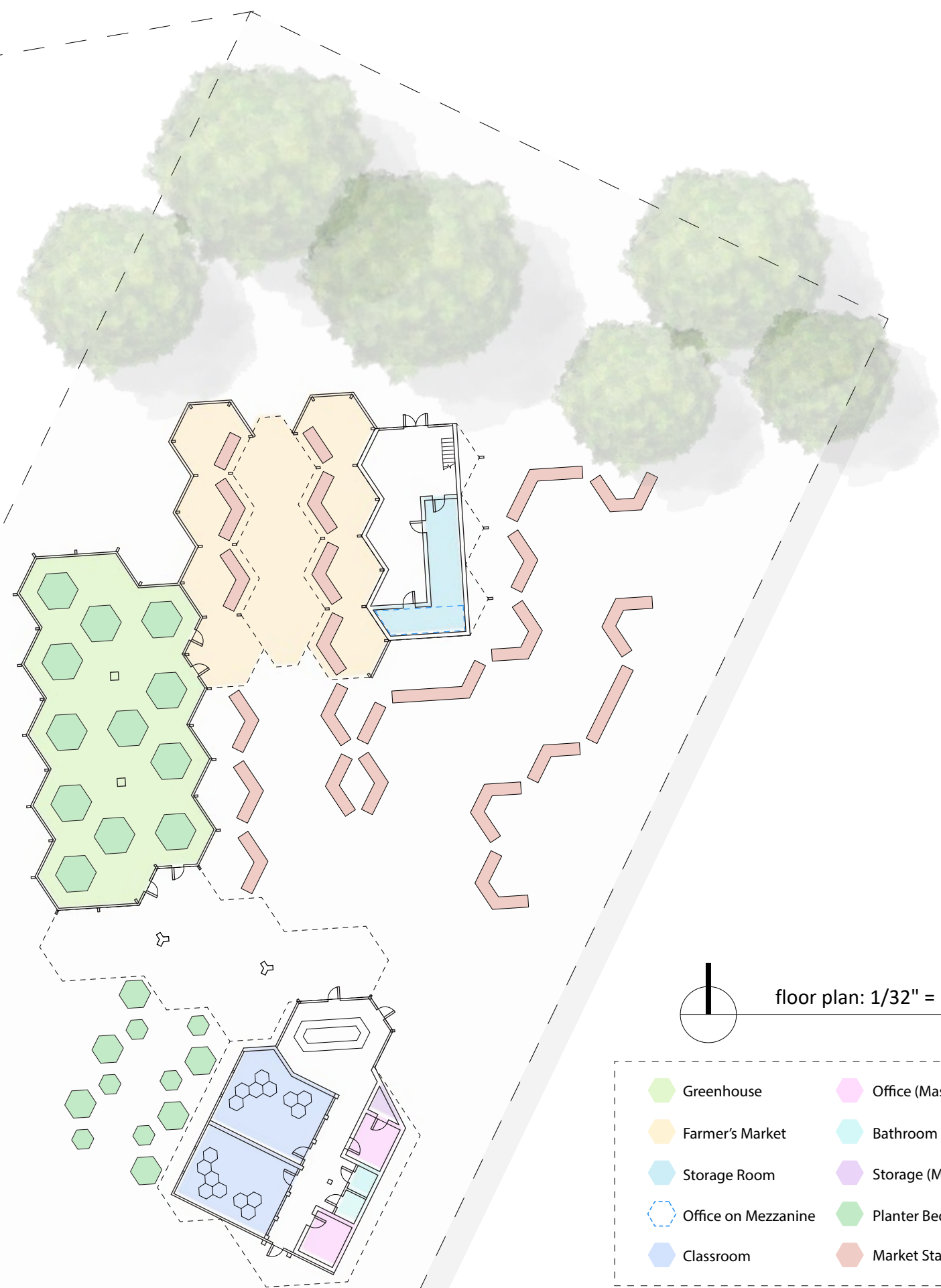
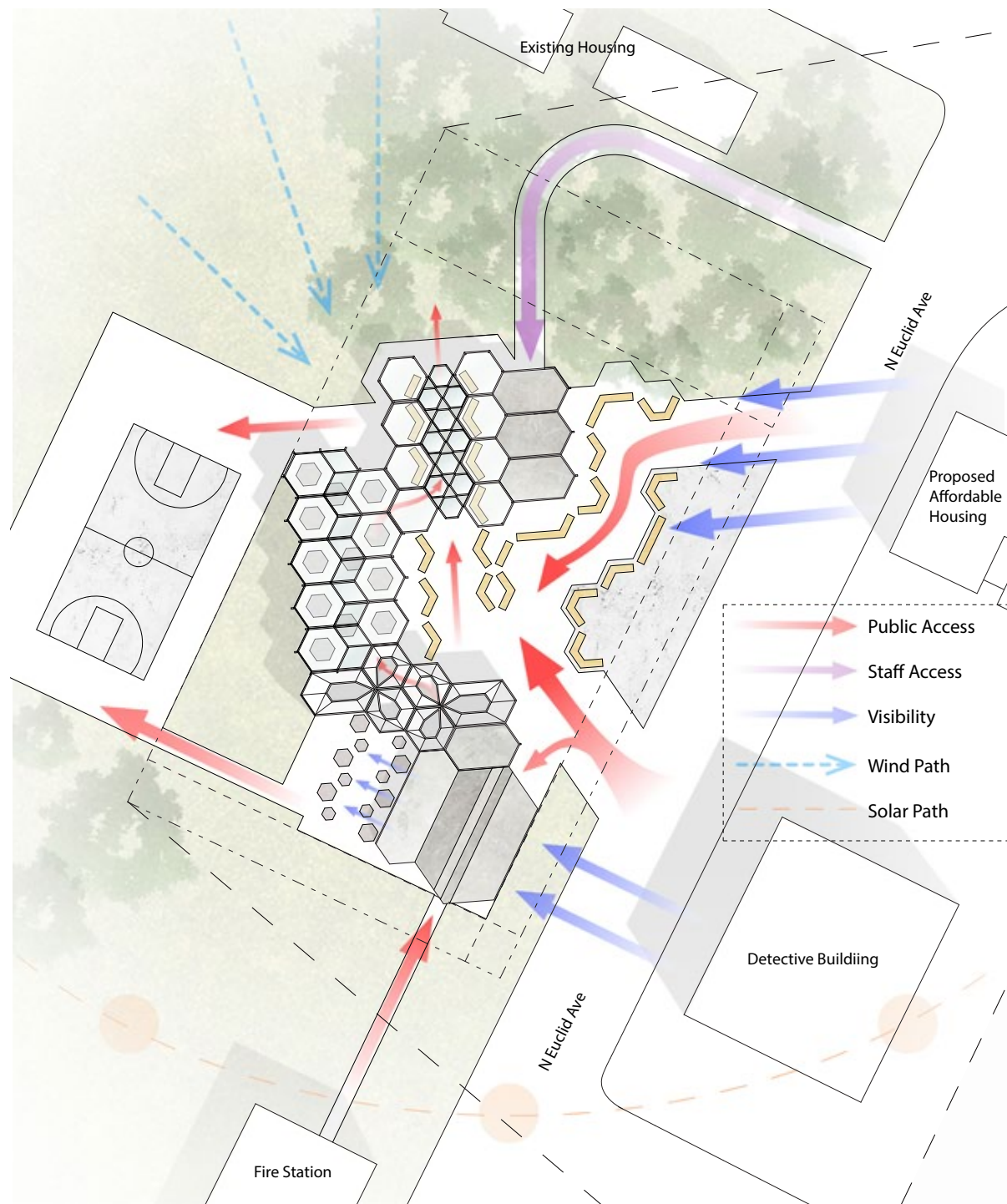


HEXGRO -- Urban Agricultural Center

In this project, we were asked to design a center for urban agriculture at a given site of the Garland Parklet, Squirrel Hill, Pittsburgh. It should include four basic functional zones--an educational building, a greenhouse, a covered farmer's market, and a support area that includes the staff's office. My design was inspired by the hexagonal shape of the plant cell and the organic growing of trees. Hexagon is not only the primary modular unit of the whole structure, but it speaks to the surrounding conditions, creates intriguing and evocative patterns, directs circulation and flow, and engenders memorable spatial experience.





SITE CONTEXT

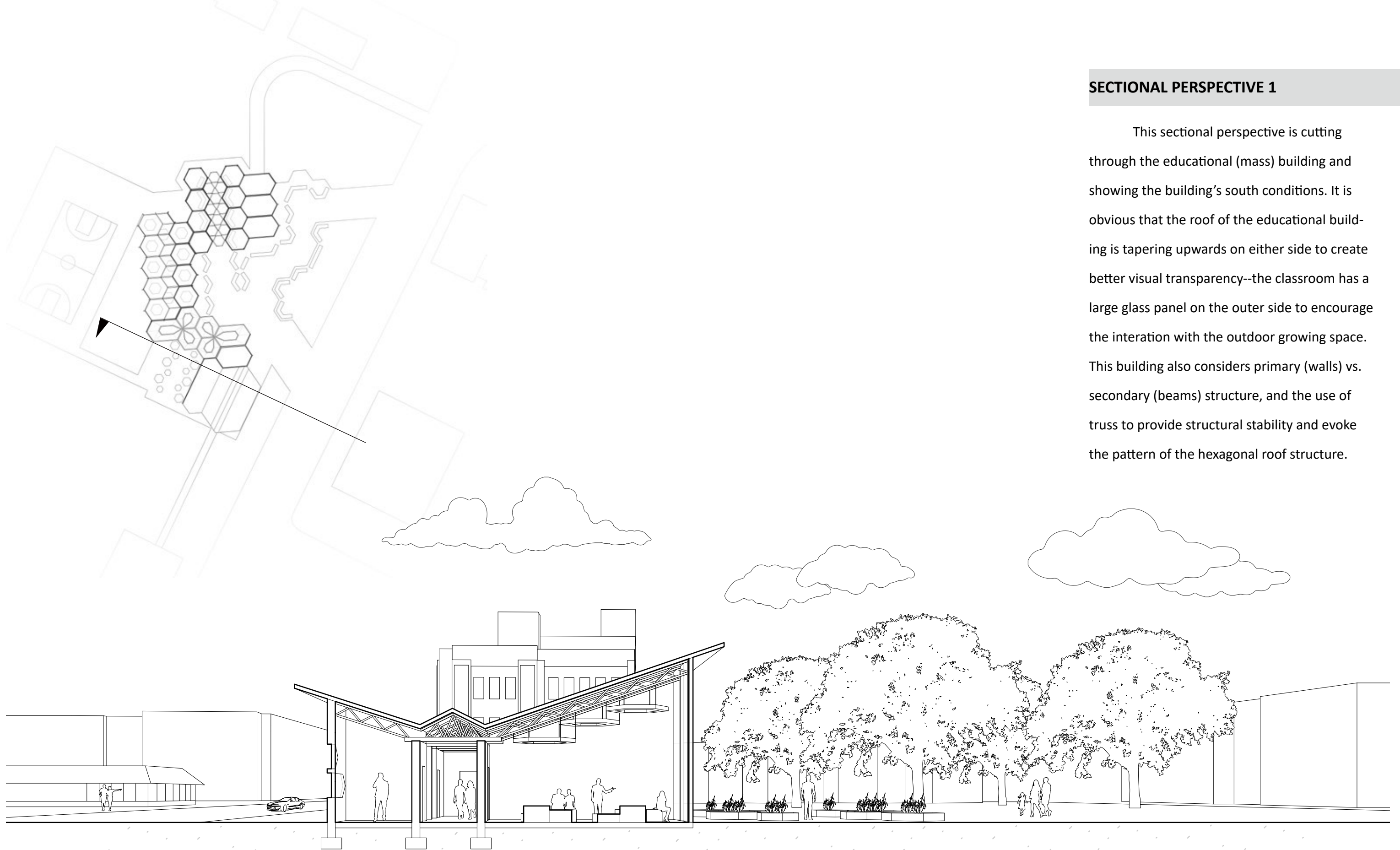
The floor plan shows that the design is corresponding to the complex site conditions, including pedestrian and staff's access to the site, visual transparency from adjacent buildings, orientation and direction of the sun and wind, the use of a large, welcoming space as a source of attraction, and the organization of different functional zones to facilitate circulation in and out of one another.

floor plan: 1/32" = 1' - 0"

- | | |
|---------------------|----------------|
| Greenhouse | Office (Mass) |
| Farmer's Market | Bathroom |
| Storage Room | Storage (Mass) |
| Office on Mezzanine | Planter Bed |
| Classroom | Market Stall |

SECTIONAL PERSPECTIVE 1

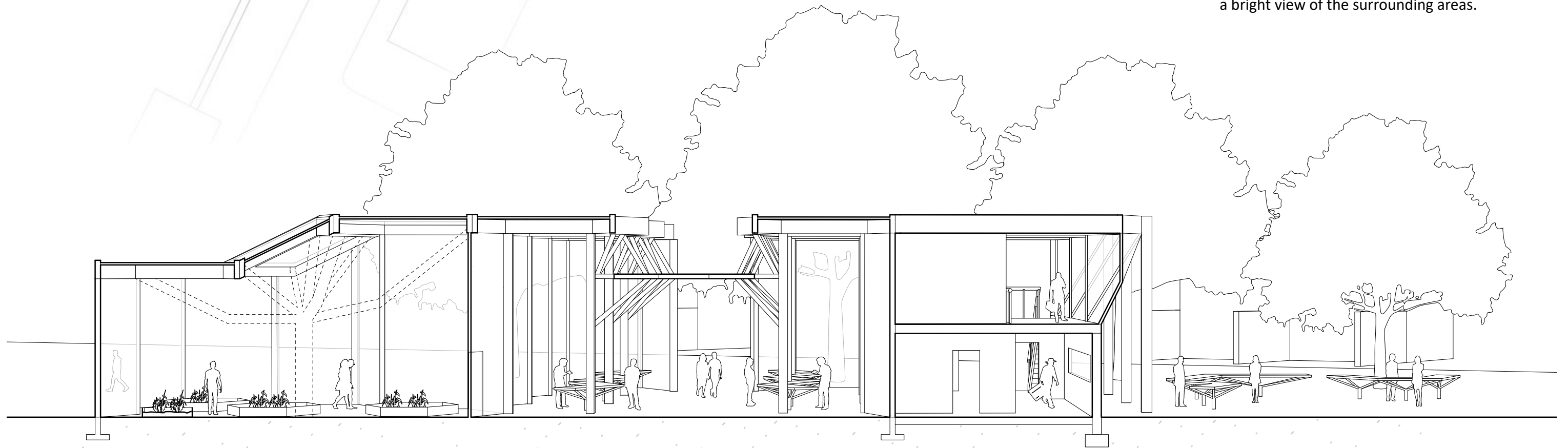
This sectional perspective is cutting through the educational (mass) building and showing the building's south conditions. It is obvious that the roof of the educational building is tapering upwards on either side to create better visual transparency--the classroom has a large glass panel on the outer side to encourage the interaction with the outdoor growing space. This building also considers primary (walls) vs. secondary (beams) structure, and the use of truss to provide structural stability and evoke the pattern of the hexagonal roof structure.



Scale: 3/32" = 1' - 0"

SECTIONAL PERSPECTIVE 2

The second sectional perspective is cutting through the greenhouse, farmer's market, and the support area and shows the building's north conditions. The big "tree" structure helps carry the weight of the steel frame and glass panels. The farmer's market has the roof of the central aisle lowered, leading pedestrians to the tree areas; and the roof above the market stalls higher, giving more focus to the stalls. The support area has a storage room on ground level and a staff's office on a mezzanine, which offers a bright view of the surrounding areas.

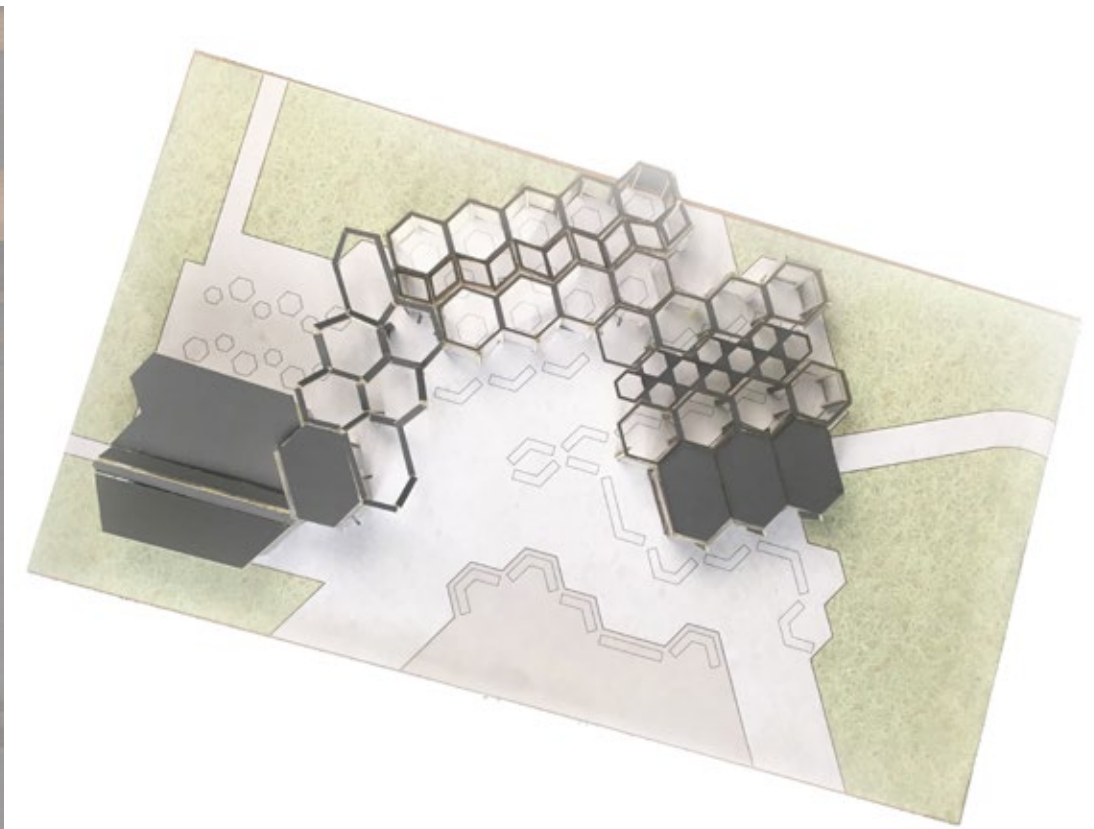


Scale: 3/32" = 1' - 0"



1

2



3

INTERIOR RENDERINGS



1. Classroom: place for group gathering, tour guiding, and educational purposes

2. Greenhouse: crystalline structure with hexagonal layout and planter beds for public growing activities

3. Farmer's market: covered place for selling and buying daily necessities.