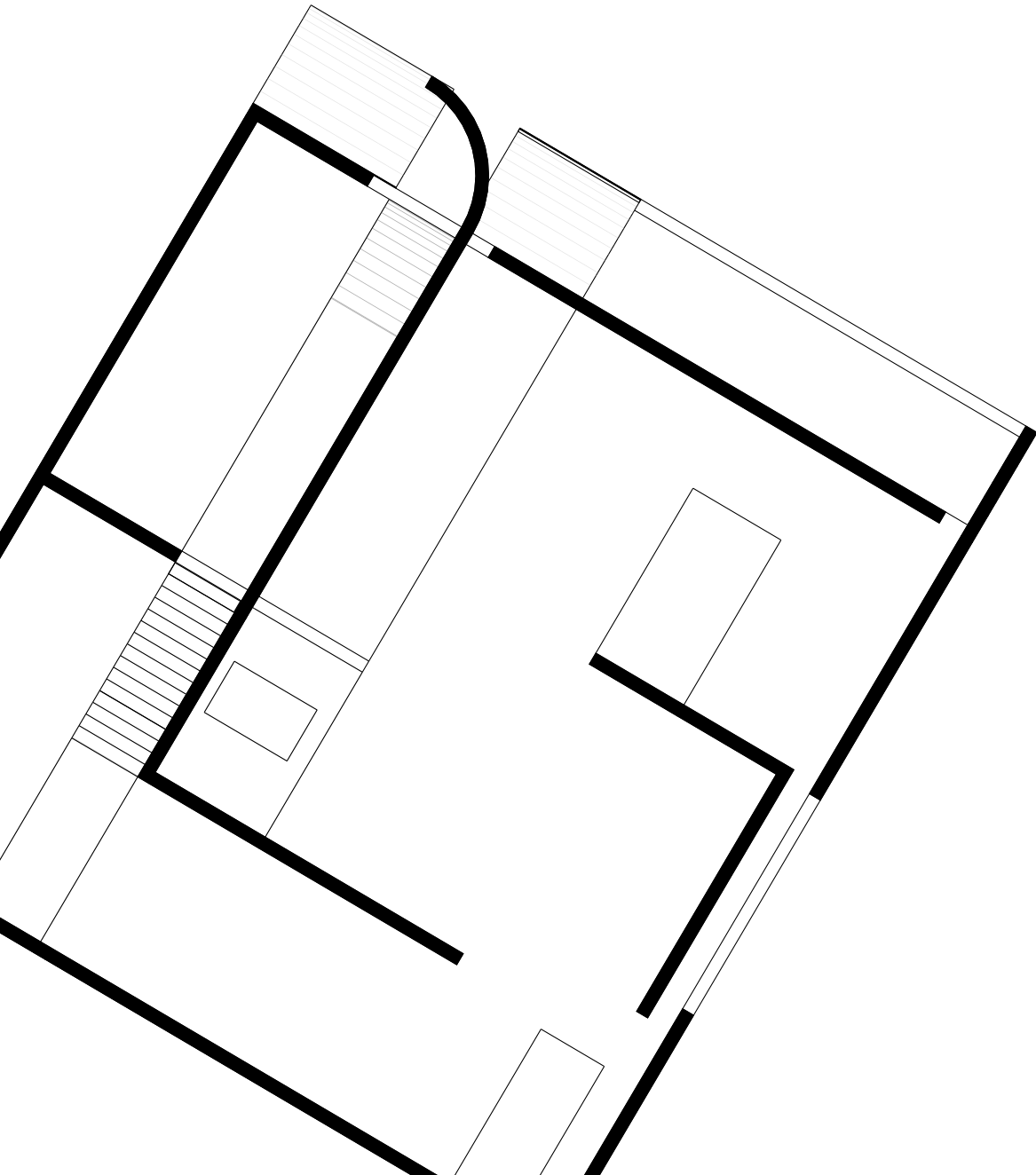


NITISH BHAT
ARCHITECTURAL PORTFOLIO
ಸಂಕ್ಷಿಪ್ತ
2013-2017



Resume

Nitish Bhat

746 Eastgate Ave, Apt 3N, University City, MO- 63130
+1 314-250-7651
nitishbhat@gmail.com



Professional Registration:

AIA Associate, 2018: 38790263
Council of Architecture since July 2014.
Registration No: CA/2014/63680



Technical Skills

Autocad | Revit | Formit

Sketchup | Rhinoceros | Adobe CC

Lumion | V-Ray | Maxwell

Microsoft Office | Wufi-Passive | GIS

3D Printing | Cura | Ideamaker



Core Skills

Graphic Design

Photography

Sketching



References

Jasmin Aber. RA. RIBA i&ii

Creative Exchange Lab (CEL)
(Executive Director & Co-founder)
Relationship: Supervisor
Email: ja@creativeexchangelab.com

Kathryn Dean. AIA FAAR

Washington University in St Louis
(JoAnne Stolarof Cotsen Professor of Architecture)
Relationship: Professor / Mentor
Email: kathryn@dean-wolf.com

Robert McCarter. M.Arch

Washington University in St Louis
(Ruth and Norman Moore Professor of Architecture)
Relationship: Professor / Mentor
Email: rmccarter@wustl.edu



Additional Information

Website:

nitishbhat.wixsite.com/portfolio

Linked-In:

[linkedin.com/in/nitish-bhat](https://www.linkedin.com/in/nitish-bhat)

Photography on 500px:

[500px.com/nitishbhat](https://www.500px.com/nitishbhat)



Education and Honors:

Washington University In St.Louis | 2015 - 2017

- **Master of Architecture** (M.Arch 2+)
- Solar Decathlon 2017, Second place for Architecture
- First place: Washington university Patent Challenge 2017
- Leading role on executive board for UMANG | 2015- 2017

BVB college of engineering and technology | 2008 - 2013

- **Bachelor of Architecture**
- Pidilite award for design excellence 2012
- Shortlisted at Annual NASA Design Competition (ANDC 2009)
- First prize for inter-college ad making competition



Experience:

Creative Exchange Lab, St Louis

+1 408 209 9252 | ja@creativeexchangelab.com

- Designer (April 2018 - Current)
- HSSU Masterplan.
- East St Louis Art and Cultural District. Part of NEA 'Our Town' grant.
- Organized symposium on 'Divided Cities'.

Olin Library, Washington University, St Louis

+1 314 935 4137 | gail.walters@wustl.edu

- Peer leader at the ARC (Jan 2016- Dec 2017)
- Organized and conducted free Adobe creative suite workshops.
- Video creation and editing projects.
- Graphic design projects for the library.

Fluid space architects and space planners, Bangalore.

+91 80 2657 3789 | fluidspacearchitects@gmail.com

- Junior Architect (Aug 2014 – Feb 2015)
- Worked on CDs and specifications
- Documentation of built project for competition entry
- Worked on 90 unit apartment building

V.K.Thaygarajan and associates, Bangalore.

+91 80 41122722 | info@vkts.in

- Junior Architect (Dec 2013 – May 2014)
- Worked with senior architect on mass housing project.
- Designed a community center for mass housing complex.

Hegde and Hegde architects, Bengaluru.

+91 80 26721672 | hegdearchitects@gmail.com

- Freelance work on Farmhouse project (Jul – Nov 2013)
- Visualization and presentation work for various projects.

Ojas Hirani Architects and Engineers, Ahmedabad.

+91 79 40032591 | ojashirani@hotmail.com

- Architectural Internship (Jan – Jun 2013)
- Research and conceptual design for Buddhist Tourist Destination
- Corresponded with client and site supervision for hostel project



Fall 2017 | Degree Project
In-Between Spaces



Spring 2017 | Design Studio
Earth-Work and Sky-Spaces



21 | Fall 2016 | Design Studio | Design-Build
Solar Decathlon: The Crete House

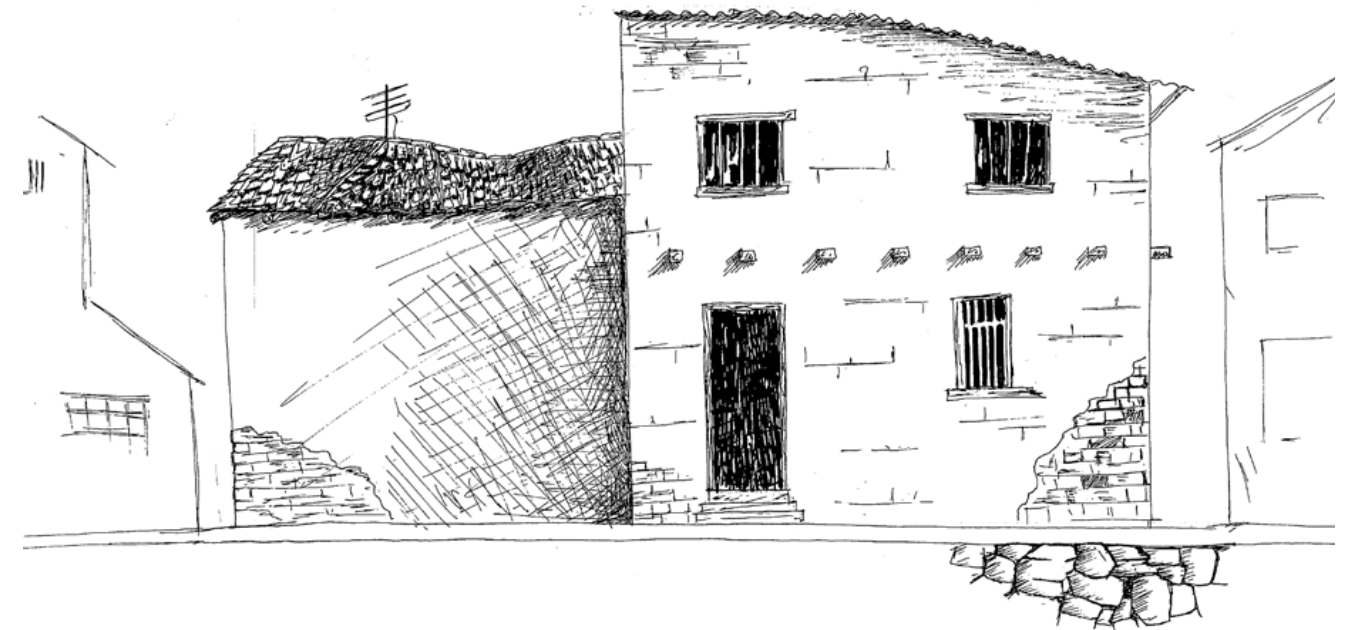
Professional Work

Sketches

Photography

On textures and patina:

Architecture that celebrates patina never has to worry about weathering. For it, time is an ally and it only grows more beautiful with age. The textures of natural materials, celebrated through simple yet precise design is something that I find fascination.



Fall 2017 | Degree Project

Professor: Kathryn Dean

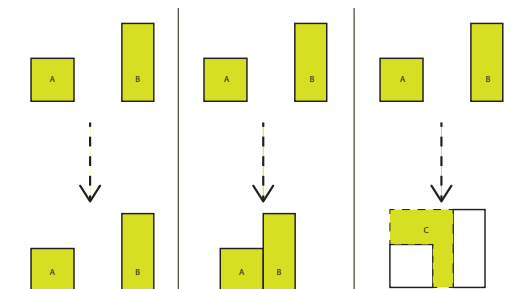
In-Between Spaces

Grand Center Music Conservatory and
Powell Hall Expansion

Revit | Autocad | Rhino | Cura
Photoshop | Illustrator

Located in a once culturally rich and dense urban context, the conservatory aims to bring back some of the vibrant street life by reconfiguring the public space around it. The scope of the project includes a new music conservatory, an expansion of the historic Powell hall (home to the St. Louis symphony) and a café that would serve the public, students and patrons of the symphony.

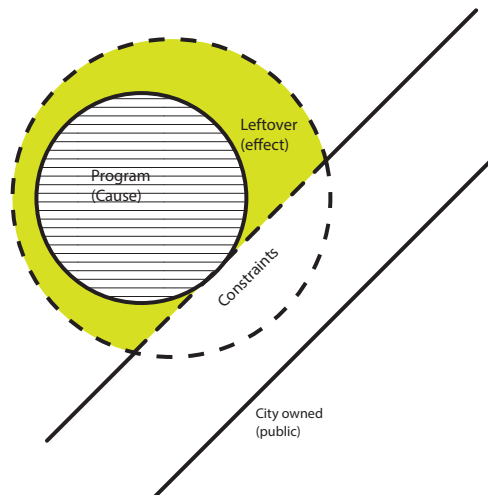
The core idea behind the project being that new construction, especially institutional projects in an urban context has the potential to have a positive influence on the street life in the way it handles its non-programmatic areas. These *leftover spaces*, created either intentionally or unintentionally can have a significant effect on how one perceives the urban context. Here, the *leftover space* in between the two main programs creates an opportunity for the institute to have a meaningful interaction with the public in the form of the alley plaza and café.



View from Grand Center looking South



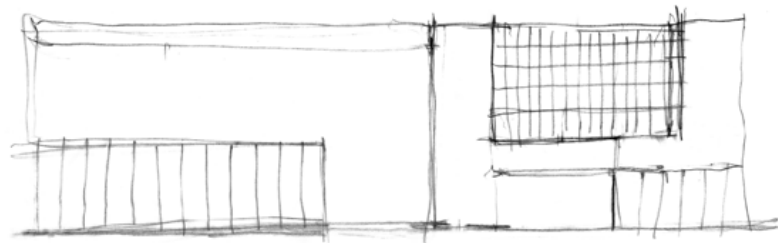
View from Grand Center looking East



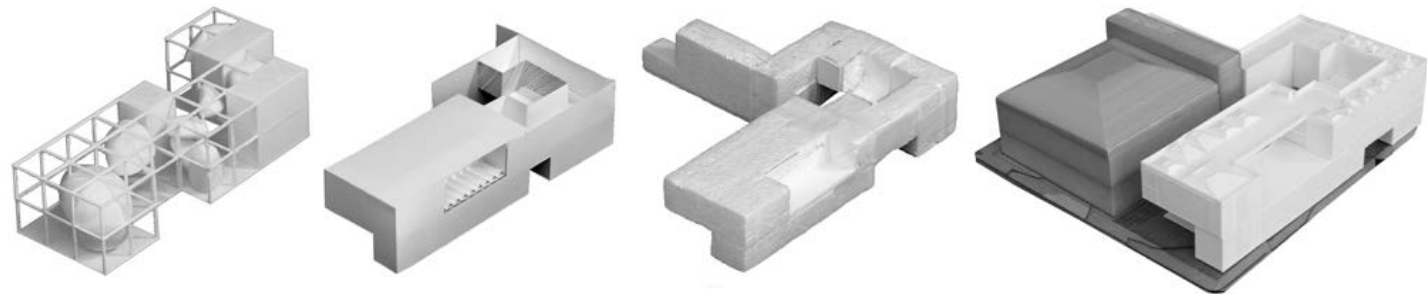
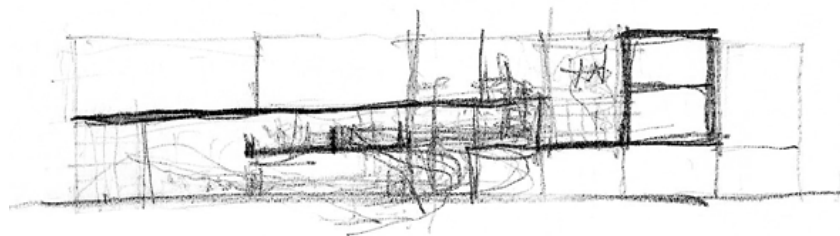
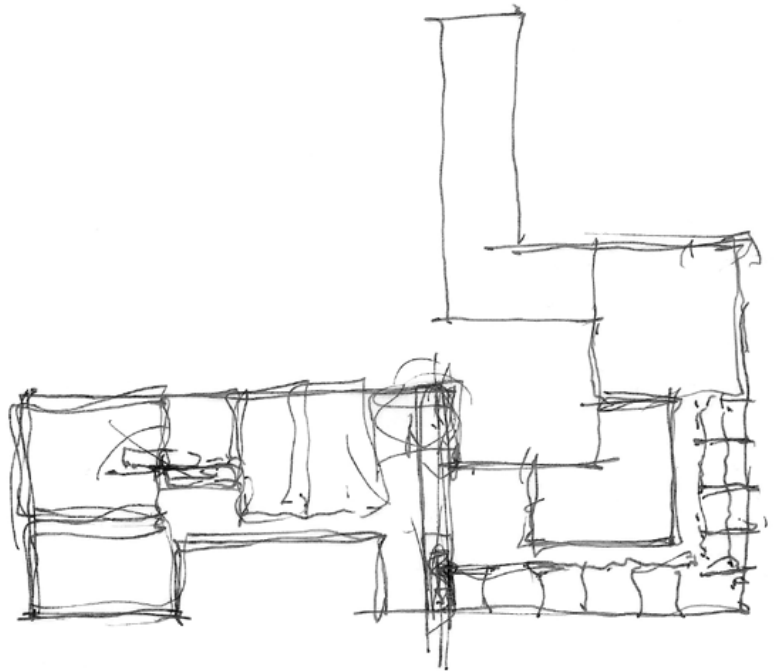
The leftover space can be formed as a consequence of site, form, function or other constraints like building code.

The volume of the project takes cues from its context to create intimate in-between spaces that are of a human scale, hence allowing for various public activities to take place. Drawing in the public into the in-between spaces through the carved-out frontage is the new café and courtyard in the heart of the project. This, in conjuncture with the Main lobby area that spills into the in-between space and the patio that communicates with the street help in creating a volume that engages its urban context.

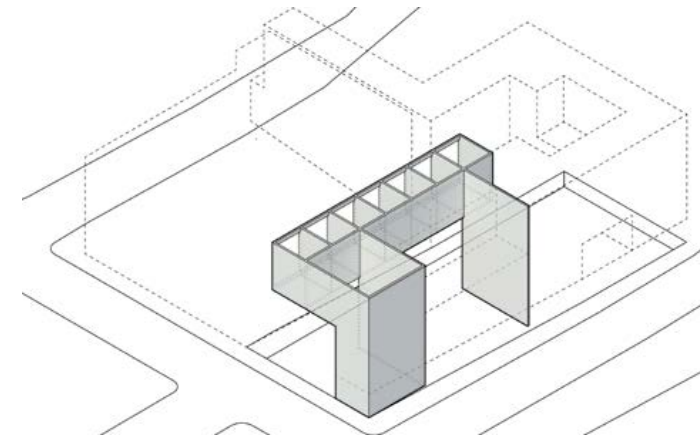
The facade is designed to act as a monolithic neutral backdrop for such social interactions, while providing the necessary privacy and sound insulation needed to study music.



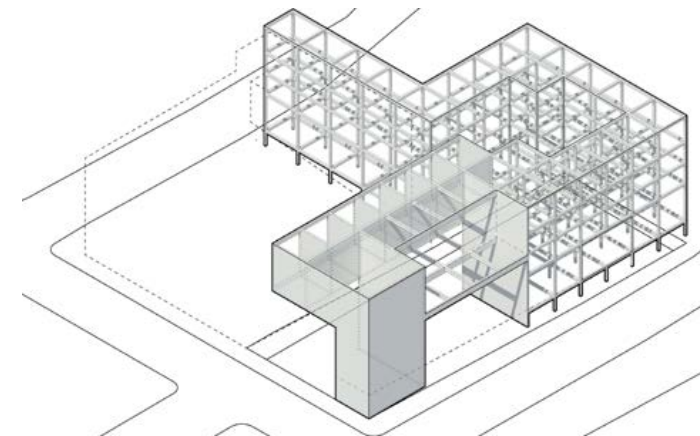
Conceptual sketches



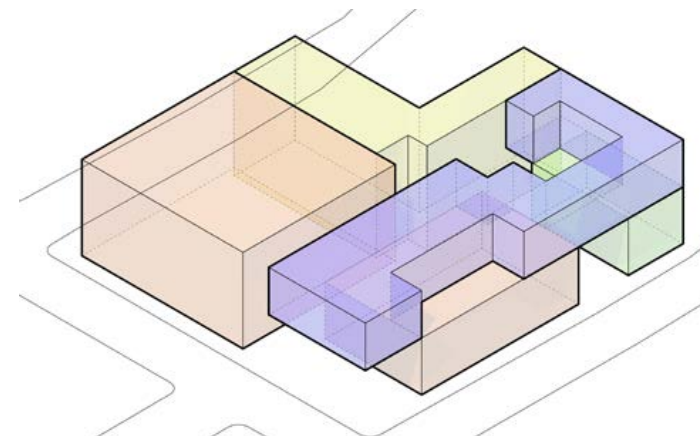
The form finding exercise went through several iterations, while always keeping the "In-Between space" at the heart of the project.



Structural strategy: The large cantilever over the lobby is achieved with structural concrete shear walls acting as massive beams.



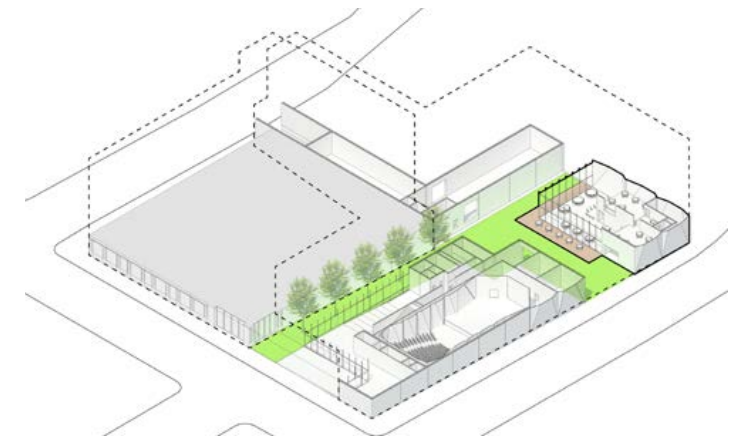
Structural strategy II: The rest of the building follows a regular grid that is dictated by the site context.



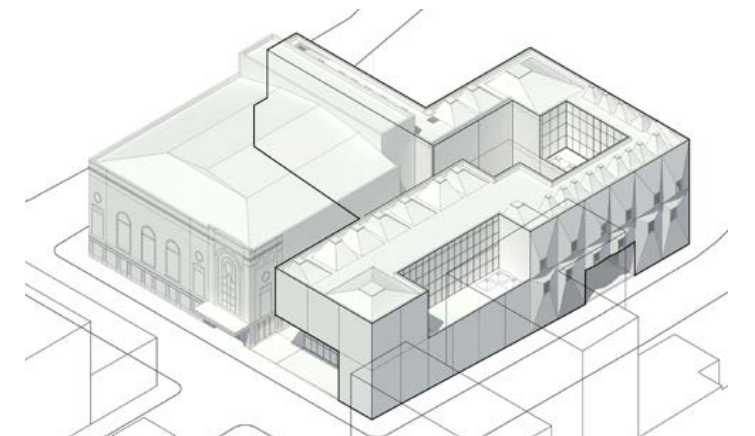
Program: The public programs such as cafe and recital halls are located on the street level, while the conservatory sits above it.



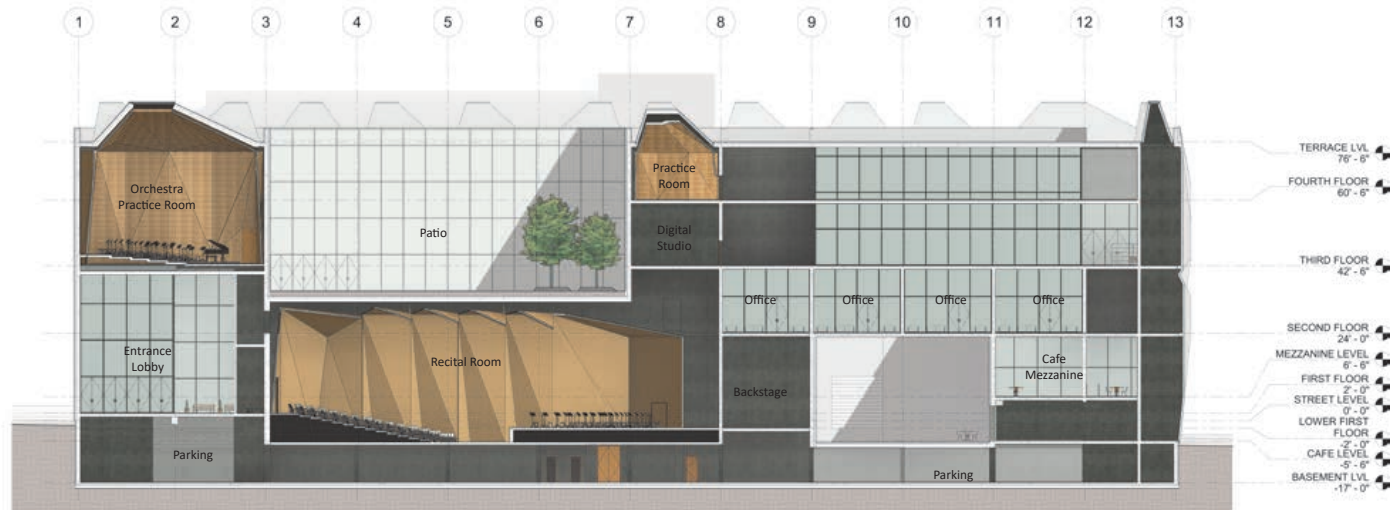
Connectivity: The symphony hall at Powell and the Recital hall at the conservatory are connected thematically and physically by the new entrance plaza, emphasized by the cantilevered form.



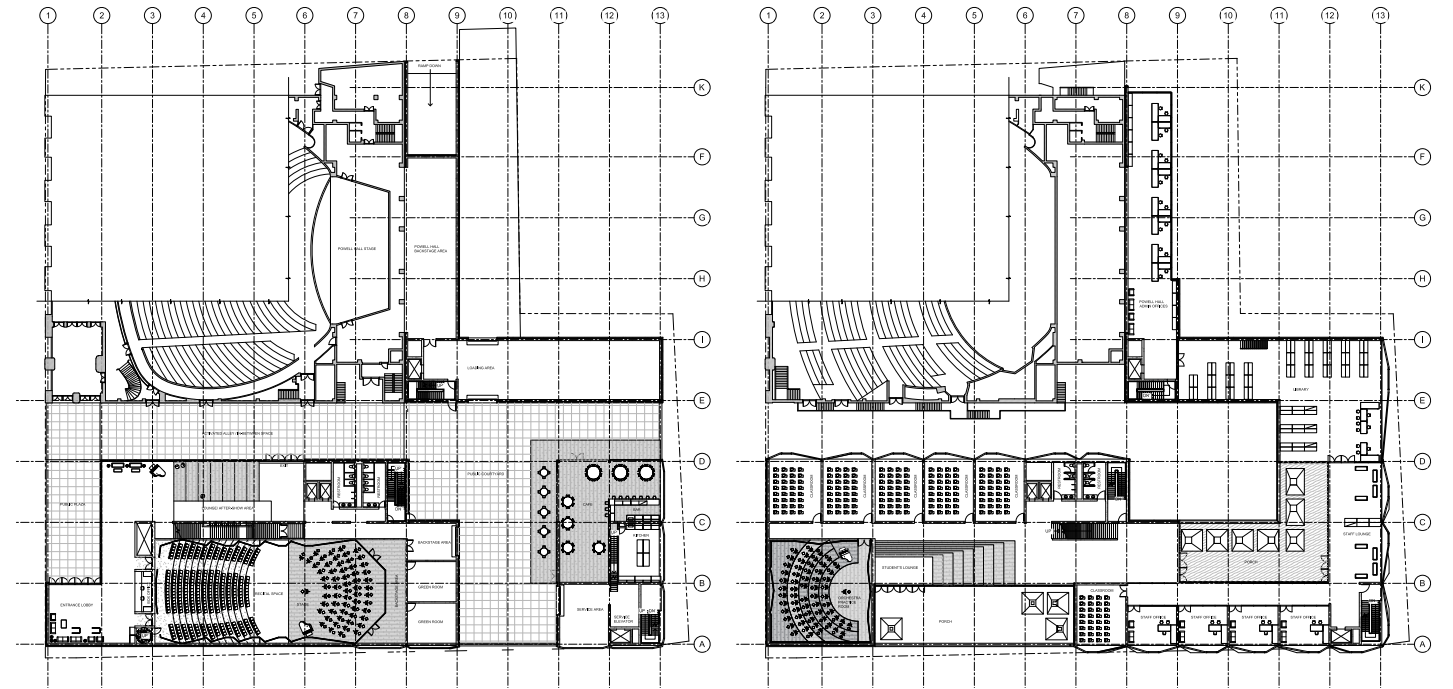
In-Between space: The alley plaza flows through the project to direct the public towards the cafe court for three sides.



Massing: The massing of the conservatory is designed to wind its way through the site, slowly transitioning into the Powell hall expansion, where it gently attaches itself to the back wall of the symphony hall.

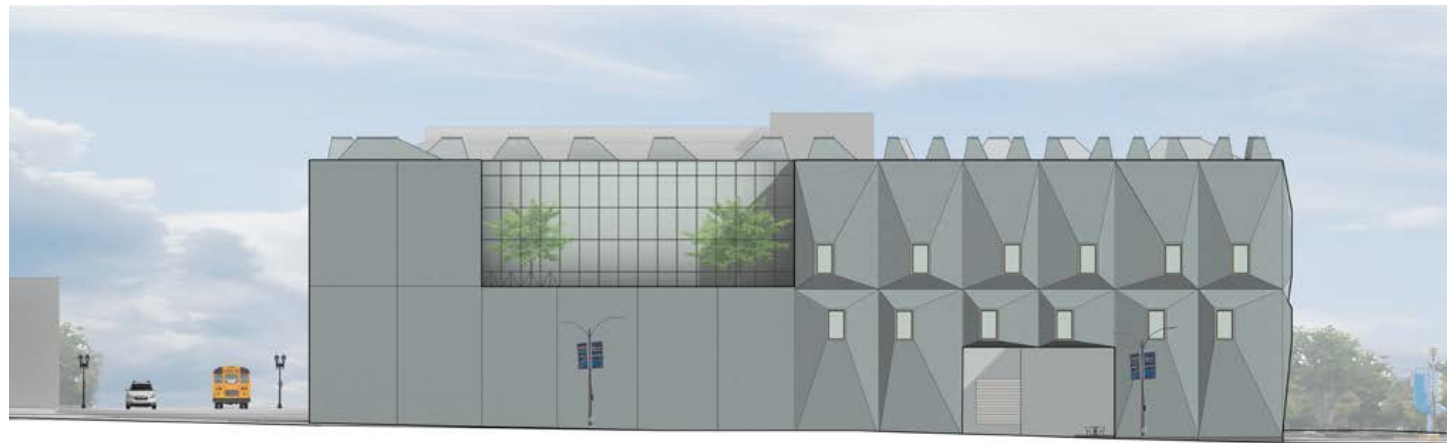


Section A-A



First floor plan

Third floor plan

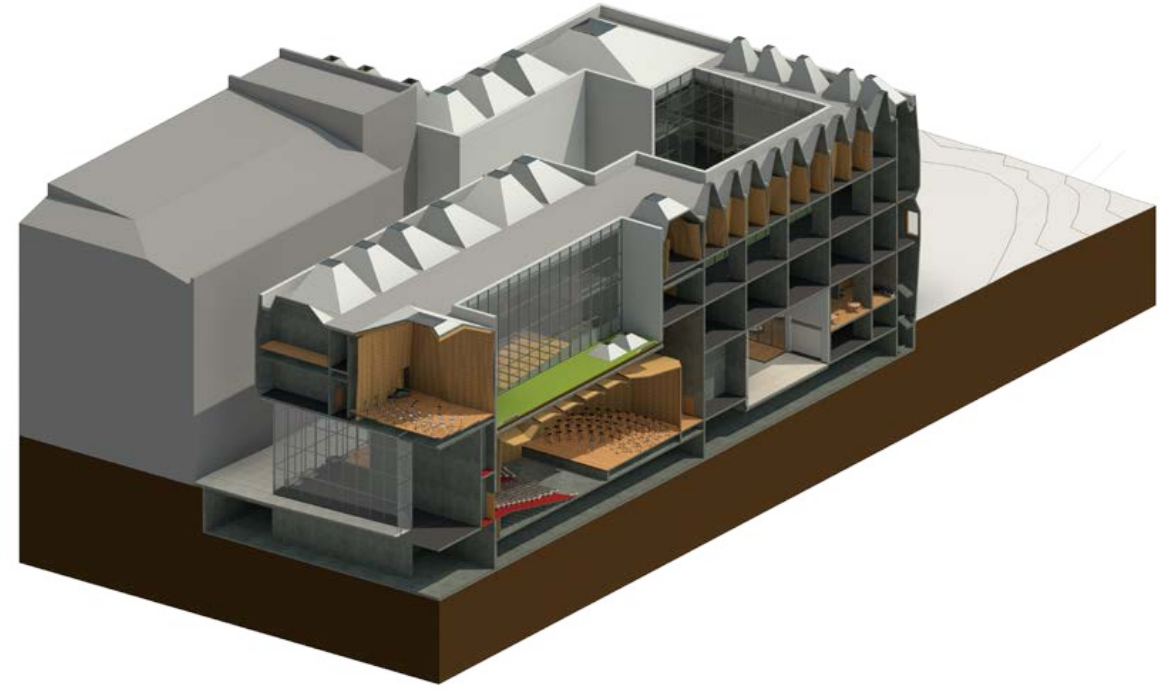


South Elevation



West Elevation

(Right) View of the cafe courtyard and plaza which would be used by the patrons of the symphony, cafe and the conservatory. This plaza also serves as the city's gateway to the annual Circus Flora that takes place in the grounds beyond.



Isometric section: Since the majority of the structure is made of exposed concrete, the acoustic spaces such as the practice rooms and recital hall are treated with acoustically insulated boxes. The skylights above the practice rooms not only provide light, but the non-parallel surfaces also help diffuse sound.

The building uses a combination of radiant heating system and a low velocity high volume cooling system to regulate internal comfort levels.



View inside the "In-Between space" looking out towards the city.



View of the Cafe Courtyard



View from Grand Blvd



View Main lobby bottom looking west.



View of the student lounge and porch.

Spring 2017 | Design Studio

Professor: Robert McCarter

Earth-Work and Sky-Spaces

An addition for Jorn Utzon's unbuilt

Asger Jorn Museum

Autocad | Rhino | Sketchup |
Maxwell | Photoshop | Illustrator

*The scaled physical model of Utzon's unbuilt
museum in this project was a group effort*

Following the footsteps of the great Jorn Utzon, this project explores ways to expand the gallery spaces of Utzon's unbuilt design for the Asger Jorn museum at Silkeborg, Denmark. The project calls for an addition of 750 sqm of gallery spaces and library.

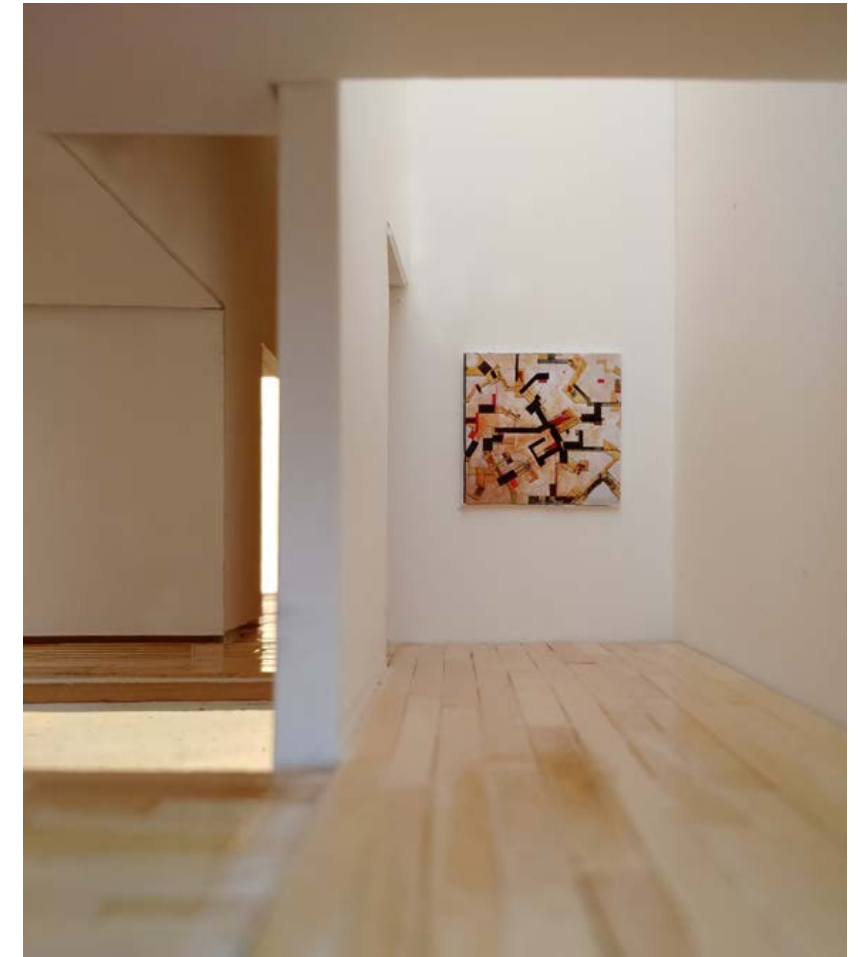
Since Utzon's museum is predominantly underground, with conical skylights illumination its shell-like interiors, the addition had to be located north of it, so that it does not cast a shadow on the skylights. A conscious decision was also made to make the addition entirely above ground, so as to not compete with Utzon's work.

Since Utzon's museum was never built, a detailed sectional model was built using Utzon's hand drawings. The site model was built as a group at 1/8th scale and used as the basis for our individual designs.



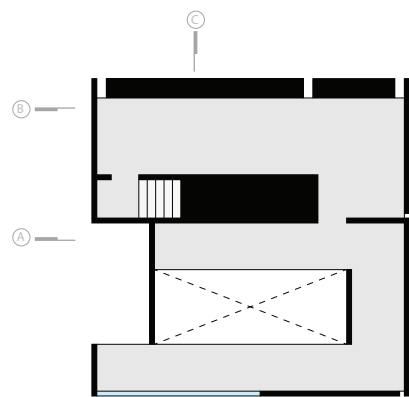
View of the museum addition with parts of Utzon's design in view.



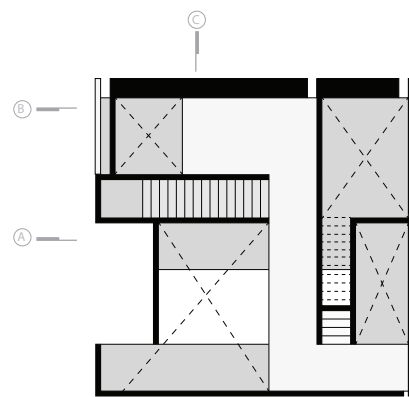


10x10x10 meter cube: In order to explore design possibilities, a sub-project was done. The imaginary cubic space is suspended 3m above ground, and was to house 12 selected works of the situationist lists art group, COBRA. In the study, I explored various ways to introduce diffused natural light into the museum without letting direct views to the outside or harsh glare from the sunlight. Thus, I ended up with the curved skylight devices that would drive the design of my final project.

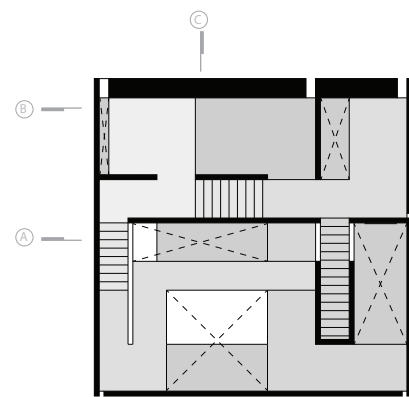
Initial 2 week long sketch project helped me understand the light quality in my design.



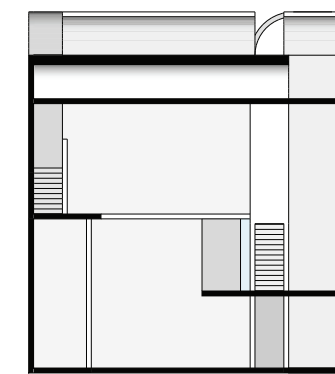
Plan At Level 1



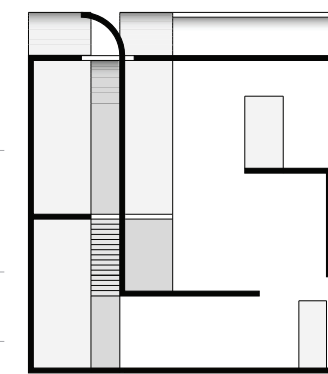
Plan At Level 2



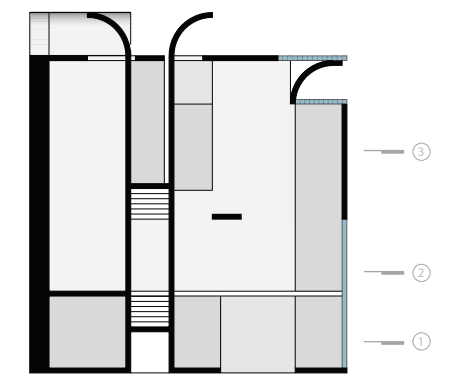
Plan At Level 3



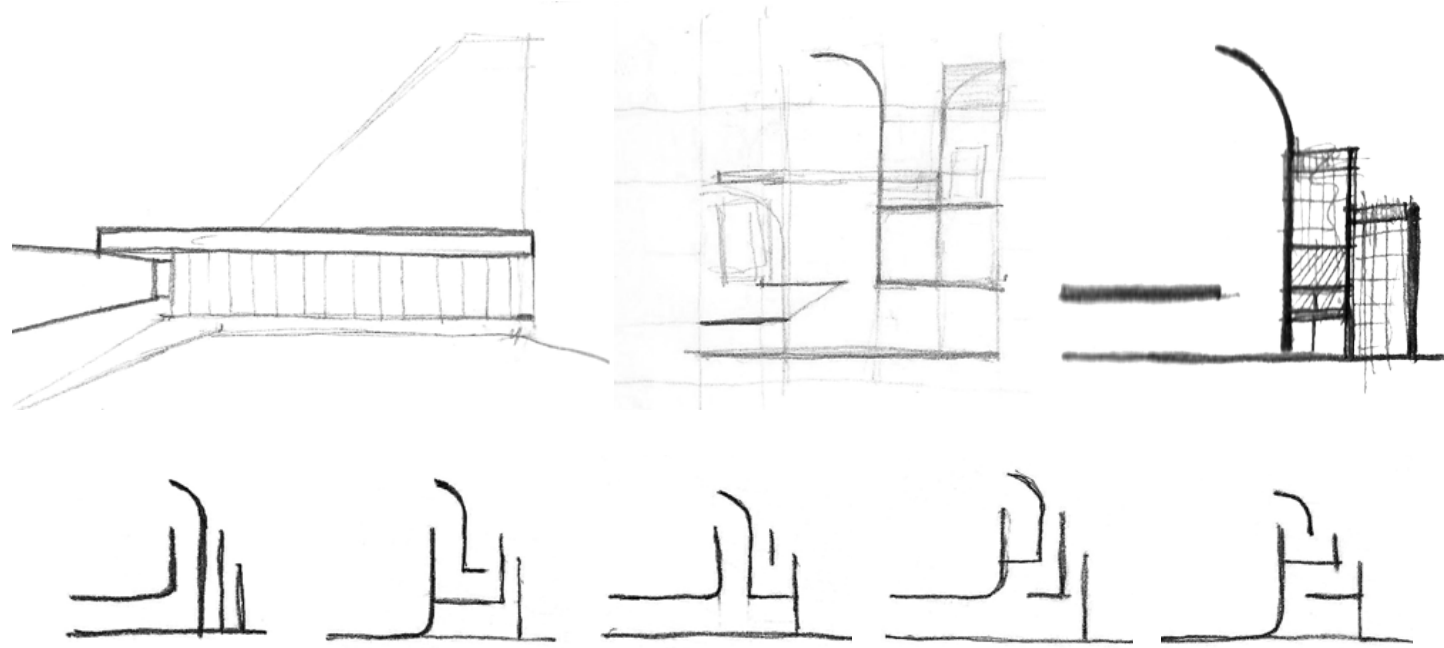
Section A-A



Section B-B

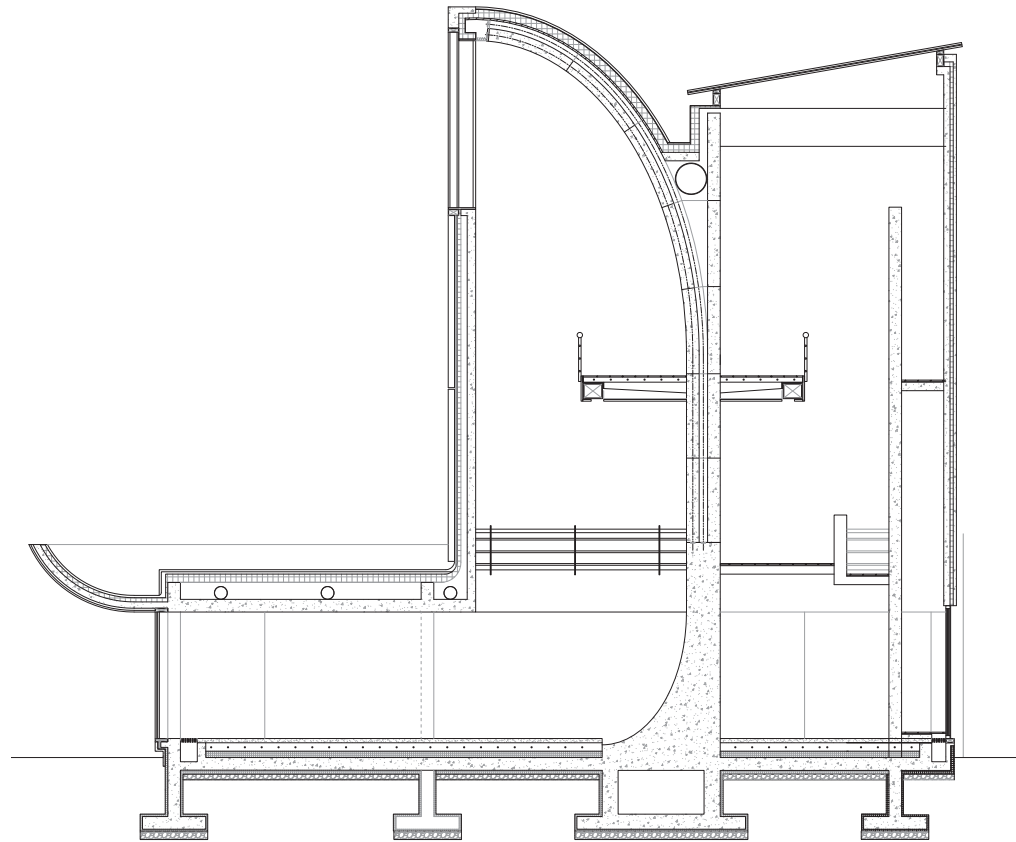


Section C-C

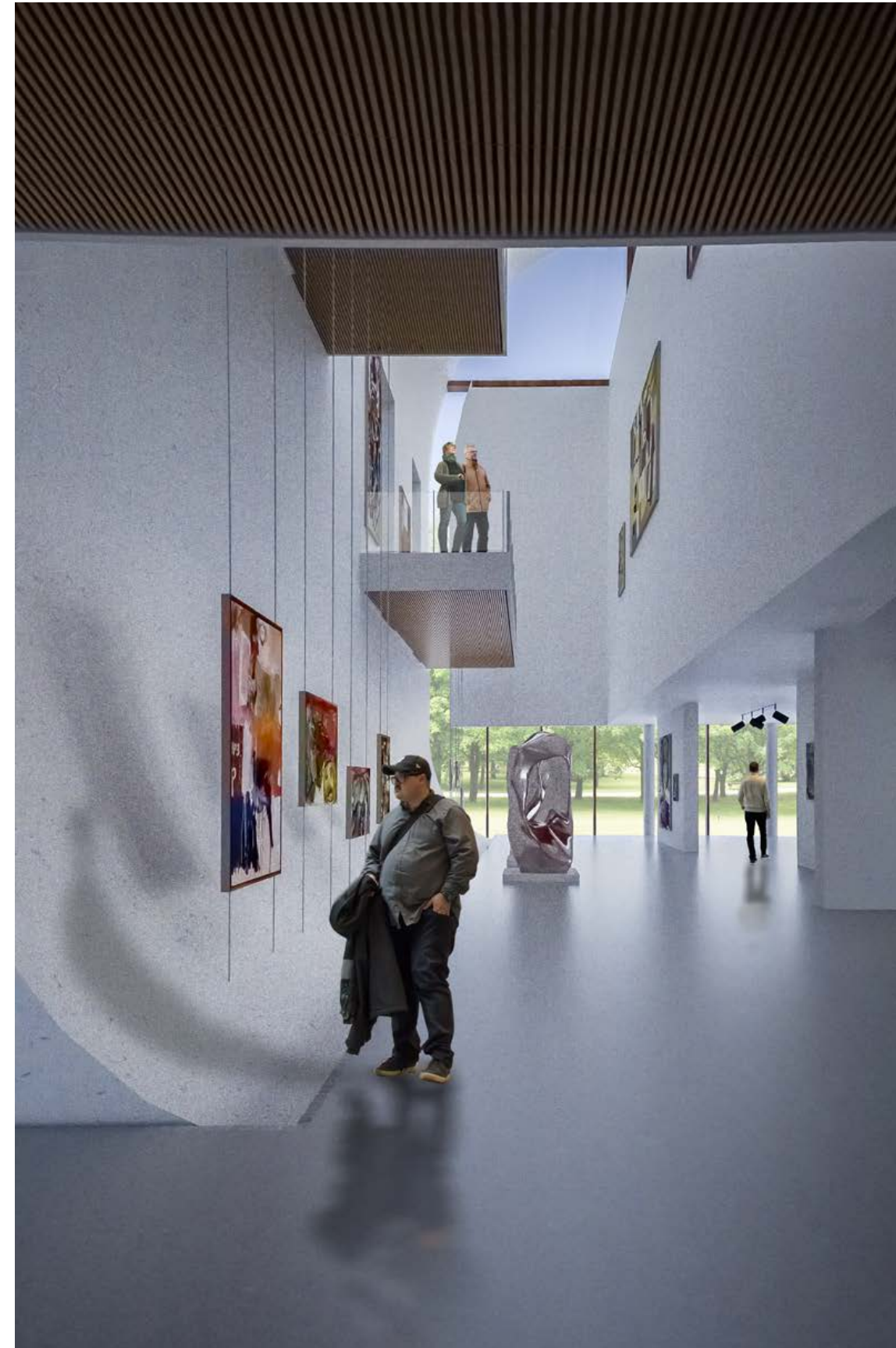


Conceptual sketches

The design process on this project was all about exploring ways of manipulating natural light similar to how Utzon's shells did the same. Drawing from the ideas explored during the 10X10X10m cube exercise, a giant version of the light catching device is at the heart of the design, which catches the low Danish sun and diffuses it to the galleries below. The final design is a series of linear winding galleries which transition from the horizontal *earth space* to the vertical *Sky space*, while being anchored to the curved concrete wall. Hence, the addition becomes an inversion of Utzon's strategy, which was winding galleries that transition from the sky to the ground.

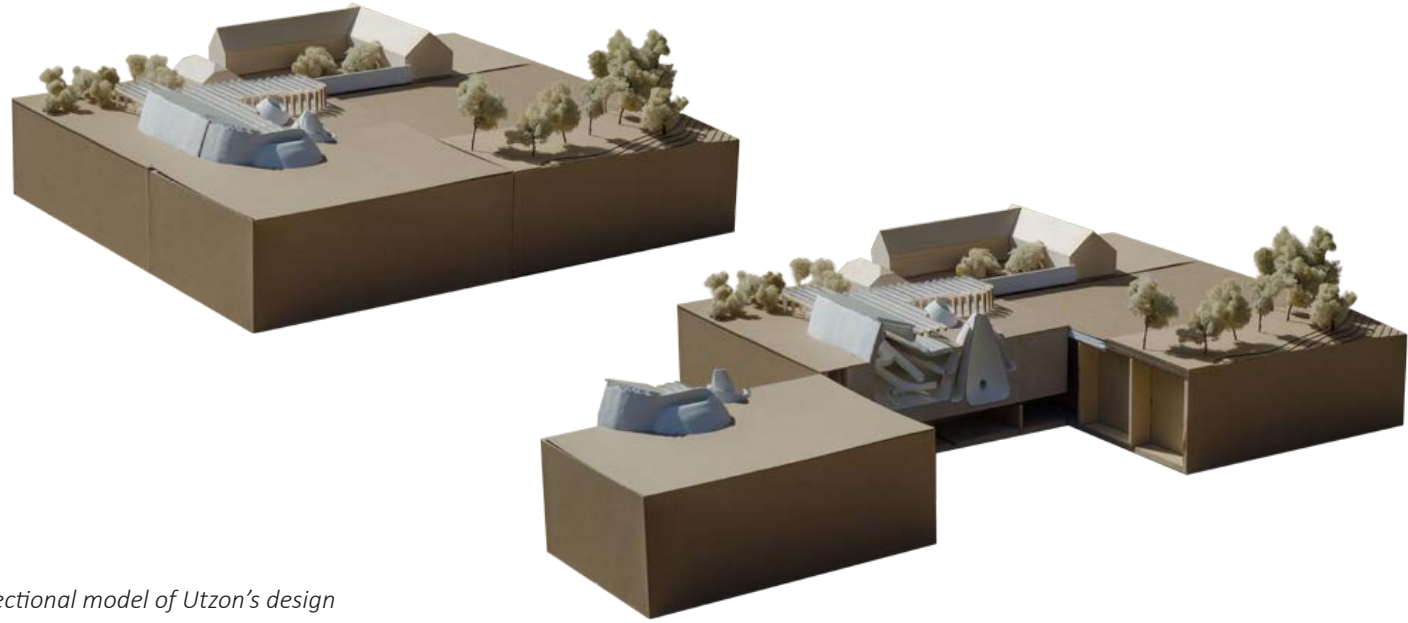


Section through both vertical and horizontal space.

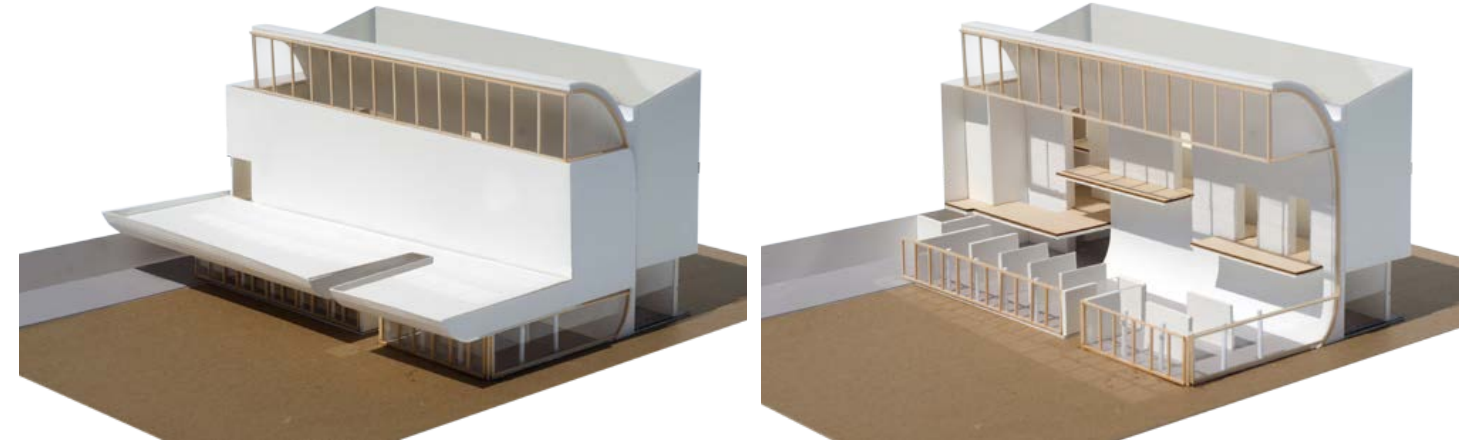


The horizontal gallery offers views towards Utzon's museum as well as the surrounding landscape, whereas, the vertical galleries are designed to block direct views to the outside.

View from the horizontal gallery to the vertical.



Sectional model of Utzon's design



Dismantled physical model



Section model through Utzon's Design



View of the museum expansion from Utzon's cafe area



View inside the horizontal gallery



View of the vertical space from the second level gallery



View of vertical gallery behind the curved wall



View of the Porch/Deck area

Fall 2016 | Design Build

Professor: Pablo Moyano and
Ryan Abendroth

Solar Decathlon: The Crete House

International Design-Build competition for
solar houses

Revit | Autocad | Sketchup | Vray
Photoshop | Illustrator

*This project was a collaborative effort
as part of the WashU team.*

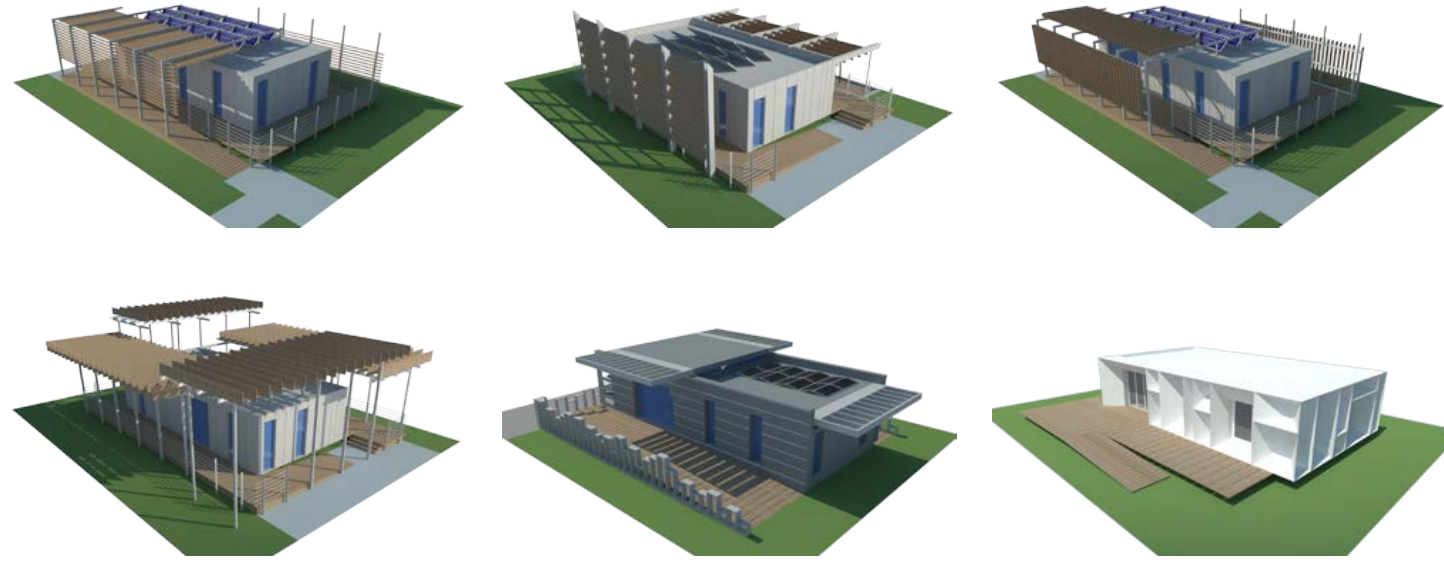
*All drawings, renderings and photographs
presented here were made by Nitish Bhat*

The “Crete House” as it was called, was a one of a kind Solar Decathlon entry for its innovative use of pre-cast concrete as its primary building material. The 900sqft solar house was designed and built in St Louis over a period of four academic semesters, then shipped to Colorado in 2017 for the competition. As part of the initial core team, I got to be involved in every step of the design-build process; from schematic design to CDs; from construction to competition.

Due to the collaborative nature of the project, Revit was extensively used to produce the 3D models and final CDs.

As the name implies, the use of concrete was key to the building’s performance as a passive solar house, by leveraging the thermal mass of concrete to create a flywheel effect, reducing the load on active mechanical systems. The exterior of the pre-cast concrete panels is finished with a 1.5” thin layer for ultra-high-performance concrete called Ductal. This thin layer of concrete is strong enough to protect the insulation behind from weathering and also greatly reduces the weight of the panels, when compared to traditional concrete.

Iterative design process



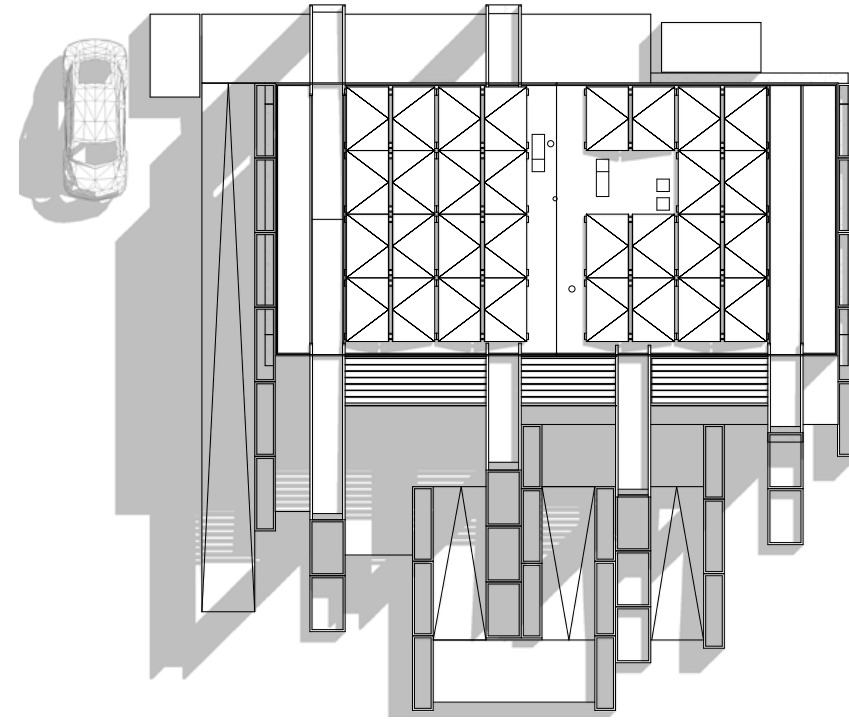
From the very beginning, the project consisted of a concrete box surrounded by sun shading devices, which went through several iterations. In the end, the vertical gutters with hydroponic system was selected. The vertical

gutters are conceived as strips that are cut and displaced from the concrete box, the voids created as a result become windows. The interior is an open floor plan with the service core acting as the divider between public

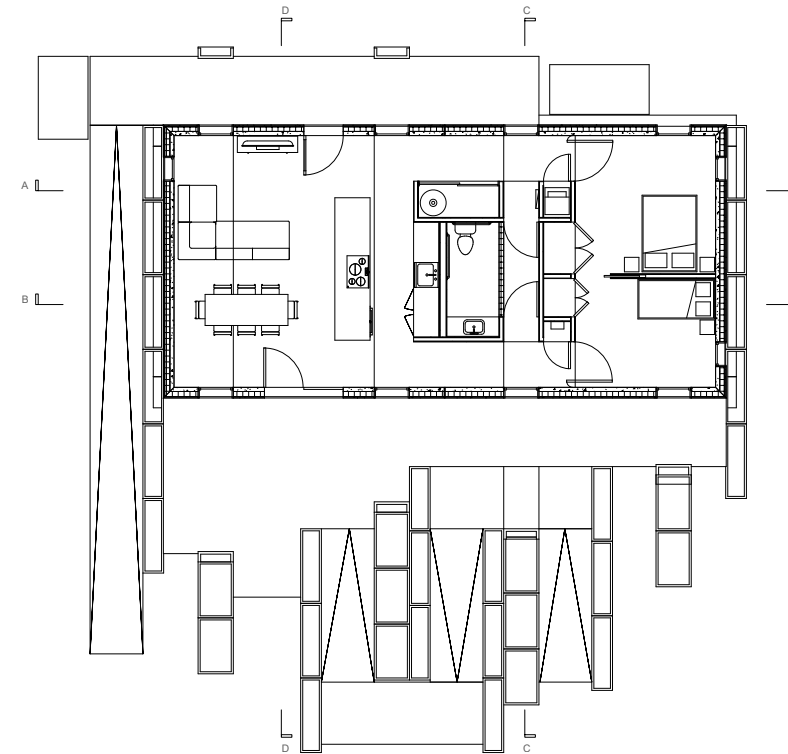
and private spaces. The lines from the gutters continue into the house through floor to ceiling windows and run across the floor and ceiling.



Isometric View



SITE PLAN



FIRST FLOOR PLAN

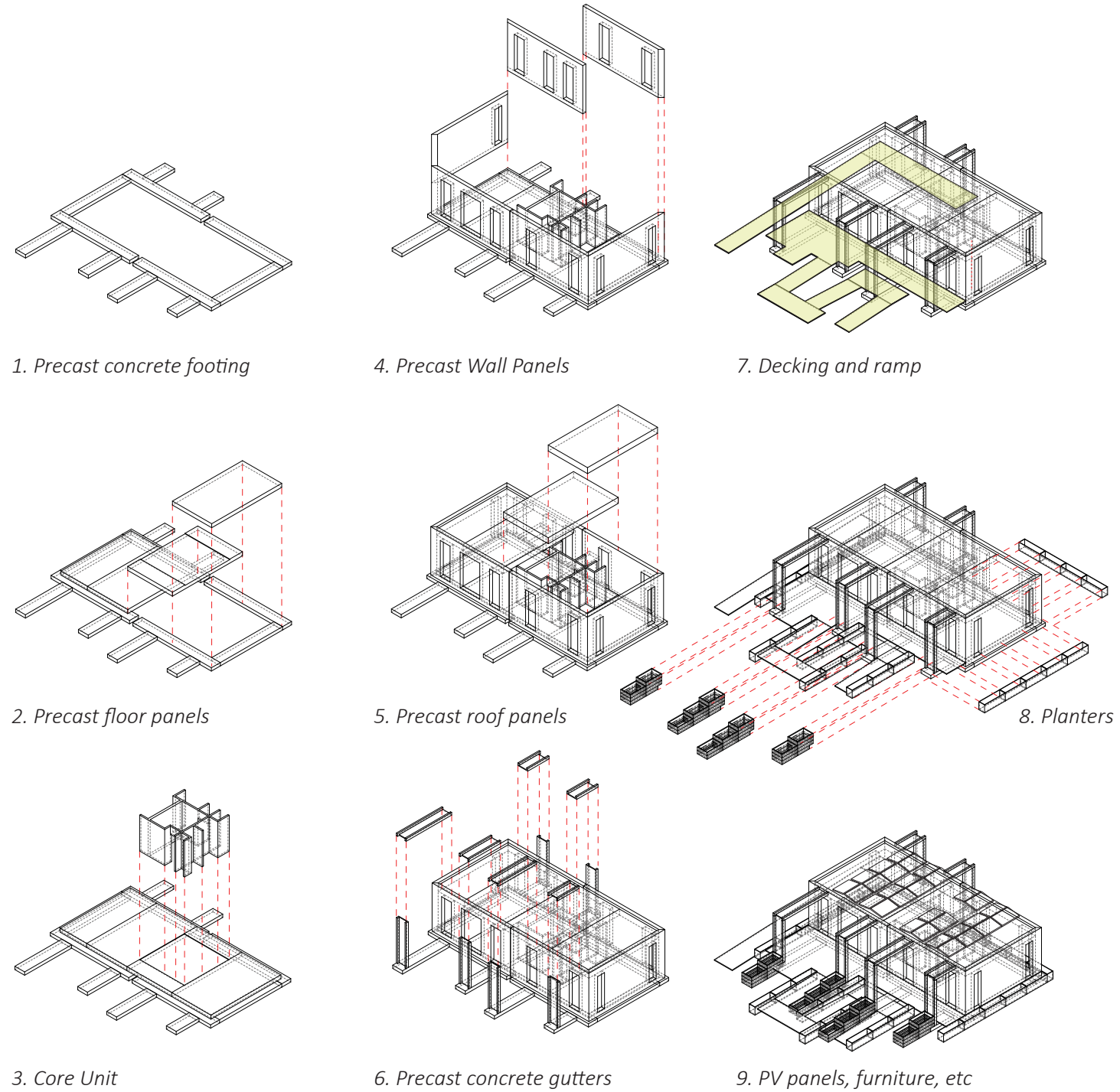


View showing the patina of interior concrete walls

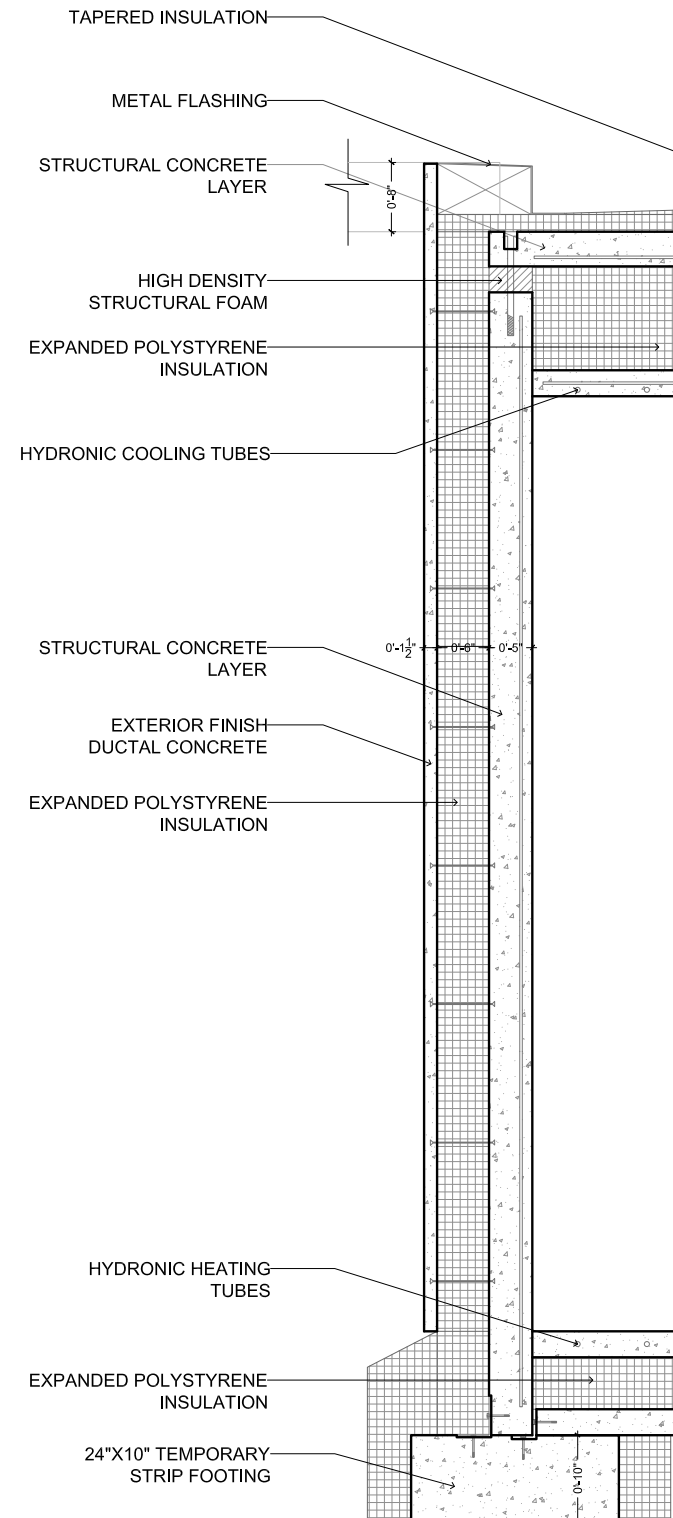


Close-up of one of the gutters with hydroponics

Construction Sequence:

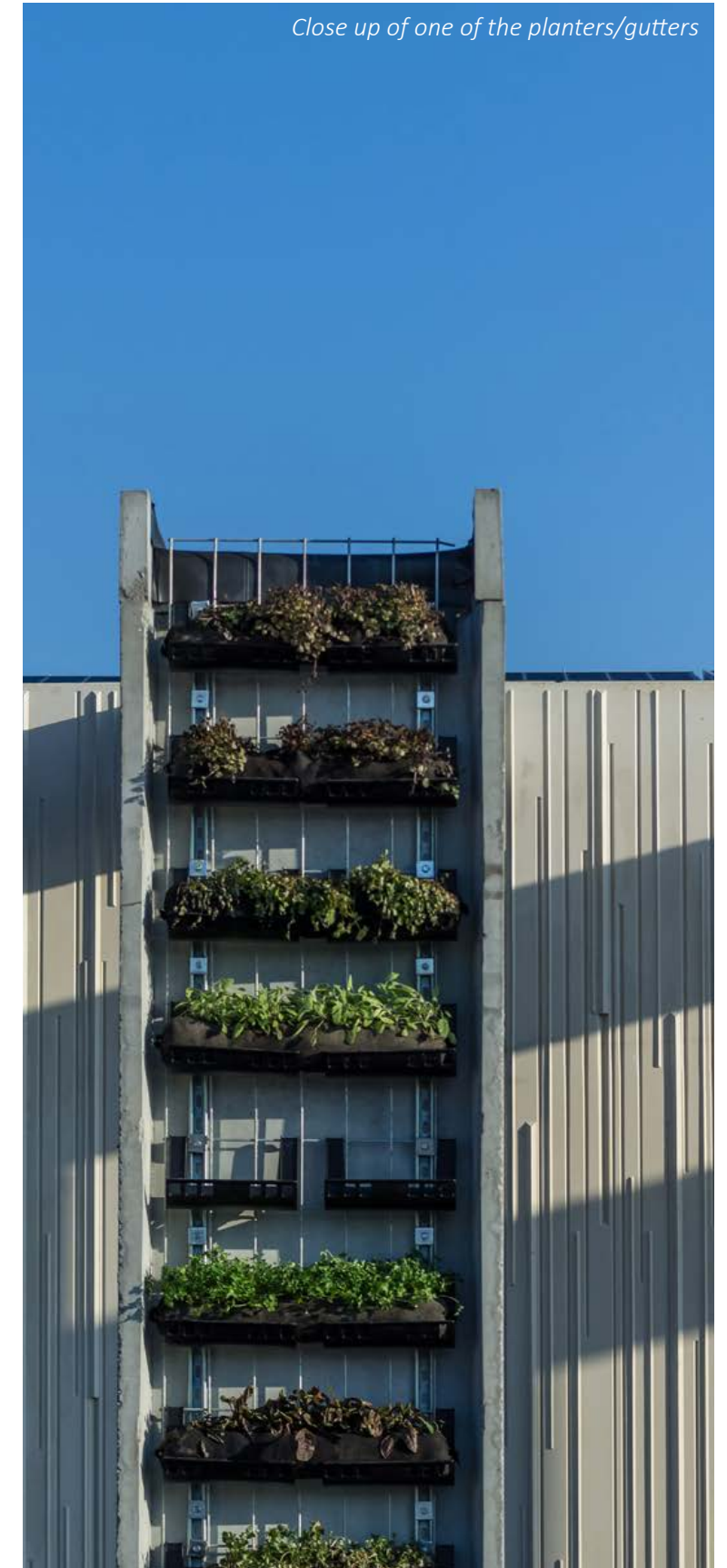


The Precast concrete elements had to be designed with transportation in mind. These large elements needed to be shipped on semi trucks from St. Louis to Denver and then shipped back once the competition was done. The above construction sequence helped us plan the logistics of moving the massive panels and core elements and to communicate the assembly process with the construction crew on site.



Wall section shows the composition of sandwich panels

Close up of one of the planters/gutters





Final built project
Photograph by Nitish Bhat



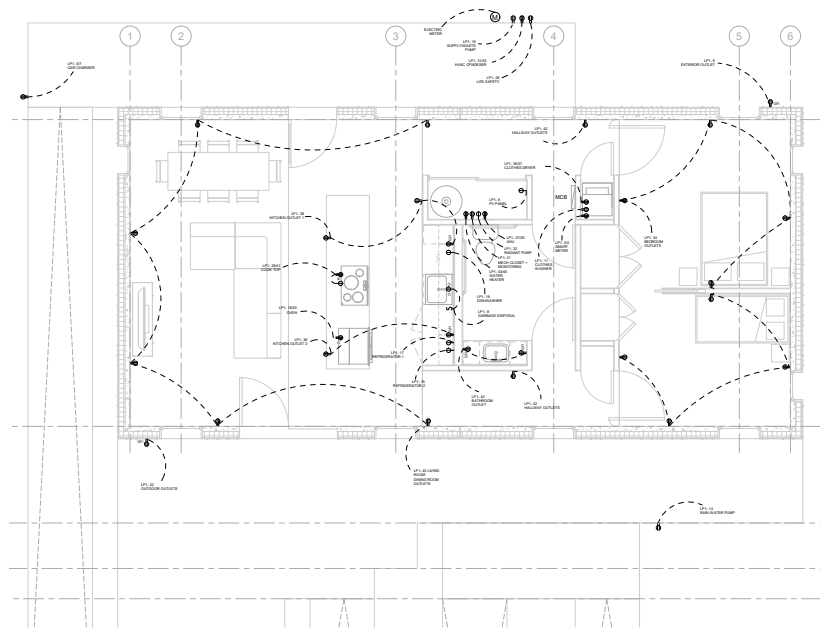
Kitchen area (Day)



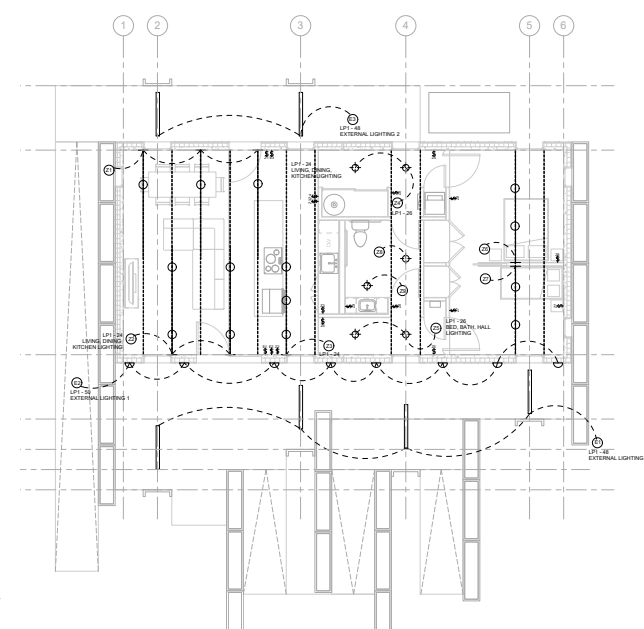
Kitchen area (Night)



Porch/Deck area (Night)



Electrical layout



Lighting layout



Porch/Deck area showing exit ramp



Living/Dinning area



Fall 2014 | Professional Work
Fluidspace Architects

Quasitum Documentation

Documentation and presentation of
finished project

Autocad | Sketchup | V-Ray
Photoshop | Illustrator

Quasitum is a state of the art office building for IT companies, constructed in Bengaluru, India. It was designed to meet high green building standards using concrete and porotherm bricks. The envelope also uses engineered sunshades to cut down on heat gain, while providing sufficient natural lighting to its open floor plates.

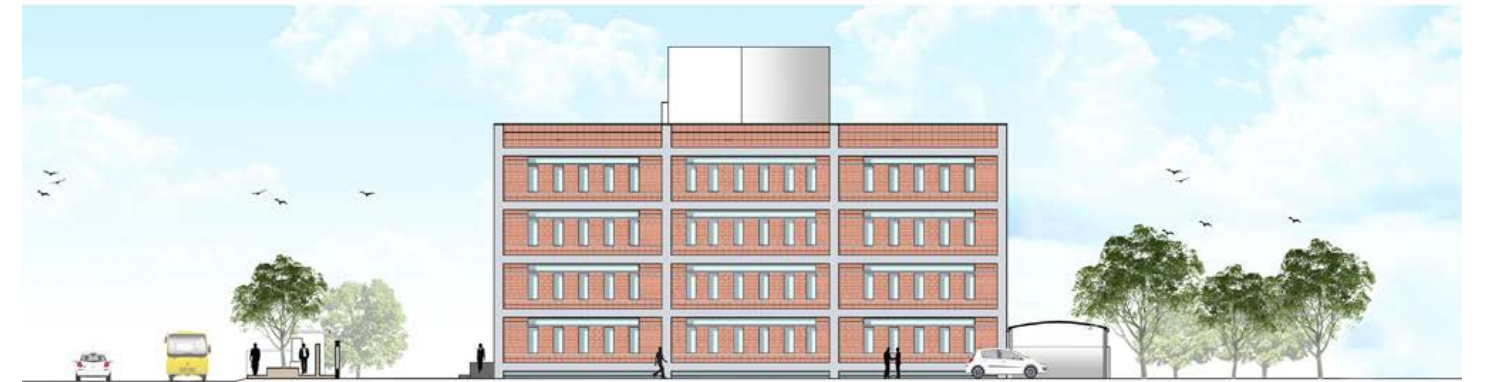
A year after the project was completed, the firm decided to enter the project in the Wienerberger brick competition. As part of the final presentation, I had to photograph, make diagrams, renderings and 3D models.



Photograph by Nitish Bhat



North side Elevation



West side Elevation



South side Elevation



East side Elevation

Spring 2014 | Professional Work
Hegde and Hegde Architects

Among the Mangoes

Farmhouse project inside mango
plantation

Autocad | Sketchup | Lumion
Photoshop | Illustrator

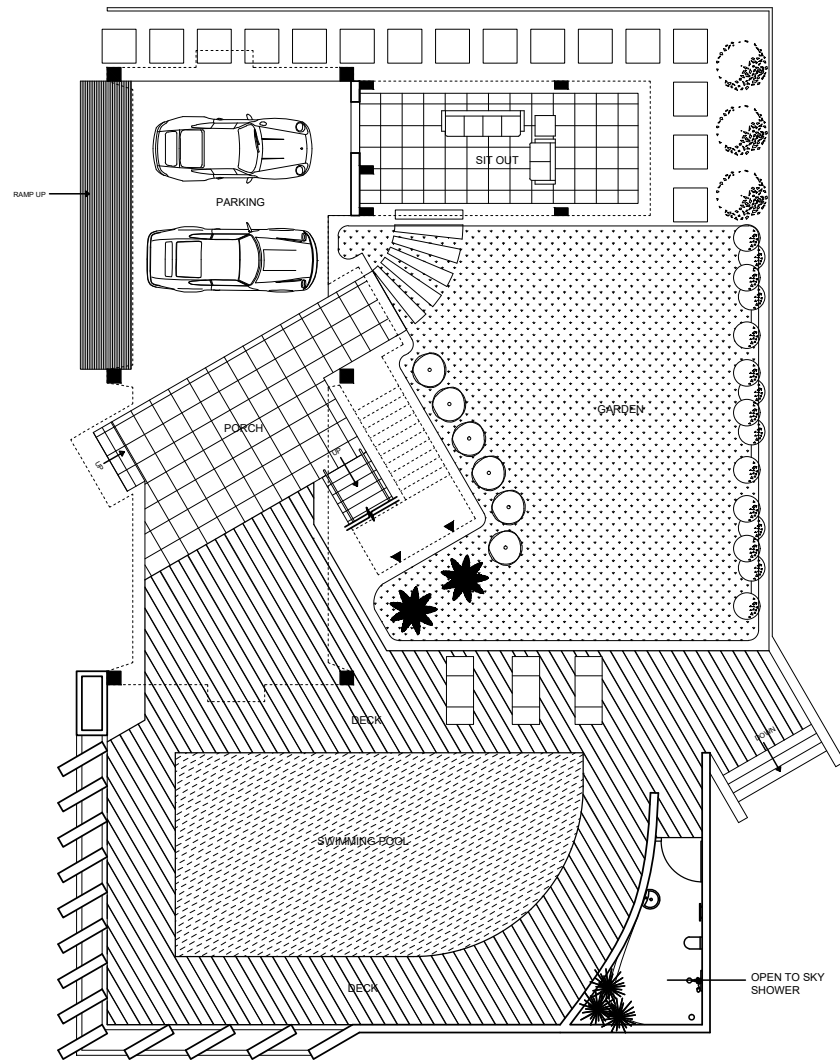


The site is located in the middle of a lush mango plantation on the outskirts of Dharwad. The client wanted a panoramic view from above the tree tops from his farm house. Hence, the living spaces are elevated above the treetops on columns, leaving space for parking and auxiliary programs.

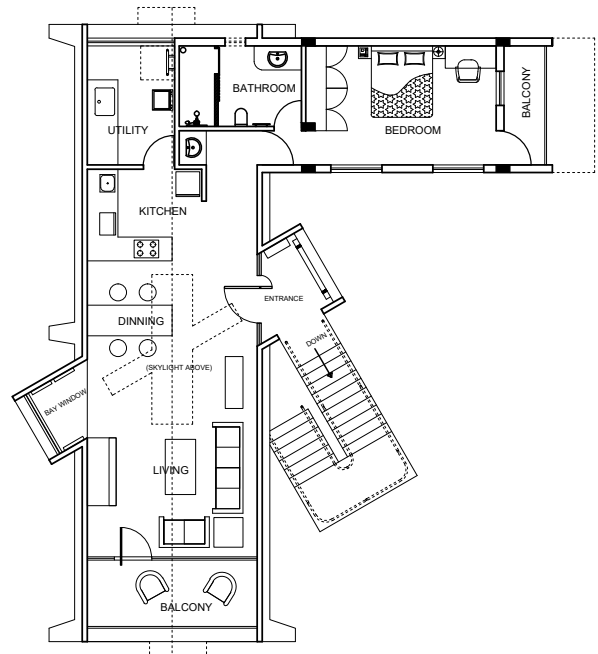
The form of the building comes from two intersecting triangular tubes. The steep slope of the roof ensures a large usable area in a triangular form, while allowing for a high ceiling which helps keep the room cool. The smaller of the two triangular tubes creates a reading nook on the eastern side, which can be used to watch the sun rise above the canopy.

The living room overlooks the pool and the plantation beyond. An open to sky shower area is blended seamlessly with the curvature of the compound wall.





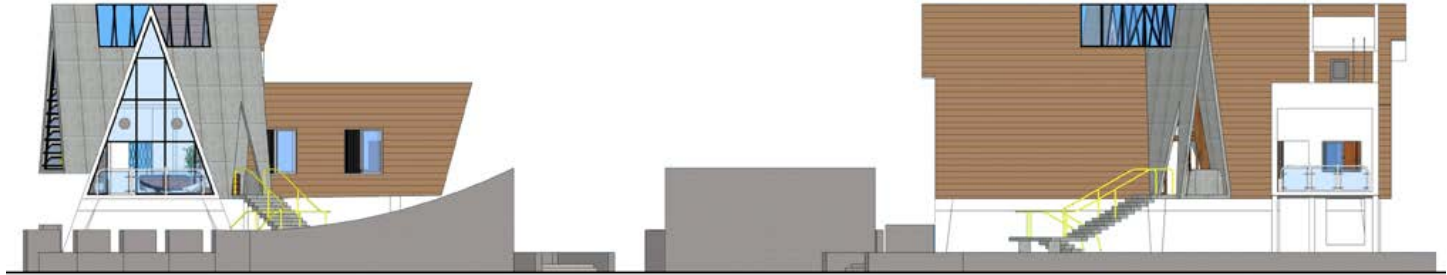
First floor plan



Second floor plan

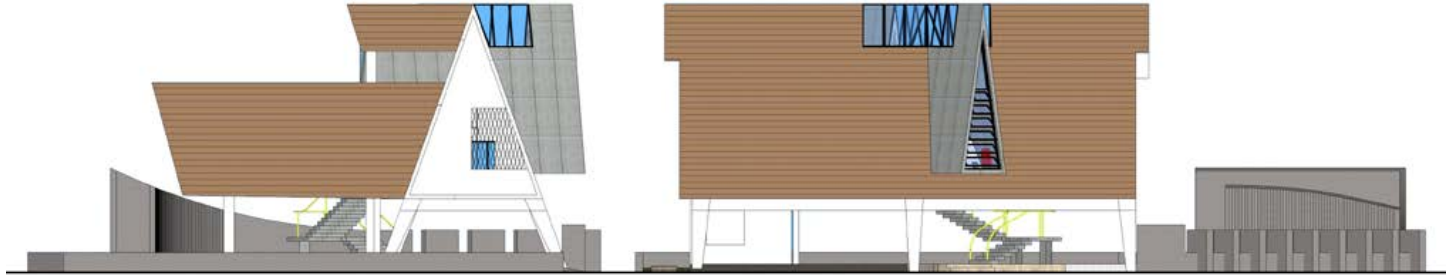


View inside living room looking south



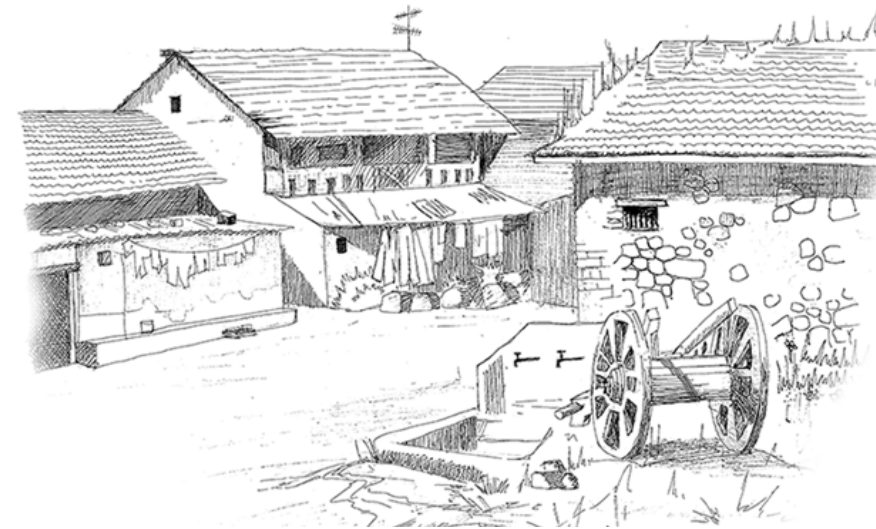
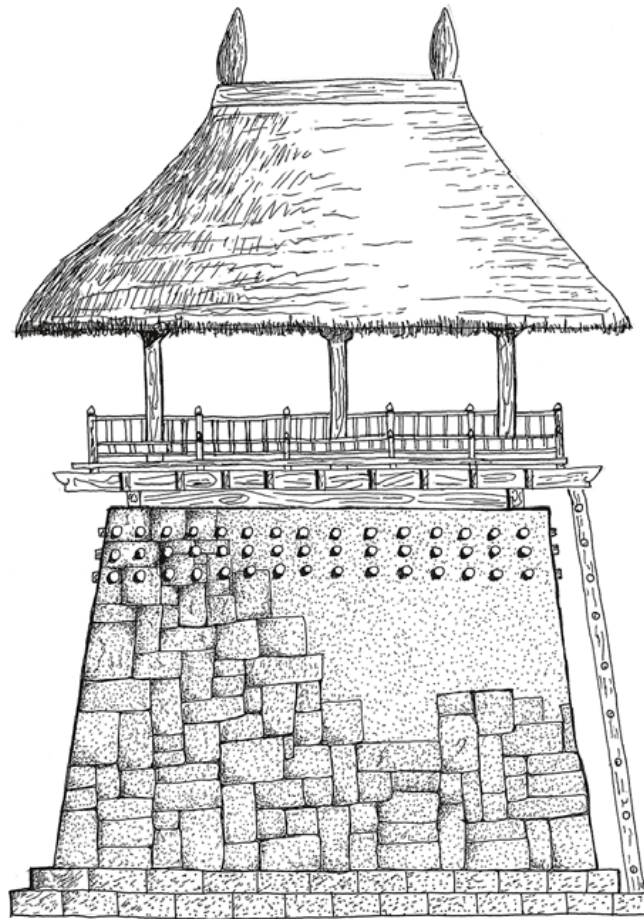
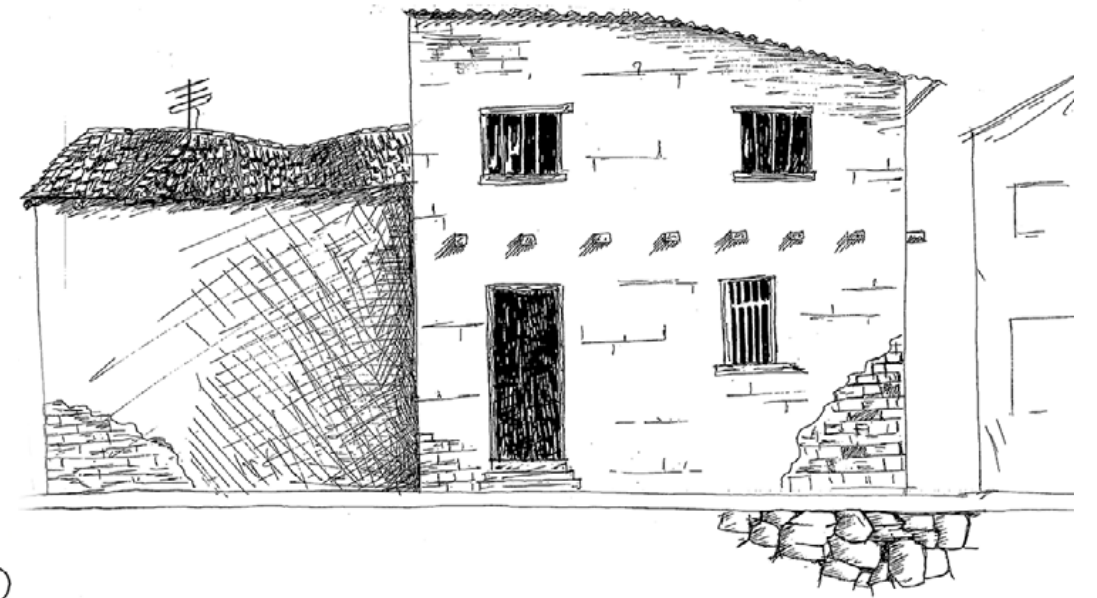
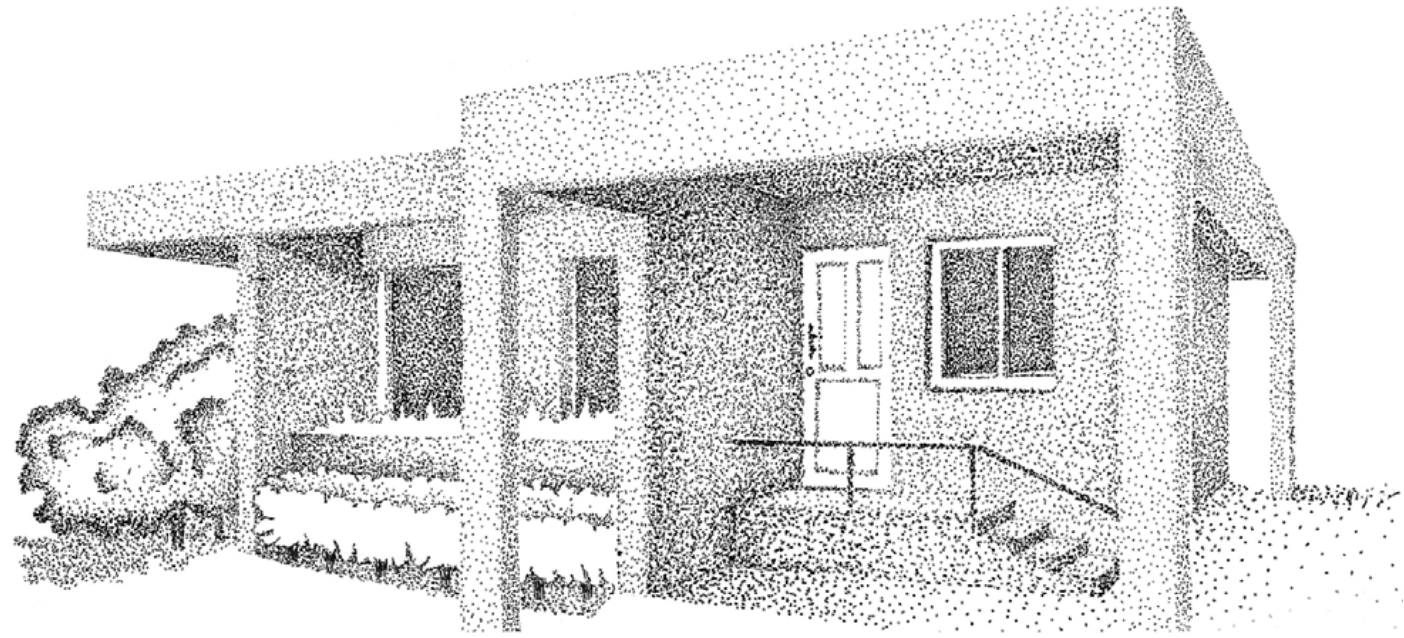
North Elevation

West Elevation



South Elevation

East Elevation





Photography





For more information please visit:

Website:

nitishbhat.wixsite.com/portfolio

LinkedIn:

[linkedin.com/in/nitish-bhat](https://www.linkedin.com/in/nitish-bhat)

Photography on 500px:

[500px.com/nitishbhat](https://www.500px.com/nitishbhat)