

Portfolio

Benjamin J. Boswick
7815559
Environmental Design 3
Landscape + Urbanism

Table of Contents

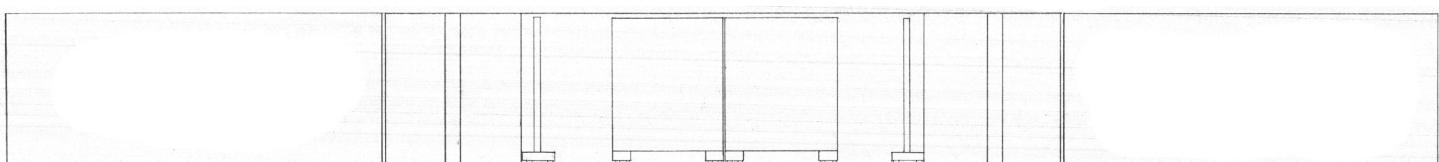
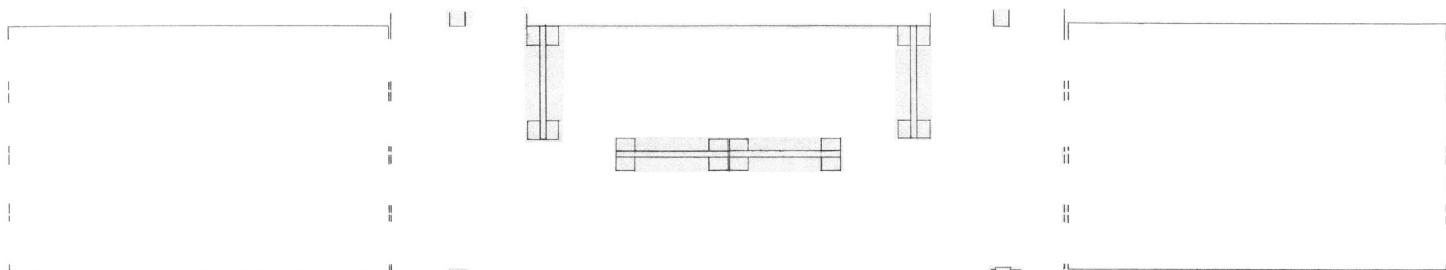
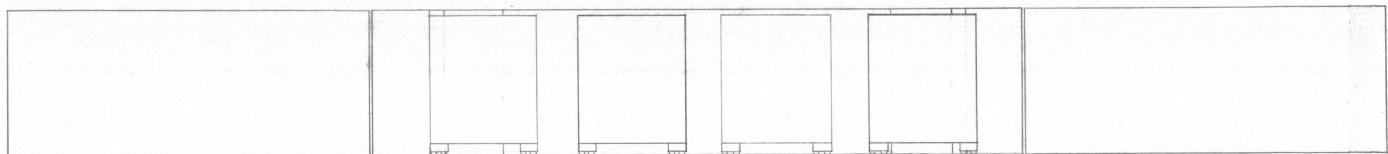
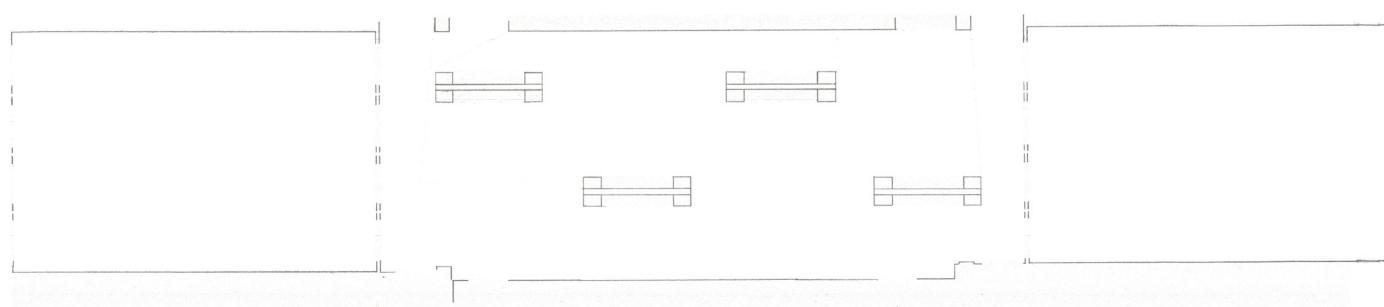
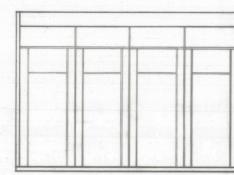
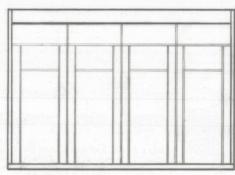
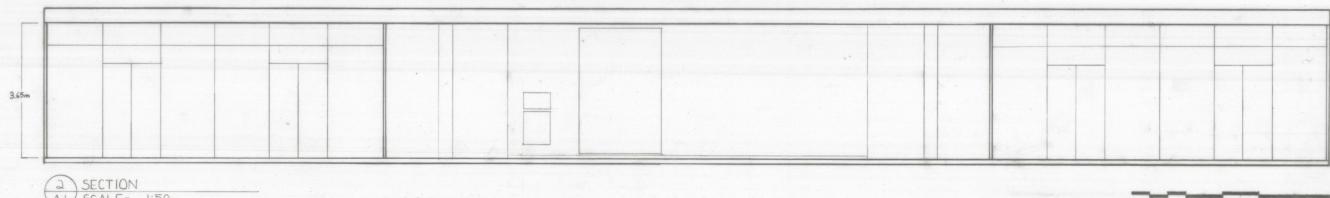
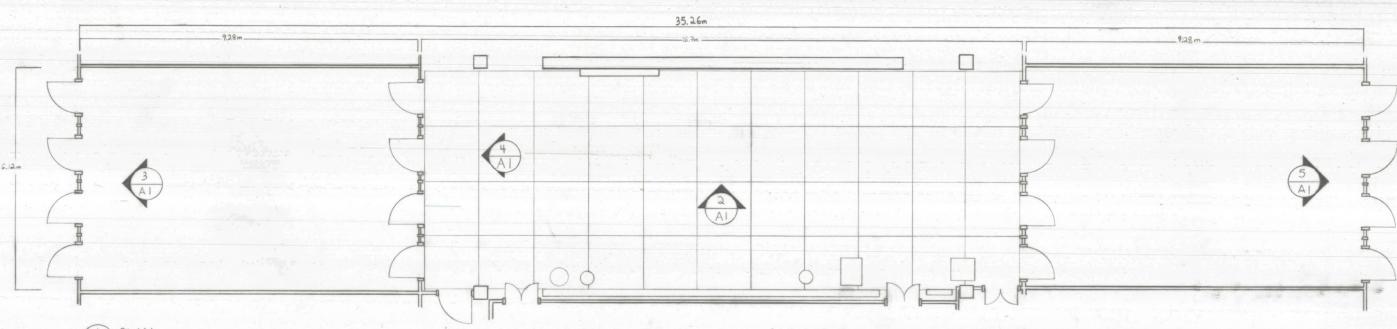
Adapt (4 Weeks)	Page	5
Share (5 Weeks)	Page	11
Street Dwelling (2 Weeks)	Page	17
Operational Metaphor (1 Week)	Page	21
Operational Strategy (2 Weeks)	Page	25
Recovering the Road (2 Weeks)	Page	31
Personal Work	Page	41

Adapt

Winter 2019 | Individual Work

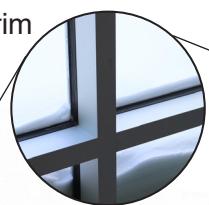
EVDS2900 Studio 2 | Prof. Mark Meagher

This project was restricted to two sites, those being the John Russell Building and Architecture 2 Building. We were required to do an analysis on our building of choice, followed by picking a specific space within either building. For this project I decided on focusing on the concourse in the John Russell Building.





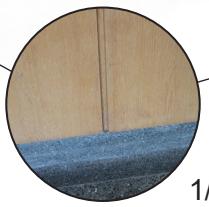
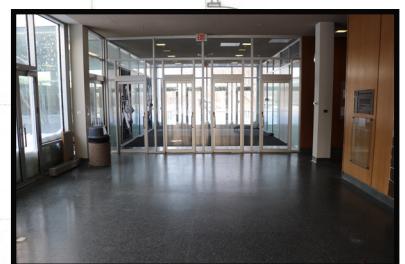
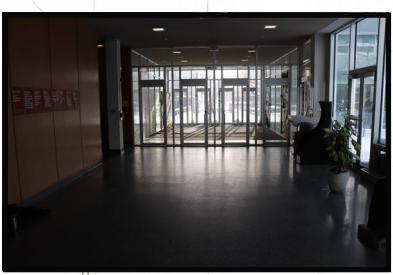
Window/Door Trim



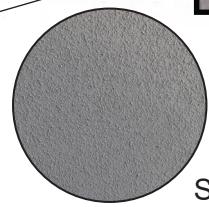
Black Terrazzo



Vestibule Glass



1/2" Fir Ply Panel



Spackle Textured Ceiling



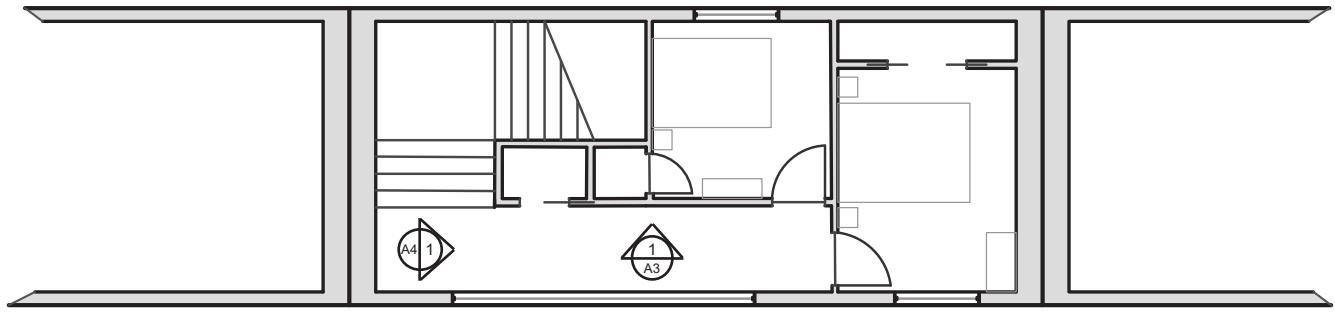


Share

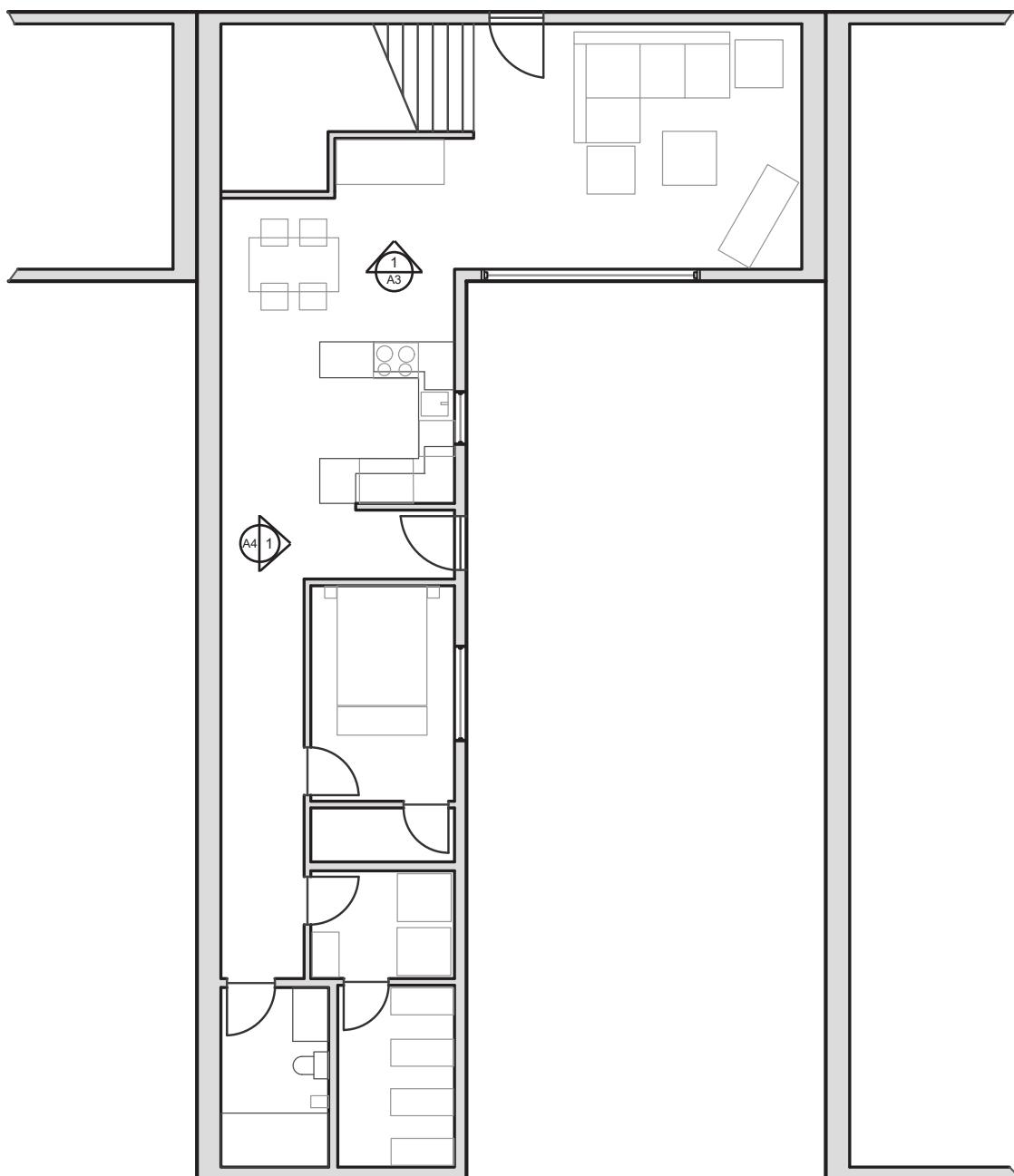
Winter 2019 | Individual Work

EVDS2900 Studio 2 | Prof. Mark Meagher

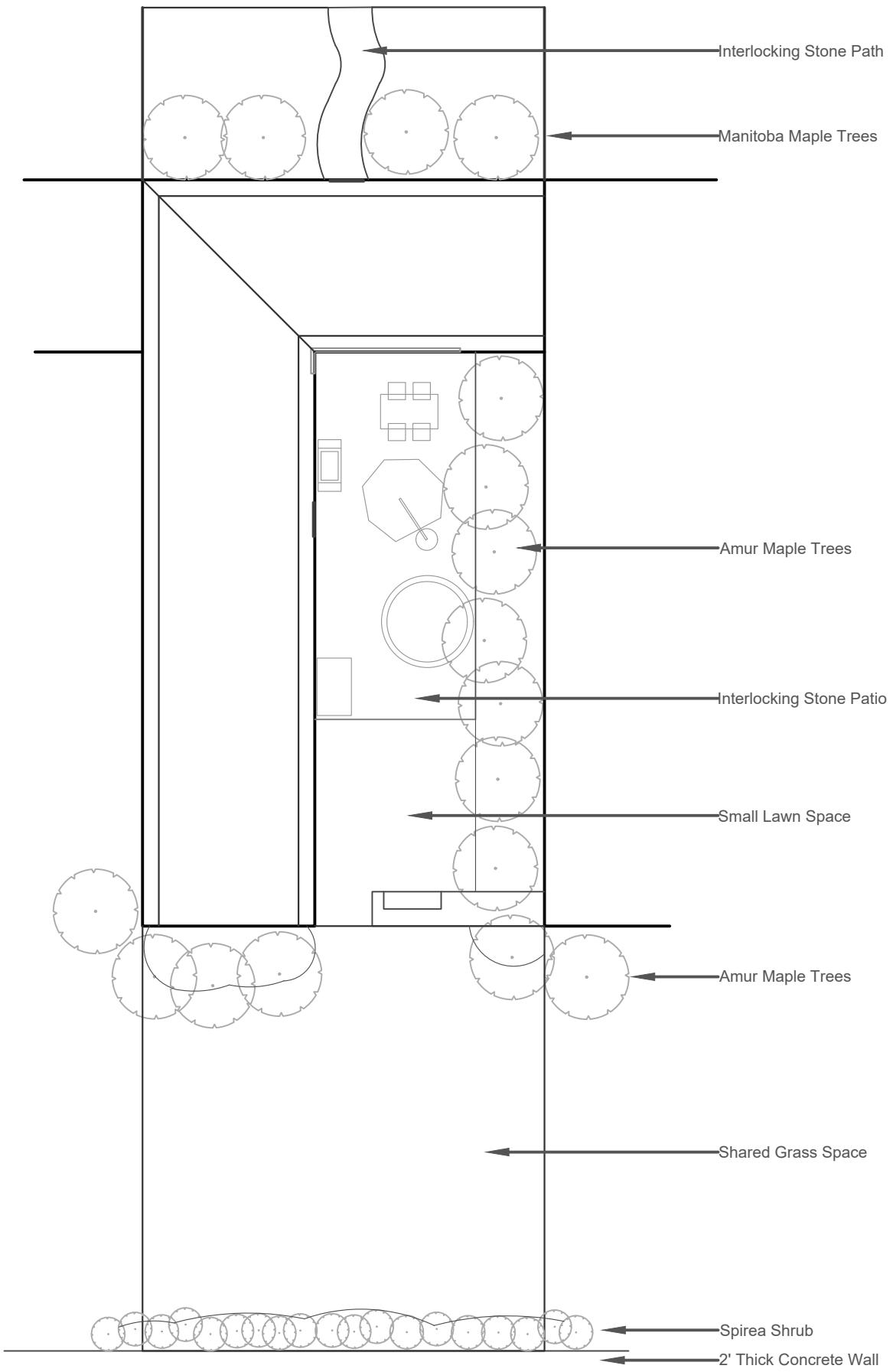
In our studio group, we started out with our character selection based on a movie of our choice. Once we established this, we were assigned a neighbourhood and picked a site within it. Finally, we were required to design a house based on a narrative that involved the characters previously mentioned.



1
A1 Second Story Floor Plan
Scale: $\frac{3}{32}$ " = 1'-0"



2
A1 First Story Floor Plan
Scale: $\frac{3}{32}$ " = 1'-0"



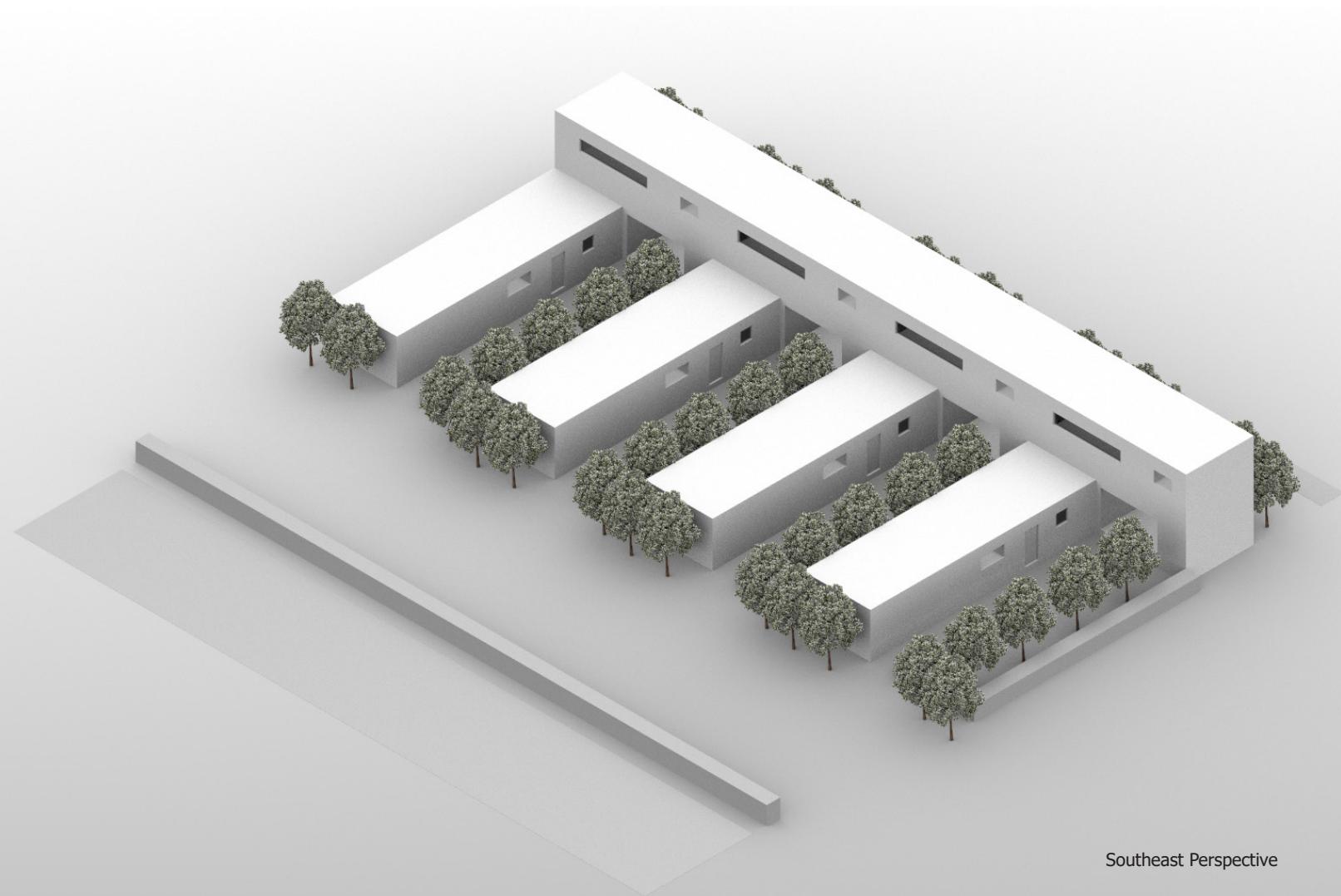
1
A2 Property Plan
Scale: $\frac{1}{8}$ " = 1'-0"



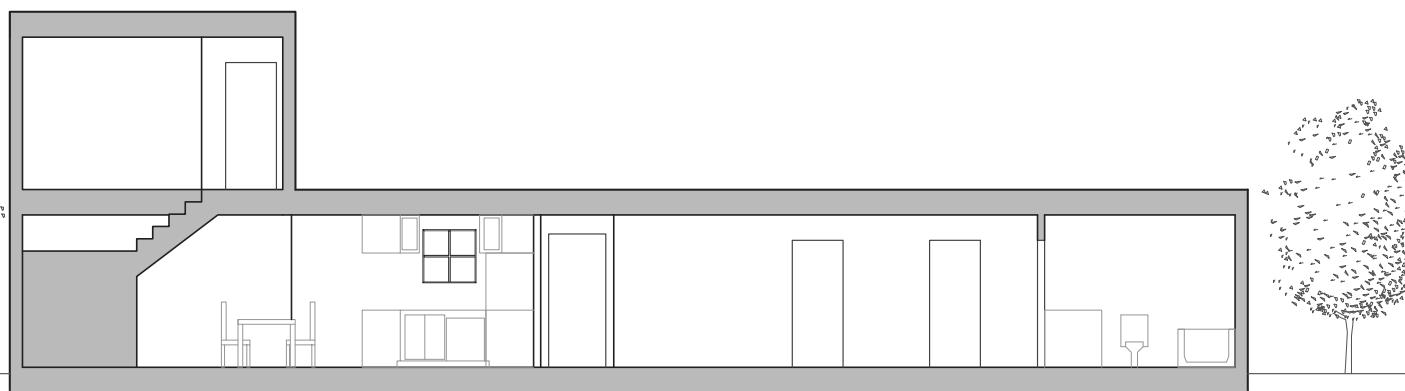
The clients for this project were based on a selection of characters from a movie. In this case, the clients were a three-member family, looking for an affordable single-family dwelling. With this in mind, a layout for the house that would be ideal for a family was created. The yard for the house was also made to have a private space and a shared space for the neighboring houses.



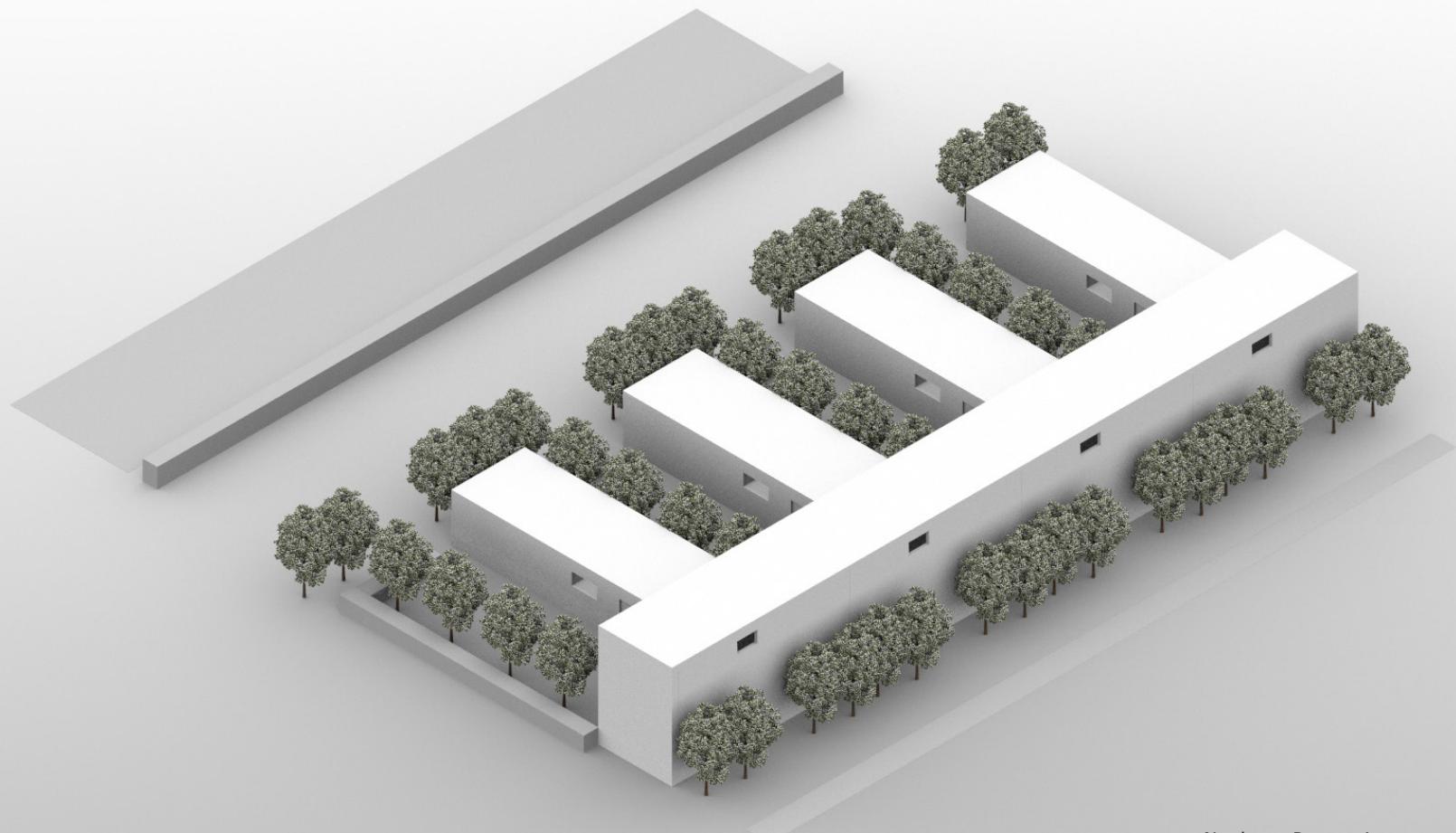
1 Northwest Section
A3 Scale: $\frac{3}{32}$ " = 1'-0"



Southeast Perspective



1
A4 Northeast Section
Scale: $\frac{3}{32}$ " = 1'-0"



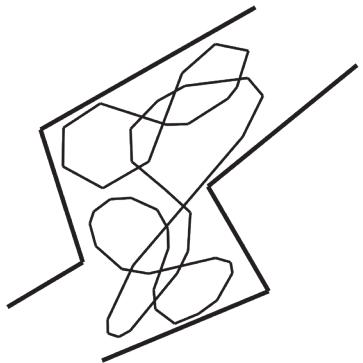
Northeast Perspective

Dwelling in on the Road

Fall 2019 | Individual Work

EVLU3006 Studio 3 | Leanne Muir + Dr. Richard Perron

We started with being provided a random neighbourhood within Winnipeg. Once we performed a site analysis, we were required to make a design proposal for an intervention within the block of a street.



PARTI DIAGRAM

Pathway - Existing path conditions were removed and replaced with a deeper contextual system.

Linkage - Each Moebius loop is linked through the twists that drop into an accessible site.

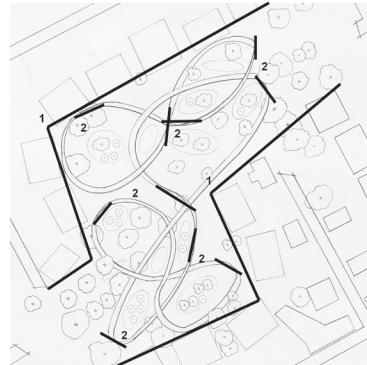
Adjacency - Each loop is adjacent to the houses on site.



SPACE

(1) Cut-out Space - At several twists on each Moebius loop there are cut-out spaces for people to "fall" into and enjoy nature, a spot off the beaten path.

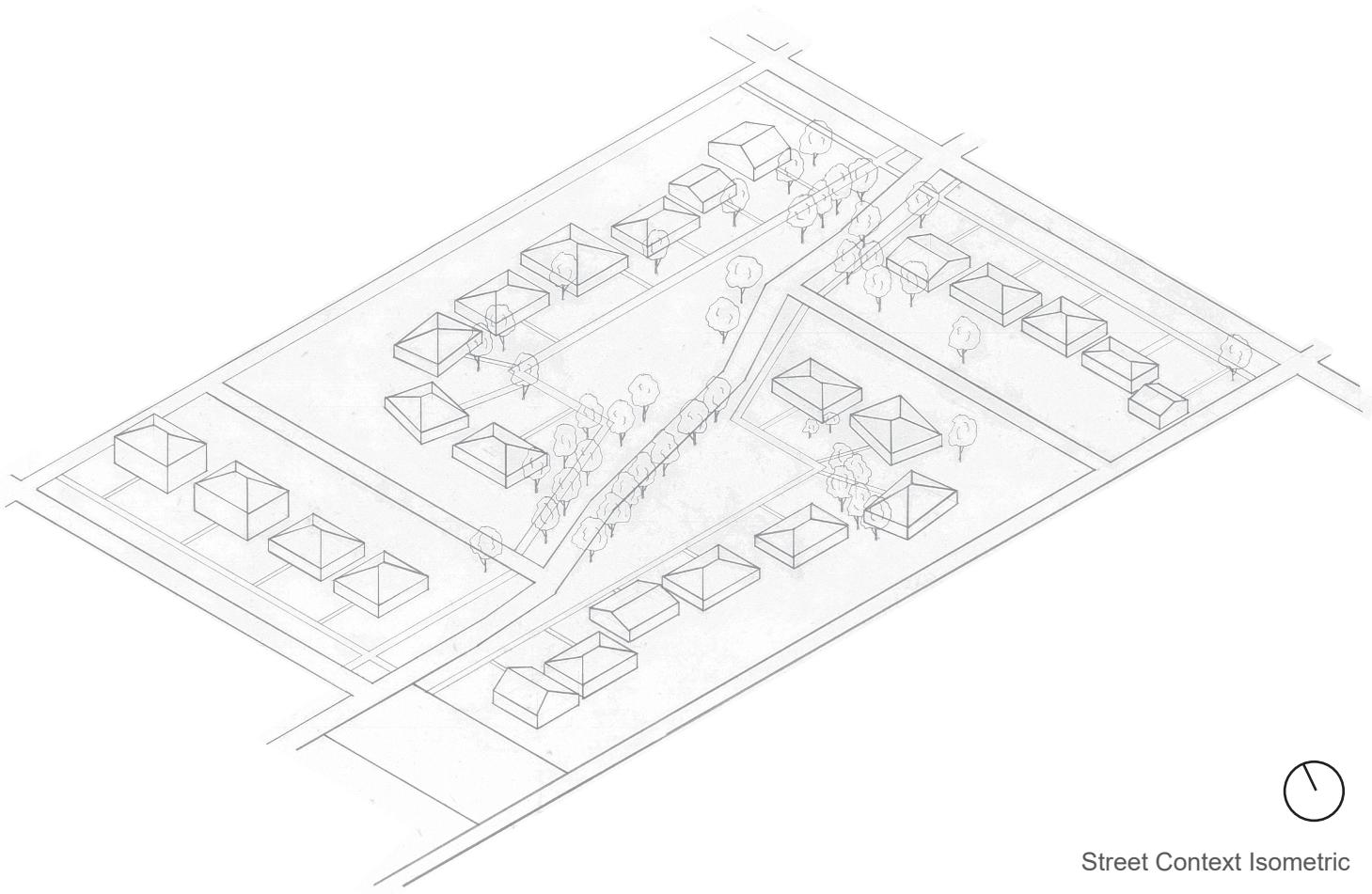
(2) Fill Space - A raised portion of land that divides several of the cut-outs

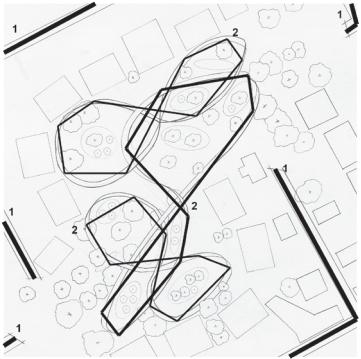


PATH

(1) Existing Paths - Existing roadways near the intervention that have been cut off from Berwick Pl.

(2) Proposed Paths - Paths that are afforded by the intervention of Moebius strips

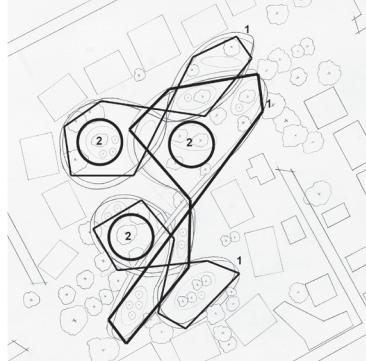




EDGE

(1) Built Edge - The edge created by the position of buildings and the properties

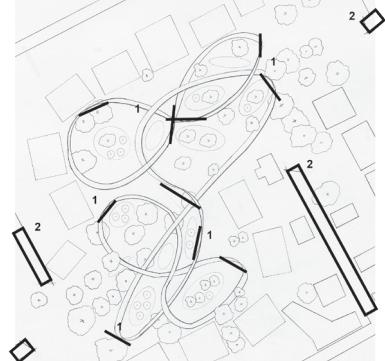
(2) Path Edge - The twist in the Mobius that causes an edge that is impossible to cross



FOCI

(1) Möbius Strip - The built Möbius strips create a foci within the neighbourhood

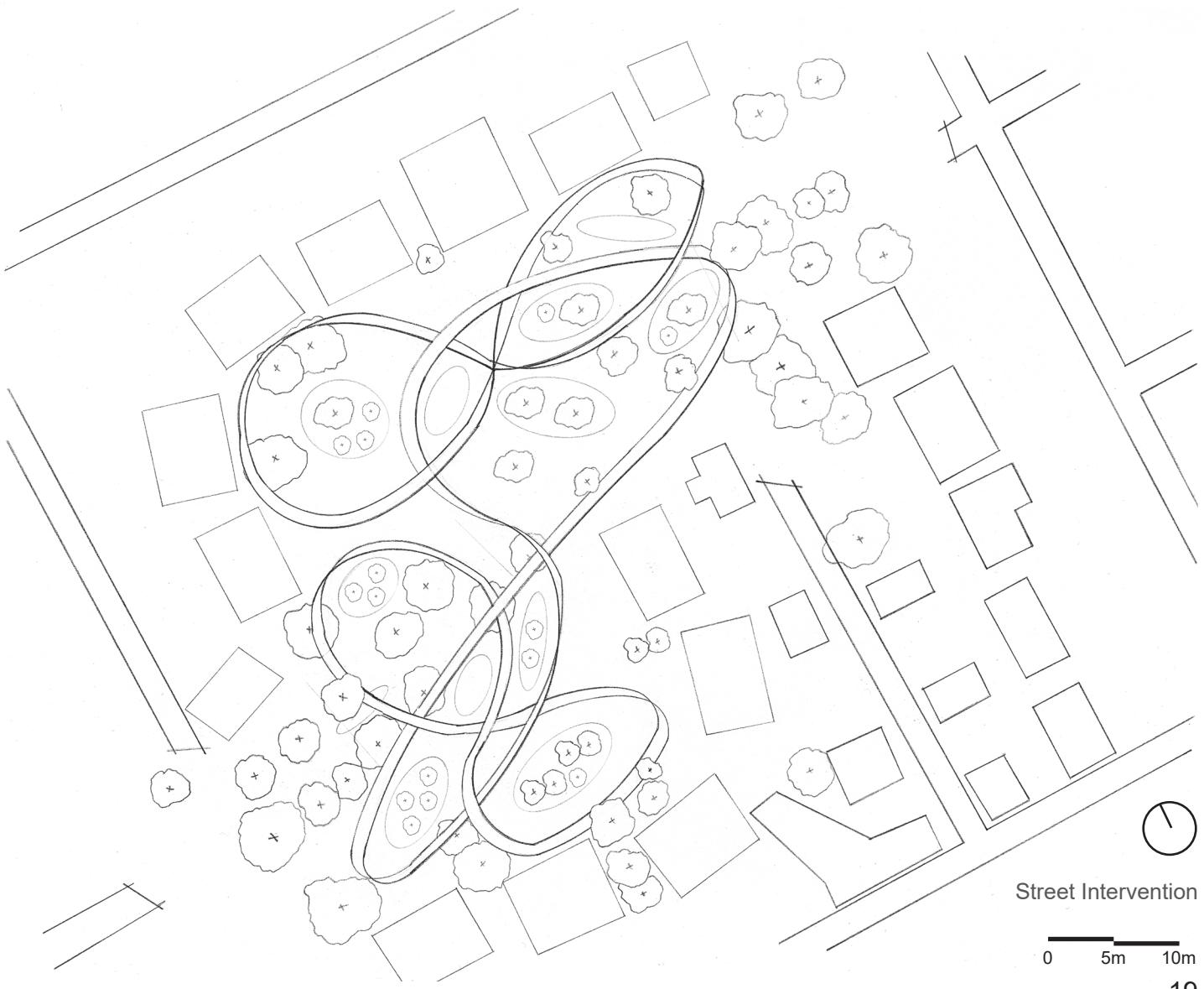
(2) Major Cut-outs - Sites are able to be created within the loop to allow for relaxation and contemplation



THRESHOLD

(1) Path-to-Ground - The twist in the path causes the pedestrian to come to ground level, and go in a cut-out

(2) Road-to-Park - The cuts in the road create a threshold from paved surface to green space



An Operational Metaphor

Fall 2019 | Individual Work

EVLU3006 Studio 3 | Leanne Muir + Dr. Richard Perron

This project started with a draw for words that were to be used as operational metaphors, communicated through the medium of collage. The word I drew was Conserve, which I communicated with a few of the most operationally similar synonyms. The jar, which first came to mind with the idea of preserving food, was used across all collages as a form of graphic continuity.

Maintain

Within this collage, controlled forest fires are used as an example of maintenance, as these controlled fires help maintain the forest. The ideal, healthy forest is separate from the controlled forest fire. Within the metaphorical jar, while the controlled fire burns on the outside.



Protect

Ocean pollution is a major issue in today's world, but countless efforts have been made by both individuals and companies to clean up the ocean. This collage depicts the containment of several species so that their habitat may be thoroughly cleaned to protect it.



Save

The collage shows sustainability by selectively choosing to light certain buildings over others. This effort is made to save electricity so that it may be collected and efficiently dispersed when required. The electricity is collected via solar panels, shown within the medium of the jar.



Preserve

The melting of ice shelves is one of the most frequently aired segments on a news broadcast, which is what inspired this collage. This collage shows an environment which is slowly increasing in temperature, this process is what leads to the collapse of ice shelves, however, an ideal condition is separated, preserved within the jar.



An Operational Precinct Strategy

Fall 2019 | Individual Work

EVLU3006 Studio 3 | Leanne Muir + Dr. Richard Perron

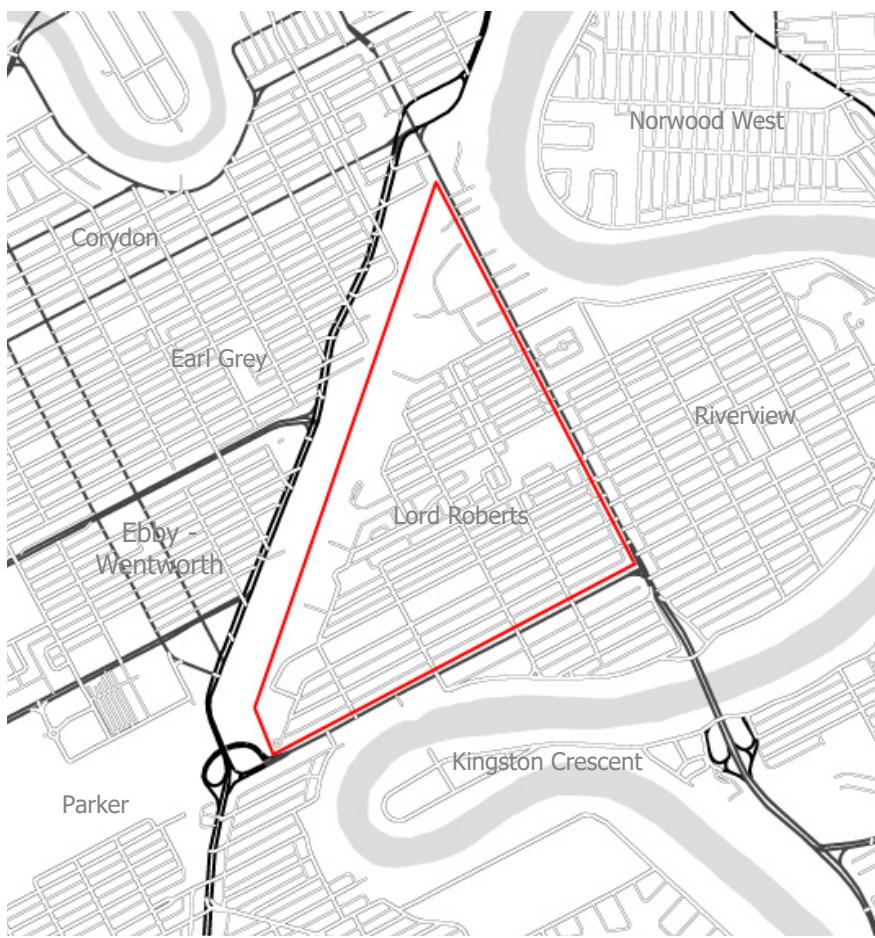
Relating to the preceeding project, *An Operational Metaphor*, as well as our site from *Dwelling In On The Road*, we were required to apply our metaphor to our precinct. In this case my focus was on Conserving green space, Seeding existing properties to create green space, and Connecting them through potential green corridors within the neighbourhood.

Growing, Growing, Gone!

Lord Roberts Green Space Synthesis

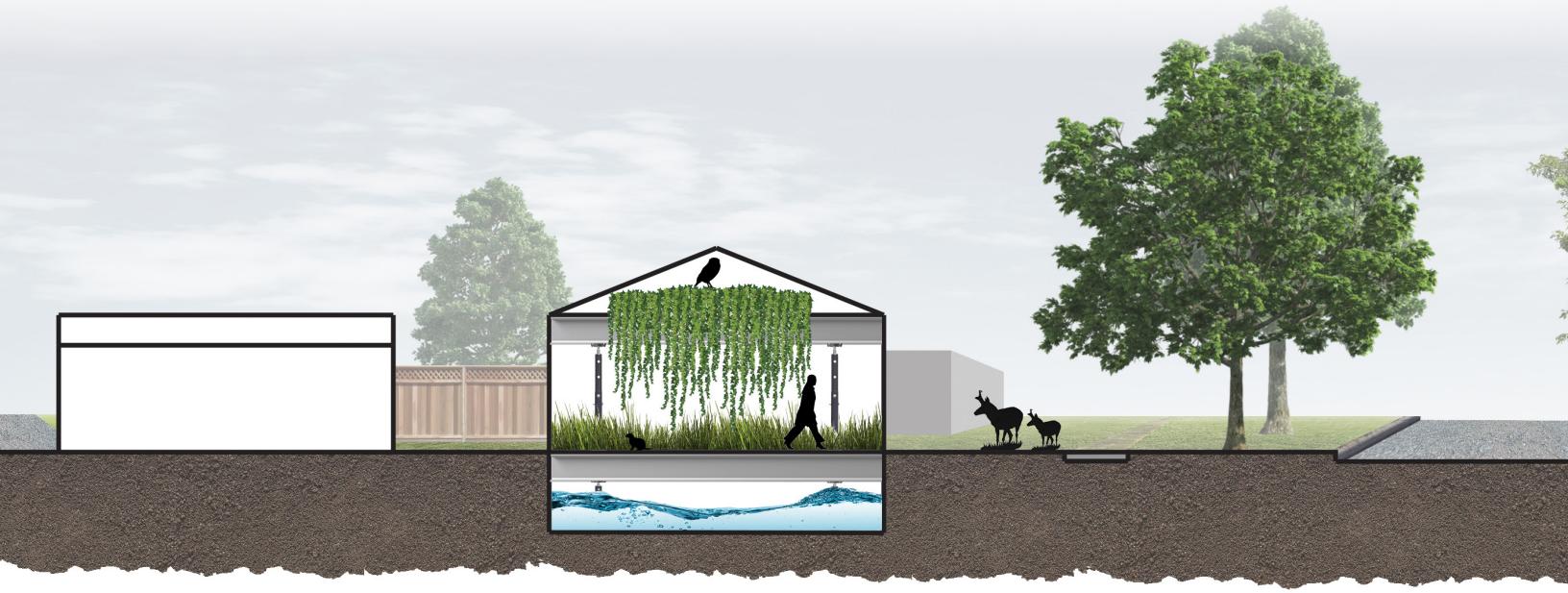
The Concept

The idea of conserving green space within the precinct came from the application of an operational metaphor. In one case, for a literal relationship, the house is to the jar, as nature is to the food. The house could act as a container, to protect the green space within. The focus was put on green space during a study when it was realized that Lord Roberts has a lack of green space based on the overall area of the precinct. The goal is to increase the amount of green space by preserving it on existing lots that will thread through the precinct to connect the existing spaces.



1 Lord Roberts Precinct Context
Scale 1:30000

- 3 In theory, there are countless possibilities for these proposed green spaces. While the main intention is to increase the green space within Lord Roberts, several systems that could benefit from this increase, such as the strength of the community, wildlife habitat, water management, active transportation, and other integrated networks. In many cases, within a single property or a cluster of them, these systems could be combined such as in the section above. This is an example of a possibility, combining habitat and water management.





2 Green Space Locations
Scale 1:16000





Solar

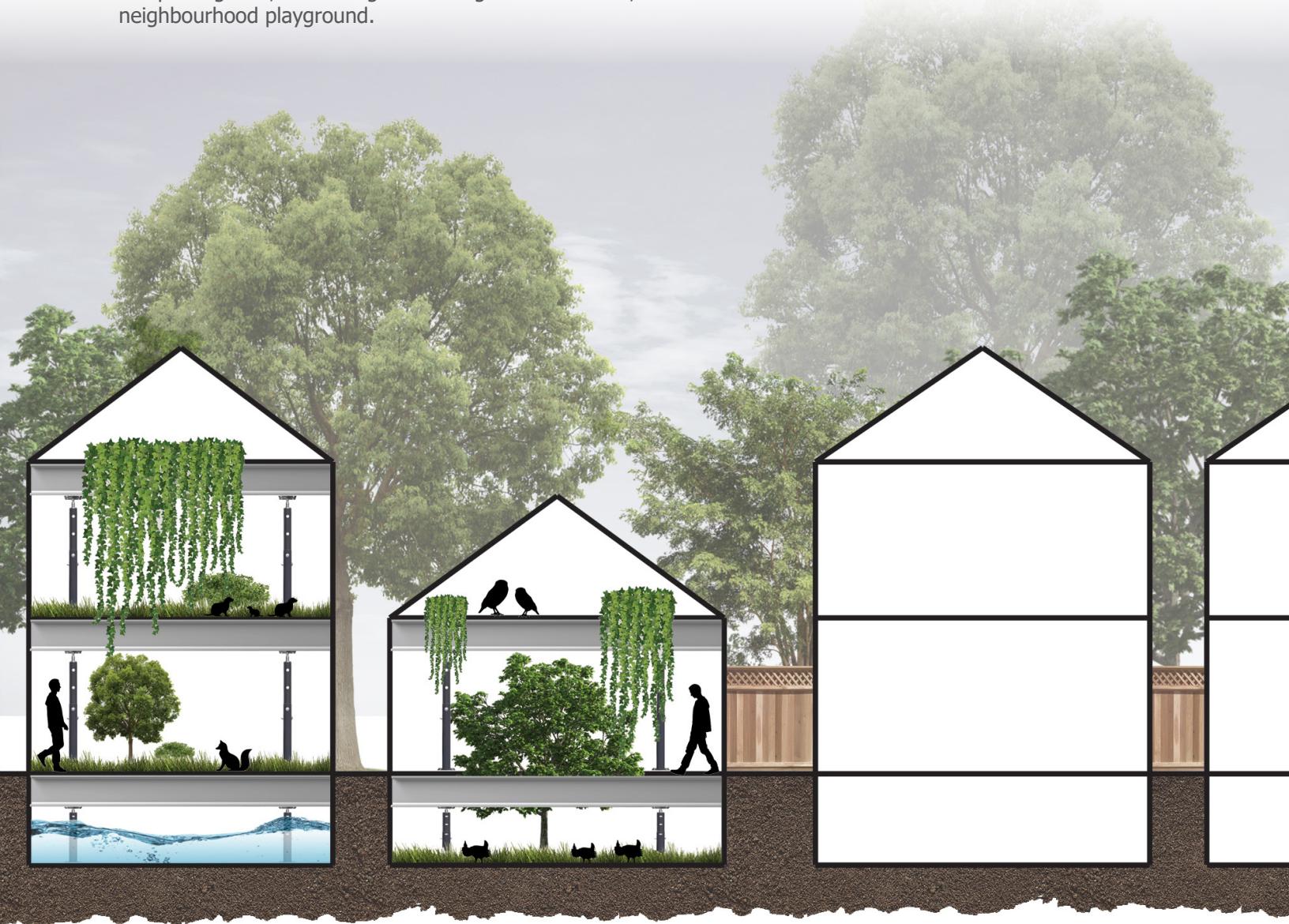


Geothermal



Compost

Several opportunities are opened up if the house is removed from the lot. Some options may include a community garden, community composting site, a solar garden or geothermal field, or a new neighbourhood playground.





Bike Repair



Butterfly Sanctuary



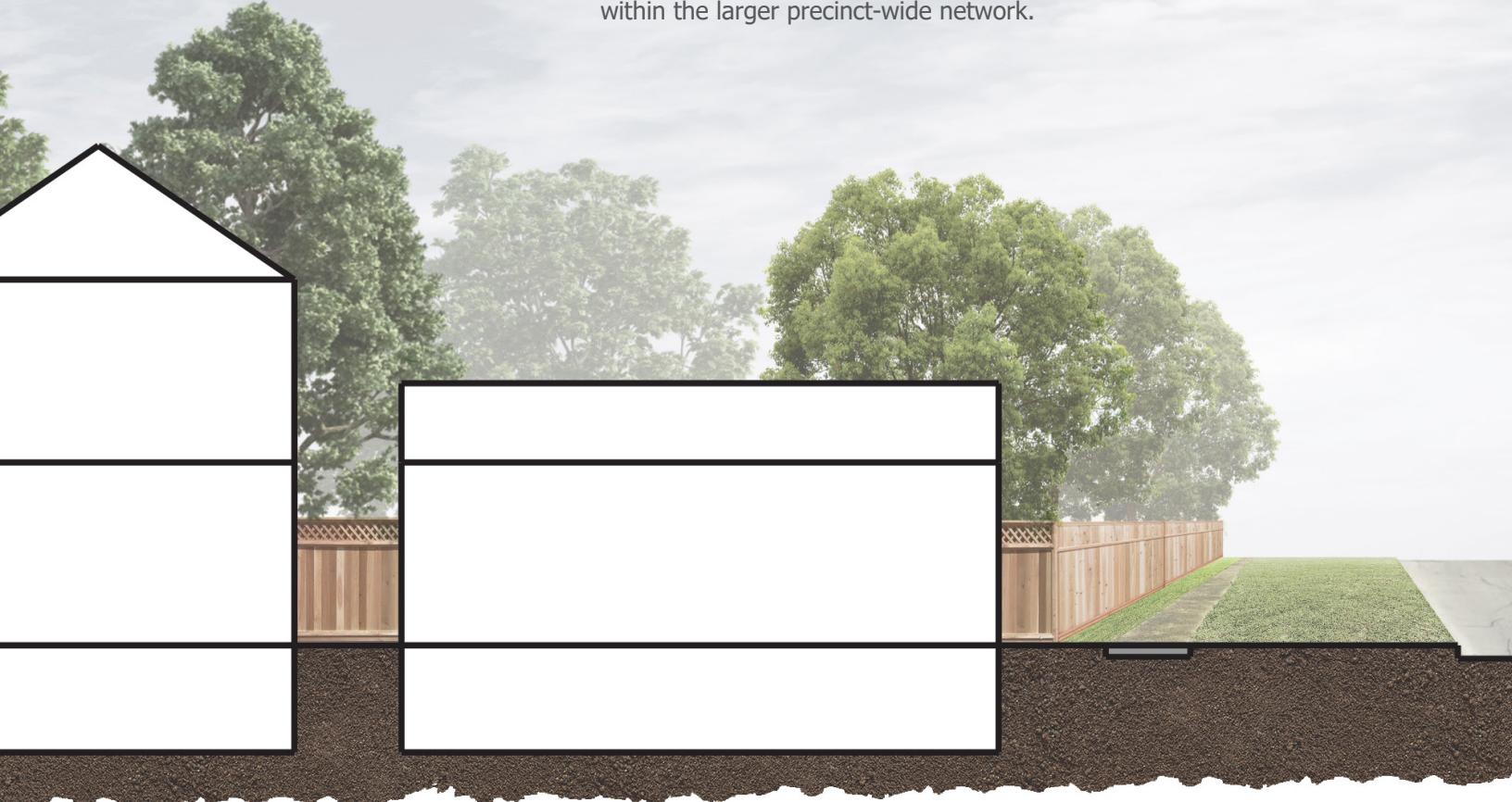
Arboretum



If the house is left on-site, the structure could be repurposed or left to be overgrown and reclaimed by nature. If it was to be repurposed, it could be turned into a bird or butterfly sanctuary, a bike recycling and repair shop, a farmers market stop, or a plant museum showcase.

④

Adjacent properties could be used together to create a different scale for several systems. It is possible to have houses removed from the properties as well, which again changes the affordability of the lot can handle. While the houses may not have a built connection, they could be connected within the larger precinct-wide network.



Recovering the Road

Fall 2019 | Individual Work

EVLU3006 Studio 3 | Leanne Muir + Dr. Richard Perron

Recovering the Road builds off the preceeding project, *An Operational Precinct Strategy*, by applying the strategy that was explored in that project to our street site from *Dwelling In On the Road*. This project is a more specific application compared to the generalized application of a strategy from the preceeding project.

Urban Orchard

Berwick Place Orchard Integration



Precinct Context

① Ecological Context

These zones contain several different mediums and spaces which host several systems including; Habitats, Water Management, Active Transportation, and other Integrated Networks. There are several species of trees found throughout the precinct and vary depending on the street. In a few situations, there are green spaces that contain clusters, or groves, of these trees along with understory. These sites also usually include small flower beds and pedestrian pathways.

② Social Context

These zones combine ecological and community elements. Community Spaces are a major factor in these zones, but Active Transport and Integrated Networks are also present. In addition to the green space, these sites also include an actual structure or other infrastructure to support a variety of activities. Spaces for activities include; baseball diamonds, seasonal ice rinks and playgrounds being present. Some main structures include Lord Roberts Community School and the Fort Rouge Curling Club.



Site Context

Site Parti Diagram

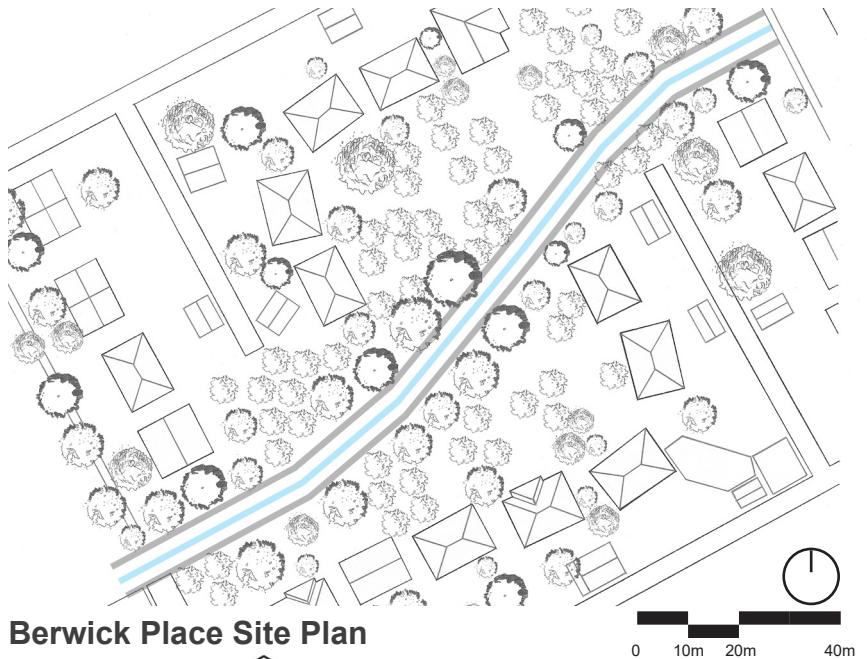
This parti diagram shows the sight-lines from the houses to the path and infiltration channel. The infiltration channel and path replace the existing roadway but now divide the site. The channel could be crossed during dry periods, however, in the spring or after heavy rainfalls may become too saturated to comfortably cross. The boundaries that are set by the houses and fences are shown here, which create a set public and private space condition.

Spatial Context

- **Private Space** - The space that contains people's homes and backyards, that is adjacent to the overall public space which contains the orchard and existing conditions.
- **Public Space** - The space that contains both existing trees and trees from the orchard addition, adjacent to the path and private space.
- **Central Circulation** - The space that contains the infiltration channel and paths where people circulate through the neighbourhood.

Proposed Site Condition

- Berwick Place will be closed from Daly Street to Argue Street
- Within this block specifically, the road space will be converted into a split pedestrian and cycling path, with an infiltration channel in between to collect storm water
- Establish an orchard within the site on a grid based on existing conditions including sight lines from resident's houses, natural gas supply lines, and existing canopy
- Prepare for a removal of nearly all existing Green Ash canopy on site within the next decade or less



Berwick Place Site Plan



Species at Risk on Site



Green Ash



Black Ash



White Elm



Existing Density Condition

- Existing canopy is made up of primarily of Green Ash, and some Black Ash
- The infestation of the Emerald Ash Borer is only a moderate concern, management programs are underway to try and prevent the spread
- Residents are told to be cautious of their trees within their property



Approximately 10 Years After Planting Orchard

- The city has decided to remove Ash trees from the original canopy due to a rise in presence of the Emerald Ash Borer, residents are allowed to decide
- The original canopy is now extremely sparse as the Emerald Ash Borer has decimated the population of ash trees within the urban canopy of Winnipeg
- Residents have left their trees on their property, but have added to the Orchard and planted more Goodland Apple trees to fill voids left by the city



Approximately 25 Years After Planting Orchard

- The majority of Ash and Elm trees have been removed from the neighbourhood, both on municipal and private land
- To maintain the density of the orchard, more fruit-bearing trees have been added to the site, some of the original trees have also been replaced
- The density continues to increase as years go on

Species within Orchard



Goodland Apple



Parkland Apple



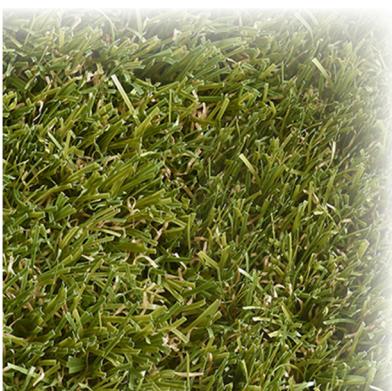
Early Gold Pear

Material Elements

Permeable Flagstone Pavers



Alpine Grass

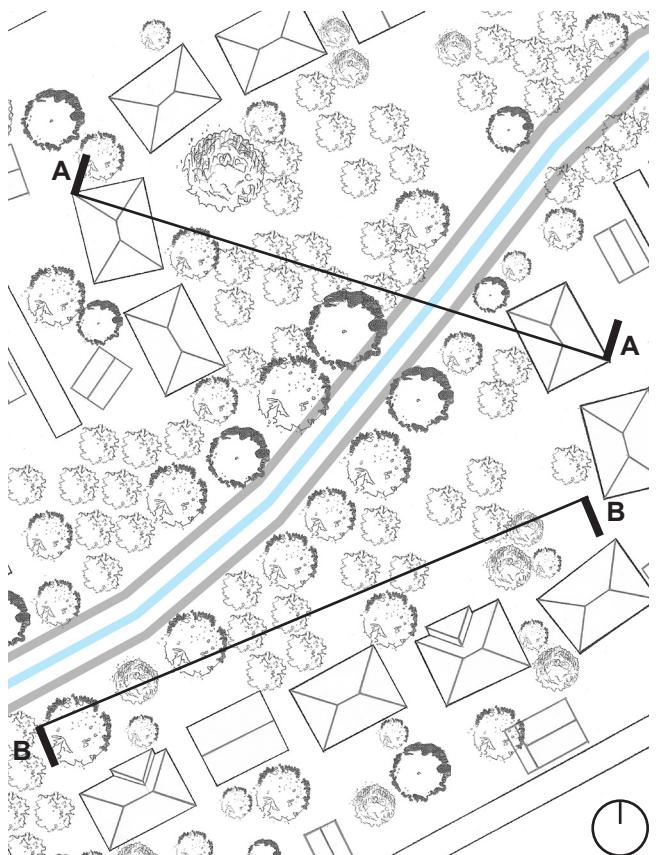


Tree Canopy



Infiltration Channel Water
with River Rock

Key Plan



A Cross-Path Section

The Goodland Apple Trees are placed to frame the view from each house, most sight-lines connecting to the pedestrian/cyclist path and infiltration channel. Without the presence of infrastructure for vehicles, space is far more free, allowing for more recreational activities and community involvement.

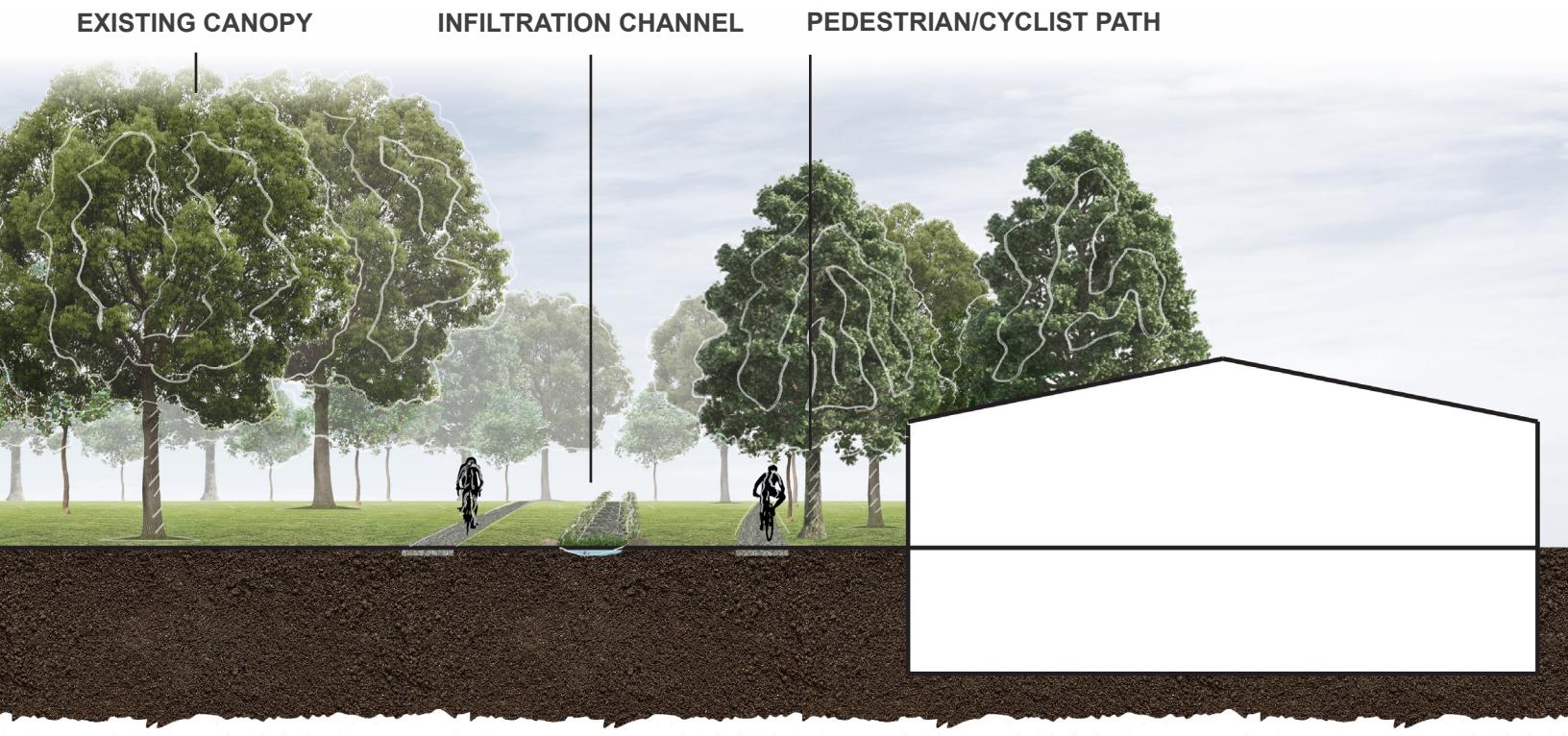


ORCHARD





Perspective of Path and Infiltration Channel

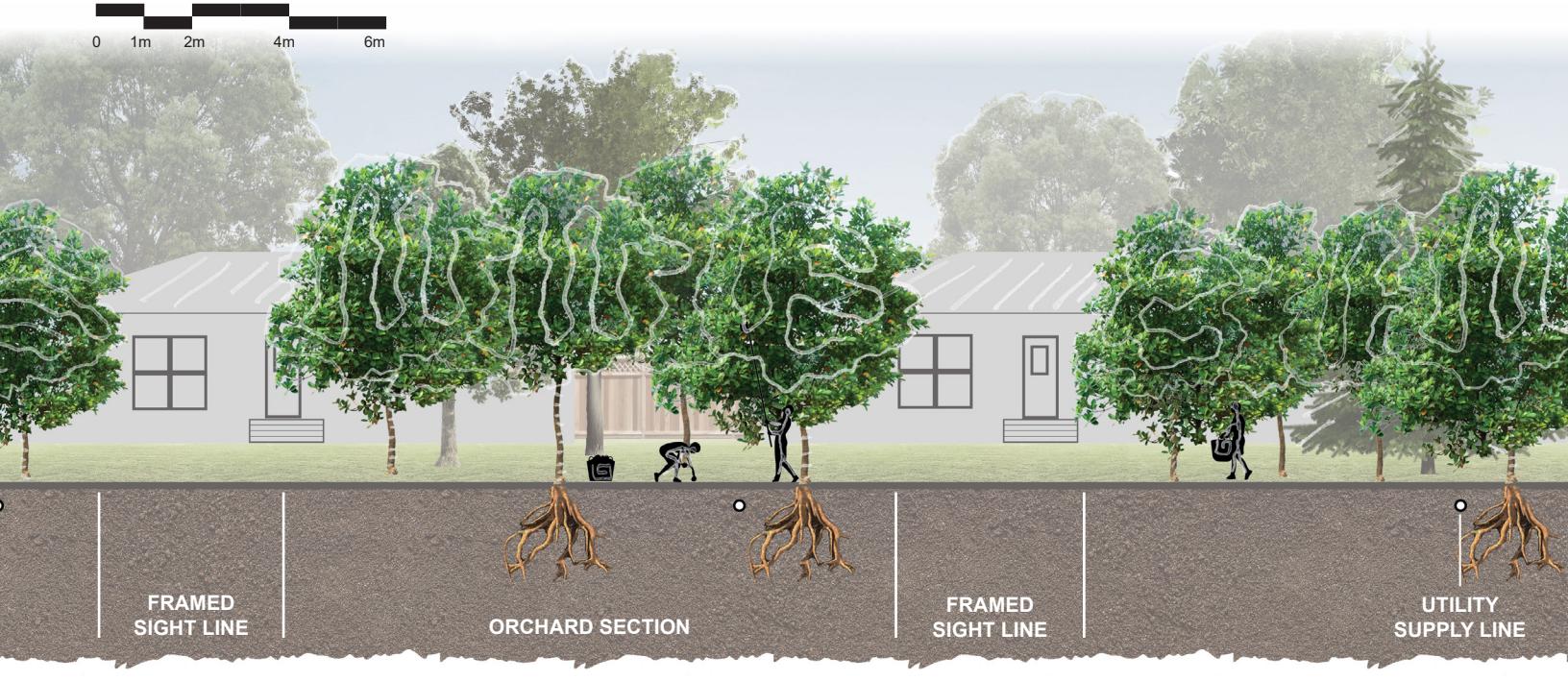




Sight Line - View From Path

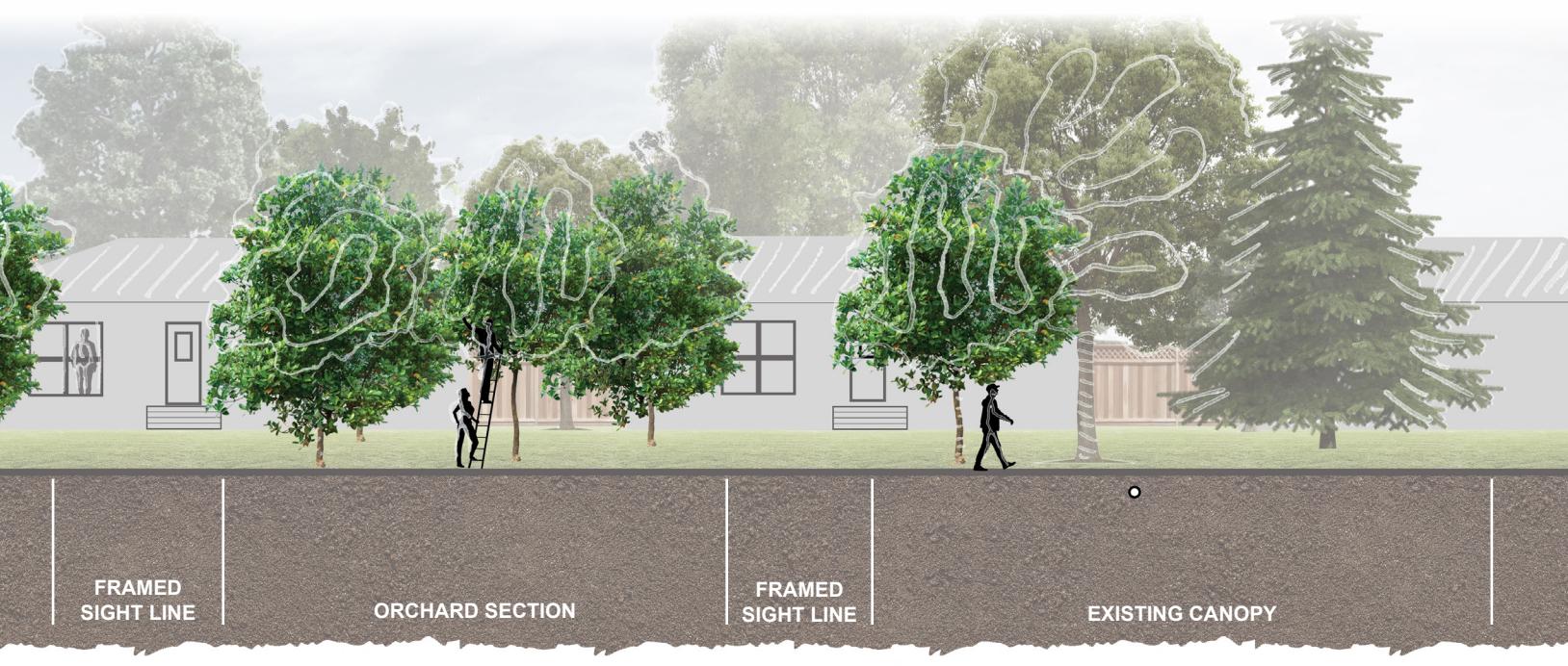
B Cross-View Section

For diagrammatic purposes, the window and door on the houses have been standardized. This shows the sight-line from the front window and front door of each house, and how it is framed by the new and existing trees. The apple trees can be utilized either by the individual property, or neighborhood-wide.





Sight Line - View From House



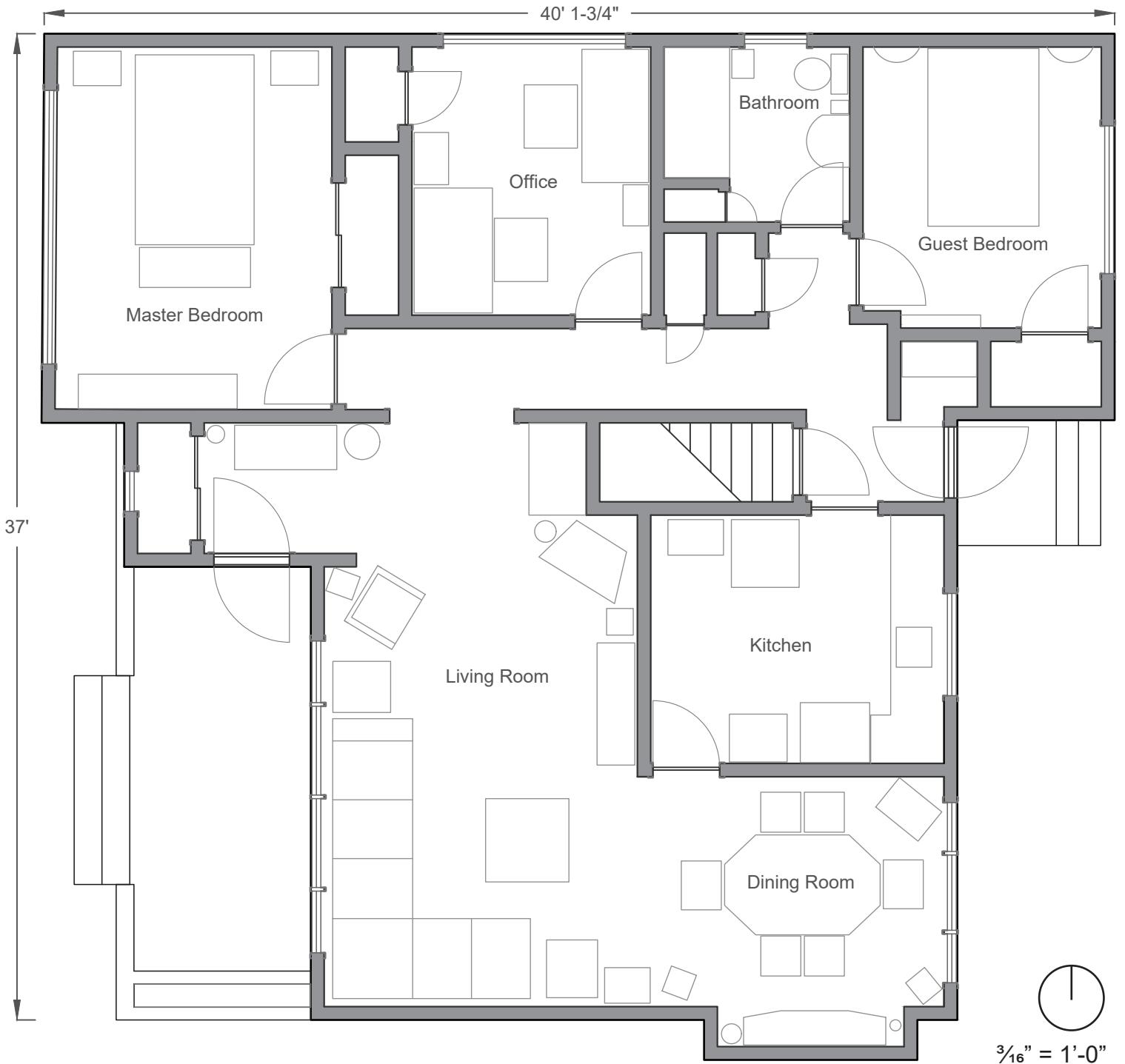
FRAMED
SIGHT LINE

ORCHARD SECTION

FRAMED
SIGHT LINE

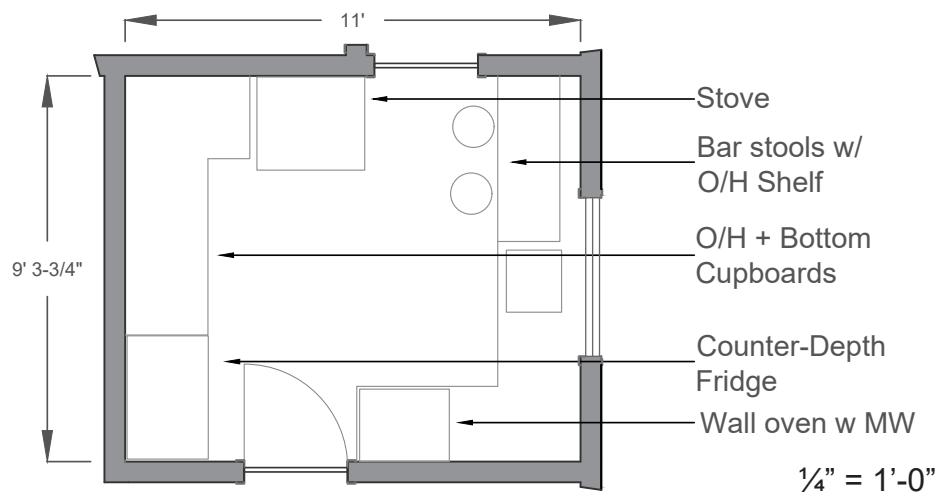
EXISTING CANOPY

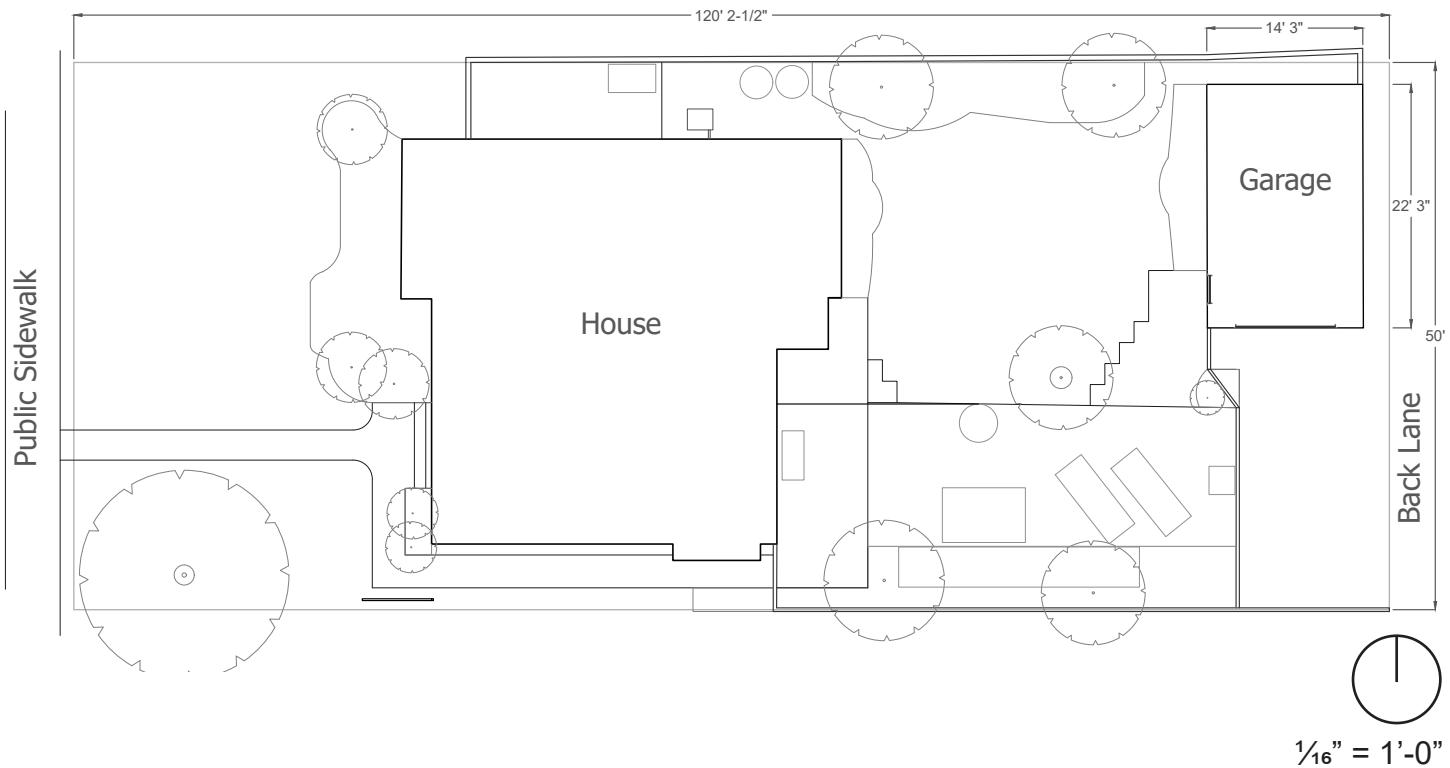
Personal Work



Kitchen Renovation

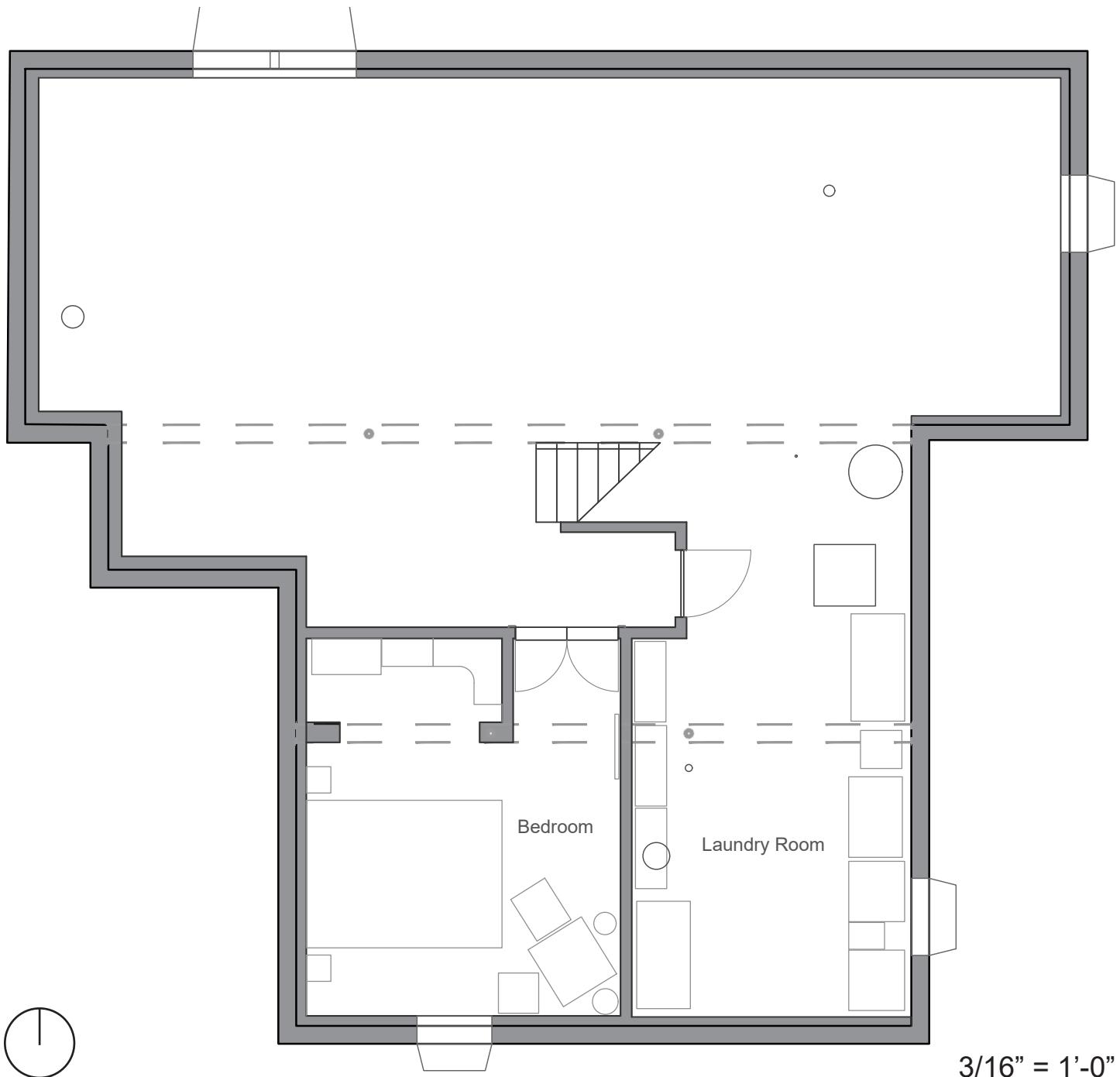
This was a small planning project that was done to test out possible layouts for a kitchen renovation within a house, based on actual measurements and client requests. Floor plan measured within $1/8''$ accuracy.





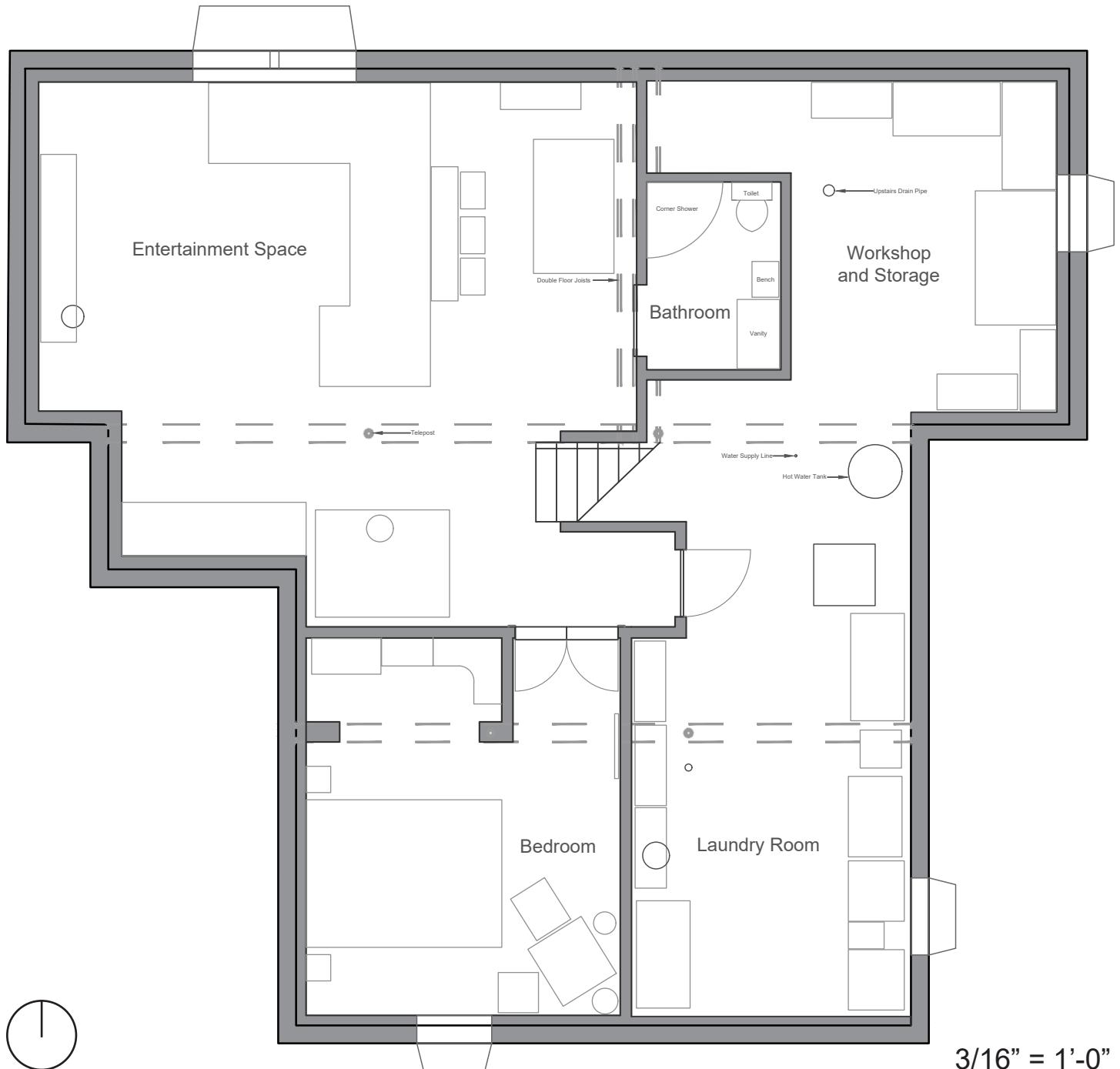
Existing Basement Plan

This plan drawing of the basement of the same property was created for testing layouts for future renovations.



Basement Renovation Plan

This is just one example of a potential layout for the new entertainment space and bathroom.



$3/16" = 1'-0"$