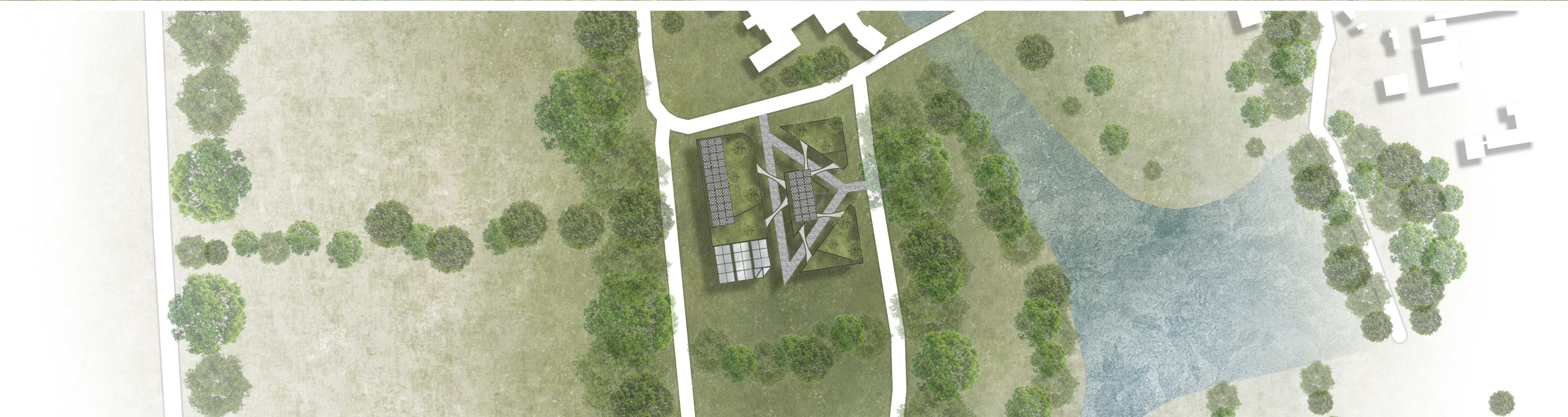


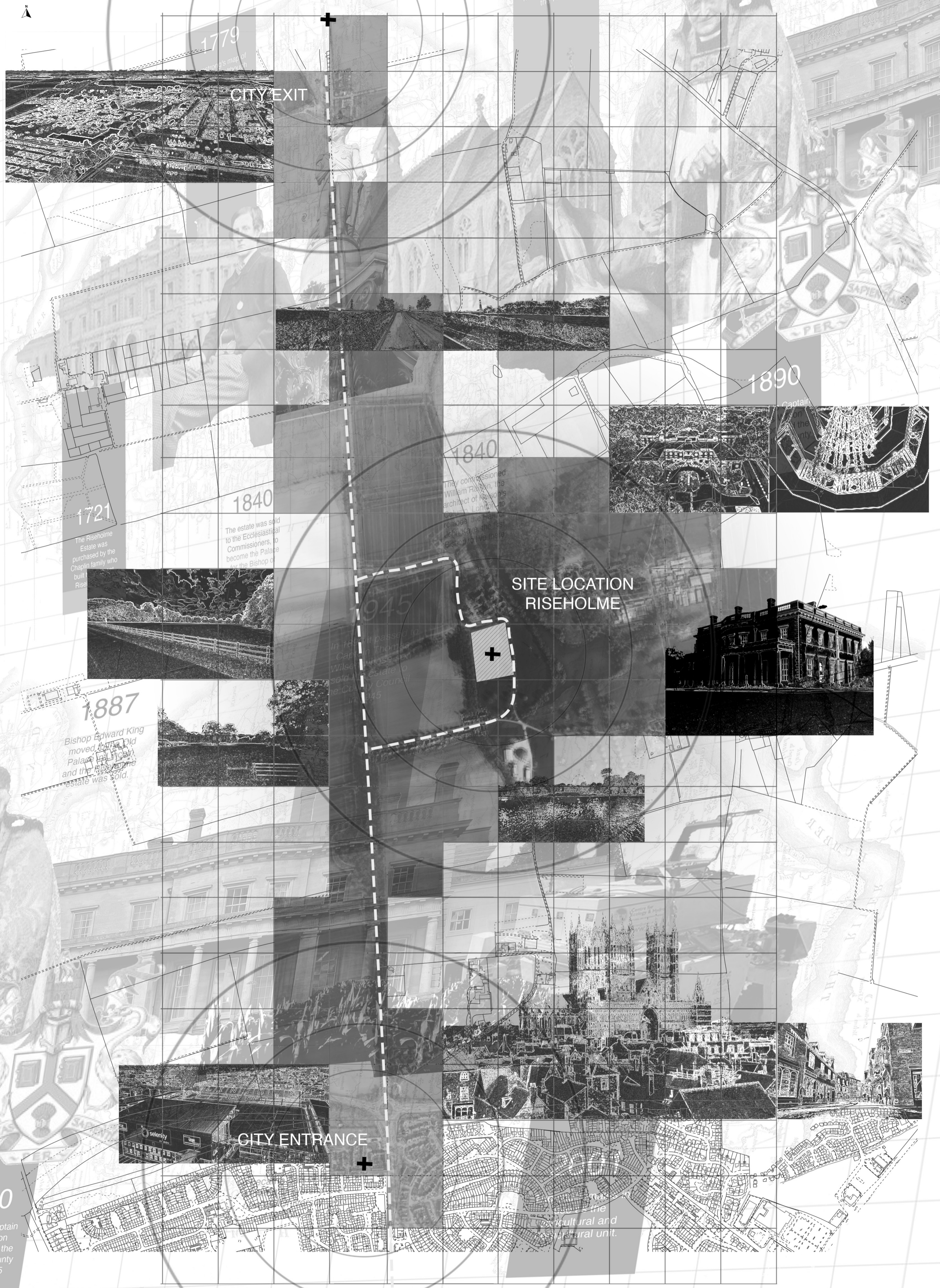
# VERDANT NEXUS

VERDANT - green with grass or other rich vegetation.  
NEXUS - a connection or series of connections linking two or more things.

*A Green Technology Research Centre for The University of Lincoln*



MASTER PLAN - 1:1000



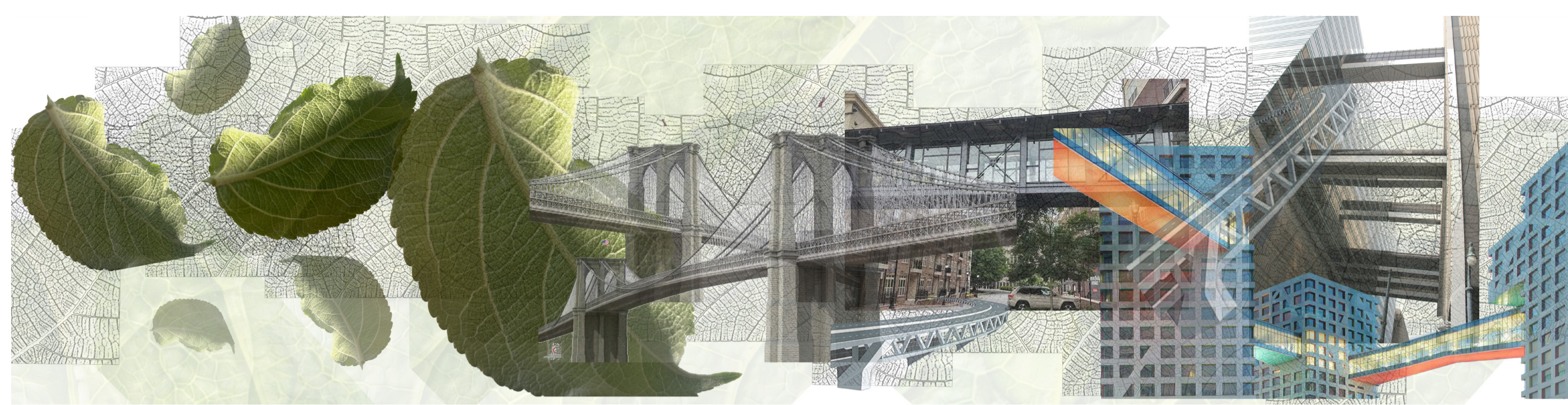
CITY EXIT

1840

SITE LOCATION  
RISEHOLME

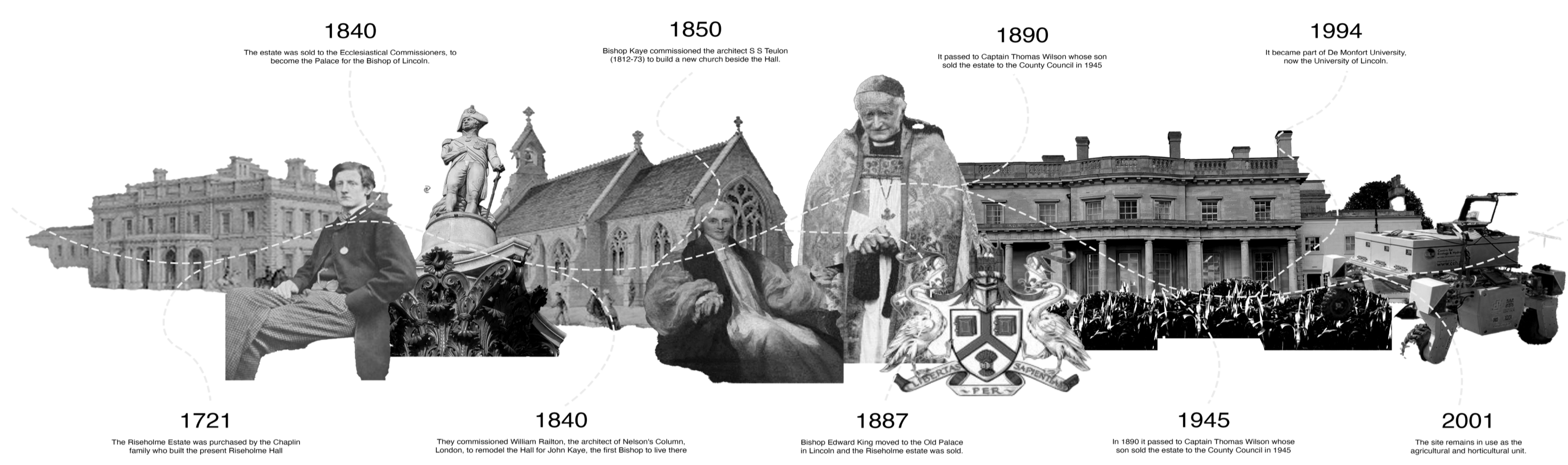
CITY ENTRANCE

ABSTRACT SITE MAP



The design for Verdant Nexus incorporates the idea of leaves natural contours and how the supporting structure stems from a single stem. This natural phenomenon acts like bridges across the face of a leaf that connect various points to the centre stem. This theory is adapted to the research centre by having four separate building's that all connect from a central point.

DESIGN THEORY



1721 The Roseholme Estate was purchased by the Chapin family who built the present Roseholme Hall

1840 They commissioned William Railton, the architect of Nelson's Column, London, to remodel the Hall for John Kaye, the first Bishop to live there

1887 Bishop Edward King moved to the Old Palace in Lincoln and the Roseholme estate was sold

1840 The estate was sold to the Ecclesiastical Commissioners, to become the Palace for the Bishop of Lincoln

1850 Bishop Kaye commissioned the architect S S Teulon (1812-73) to build a new church beside the Hall

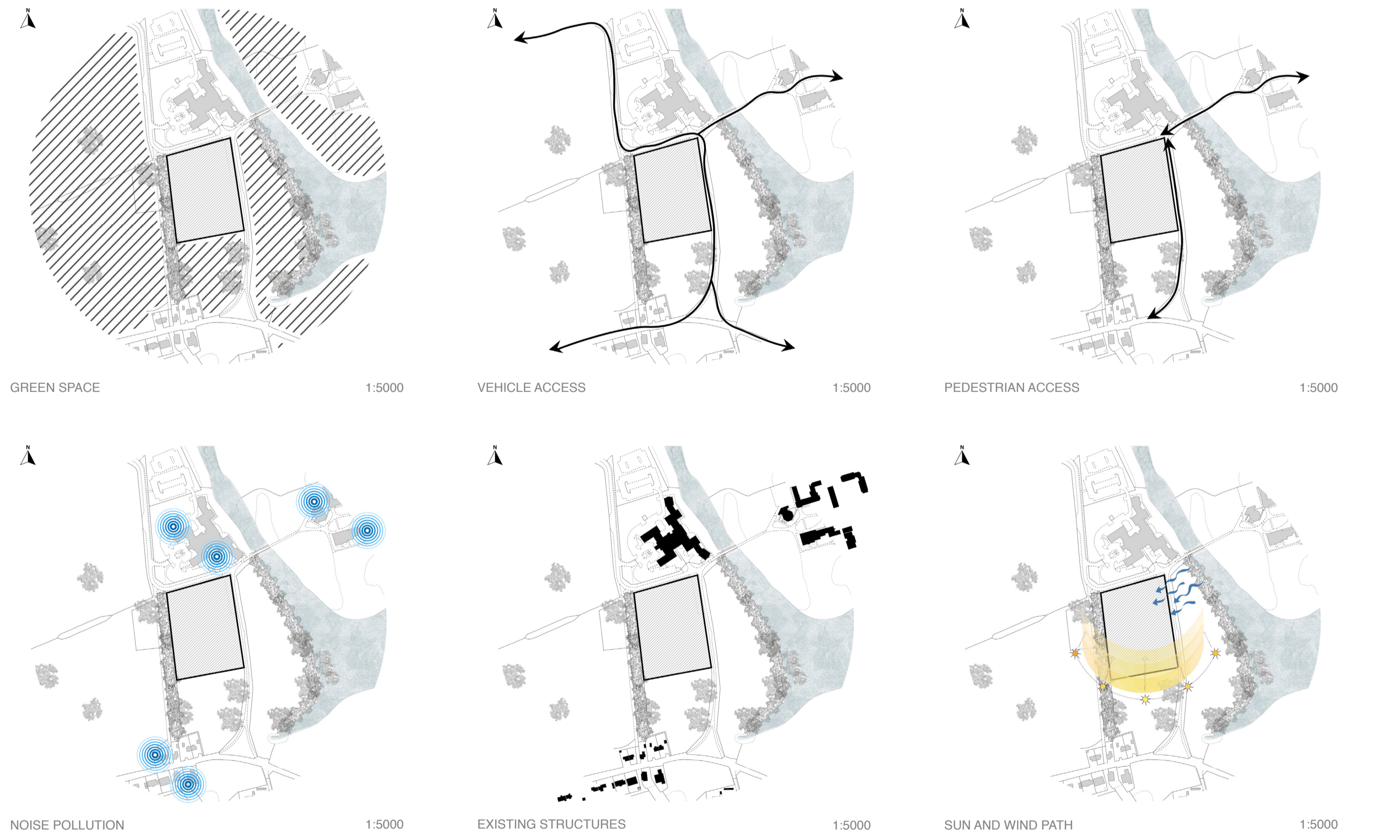
1890 It passed to Captain Thomas Wilson whose son sold the estate to the County Council in 1945

1945 In 1890 it passed to Captain Thomas Wilson whose son sold the estate to the County Council in 1945

1994 It became part of De Montfort University, now the University of Lincoln

2001 The site remains in use as the agricultural and horticultural unit

SITE TIMELINE



GREEN SPACE 1:5000

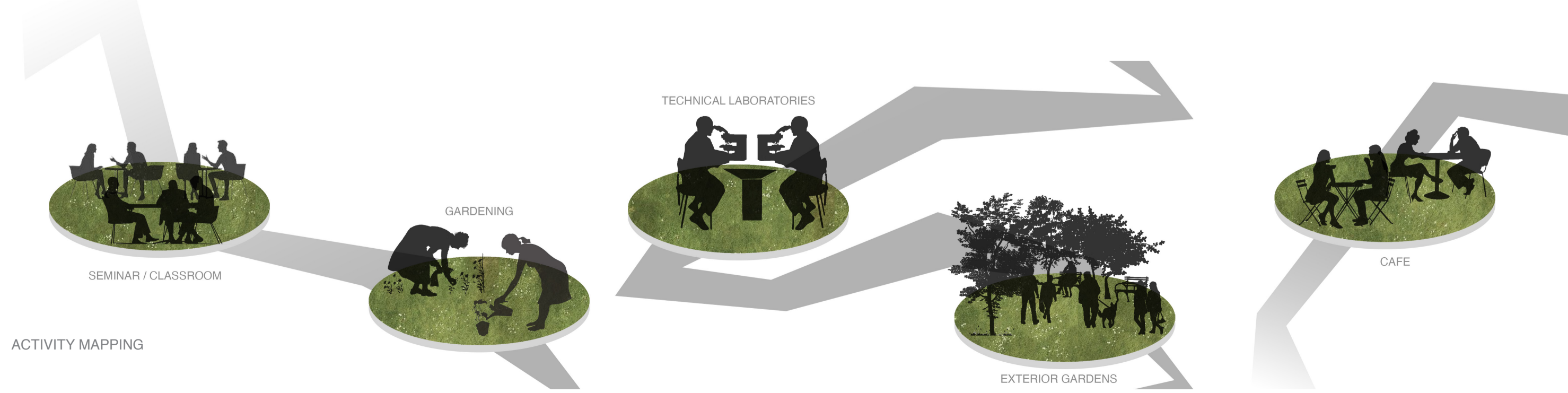
VEHICLE ACCESS 1:5000

PEDESTRIAN ACCESS 1:5000

NOISE POLLUTION 1:5000

EXISTING STRUCTURES 1:5000

SUN AND WIND PATH 1:5000



SEMINAR / CLASSROOM

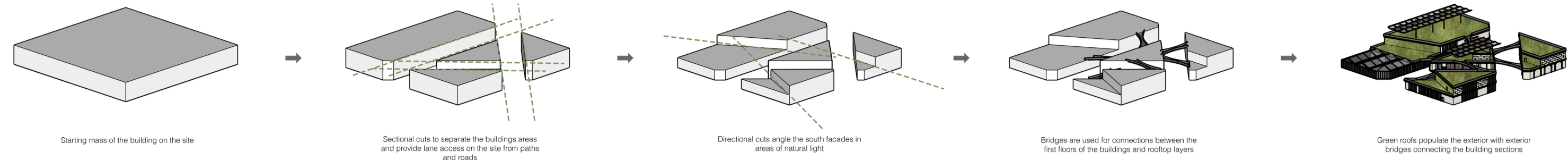
GARDENING

TECHNICAL LABORATORIES

EXTERIOR GARDENS

CAFE

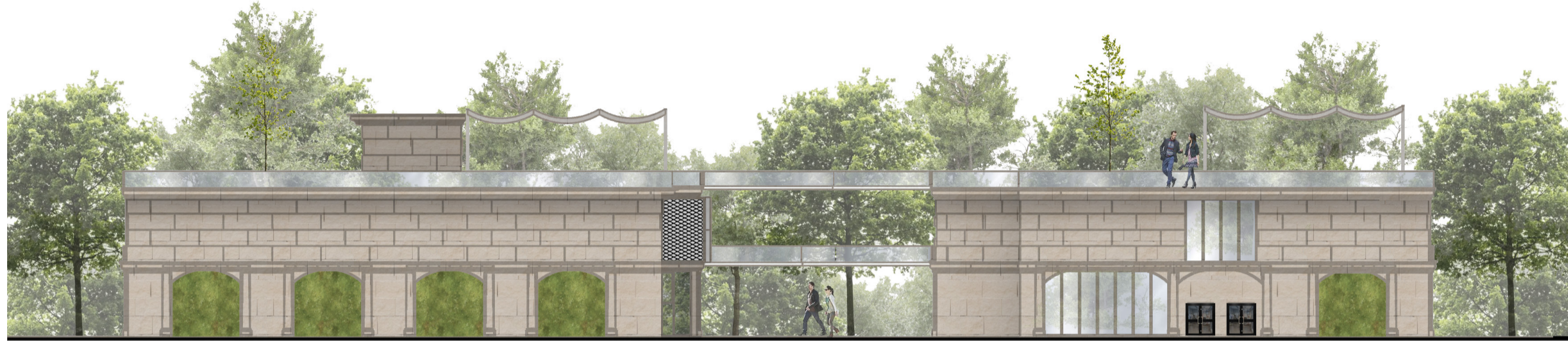
ACTIVITY MAPPING



PROJECT MASSING DEVELOPMENT



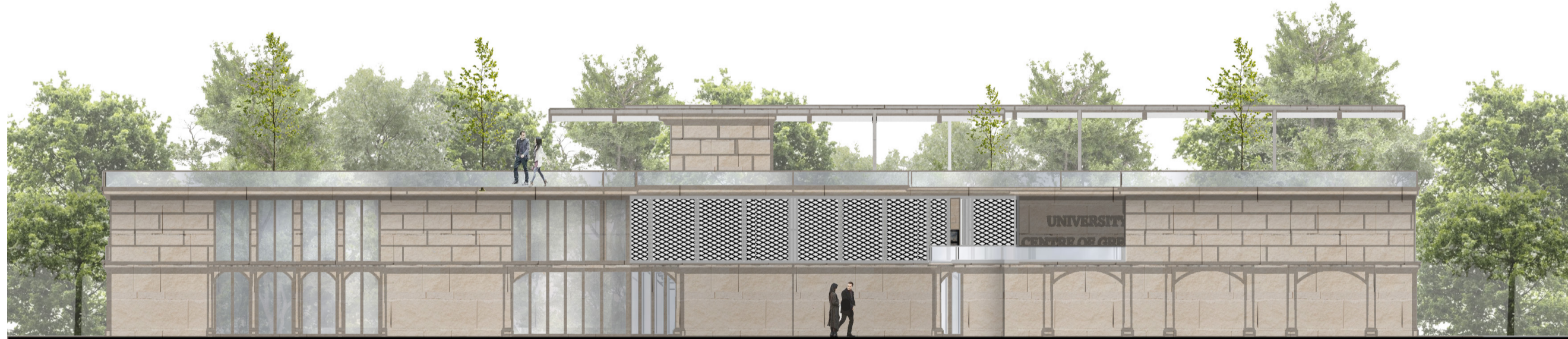
NORTH SECTION



NORTH ELEVATION - 1:300



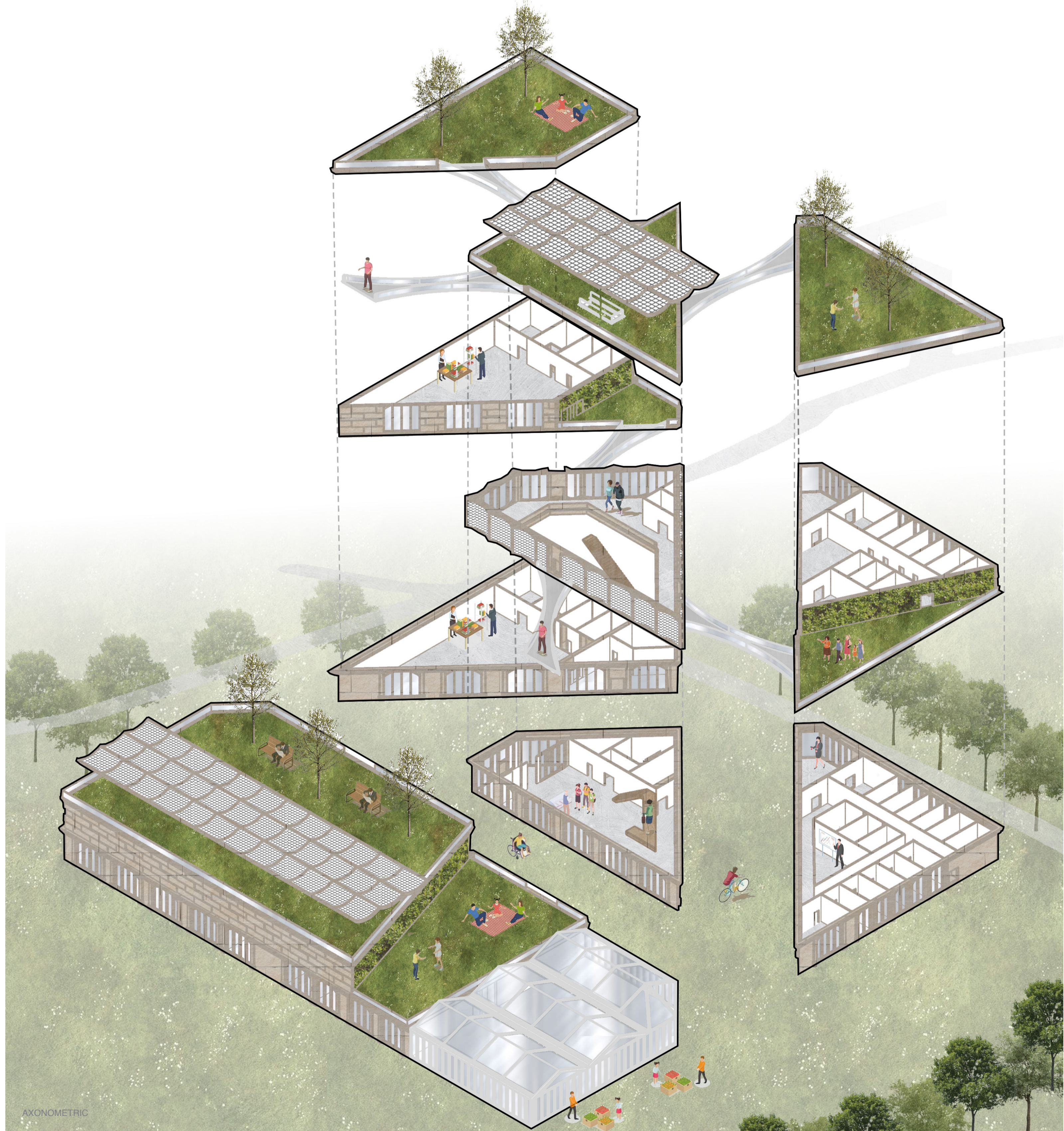
SOUTH ELEVATION - 1:300



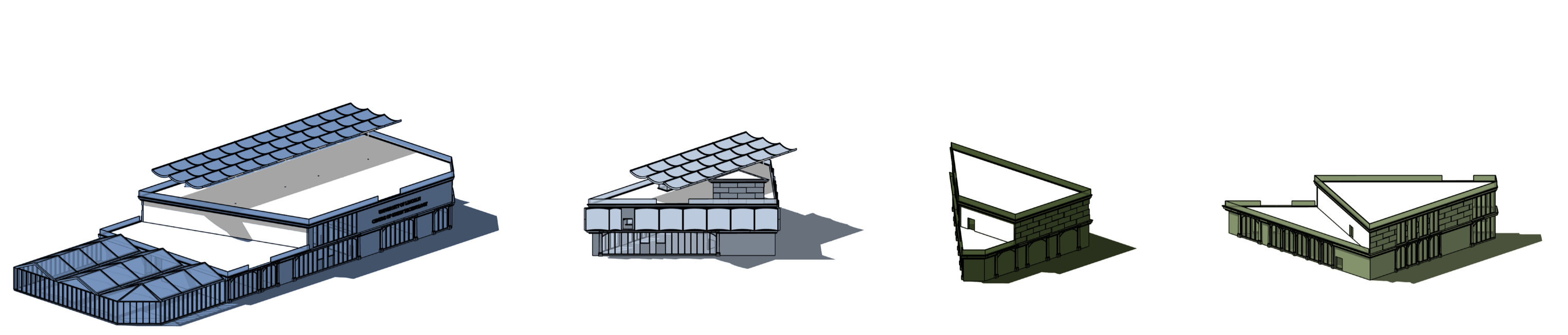
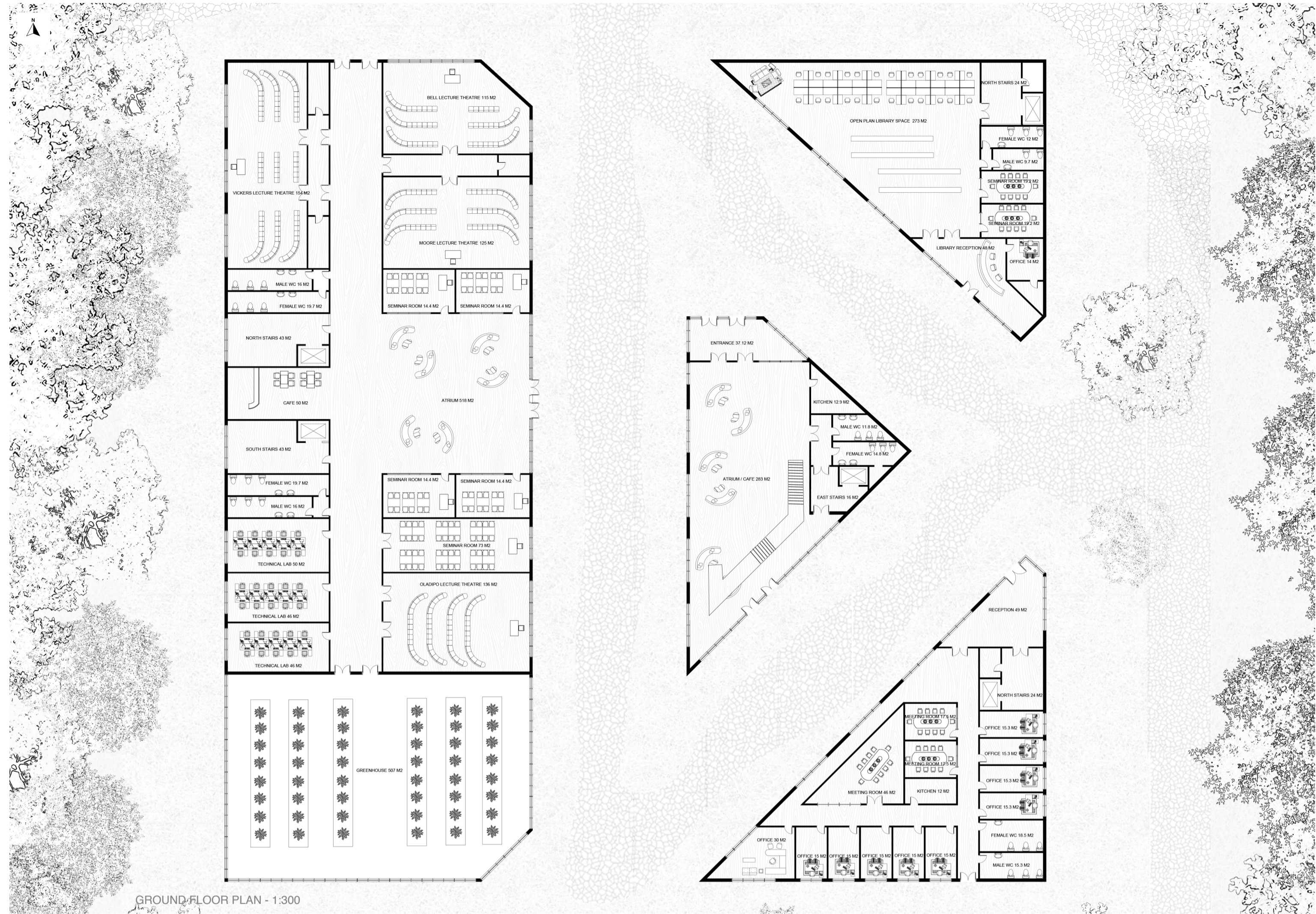
EAST ELEVATION - 1:300



WEST ELEVATION - 1:300



AXONOMETRIC



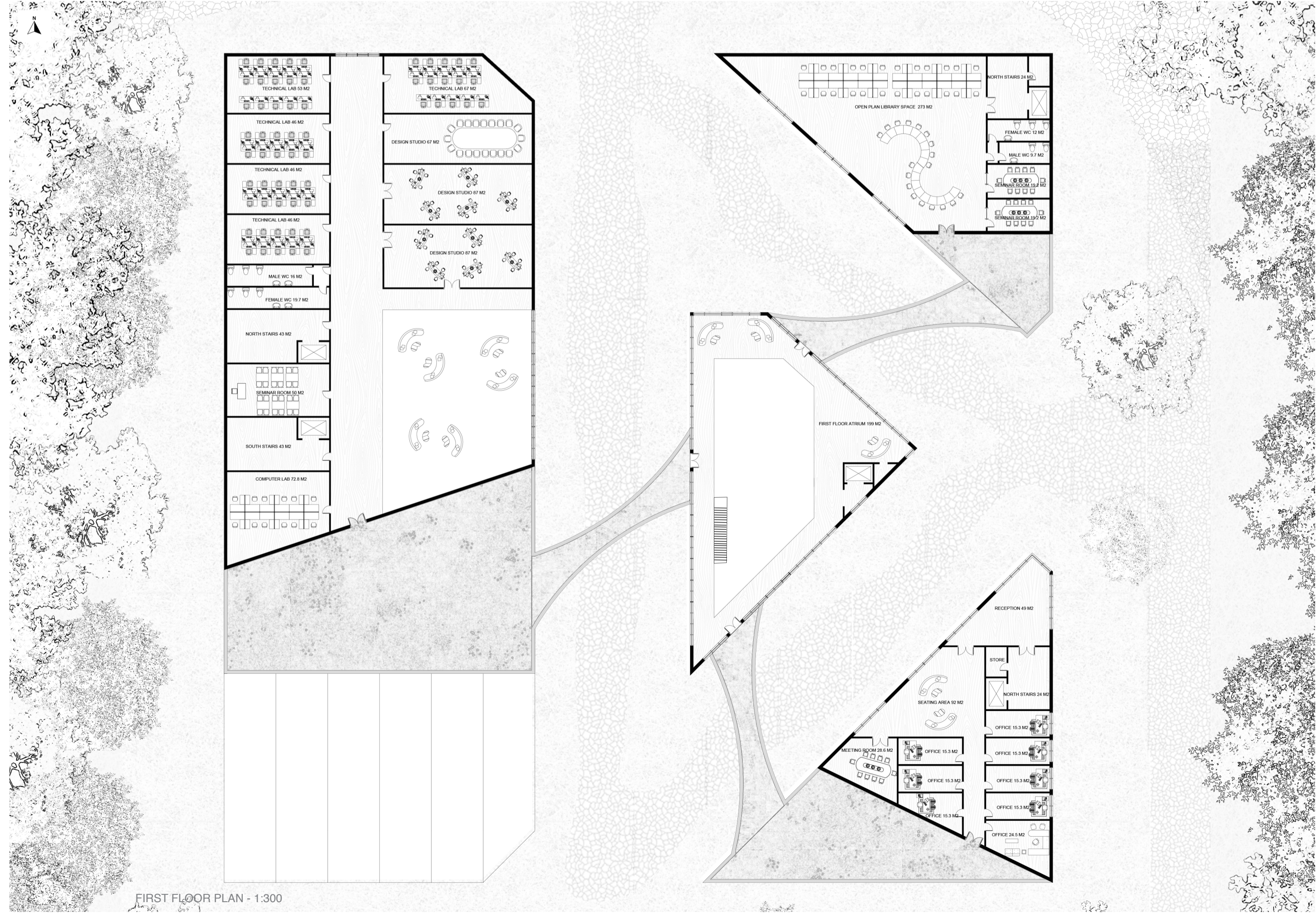
University of Lincoln - School of green technology. The main building on the site consisting of technical labs and design studios. The south side of the building is fit with an extensive greenhouse to house plantations for research and experimentation.

The central building acts as a hub for the campus, connecting all the surrounding buildings via bridges. The building utilizes greenery across the second story to reduce overheating through thermal mass.

The administration building is fit with offices and meeting rooms on both floors, primarily for teaching staff. This keeps the area private from the rest of the campus.

The library is at the front of the campus for easy access from the entrance part of the site. This library will be specifically for green infrastructure and agricultural research which is prominent for the real-time site.

BUILDING USAGE





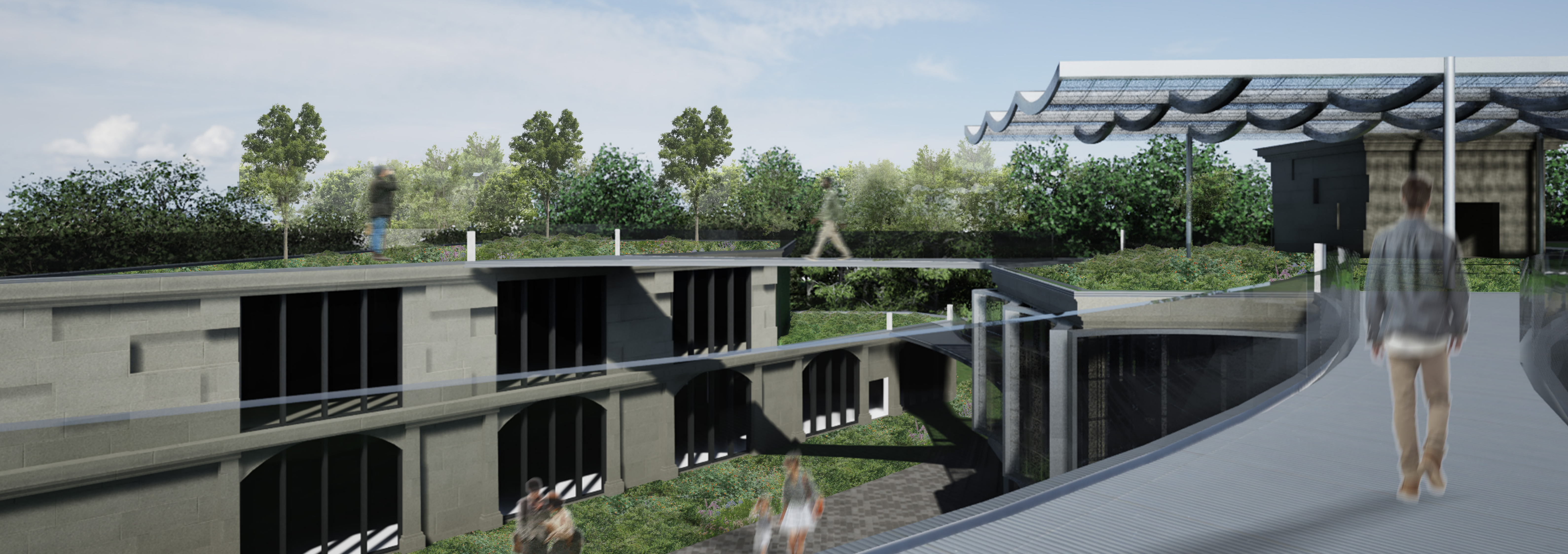
The central hall is the centre hub for Verdant Nexus. This building connects the admin, library and laboratories together through bridge connections. This area is meant for study and social integration for students, as well as the opportunity to get confectionary from the kitchen area. The structure consists of two stories with the first floor and roof top hosting access points for traversal across the site.



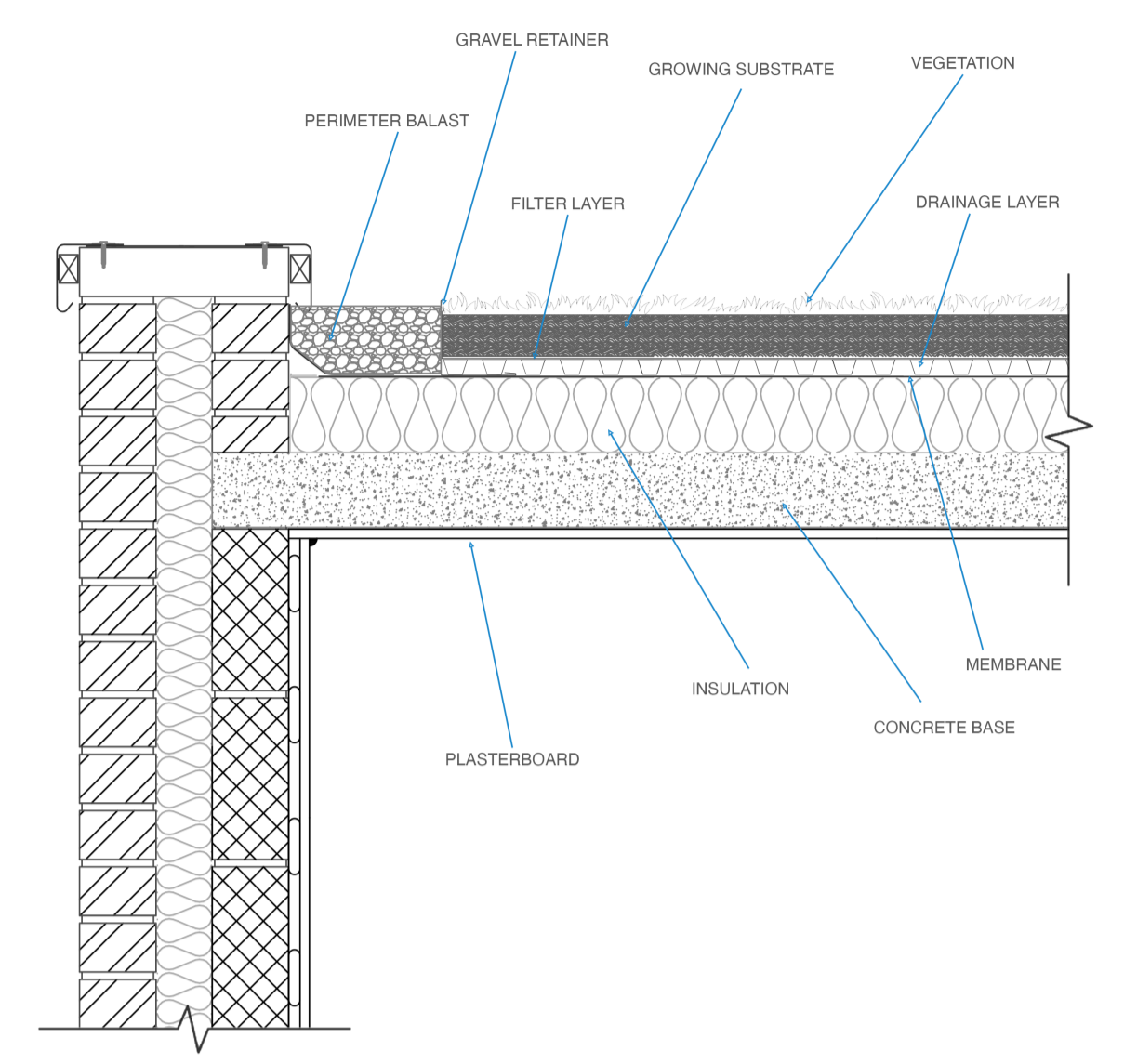
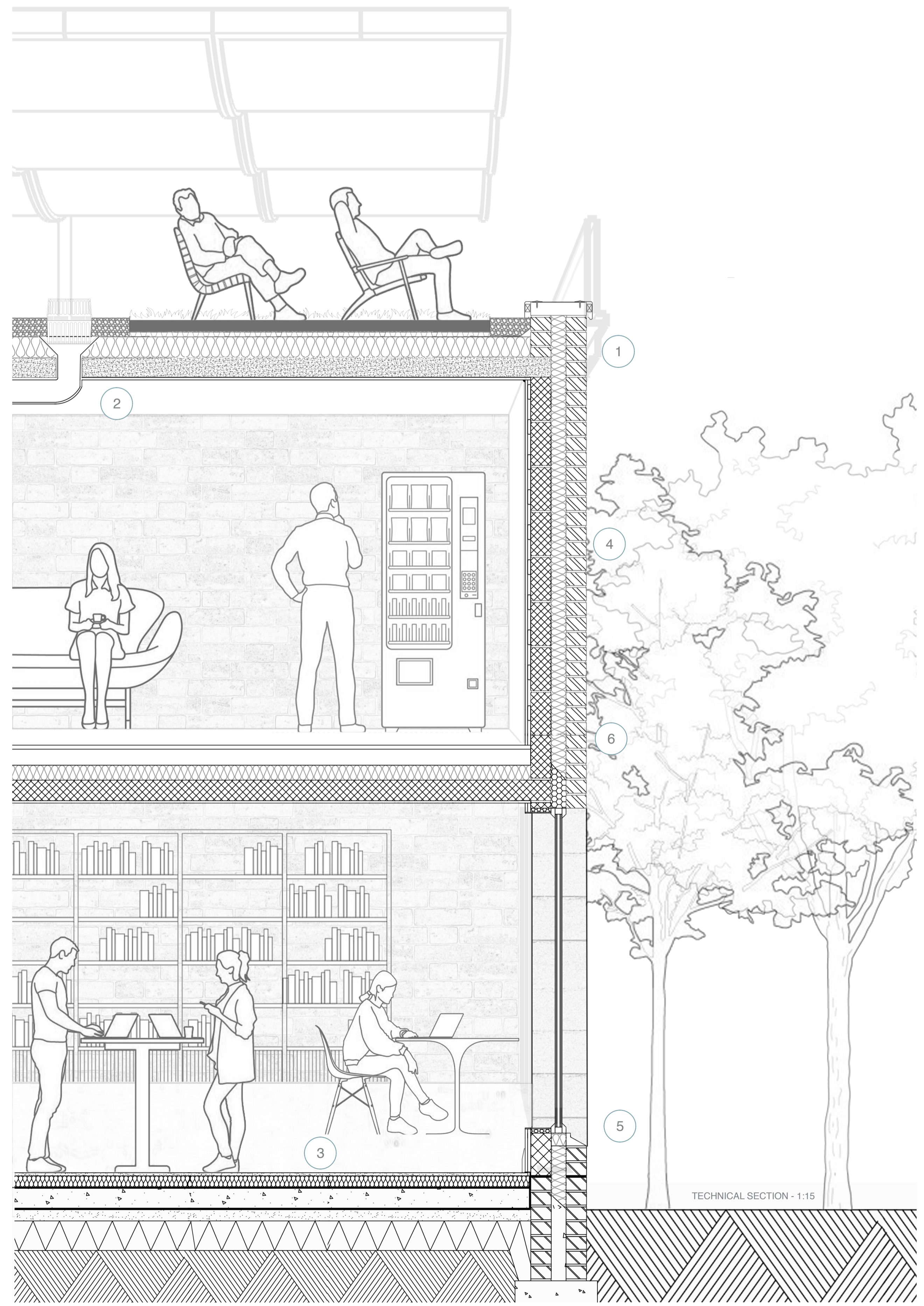
The greenhouse section of the educational building hosts spaces for plantation growth to perform experimentation on. The extensive glass roof allows for an increased humidity compared to the outside of the building which can help to promote the growth of plants that may not usually thrive in the wild. This infrastructure offers sufficient educational benefits for the students as they can gain better knowledge of plants.



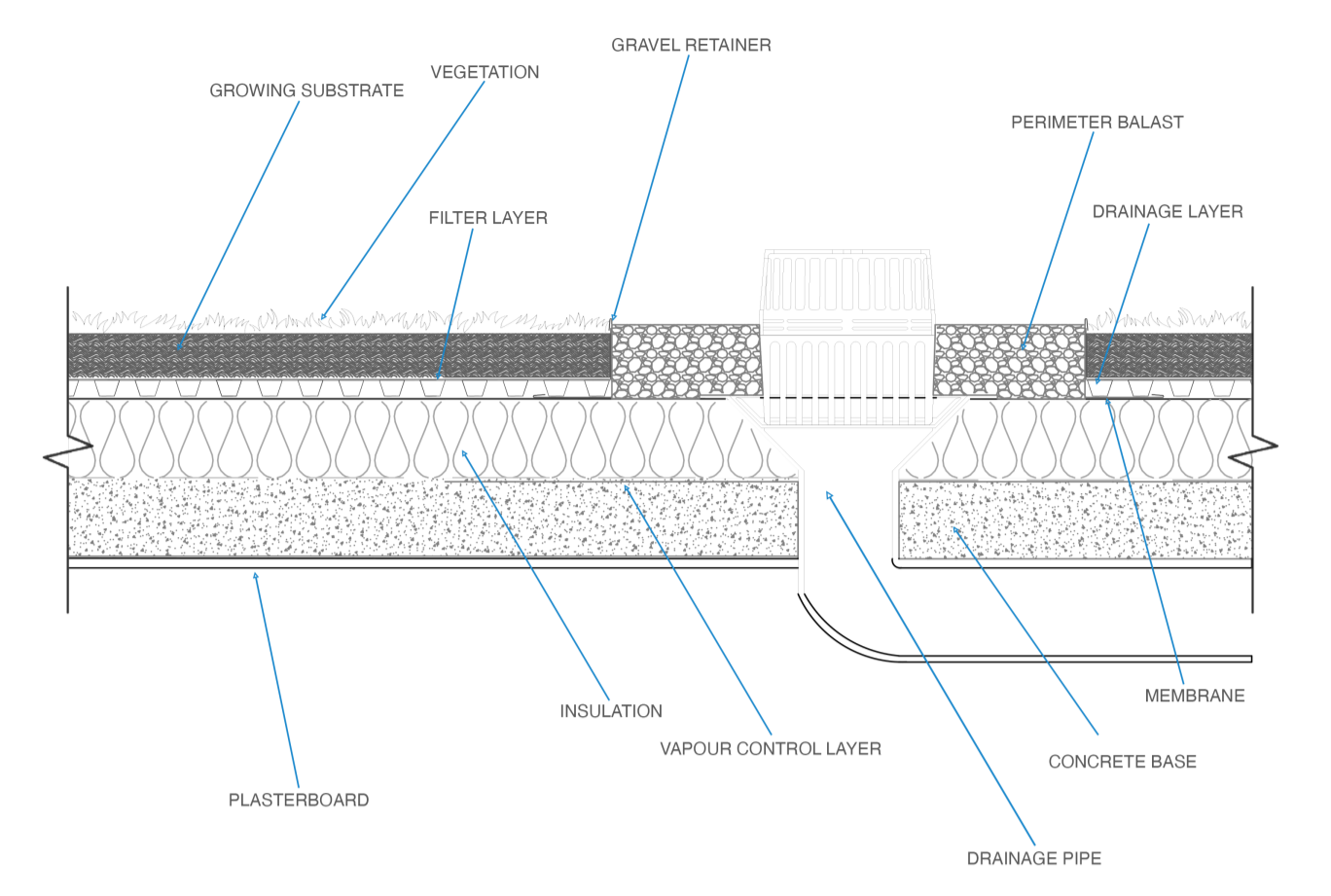
The exterior styling of the walls of Verdant Nexus are reminiscent of those used at Riseholme Hall. The project aims to fit with the vernacular architecture of the Riseholme site and pays homage to the hall's classical architectural style. The wall used staggered brickwork and archways to further express this style of architecture and the integration of limestone brick makes the materials parallel with Riseholme Hall.



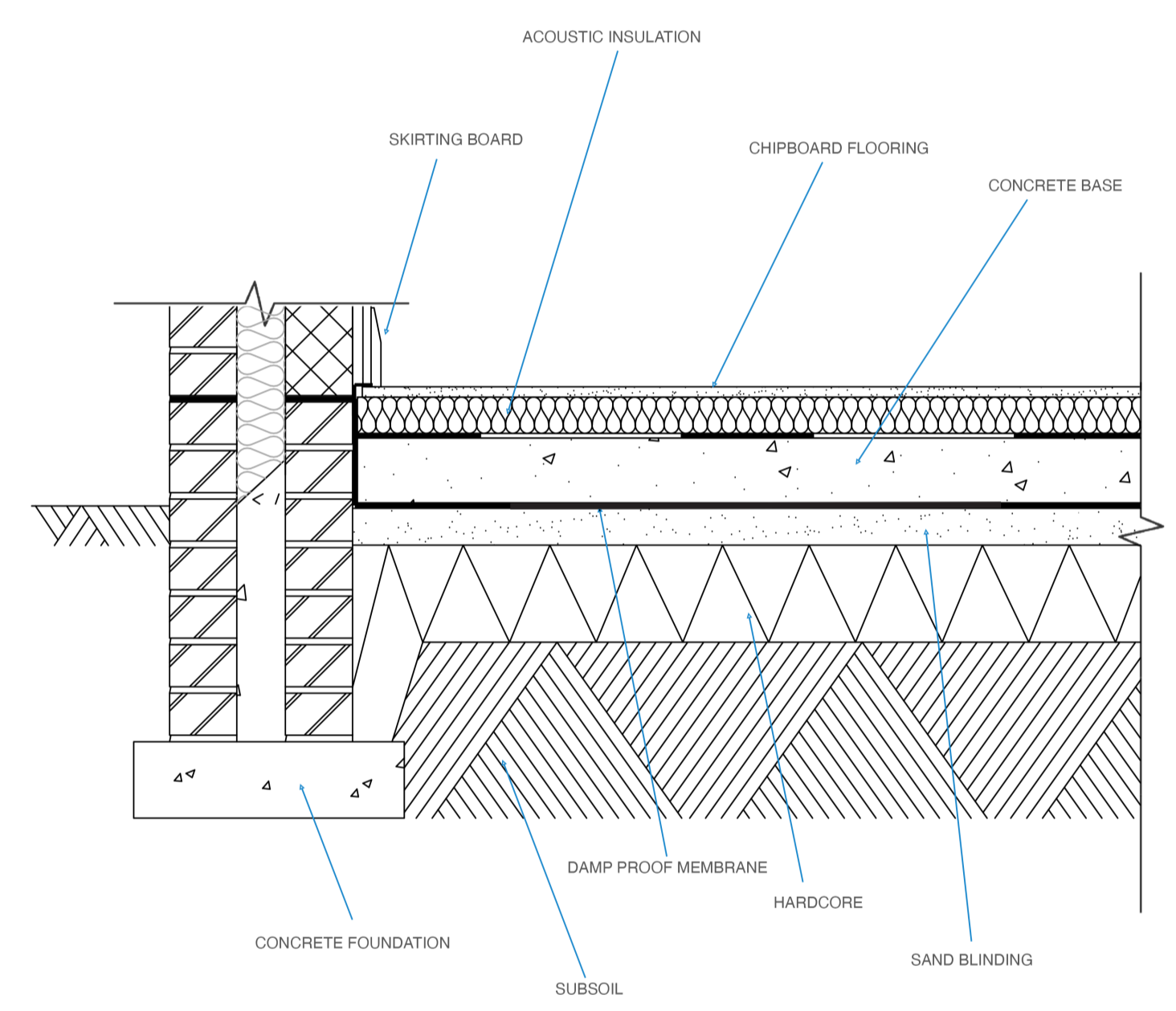
The building uses live foliage walls and green roofs as the main types of green infrastructure present in the building. For the walls, the building uses full filled cavity walls as the main structure and double glazed panels for all glass entrances of the building. The live wall uses planter pots to store the plants and spray nozzles for irrigation.



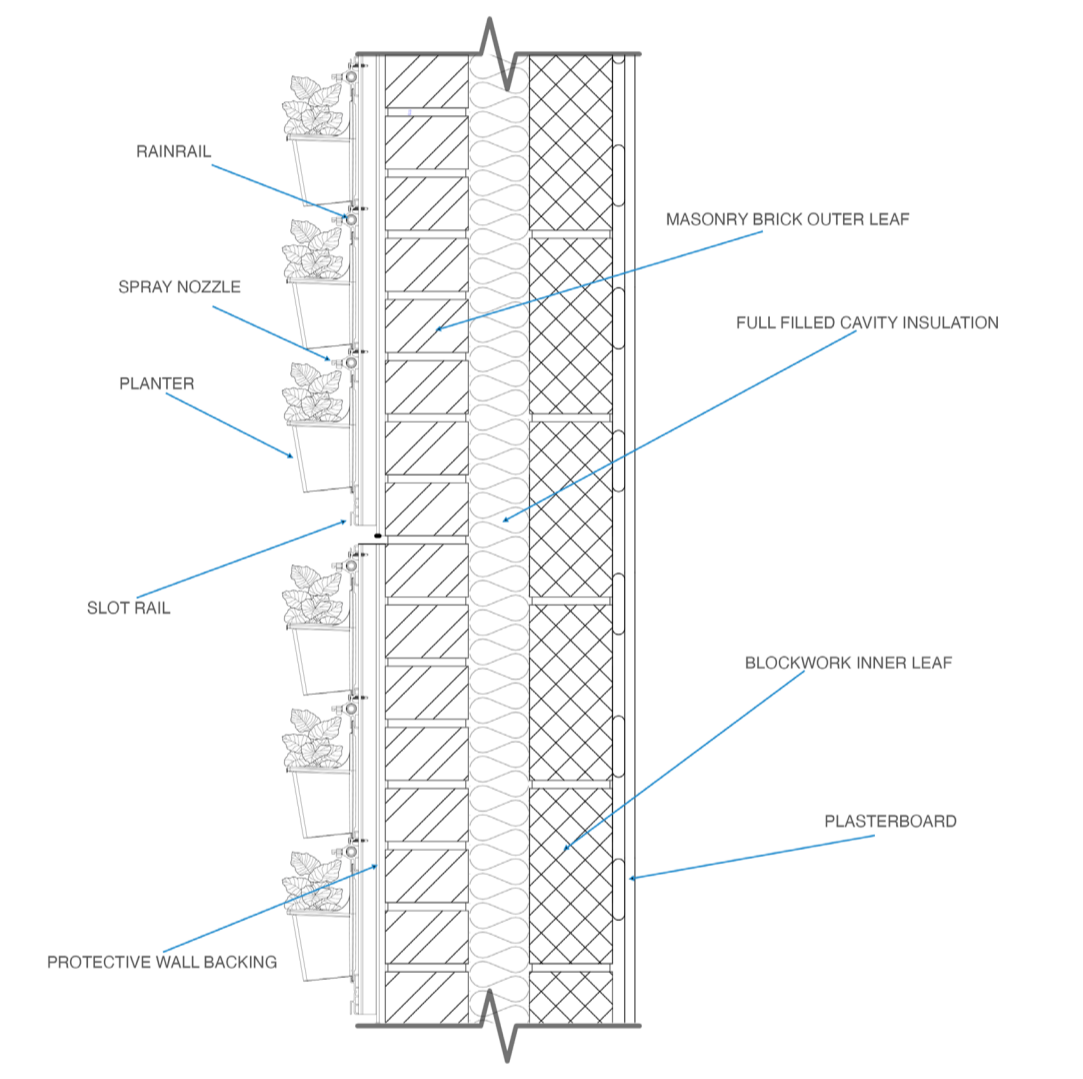
1 GREEN ROOF - 1:10



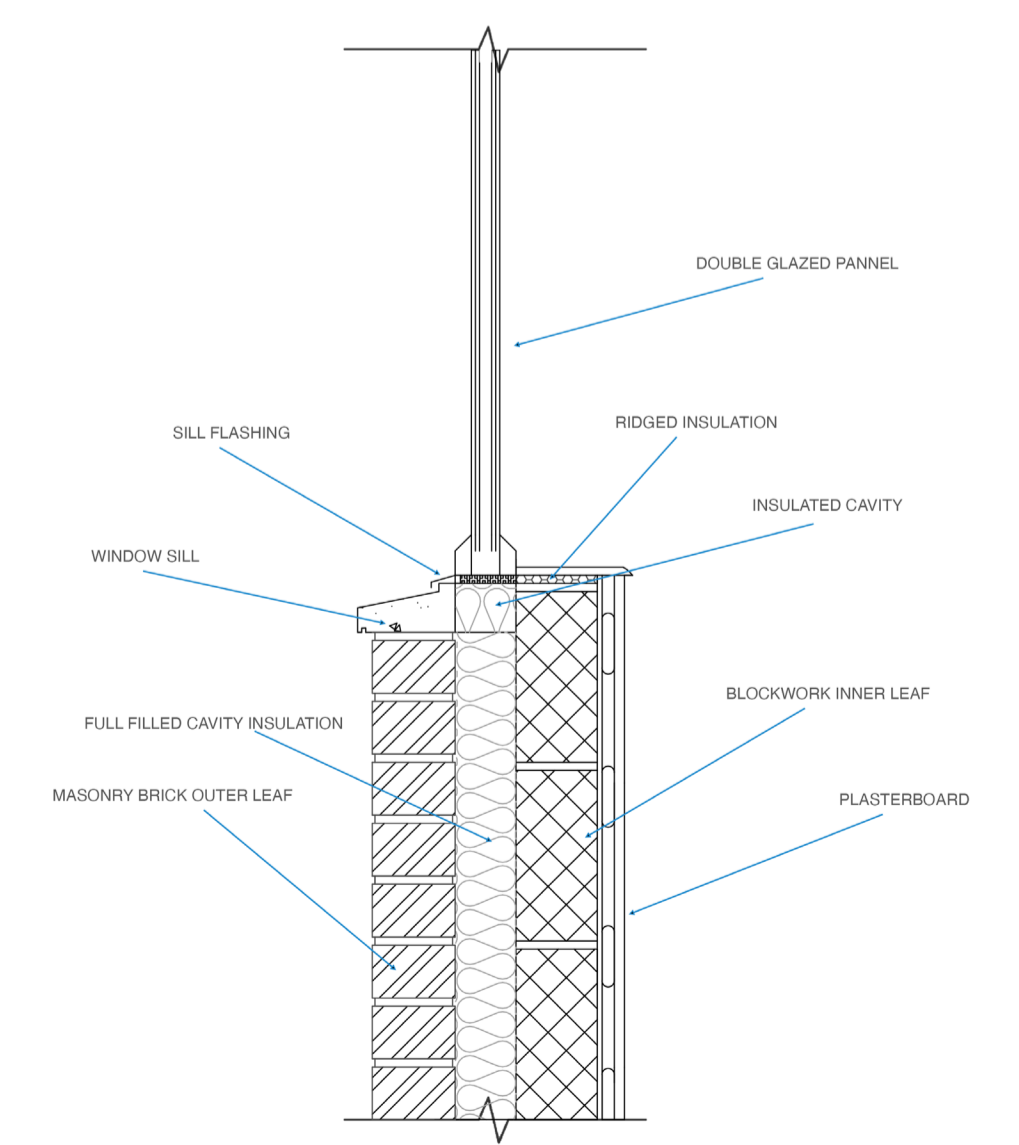
2 GREEN ROOF DRAINAGE - 1:10



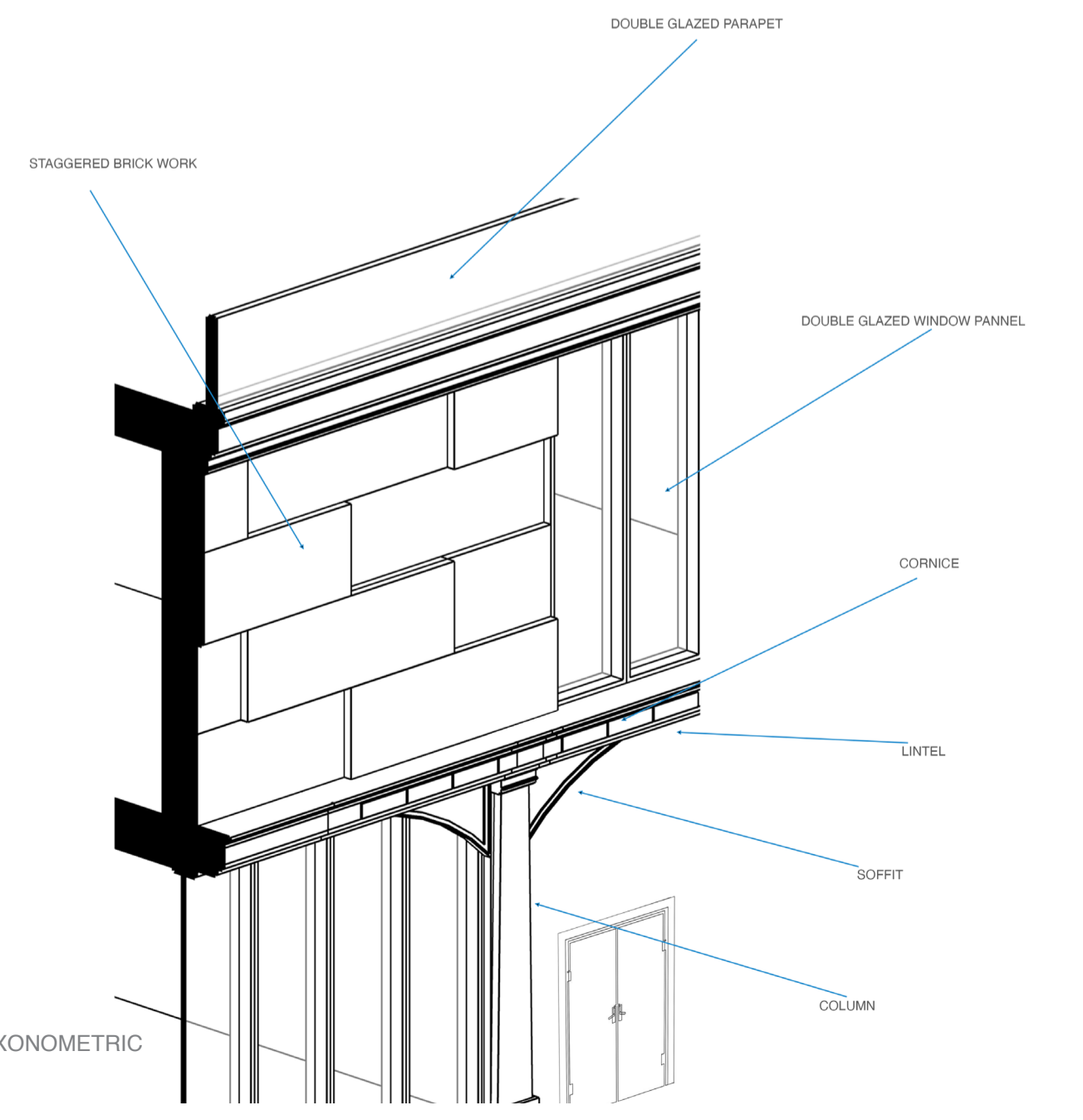
3 FLOOR DETAIL - 1:10



4 GREEN WALL AND CAVITY WALL DETAIL - 1:10



5 WINDOW SILL DETAIL - 1:10



6 WALL AXONOMETRIC

TECHNICAL SECTION - 1:15