

Portfolio

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Bachelor of Architecture University of Oklahoma

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Perspective

Identity HOTEL

Medicine Park, OK | Studio VI

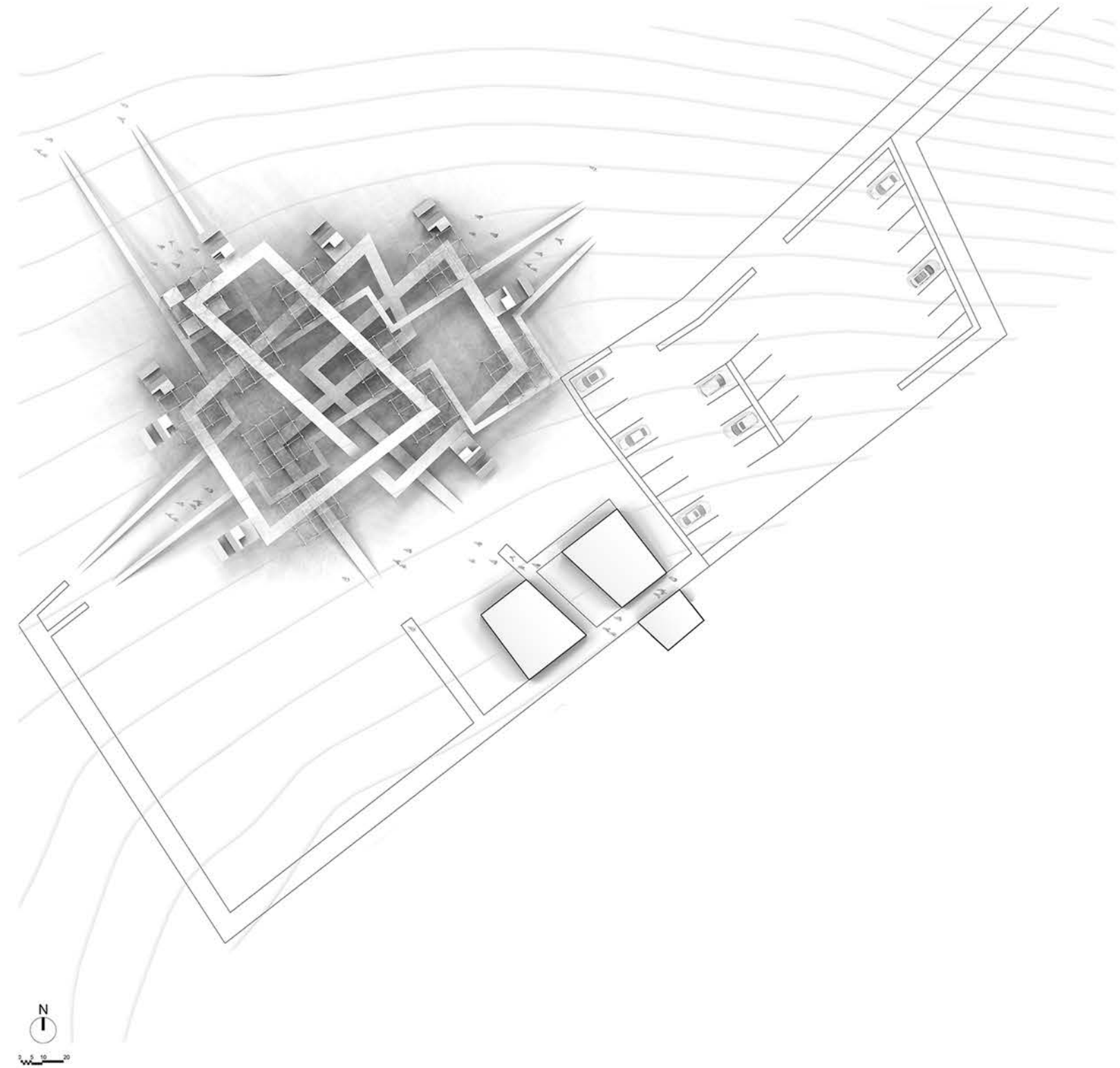
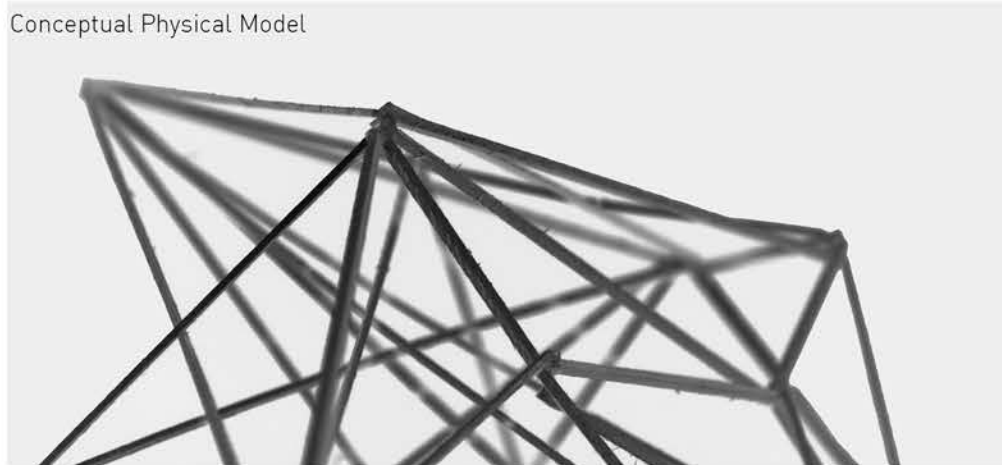
With Medicine Park being a major destination for mountain bikers, the design aims to implement this activity into the town's identity. According to locals, the only way Medicine Park can thrive is through tourism. The people hope their town can attract visitors all year round. Therefore, an eco-resort at Medicine Park is a perfect opportunity to fulfill the town's vision.

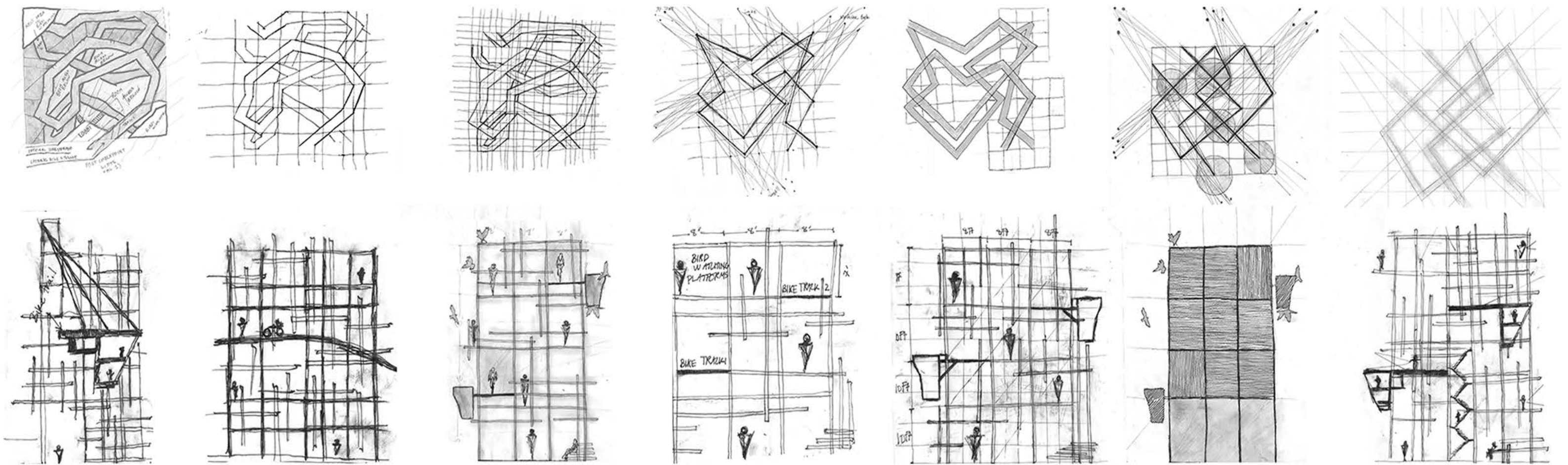
With a mountain bike influenced eco-resort, Medicine Park has the chance of becoming a major southern tourist hub in the future. To generate a mountain bike concept, one must evaluate what makes mountain biking unique and arguably more experiential than road cycling. Mountain bikes are made to handle terrain obstacles and adapt to adversity. This feeling of unpredictability within the sport is reflected in the personalities of those who perform it. Mountain bikers prefer a slower and paced adventurous route.

With unpredictability being a key factor, the design engages a sense of suspense and mystery. Instead of walking to their room, the people staying at the resort would ride their bikes to their rooms. Distinct and interweaving pedestrian and bike paths create two overlapping loops which are designed in correspondence to the natural views and landmarks around them.

The verticality of the towers resembles the dominant presence of mountains in Oklahoma. With the land being so flat in Oklahoma, mountains, despite being relatively modest in height, are visible from a long way out. The towers, despite having structural qualities which suspend the loops, are also programmatic. Activities within the towers range from bird-watching to framing market spaces.

Conceptual Physical Model

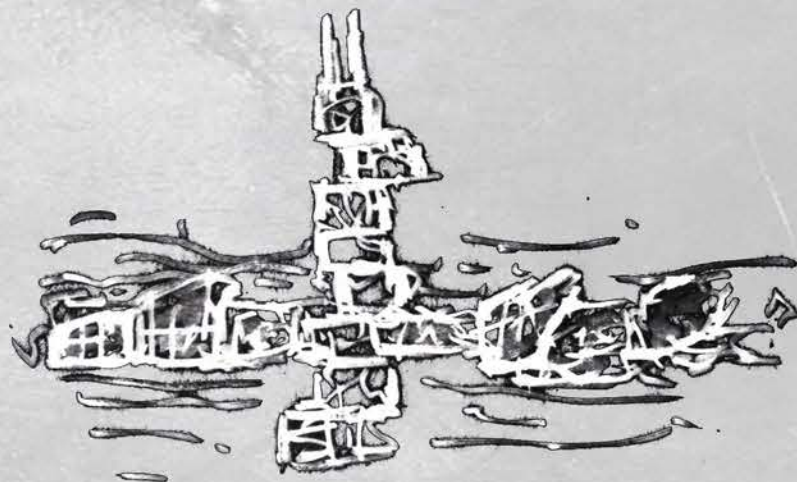




Elevation



Initial Process Sketches: Structured Chaos Exploration



Urban Collage as an Experiential Precedent: Pictures taken in Beirut



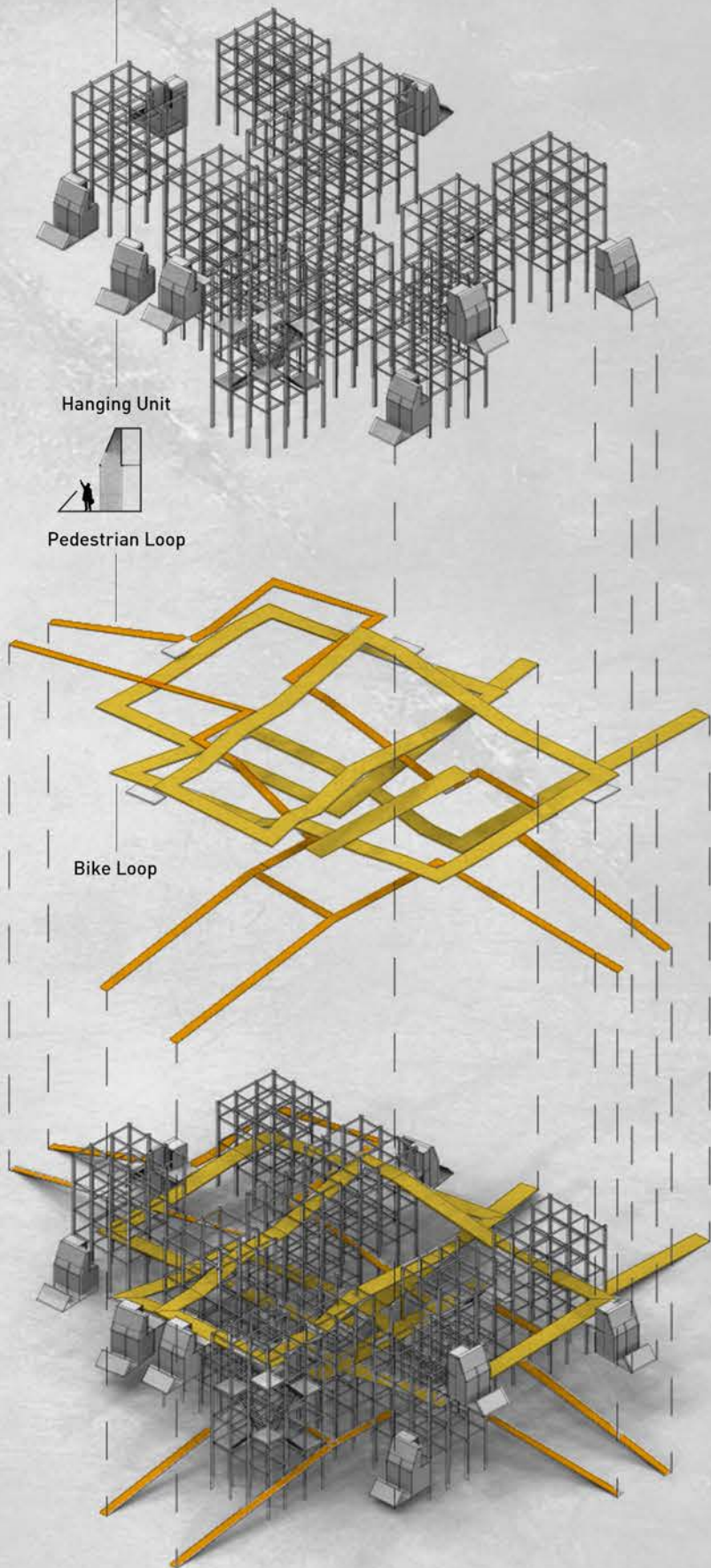
Programmatic Tower

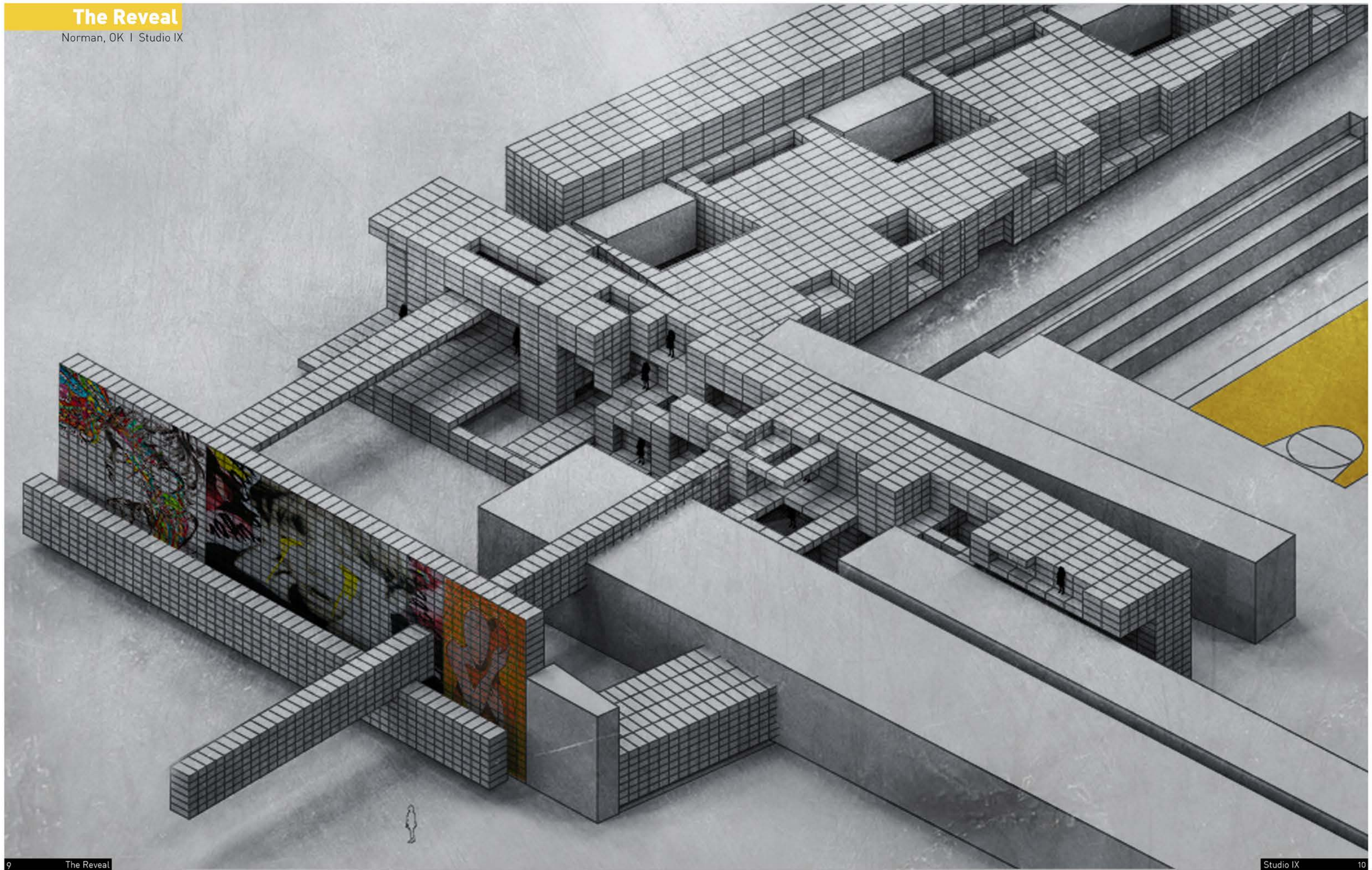
Hanging Unit



Pedestrian Loop

Bike Loop





The Reveal

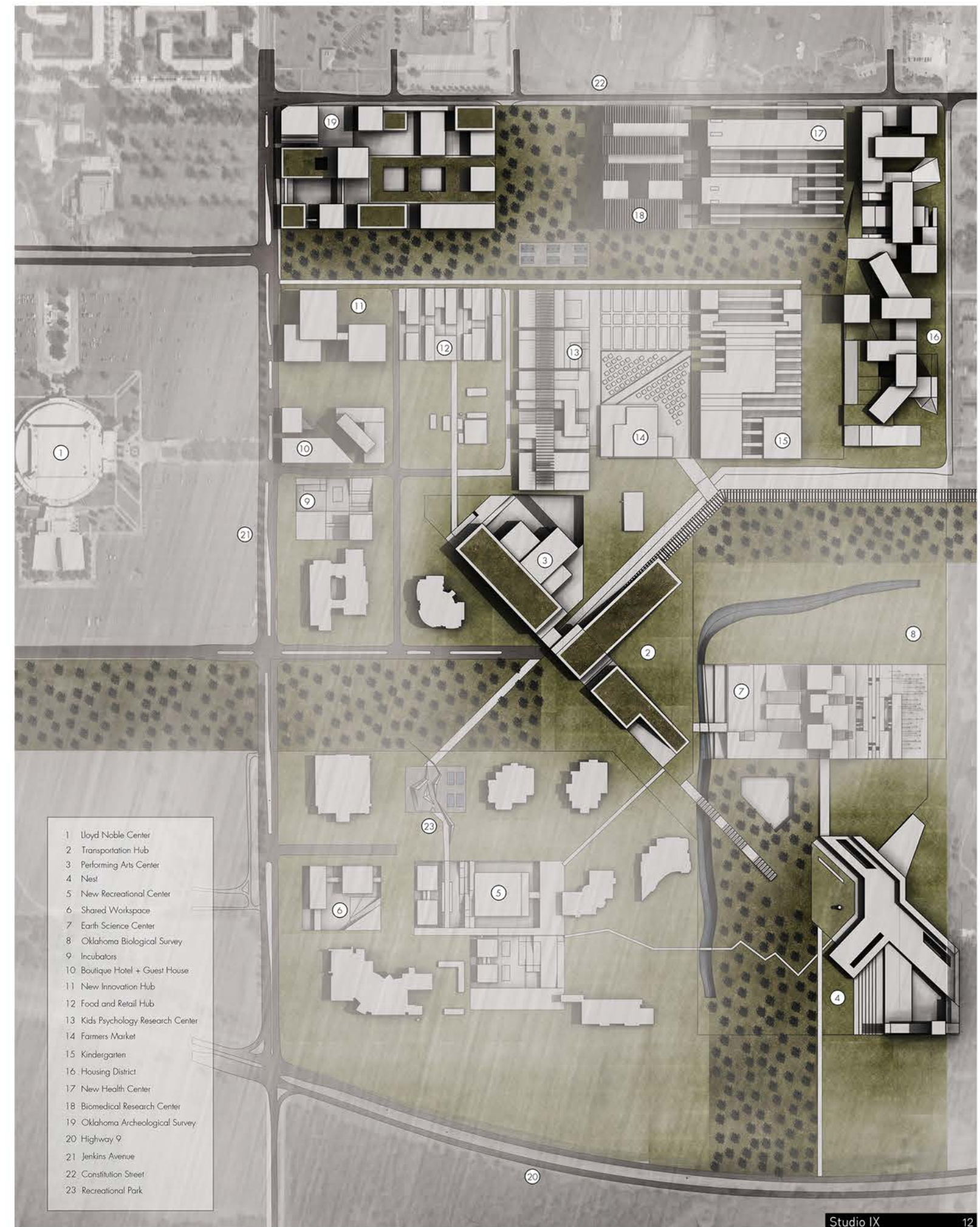
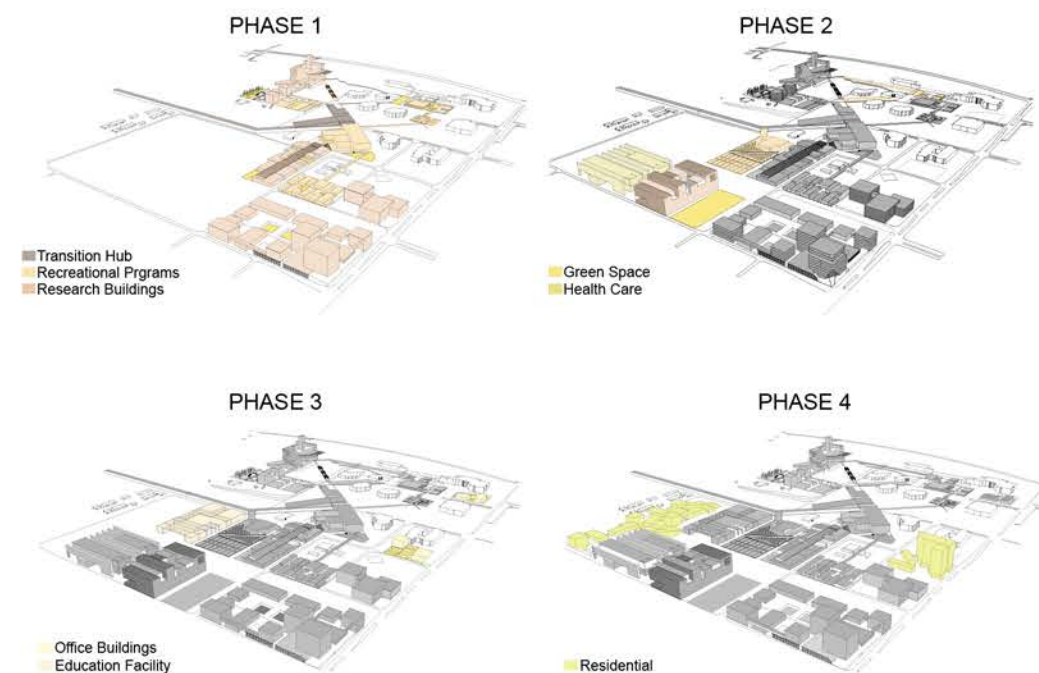
Norman, Oklahoma | Studio IX

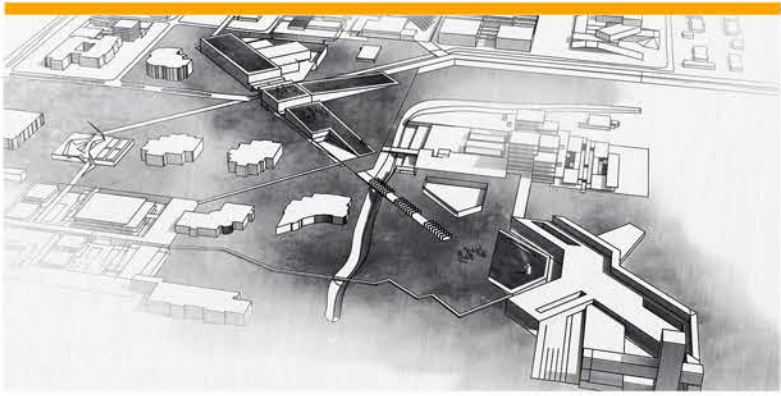
South Campus as it stands has a fog of misunderstanding looming over it, barring users from discovering the possibilities that could be revealed with a little exploration. The new design of "the Reveal", allows for the potential of this exploration and new experiences to unfurl. Connecting different building uses through green pathways, this revitalization of South Campus encourages users to explore their surroundings slowly, as someone who is lost in the fog would, to better understand their surroundings.

The overlapping layers of use create opportunities for people to come together and inspiring new possibilities of collaboration. While research is the focus of development, housing, eating, and recreation are the next level of importance of development. Having the option for the researchers to have all their needs within a confined area, to where they could live across the street from where they are conducting innovative research in their field, having a greengrocer for healthy eating options nearby so vehicular travel is unnecessary, and recreation options to see nature and have a moment of rest.

To reach to more than just one people demographic, however, this redesign is proposing the implementation of schooling options from daycare to elementary level school kids to cater to those with families and foster more levels of overlap in users. Utilizing the greenspace to its full potential of being not only a natural buffer between the different occupancy types, but also as a meandering circulation opportunity for the people who visit the site to become fully lost and lead throughout the site.

To solidify the connection to the surrounding context, the new plan proposes a transit hub that has the opportunity for a bus hub and a light-rail train stop for people to go towards OKC. The light rail and the bus hub provide users of the site with a range of options on how far away they want or need to travel, as well as providing opportunity for alternative travel solutions to driving to help reduce emissions from vehicles.





A new hotel and conference spaces gives the university a new location to host major conferences and scale up global research. It is located near transit, food, and the arts.

Existing offices become centered around food and activity centers to draw in the community and incubate startups and an entrepreneurial atmosphere.

Computing and software development is located next to green space and quick food access to promote a productive, diverse work environment.

Developmental research is located next to the community gardens, school and daycare.

Existing weather and engineering research buildings become part of a new, diverse community.

The NEST is bermed behind the landscape to deaden sound and provide a beautiful setting for this groundbreaking facility, but has urban connections to the weather center, transit, and environmental research quads.

Combined small shopping and local small eating spots center computing, health, and development engineering and research.

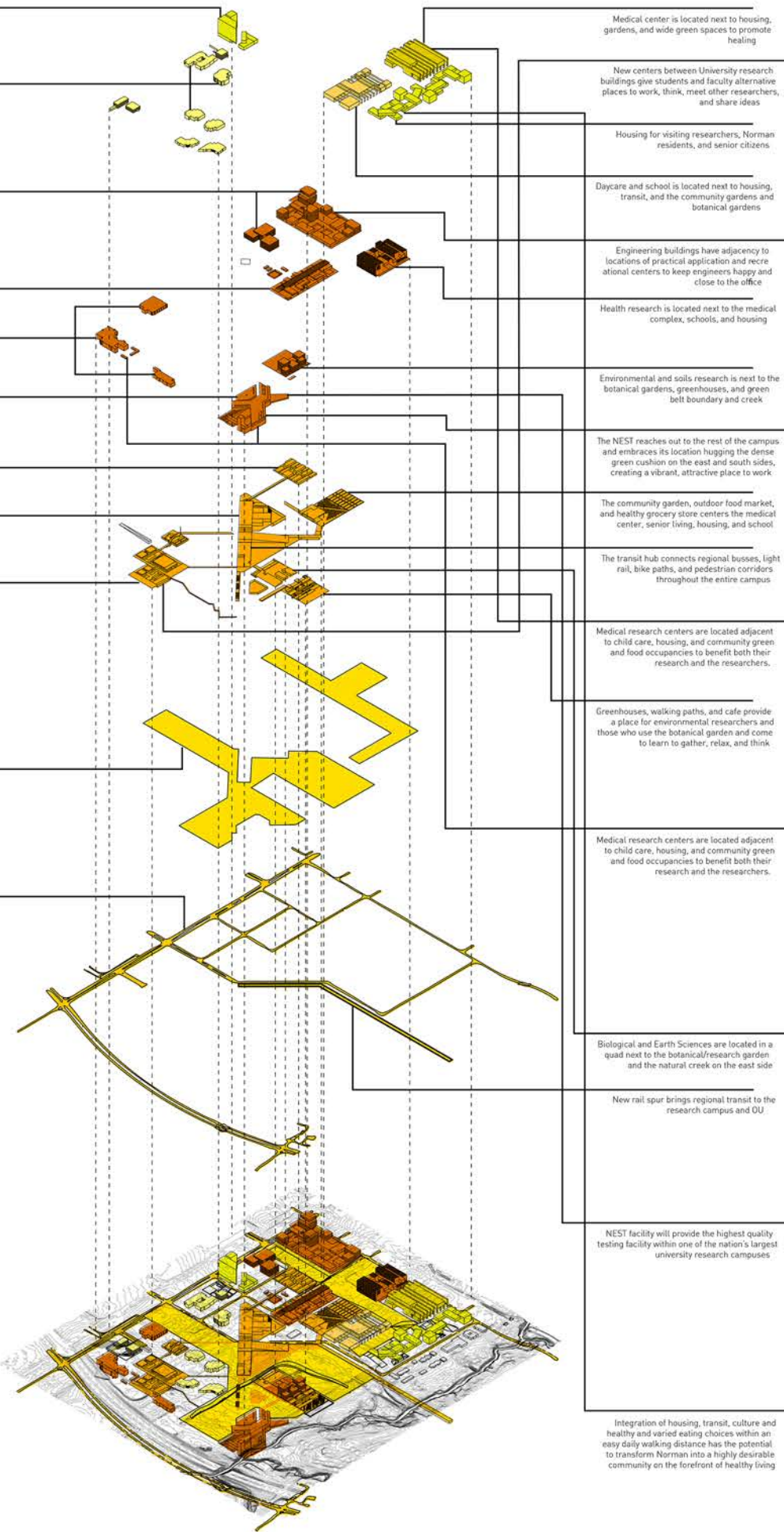
New performing arts complex culturally centers the entire campus, uniting the university and the community through the shared experience of the arts.

Skate park, tennis courts, central park recreational complex, and small cafe network replace the expansive parking lot and draw people out of the weather center and offices and into the community, expanding the use of the existing buildings. New underground parking discreetly tucks vehicles away.

Green spaces interlocking with program areas connect the campus to natural vistas bordering the campus and define edge and district conditions.

Car traffic is rerouted to peripheral streets to centralize pedestrian pathways. A central street provides regional and educational bus access.

- EDUCATION
- HOUSING
- OFFICE
- HEALTH
- RESEARCH
- RECREATION
- GREEN SPACE
- ROADS



Medical center is located next to housing, gardens, and wide green spaces to promote healing.

New centers between University research buildings give students and faculty alternative places to work, think, meet other researchers, and share ideas.

Housing for visiting researchers, Norman residents, and senior citizens.

Daycare and school is located next to housing, transit, and the community gardens and botanical gardens.

Engineering buildings have adjacency to locations of practical application and recreational centers to keep engineers happy and close to the office.

Health research is located next to the medical complex, schools, and housing.

Environmental and soils research is next to the botanical gardens, greenhouses, and green belt boundary and creek.

The NEST reaches out to the rest of the campus and embraces its location hugging the dense green cushion on the east and south sides, creating a vibrant, attractive place to work.

The community garden, outdoor food market, and healthy grocery store centers the medical center, senior living, housing, and school.

The transit hub connects regional busses, light rail, bike paths, and pedestrian corridors throughout the entire campus.

Medical research centers are located adjacent to child care, housing, and community green and food occupancies to benefit both their research and the researchers.

Greenhouses, walking paths, and cafe provide a place for environmental researchers and those who use the botanical garden and come to learn to gather, relax, and think.

Medical research centers are located adjacent to child care, housing, and community green and food occupancies to benefit both their research and the researchers.

Biological and Earth Sciences are located in a quad next to the botanical research garden and the natural creek on the east side.

New rail spur brings regional transit to the research campus and OU.

NEST facility will provide the highest quality testing facility within one of the nation's largest university research campuses.

Integration of housing, transit, culture and healthy and varied eating choices within an easy daily walking distance has the potential to transform Norman into a highly desirable community on the forefront of healthy living.



GRADUATE STUDENT
"The new south campus is so much more accommodating to graduate students, providing better opportunities for not just research but providing housing and recreation options as well."



SOFTWARE DEVELOPERS
"The University's new South Campus has great opportunities for software developers with their new research building, as well as any creatively needed to where you do not even have to leave, everything is just right around the corner."



AEROSPACE (BOEING)
"With the new testing facility and possible office buildings, there is no other research campus in the US more suited for Boeing to lay down new roots to further research and development."



MEDICAL RESEARCHERS
"The University of Oklahoma's new Medical research building and medical program is top notch and presents a great opportunity for any researcher in this field."



WEATHER RESEARCHERS
"With this University housing the National Weather Center there is no other place to do cutting edge research like that being done here, and it presents opportunities that cannot be found anywhere else."



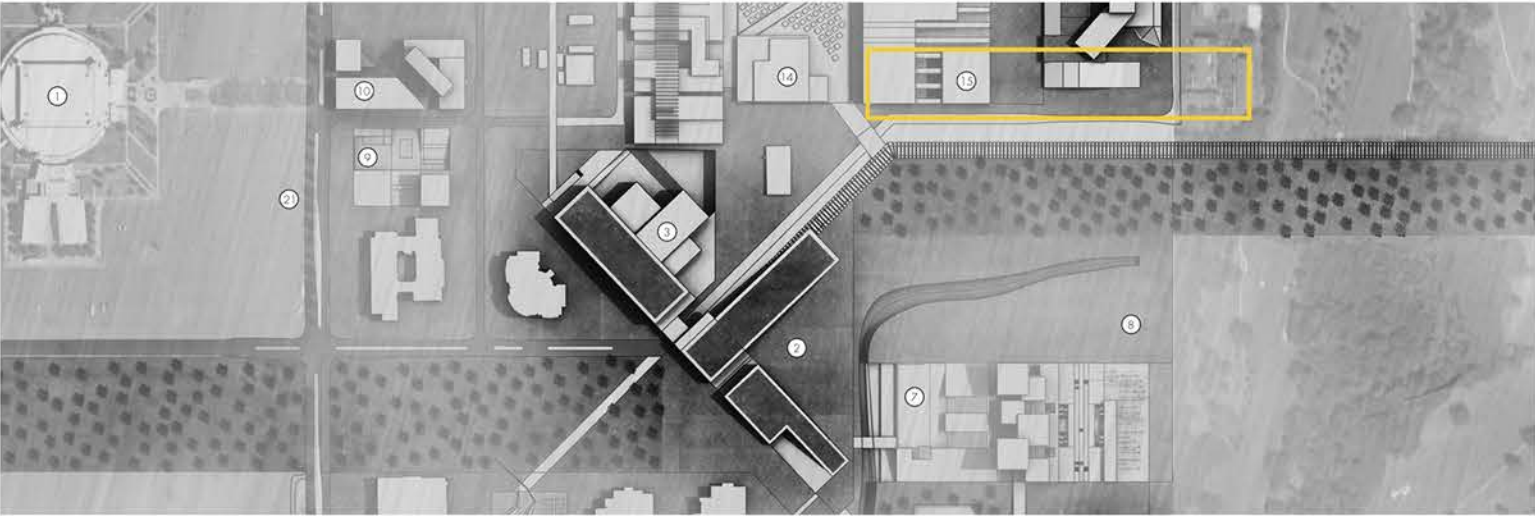
ENVIRONMENTAL RESEARCHERS
"Having our research labs in such close connection to so many similar fields of research provides great opportunities for overlap in the various sciences and for new discoveries to be made."



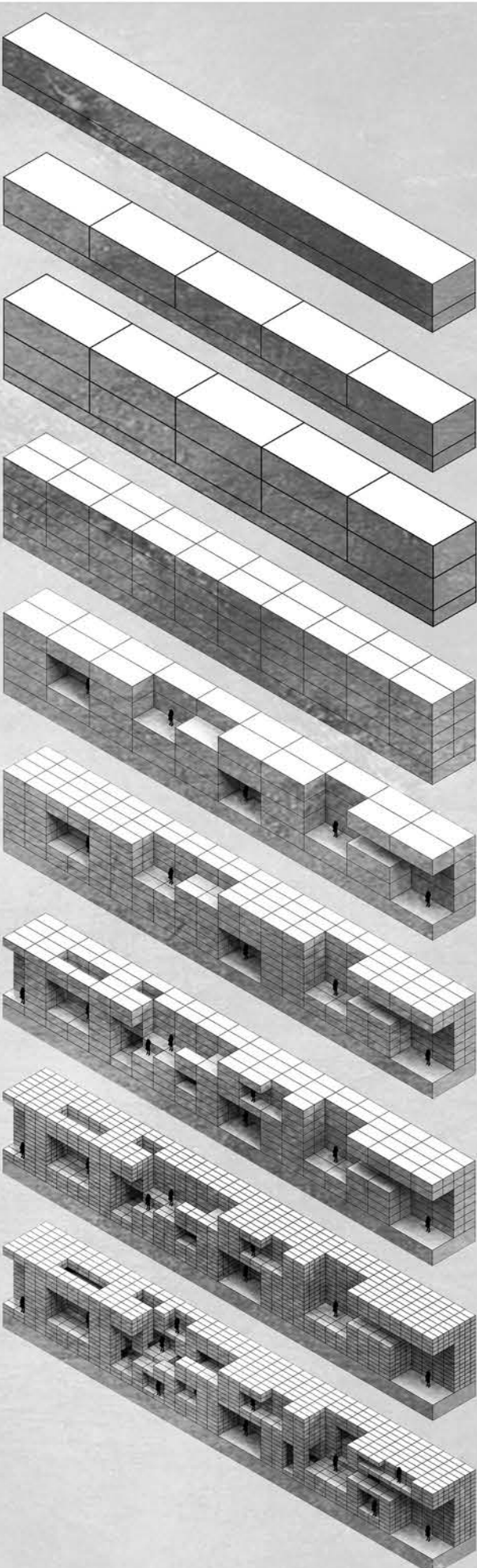
MILITARY
"With the site's rich history with the military, the return of housing and life to this area pays homage and respects what it used to be in the 1940's."

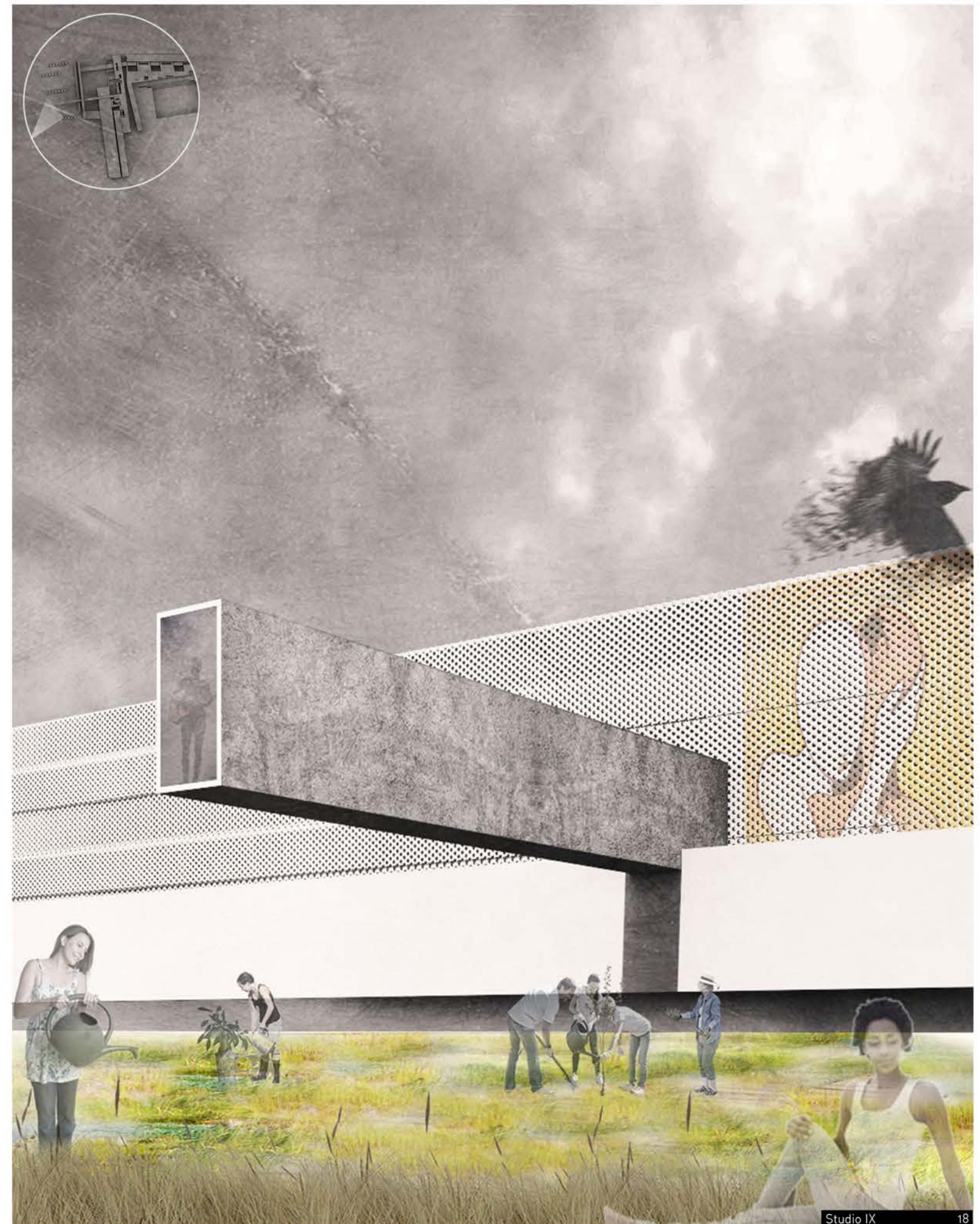
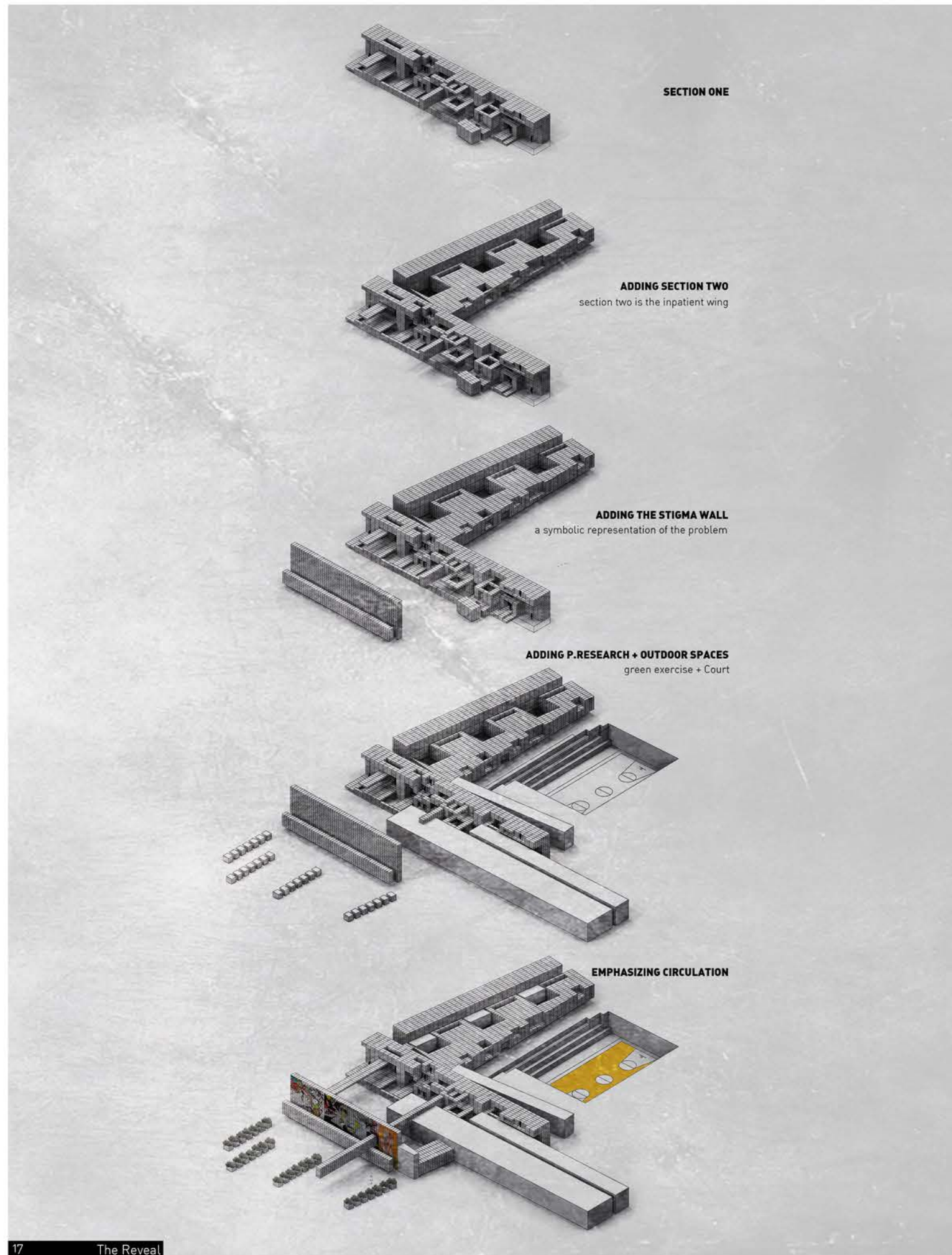


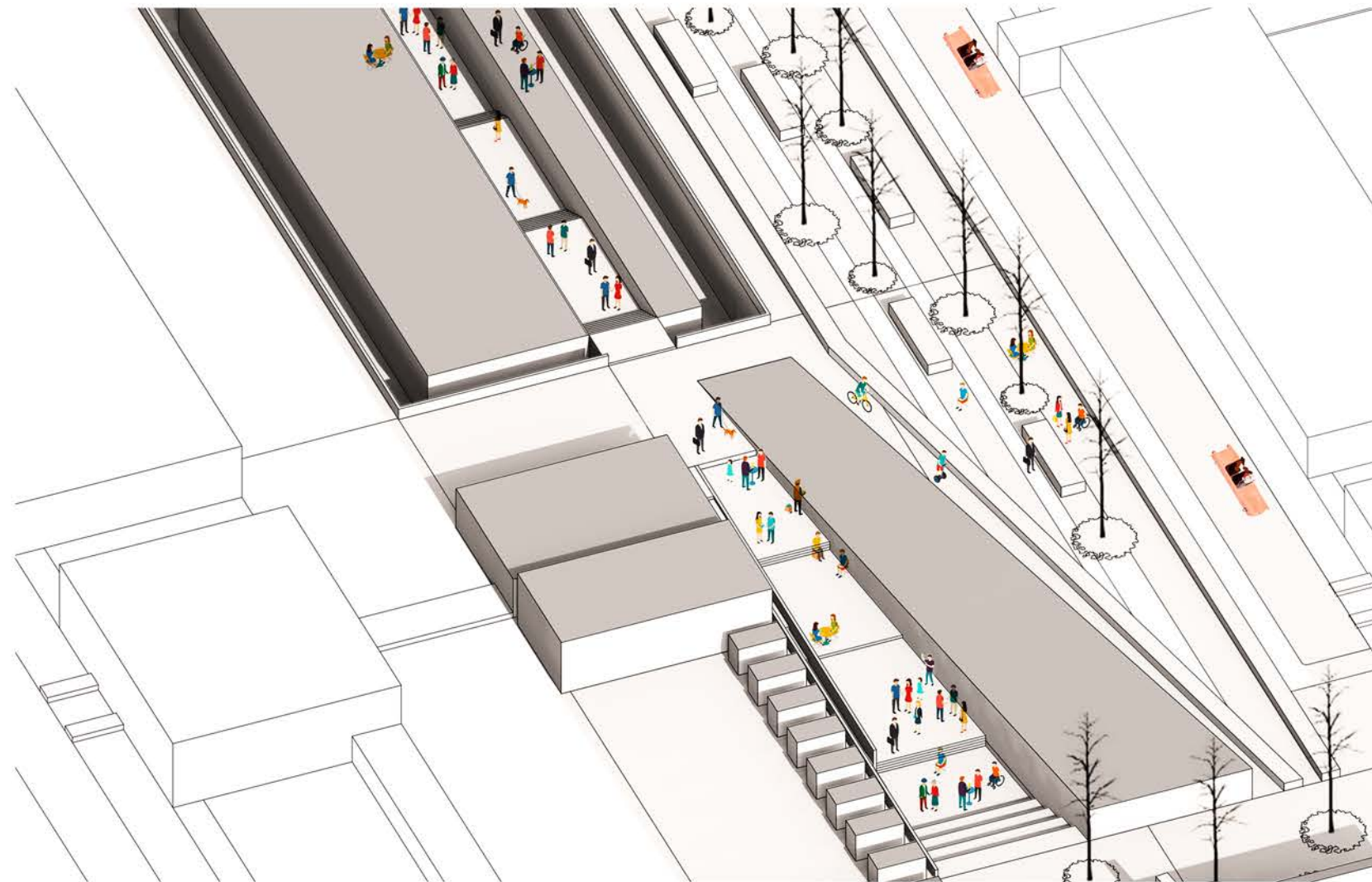
FAMILIES, CHILDREN, & ELDERLY
"With so many different recreational areas, in addition to the new school at daycare, this is very much a family friendly area that is full of life and surprises to explore."



Picking a Focus
Mental Health Program Exploration
Following the masterplan phase, the task was to pick a site where a desired program would be developed. .





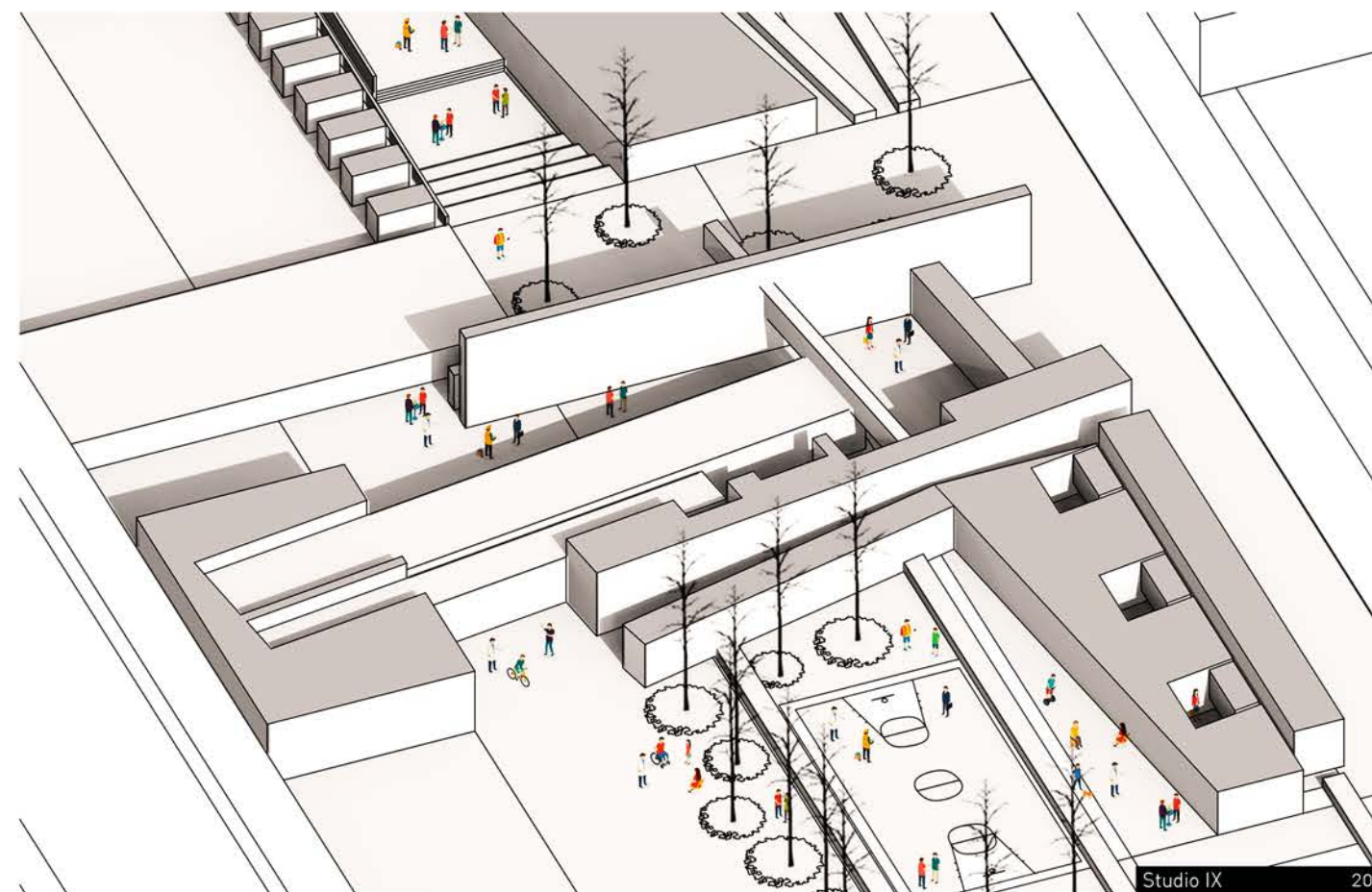


OU Behavioral Health Community Center

Mental health stigma takes the form of two distinct types: social and perceived. Social stigma constitutes the prejudicial attitudes and discriminating behavior directed towards individuals dealing with mental health problems. The psychiatric label these people are given creates an invisible barrier between the "patient" and society. In contrast, self-stigma (perceived) is the interiorizing of discrimination and self-perception by the mental health sufferer. Self-stigma results in feelings of shame and undesirable and dishonest treatment outcomes. Regardless of the type of stigma, the main factor fostering such stigmas remains attitudes within societies which view psychiatry as menacing and something which we must keep isolated.

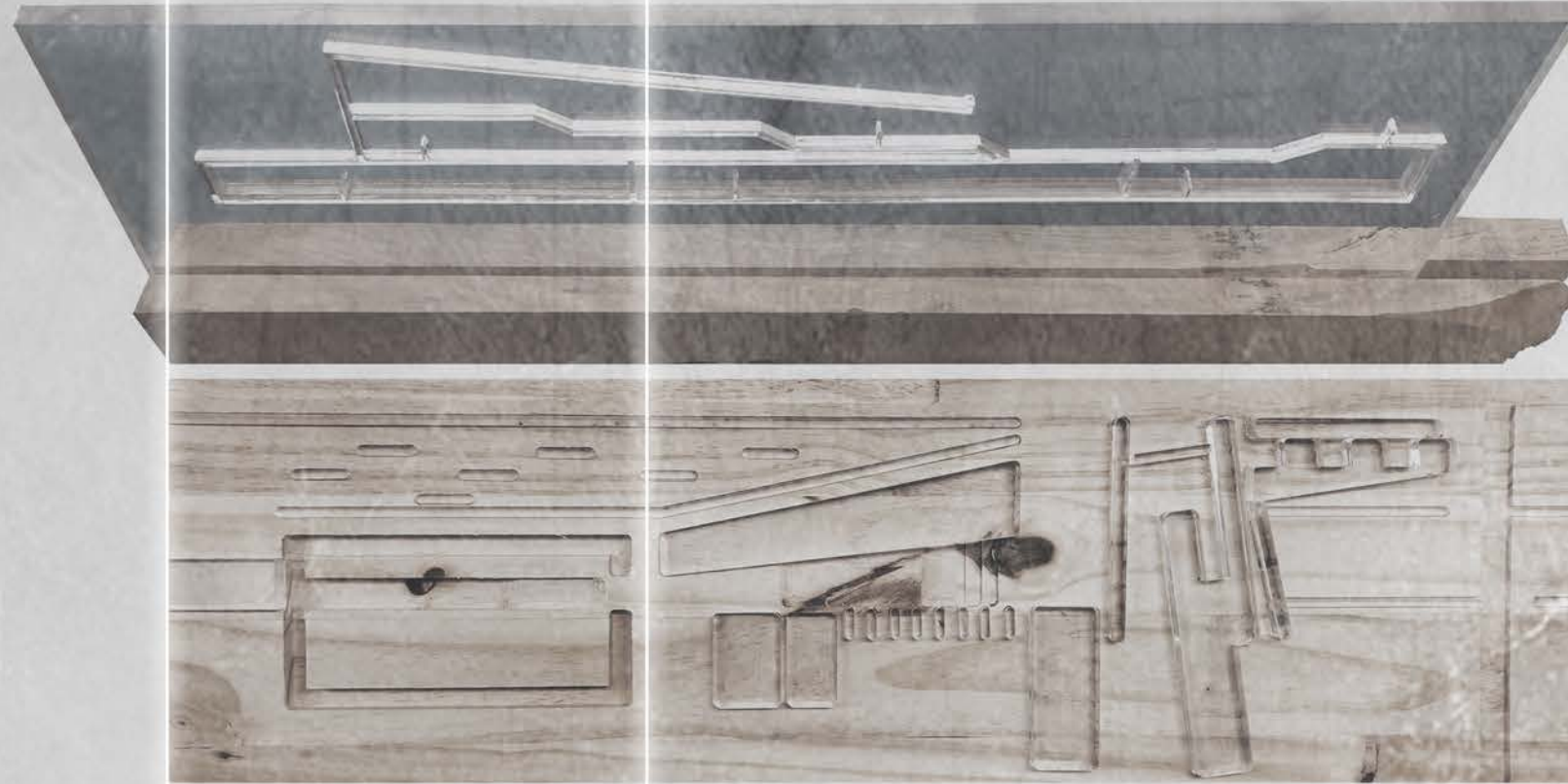
A new university research campus seems like the appropriate platform for an intervention which would shatter the stigma walls surrounding mental health. The intervention would provide community members with the right tools which will help them play a meaningful role in overcoming mental health stigma.

The site's orthogonal grid is broken by the geometry of the inpatient wing. This break in geometry resembles the sense of urgency required to break the mental health stigma. the geometric twist can be seen as an outcry by the inpatient wing, one which requires change through a shock. This twist on the site creates a "crack," a literal and metaphorical one. On site, the crack is a sequence of spaces running in the east/west direction and linking the different parts of the overall system. The crack incorporates recreational and communal spaces which could potentially be where inpatients interact with the community. For example, inpatients who reach a sustainably healthy state and feel ready to leave their facility can inhabit the crack and interact with the community by selling food they grow themselves as part of their green exercise program.



Section Cut

Section Model



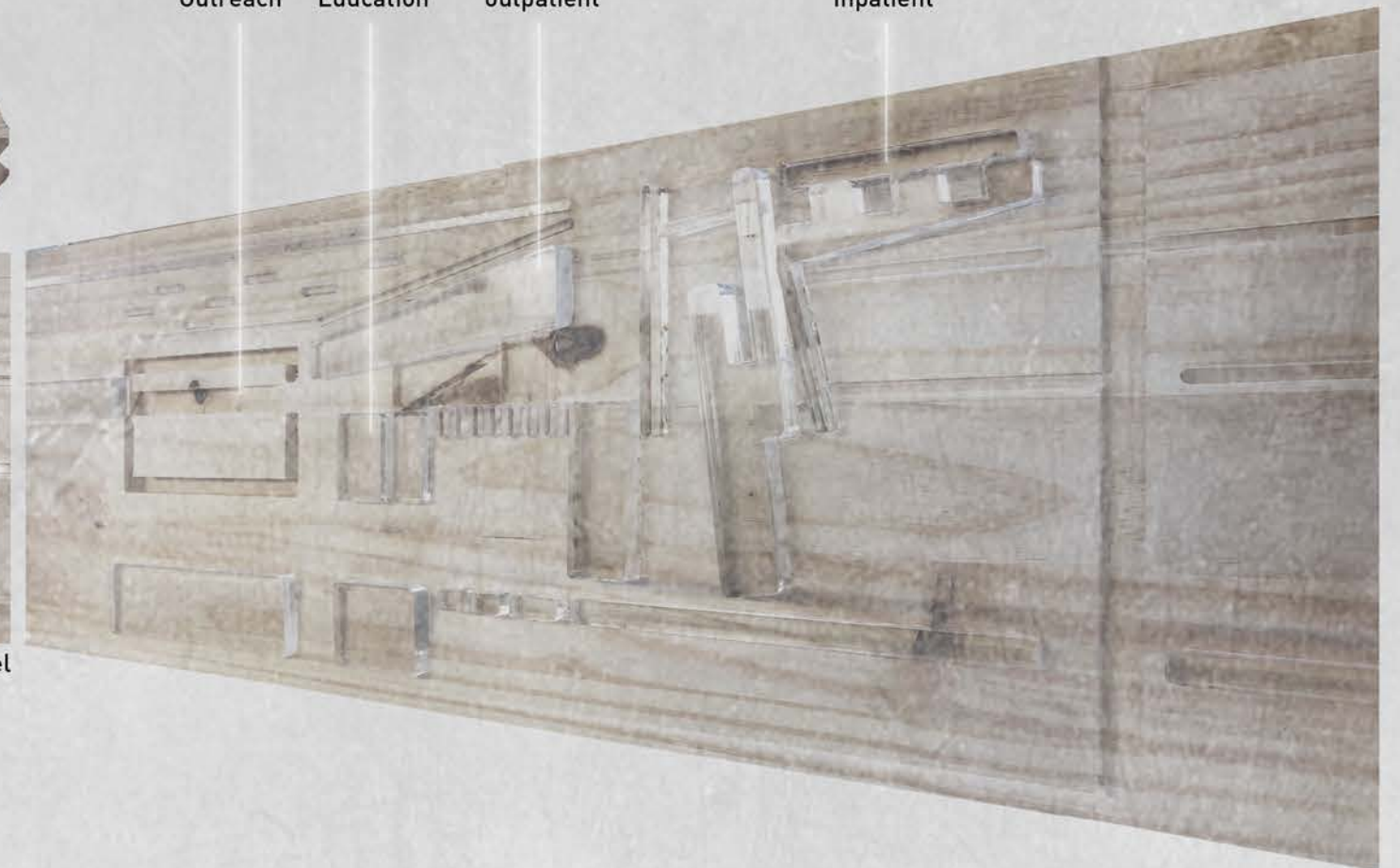
Mental Health Ribbon Massing Model

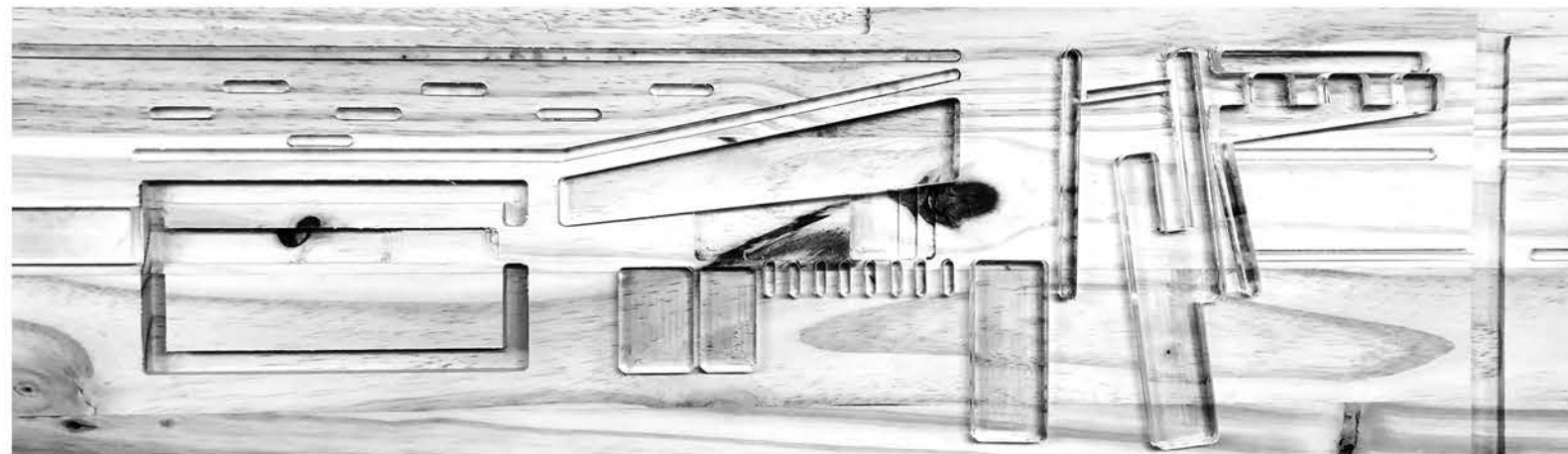
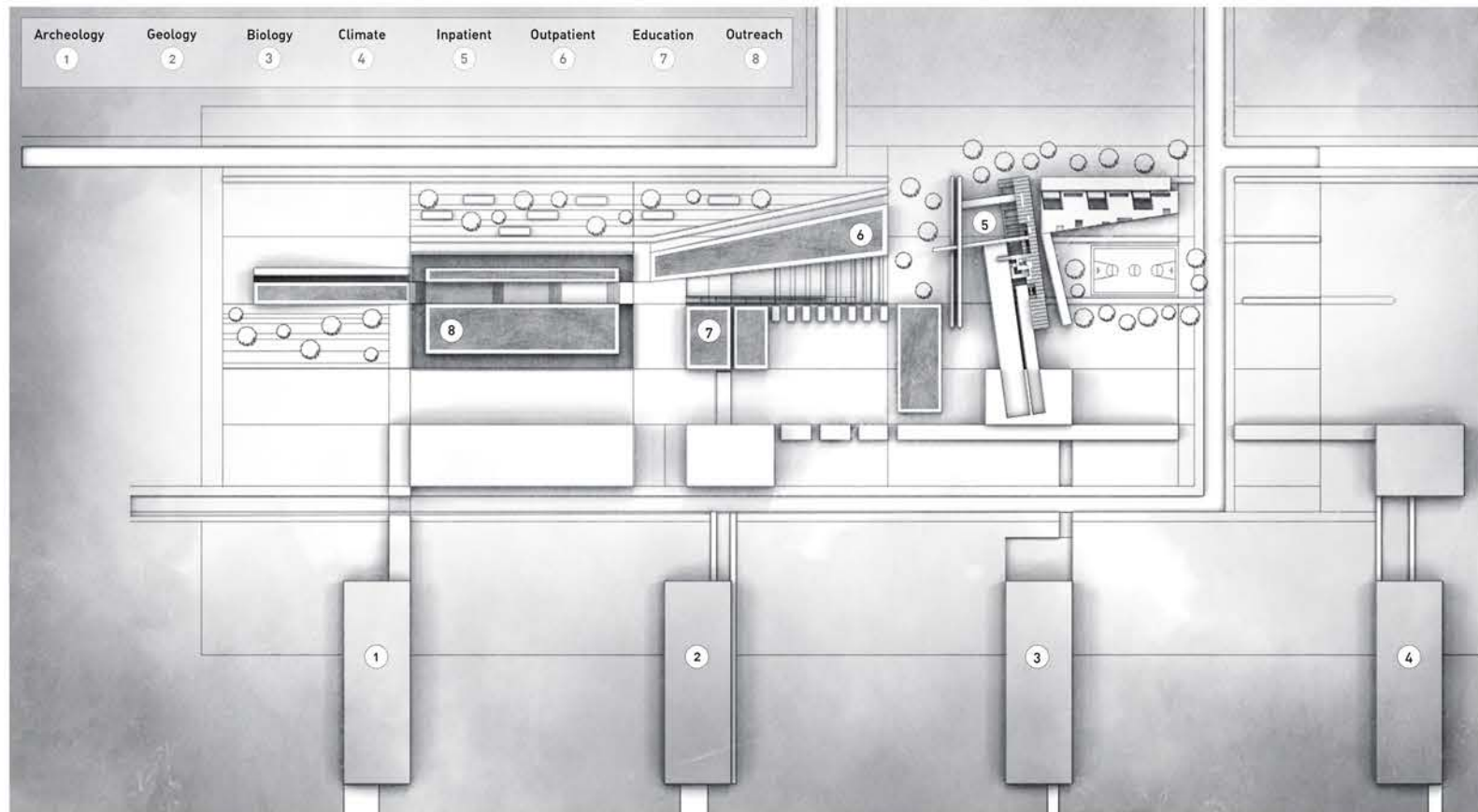
Outreach

Education

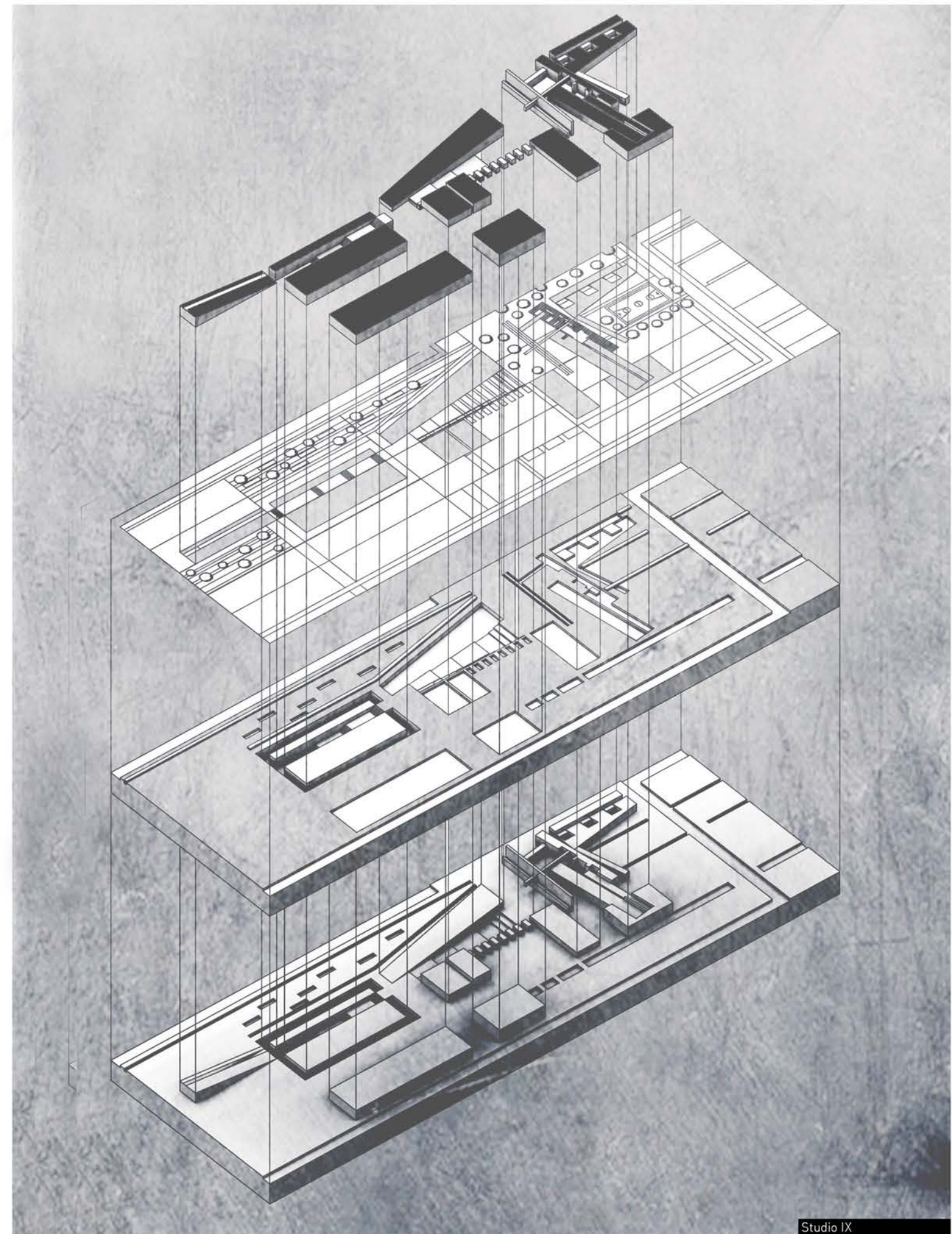
outpatient

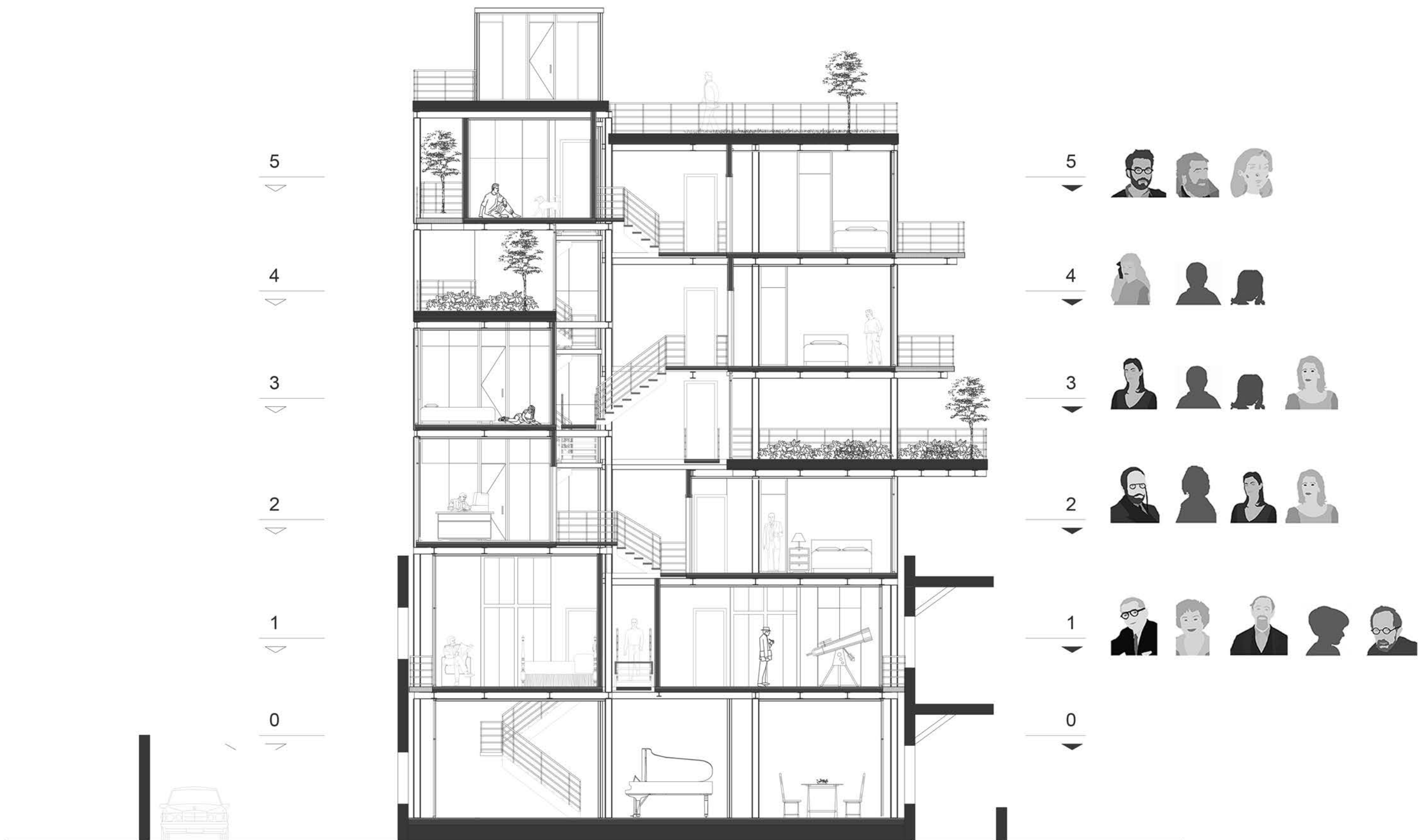
Inpatient





“THE REVEAL” IS A WORK IN PROGRESS TO BE COMPLETED DURING STUDIO X OF SPRING 2018





Weiss Residence

Beirut, Lebanon | Independent

Hans Weiss was born in Berlin in 1922 and is the eldest of four children. His parents were largely unhappy with Hitler's regime in Germany, so they fled as they did not want to raise their children in a violent environment.

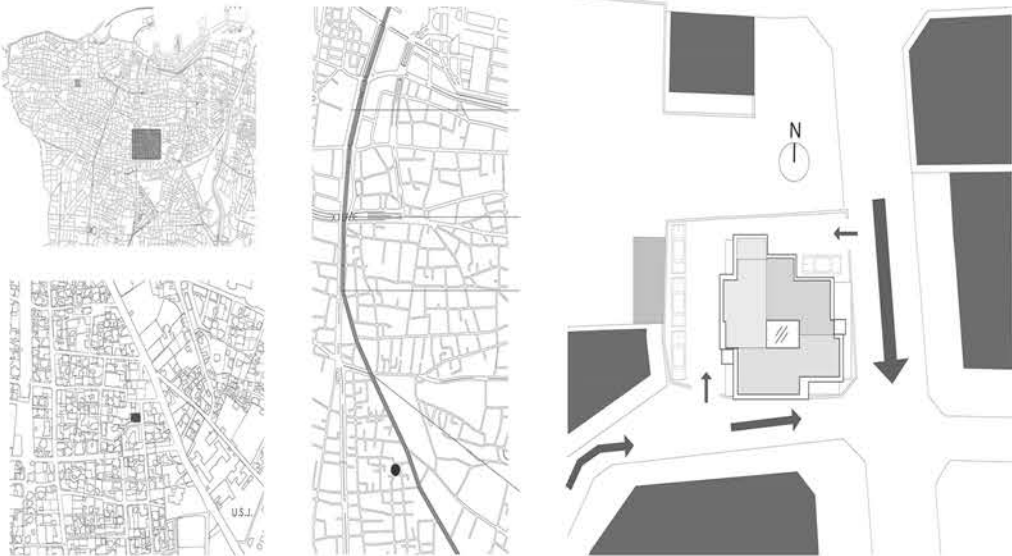
Hans was raised on classical music, which eventually blossomed into a passion. He took this to Beirut with him where he honed his skills and became a composer as well as a music teacher at a university. At the age of 23, Hans fell in love with and married a Lebanese woman named Rita and went on to have 3 sons with her: Ludwig, Friedrich, and Wolfgang.

To his utter disappointment, none of his sons developed a passion for music as he did, and he considers this his life's biggest failure. Hans is extremely difficult by nature and thus gives anyone who tries to approach him a hard time; it is for this reason that there is always tension between the family members. He is generally cranky and does not find pleasure in anything but his music.

Hans' middle son, Friedrich, was born in 1949 in Beirut. Friedrich's heart is in the fabrics industry wherein he makes and sells fabrics and materials. His going into this field was an utter disappointment to his father, who had hoped that his sons would take after him and venture into music. As was the case for his brothers, Friedrich's relationship with his father was not great. This changed, however, when he took it upon himself to make use of his craft and design a book meant to hold all of his father's compositions and pieces. The gesture was well recieved by Hans, who, as a result, became more understanding regarding his son's chosen profession. This paved the way for Friedrich becoming his father's favorite.

As a result of this favoritism, Hans' other two sons began to get jealous. Despite the fact that they were extremely successful and wealthy, nothing was enough to impress their father. This led to more tension among each of the sons' families in the future.

Because Friedrich is a pacifist, as his name so suitably entails, he pondered and postulated for days and nights on end in an attempt to find a solution for his family's abundance of problems. Friedrich is, finally, the one who comissioned the house to be built as he believes that this communal space could be a way to finally put these issues to bed.



GREEN LINE CONTEXT



DEMARCATION LINE

THE TENSION AMONG THE FAMILY MEMBERS RESEMBLES THE SITE'S HISTORIC CONTEXT AS IT PERTAINS TO THE LEBANESE CIVIL WAR.

THE SITE IS SITUATED APROXIMATELY ON THE GREEN LINE, A LINE OF DEMARCATION WHICH SEPARATED MUSLIM WEST BEIRUT FROM CHRISTIAN EAST BEIRUT DURING THE LEBANESE CIVIL WAR.



Existing Structure Pictures I Took in Lebanon



Elevations

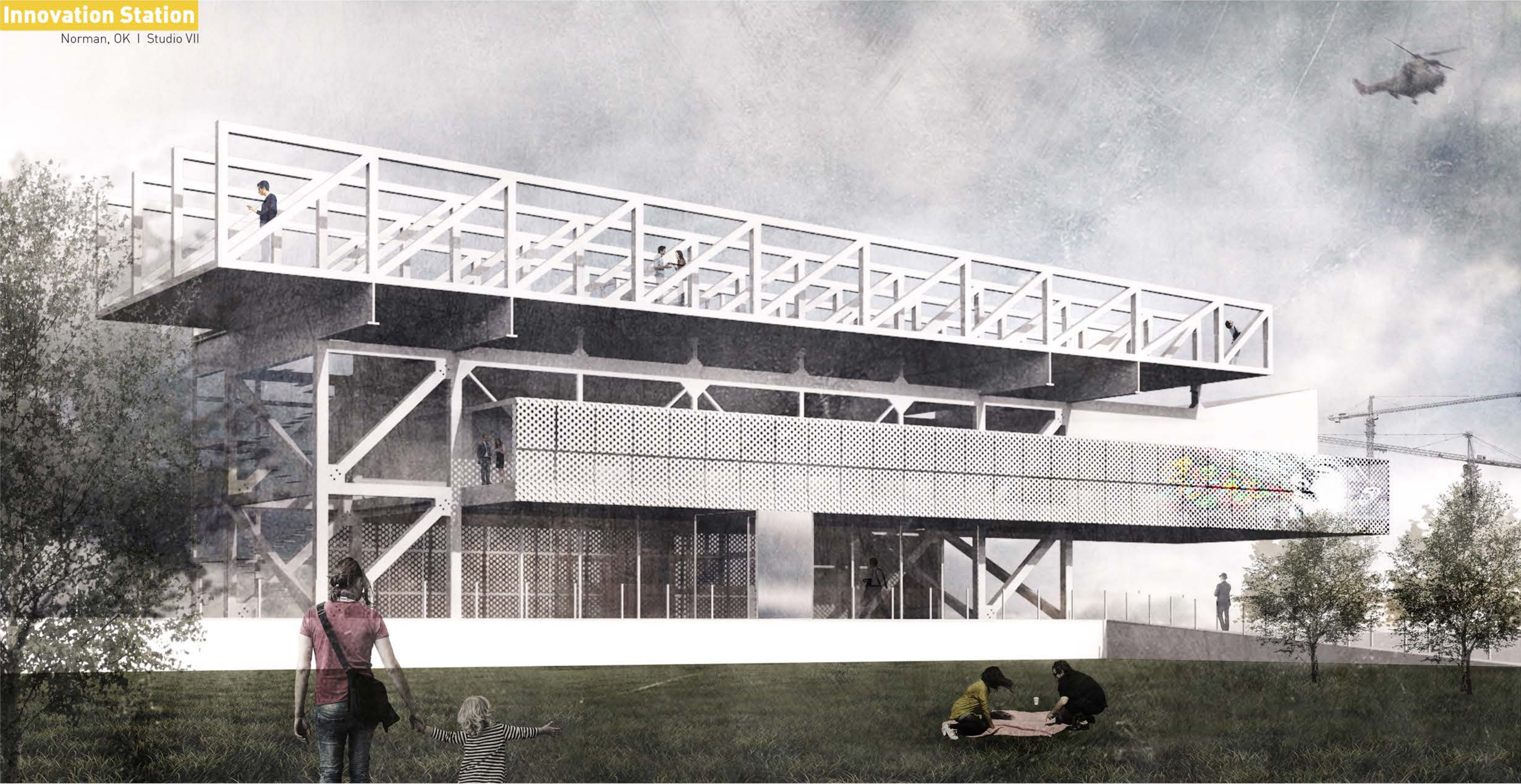


Interior Perspective



Exterior Perspective





Innovation Station

Norman, OK | Studio VII

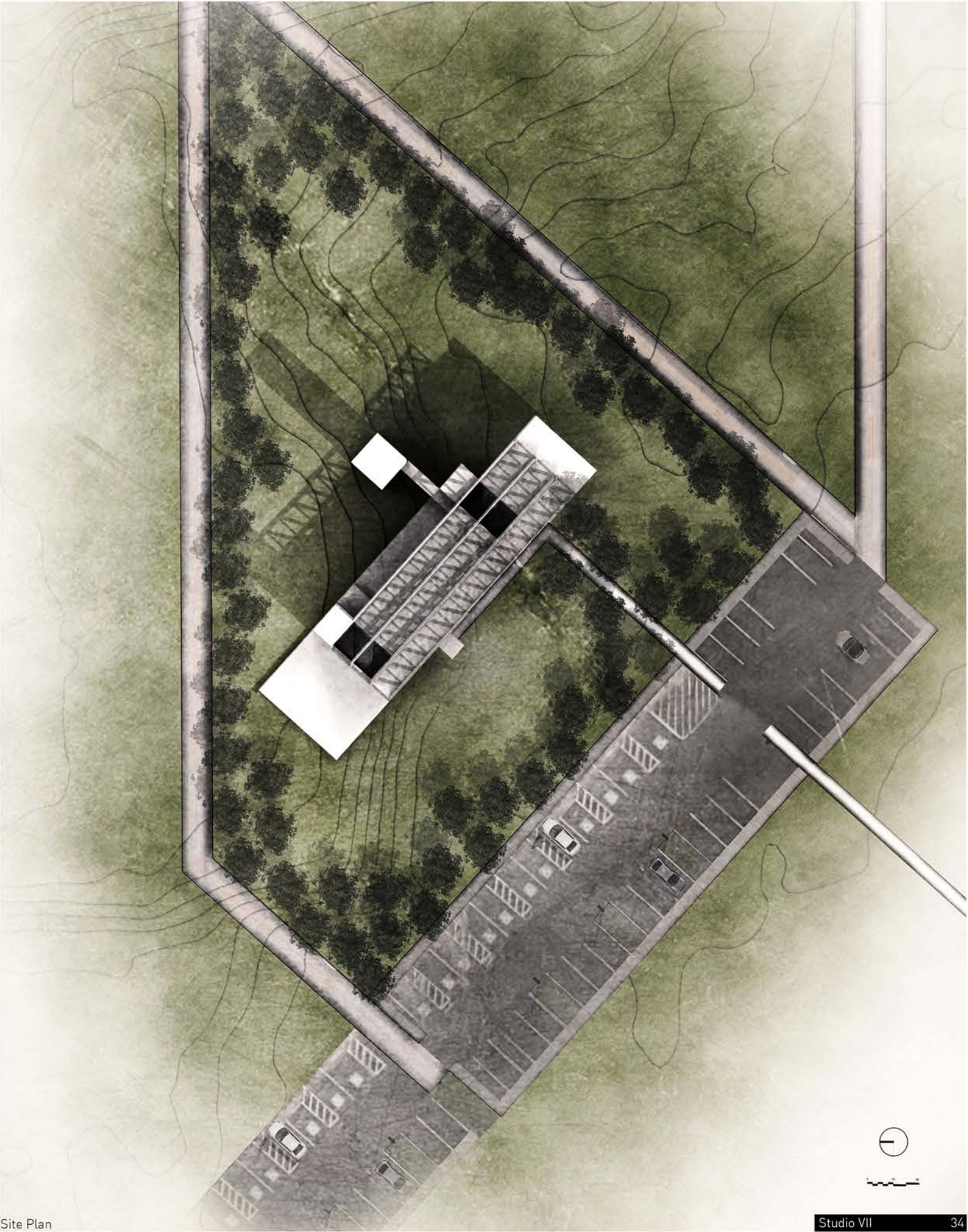
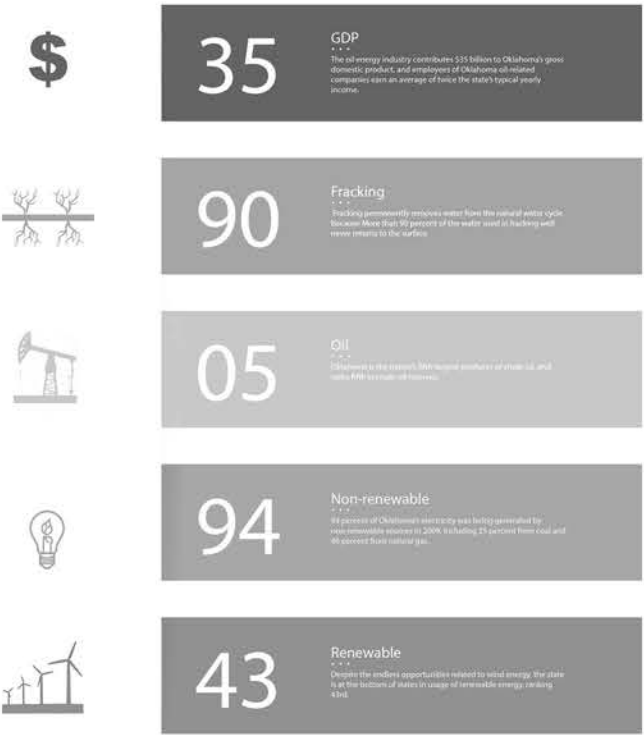
The design is an indirect response to the dangers of the dominant oil industry in Oklahoma. Oklahoma is the nation's fifth largest producer of crude oil, has the second-greatest number of active drilling rigs, and ranks fifth in crude oil reserves. Despite the endless opportunities related to wind energy, the state is at the bottom in usage of renewable energy.

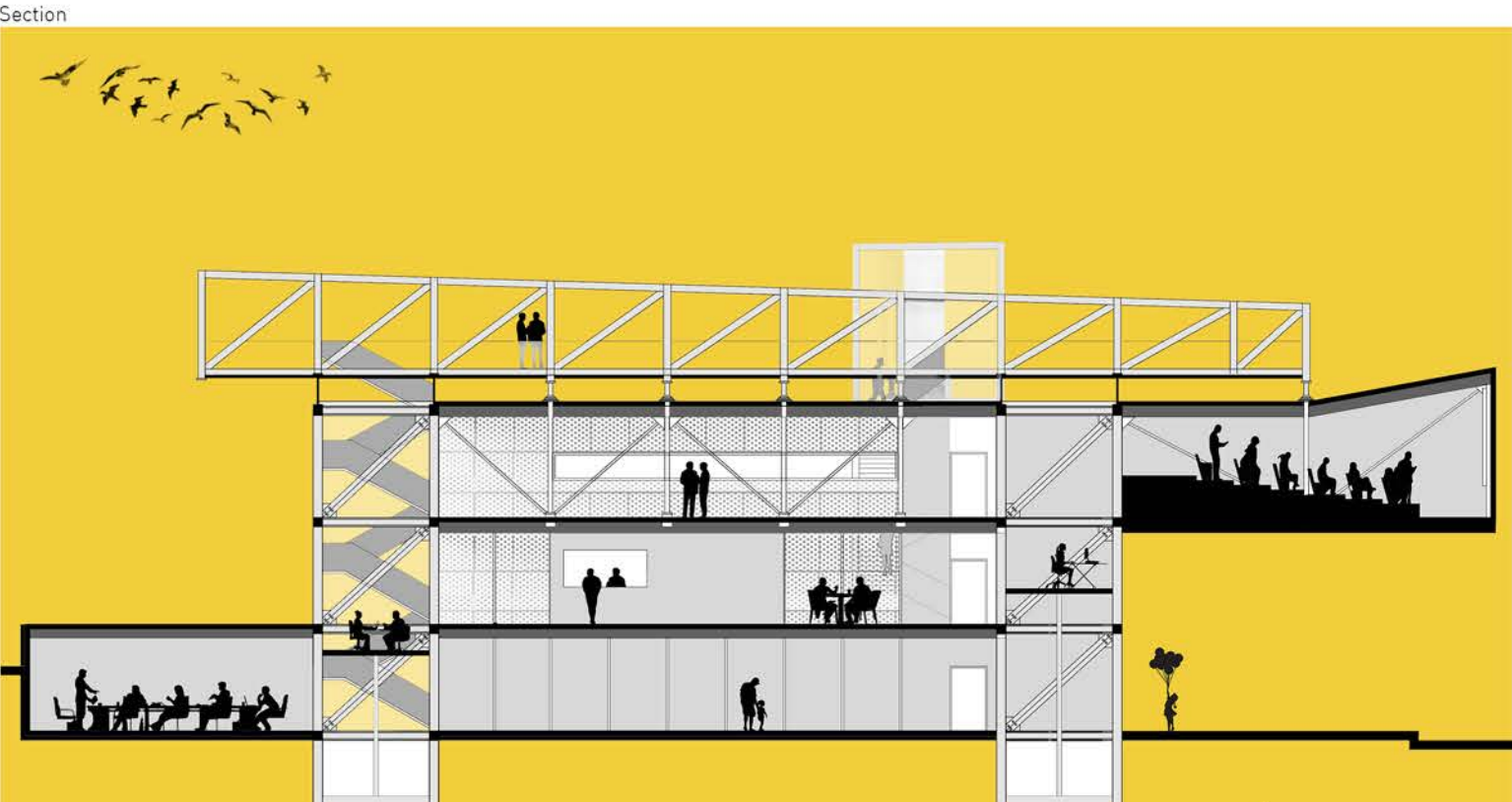
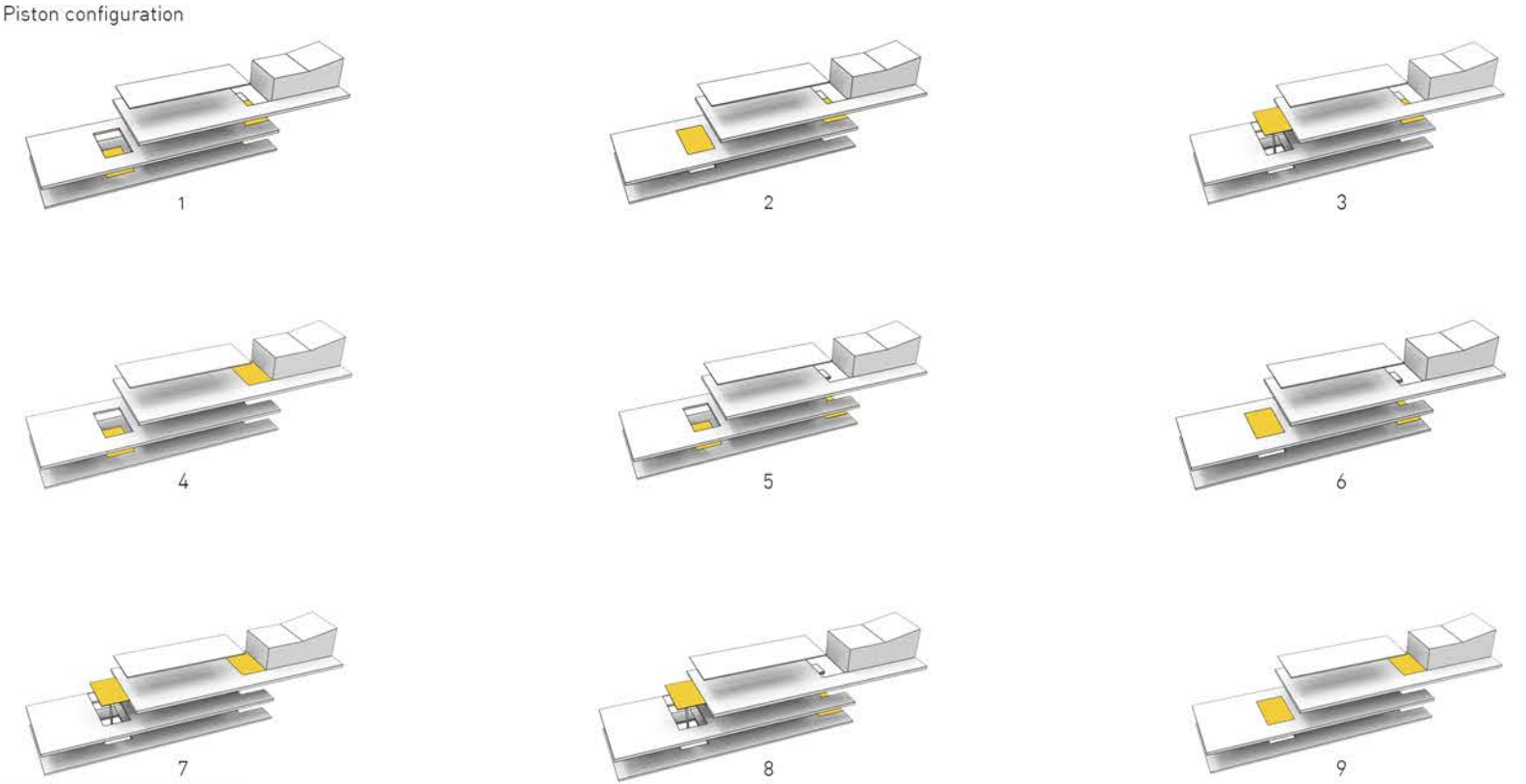
"Innovation Station" acts as a business incubator for small start ups researching in the field of renewable energy. It aspires to provide these small firms the adequate facilities necessary to perform studies on the various renewable energy resources.

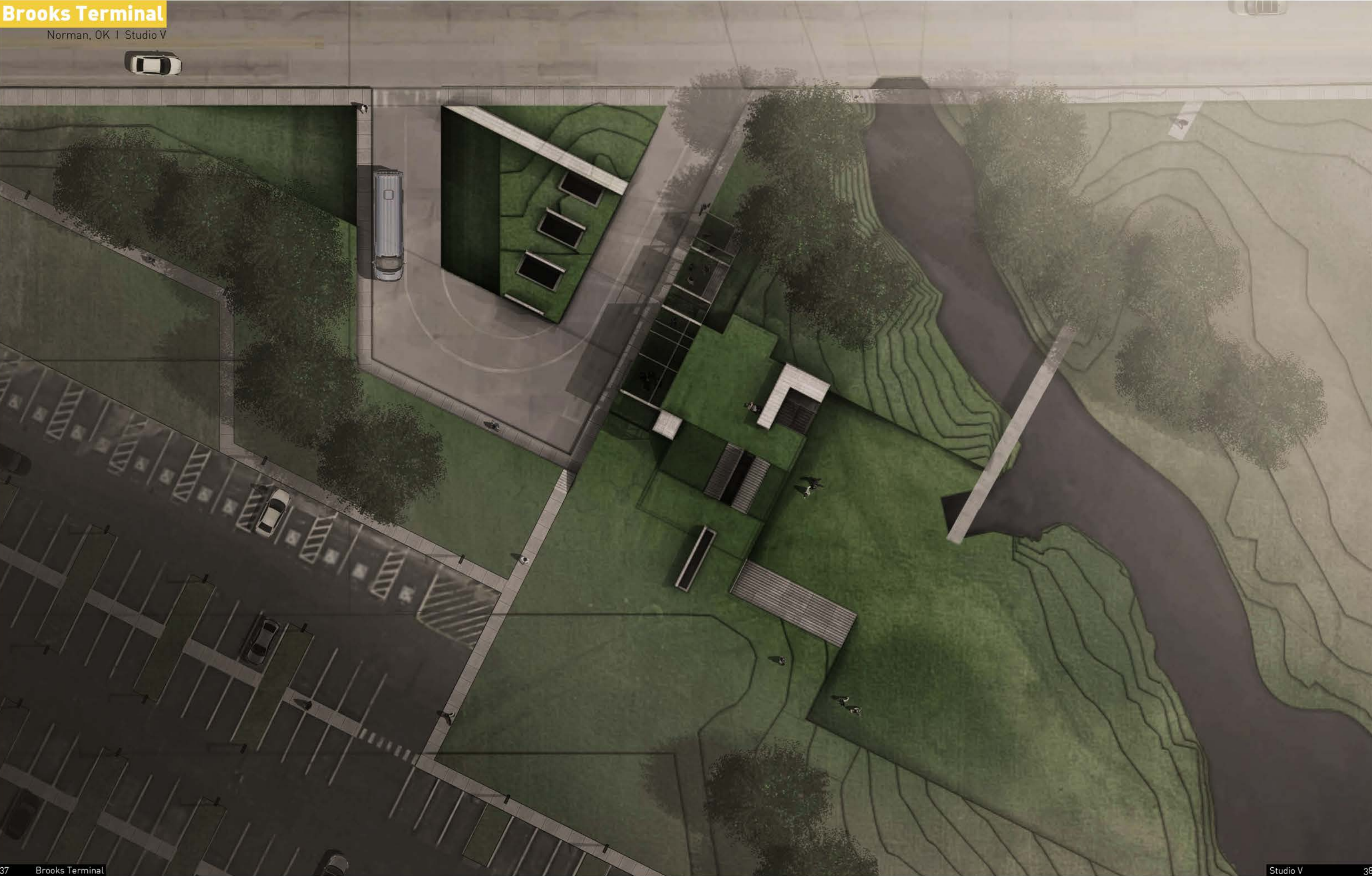
New technology is always coming out, and to keep up with its pace the spaces need to reflect this growth through adaptability and flexibility. The second floor of the building is completely suspended from four trusses on top of the building. These trusses are supported by two core masts. This suspension provides large spaces free of any structure, allowing for future reconfiguration.

The clear vertical division in program is blurred by two vertically moving pistons located in each of the masts. The two pistons are office spaces for scientists and engineers that can be reconfigured vertically and moved to any level in the building. This allows the researchers to connect with the public when needed, and secure their scientific privacy when desired.

The massing of the building is heavily influenced by the sun path and prevailing winds. The building is rotated approximately 45 degrees, extending along a north west south east axis. This axis is parallel to the direction of the prevailing winds, which are mainly from the north west in the winter and from the south east in the summer. This orientation allows air to circulate directly into the air gap or breezeway between the second floor roof and the trusses, preventing the building from overheating.







Brooks Terminal

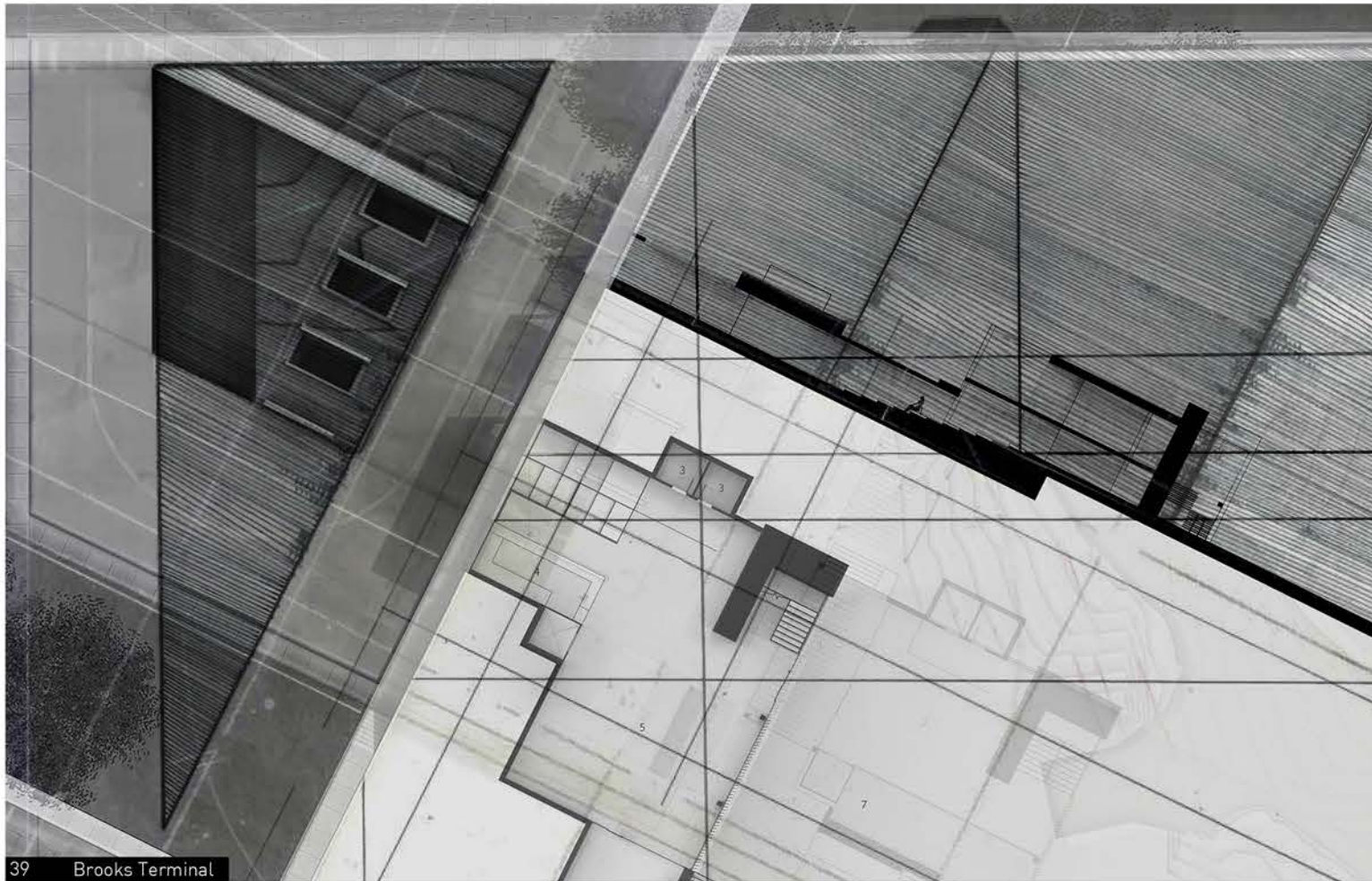
Norman, OK | Studio V

The main problem was tackling the inadequate circulation which resulted from the existing bus terminal. The four circulation categories; buses, cars, bikes, and pedestrians all overlapped uncomfortably and erratically. From that resulted the concept of manipulating the landscape to provide separate circulation pathways for each circulation category.

When approaching the site from the west, the building appears to be a simple bus station humbly resting on the landscape. Once entered or approached from the east side however, a double story community center and a courtyard with views towards the pond are revealed.

The wind/sun analysis of the sun dictated the building's orientation. The lower level is aligned to benefit from the most amount of natural ventilation in the summer, but can be closed off in the winter. Additionally, two thermal masses are present within the building, providing natural heating to the interior spaces.

Proportions Hybrid



Physical Model





Elevation



Section

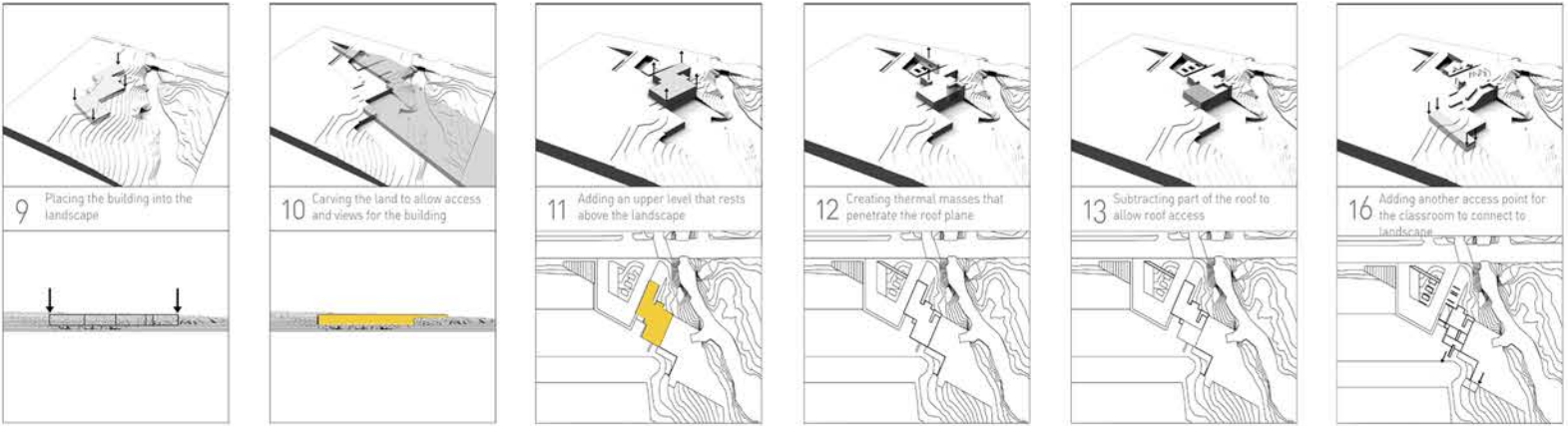
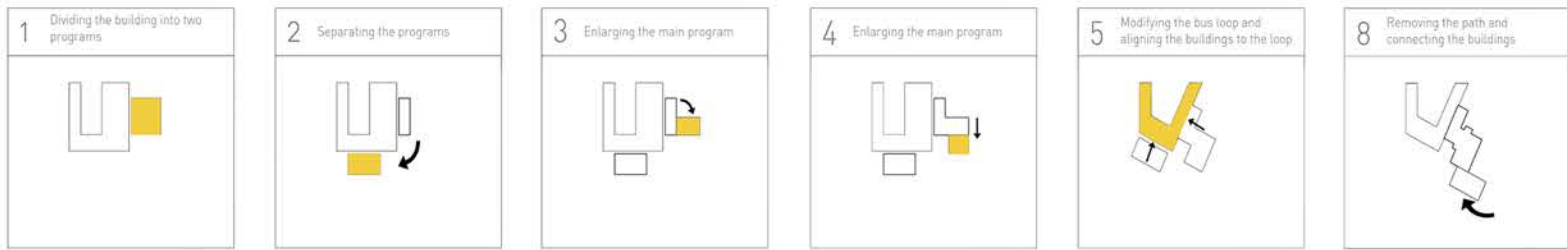


Section



Perspective from Creek

Form Generation





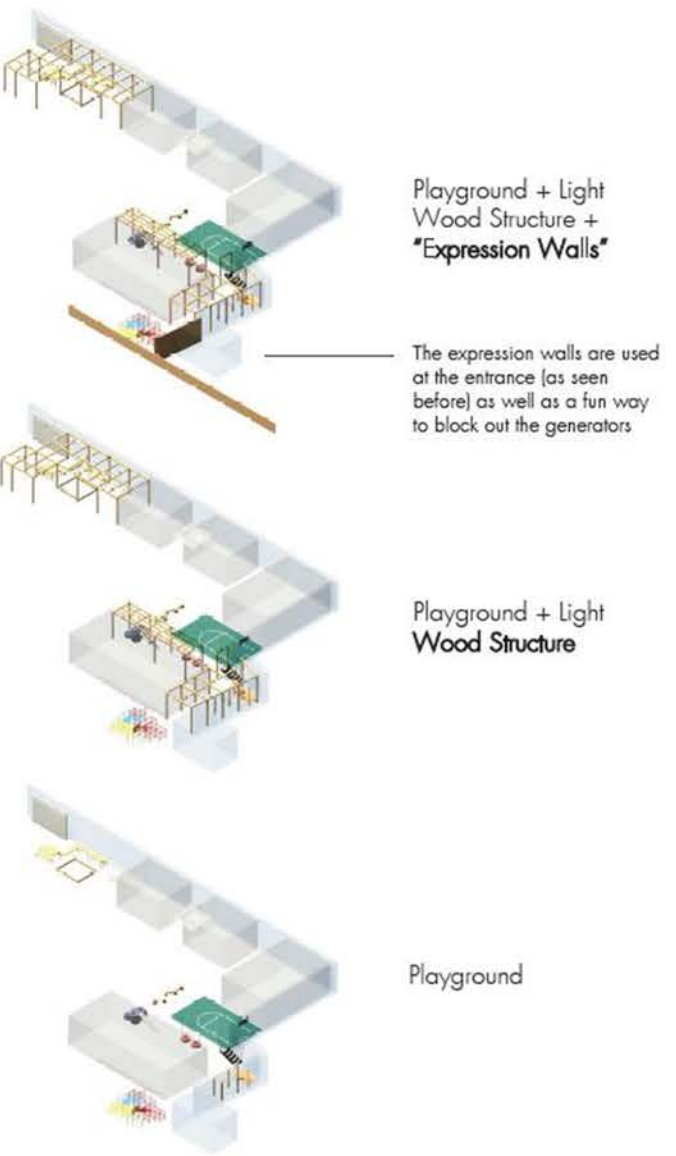
Shabriha UNDP Child-Friendly Competition

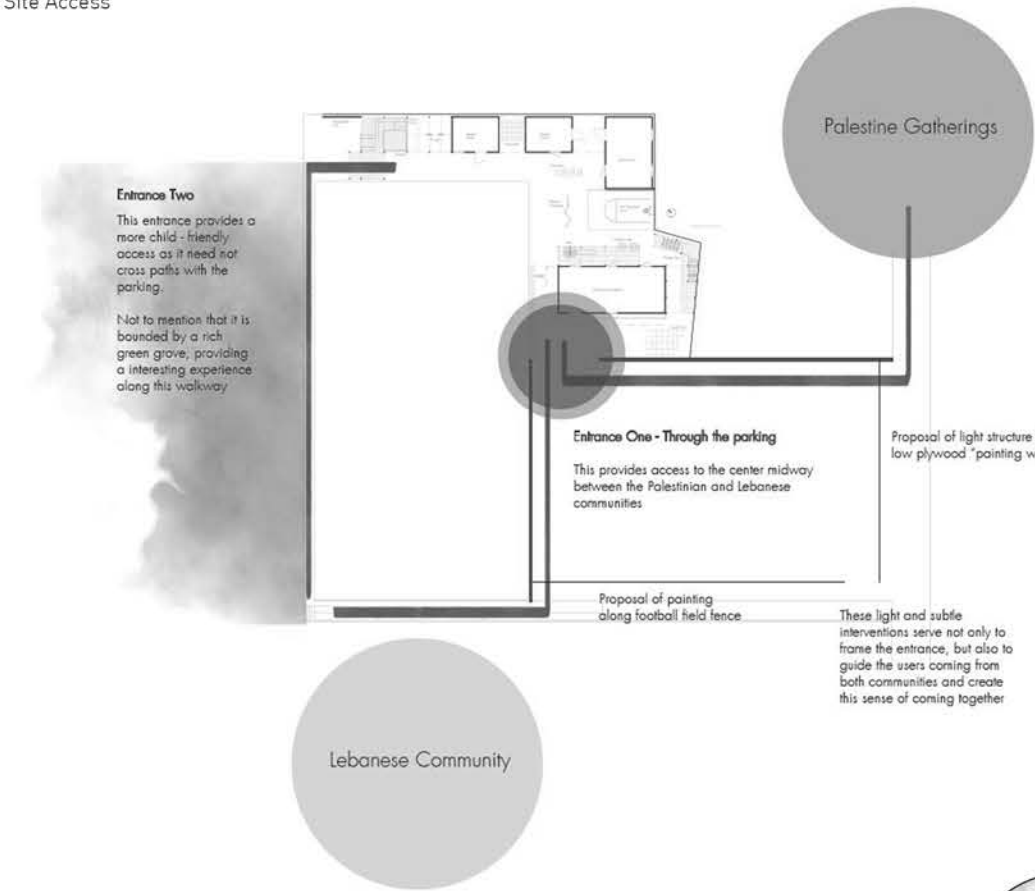
Beirut, Lebanon | Independent

Task

The competition assignment was to transform a three hundred and ninety squared meters site in Tyre, Lebanon, into a child friendly recreational space for the refugees of the area. The program included an assembled structure serving as a multi-purpose community center with a children playground, with special attention to children safety, environmental sustainability, and social inclusivity

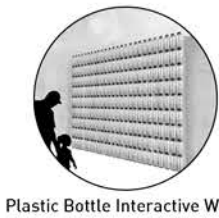
Drawing inspiration from the site's context, the design highlights unity between the Palestinian and the Lebanese sides of the plot. The aim is to resemble the existing conditions of Tyre, where Palestinian and Lebanese people live together in harmony with no visible divisions. The architecture strives to blur borders. In the design, unity is created by breaking any rigid and formal circulation, forming flowing spaces that merge together and fuse into their surroundings. This coupled with the inclusion transitional outdoor spaces and the absense of 'dead end' spaces, blurs the borders between outdoor and indoor and particularly between walk and play



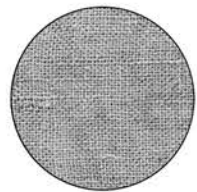


West Site Entrance Perspective

In order to shade the playing area adjacent to the west entrance, cheap and recycable materials were used. These materials project interesting shadows and colors on the playing area, adding to the playful atmosphere of the project.



Plastic Bottle Interactive Wall



Potato Sack Fabric Shading



Water Container Base Shading

