

Between the Seams

3 // Heritage Adaptive Reuse and Civic Space — Academic Work



Course: ARCH 493

Location: Cambridge, ON

Date: May – July 2025

Role: Design development, digital and physical 3D modelling, technical systems resolution, diagramming

Collaborators: Abeer Ali

Instructor: Jaliya Fonseka

Software: Rhino, Revit, D5, Photoshop, Illustrator



Morphology

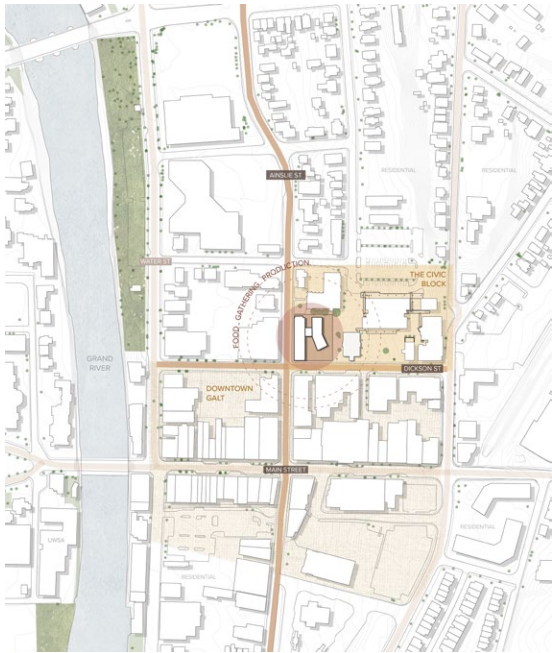
Traces the project's formal development by translating stitching and seam logic into architectural massing. Lines of tension define the building's form, while points of convergence establish primary modes of circulation along the path of the "strings."

How can fabric act as a medium to reconnect a community with its history, its market, and its civic identity?

Between the Seams reimagines the Cambridge Farmers' Market as a civic and cultural anchor where heritage, materiality, and public life are woven together. Located within the historic center of Cambridge, the project transforms an inward-facing market into an open and inclusive public realm that strengthens its relationship with the city and its residents. The intervention draws inspiration from the qualities of fabric, its ability to fold, bind, and connect, as a metaphor for uniting old and new layers of the urban fabric.

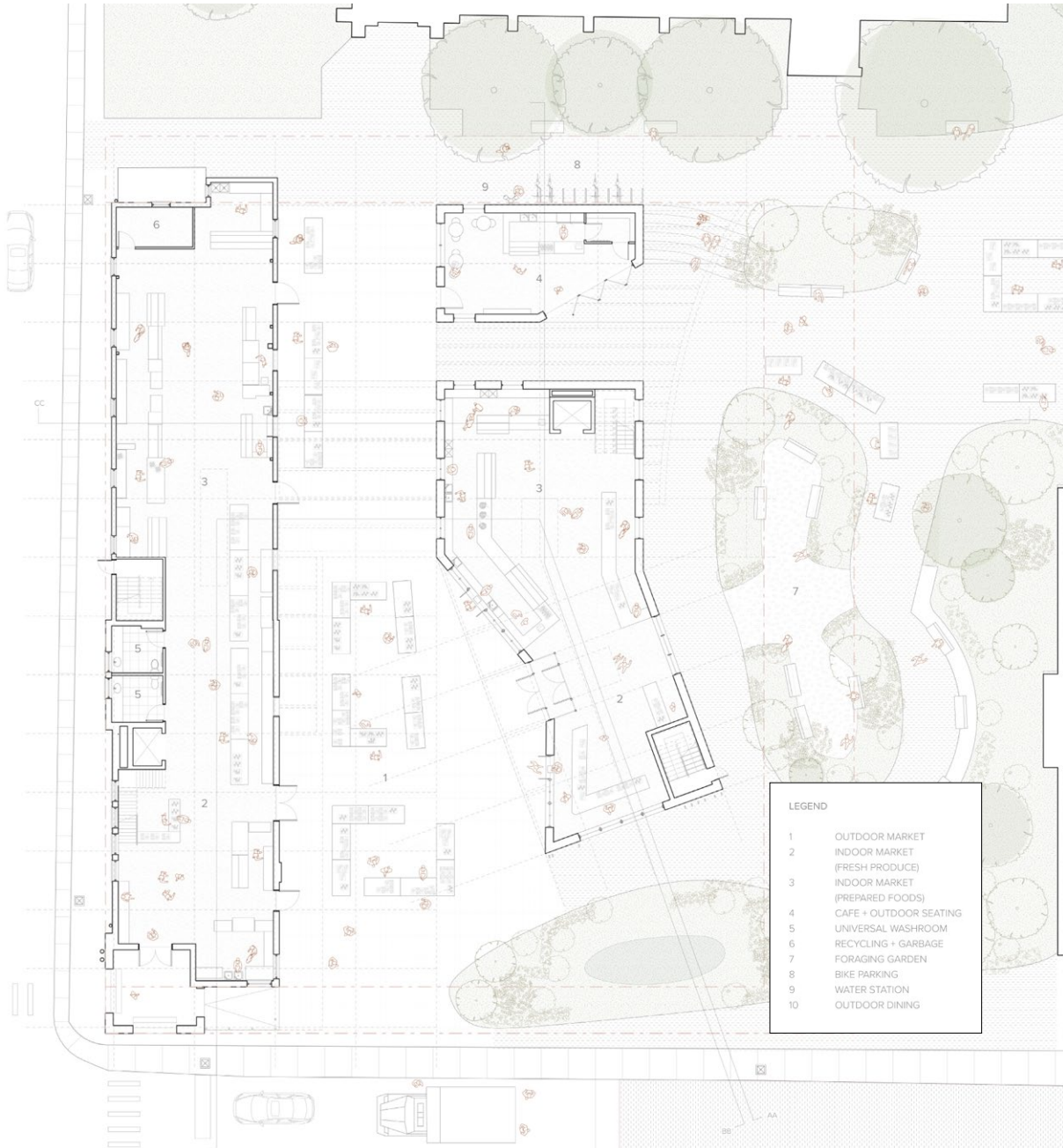
By extending the existing structure to stitch the historic market hall to the surrounding civic block, the design activates underused spaces and improves pedestrian connectivity. Courtyards, covered walkways, and perforated fabric-like geometries support social interaction while allowing light and air to permeate the structure.

Through this approach, Between the Seams celebrates the enduring relationship between people, place, and production. The project positions the market not only as a site of exchange, but also as a shared cultural landscape shaped by everyday routines, chance encounters, and local work. Instead of treating the Farmers' Market as an inward-facing destination, the proposal opens it back into the city, making it easier to enter, linger, and move through. It creates more opportunities for people to gather without needing a formal event, and it supports the small, repeated moments that build community over time. At the same time, the design keeps the market's heritage legible. It does not erase the existing structure, but extends and threads through it, allowing old and new layers to sit beside one another. This balance of continuity and growth reframes tradition as something active rather than preserved behind glass.

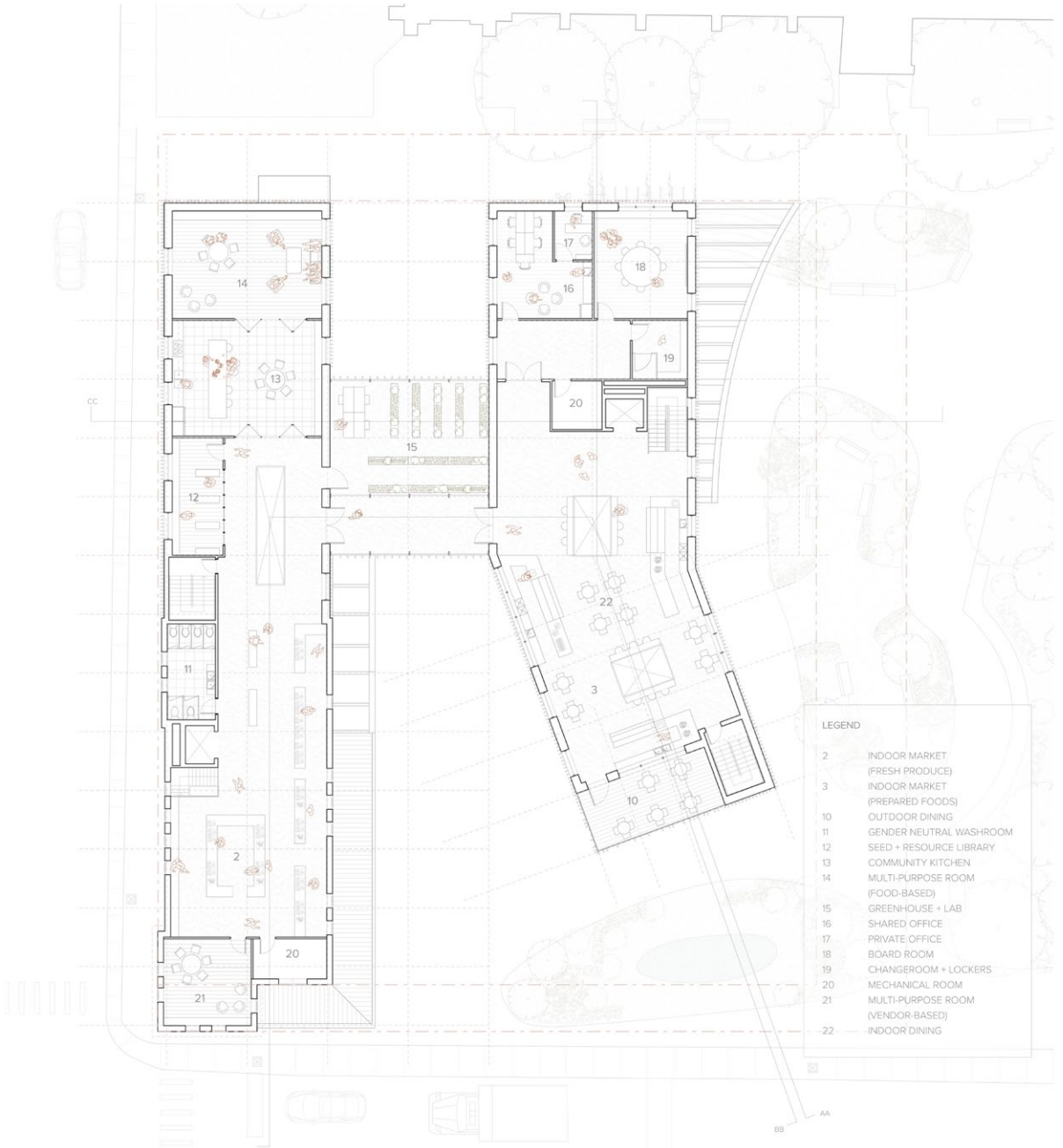


Site Plan

The ground and upper levels are organized to balance openness, clarity of movement, and operational efficiency across public and support programs. At the ground level, highly active uses such as indoor and outdoor markets, food preparation, dining, and gathering spaces are arranged to encourage permeability and continuous circulation, allowing visitors to move fluidly between interior and exterior conditions. Service functions and building support spaces are carefully integrated to remain accessible without interrupting public flow. Above, the second level consolidates quieter, resource-oriented programs, including community kitchens, learning spaces, offices, and greenhouse functions, creating a layered organization that separates intensity while maintaining visual and spatial connection between floors. Together, the plans establish a clear hierarchy of use that supports both daily market activity and longer-term community engagement.



Ground Floor Plan



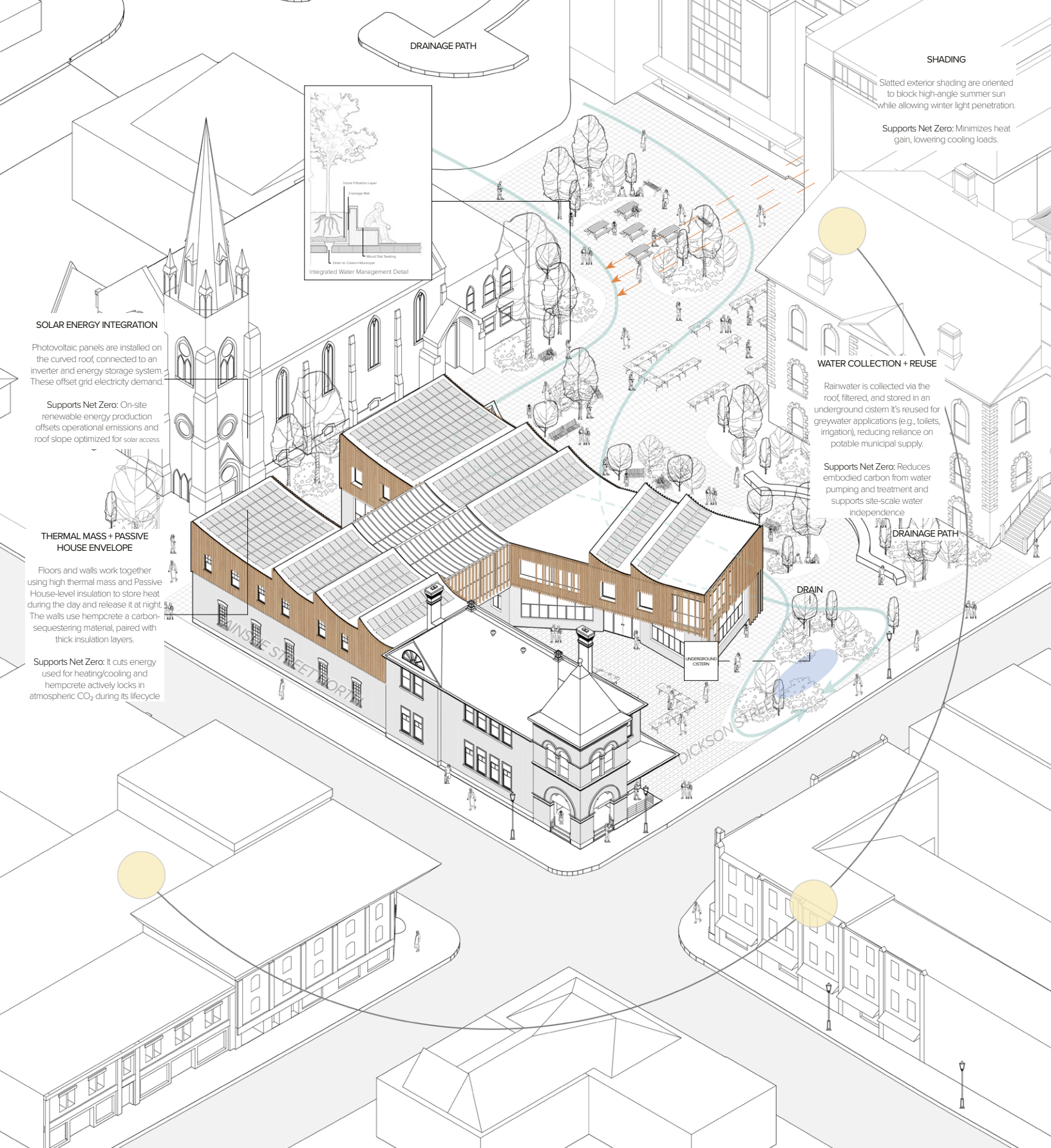
Second Floor Plan



Connector Bridge View



Unfolded Section



Sustainability Diagram

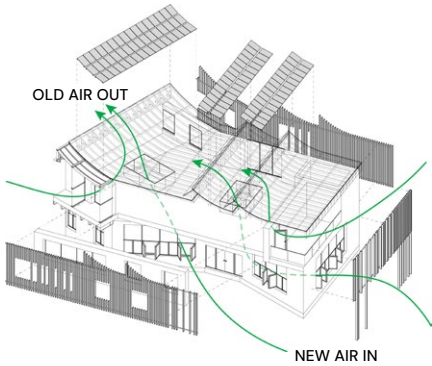
Environmental systems are integrated directly into the project's architectural and urban logic, positioning sustainability as a spatial condition rather than an applied layer. Roof geometry supports solar energy generation while directing rainwater through visible drainage paths for collection and reuse. Shading devices and thermal mass work together to regulate heat gain and interior comfort, reducing reliance on mechanical systems. These strategies extend beyond the building footprint, embedding environmental performance into the courtyard and public realm and making climate-responsive design legible in everyday use.



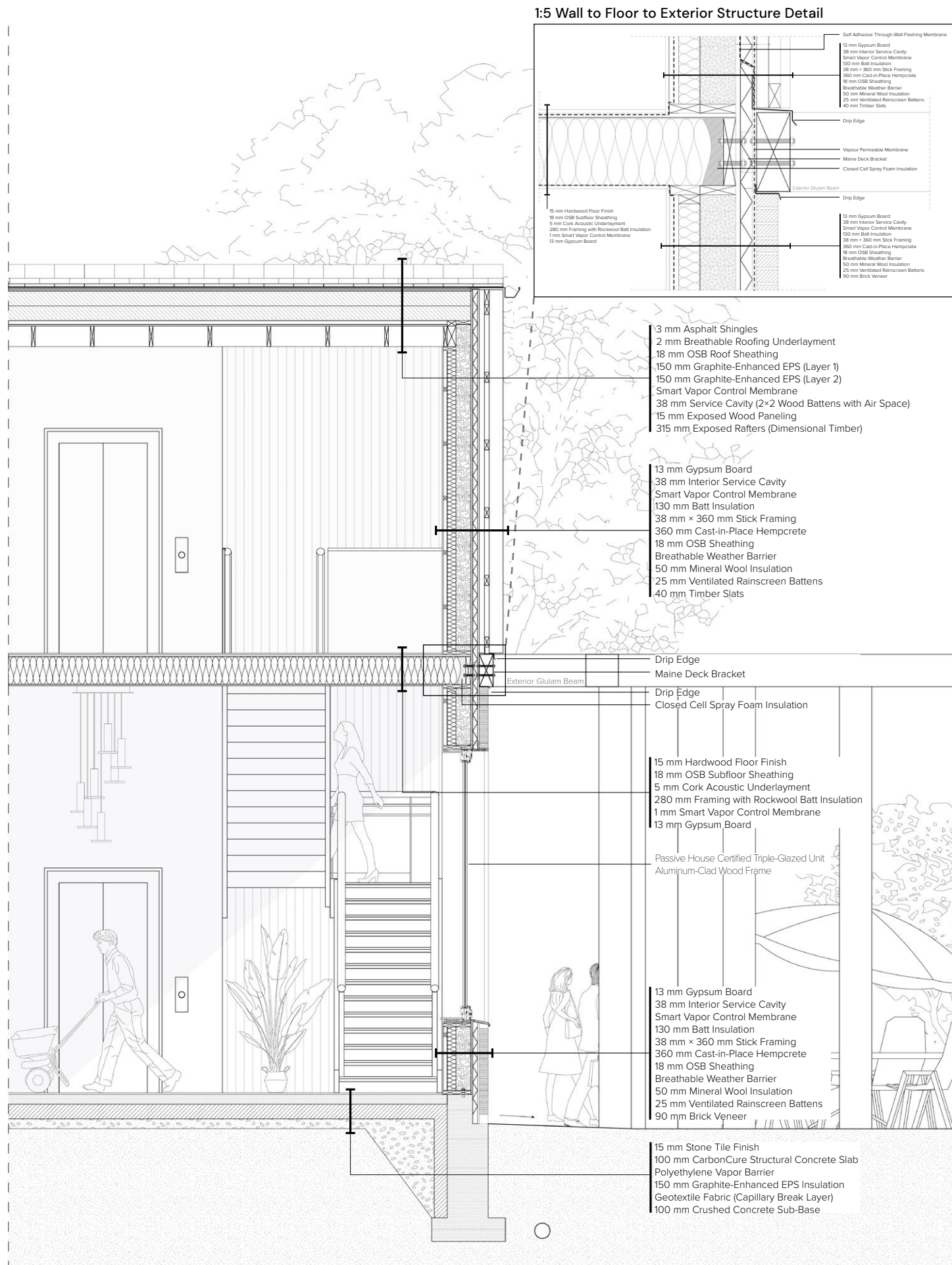
South Elevation



West Elevation



The market employs a passive ventilation strategy that combines cross-ventilation with stack-driven airflow to regulate interior comfort. Fresh air is introduced through low-level perimeter openings, where it moves across vendor areas and circulation spaces before rising through the section. As internal heat gains from people and equipment increase, air is drawn upward along the sloped roof geometry toward high-level operable openings. Warm, stale air is released at the roof, creating a pressure differential that continuously pulls new air through the market floor. By aligning ventilation paths with roof form and section, the system reduces reliance on mechanical cooling while maintaining consistent airflow and improved indoor air quality.



1:20 Wall Detail

Sectional and Site Models



Main Entrance View