

ON EARTH'S BODY

A NEW CENTER FOR THE CITY OF ALEXANDRIA
DEPARTMENT OF PARKS AND RECREATION
by Jacqueline Cheron

Thesis submitted to the faculty of Virginia
Polytechnic Institute and State University
in partial fulfillment of the requirements
for the degree of

MASTER OF ARCHITECTURE

Susan Piedmont-Palladino, Chair

Marcia Feuerstein

Paul Emmons

May 10, 2010
Alexandria, VA

Keywords: Body, Earth, Theater, Classroom

ON EARTH'S BODY

A NEW CENTER FOR THE CITY OF ALEXANDRIA
DEPARTMENT OF PARKS AND RECREATION
by Jacqueline Cheron

I have always been interested in the body and spirit/self relationship. As a former fitness instructor and new mother, I have experienced many variations of my body. I was especially interested in what happens during movement or exercise as the body and self become more aware of each other and the spaces around them.

My thesis began with an investigation of the body in context to modern dance. I read several books and took a course on beginning modern dance where we practiced the basic motions and attended performances. I was influenced by modern dance's fluid, natural motion and bare feet in direct contact with the earth which inspires a momentary release of the soul from the body.

It was these initial feelings that I wanted to convey in my thesis...a building that danced with the Earth around it, a building cradled in Earth.

Abstract

	Title
	Abstract
iii	Table of Contents
iv	List of Figures
1	Dance and the Body in Space
2-4	Body as Structure
5	Building Program
6-7	Site
8-11	Plans
12-14	Sections & Elevations

All Photographs were taken by the author

fig. 1.1	Matisse, Henri. Dance. 1910. The Hermitage, St. Petersburg. 15 Oct. 2006 < http://arthistory.about.com/od/from_exhibitions/ig/from_russia_1207/fr04_matisse.html >	fairuse	page 1
fig. 1.2	Unknown, Matt. Trampoline-Jump-Ed. Online Posting. 13 Aug. 2005 < http://www.flickr.com/photos/37613229@N00/33724057/ >	fairuse	page 1
fig. 1.3	Original Painting entitled The Three Men	photograph taken by author	page 1
fig. 1.4	Original Painting entitled The Spirit Within	photograph taken by author	page 1
fig. 3.1	Structural sketches	photograph taken by author	page 3
fig. 3.2	Concrete structure sketches	photograph taken by author	page 3
fig. 7.1	Site exploration model	photograph taken by author	page 7
fig. 7.2	Site exploration sketches	photograph taken by author	page 7
fig. 7.3	Photograph of tunnel	photograph taken by author	page 7
fig. 7.4	Site Photo	photograph taken by author	page 7
fig. 7.5	Site Photo	photograph taken by author	page 7



fig. 1.1-Matisse, Henri. Dance. 1910. The Hermitage, St. Petersburg. 15 Oct. 2006
<http://arthistory.about.com/od/from_exhibitions/ig/from_russia_1207/fr04_matisse.html>
fairuse

Light should come from the ground plane and remain close to the body. The body as the focus of expression. Views to the exterior should be limited as not to distract the self from the body, focus light and views inward. Ambient diffuse light with an obscured source.

The body in play is excited and elevated, curious and descending. There is a fascination with the body leaving the ground plane.



fig. 1.2 Unknown, Matt. Trampoline-Jump-Ed. Online Posting. 13 Aug. 2005
<<http://www.flickr.com/photos/37613229@N00/33724057/>> fairuse

In figure 1.3, entitled The Three Men, I explored the body as three layers of function. The skeleton serving as structure, the skin as the face/identity and concealer of internal workings and the muscles liberated from these as the spirit of free unrestrained motion.

Figure 1.4, entitled The Spirit Within, shows lights seeping through the Earth, seductively revealing the hidden life beneath.



fig. 1.3 Original Painting entitled The Three Men

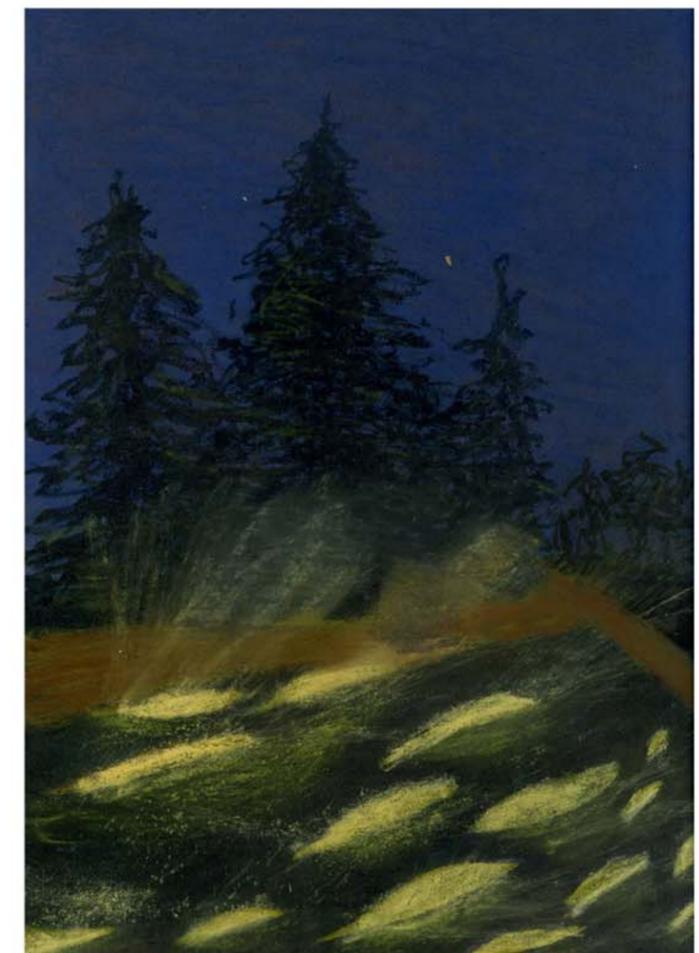
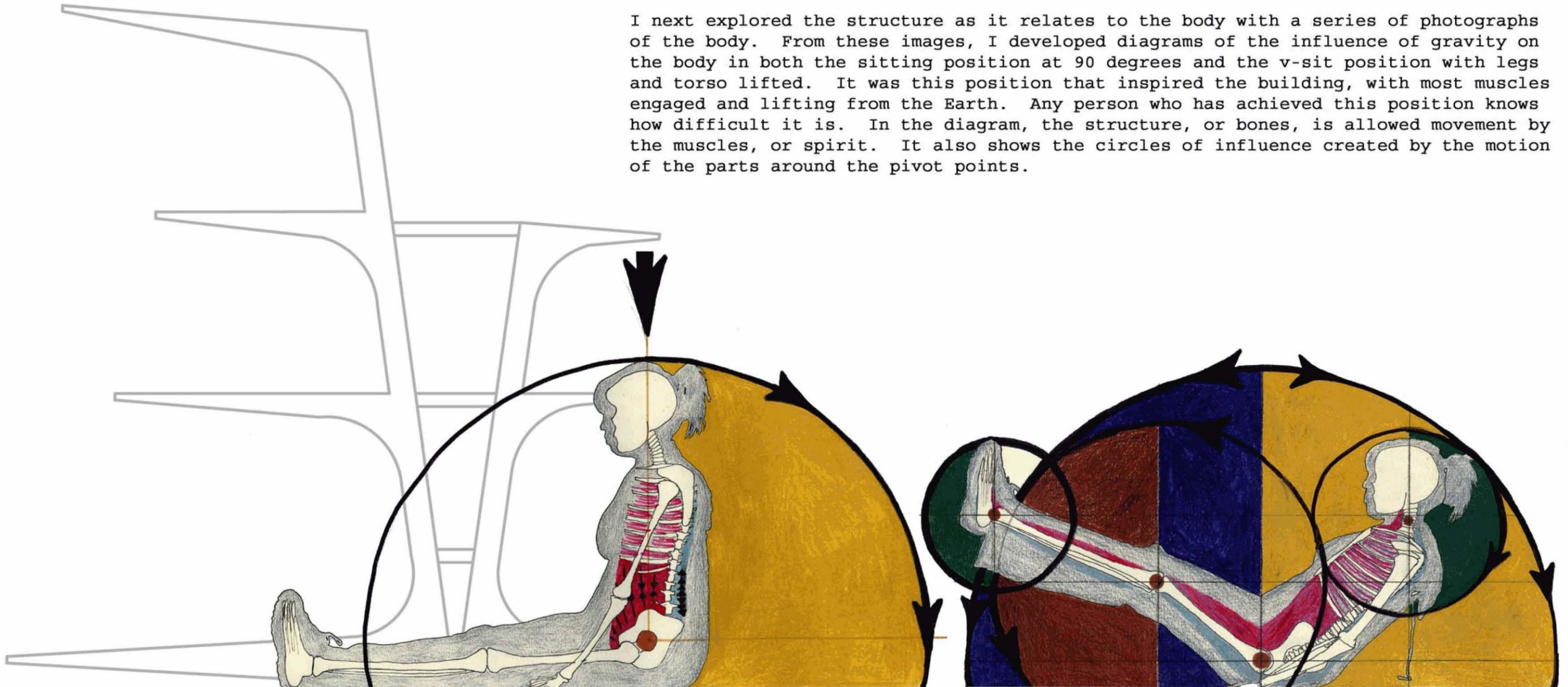


fig. 1.4 Original Painting entitled The Spirit Within



I next explored the structure as it relates to the body with a series of photographs of the body. From these images, I developed diagrams of the influence of gravity on the body in both the sitting position at 90 degrees and the v-sit position with legs and torso lifted. It was this position that inspired the building, with most muscles engaged and lifting from the Earth. Any person who has achieved this position knows how difficult it is. In the diagram, the structure, or bones, is allowed movement by the muscles, or spirit. It also shows the circles of influence created by the motion of the parts around the pivot points.



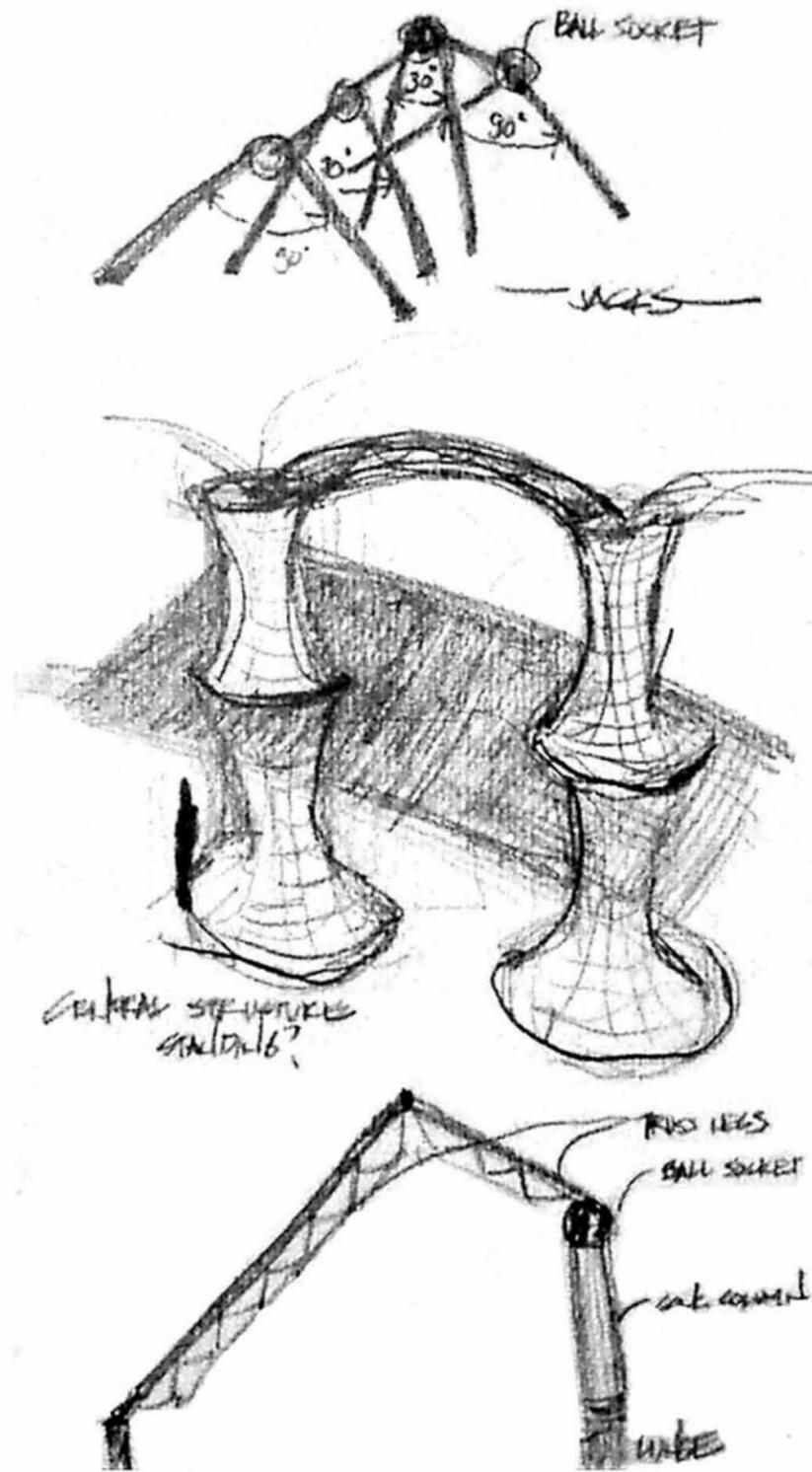


fig. 3.1

Figure 3.1 shows some structural sketches of how different positions; jacks, standing and lunging; could be translated into architecture. Versions of the standing column and the truss leg/lunge show themselves in my thesis building.

The first attempt at translating body as structure is shown in Figure 3.2 as large, almost gothic concrete structure. This was unsuccessful, as the sculptural structure overtook and overwhelmed the architecture...dictating more to and not working with the spirit of the spaces.

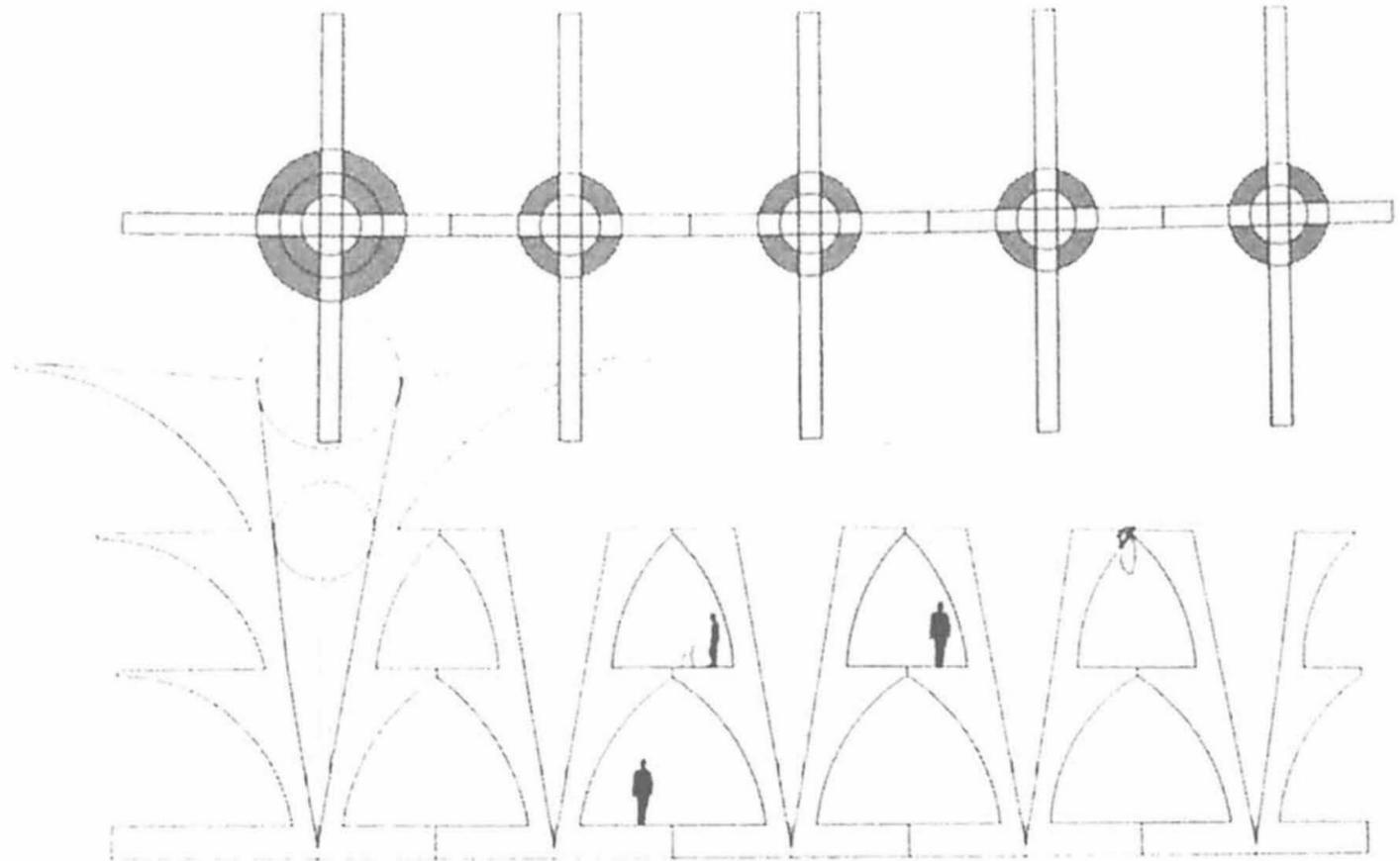
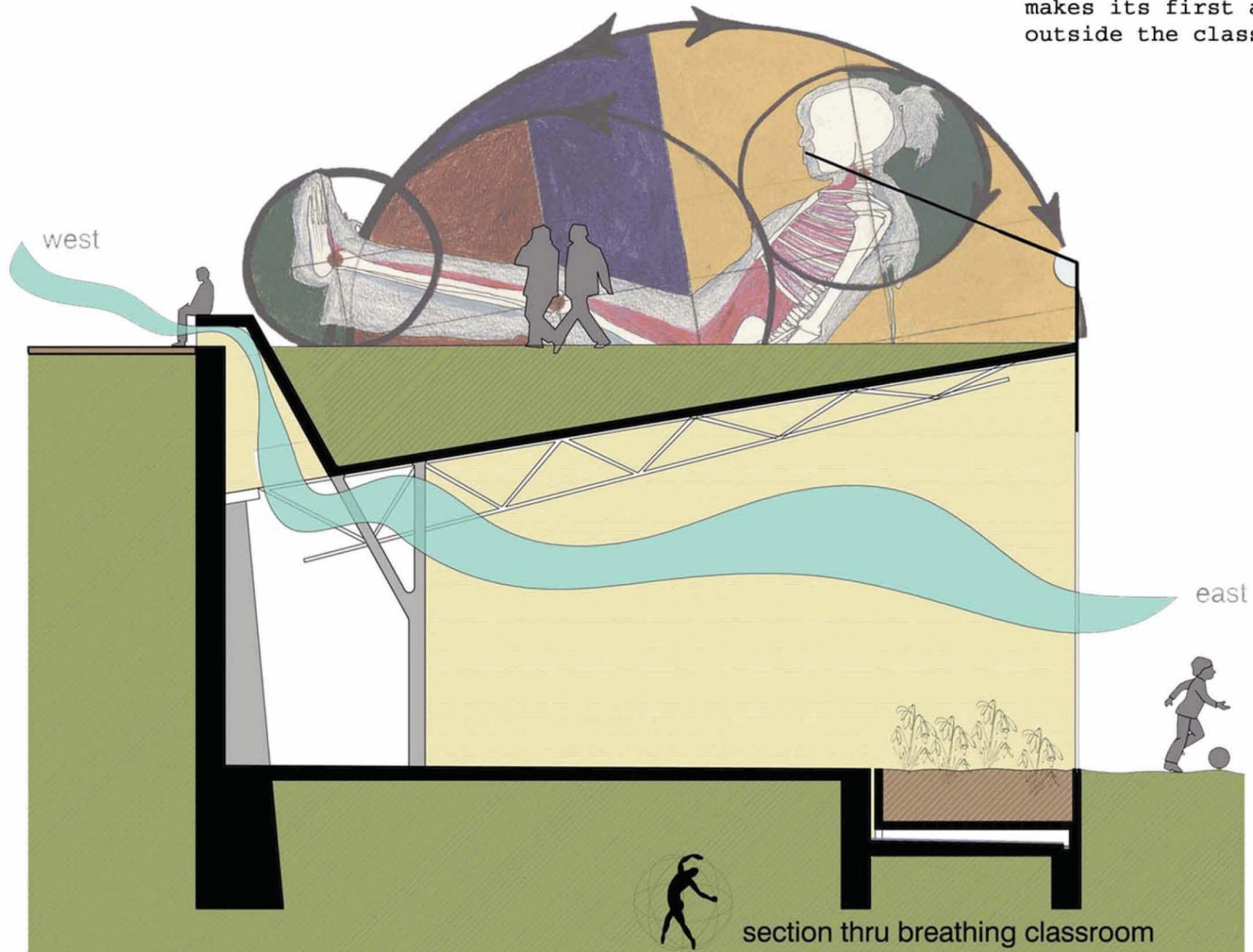


fig. 3.2

The synthesis of the moving body image and the structure came as a conceptual sketch through the breathing classroom. Here the truss-leg assembly is used as structure and cross-ventilation through the classroom comes from operable/moving window components. The Earth also makes its first appearance into the building in gardens located just outside the classrooms.



The site, formerly a park, shall house a new headquarters building for the City of Alexandria Department of Parks and Recreation. In addition to an office function, the building will house an exhibition space, theater, classrooms and a restaurant.

The head - activity - tower building

Lower Level - Theater

Main Entry Level - Exhibition space for City of Alexandria Parks Department, includes a central garden for native plants.

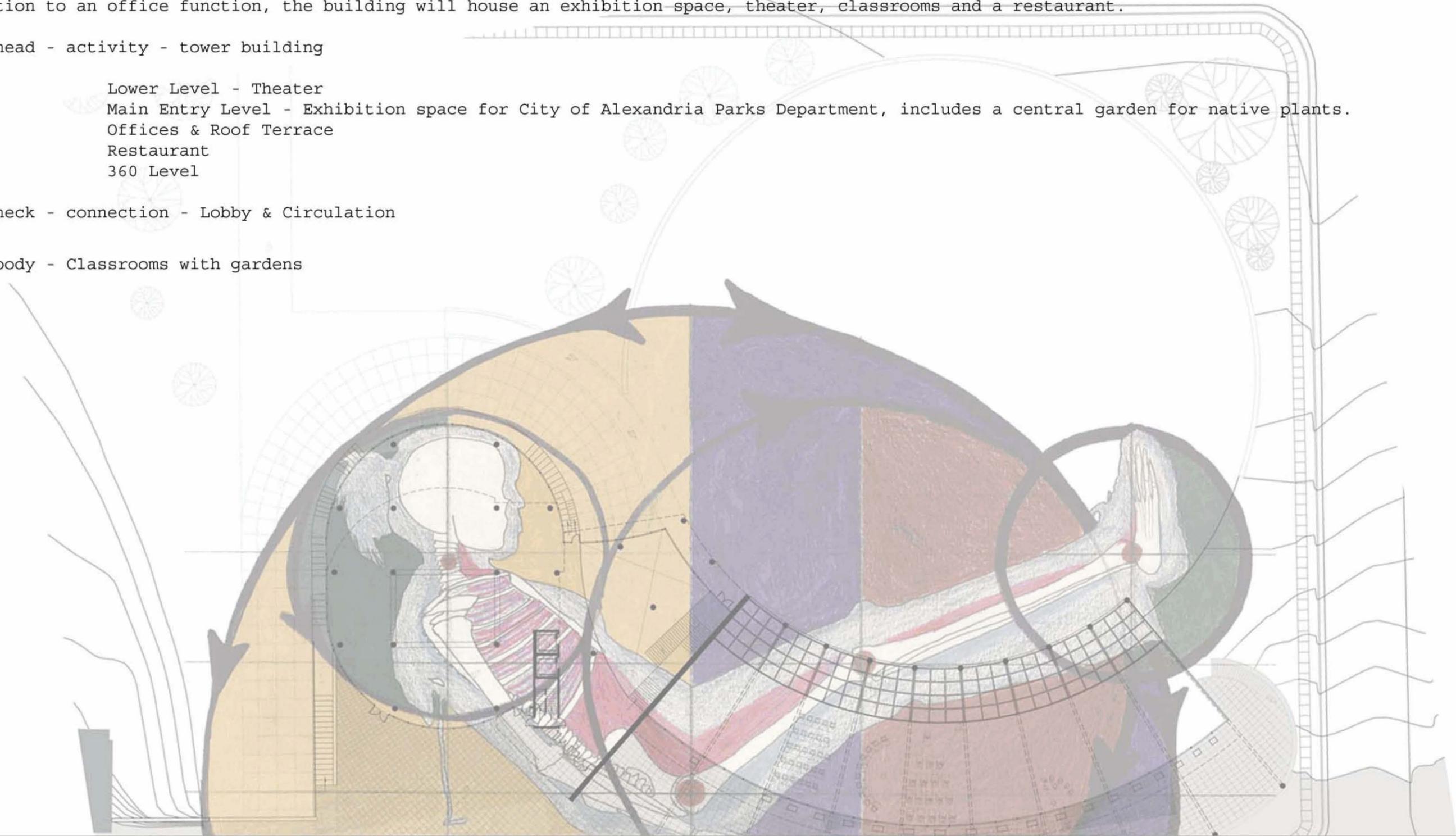
Offices & Roof Terrace

Restaurant

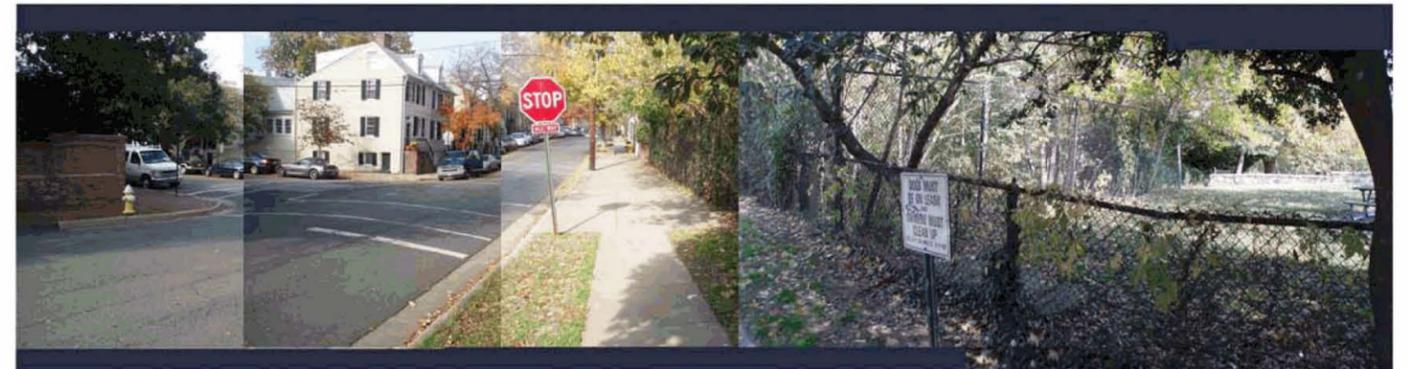
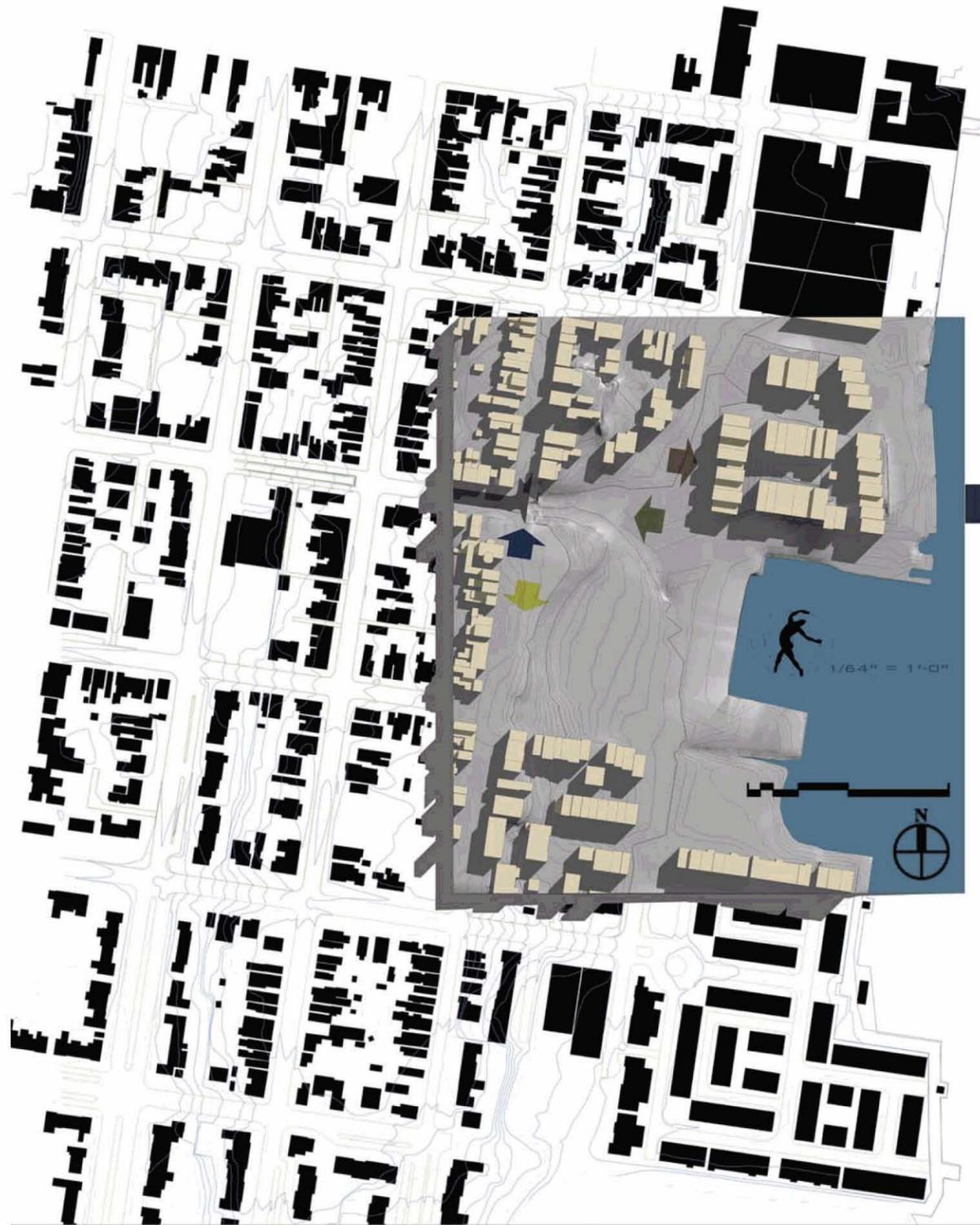
360 Level

The neck - connection - Lobby & Circulation

The body - Classrooms with gardens



The site for my building is a parcel of land three blocks south of King Street with an unobstructed view of the Potomac. What drew me to this site was its varied topography ranging from six feet above sea level at the east most edge to 30 feet above sea level at the west most edge. There is also a beautiful stone pedestrian tunnel at the north side. The land is used as a public park with swings and a basketball court. Much of the land is still underdeveloped.



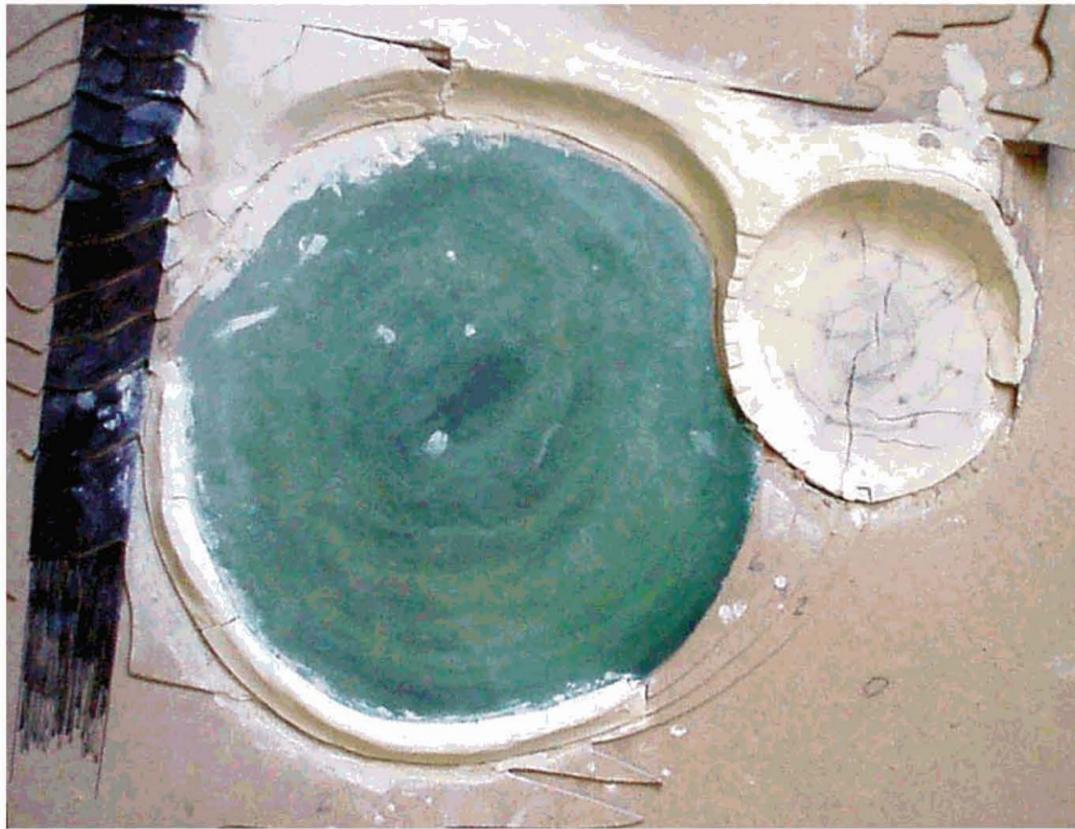


fig. 7.1 Site exploration model

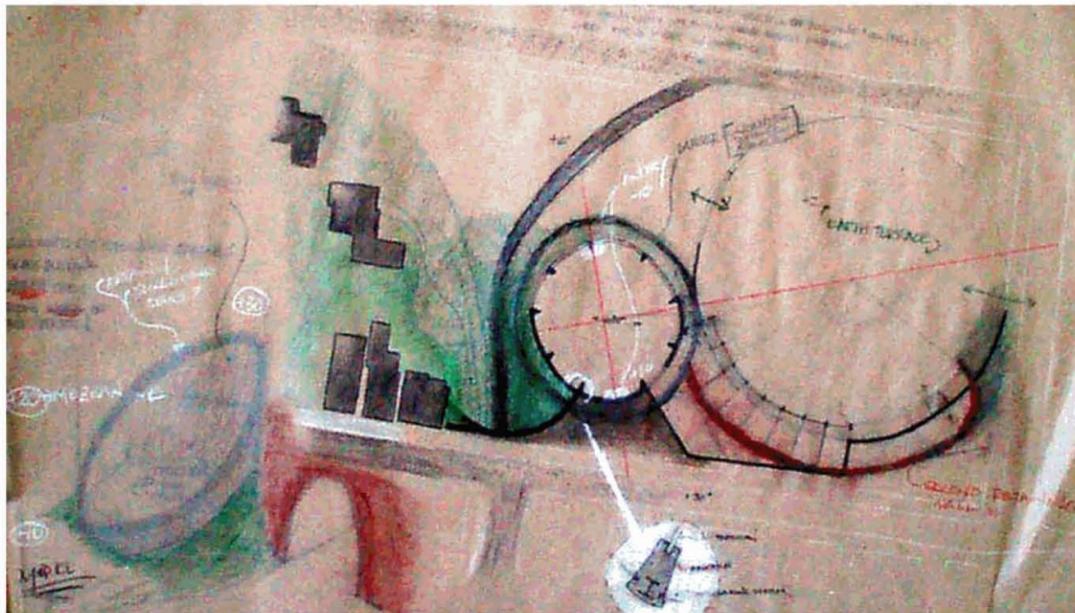
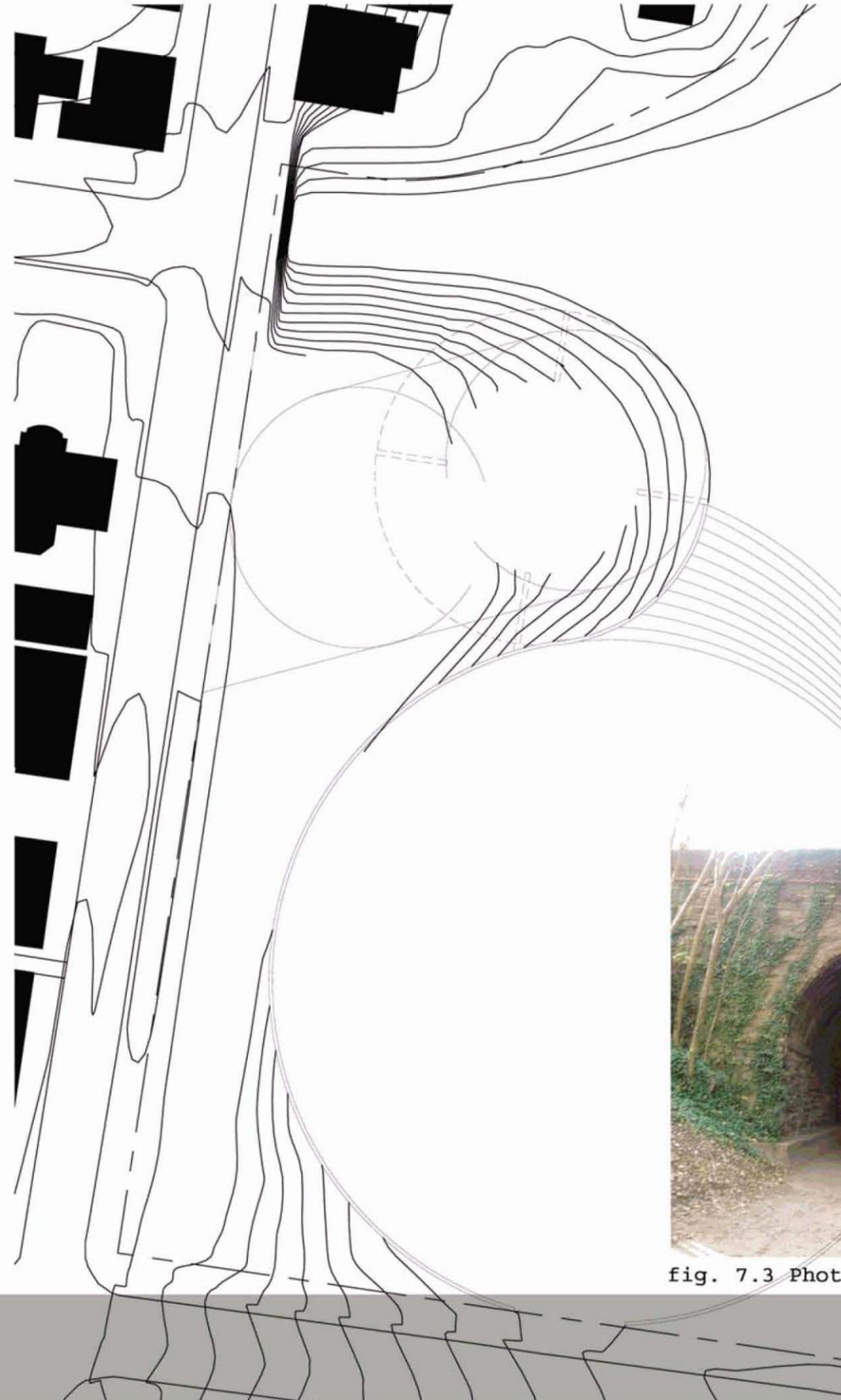


fig. 7.2 Site exploration sketches



I wanted to create a building inspired by the existing topography & flow of the land. I began modeling and molding the Earth (fig. 7.1) and discovered a head or tower component near the tunnel at the north part of the site. This is where the theater, exhibition, offices and restaurant will live. A circular terrace emerged with a backbone/ribcage of classrooms nestled into the earth bank along the perimeter. A neck portion connects the head/tower to the body/classrooms. This houses the circulation-elevators, stairs, lobby spaces and also the roof that serves as a cocktail style entertaining space with a projection wall for films and presentations.



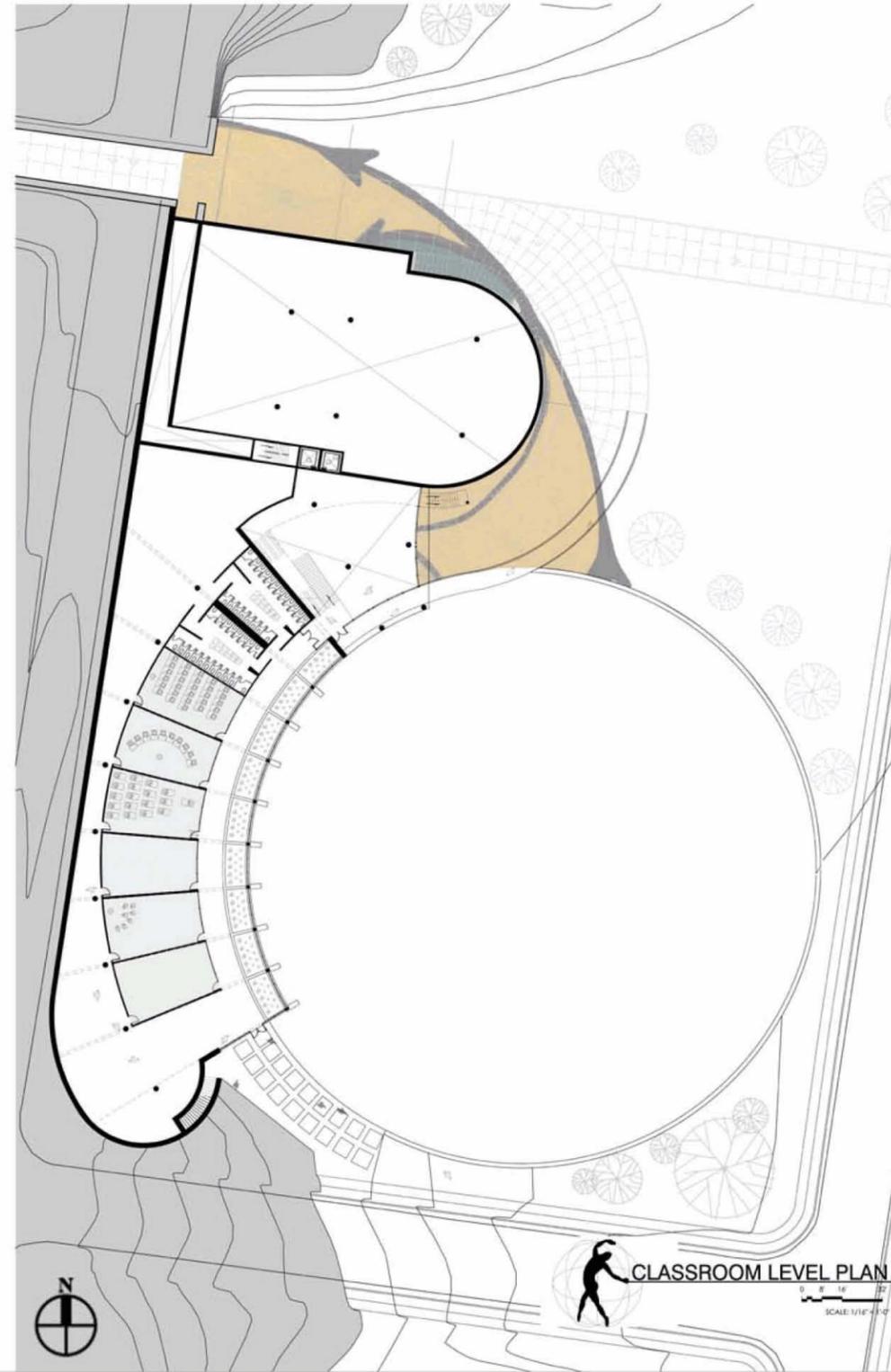
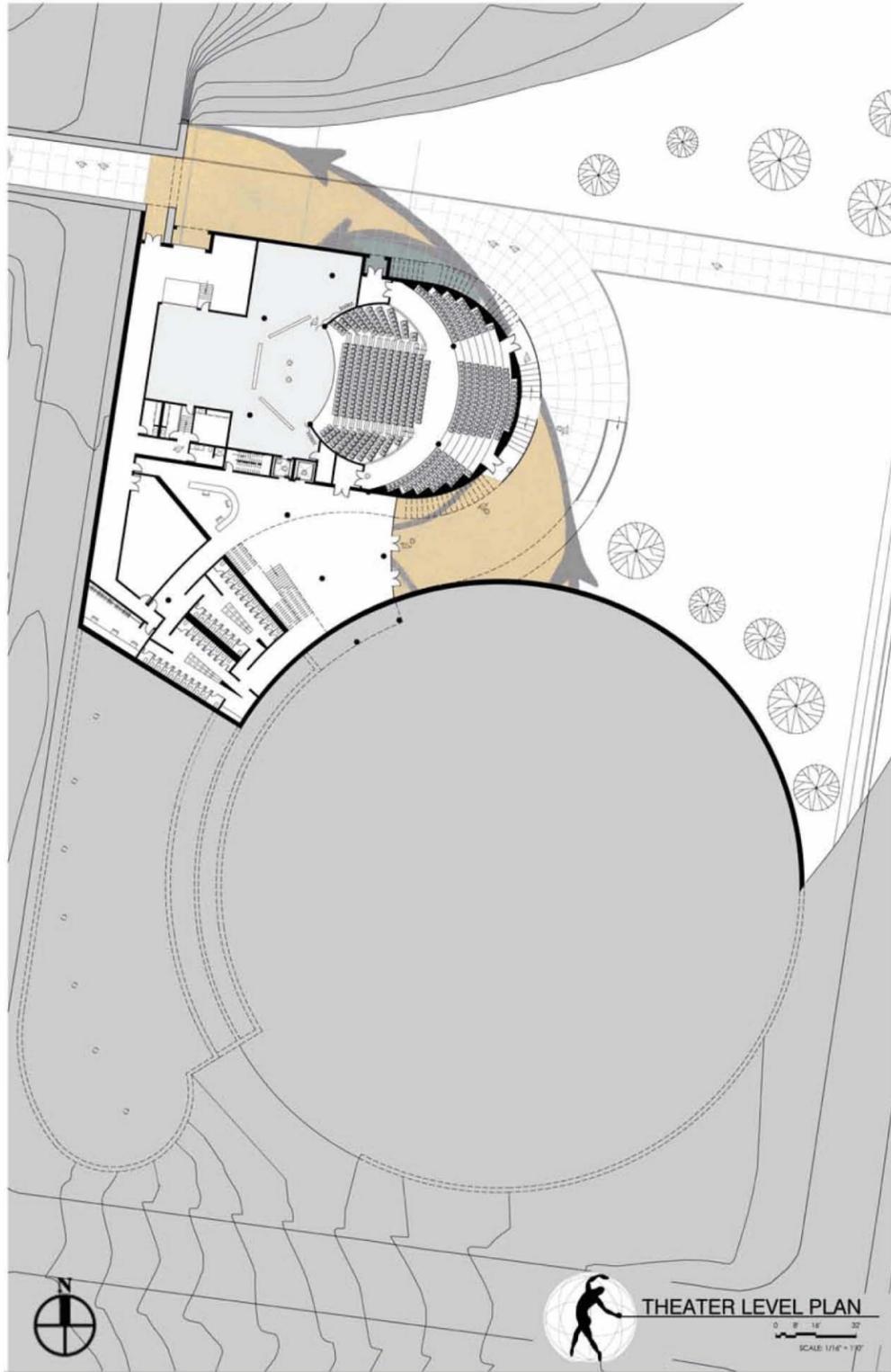
fig. 7.3 Photograph of tunnel

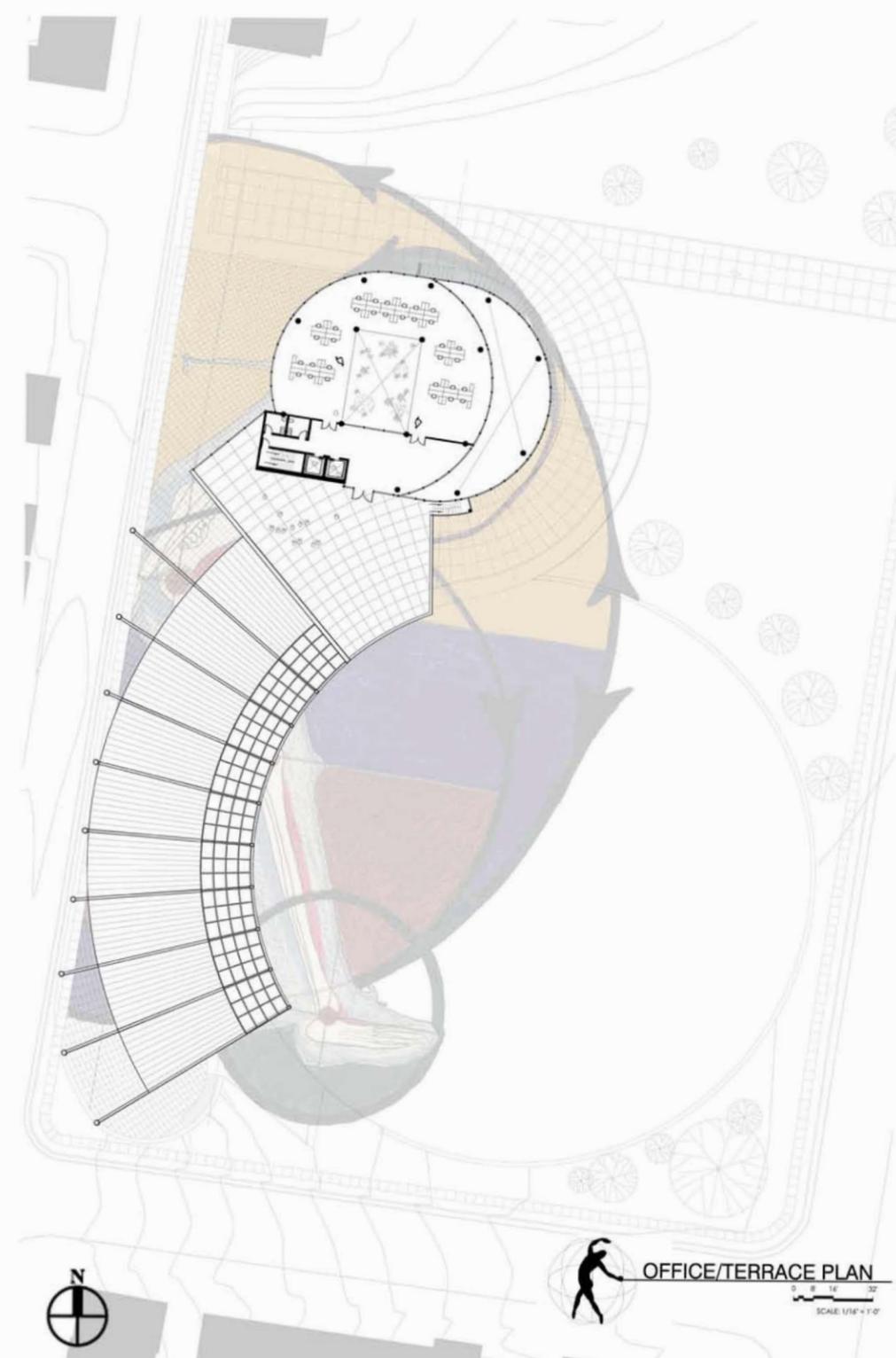
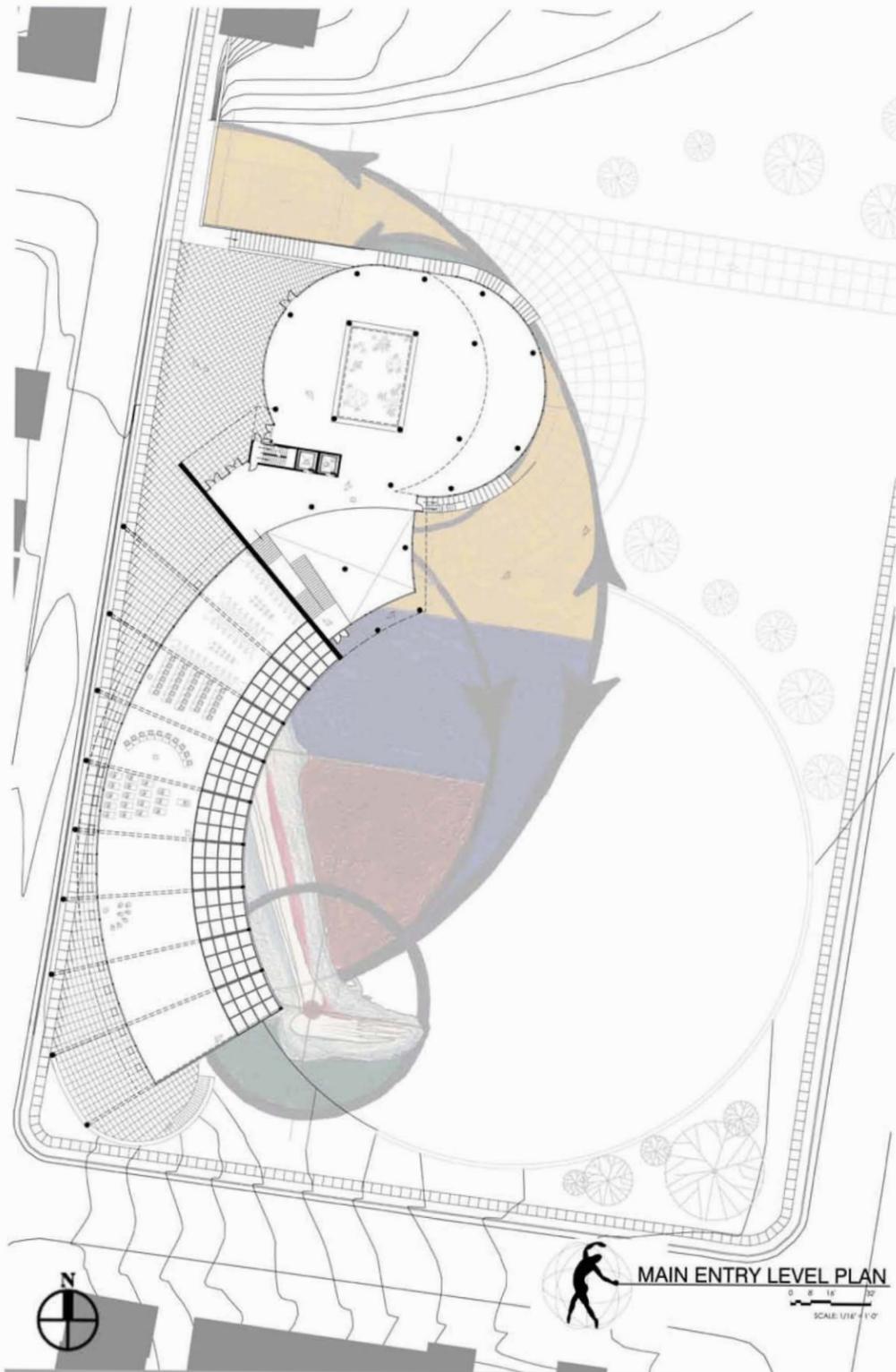


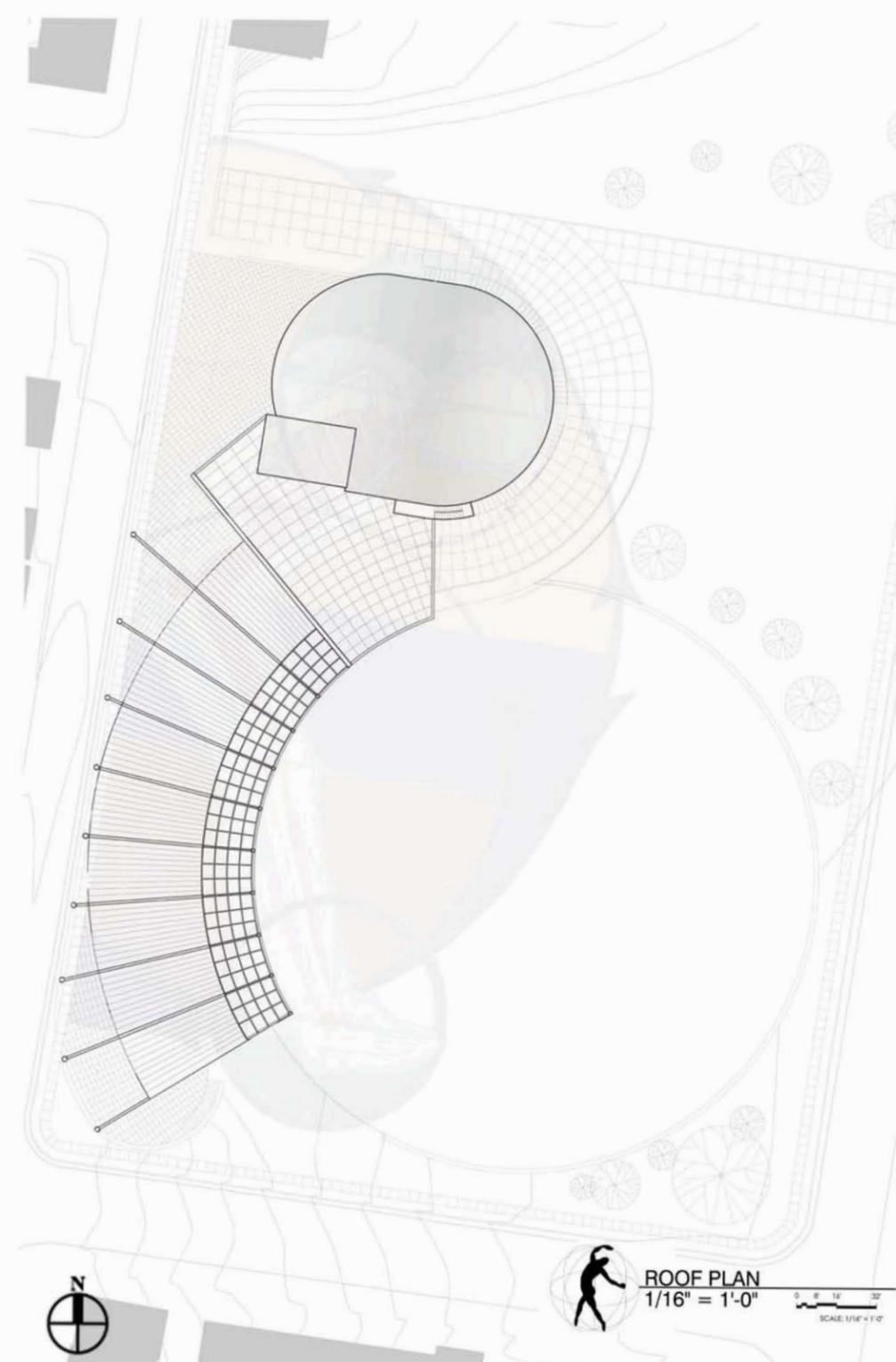
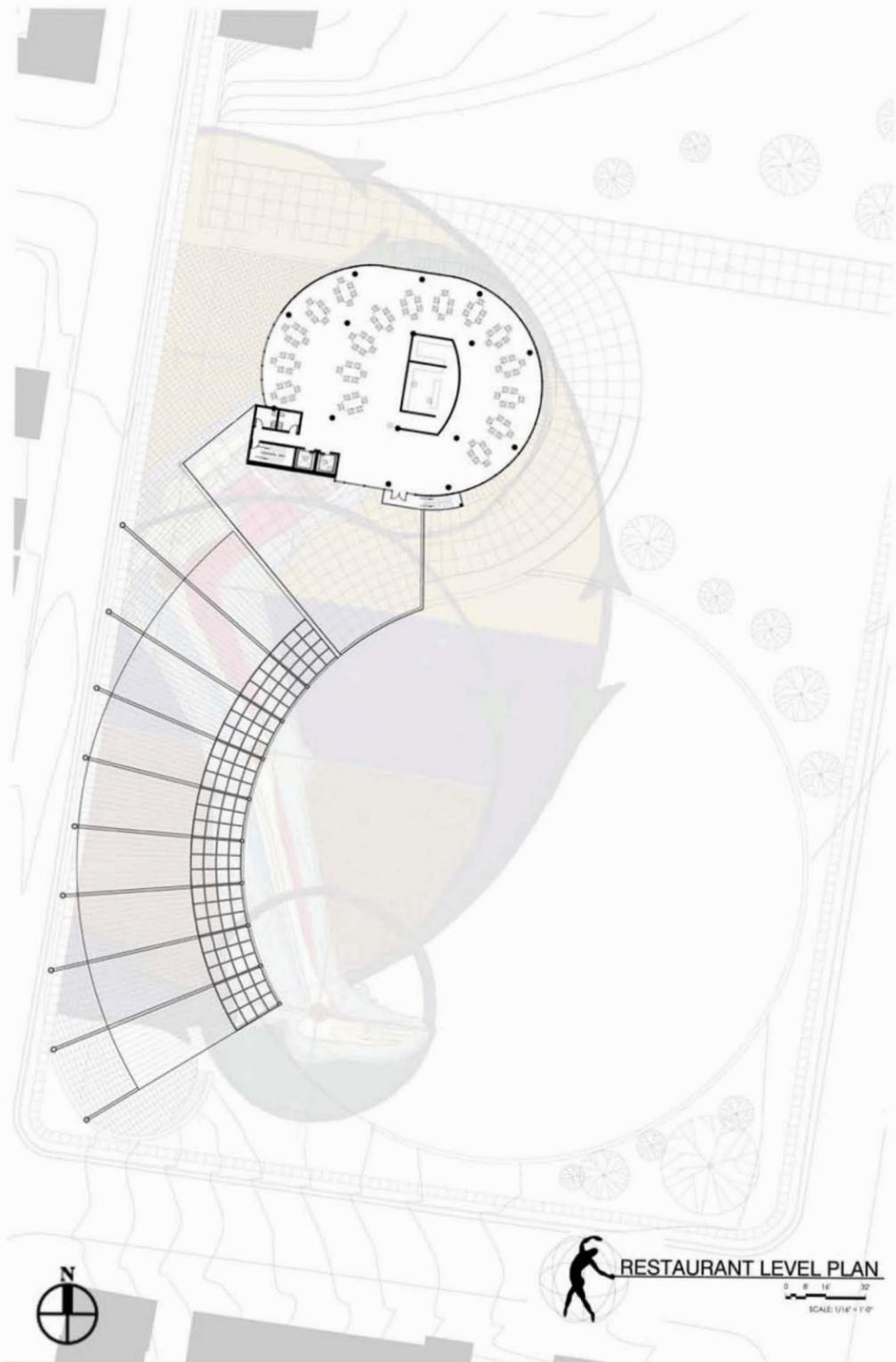
fig. 7.4 Site Photo

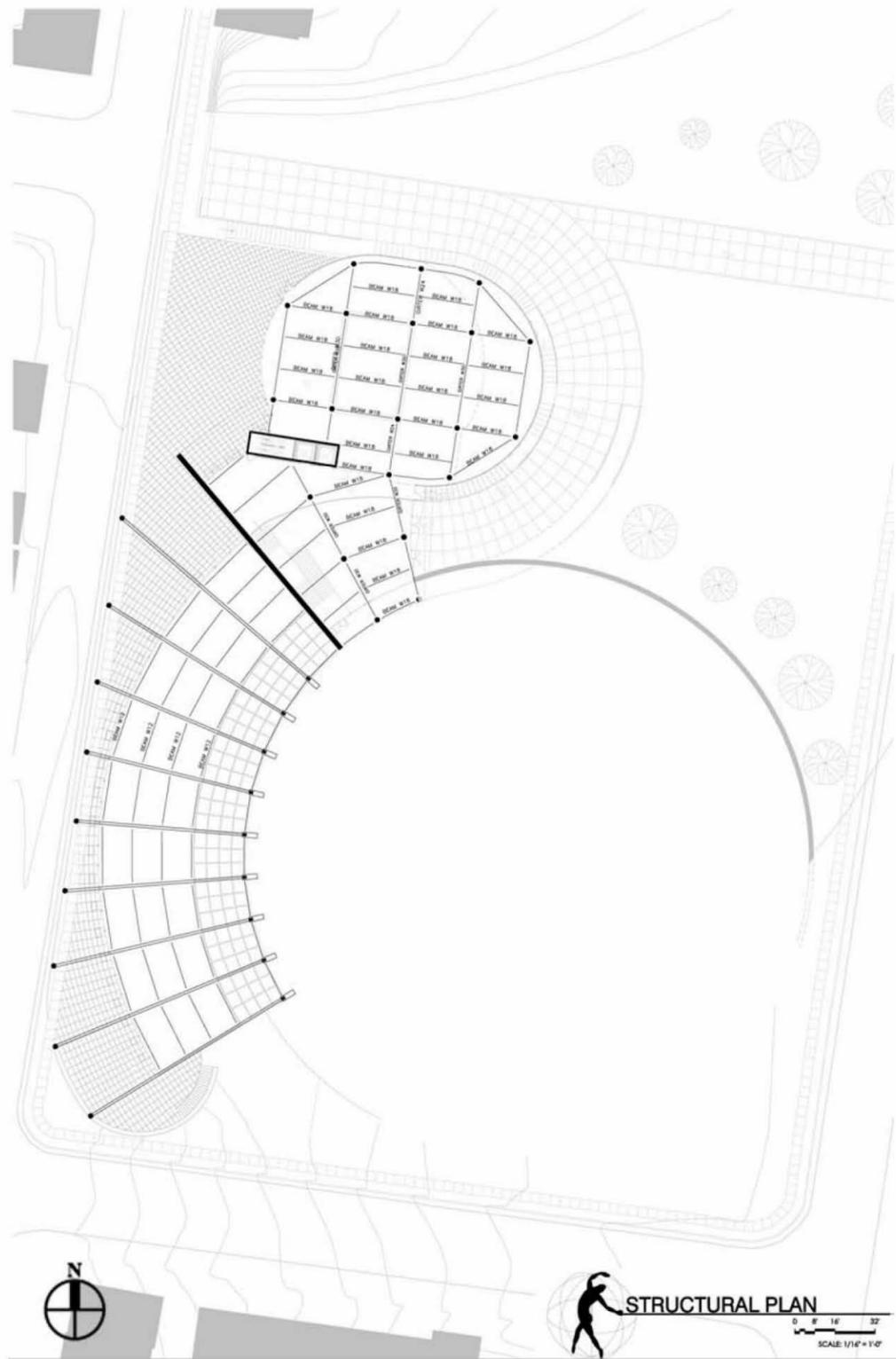


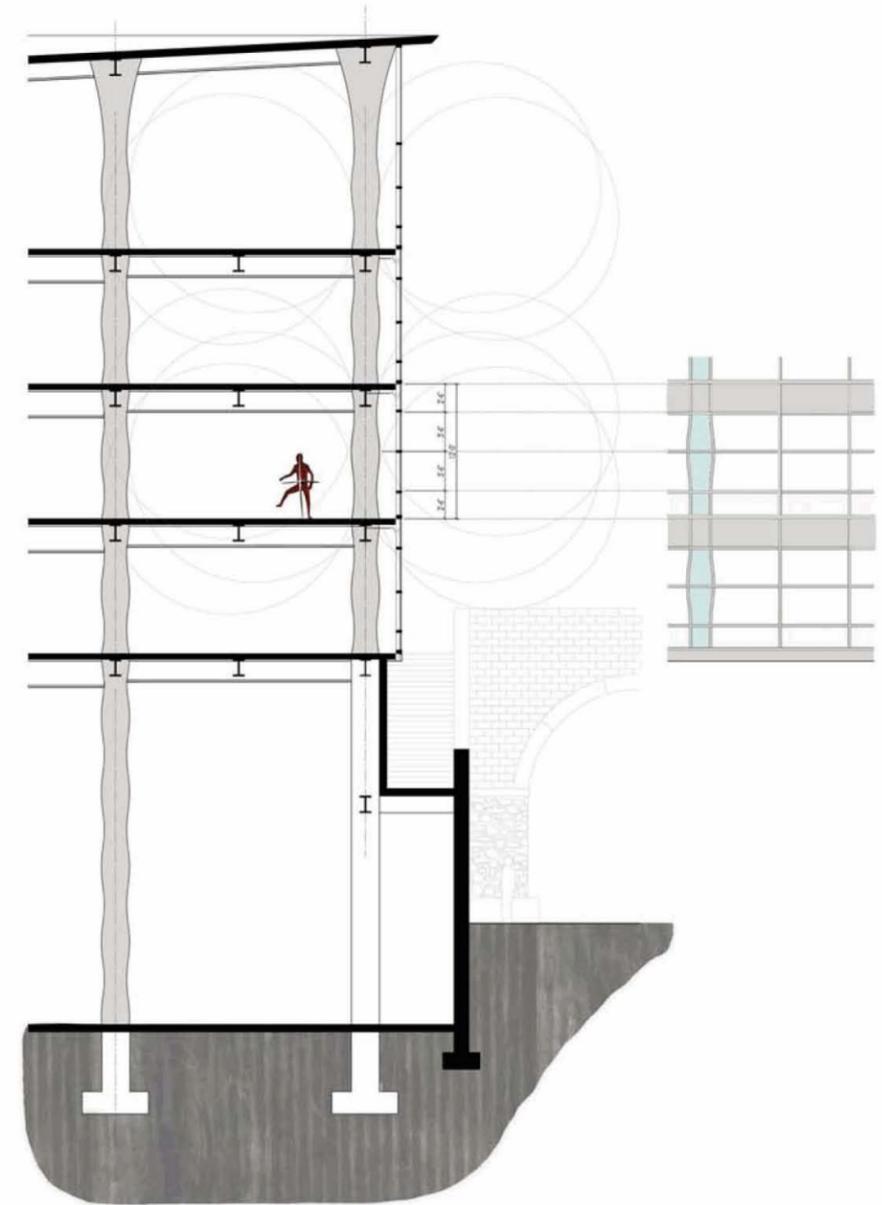
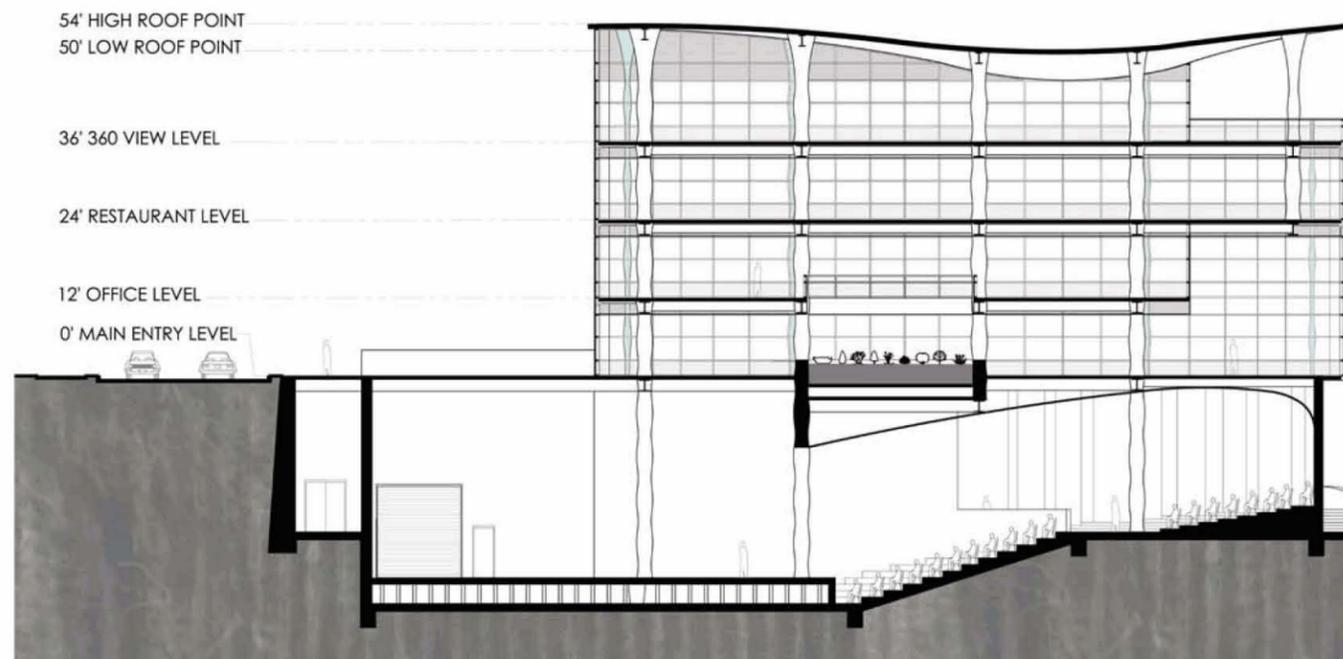
fig. 7.5 Site Photo





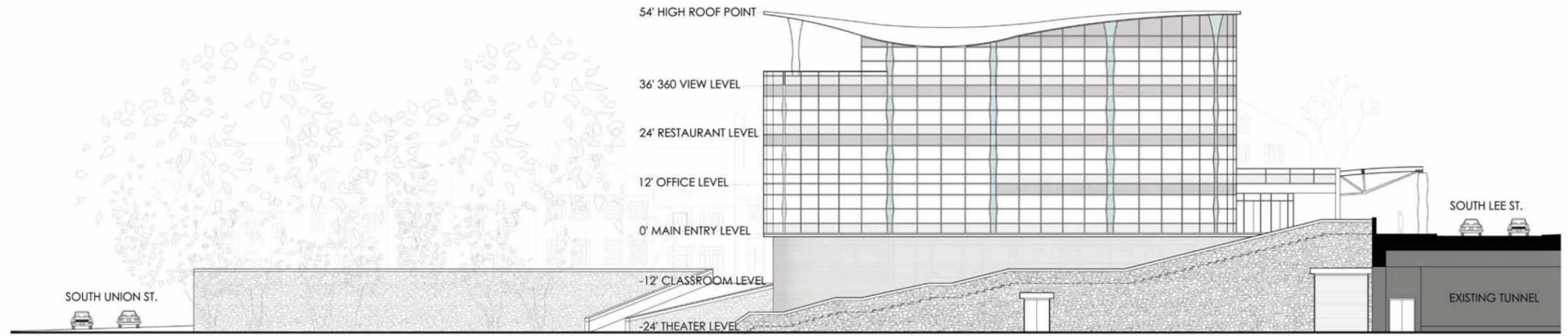


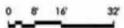


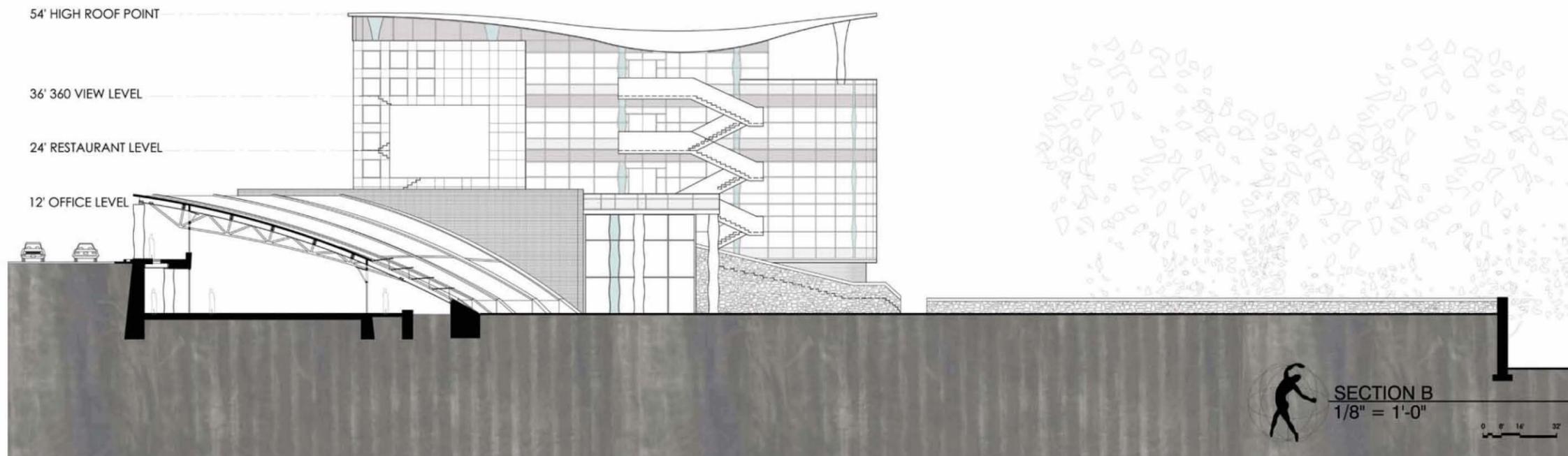


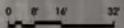
SECTION A
1/8" = 1'-0"

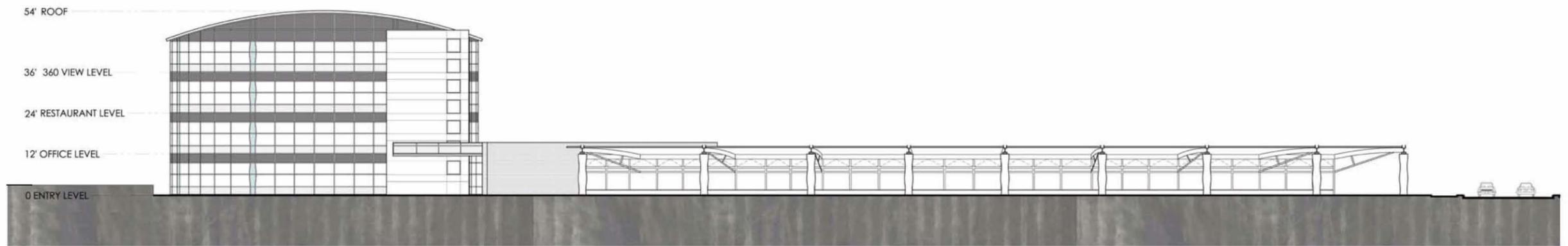




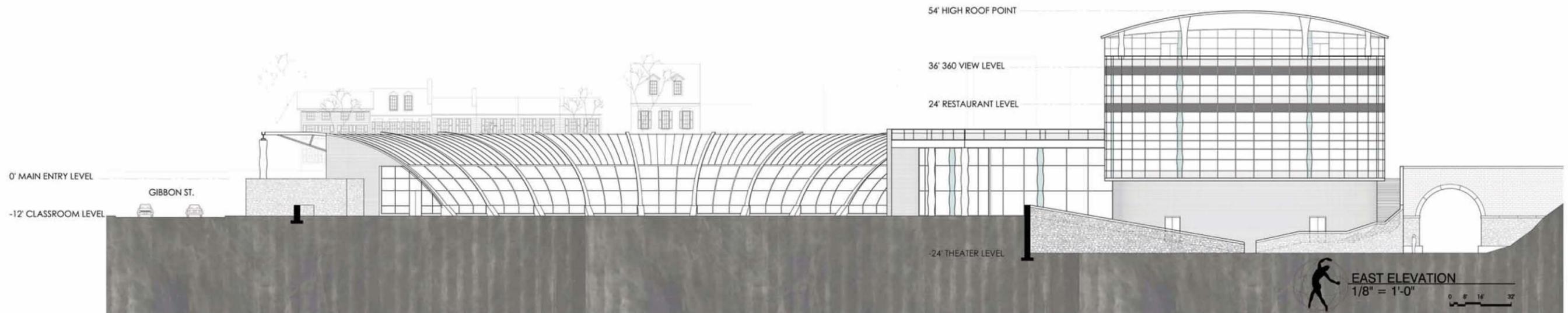

SOUTH ELEVATION
 1/8" = 1'-0"
 




SECTION B
 1/8" = 1'-0"
 



WEST ELEVATION
 1/8" = 1'-0"
 0 8' 16' 32'



EAST ELEVATION
 1/8" = 1'-0"
 0 8' 16' 32'