

The Jimmie Rodgers Museum and Music Center

Meridian, MS



The History
Meridian, Mississippi was established in 1860 as a junction of the Mobile and Ohio Railroad and the Southern Railway of Mississippi. Meridian grew as the railways brought goods and trade to the south. Between 1890 and 1930, Meridian was Mississippi's largest city and a trailblazer for manufacturing in the state. In this growth, Meridian became a trade hub for the surrounding areas, connecting many railroad lines to the city (as seen in Meridian Transport Diagram). In 1890, the Grand Opera House opened in Meridian's downtown and was the first grand space for performance in the city.

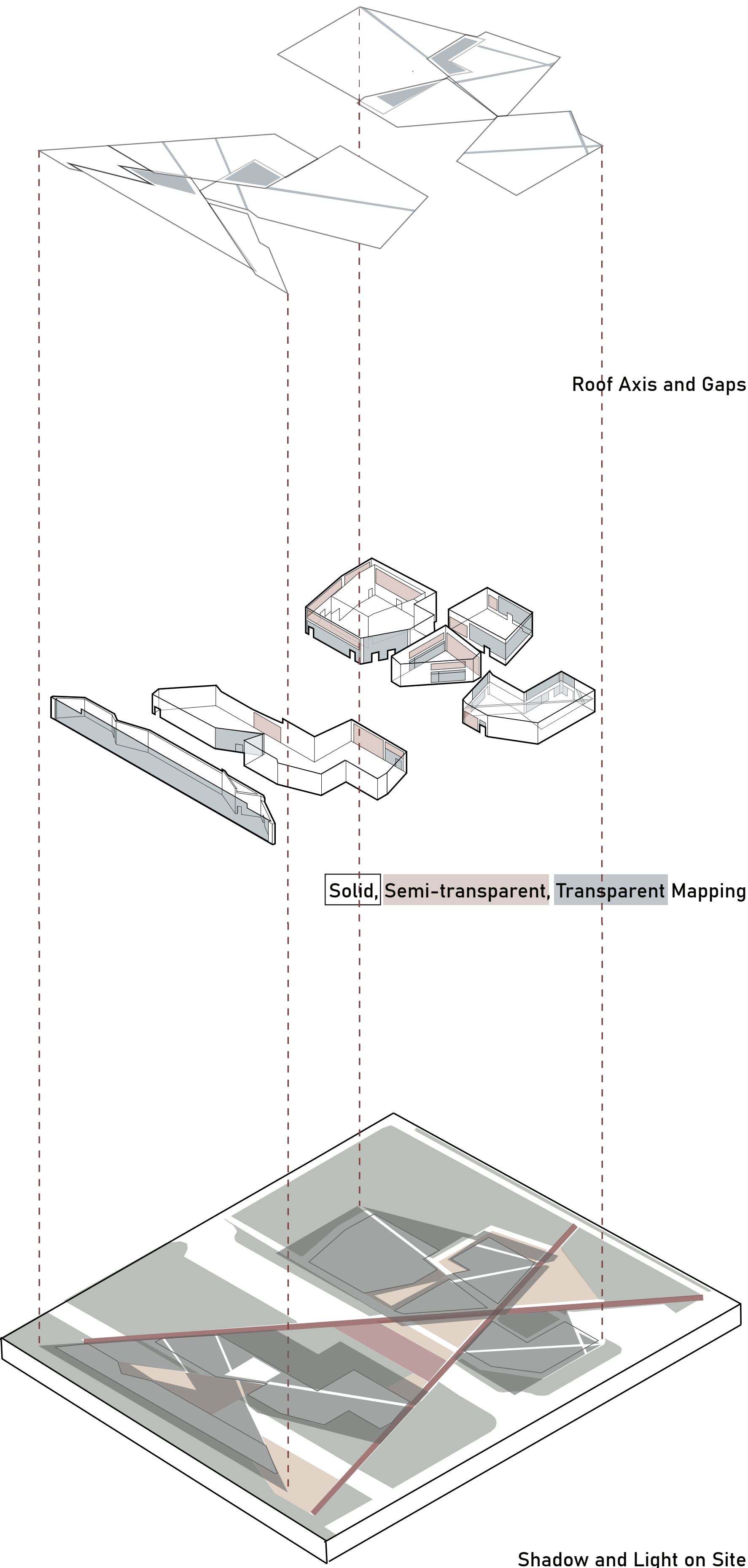
Jimmie Rodgers, born in Meridian in 1897 as the son of a railroad foreman, shared Meridian's musical soul throughout the south, becoming the "Father of Country Music". Meridian continued to produce musical artist such as David and Jimmy Ruffin, Al Wilson, Eddie Houston, Pat Brown, Patrice Moncell, and Haley Williams of Paramore to name a few. The decline of trade along the railroad heavily impacted Meridian's economy and population. The city has pivoted to embracing its history of music and performance, establishing itself as a cultural hub in east Mississippi with The Riley Center, the Mississippi Arts + Entertainment Experience (The MAX), the Mississippi Children's Museum, and the Jimmie Rodgers Memorial Museum.

The Project
The Jimmie Rodgers Museum and Music Center seeks to create a hub for Meridian's music, art, and cultural scenes. This project provides an experience that unites exhibition, performance, and education while contributing to Meridian's existing Museum District both as a tourist destination and as a resource for locals. The project is organized according to lanes created by examining the site's relation to other impactful experiences in Meridian.

These lanes establish paths, divide spaces, and create openings for light across the project. The paths use light as a material for way-finding to direct the user across the site. The center focuses on light and transparency of space through materiality and transitions. These tools define points of arrival, transitions, and points of rest within the program. Taking cues from Meridian's local climate, the lanes also define roof shapes with large overhangs that create areas of shade and shelter while establishing its own micro-climate for the user's comfort between buildings on the site. The roofs also define exterior spaces, which can be used for community events, performances, and gathering.

Designing for Economy
This project contributes to the existing tourist economy in Meridian as it is intended to become a destination within the "Museum Walk" in the city. Due to the large intentionally unprogrammed spaces outside of the buildings, the design creates opportunities to venue events that bring revenue to the community, such as hosting outdoor concerts. To cut back on transport costs, the project uses on-site earth for rammed earth walls and sources local brick and steel companies for facade and structural elements.

Designing for Change
Taking into account the already established unprogrammed open areas around the site, the project is intended to provide the community with a space that can be rehabilitated into parks or events spaces. The project lends itself to secondary uses that will need large maintained areas with both grass and paved land.



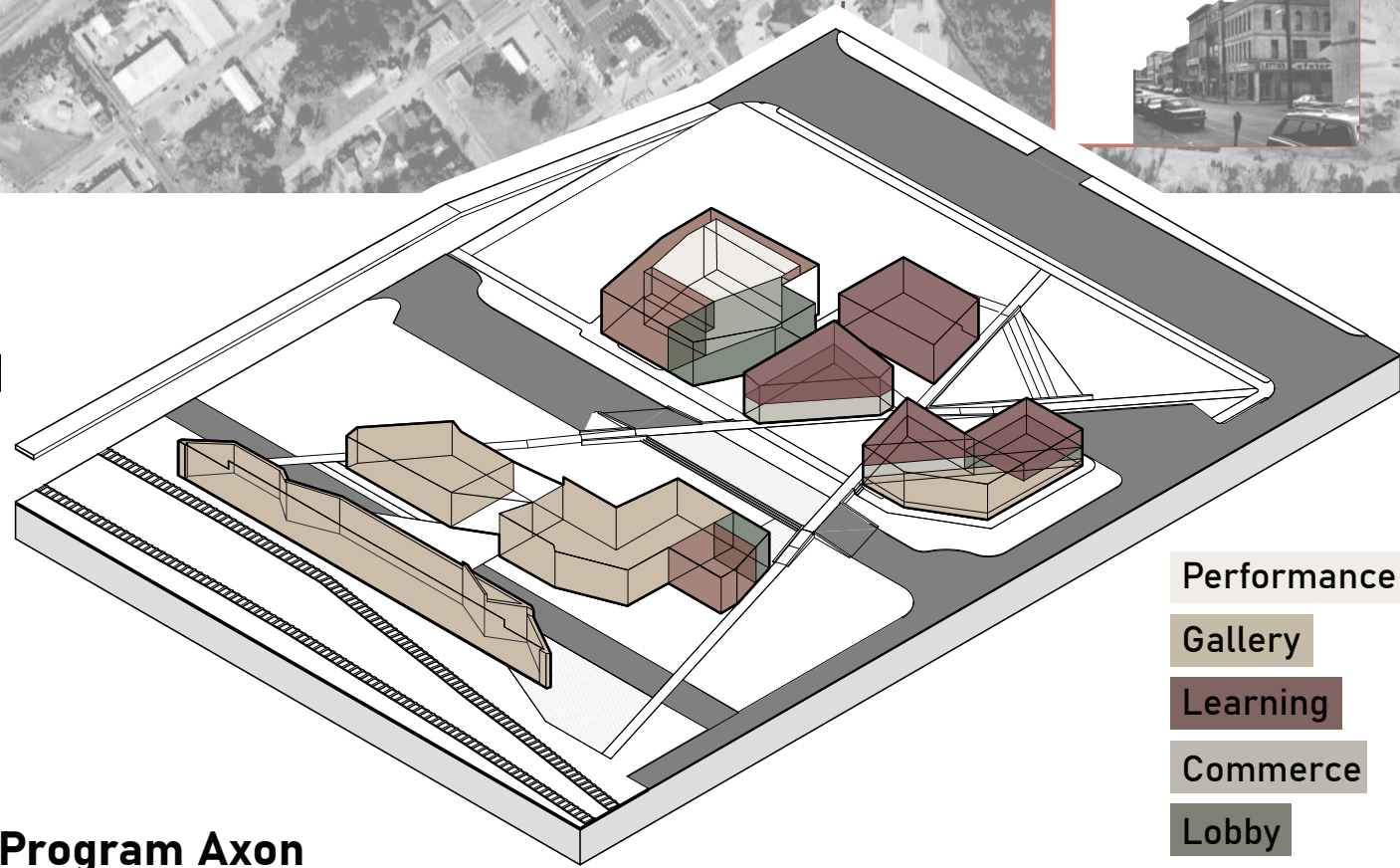
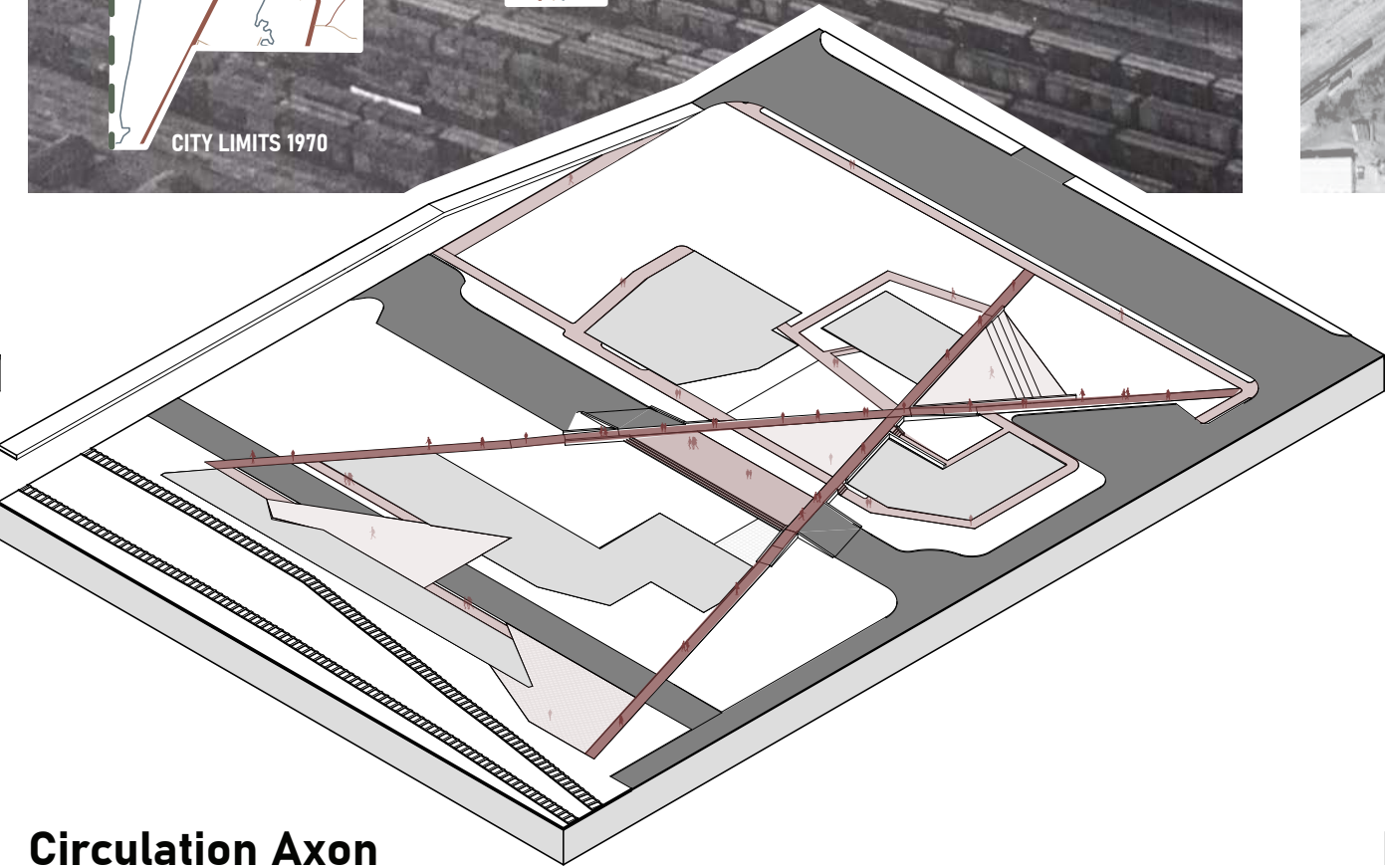
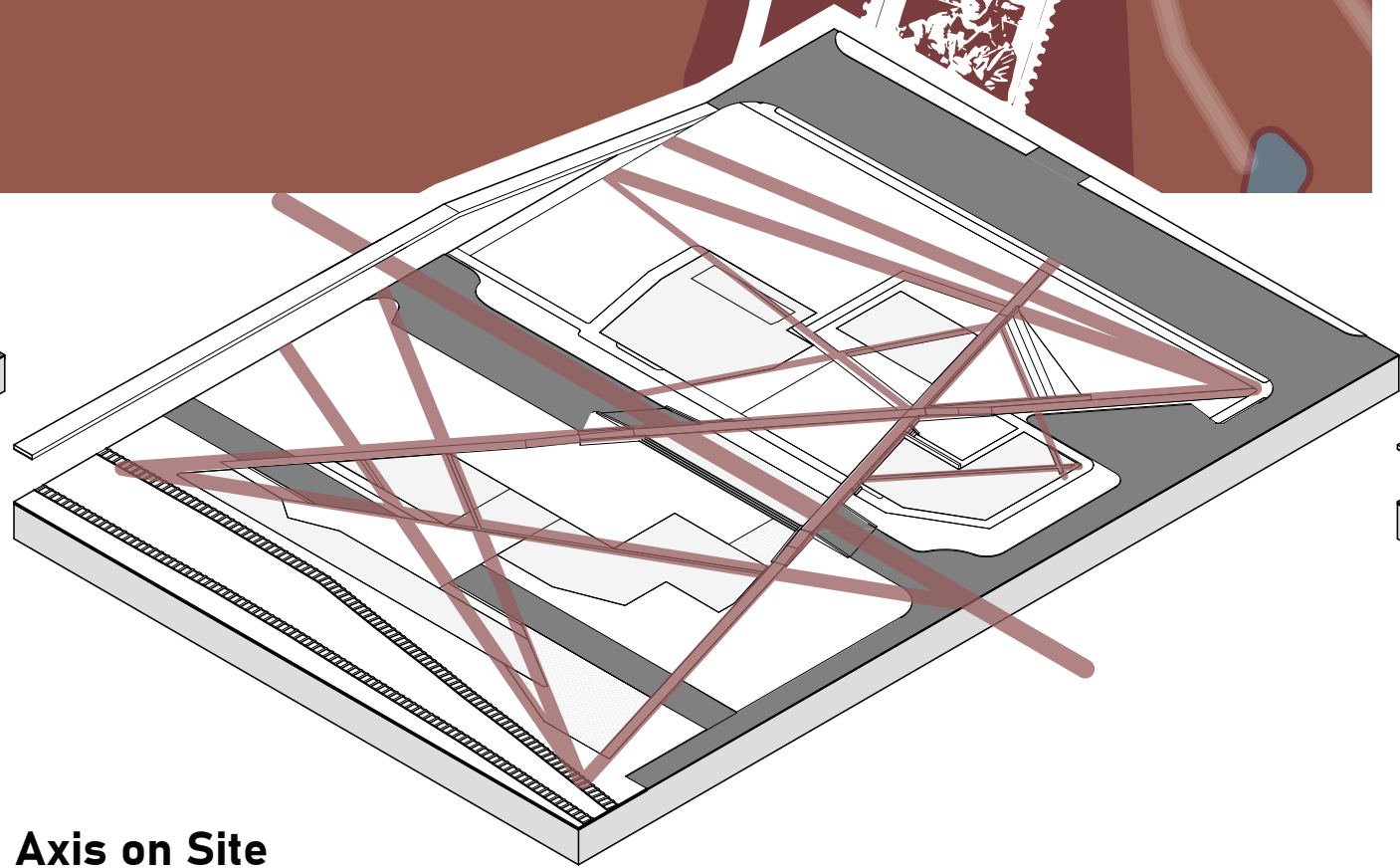
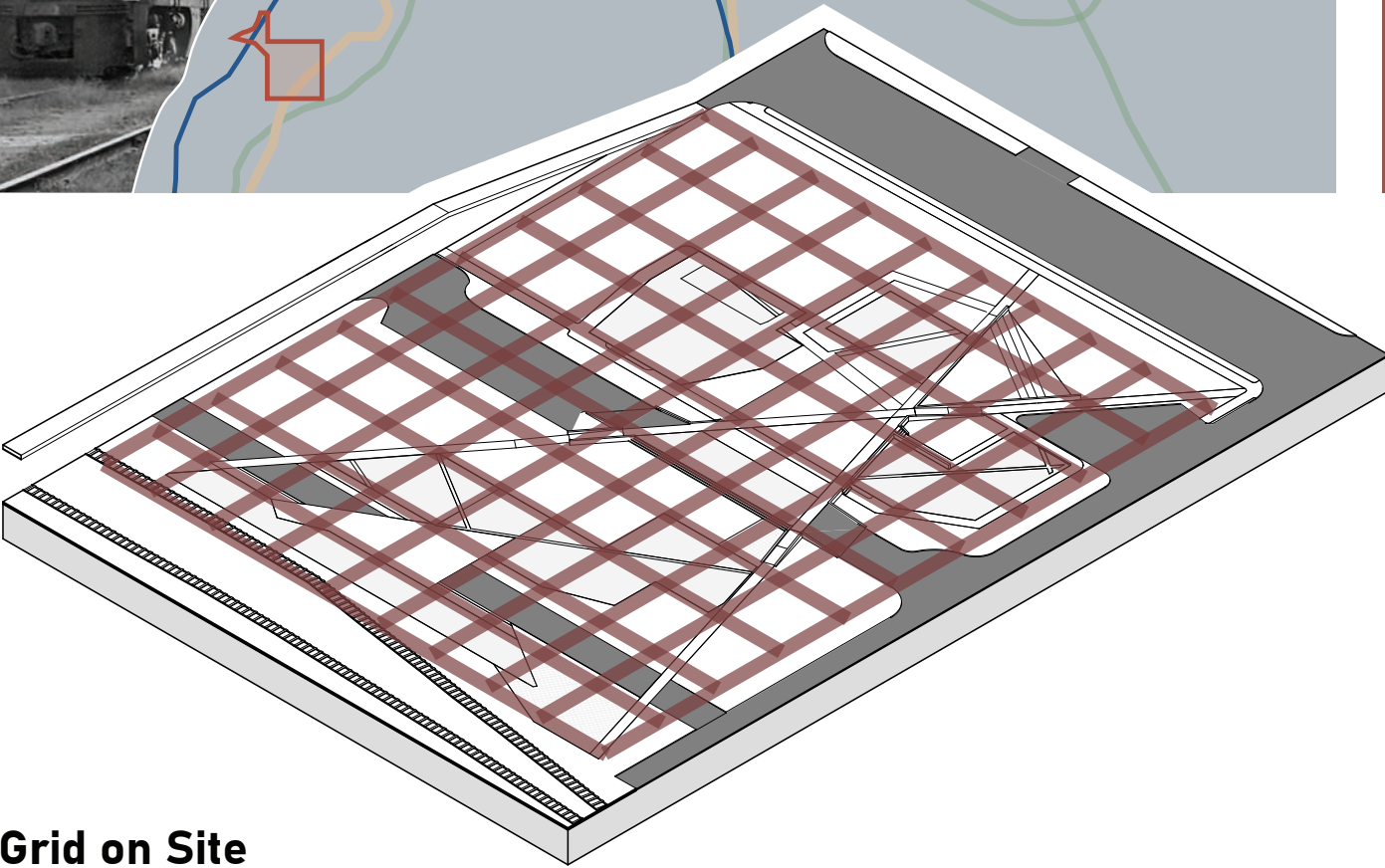
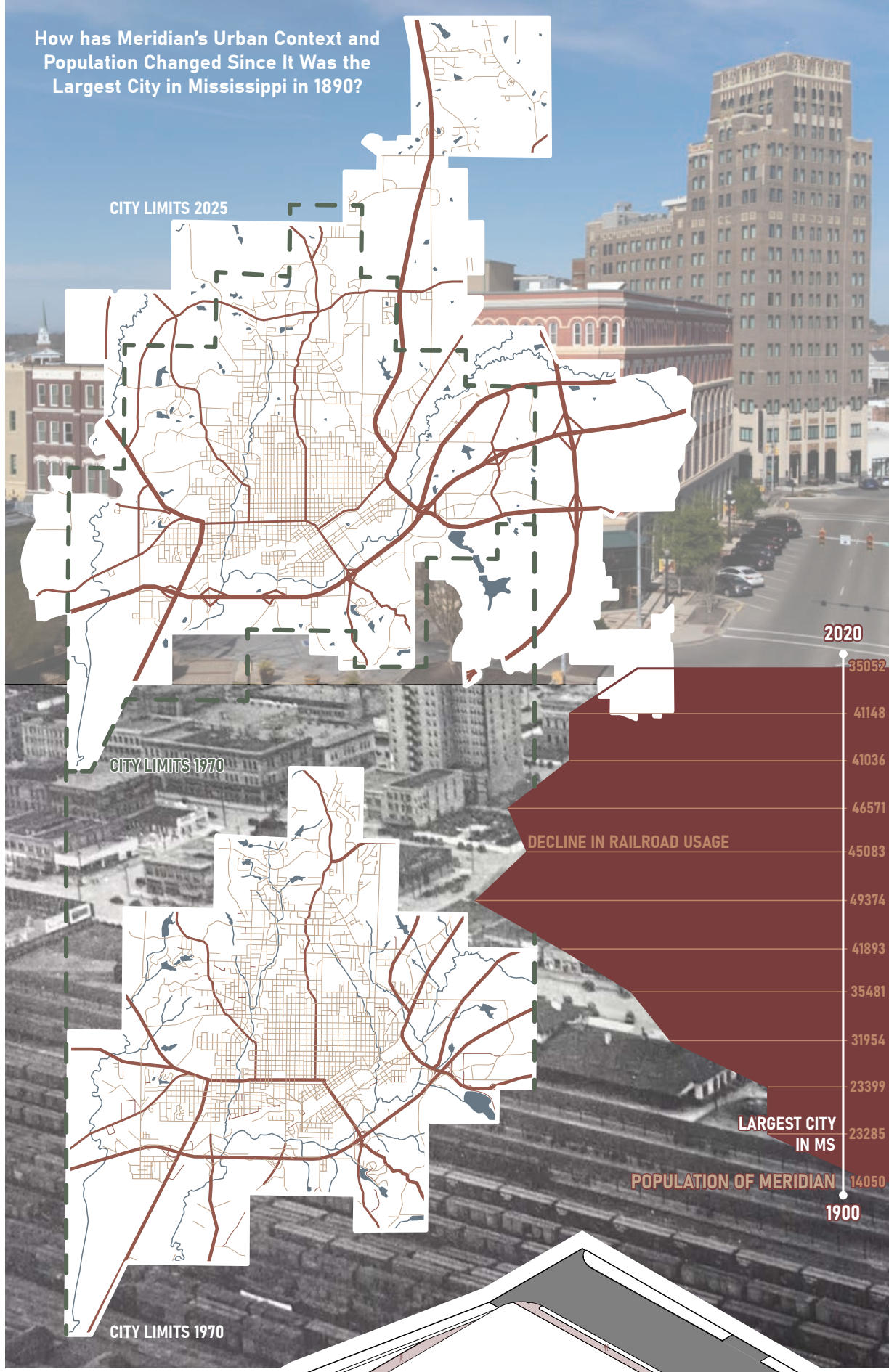
Shadow and Light on Site

Exploded Conceptual Axon

Designing for Discovery
The nature of this program demands investors who are committed to supporting Meridian's museum economy as well as the legacy of Jimmie Rodgers. The Jimmie Rodgers Foundation is an established committee that "devotes its time and effort to preserving the heritage of country music by presenting special events throughout the year in Meridian, Mississippi." Organizations like this could utilize the range of spaces available in the design for events, fundraisers, concerts, and more.

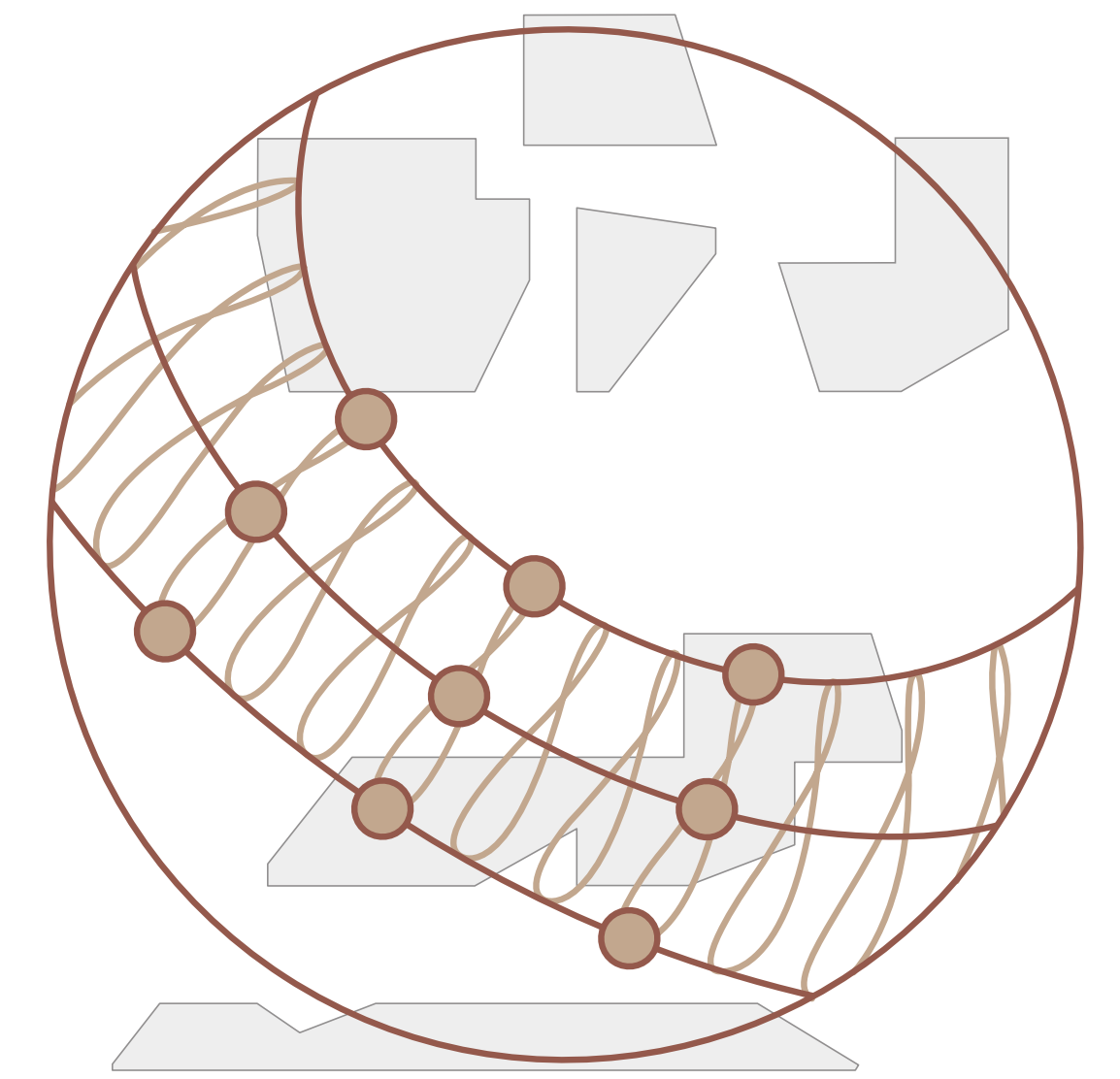
In designing this project, we learned the importance of the balance between buildings and the site. A project should be holistic, not just buildings. Integrating the site in a design lends itself to creating opportunities for more impact throughout the site experience and surrounding context. The site does not have to emulate a textbook example of landscape design. Site design can be unique and creative without being overly complicated.

Using the lessons learned from previous projects, we devoted ourselves to the initial stages of concept and integrating various design methods from the very start. We also already had an understanding that the personal experience of each moment in the process is important and can help lead elements throughout all levels of design.

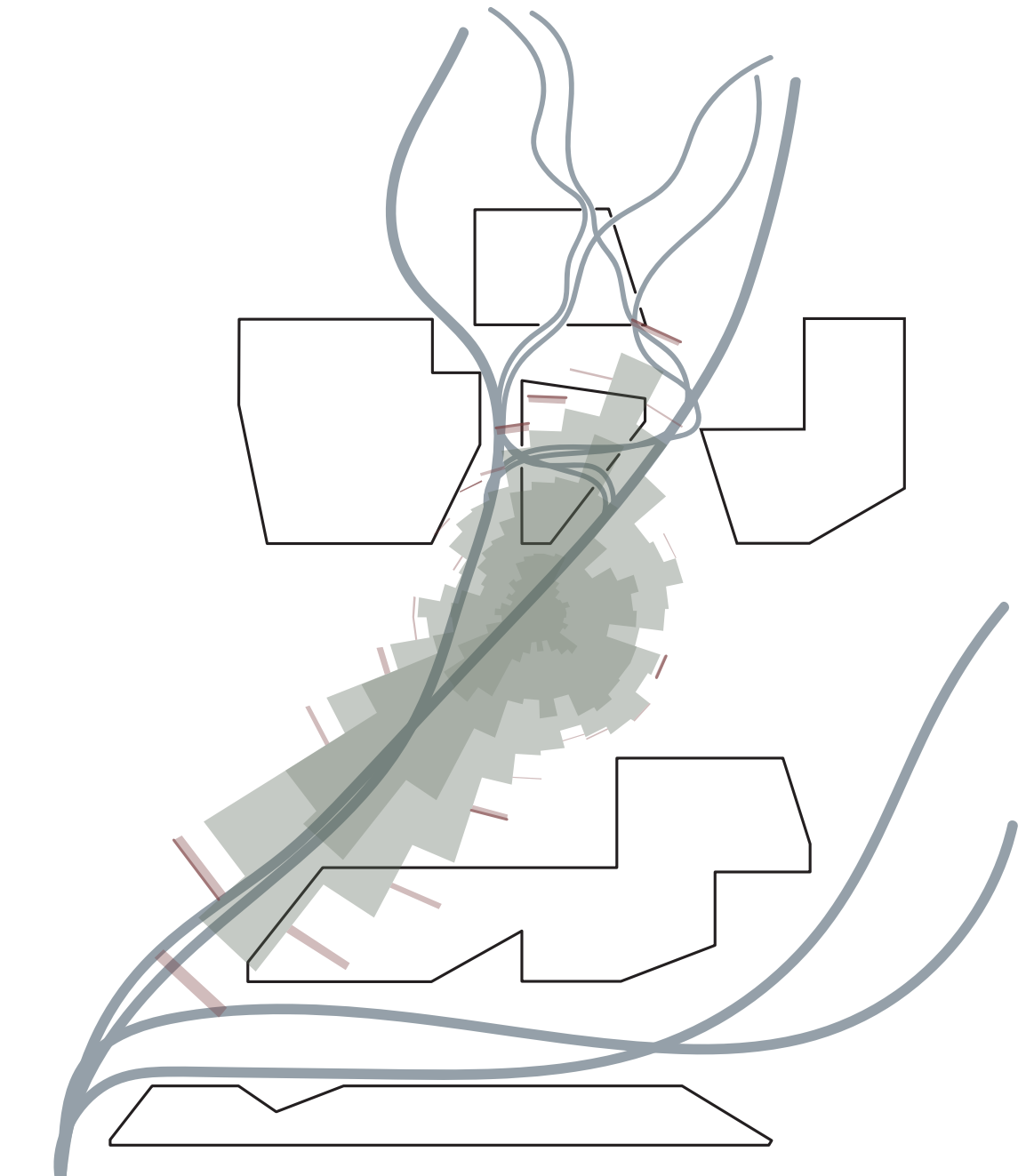


- Performance
- Gallery
- Learning
- Commerce
- Lobby

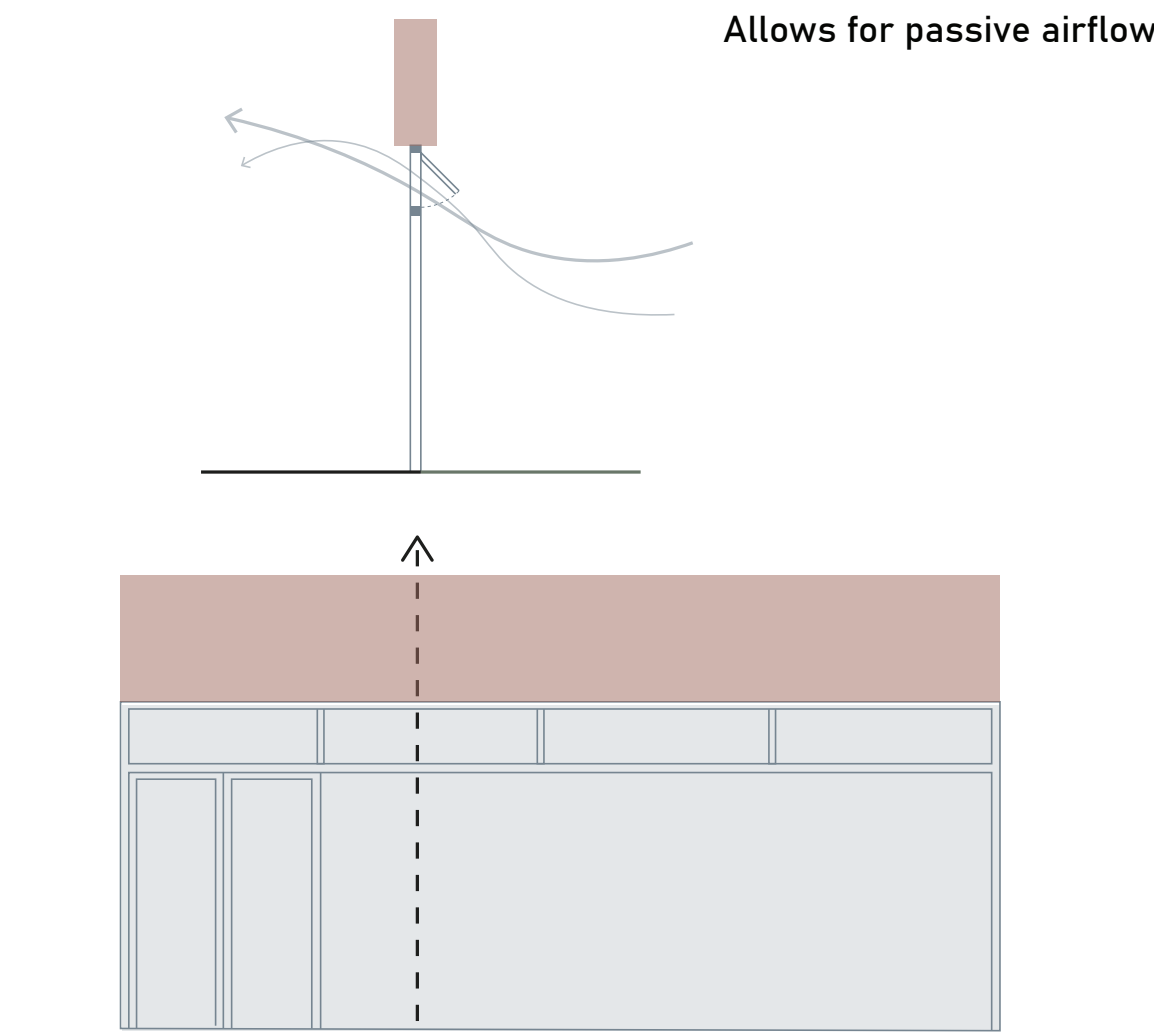
- PLAN KEY**
 1: Auditorium
 2: Auditorium Lobby
 3: Library
 4: Cafe
 5: Gift Shop
 6: Temporary Gallery Exhibits
 7: Mechanical
 8: Storage
 9: Temporary Gallery Lobby
 10: Jimmie Rodgers Gallery Lobby
 11: Administrative
 12: Jimmie Rodgers Gallery Exhibition Space
 13: Contemplative Courtyard
 14: Support
- 15: Music Classroom
 16: Open Seating
 17: Elevated Gallery Viewing Space
 18: Research Lab
 19: Offices
 20: Meeting Room



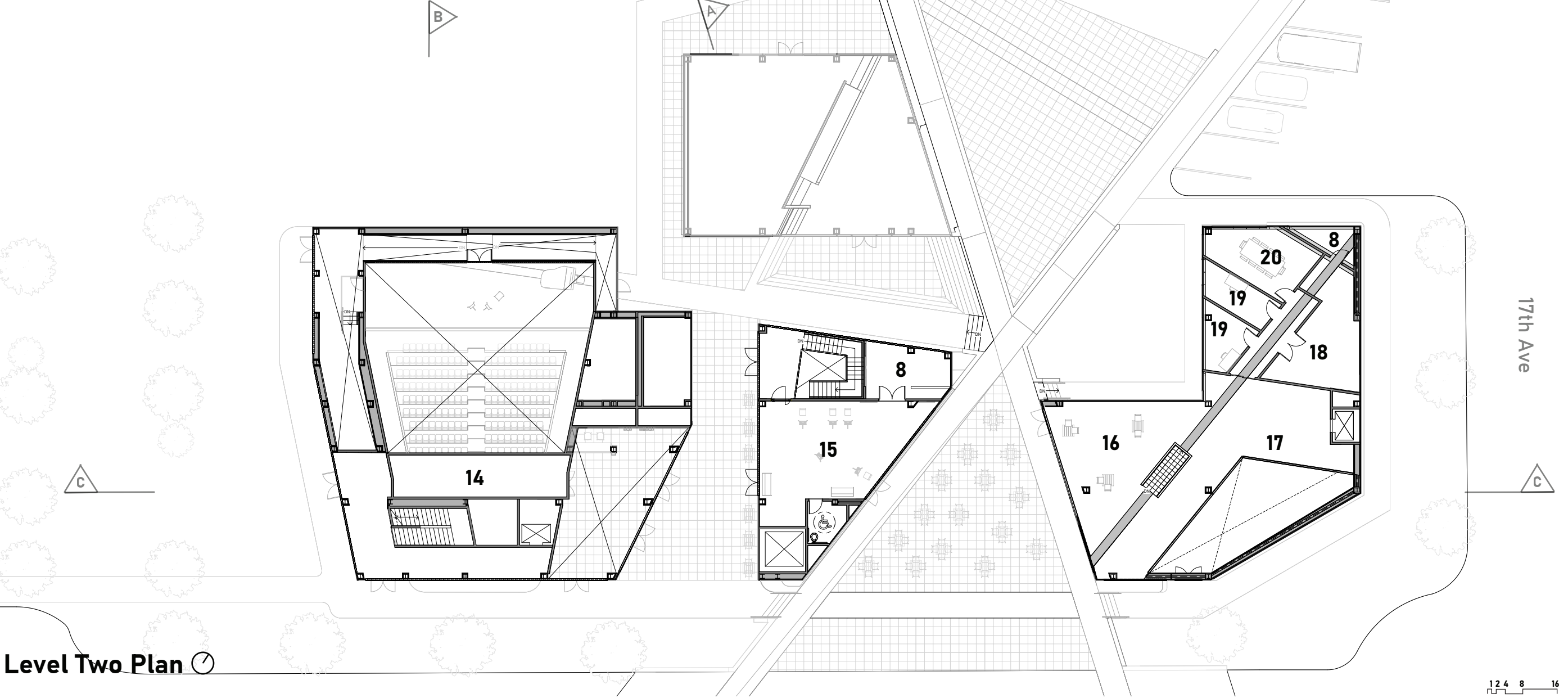
Solar Analysis



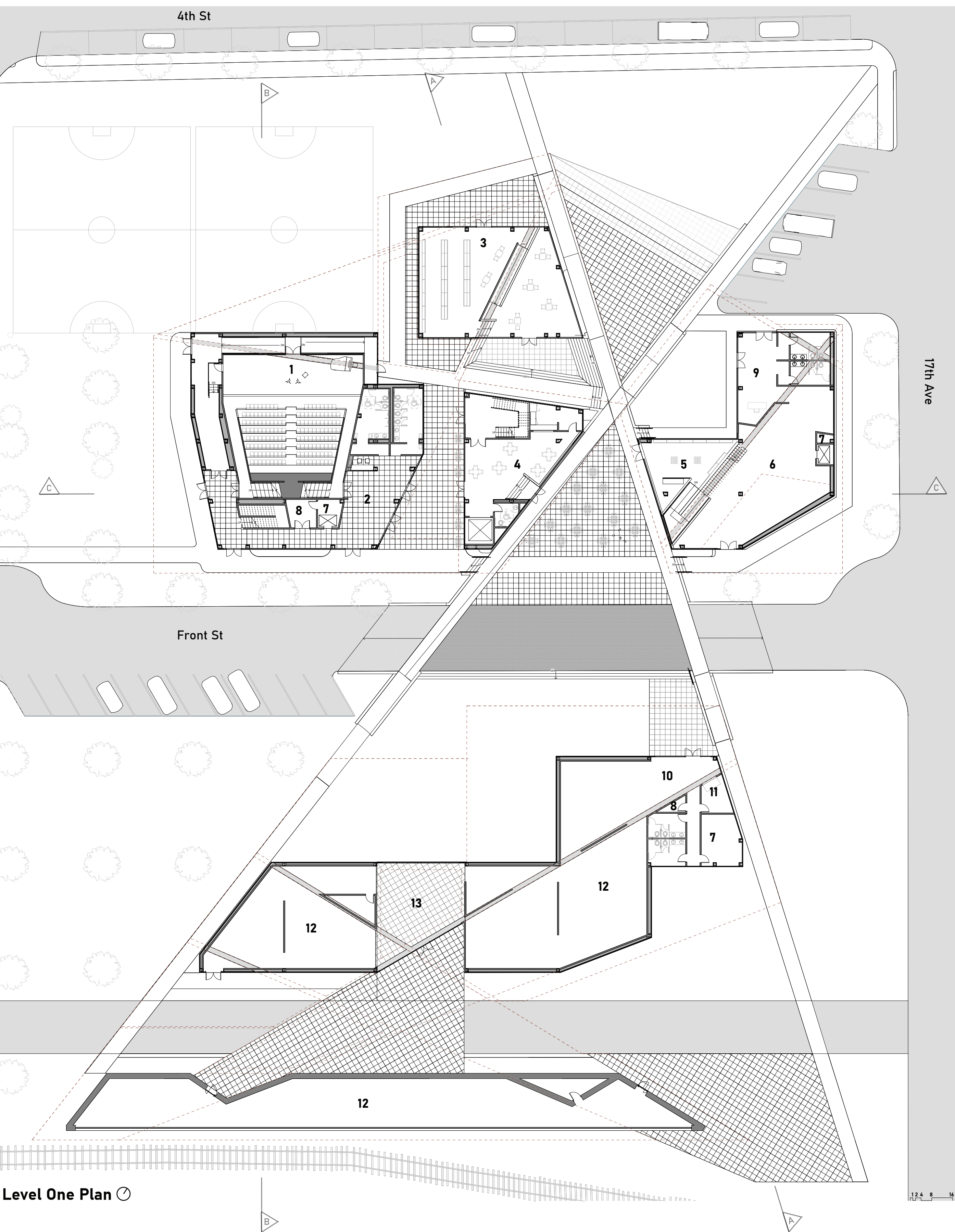
Wind Analysis



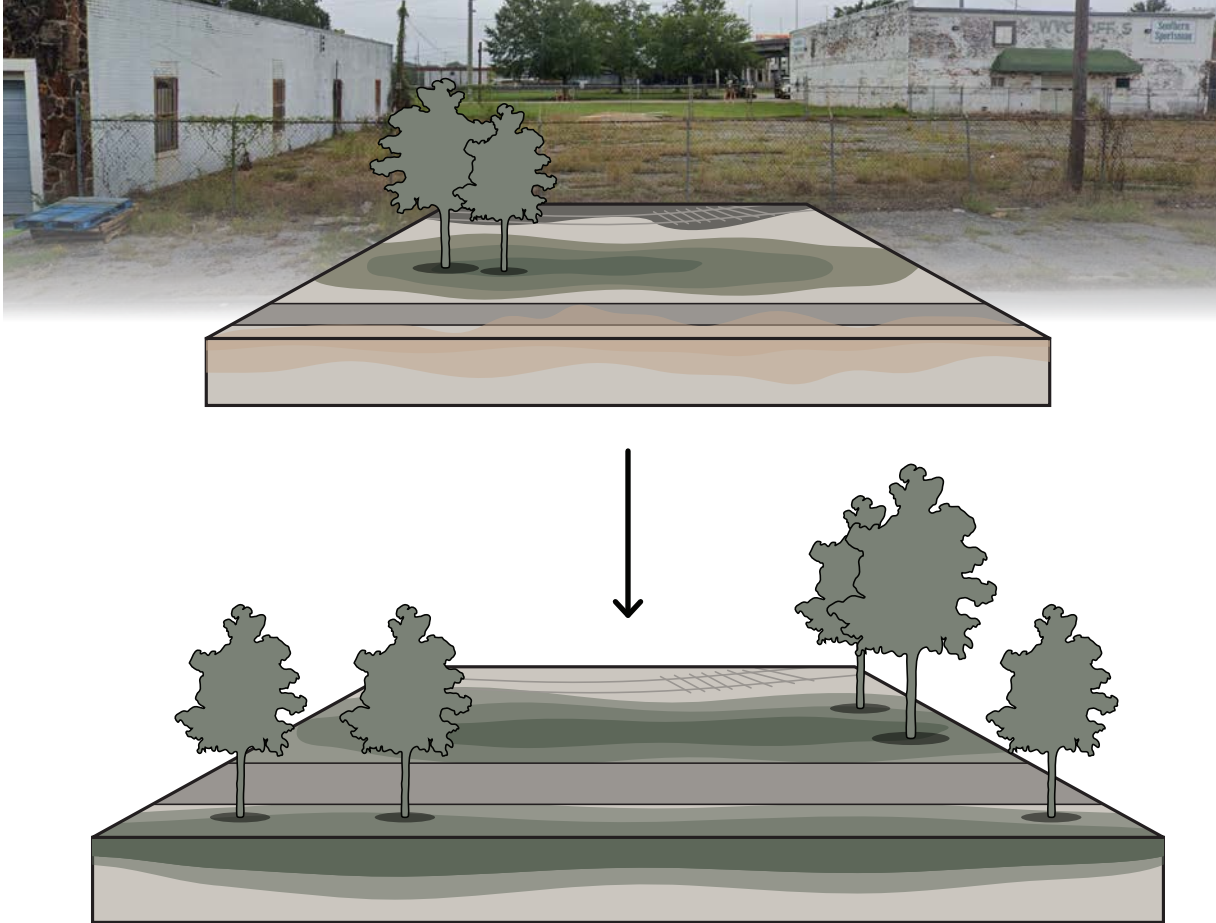
Operable Windows



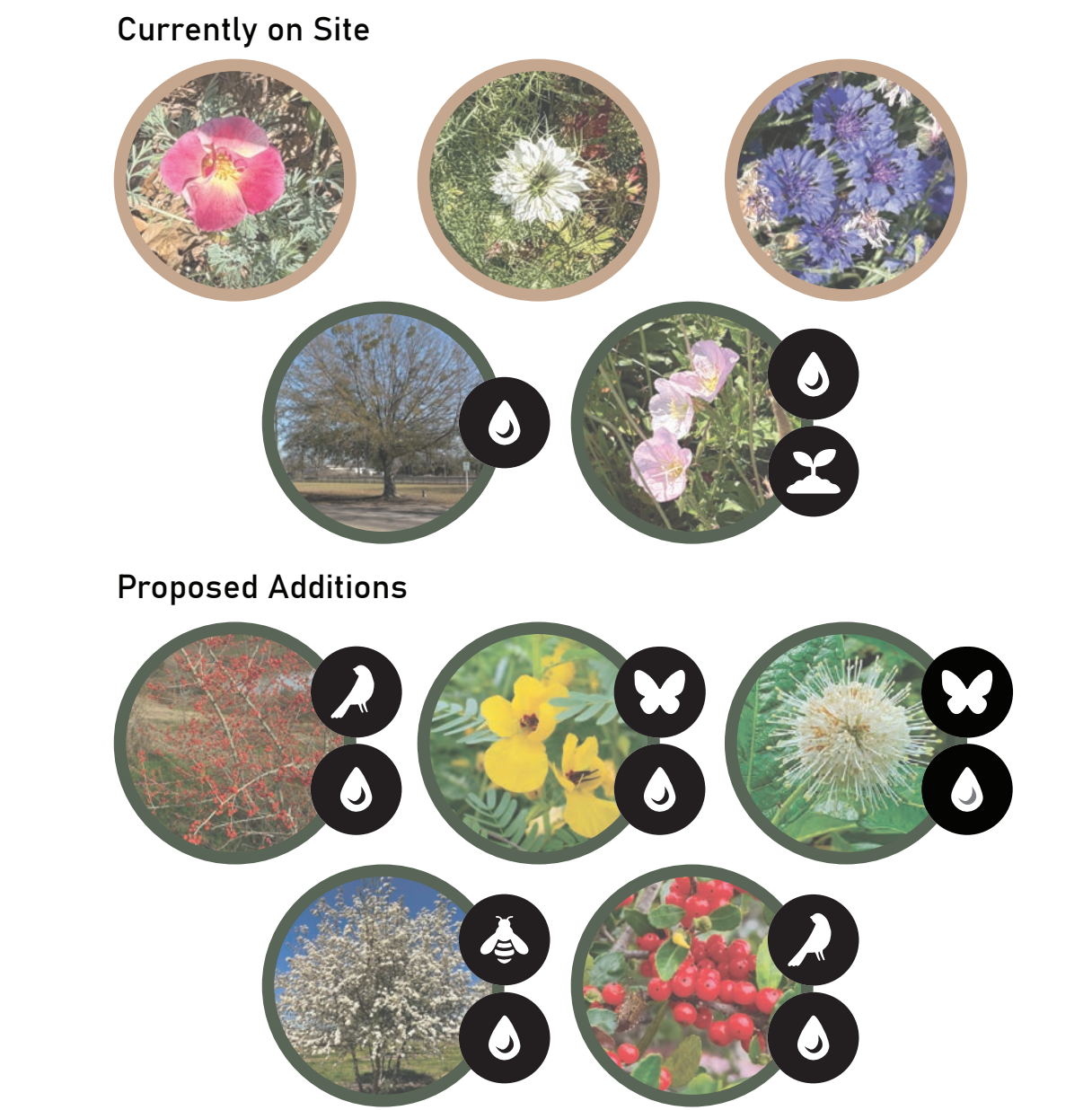
Level Two Plan



Level One Plan

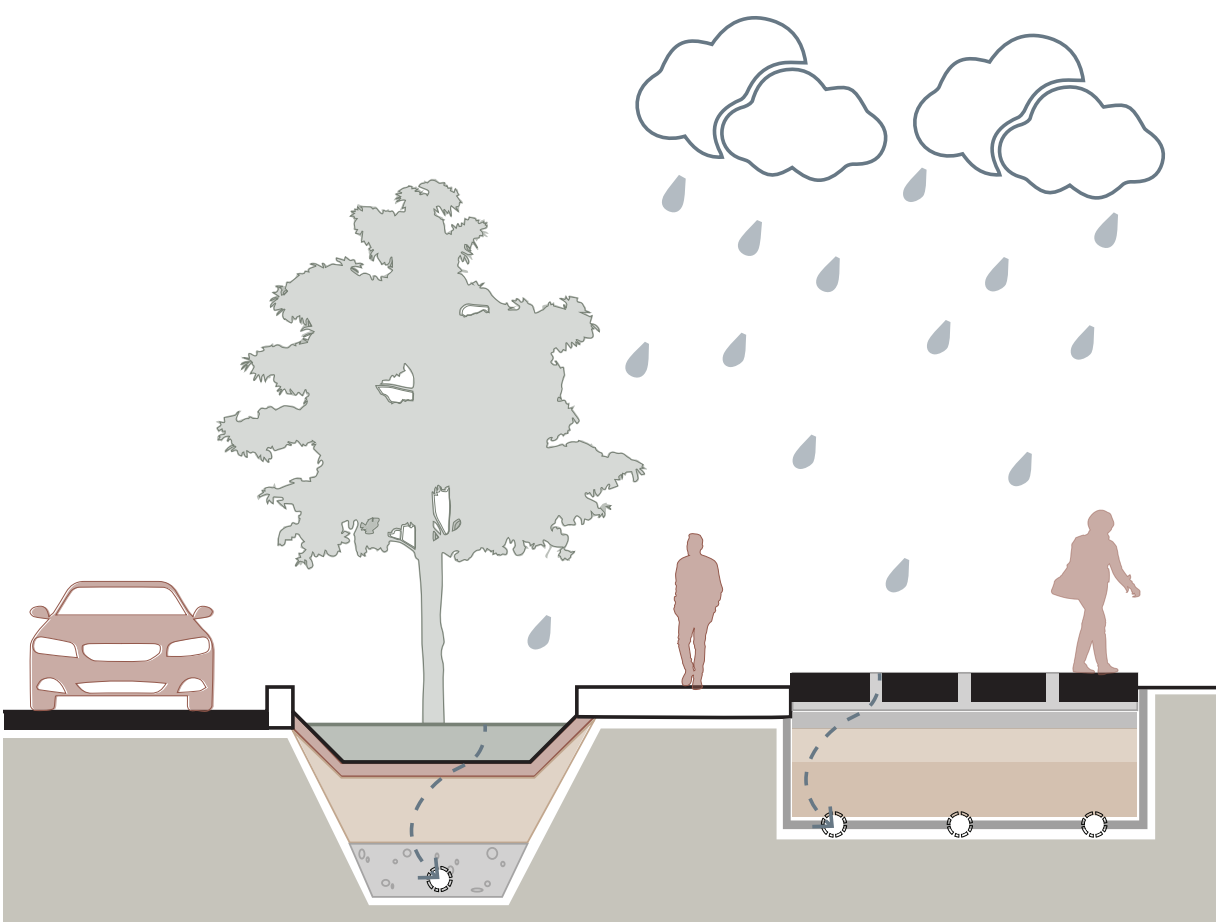


Brownfield to Restored Green Area



- Native Species
 Positive Impact on Bird Populations
 Positive Impact on Butterfly Populations
- Adaptive Species
 Positive Impact on Pollinators
 Positive Impact on Water Infiltration Practices
- Contributes to Soil Rigidity
 Contributes to Water Infiltration Practices

On-Site and Native Plants to Use



Water Filtration Strategies on Site

Designing for the Ecosystem

Both the surrounding area and on site lands have a large possibility of being a brownfield due to the previously developed AGS Railroad Station and Planters Compress Warehouse Company's Cotton sheds located near site. This project is a way to reform and restore these contaminated lands into properly maintained green and developed areas. Additionally, this design takes note of on-site and native plants. It proposes installing vegetation that will thrive within Meridian's climate while also contributing to the local insect and avian population.

Designing for Water

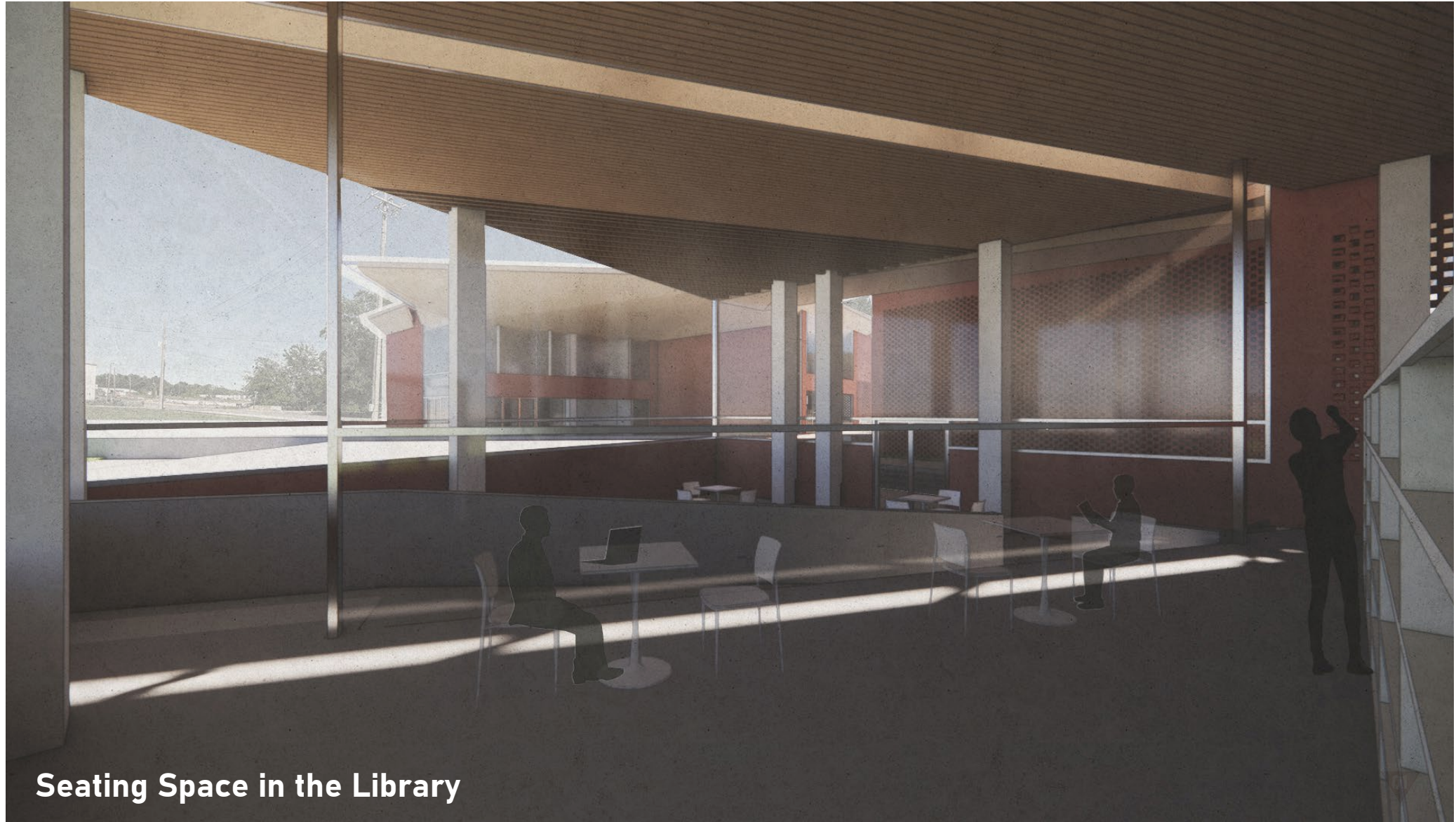
One way this project intends to navigate and manage stormwater is with water filtration systems integrated within pathways and paver systems throughout the site. Water is also collected and drained from the roof system to be filtered and held to use for flushing toilets, watering vegetation, and utilized in mechanical systems if needed.



Linear Gallery Looking to Train



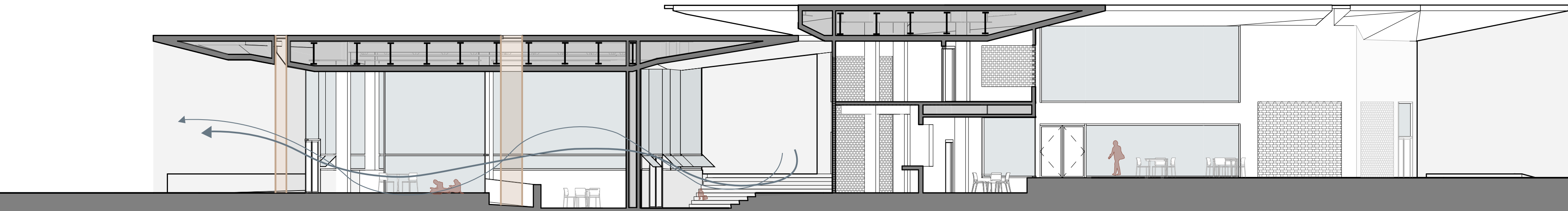
Jimmie Rodgers Exhibit Space



Seating Space in the Library



Large Performance Hall



Section A





Outdoor Space between Performance Hall and Cafe



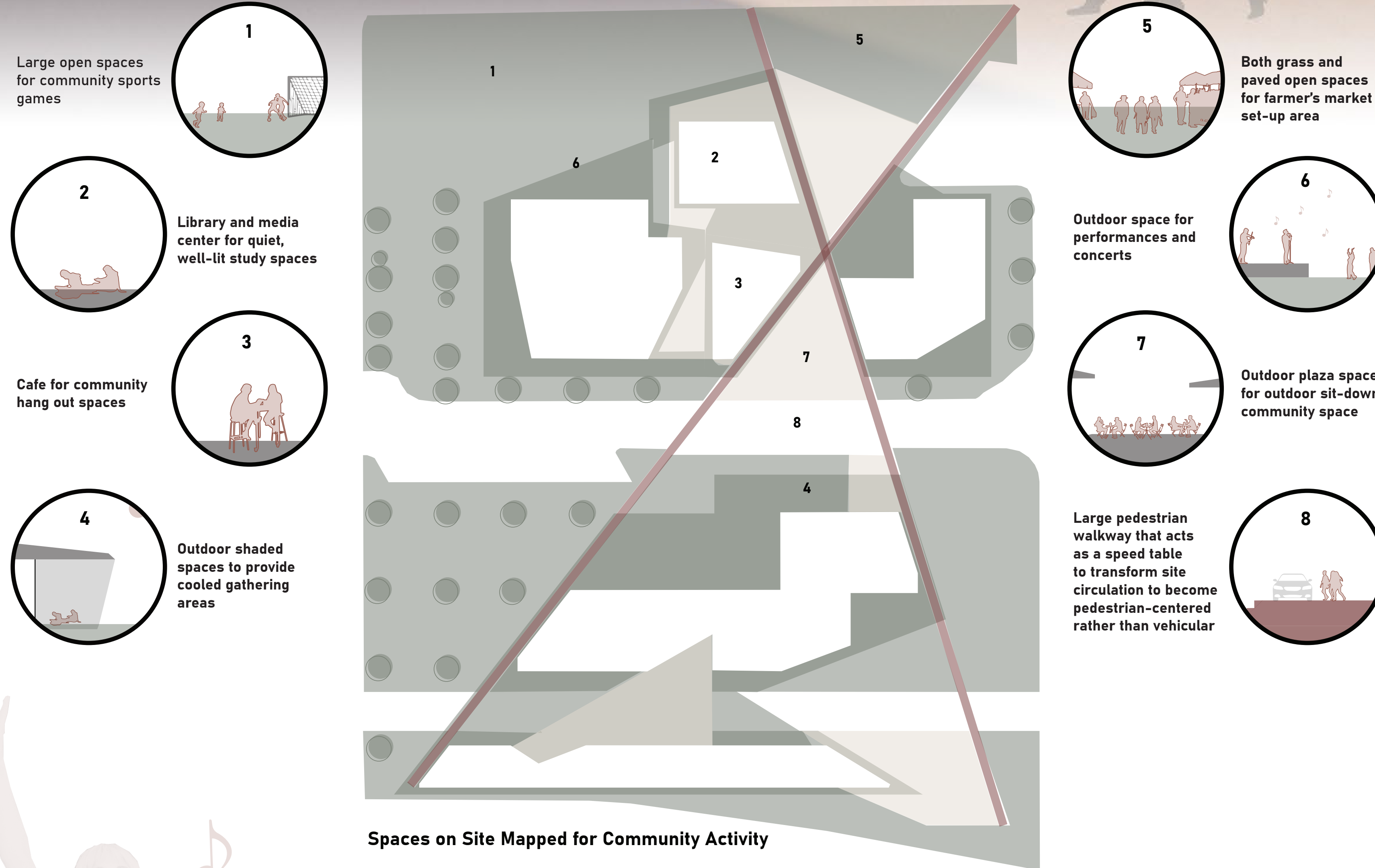
Outdoor Space off the Library



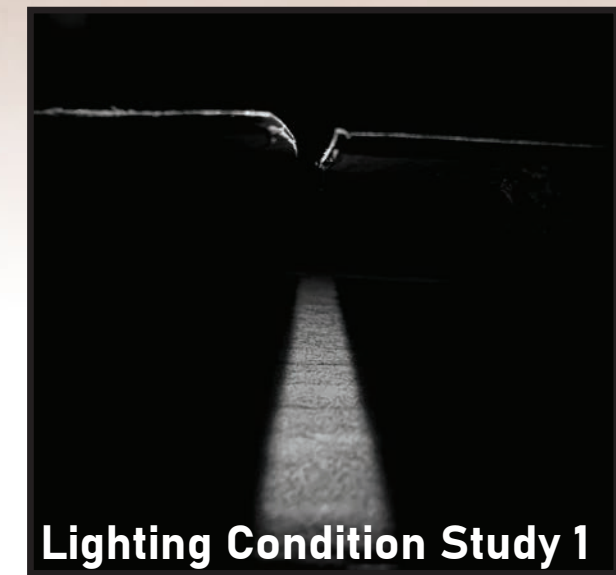
View from Front Street near the Overpass



View across Front Street to the Jimmie Rodgers Gallery Spaces



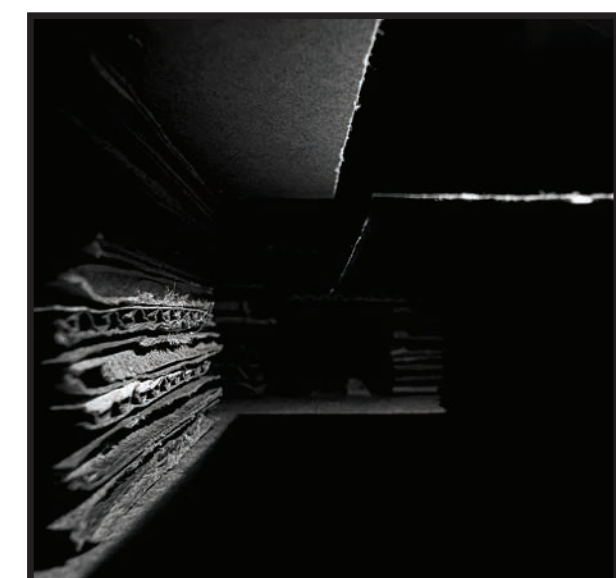
Spaces on Site Mapped for Community Activity



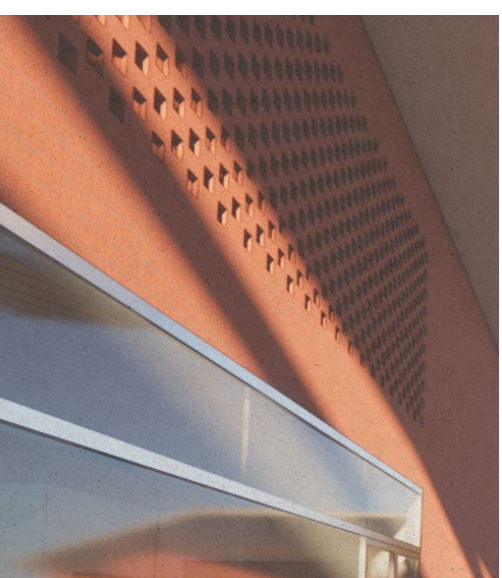
Lighting Condition Study 1



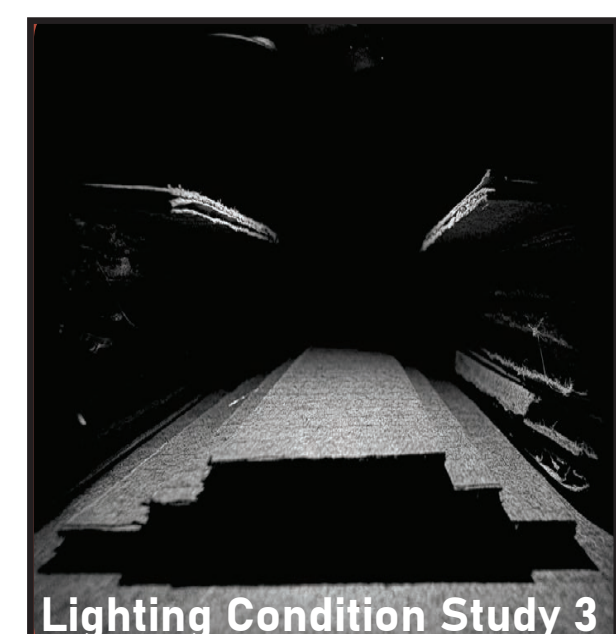
Condition in Project 1



Lighting Condition Study 2



Condition in Project 2



Lighting Condition Study 3

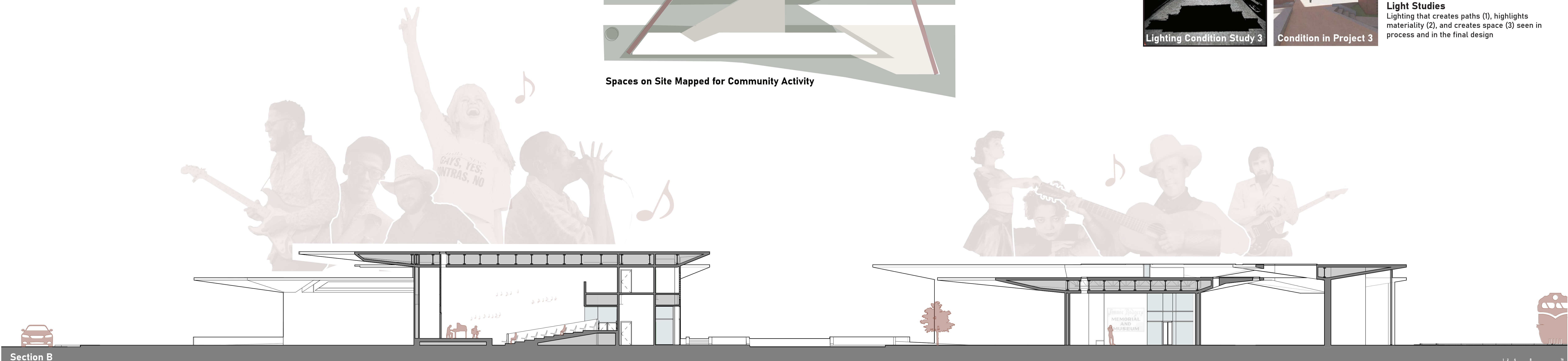


Condition in Project 3

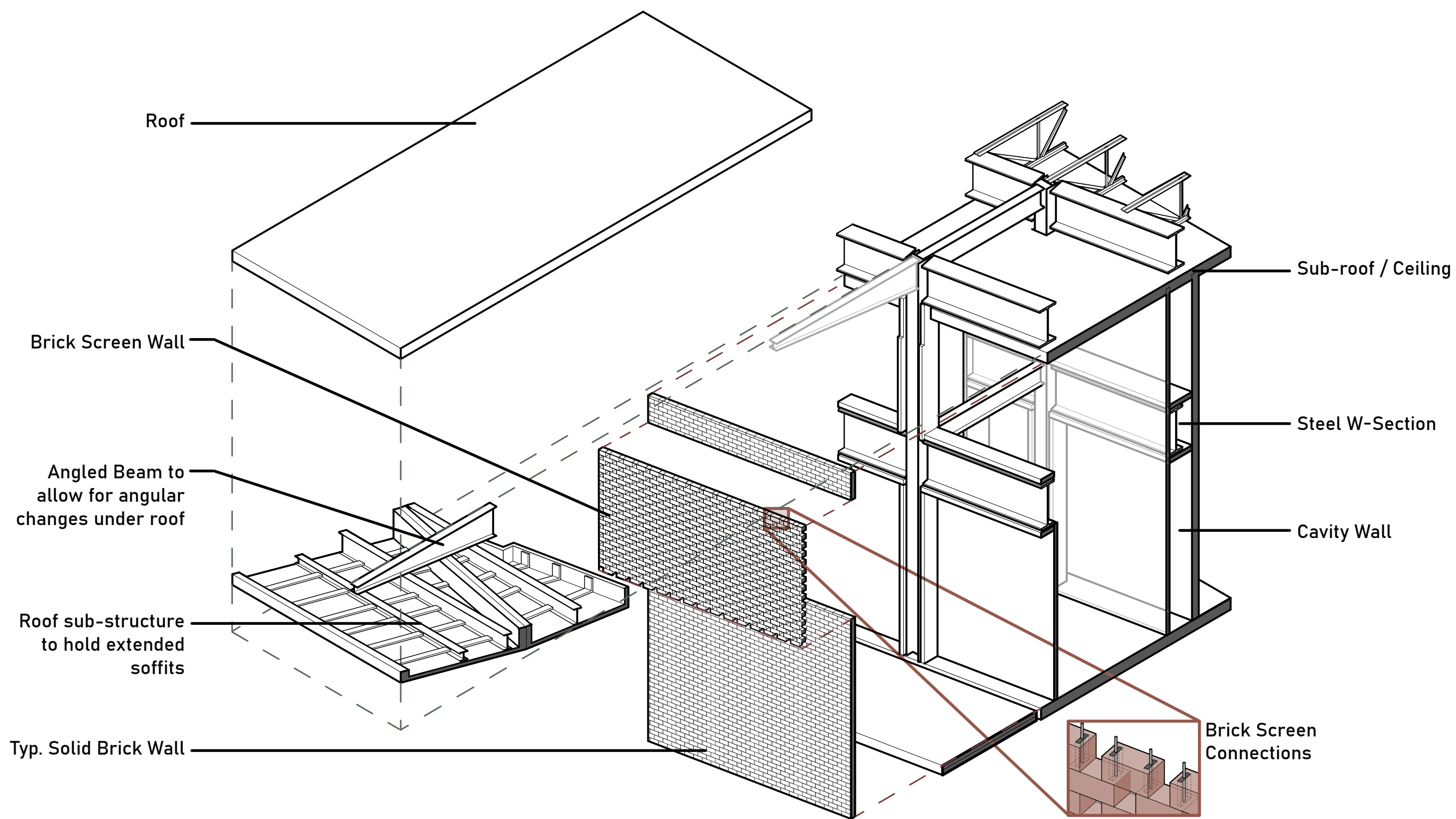
Designing for Equitable Communities
Created with a campus inspired design, this project incorporates large open spaces to host community events, such as the local farmers market held within Meridian. Additionally, the multi-building design creates great transitions from indoor spaces to outdoor spaces, keeping a connection to the outdoors always present. All buildings have large overlapping overhangs that help establish Meridian's climate. The main road bisecting the site, Front St., has a large planned elevated pedestrian walkway that acts as a speed table for cars in order to reorient the focus from vehicular transport to human scale walk-ability on site. The project's main material used is brick, which is an allusion towards the existing fabric of Meridian's downtown area. This way, the project can be properly integrated within the community's local context, instead of trying to impose over an already established vernacular.

Designing for Well-being
This design's main focus is creating natural lighting that can be utilized for path-finding. Because of this, natural lighting is well integrated into the interior spaces of the project. Most walls are designed have a double wall cavity system to help navigate both acoustical and thermal comfort within the project. Exterior spaces are well shaded by reaching overhangs to navigate the external thermal comfort of the site as well. Because of the brick screen present on many of the facades, the connection to the outdoors is very prevalent within the site.

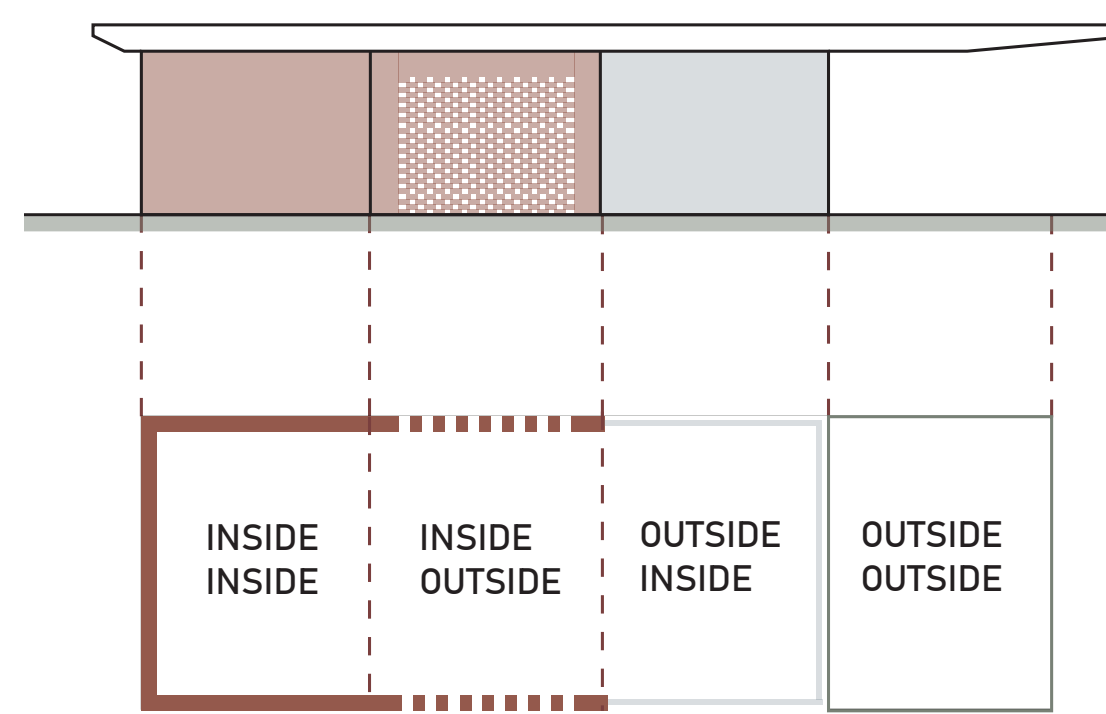
Light Studies
Lighting that creates paths (1), highlights materiality (2), and creates space (3) seen in process and in the final design



Section B

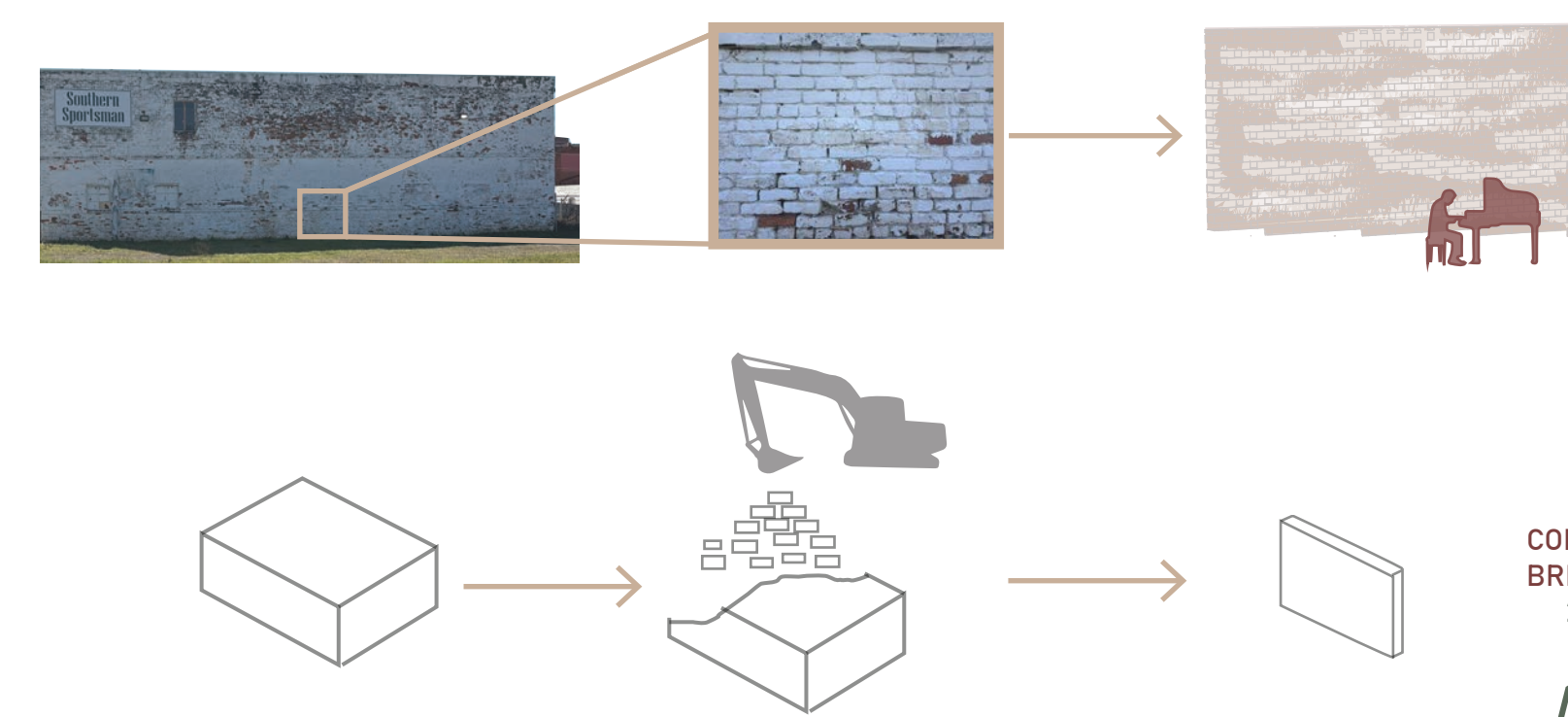


Exploded Structure and Facade Axon



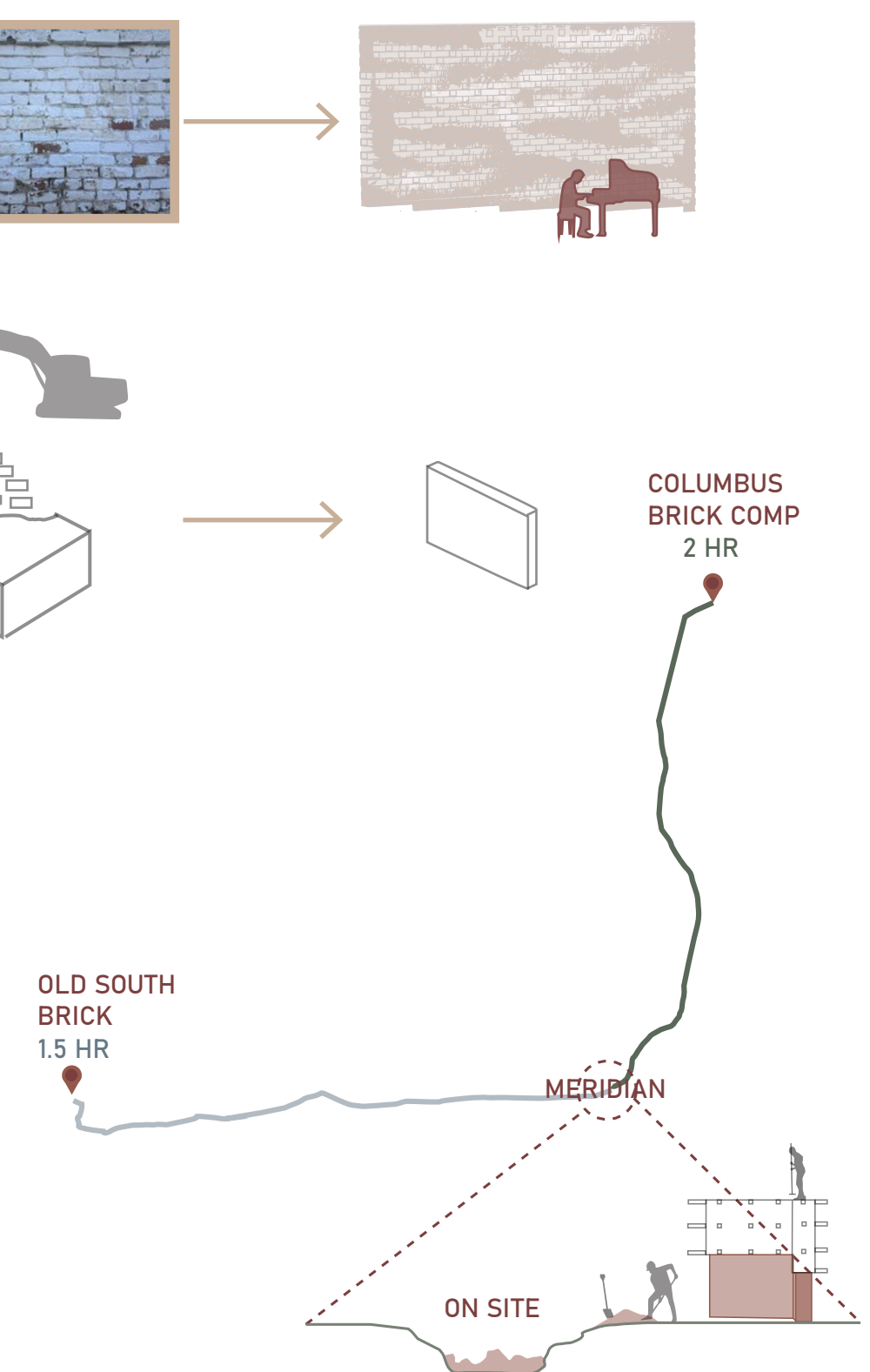
Inside and Outside Spaces Created Through Materials

Designing for the Integration
Double wall systems work with thermal lag to provide both interior thermal and acoustical comfort from outside heat, chill, and noise pollution. Most buildings in the design integrate operable windows within the curtain wall systems to allow for passive cooling through natural air circulation on site. Interiors with a lifted floor integrate displacement ventilation within the floor system that work in conjunction with the stack effect that can direct hot air out through operable openings within the roofs. Additionally exterior comfort is navigated by shaded areas provided by the roofs to try and mitigate Meridian's hot and humid climate.

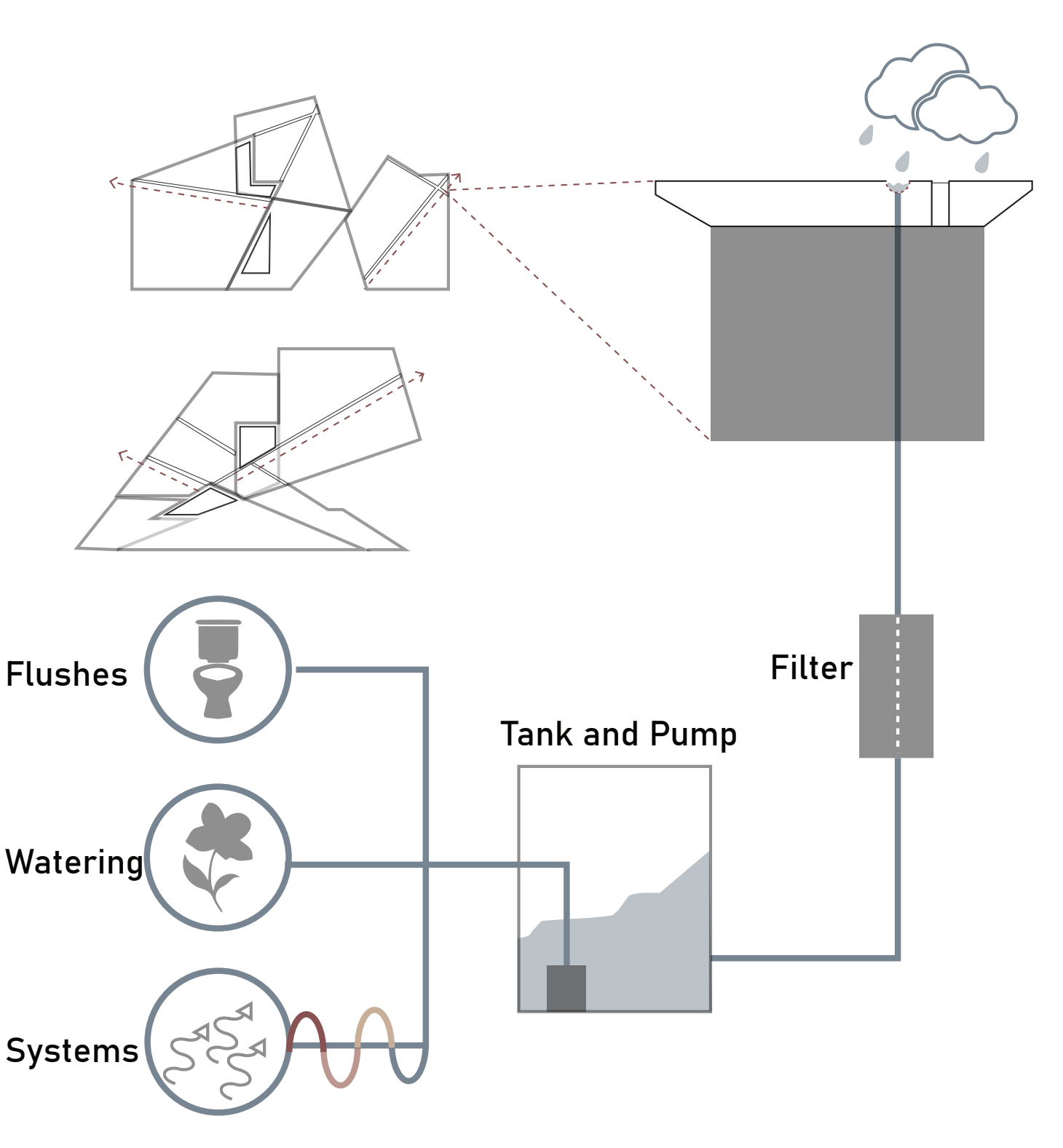


Material Reuse

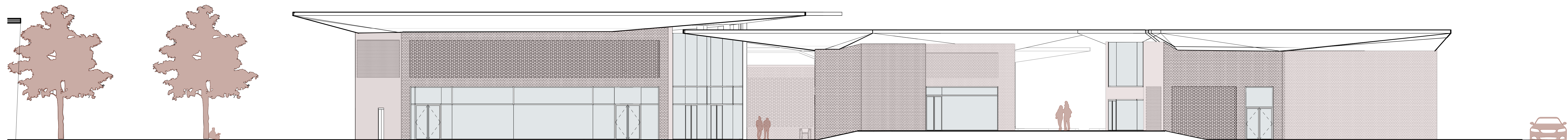
Designing for Resources
Materials for the project such as brick and steel, are sourced locally within Mississippi, while earth for rammed earth walls can be used from the typical on-site excavation as part of construction. The existing buildings on site will be used for their materials, such as brick, and repurposed into interior and exterior walls within the project. The steel for the structure in the project can be sourced from steel manufacturers in Meridian, such as: Structural Steel Services Inc., Gipson Steel Inc., Henderson Steel, and Magnolia Steel Co.



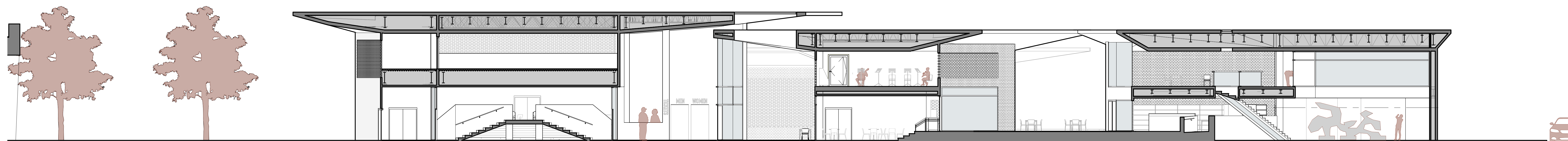
Material Source Map



Water Gathering, Filtration, and Reuse

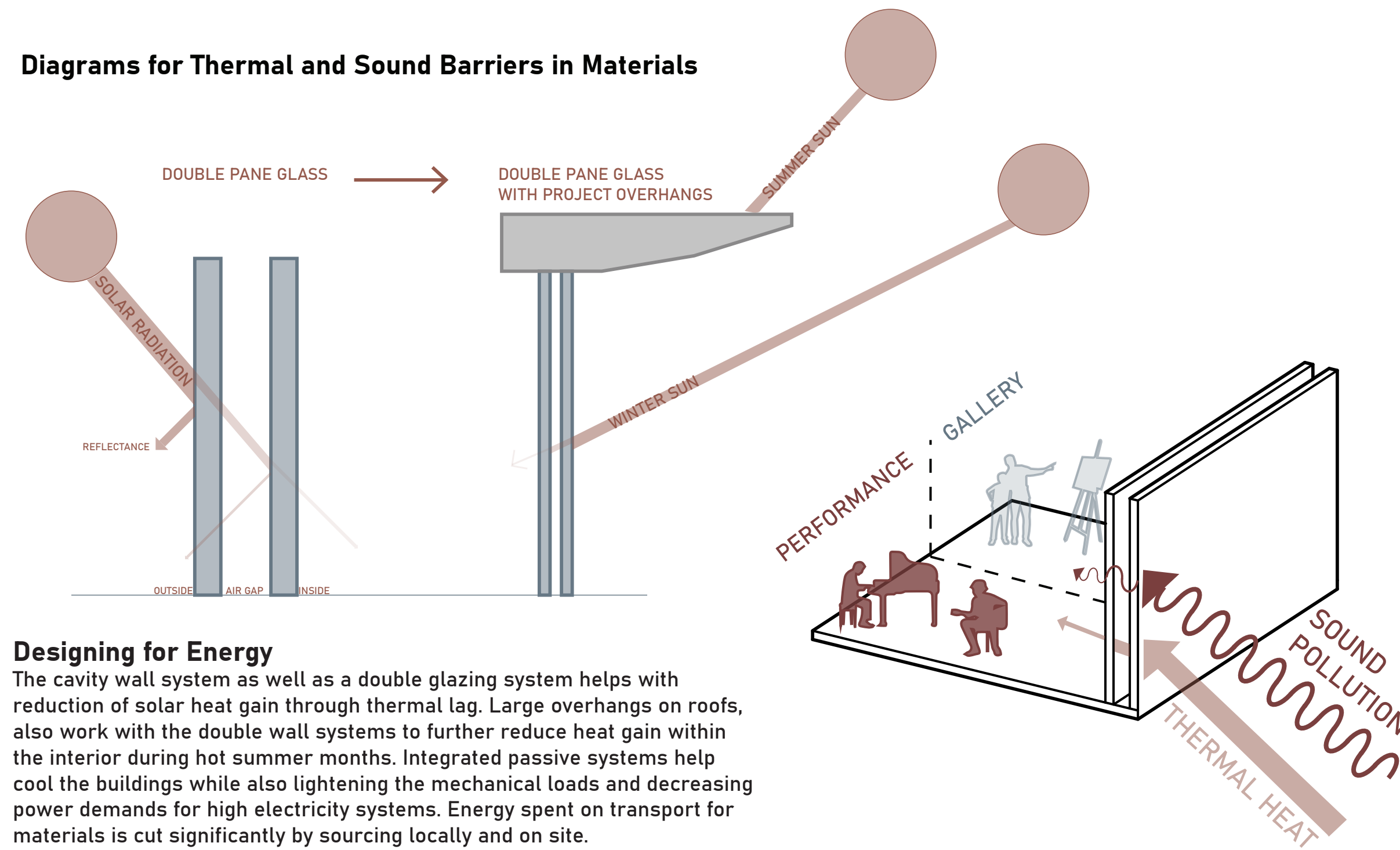


Front St. Elevation



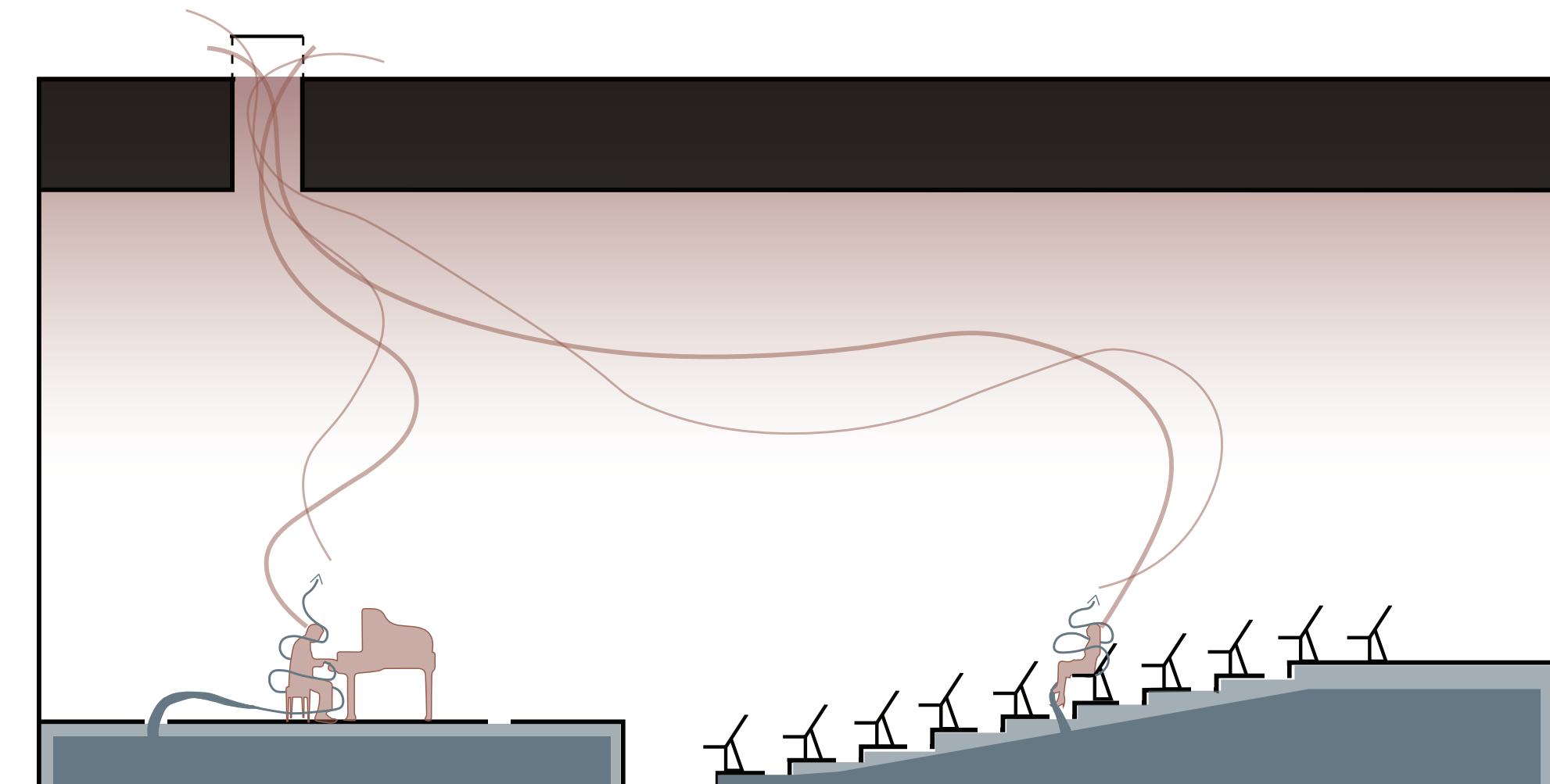
Section C

Diagrams for Thermal and Sound Barriers in Materials

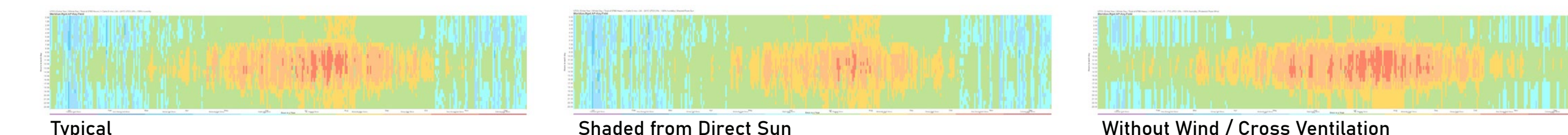


Designing for Energy
The cavity wall system as well as a double glazing system helps with reduction of solar heat gain through thermal lag. Large overhangs on roofs, also work with the double wall systems to further reduce heat gain within the interior during hot summer months. Integrated passive systems help cool the buildings while also lightening the mechanical loads and decreasing power demands for high electricity systems. Energy spent on transport for materials is cut significantly by sourcing locally and on site.

Displacement Ventilation Stack Effect



Universal Thermal Climate Index (UTCI) Analysis for the Site



Interior Thermal Studies

