

Bus Shelter and Art Installation

Project 3 – Bus Shelter and Art Installation

Rachel Estafanous

528 Design Studio I, MFA1

Fall 2025

Table of Contents

- **01 Project Brief**
3

- **04 Inspiration**
7

- **07 Sketches**
12

- **10 Final Model**
19-21

- **02 Research**
4

- **05 Brainstorming**
8-9

- **08 Drawings**
13-16

- **03 Site Photos**
5-6

- **06 Sketch Models**
10-11

- **09 Diagrams**
17-18

Project 3

Bus Shelter Design

Project Brief

Project Brief

This project focused on designing a bus shelter that also functions as a permanent art installation within Madison Square Park. The structure was required to explore the elements of light and form, creating an experience that could be appreciated from both the interior and exterior. The project encouraged the integration of architectural design and artistic expression while maintaining sensitivity to the park's existing landscape.

The design process involved research, precedent studies, conceptual sketches, and model development. The goal was to create a space that provides shelter, visual interest, and a meaningful connection between art, architecture, and the urban environment.

Objectives

The goal of this project is to understand how form and light can be used to create a cohesive and meaningful public space. Through exploration of proportion, transparency, and structure, the design expresses how functional architecture can also serve as art. The project encourages experimentation, creativity, and integration of design principles within a real-world context.

Project 3

Bus Shelter Design

Research

Research

I began by reviewing the recommended inspiration sources and selected one to incorporate into my concept board, which I clearly labeled. I then expanded my research using *Design: The Leading Hotels of the World* (Monacelli), drawing inspiration from the way hospitality spaces integrate structure, light, and atmosphere. This helped shape my approach to creating a form that feels both functional and sculptural.

Next, I explored examples of contemporary bus stops and pavilion structures to identify shapes that aligned with my concept and informed my initial sketches. Finally, I analyzed photos of Madison Square Park, focusing on the fountain and surrounding planters to understand how natural and built elements interact within the site. These references collectively guided the development of my final design.

Wind Study

Location: Manhattan (Manhattan, NY)

Prevailing winds in this region are primarily westerly / northwesterly, especially in colder months.

In warmer months there are also significant southerly / south-westerly winds.

For a rectangular floorplan with open short ends, placing those short ends north and south (so the long sides face east-west) reduces the direct impact of dominant winds and snow/rain intrusion.

Outcome: Minimizes rain/wind/snow penetrating open entries, enhances user comfort and protection from elements.

Project 3

Bus Shelter Design

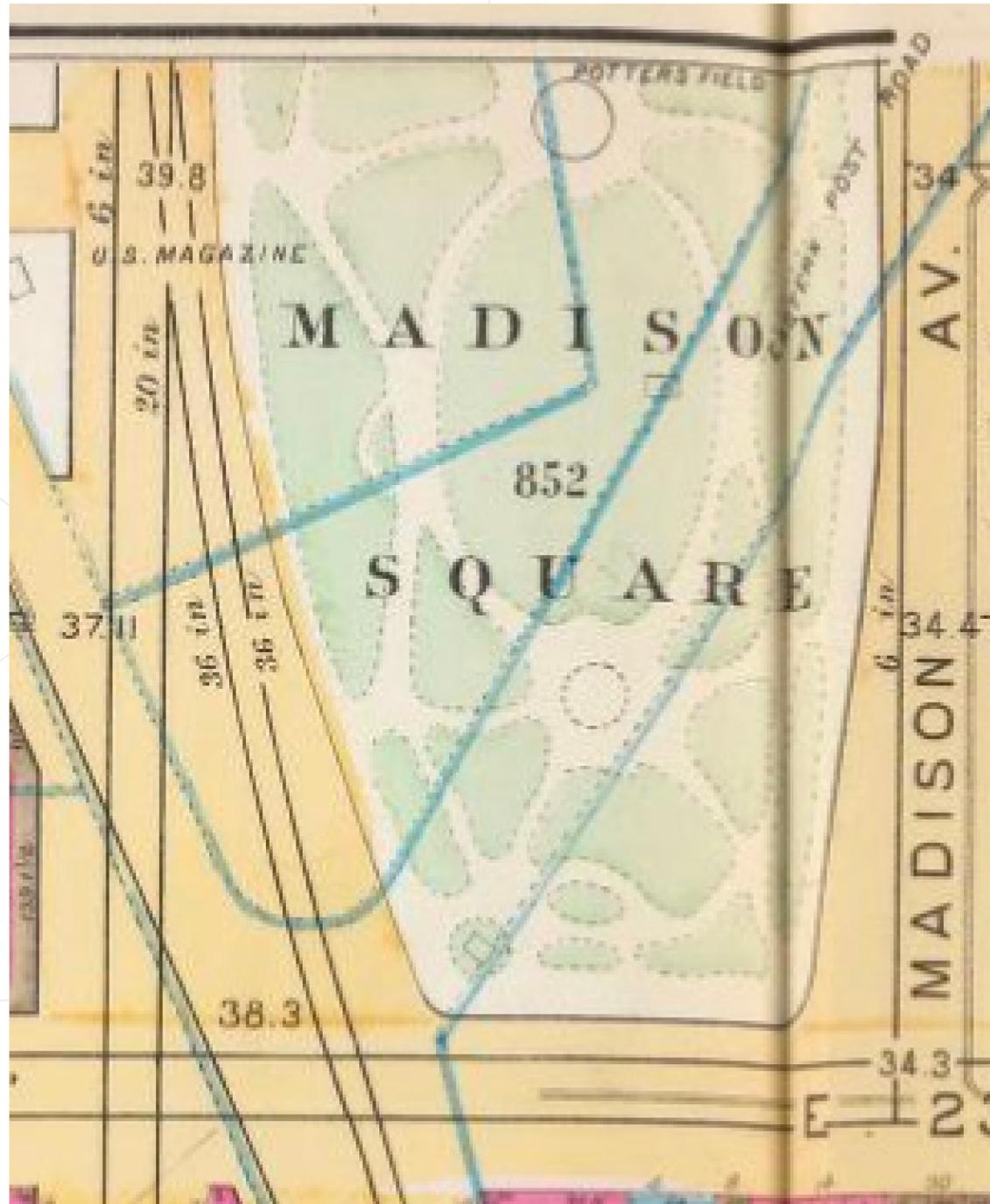
Site Photos



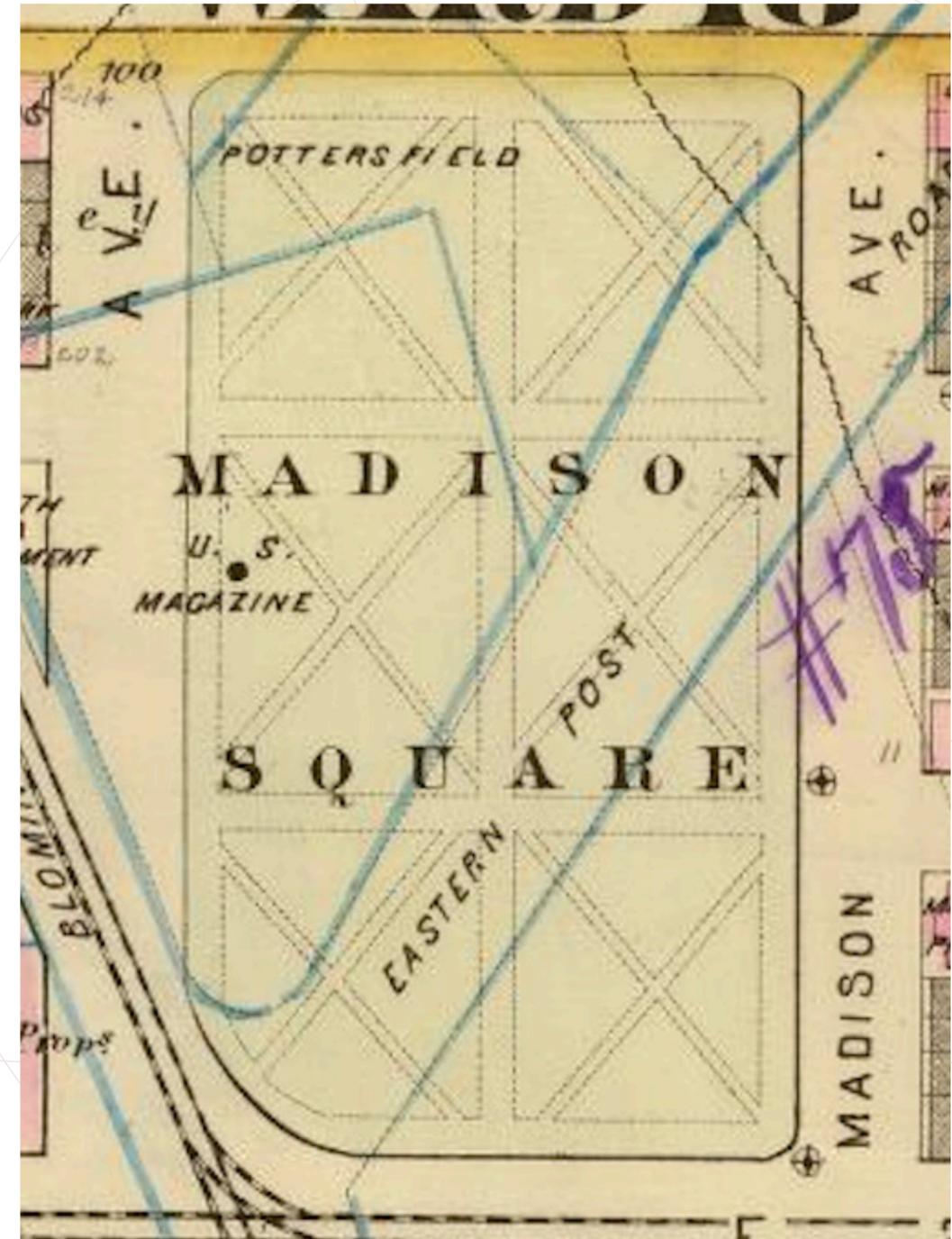
Project 3

Bus Shelter Design

Site Plan



1891 Atlas Map by G.W. Bromley & Co.



1879 Atlas Map by G.W. Bromley & Co.

Project 3

Bus Shelter Design

Architectural Inspirations



Project 3

Bus Shelter Design

Idea Brainstorming Notes

- incorporate seating into the facade of the shelter (with a cover)
- make the seating look like art / incorporated seamlessly from the outside to inside
- let light shine in through gaps
- play with cool integrated lighting that blends seamlessly into design, but is also art itself

• light up tiles like they are a cool tile like pattern, but its a light not tile

• maybe light strips are built into metal

↳ play around with lighting in the ground

- standing glass elements with open/closable metal parts
- curves, organic, waves
 - but maybe exterior is more straight edge
 - interior is more organic
 - or everything is curves, organic, natural
- stools that look like planters from the park (backs of stools are vines going all the way up to garden roof)
- garden roof
 - incorporate movable shelter material to be able to increase weather protection when necessary
 - with light strips incorporated
- do one idea that matches traditional metal work to match park aesthetic (do metal work benches incorporated into facade? (lamp posts built in?))
- one that is very wavy
- glass that turns to shade in sun
- one in between

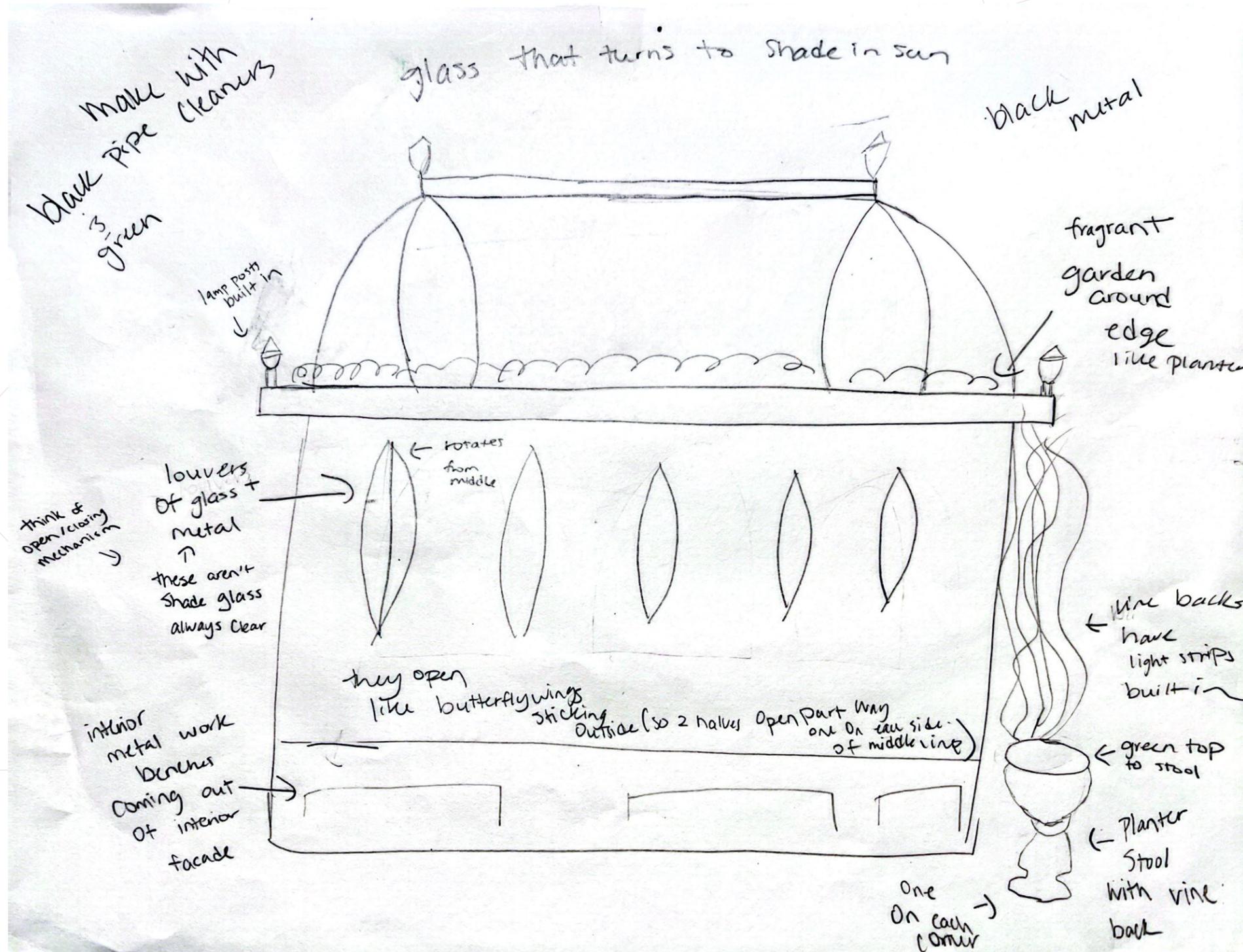
Additional Notes

- make part of the roof of the structure have clear glass too like the window glass and highlight them as apertures in the transition glass
- maybe have a leaf cover coming out of the vine over each stool. look at disneylands bug lige world for inspo

Project 3

Bus Shelter Design

Sketches- Idea 1



Project 3

Bus Shelter Design

Sketch Model 1

Historical Ornate Natural

Concept

The concept was inspired by our discussion about design adding to the quality of a city while blending into its character at the same time. I chose wrought iron as the main material to reflect the historical qualities of Madison Square Park and to make the structure feel like it belongs. The goal was to add beauty and purpose to the space without competing with its surroundings. The design embraces subtlety and craftsmanship, enhancing the park through structure, form, and integration with nature.

Materials

The model represents a wrought iron frame with transitional glass. The windows and apertures would use clear glass to maintain transparency. The stools would be made of durable exterior metal. The vines would be steel with integrated outdoor LED light strips. A fragrant garden of flowers would wrap around the top during spring and summer, replaced with evergreen vines and seasonal decorations in the winter.



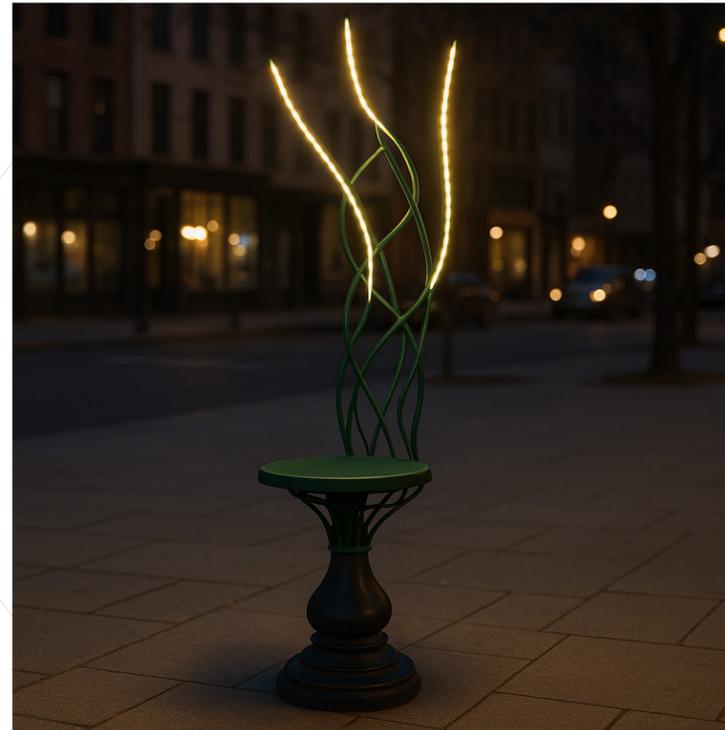
Project 3

Bus Shelter Design

Sketch Concept 1 AI Images



Planter in Madison Square Park



AI semi-accurate rendering of my stool design concept

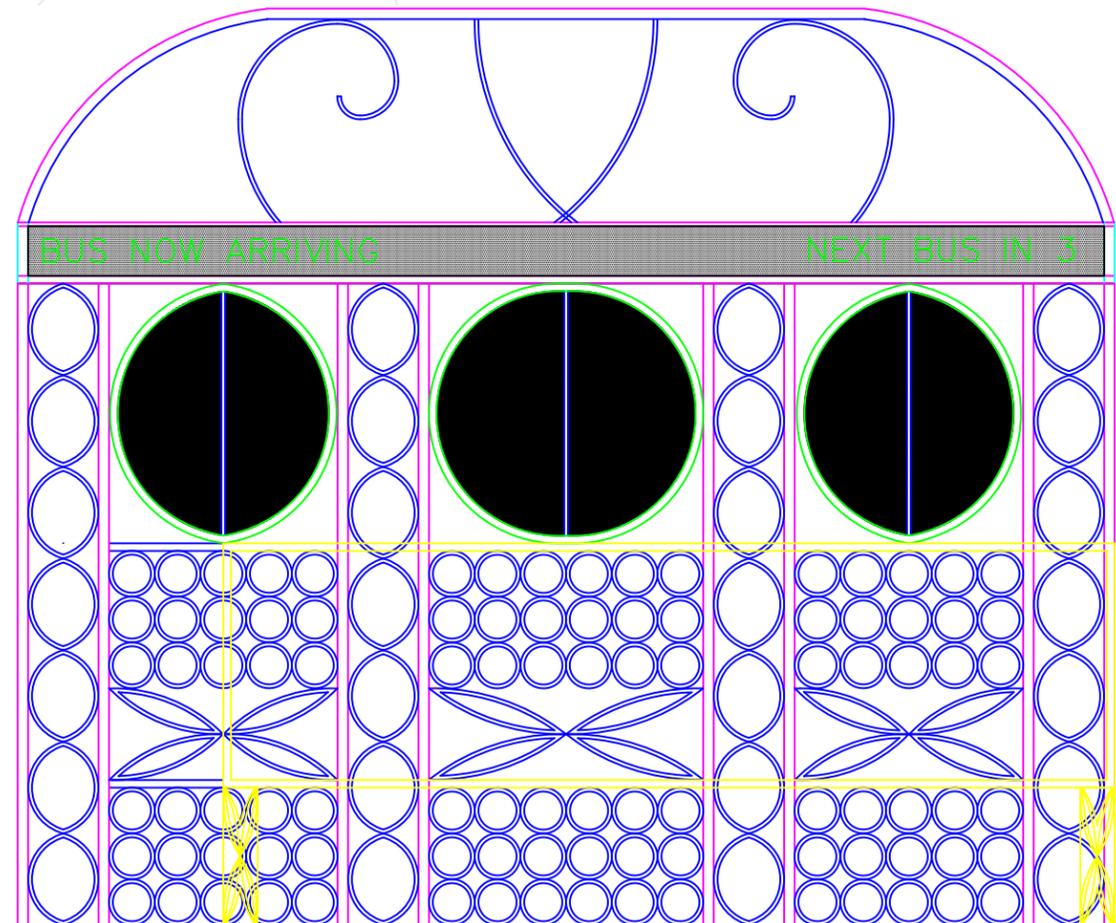
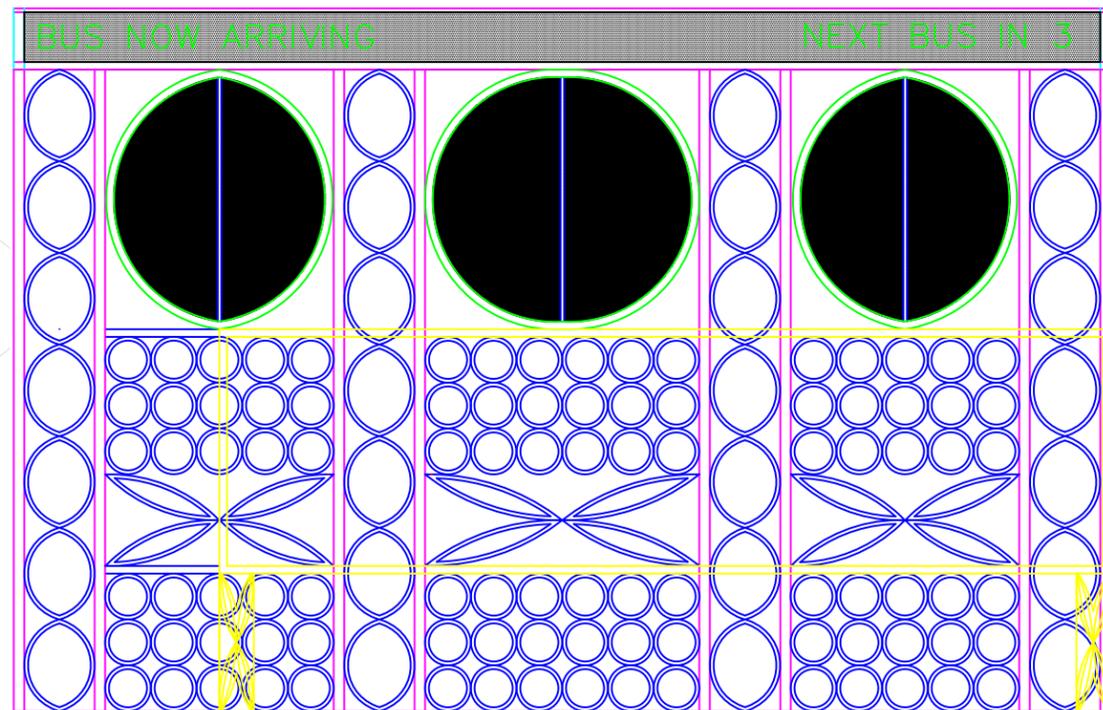
Stool Concept

The stool design features a black metal base paired with a green metal top, echoing the form and proportion of the planters surrounding the fountain at Madison Square Park. Vertical steel vines, coated in green, extend from the stool structure into the integrated planter of the bus shelter, visually connecting the seating to the surrounding landscape. Select vines include embedded LED light strips that activate at dusk, creating a subtle glow that enhances both safety and ambiance.

Project 3

Bus Shelter Design

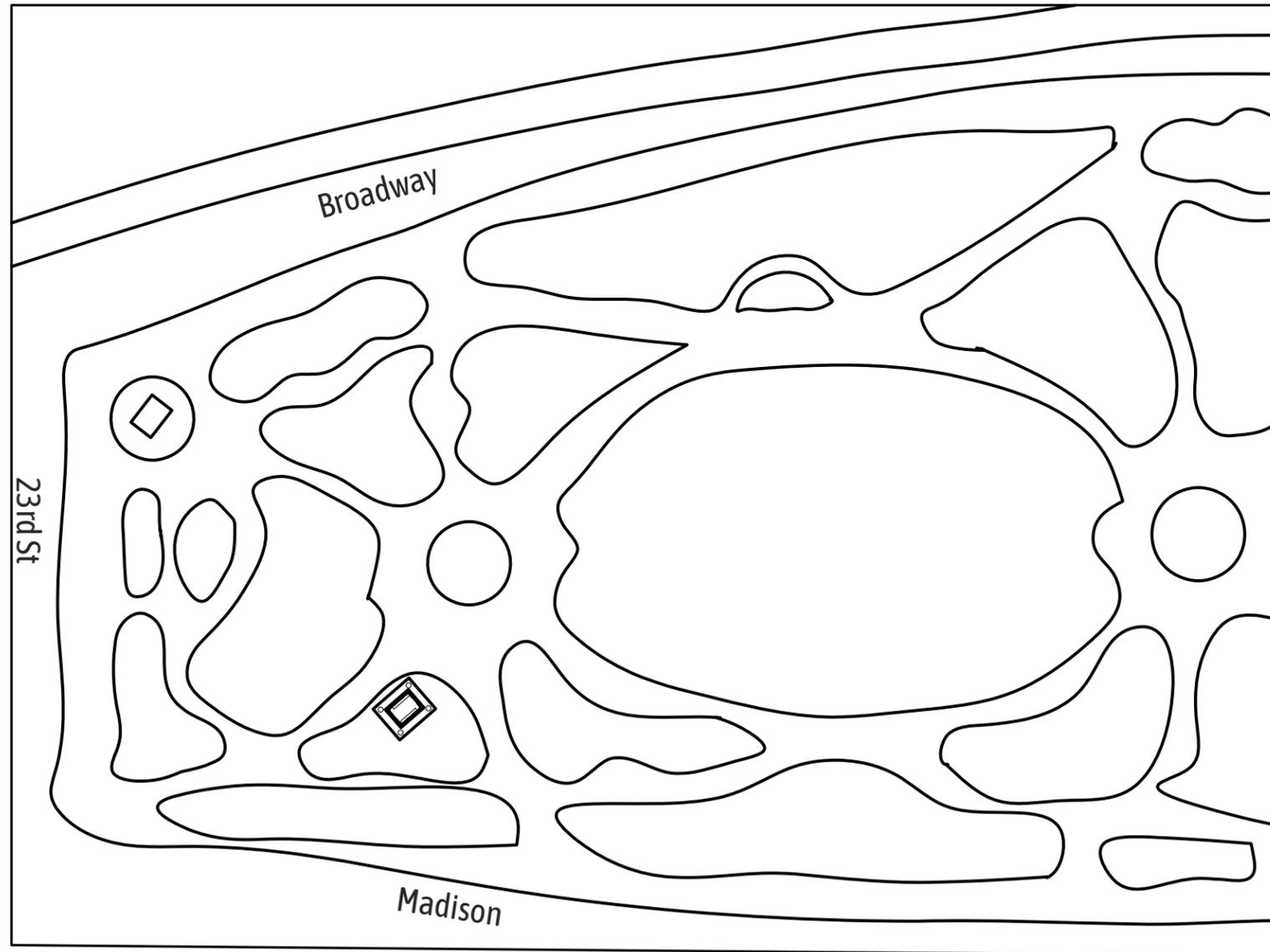
AutoCAD- Bus Schedule Sketches



Project 3

Bus Shelter Design

Drawings-Site Plan

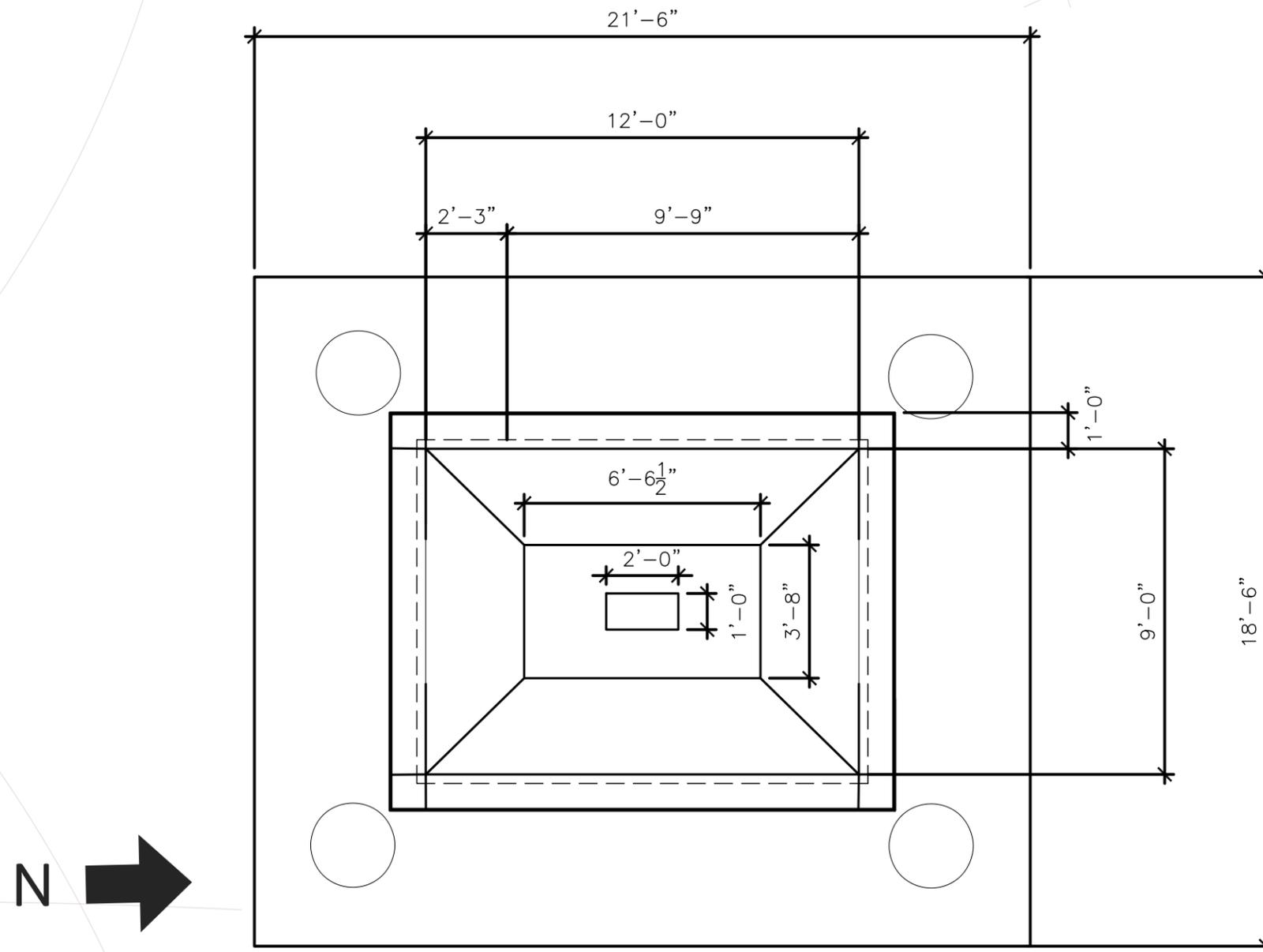


A Site Plan
Scale: 1/4" = 16'

Project 3

Bus Shelter Design

Drawings-Roof Plan

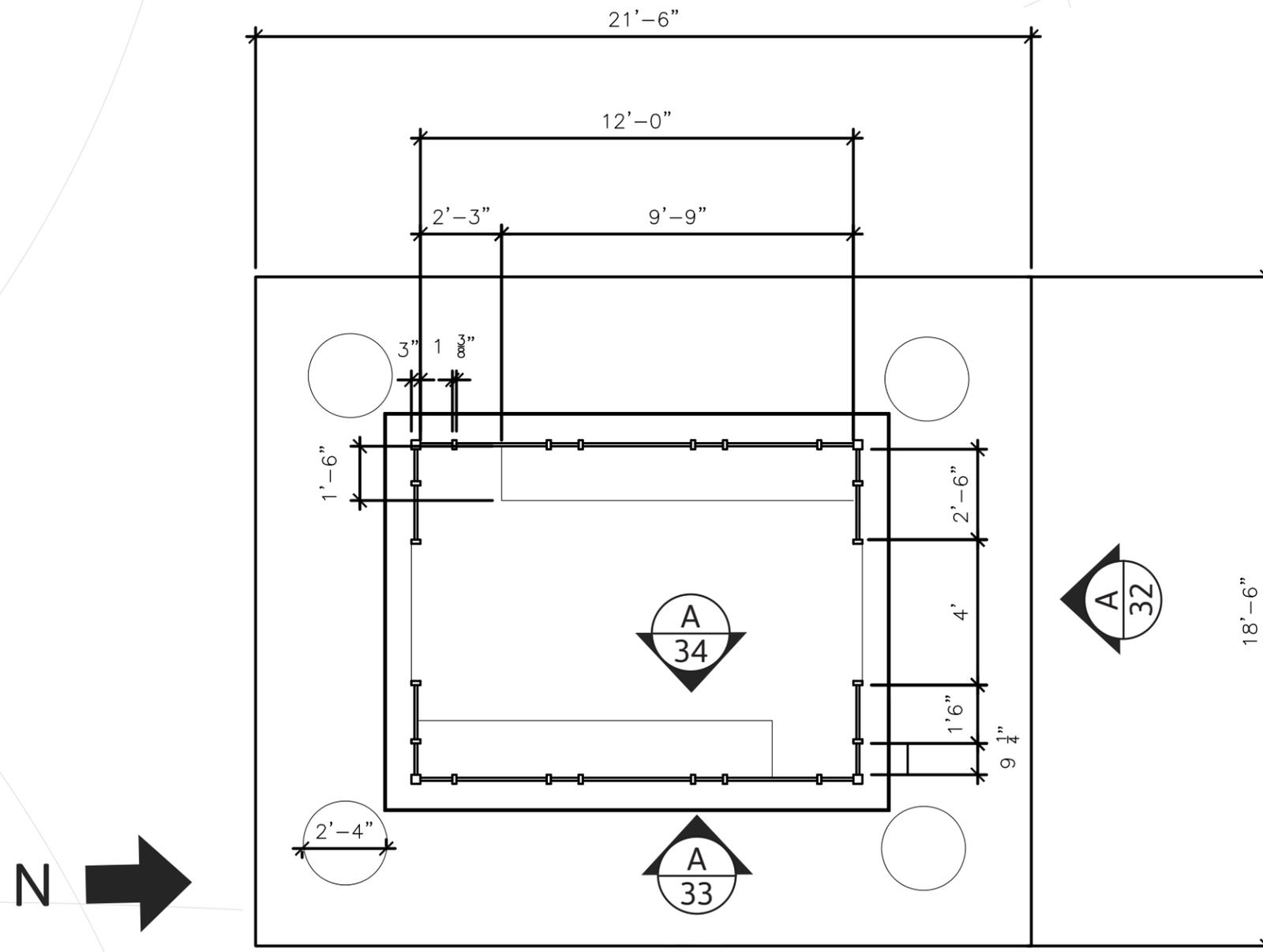


A Roof Plan
Scale: 1/4" = 1'

Project 3

Bus Shelter Design

Drawings-Floorplan

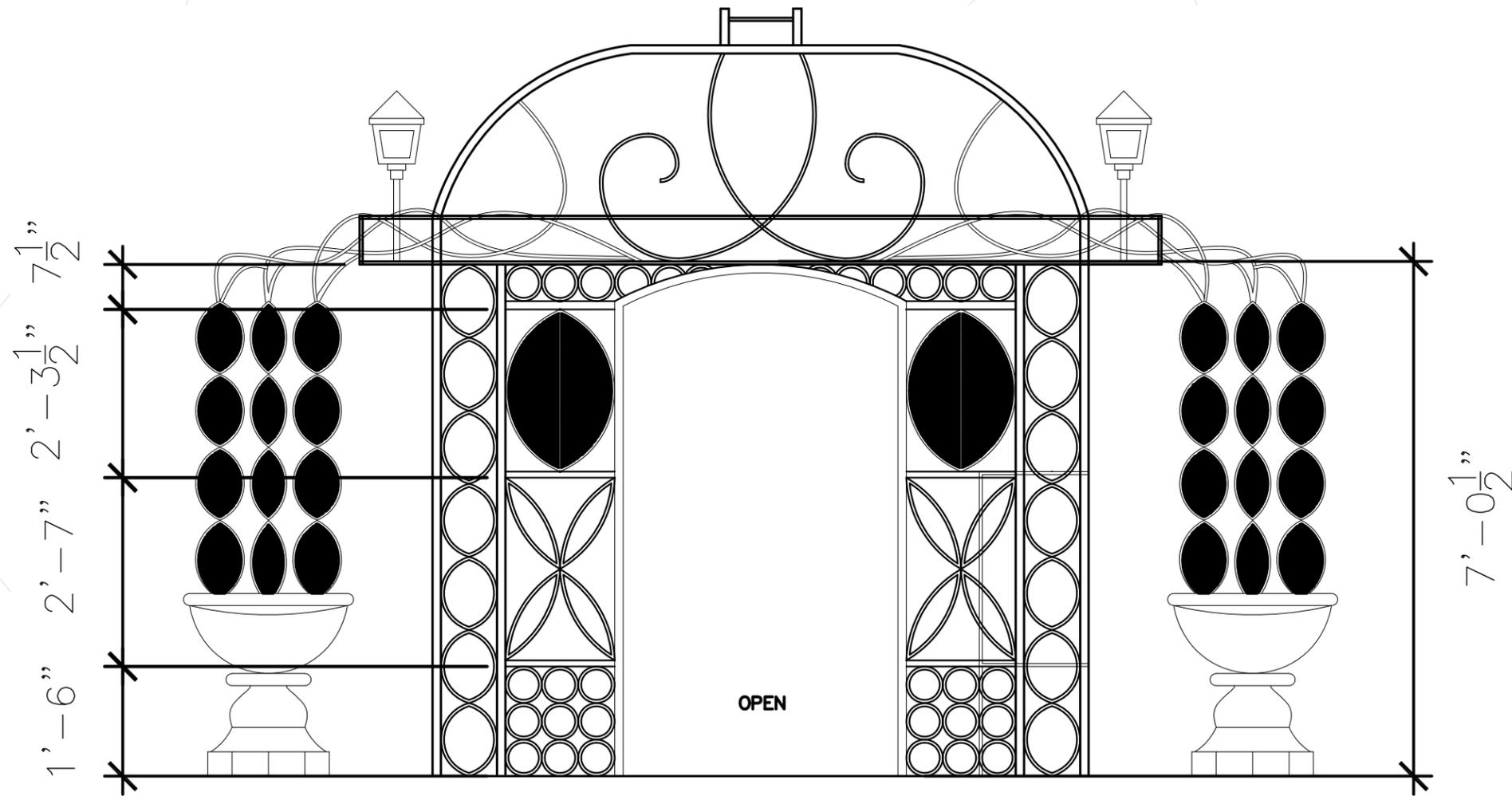


A Floorplan
Scale: 1/4" = 1'

Project 3

Bus Shelter Design

Drawings- Exterior Elevations

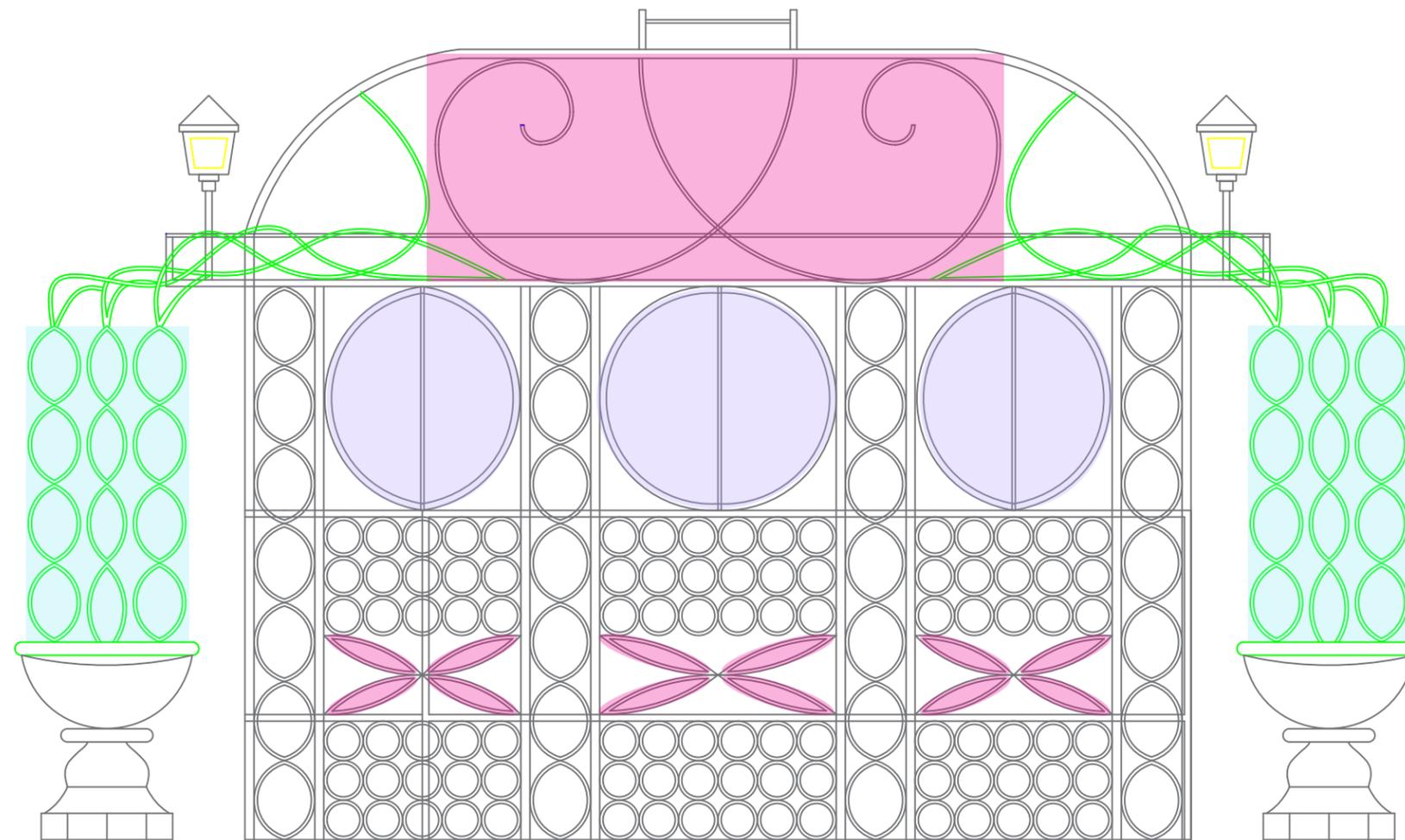


A North/South Exterior Elevation
Scale: 1/2" = 1'

Project 3

Bus Shelter Design

Diagrams- Fenestrations & Apertures



East/ West Exterior Elevation

This diagram emphasizes the unique operable windows as a defining fenestration element. Each window opens outward in paired panels, resembling butterfly wings, which introduces movement, ventilation, and an interactive quality to the design. Made of clear glass, these windows stand out within the broader structure of transition glass that defines most of the shelter.

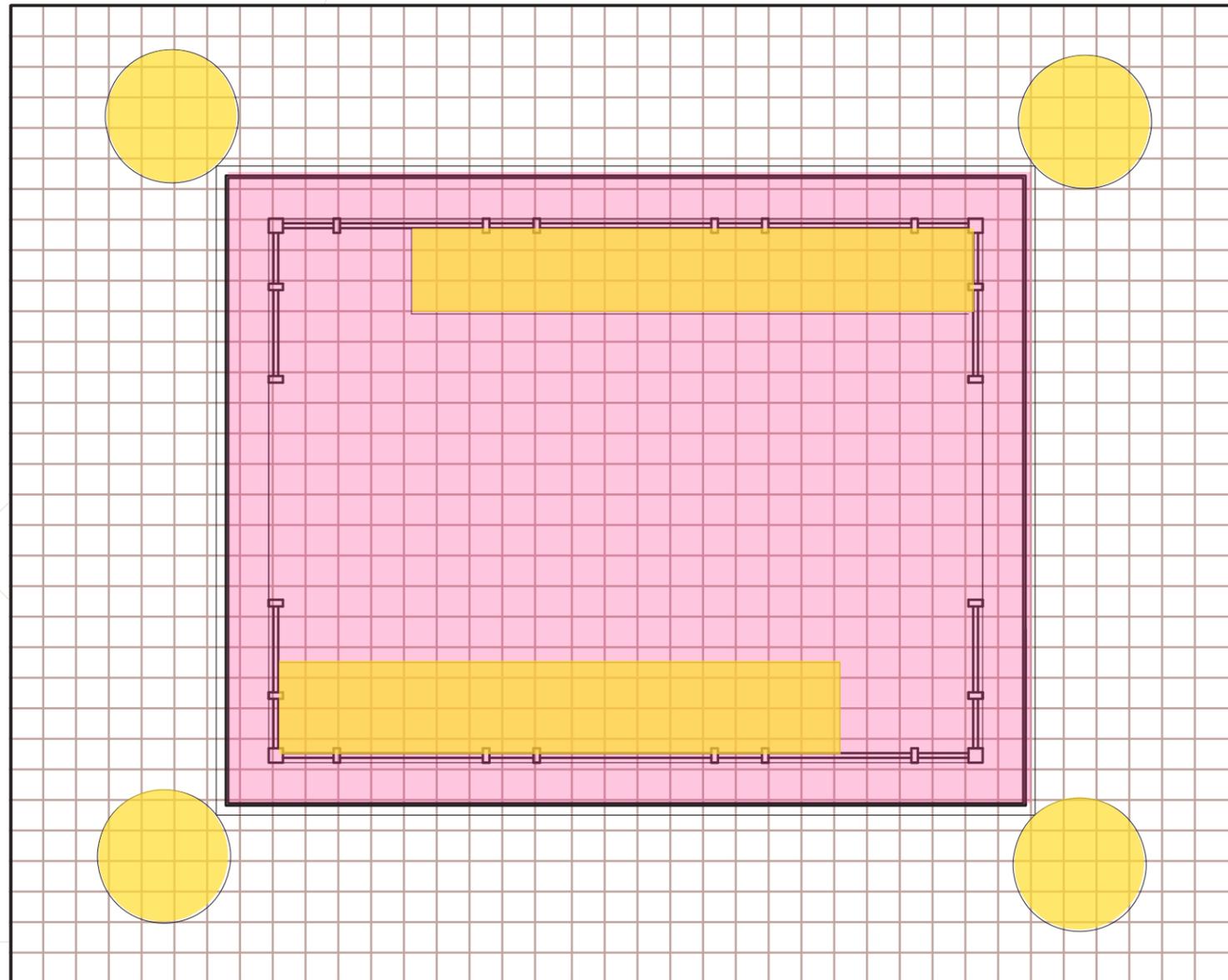
Key:

- = Clear glass apertures
- = Clear glass fenestration
- = Apertures

Project 3

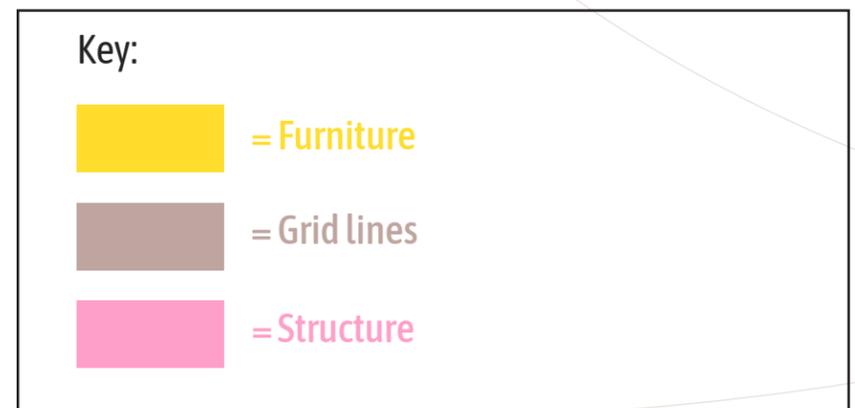
Bus Shelter Design

Diagrams- Spatial Organization



Floorplan

This diagram shows how the bus shelter follows a strict grid system. Every element aligns to the grid to create structure and clarity. The benches and stools fit within rectangular modules that keep the layout orderly, balanced, and cohesive.



Project 3

Bus Shelter Design

Final AI Models

Timeless Ornate Nature



AI semi-accurate rendering of bus shelter with dome roof in the park



AI semi-accurate rendering of bus shelter in the winter

Project 3

Bus Shelter Design

Final Model

Timeless Ornate Nature



Scale: 1/2" = 1'

Shelter Concept

This model represents a sectional perspective to clearly show the rotating bus schedule, integrated bench metalwork, and the overall spatial layout within the shelter. The dome roof begins just behind the planters, although in this perspective view it begins before them. When viewed head-on, this creates the illusion that the garden is projecting outward toward the viewer. This was intentional to maintain the visual cohesion of the model's proportions and materials while allowing key elements to remain visible. The stool design was updated so that the vine backs now extend from the center of each stool, creating two seating sides. This also allows for both partially covered and uncovered outdoor seating.

Project 3

Bus Shelter Design

Final Model

Timeless Ornate Nature



Scale: 1/2" = 1'