

The Academic Environment

ONE OF THE MOST IMPORTANT ASPECTS OF IMAGINING THE FUTURE OF AN INSTITUTION IS TO DISCOVER NOT ONLY ITS LONG-STANDING CULTURE, BUT ALSO ITS POTENTIALS OF BECOMING, TRANSFORMING, AND RE-INVENTING ITSELF.

A SCHOOL KNOWN FOR ITS RESEARCH ACCOMPLISHMENTS, THE FACULTY OF ARCHITECTURE, BUILDING AND PLANNING AT THE UNIVERSITY OF MELBOURNE IS ALSO RE-THINKING THE RELATIONSHIP BETWEEN ITS PRODUCTIVE AND ANALYTICAL FORCES, BETWEEN THE ACTIVITIES OF STUDIO AND SCHOLARSHIP. IT IS ALSO RETHINKING BROADER DISCIPLINARY BOUNDARIES, MUCH LIKE WHAT IS HAPPENING IN OTHER FIELDS, AND RECOGNIZING THAT WHILE SOME ASPECTS OF KNOWLEDGE ARE ADVANCED BY INTROVERSION, INSULARITY, AND INTROSPECTION, THERE IS AT THE SAME TIME A GREAT LEAP FORWARD MADE BY DISCIPLINARY CROSS-FERTILIZATION, THE BLURRING OF INTELLECTUAL TERRITORIES, AND THE ENCOURAGEMENT OF COLLABORATIVE PLATFORMS. THIS, OF COURSE, IS SOMETHING THAT CAN HAPPEN IN OBVIOUS WAYS WITHIN THE SCHOOL: BETWEEN ARCHITECTURE, BUILDING, URBAN DESIGN AND LANDSCAPE ARCHITECTURE. BUT IT IS ALSO A BROADER PHENOMENON THAT CAN TAKE PLACE WITHIN AN EXPANDED FIELD, EXPOSING POSSIBILITIES IN JOINING FORCES WITH ENGINEERING, BUSINESS, REAL ESTATE DEVELOPMENT, GEOGRAPHY, SOCIOLOGY AND AMONG OTHER FIELDS FOR WHICH THE UNIVERSITY OF MELBOURNE IS KNOWN.

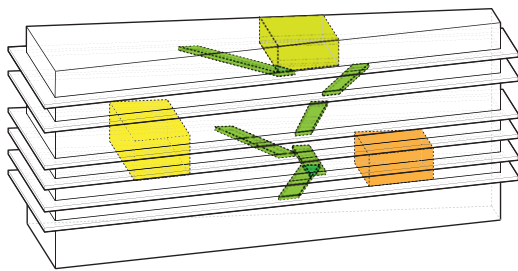
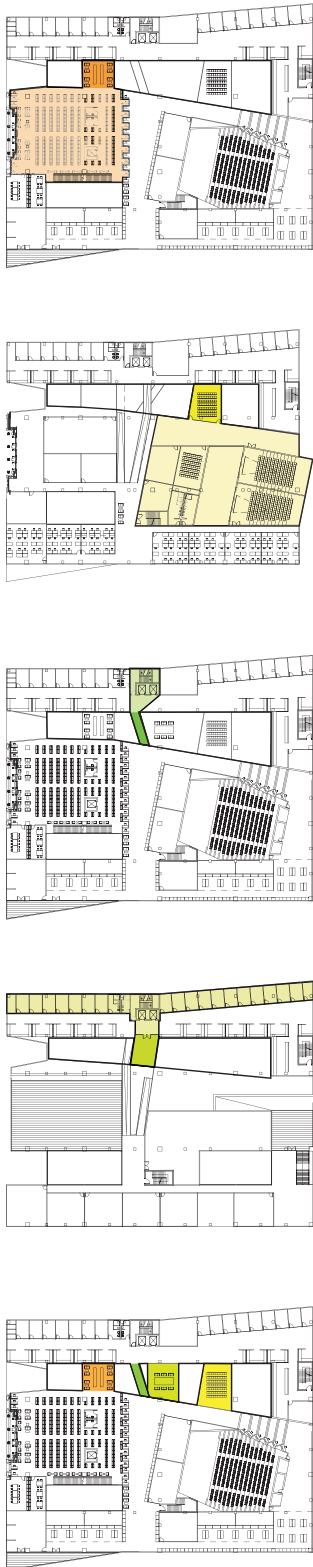
TRANSLATING THIS INTO A FORMAL OPPORTUNITY, THIS CAN BE CAST INTO, AMONG OTHER THINGS, TWO SCALES: THE FIRST BEING ONE OF URBANISM AND THE LINK THAT THE BUILDING MAKES TO THE CAMPUS (OR THE CITY AT LARGE) AND THE SECOND BEING THE ARCHITECTURAL, AND HOW PROGRAMS WITHIN THE BUILDING CAN BE BROUGHT TOGETHER PRECISELY TO BRING VARIED DISCIPLINARY COMMUNITIES TOGETHER.

AT THE URBAN SCALE, A DRAMATIC URBAN PROMENADE WITHIN THE INTERIOR OF THE BUILDING HAS BEEN INTRODUCED TO EXPAND THE AUDIENCE OF DESIGN, TO ENGAGE OTHER PUBLICS, AND TO CREATE NEW PLATFORMS OF COLLABORATION BOTH WITHIN THE UNIVERSITY AND OUTSIDE, WITHIN THE COMMUNITY AND BEYOND, TO OTHER GLOBAL COMMUNITIES.

WITHIN THE BUILDING, WE ADOPT A PROGRAMMATIC STRATEGY THAT IS IMPLEMENTED SYSTEMATICALLY THROUGHOUT THE PROJECT, A TECHNIQUE RELATED TO EXPOSURE, SPLICING, AND TANGENCY. IF CONVENTIONAL PLANNING EFFORTS SUCCEED BY WAY OF STRATIFICATION, COMPARTMENTALIZATION, AND SEGREGATION, WE INSTEAD PROPOSE TO HAVE EACH AND EVERY PROGRAM LINKED TO OTHER IN STRATEGIC WAYS.



VIEW FROM MASSON ROAD



VIEW WITHIN LARGE THEATRE



VIEW WITHIN MAIN ATRIUM

DESIGN STUDIO



VIEW OF SOUTH ELEVATION

THE DESIGN STUDIO HAS SEEN MANY TRANSFORMATIONS OVER THE YEARS, DECADES AND CENTURIES. ONCE A SPACE OF MENTORSHIP BY MASTERS, IT HAS ALSO BECOME A PLATFORM FOR GREAT DEBATES, EXPERIMENTS, AND CHALLENGES. THE STUDIO SYSTEM WITHIN THE ACADEMY HAS BEEN GREATLY IMPACTED BY TECHNOLOGIES, RESOURCES, EQUIPMENT, AND TOOLS THAT HAVE HELPED DEFINE NEW PEDAGOGICAL POSSIBILITIES.

IF THE TRADITIONAL ARCHITECTURE SCHOOL HAS TRIED TO USE THE ACADEMY TO PREPARE STUDENTS FOR PRACTICE, THE UNIVERSITY OF MELBOURNE HAS, INSTEAD, USED ITS STRENGTH IN RESEARCH TO CHALLENGE, TRANSFORM, AND REINVIGORATE PRACTICE FROM THE BOTTOM UP. WITHIN THIS CONTEXT, THE DESIGN STUDIO PLAYS AN IMPORTANT ROLE.

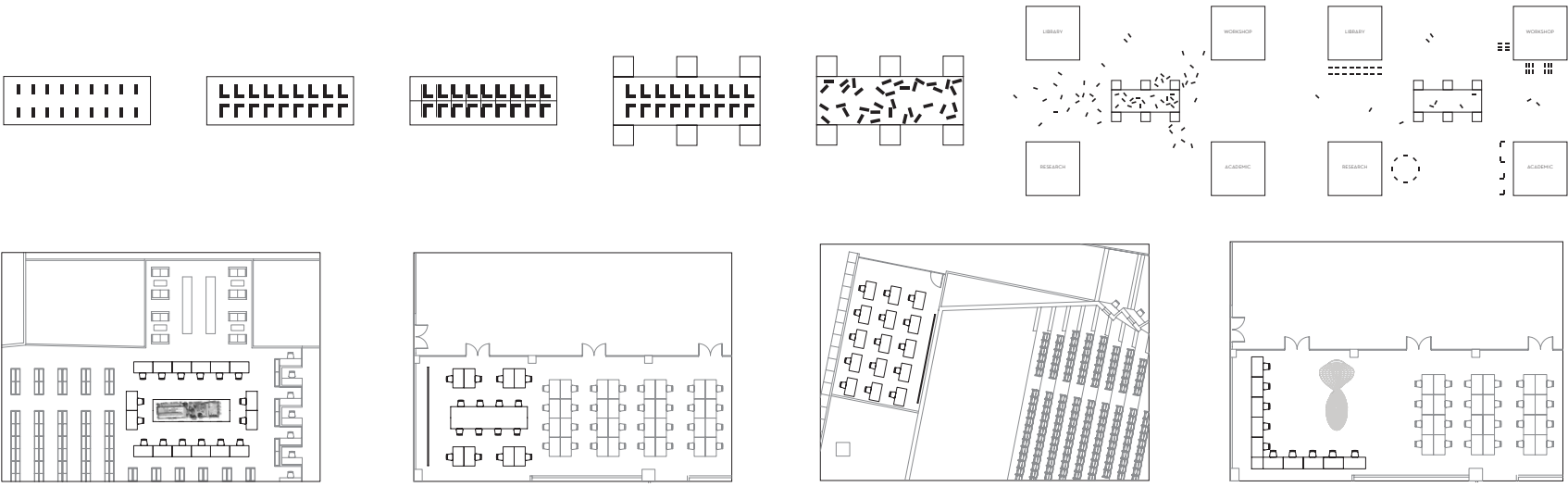
FOR THIS REASON, WE HAVE DESIGNED A SERIES OF SPATIAL AND PROGRAMMATIC STRATEGIES, ENVISIONING THE DESIGN STUDIO FOR SOME VERY SPECIFIC USES, BUT EVEN MORE IMPORTANTLY AS A SPACE OF FLEXIBILITY THAT HAS THE ABILITY TO TRANSFORM FURTHER AS NEW CURRICULA, NEW TECHNOLOGIES AND NEW DEBATES IMPACT OUR VISION OF FUTURE PEDAGOGIES.

COMMUNICATION NETWORKING HAS FUNDAMENTALLY ALTERED WHERE MANY OF THE DESIGN STUDIO'S ACTIVITIES CAN OCCUR – IN THE CORRIDOR, ON THE STAIRWELL, ELSEWHERE ON THE CAMPUS AND OUTDOORS AND IN THE LANDSCAPE.....AND YET THERE IS MUCH TO BE SAID FOR A STUDIO ENVIRONMENT THAT IS MORE THAN A WIRELESSLY CONNECTED FIELD OF DISCRETE SPACES. A GROUPING OF STUDIOS TO FORM A COLLECTIVE, WITH ITS HUM OF ACTIVITY, ITS THEATRICAL DISPLAY OF STUDENT DIVERSITY, AND SENSE OF PLACE CAN CREATE A STRONG SENSE OF IDENTITY FOR THE SCHOOL AND THE STUDENT BODY.

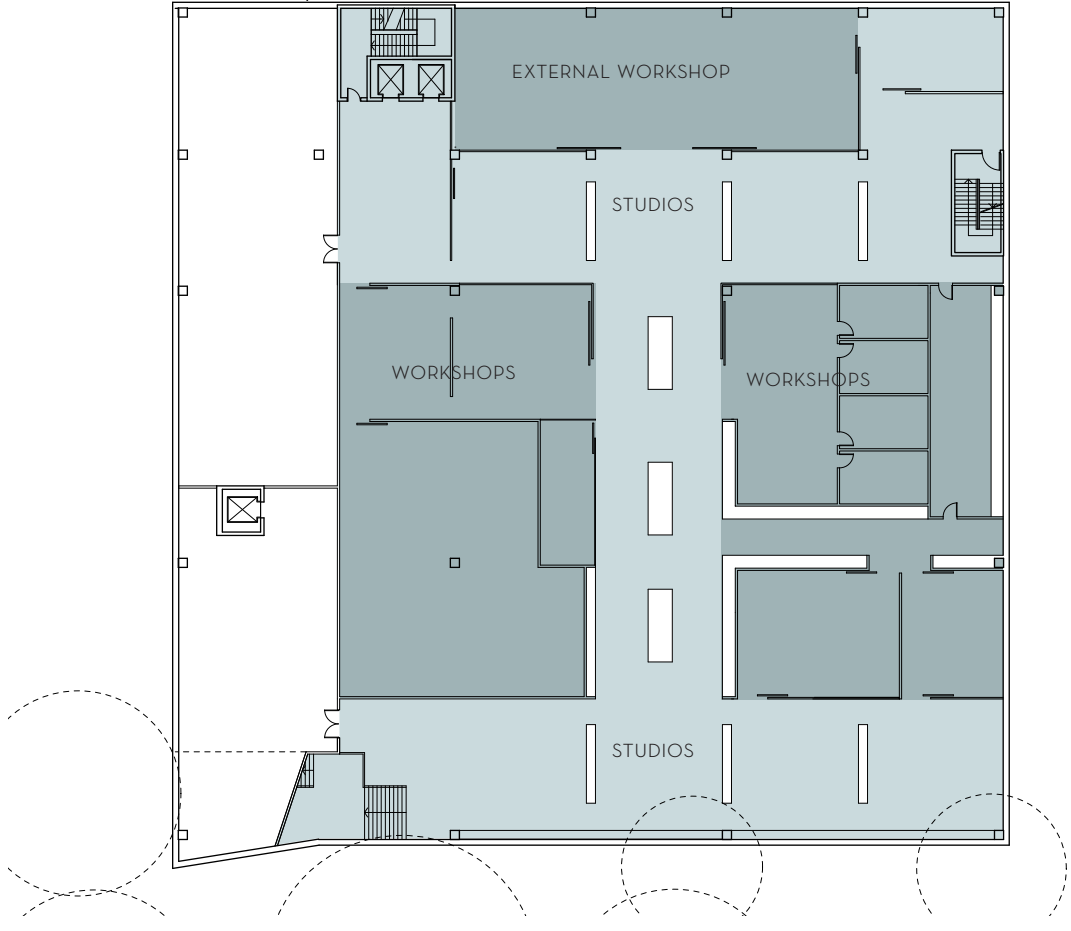
A DESIGN STUDIO COULD BE:

- DISPERSED – SCATTERED LOCALLY, CAMPUS WIDE AND GLOBALLY
- CENTRALISED – A COLLABORATIVE HEART FOR THE FACULTY
- CLUSTERED – CLUSTERED GROUPINGS WITH DIFFERING IDENTITIES
- PERIPHERAL – ON DISPLAY AT THE EDGE
- FLEXIBLE – EASILY COLONISED AND ADAPTABLE
- CATALYTIC – STRATEGICALLY LOCATED TO PROMOTE COLLABORATION
- THEATRICAL – A GRAND STAGE OF CREATIVE DISCOURSE

OUR APPROACH HAS BEEN TO CREATE A RADICALLY HYBRIDISED MODEL – BOTH DISPERSED AND CLUSTERED, CENTRALISED AND PERIPHERAL, THEATRICAL AND FLEXIBLE AND ABOVE ALL ELSE, CATALYTIC. TO THIS END, THERE HAS BEEN A CONSCIOUS EFFORT TO CREATE EXPLICIT PROGRAMMATIC ADJACENCIES THAT OPEN UP THE VISUAL, ACOUSTIC AND EXPERIENTIAL RELATIONSHIPS BETWEEN THE DESIGN STUDIO AND THE OTHER KEY PROGRAMMATIC ELEMENTS. ALL OF THESE STRATEGIES ARE INTENDED TO EXPAND THE DESIGN STUDIO INTO MULTIPLE WORLDS, ALL WITHIN THE ONE BUILDING.



VIEW FROM WORKSHOP TO STUDIOS



BASEMENT FLOOR PLAN



STUDIO SECTION

This architectural rendering depicts a modern university campus centered around a courtyard. The courtyard features a paved plaza, lush greenery, and a large, circular, white sculpture. The surrounding buildings are modern, with white facades and blue-tinted glass windows. A large, multi-story building with a grid-like facade is visible on the left. The foreground shows a paved walkway and steps leading up to the courtyard. The sky is clear and blue.

An architectural rendering of a modern building with a white, perforated facade. The building features a large, curved section with a grid of white panels and orange-brown structural elements. A large tree is in the foreground on the left, and several people are walking on a paved path in front of the building. The sky is clear and blue.

The collage illustrates the design process for the University of Melbourne F&P Competition. It features several key elements:

- Top Left:** A conceptual sketch of a building form, labeled "view from concrete lawn".
- Top Center:** A site plan showing the building's location within the campus context, labeled "view from concrete lawn".
- Top Right:** A section drawing showing the building's internal structure and roof profile, labeled "view from concrete lawn".
- Middle Left:** A 3D rendering of the building's form, labeled "view from concrete lawn".
- Middle Center:** A 3D rendering of the building's form, labeled "view from dome macedon road".
- Middle Right:** A 3D rendering of the building's form, labeled "view from concrete lawn".
- Bottom Left:** A 3D rendering of the building's form, labeled "view from concrete lawn".
- Bottom Center:** A 3D rendering of the building's form, labeled "view from concrete lawn".
- Bottom Right:** A 3D rendering of the building's form, labeled "view from concrete lawn".

Text overlays provide context for each stage of the design process, including site analysis, conceptual design, and the development of architectural drawings and 3D models.

The Living Building



VIEW TO MAIN ENTRY

THE LIVING BUILDING MUST RESPOND TO THE HUMAN CHARACTERISTICS OF INHABITATION, WITHIN THE FRAMEWORK OF A SUSTAINABLE APPROACH TO DESIGN, CONSTRUCTION AND PERFORMANCE. OUR RESPONSE HAS BEEN TO CREATE A BUILDING THAT EMBEDS SUSTAINABILITY SYSTEMS AND TECHNOLOGY (BOTH HIGH AND LOW), RECORDS AND COMMUNICATES ITS PERFORMANCE, AND ALLOWS CONTROL BY ITS INHABITANTS OVER THEIR OWN ENVIRONMENT WHEREVER POSSIBLE. THERE IS PEDAGOGICAL AND RESEARCH VALUE WHEN STUDENTS HAVE A HAPTIC ENGAGEMENT WITH ENVIRONMENTAL CONTROL SYSTEMS AND THE BUILDING ITSELF BECOMES AN ONGOING RESEARCH PROJECT.

A BROAD UNDERSTANDING OF SUSTAINABILITY ENCOURAGES THE RETENTION AND ADAPTATION OF EXISTING BUILT FABRIC. WE HAVE RETAINED THE HISTORIC FACADE DESIGNED BY JOSEPH REED AND REVITALISED THIS FRAGMENT AS THE NEW FACE OF THE FACULTY LIBRARY.

THE OVERALL FORM UTILIZES ATRIA TO REDUCE THE EXTERNAL FAÇADE ENVELOPE, AND CONSEQUENTIAL HEAT LOSS IN WINTER AND HEAT GAIN IN SUMMER. THE ATRIA PERFORATE THE PODIUM TO PROVIDE AN EVEN EXPOSURE TO NATURAL LIGHT. THEY ARE THE LUNGS OF THE BUILDING ENCOURAGING AND CONTROLLING NATURAL VENTILATION.

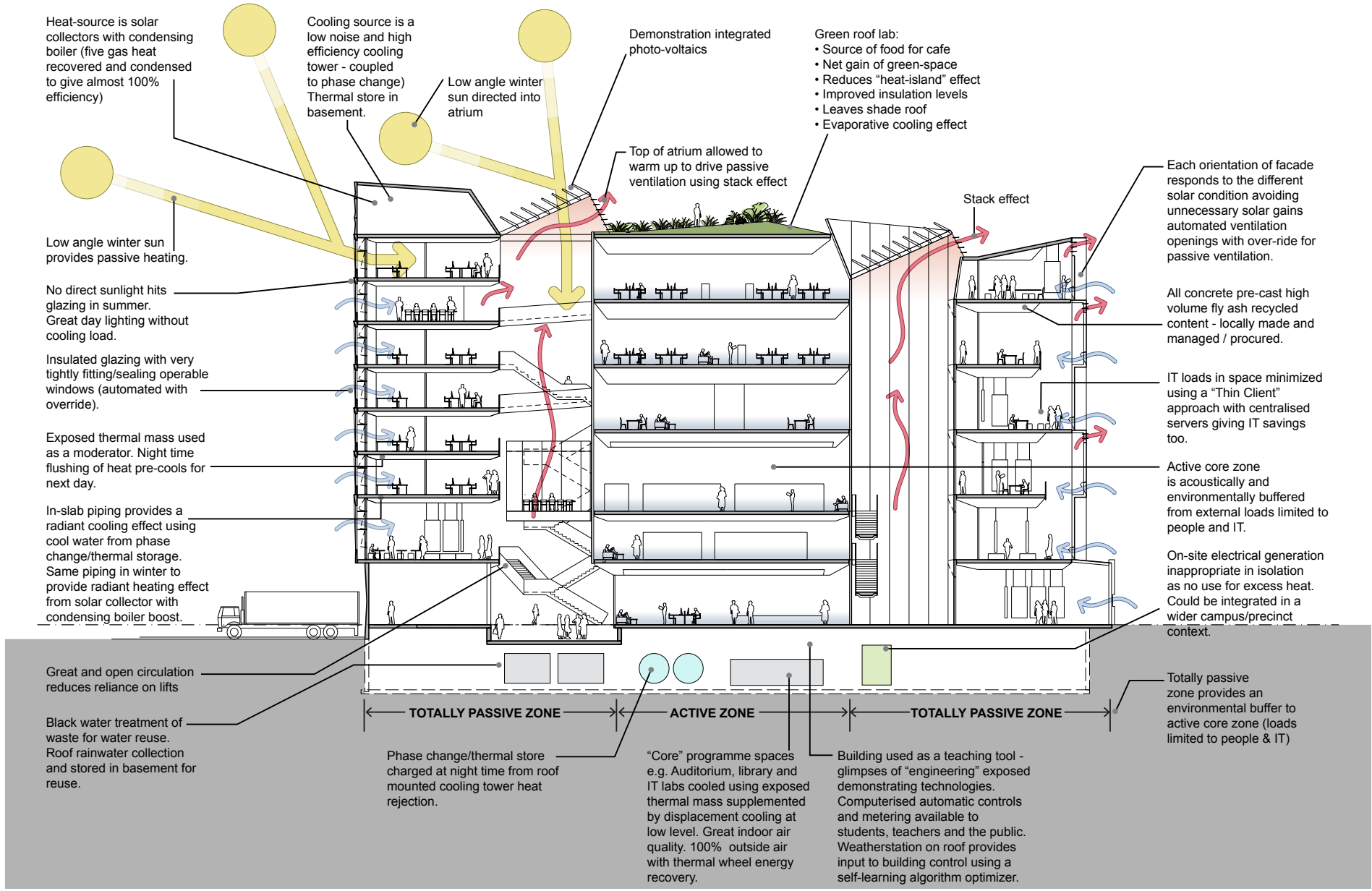
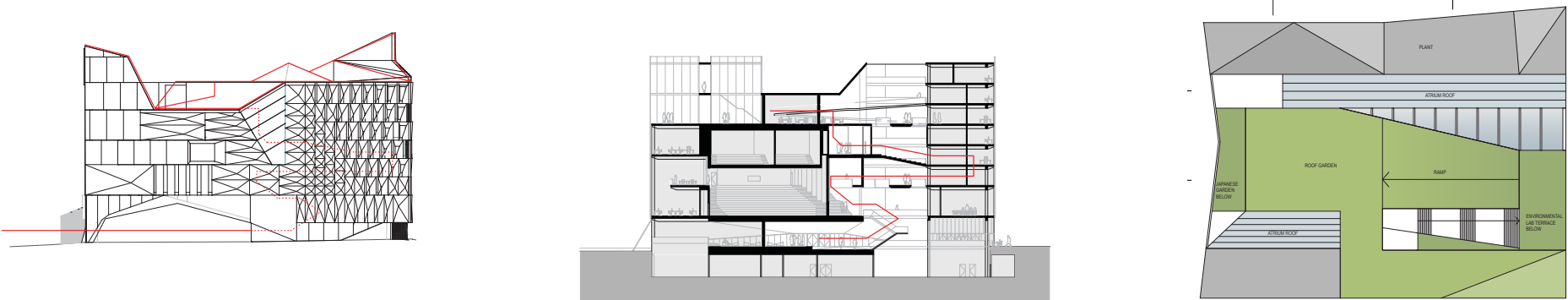
THE PASSIVELY CONTROLLED PERIMETER PROGRAMME SPACE OF STUDIOS AND ACADEMIC OFFICES PROVIDES THE ENVIRONMENTAL AND ACOUSTIC BUFFER TO THE MORE ACOUSTICALLY CRITICAL AND ACTIVELY ENVIRONMENTALLY CONTROLLED AUDITORIUM, LIBRARY AND IT SPACES. PASSIVE CONTROL IS VIA OPERABLE WINDOWS, WINTER SUN PENETRATION AND A THERMALLY ACTIVATED BUILDING MASS THAT PROVIDES STABILITY OF COMFORT THROUGHOUT THE YEAR.

A LONG-LIFE LOOSE-FIT ATTITUDE TO INTERNAL PLANNING PROVIDES AN EXTREMELY FLEXIBLE INTERIOR THAT WILL BE ABLE TO ACCOMMODATE CHANGES IN TEACHING AND LEARNING PEDAGOGIES, TECHNOLOGY AND PROGRAMMATIC MIX OVER TIME.

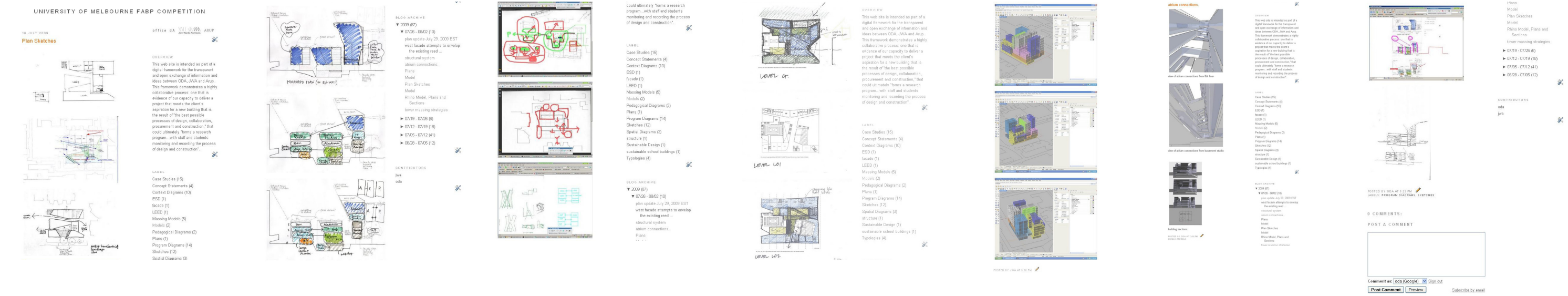
IN PRINCIPLE, THE CONSTRUCTION FOR THIS BUILDING WILL BE MANAGED OFF SITE AS MUCH AS PRACTICAL USING PRE-FABRICATION WHEREVER POSSIBLE. CONSTRUCTION MATERIALS WILL BE EXPLORED AS AREAS FOR INNOVATION AS THE DESIGN DEVELOPS:

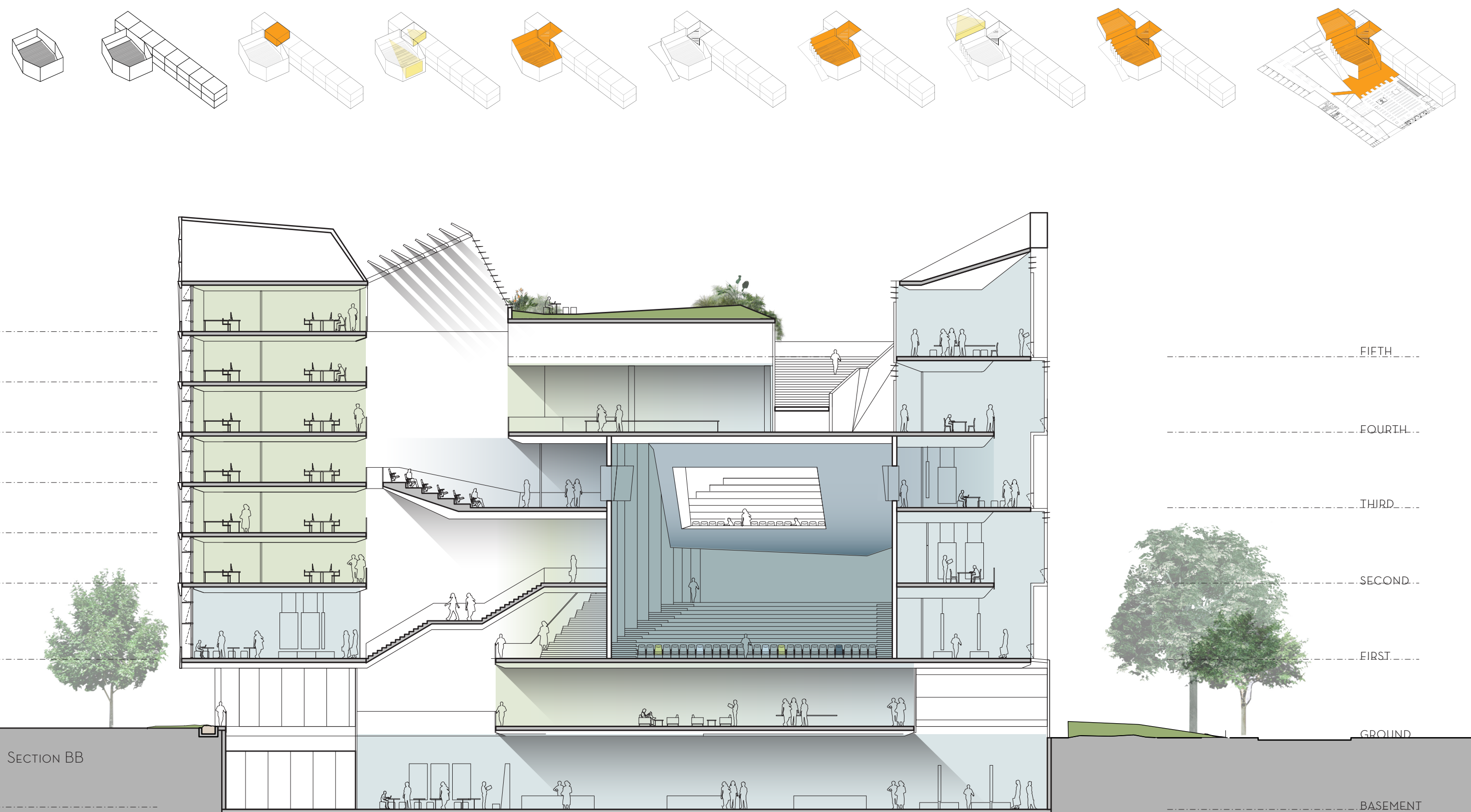
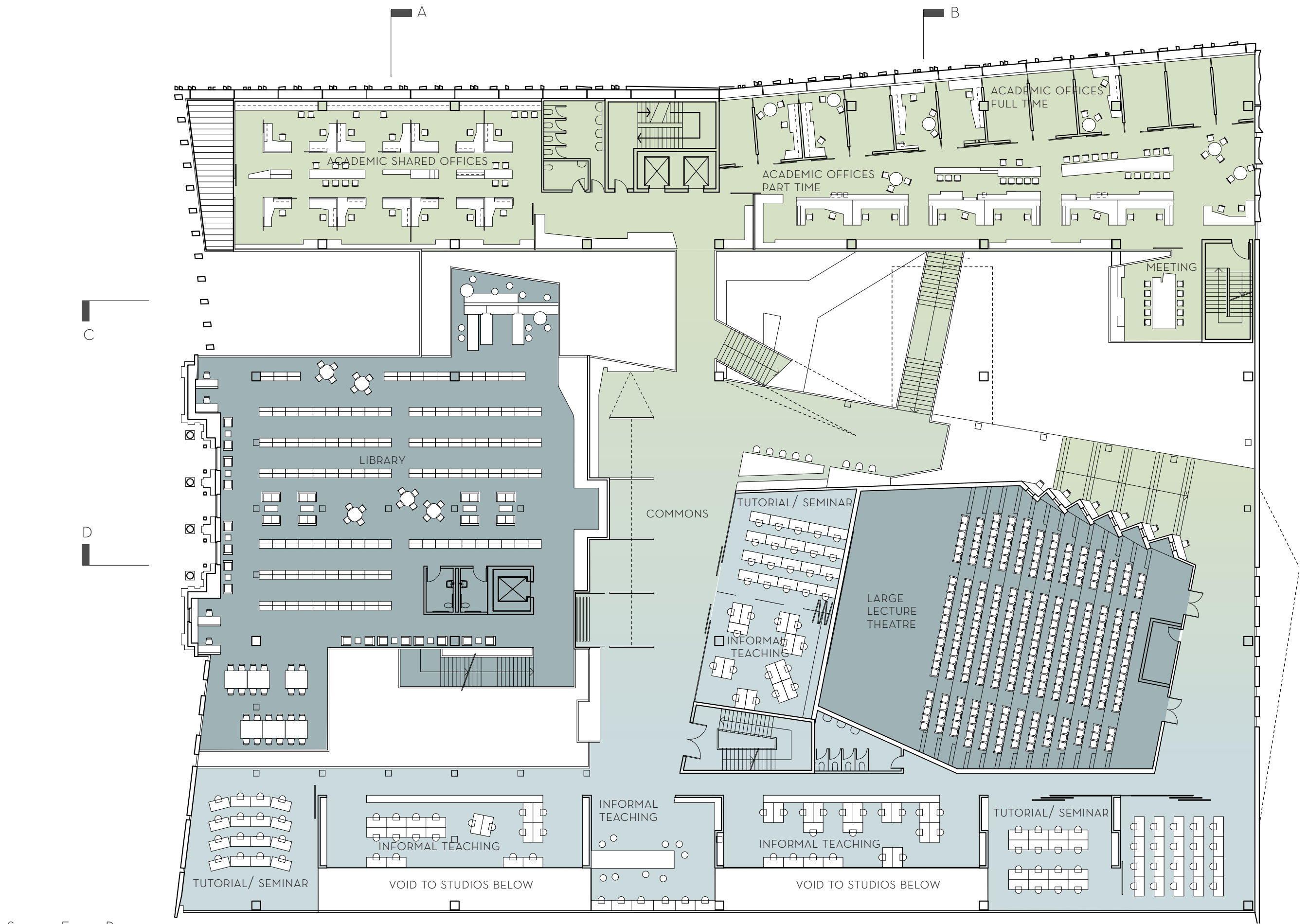
1. TIMBER IS A HIGHLY SUSTAINABLE BUILDING MATERIAL. WE AIM TO INCORPORATE TIMBER FRAMING WHEREVER STRUCTURAL CAPACITY AND BUILDING CODES WILL ALLOW, AND TO EXTEND ITS USE BEYOND THE CONVENTIONAL.
2. VERY HIGH VOLUME FLY-ASH PRE-CAST CONCRETE CAN BE PROCURED LOCALLY. THE OVERALL SAVING IN CO₂ PRODUCED BY SUCH A PRODUCT COMPARED TO CONVENTIONAL CONCRETE IS IN THE ORDER OF 80-90%.

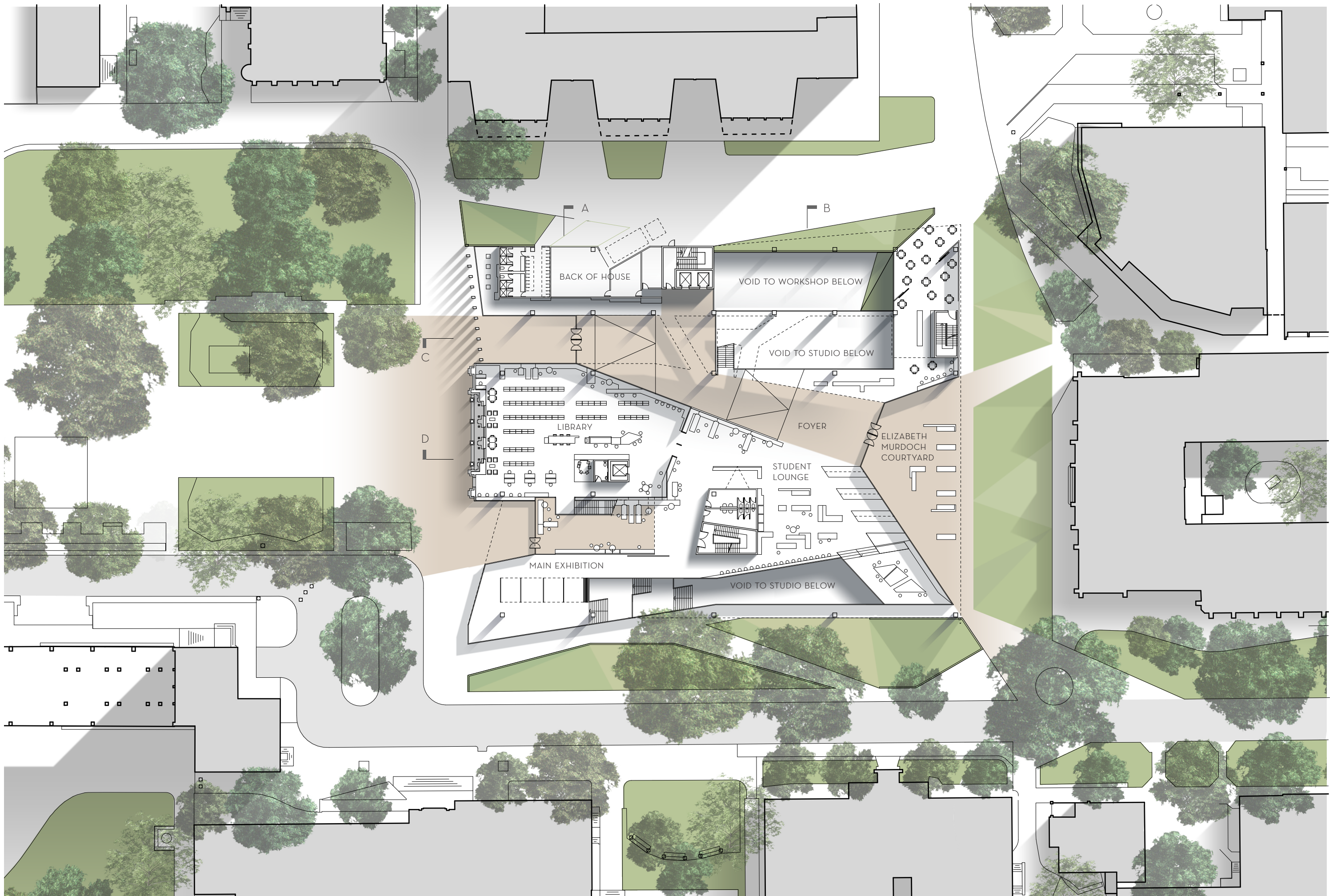
OUR DESIGN PROPOSAL INCLUDES A GREEN ROOF WITH AGRICULTURAL SPECIES PLANTED FOR RESEARCH BY THE LANDSCAPE ARCHITECTURE DEPARTMENT AND TO PROVIDE FRUIT AND VEGETABLES FOR THE CAFÉ AT GROUND LEVEL. THIS GREEN SPACE PROVIDES A NET-GAIN IN GREEN SPACE TO THE UNIVERSITY, AND PROVIDES EXCELLENT THERMAL INSULATION LEVELS. THE ENVIRONMENTAL LABORATORY AT ROOF LEVEL IS LOCATED IN CLOSE PROXIMITY TO THIS ROOFSCAPE ALLOWING FOR THE TESTING OF DIFFERENT FAÇADE TYPES AND ENVIRONMENTAL CONTROL SYSTEMS IN SITU.



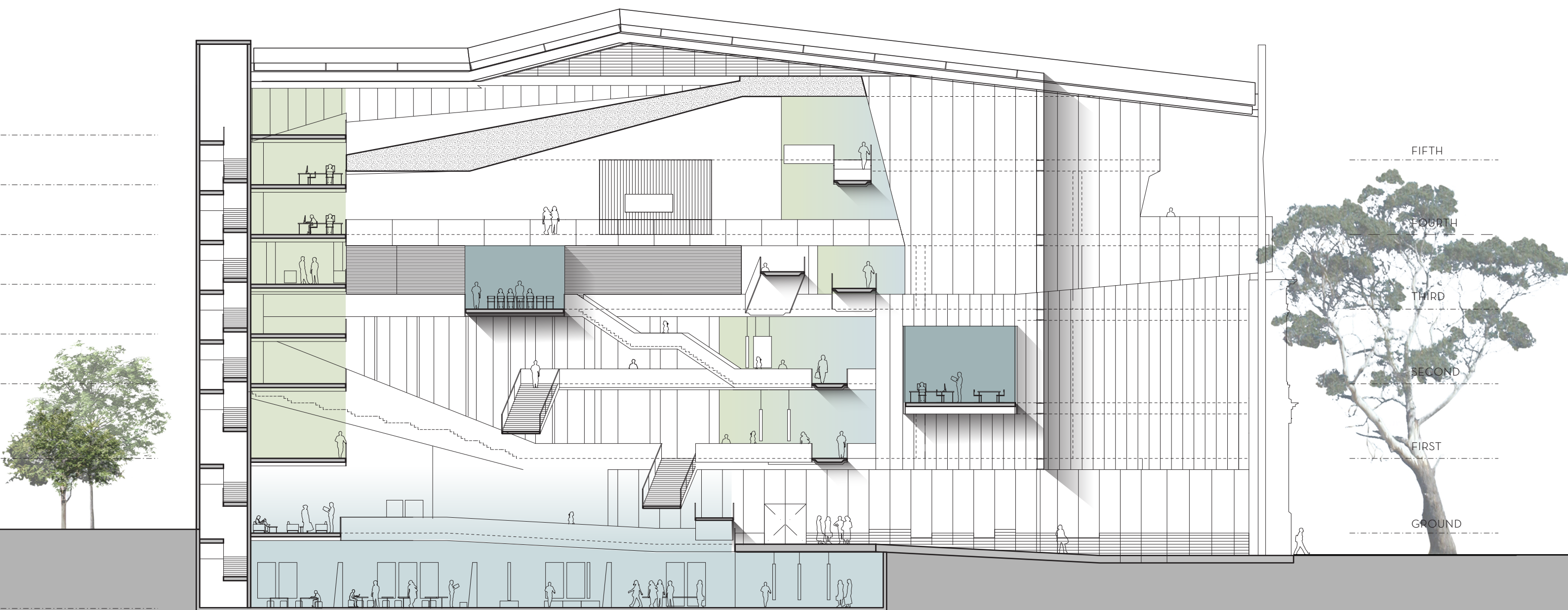
SECTION AA - ESD STUDY





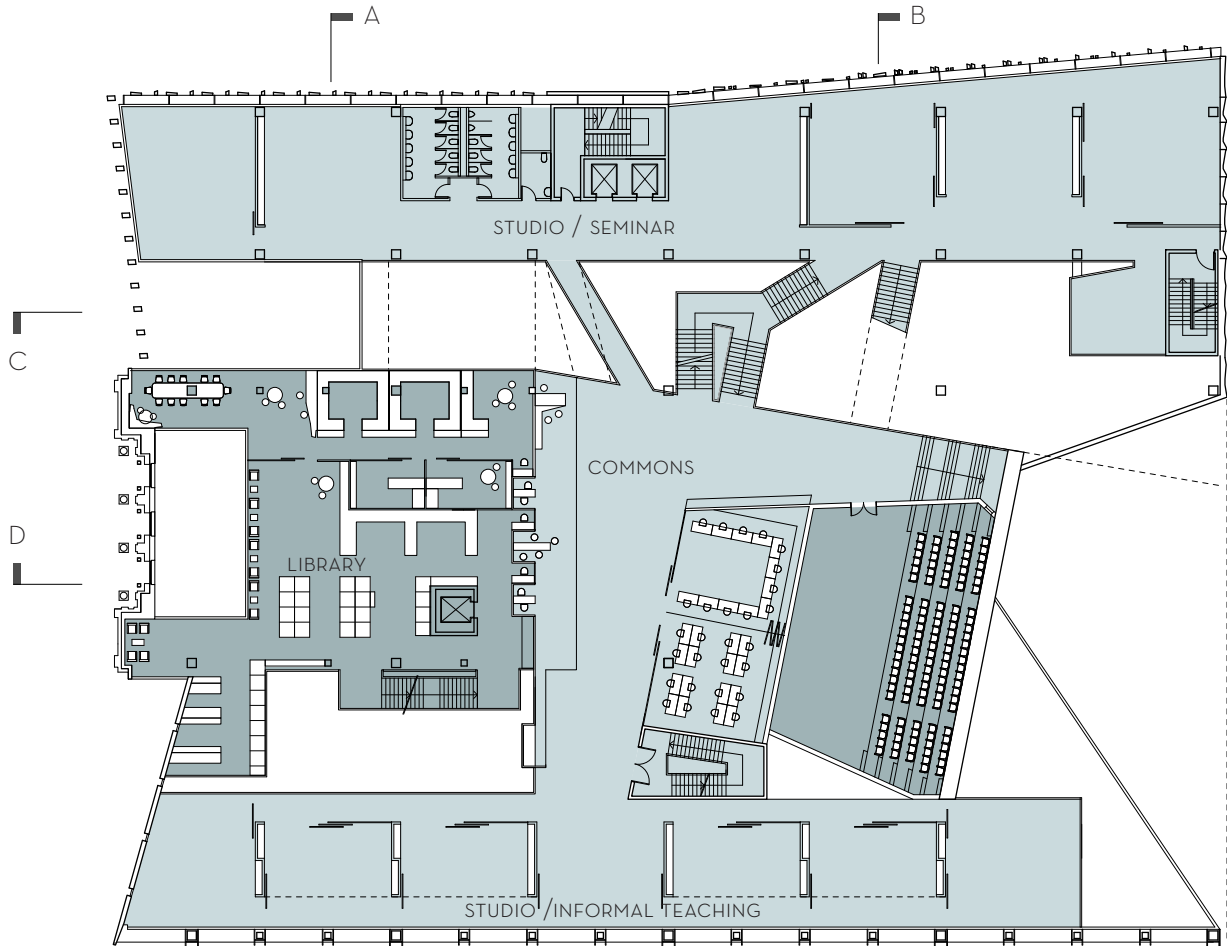


GROUND FLOOR PLAN

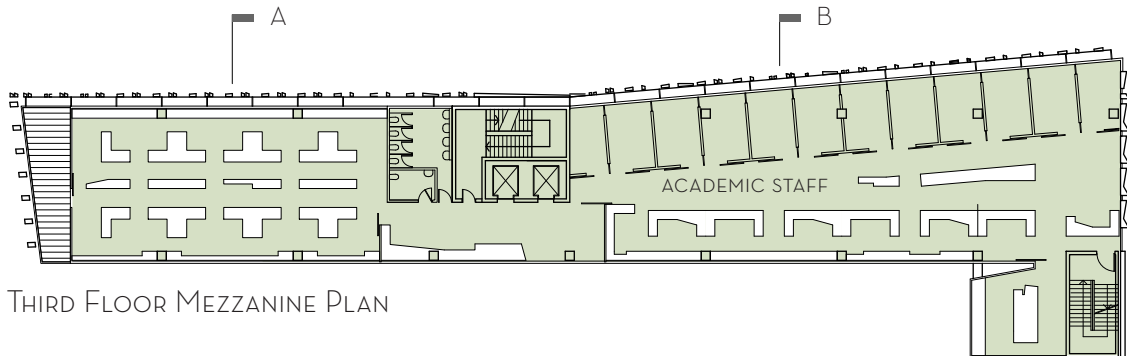


SECTION CC

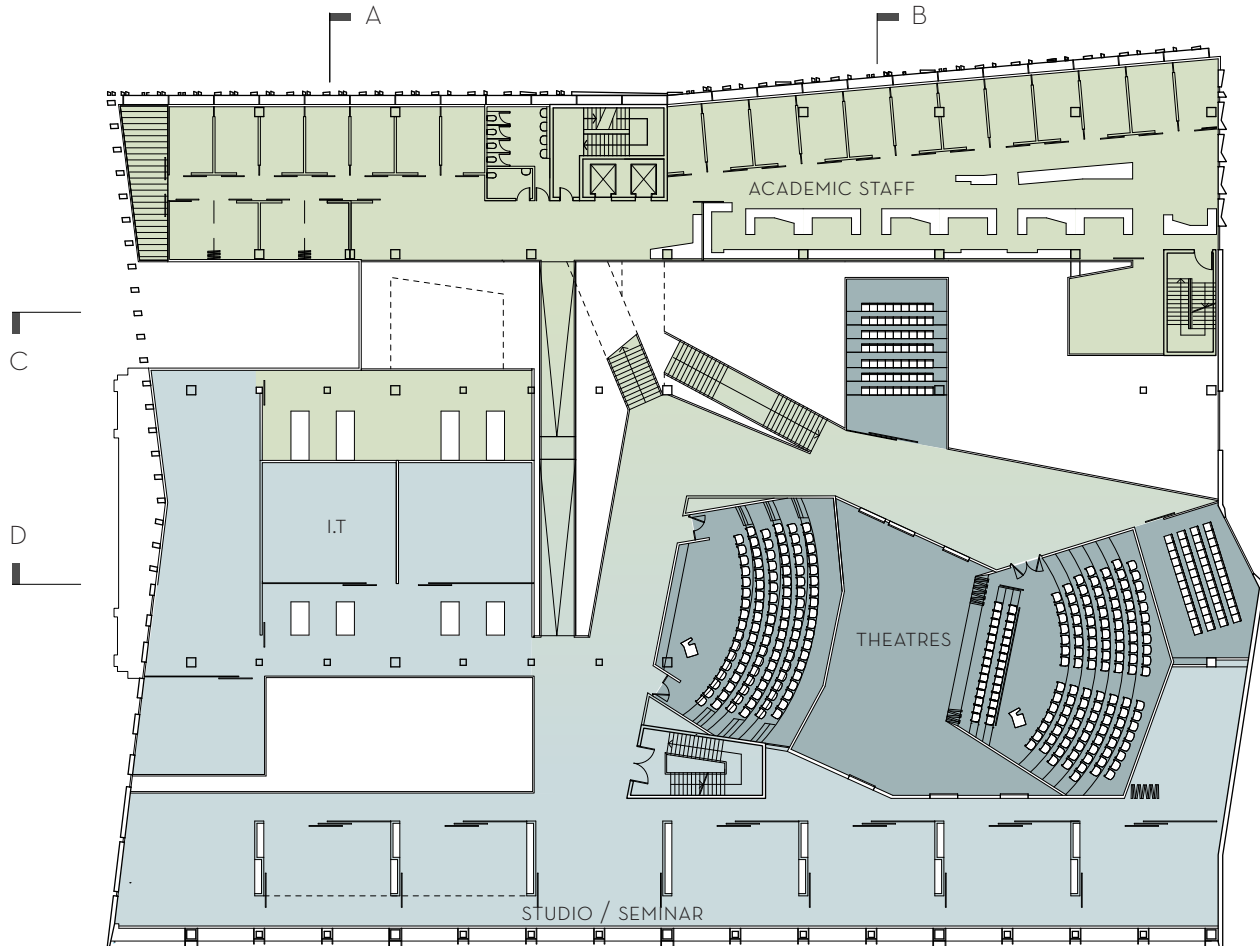
- CIVIC
- STUDENTS
- FACULTY / STAFF



FIRST FLOOR PLAN



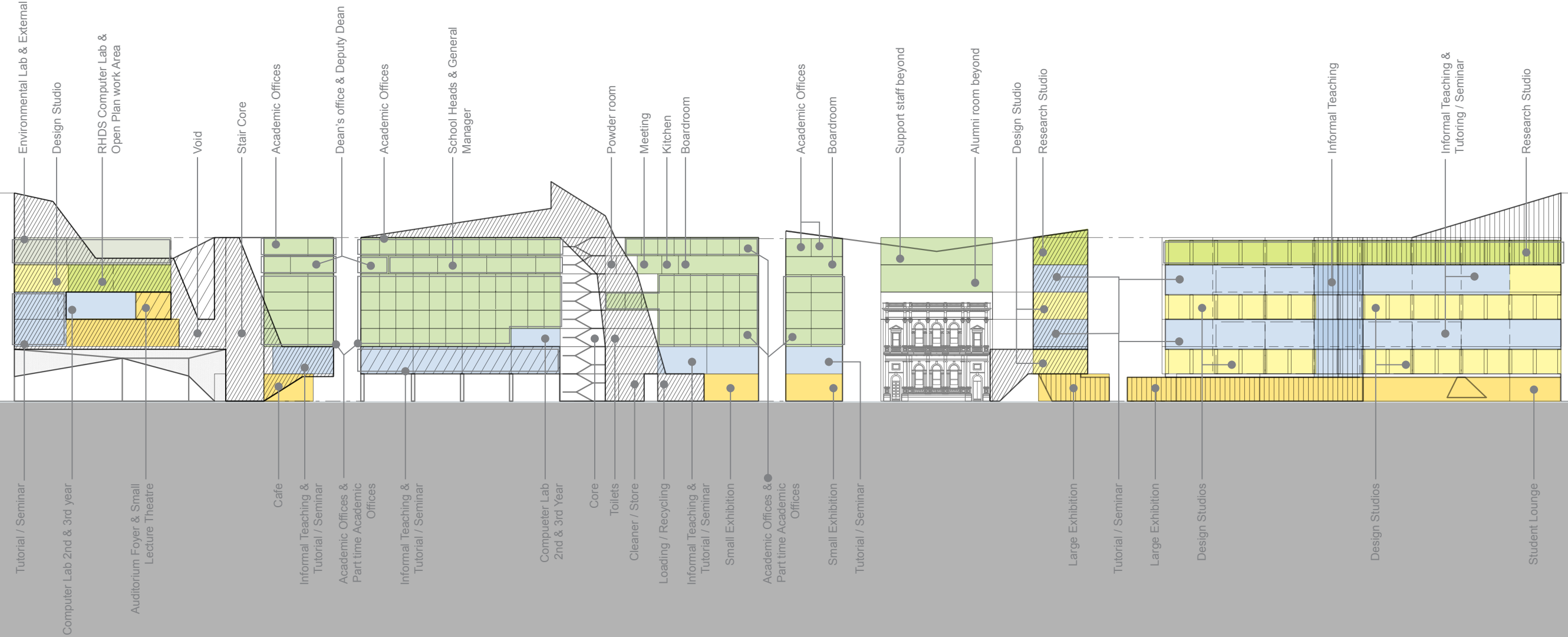
THIRD FLOOR MEZZANINE PLAN



THIRD FLOOR PLAN

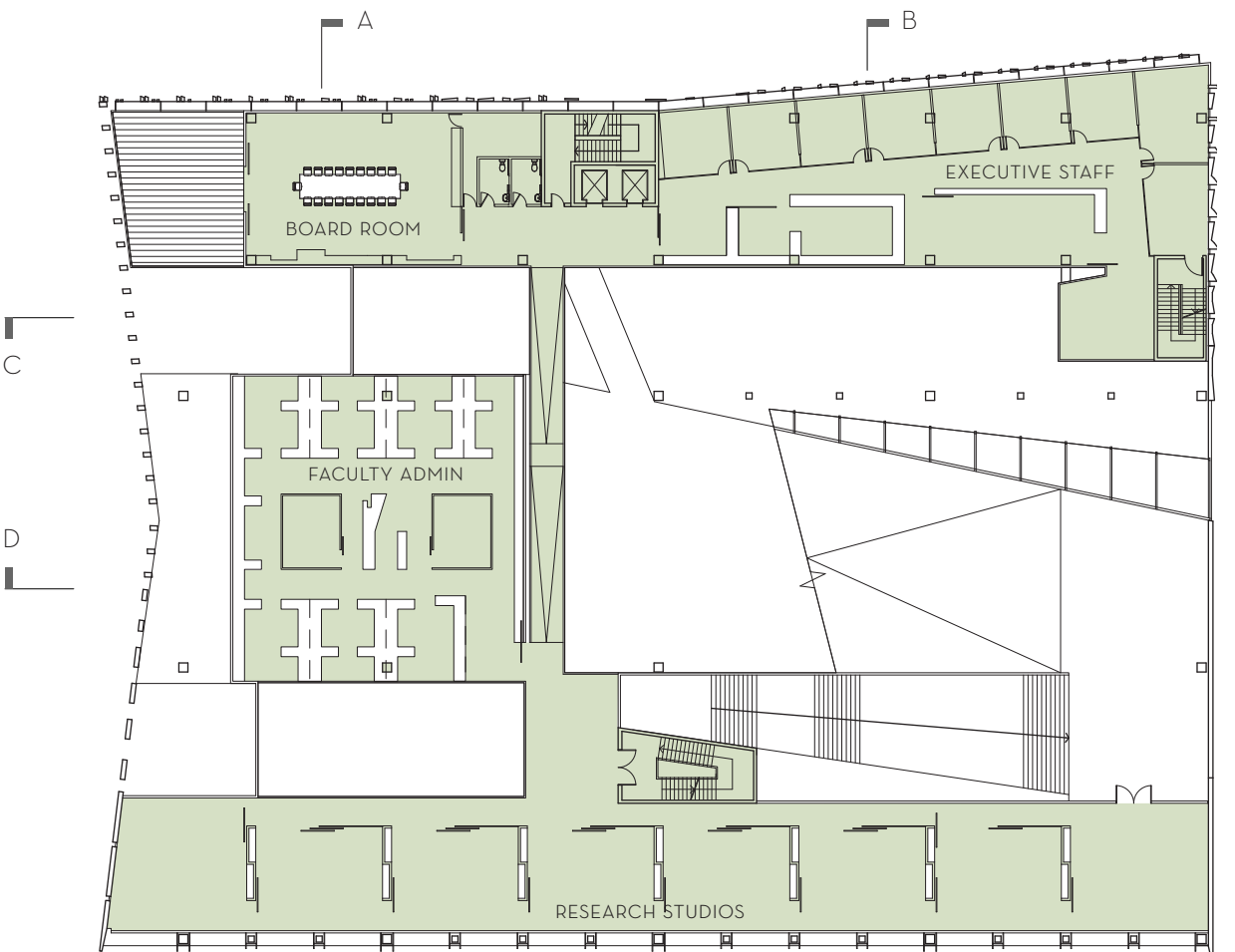
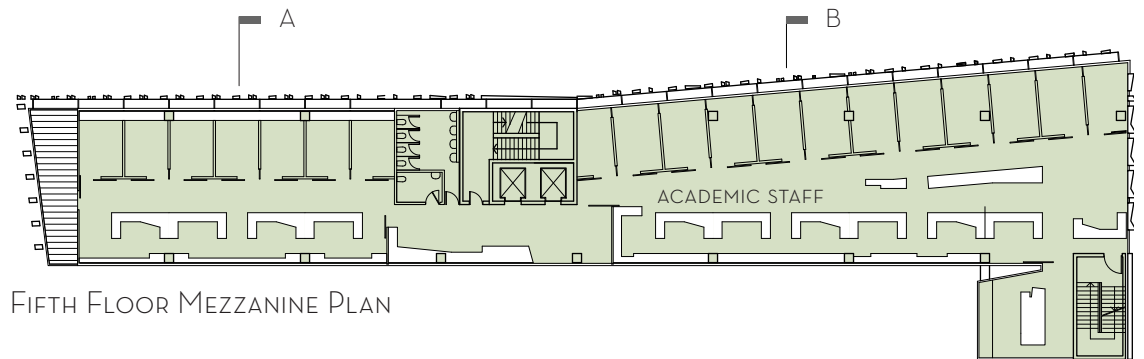
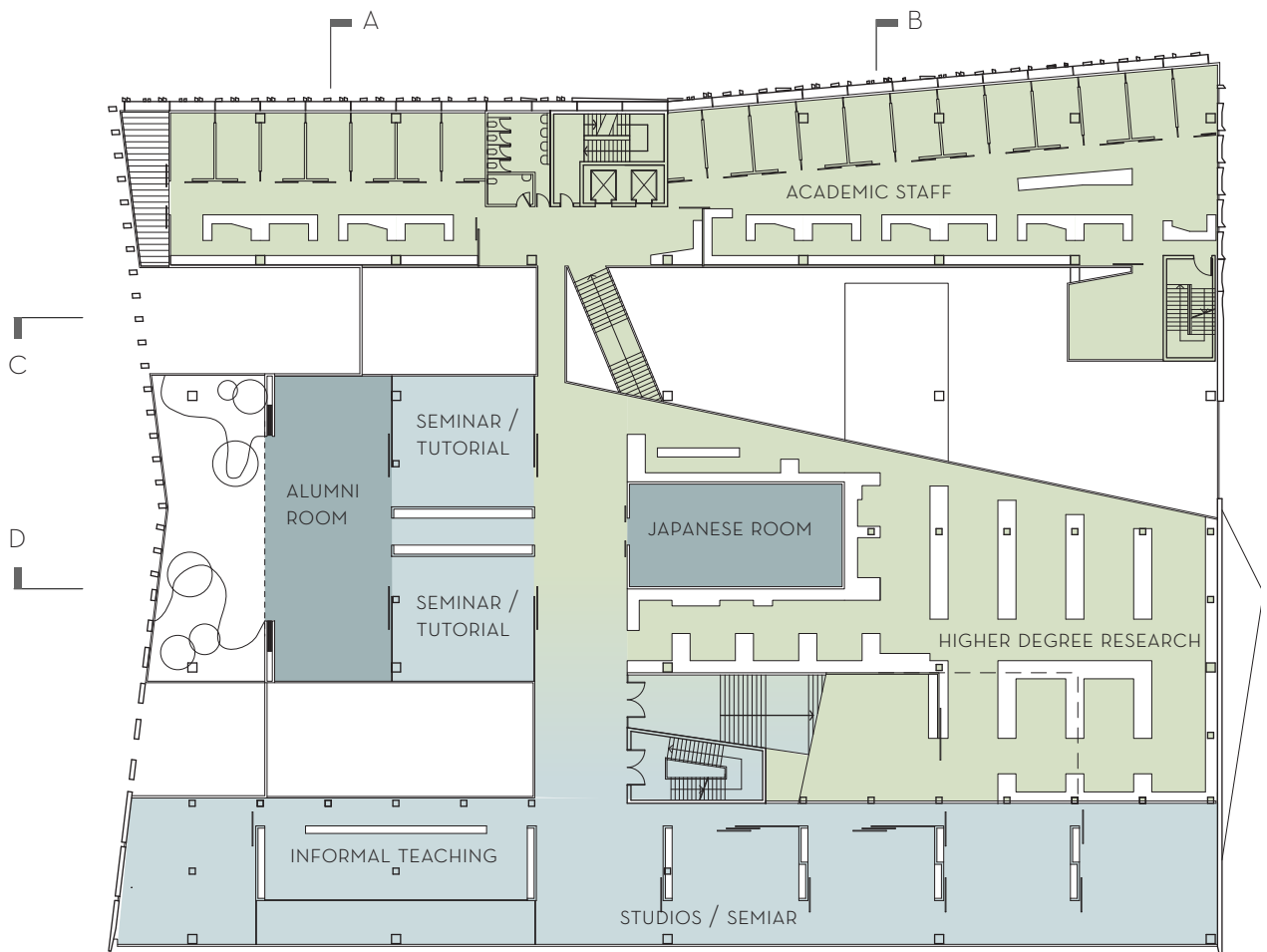


VIEW FROM NORTH EAST

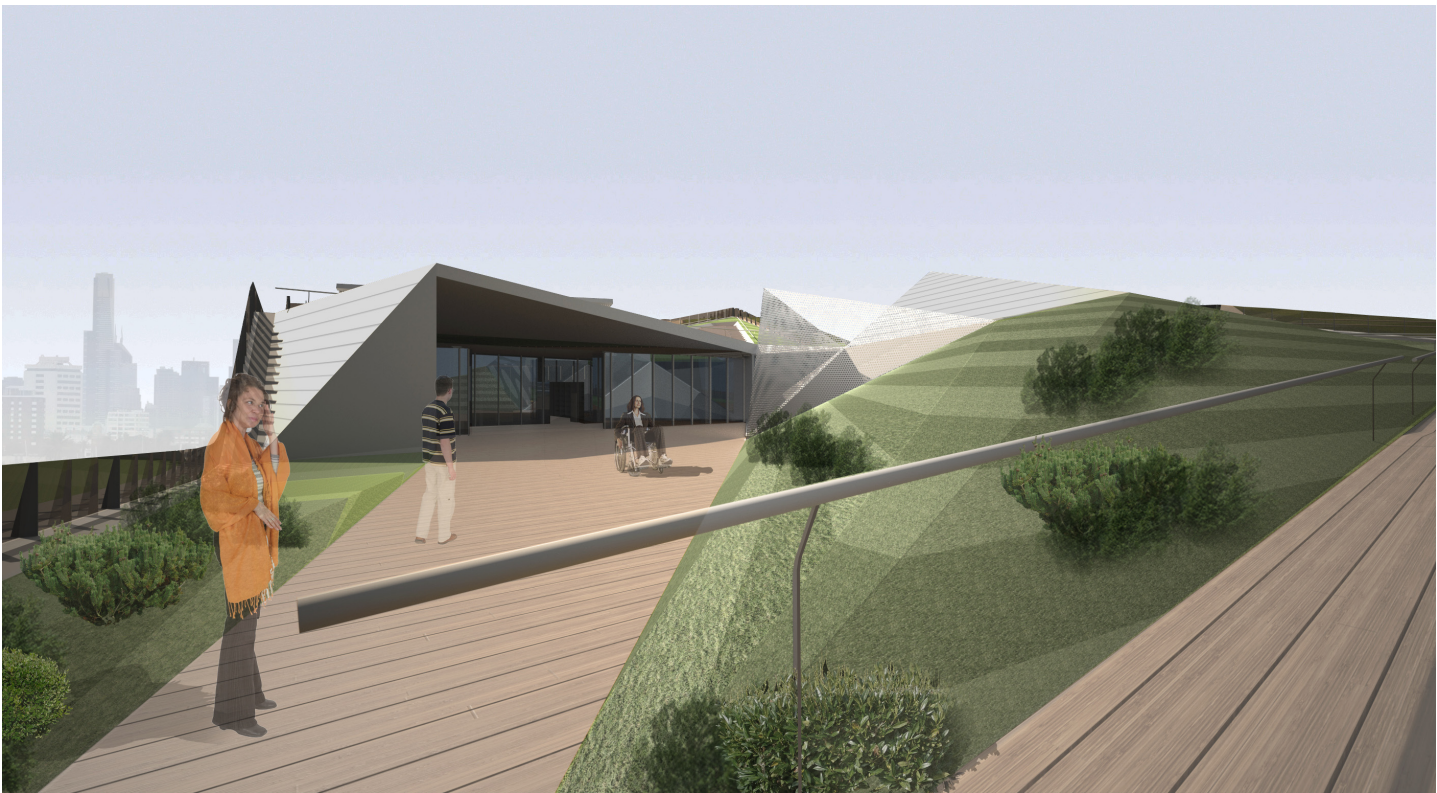


UNFOLDED ELEVATION

- CIVIC
- STUDENTS
- FACULTY / STAFF



DETAIL OF WEST FACADE



VIEW OF LANDSCAPED ROOFSCAPE

