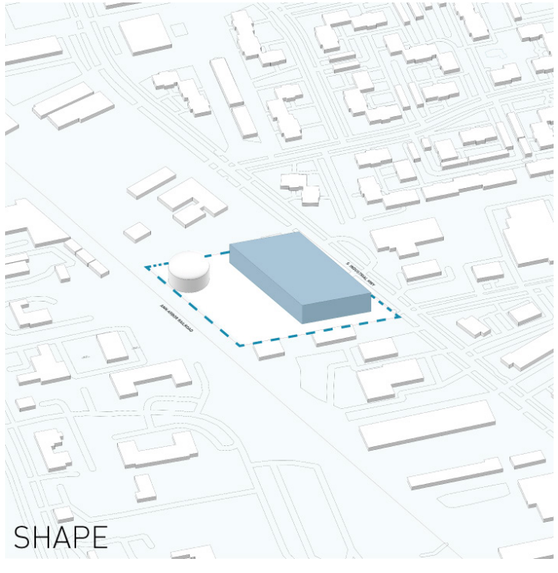
GREEN SPACE

ANN ARBOR HOUSING COMMISSION

COMMERCIAL SPACE

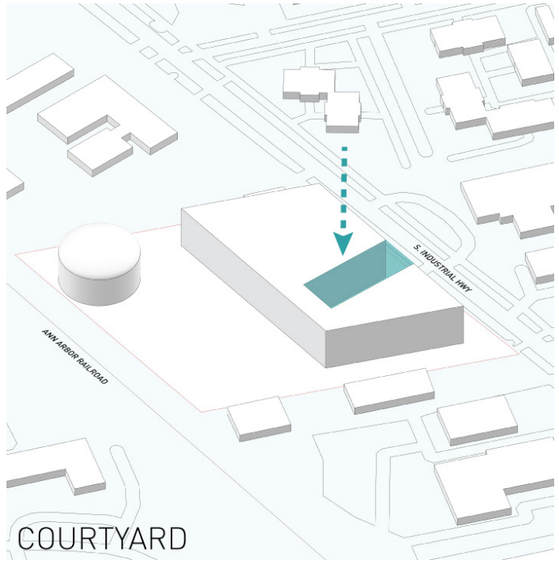
AFFORDABLE HOUSING FOR FAMILIES AND INDIVIDUALS

We aim to develop accessible welcoming spaces for all our residents.



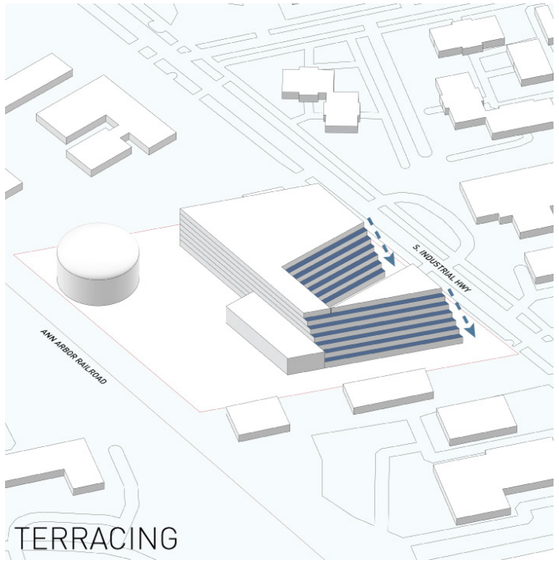
SHAPE

Initially our idea was to keep the same shape of parallelogram. This for ease of site organization and to challenge the floor plans



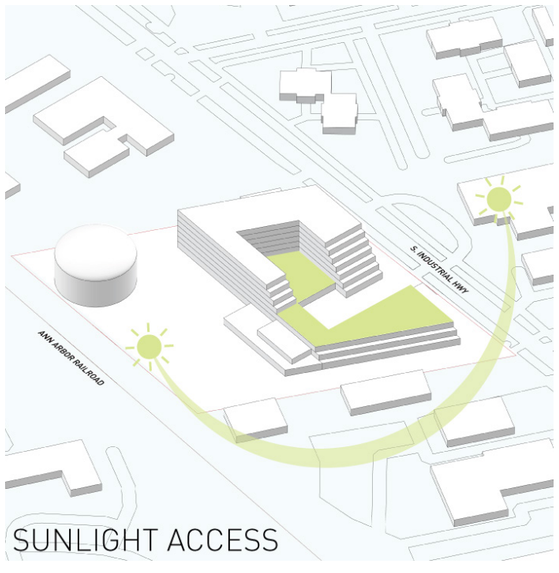
COURTYARD

Because our demographic is mainly families, a courtyard for kids to play or for spending time outdoors would be necessary



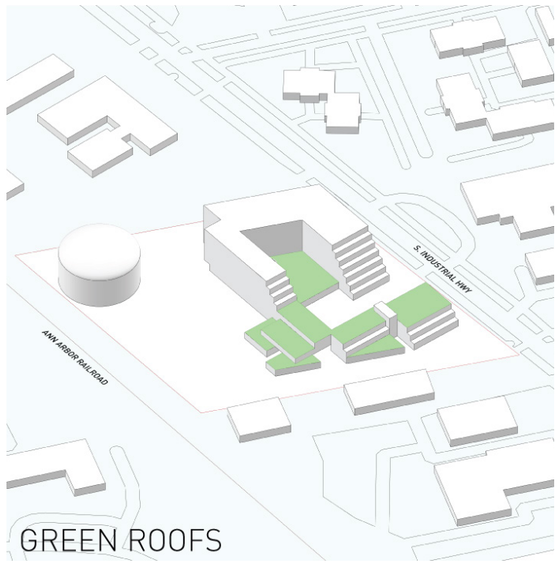
TERRACING

In addition to keeping the site shape we also stuck to south facing terraces to provide residents more views, sun-light, and private outdoor space in their unit



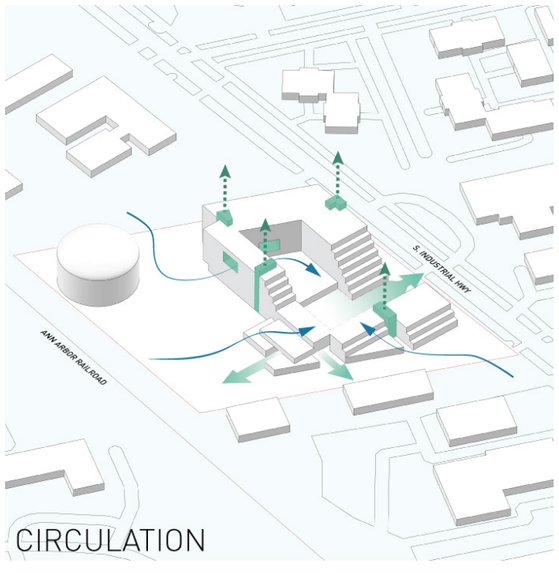
SUNLIGHT ACCESS

For more access to sunlight there is now a raised courtyard and less floors on the south side for more sunlight access to both courtyards



GREEN ROOFS

Green roofs have been added to the south side for more green space as well as a water collection system



CIRCULATION

There are cores of vertical circulation. Voids in our building will provide cross-ventilation, sunlight, as well as a playful facade and add to our different scales of green space

1st Floor + Site Plan

Address: 2000 S. Industrial Hwy, Ann Arbor, MI, 48104

Site Area: 174,733 SqFt
BGSF: 227,648 SqFt
Net BGSF: 195,074 SqFt
Leasable SqFt: 186,098 SqFt
FAR: 1.3
Footprint: 47,269 SqFt
Site Coverage: 78%
DUA: 20
# of Units: 101

Outdoor Resident Parking Spaces: 101
Outdoor Public Parking Spaces: 5
Covered Public Parking Spaces: 8
Indoor AAHC Parking Spaces: 11
Outdoor AAHC Parking Spaces: 6

Programs:
Convenience Store
Restaurant
Gym
Mail Service
Food bank
Study Lounge/Computer Lab
AAHC + Maintenance

Bus Stop (6 & 24)

SCALE: 1/16" = 1' 0"

0 5' 15' 50'

Terracomm 2nd Floor

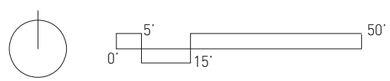
Resident Gathering Space

2-Bed Units

3-Bed Units

4-Bed Units

Scale: 1/16" = 1'- 0"



Terracomm 4th Floor

Resident Gathering Space

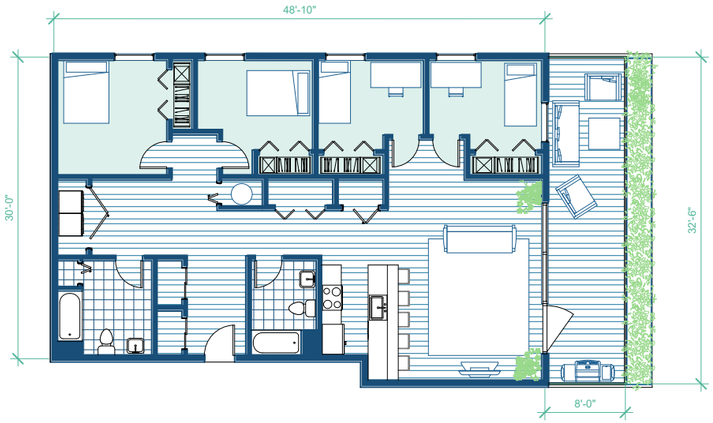
2-Bed Units

3-Bed Units

Scale: 1/16" = 1'- 0"

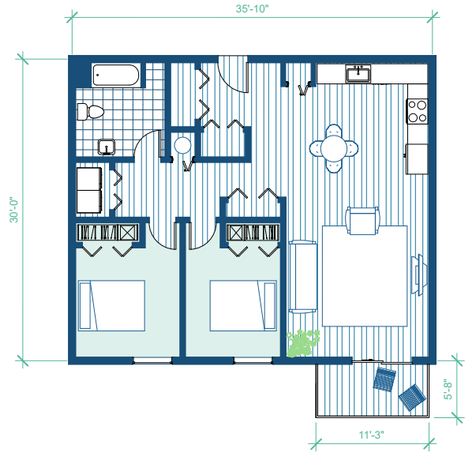
0' 5' 15' 50'

TYPE: T1
4 Bed/2 Bath
Terrace Unit
1,440 SqFt
Total: 5

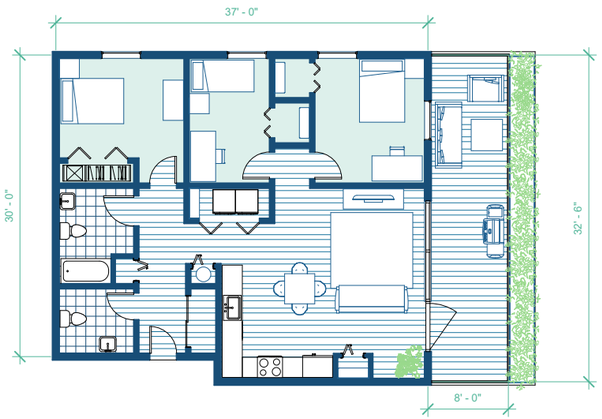


TYPE: B1A
3 Bed/2 Bath
Corner Unit w/Balcony
1,350 SqFt
Total 14

TYPE: B2A
2 Bed/1 Bath
w/Balcony
1,050 SqFt
Total: 27

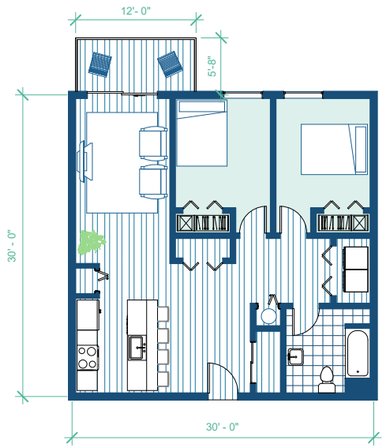


TYPE: T2A
3 Bed/1.5 Bath
Terrace Unit
1,110 SqFt
Total: 3



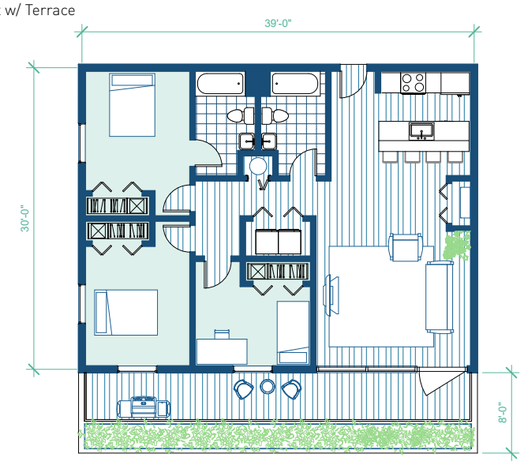
TYPE: B1B
3 Bed/2 Bath
w/ Balcony
1,200 SqFt
Total: 18

TYPE: B2B
2 Bed/1 Bath
w/Balcony
900 SqFt
Total: 14



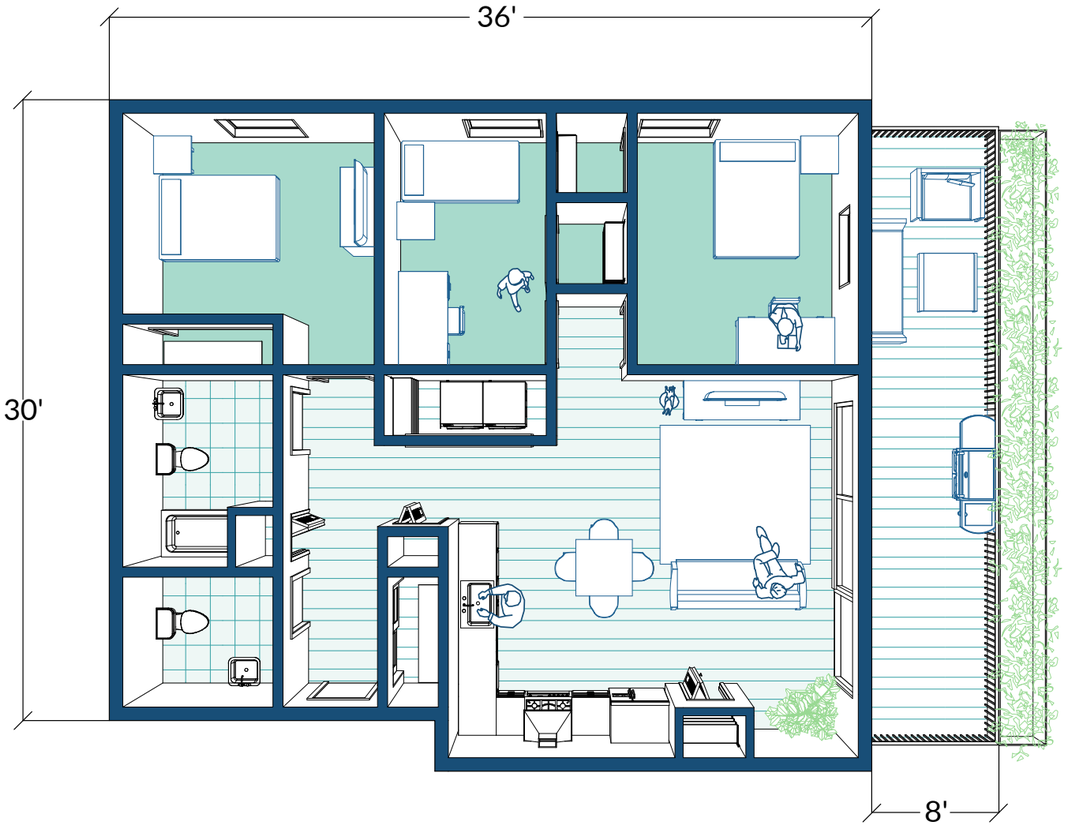
TYPE: T3
2 Bed/1 Bath
Terrace Unit
900 SqFt
Total: 6

TYPE:T2B
3 Bed/2 Bath
Corner Unit w/ Terrace
1,170 SqFt
Total: 8

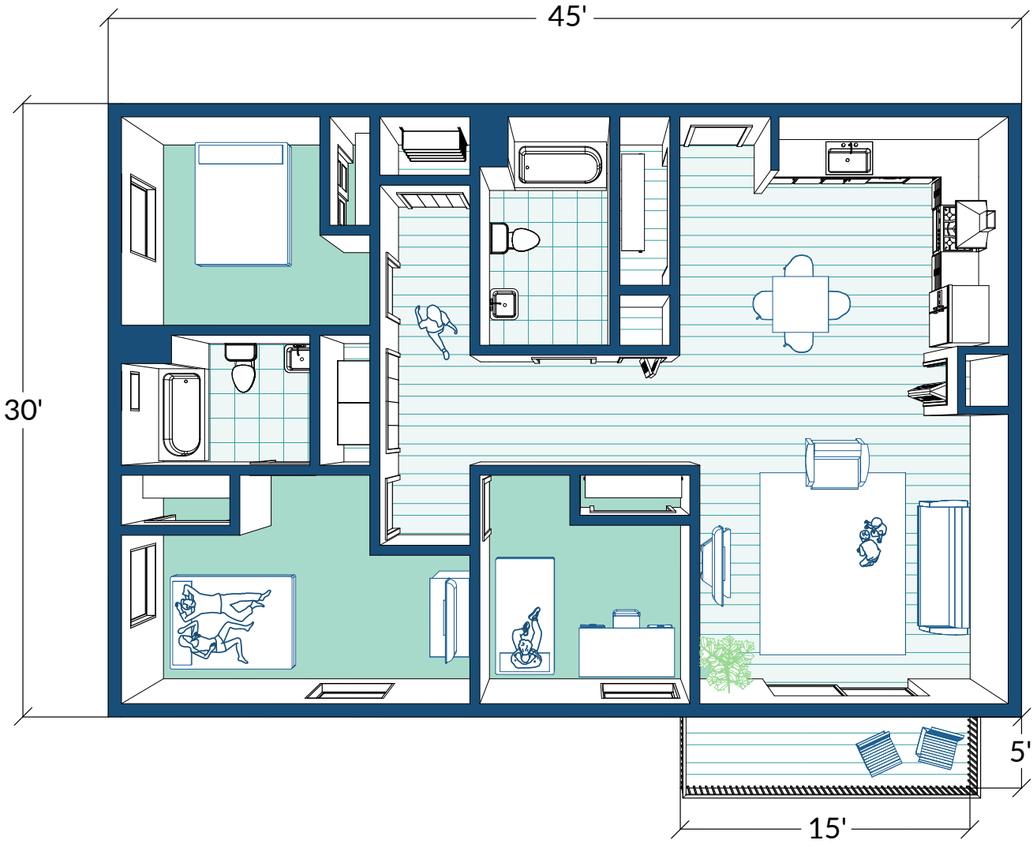


TYPE: B2C
2 Bed/1 Bath
w/Balcony
900 SqFt
Total: 6

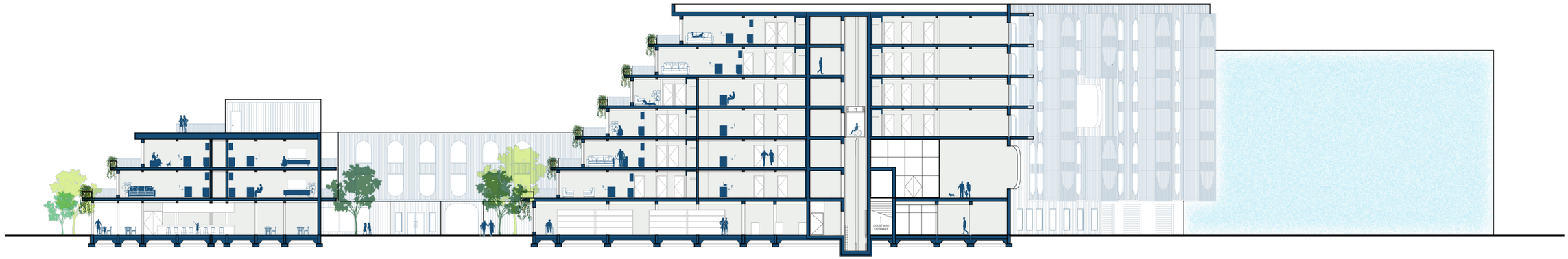
Total # of Units in Building: 101



TYPE: T2A 3 Bed/1.5 Bath - “Terrace Unit” - 1,080 SqFt - Total: 3



TYPE: B1A - 3 Bed/2 Bath - Corner Unit w/ Balcony - 1,350 SqFt - Total 14

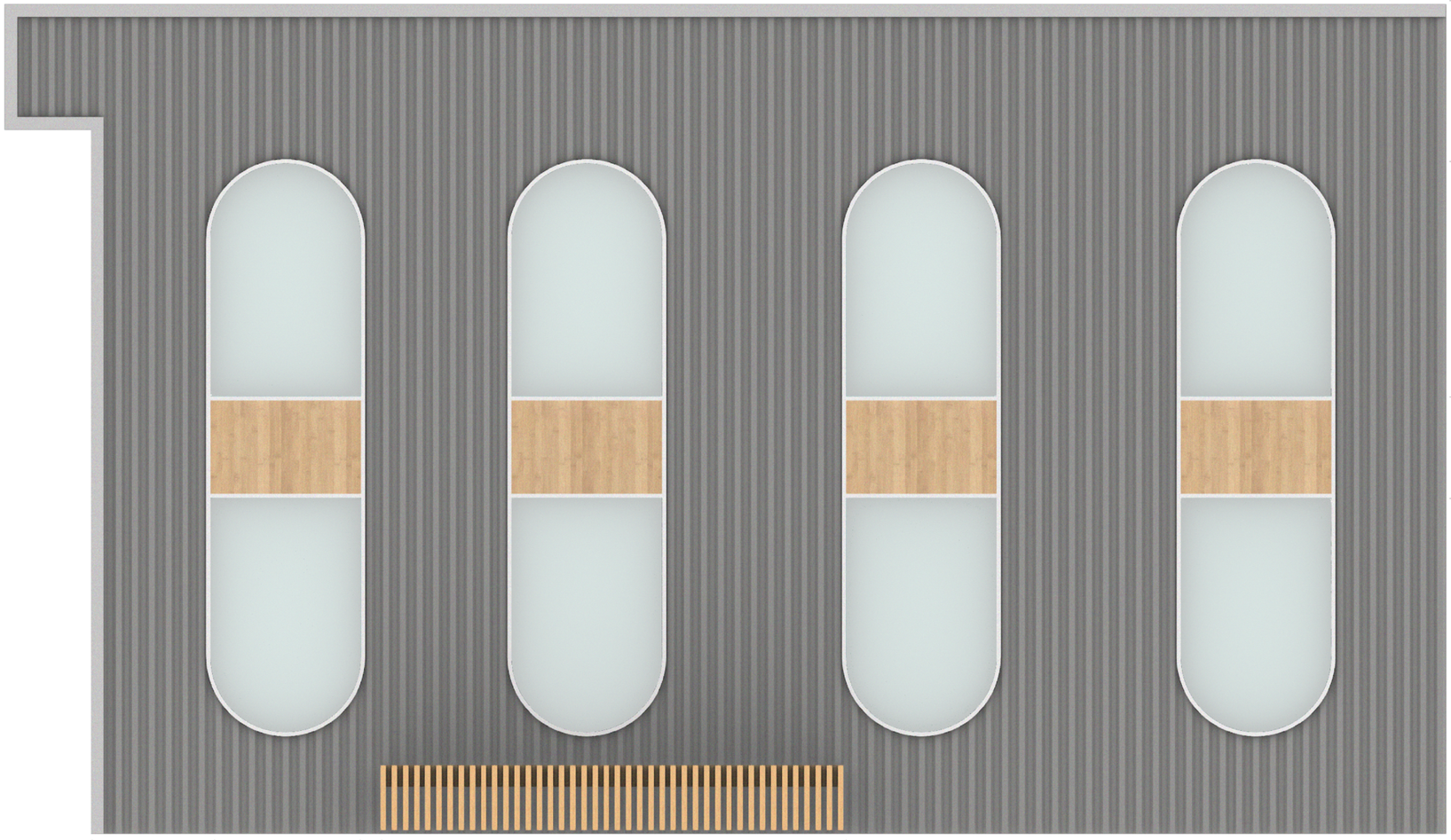


NORTH-SOUTH BUILDING SECTION

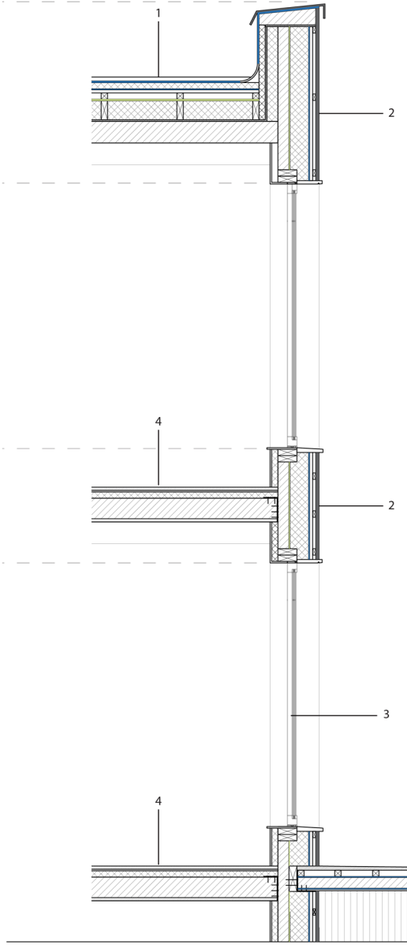
EAST ELEVATION

TerraComm

ARCH672 System Studio
Group 5: Karel, Xin, Yikai



Facade Elevation
Scale:1/2"= 1'-0"



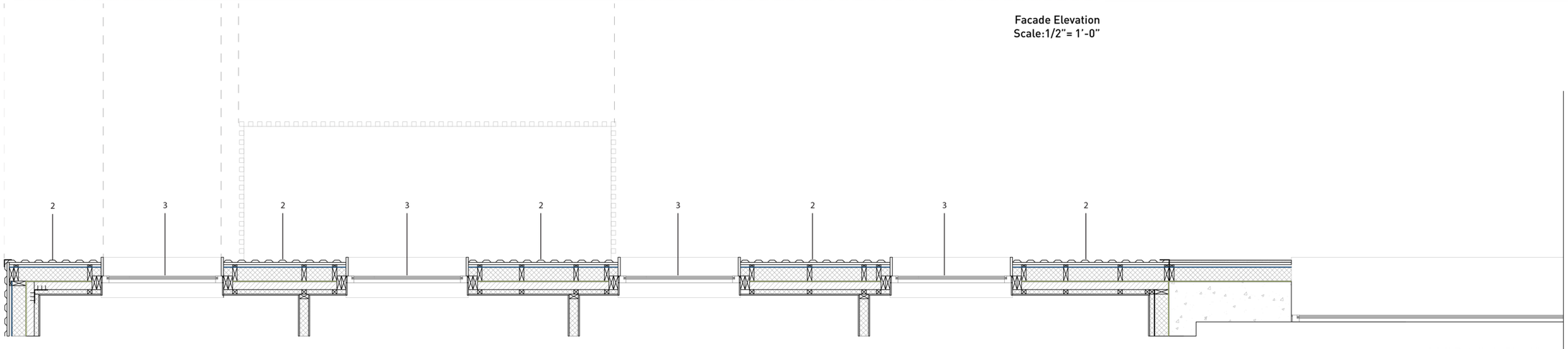
Wall Details in Sction View
Scale:1/2"= 1'-0"

1. Roof Construction, Flat Roof System
- Reflective Roof Coating
- Asphalt Waterproofing Membrane
- Rigid Insulation
- Vapour Barrier
- Plywood Decking
- Air Gap
- Thermal Insulation between 2X6 Roof Joists
- Air Barrier Membrane
- CLT Floor

2. Wall Construction, CLT Load Bearing Wall
- Aluminium Wall Panels, Corrugated
- Air Gap, 1x2 Counter Battens
- Battens
- Asphalt Waterproofing Membrane
- Thermal Insulation (EPS) between 2X6 Timber Studs
- Vapour Barrier
- 3-ply CLT Panel
- Service Zone, Insulated
- Gypsum Plasterboard

3. Double Glazing
- Suspended Coated Film

4. Floor Construction, Residential Floors
- Laminate Flooring
- Rubber Sounds Absorption Layer
- Rigid Insulation
- 5-ply CLT Panel
- Fire Protection Boarding



Wall Details in Plan View
Scale:1/2"= 1'-0"

TerraComm

ARCH672 System Studio
Group 5: Karel, Xin, Yikai

Wall Section Details
Scale:1/2"= 1'-0"

1. **Railing Construction**
   Transparent Aluminium Panels, Corrugated

2. **Planter Box**
   Growing Medium
   Drainage Layer, Water Collection Pipe
   Rigid Insulation
   Waterproofing Membrane
   Concrete Planter Box, with Wooden Cladding

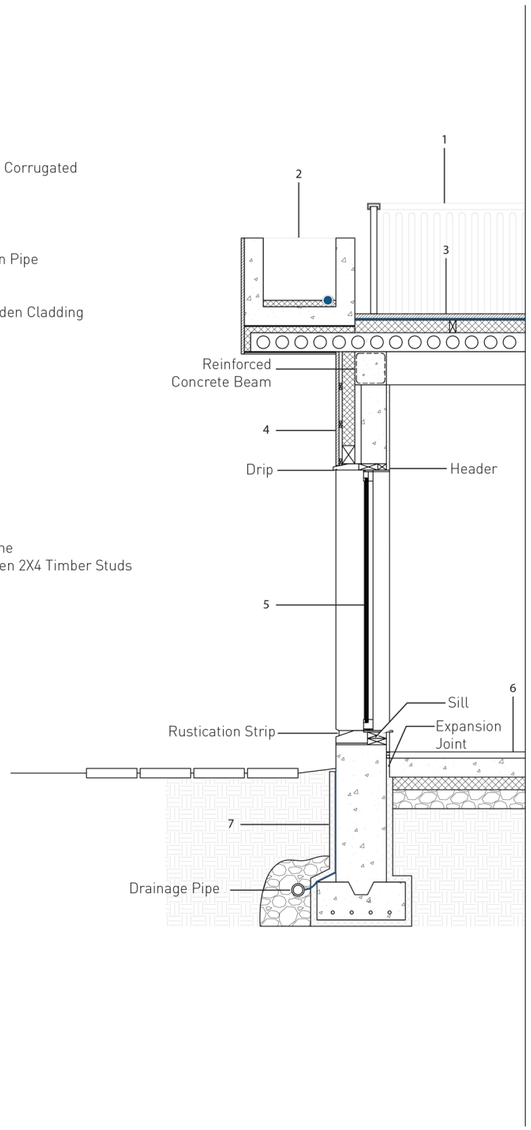
3. **Floor Construction, 2nd Floor**
   Laminate Flooring
   Waterproofing Membrane
   Thermal Insulation
   Hollow-core Concrete Slab

4. **Wall Construction, 1st Floor**
   Wooden Cladding
   Air Gap, 1x2 Counter battens
   Asphalt Waterproofing Membrane
   Thermal Insulation (EPS) between 2X4 Timber Studs
   Vapour Barrier
   Concrete Wall
   Gypsum Plasterboard

5. **Storefront Windows**
   Suspended Coated Film

6. **Ground Floor + Foundation**
   Concrete Floor Finishes
   Reinforced Concrete Slab
   Vapour Barrier
   Rigid Insulation
   Crushed Stone

7. **Foundation, Strip Foundation**
   Rigid Insulation
   Bitumen Paint
   Foundation Footing, 42" Deep



Facade Elevation
Scale:1/2"= 1'-0"