Richard Dempsey

Selected Works

Richard Dempsey

designer - fabricator

richardwdempsey@gmail.com
706.248.4611
richard__dempsey

education

The Savannah College of Art and Design
BFA Architecture - 2015

The Georgia Institute of Technology
M.Arch - 2020

awards / publications

Georgia Tech Academic Scholarship 2018-2020

Portman Prize Publication 2019

ACSA Conference: The Ethical Imperative 2018
Presentation of Megalith: A Deterrent. Presented in Architecture in the Expanded Field Panel. (Denver, CO March 2018)
with Jean Jaminet and Zach Beale

Isomorphism 2017

SCAD CLC Residential Studio 2014
Competition winning studio project for residential design

academic experience

Kent State University 2017
Invited guest juror and guest presenter

The University of Georgia 2017
Invited speaker to the UGA Sustainability Certificate Program.

Kennesaw State University 2017
Guest Reviewer

skills

Rhino, AutoCAD, Maya, Revit, Z Brush, Grasshopper, Fologram (construction / fabrication via Hololens and AR), Adobe Creative Suite,Microsoft Office, 3DS Max, KeyShot, Physical Model Making, Digital and Traditional Fabrication Techniques, Drawing, Painting, Art Architectural and Design Theory.

work experience

Georgia Tech Digital Fabrication Lab
Shop Technician and Fabricator : Aug 2019 - Present
Aided students and faculty with development and creation of digital and traditional fabrication projects

Morphosis, NYC
Georgia Tech Practicum Program 2019
Competition development for Brighton College in UK.

Greg Harrell Architects atlanta, georgia
Designer : Jan 2019 - Dec 2020
Design and development of residential projects of varying scale. Taken a lead design role on projects from initial concept design through contract documents.

Hansen Architects savannah, georgia
Designer : Feb 2018 - Aug 2018
Design and documentation of luxury hospitality, residential, higher education, historic preservation, and re- use projects.

Bork Design athens, georgia
Designer : Mar 2016 - Mar 2017
Design and documentation of mixed use, adaptive re-use, and residential projects.

Cowart Group Architects savannah, georgia
Intern : Jun 2014 - Mar 2016
Design and documentation of luxury residential projects from initial site analysis through contract documents.

SCAD Museum of Art savannah, georgia
Docent 2013 - 2014
Informed visitors about current exhibitions, conducted guided tours and aided in exhibitions install work and curation after exhibiting interest in museum work and exhibition design.

references

Gerald Cowart FAIA : Owner, Cowart Group Architects
phone: 912.658.2494 email: gcowart@cowartgroup.com

Jean Jaminet Professor / Collaborator
phone: 212.786.2065 email: jjamninet@kent.edu

Amy Landesberg : Sculptor / Architect / Collaborator
phone: 404.797.9562 email: al@amylandesberg.com

Brian Bell : Principal BLDGS
email: bb@bldgs.org

Megalith : A Deterrent

presented at ACSA The Ethical Imperative Conference
carlsbad, new mexico

- team:
richard dempsey - design, visualization
zach beale - visualization
jean jaminet - critic

Designed as a deterrent to keep people away from the WIPP (waste isolation pilot plant) site in Carlsbad, New Mexico for the next 10,000 years we explored ways to deter while circumventing direct communication. Communication with humans that far in the future will be impossible through language, so we chose to use a physiological approach using 19hz (the fear frequency) resonance to cause irrational fear from those attempting to visit the site. This fear will allow for the site to worm its way into local folklore allowing the project to become known as a "bad place" in the future.

SITE KEY

Lowest Concentration of Stelae,
Only 19hz Subsonic Frequency

Medium Concentration of Stelae, Introduction of Dissonant Elements

High Concentration of Stelae,
High Level of Subsonic Dissonance

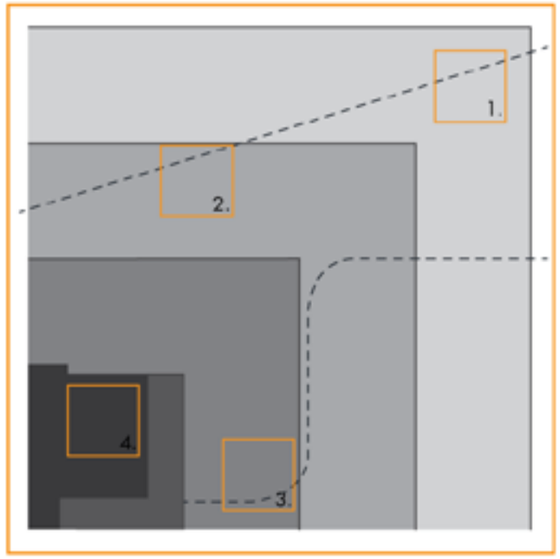
Extreme Concentration of Stelae, Total Subsonic Dissonance

WIPP Main Building Location

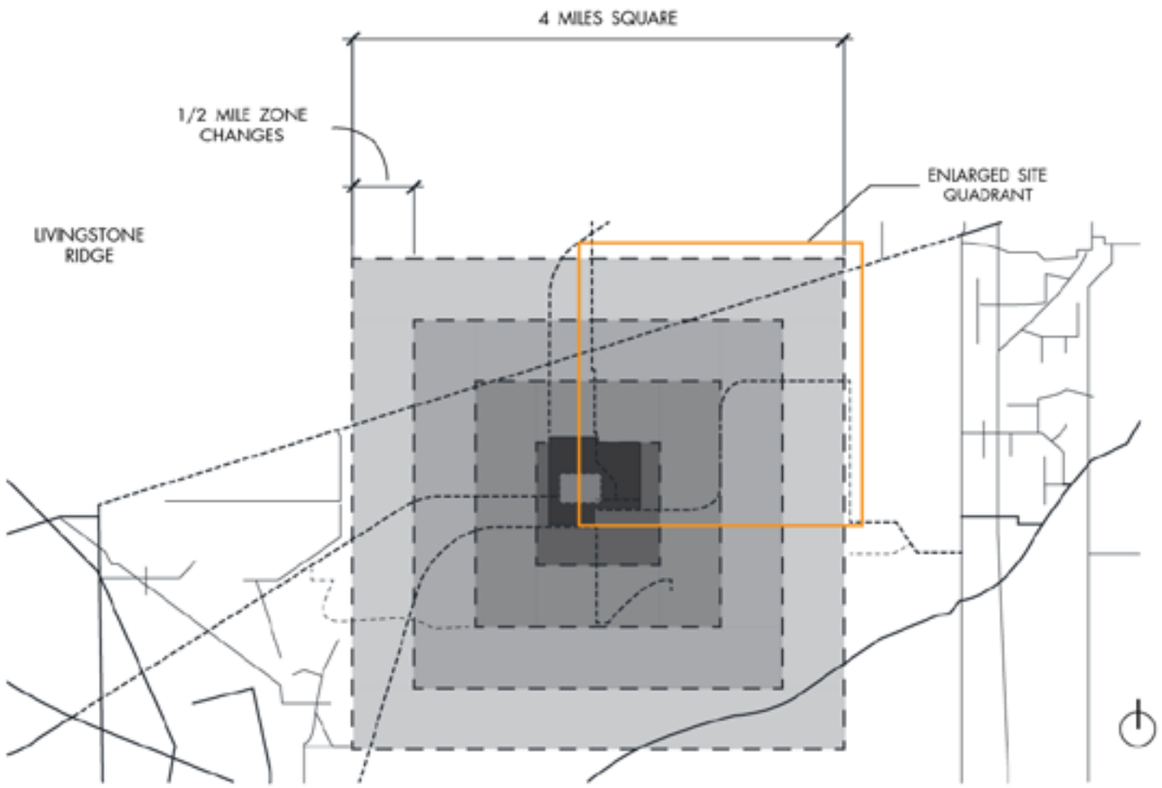
---------- Roads To Be Removed

PREVAILING WINDS

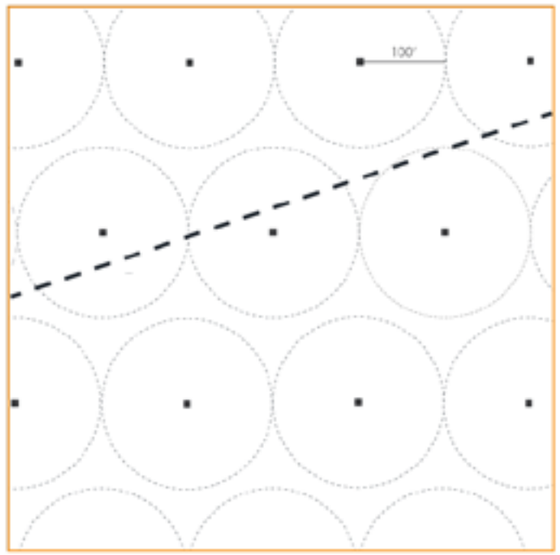
JAN - WEST	JUL - SOUTH
FEB - WEST	AUG - SOUTH-SE
MAR - WEST	SEPT - SOUTH
APR - WEST	OCT - SOUTH
MAY - WEST	NOV - WEST
JUN - SOUTH-SE	DEC - WEST



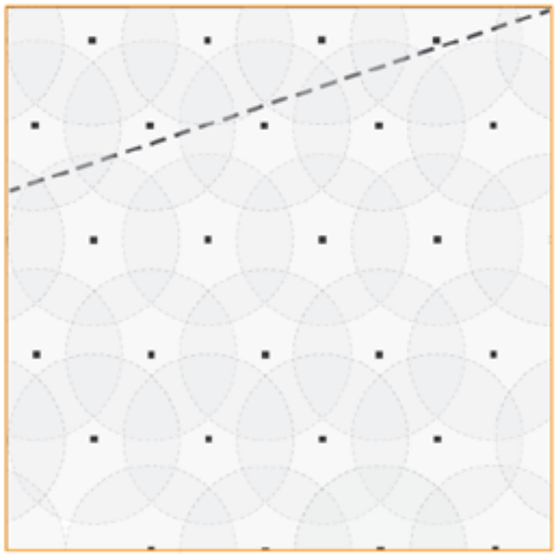
ENLARGED SITE QUADRANT PLAN



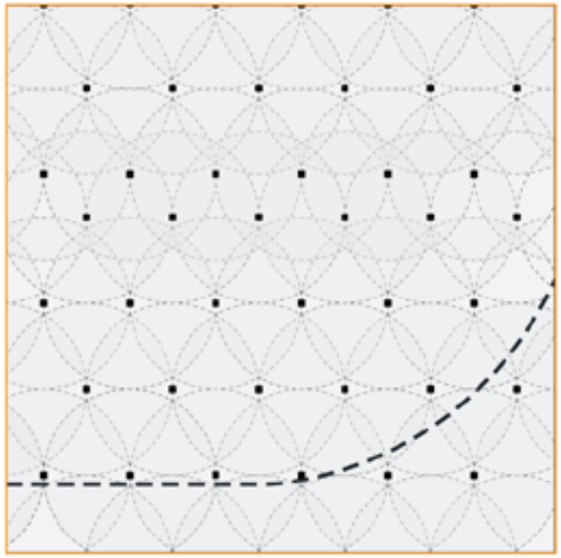
SITE PLAN



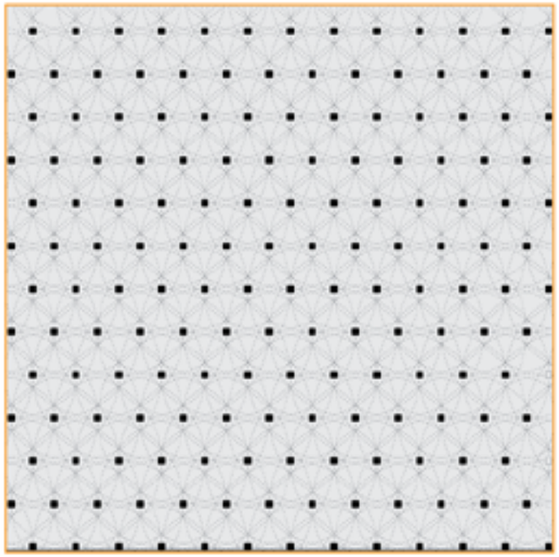
1.
LOW CONCENTRATION STELAE ARRANGEMENT
(100' CONSERVATIVE EFFECTIVE RADIUS OF RESONANCE)



2.
MEDIUM CONCENTRATION STELAE ARRANGEMENT



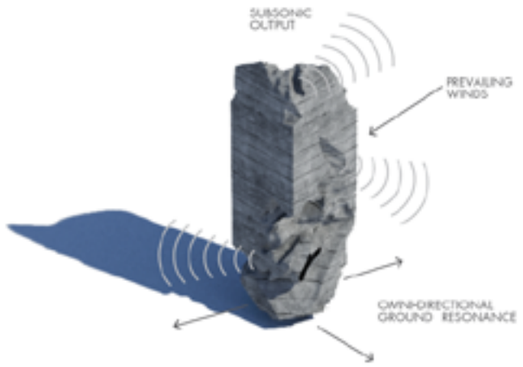
3.
HIGH CONCENTRATION STELAE ARRANGEMENT

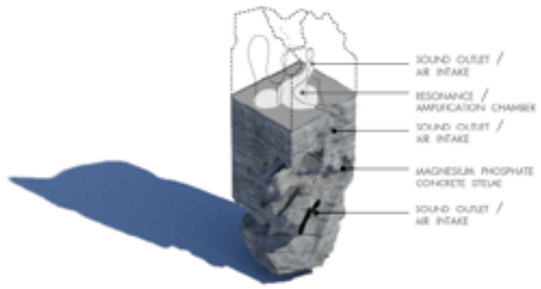


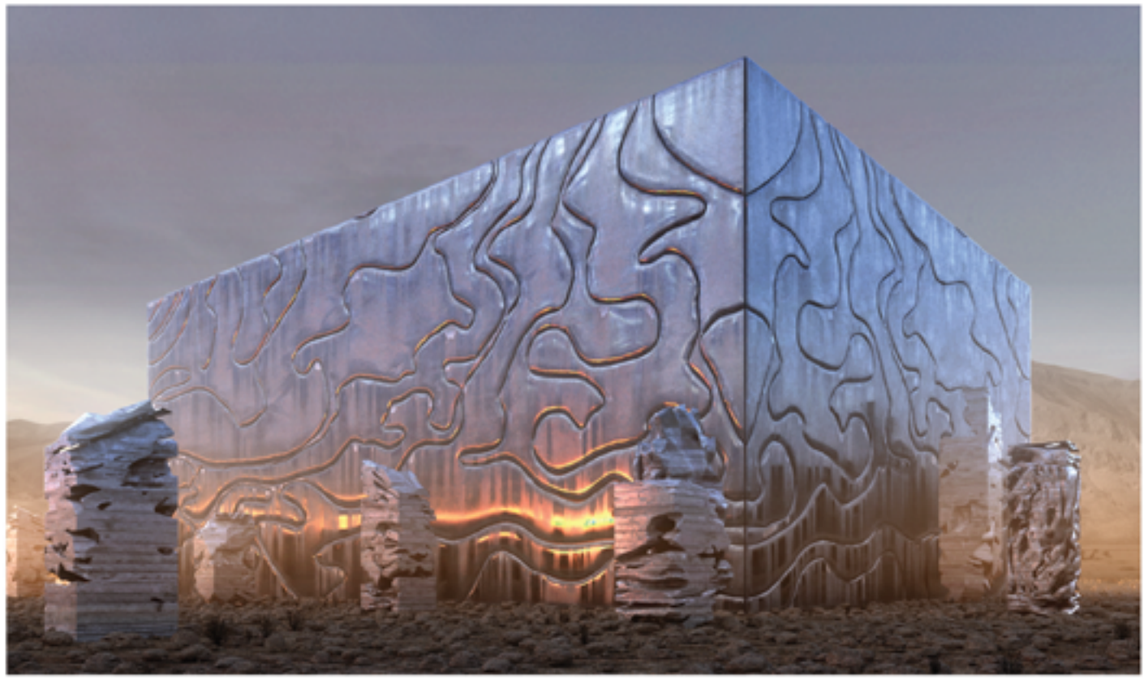
4.
EXTREME CONCENTRATION STELAE ARRANGEMENT

STELAE DETAIL

STELAE DETAIL OF RESONANCE CHAMBER THROUGH INTAKE / OUTLET



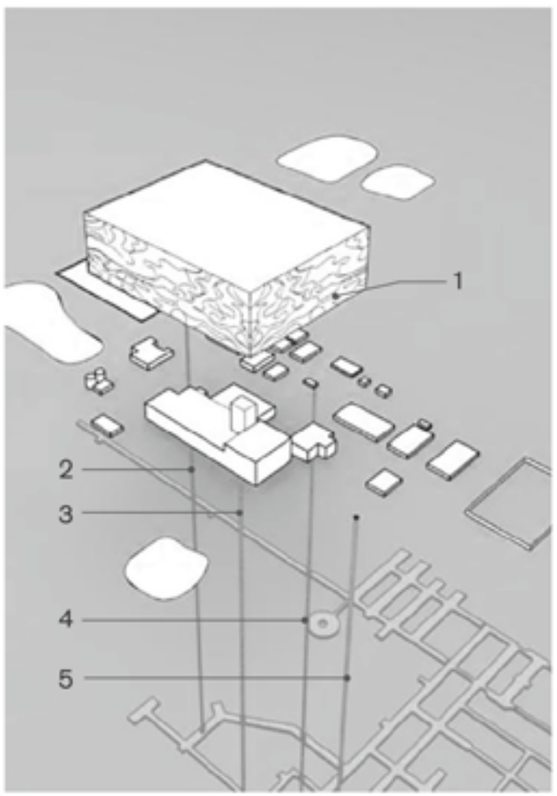




STELAE FIELD AND MIRRORED SARCOPHAGUS

DRAWING KEY

1.) SYNTHETIC CRYSTAL MIRROR CLADDING (TO RESIST SCRATCHING)
2.) WIPP INTAKE SHAFT
3.) WIPP WASTE SHAFT
4.) WIPP SALT HANDLING SHAFT
5.) WIPP EXHAUST SHAFT

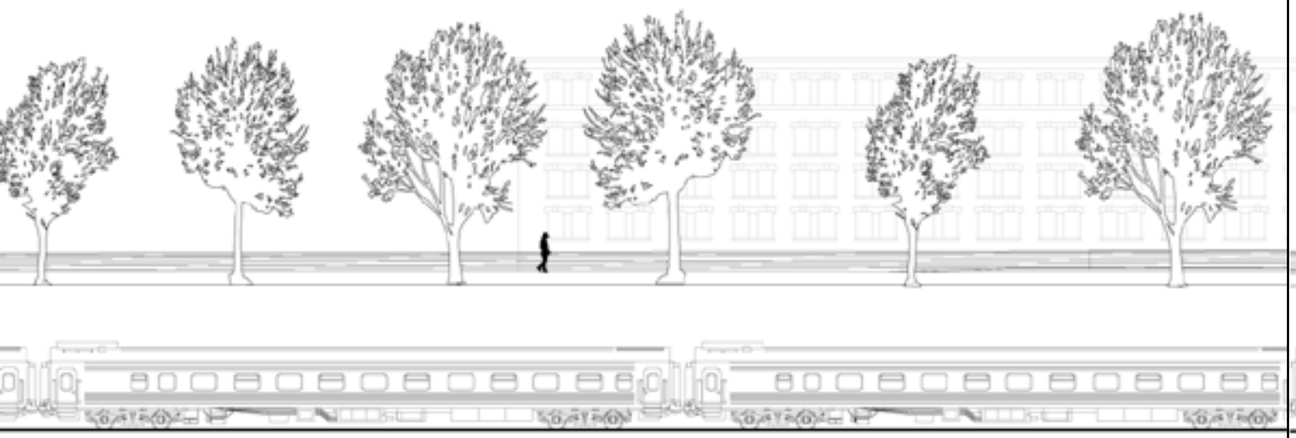


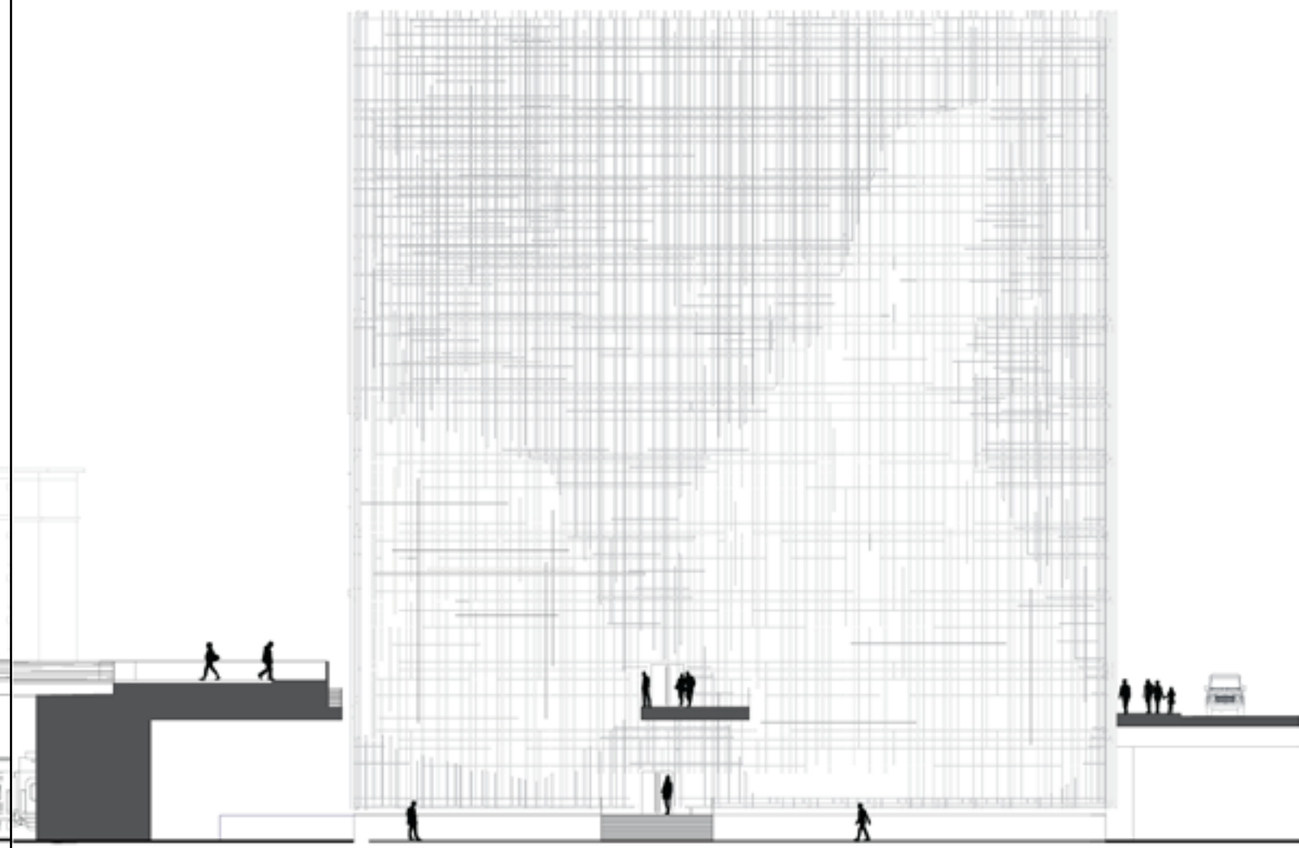
SARCOPHAGUS AND UNDERGROUND NUCLEAR STORAGE

55 Foundry Street

boston massachusetts
professor : david yocum
competition critic : alan organschi

Sited in south Boston, Massachusetts this mixed-use project focuses on local community engagement and experimentation with CLT (cross laminated timber). This area of south Boston is a food desert, and the implementation of a market on the ground level will aleviate this pressure on the neighborhood. On the second level a public library annex, and 40 micro housing units above. Structurally, instead of resorting to to the expected post and beam approach indicative of CLT construction I wanted to experiment with a new way of building using a series of strategically placed shear walls and a lattice-work of transfer beams above to create a porous architectural gesture. This approach was translated into the exterior through a heavily articulated second skin for shading allowing the language to be understood at multiple scales.



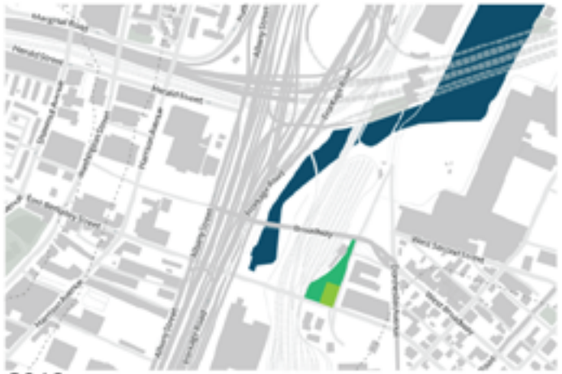


MASS TIMBER CARBON SEQUESTRATION FOR PROJECT

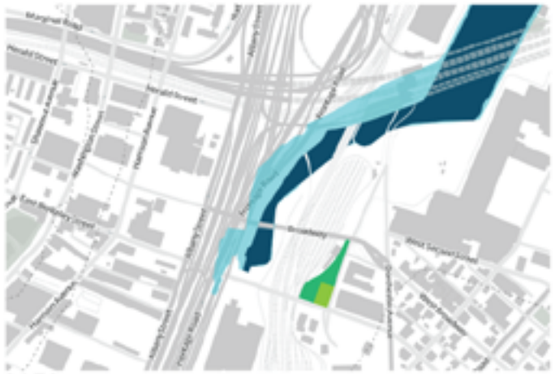
CLT / TIMBER VOLUME	TOTAL VOLUME 181,278 CUBIC FEET
CLT / TIMBER CARBON STORAGE	676KG CO^2 PER M^3 (43LBS FT^3)

TOTAL PROJECT CARBON STORAGE **3,897** CUBIC TONS

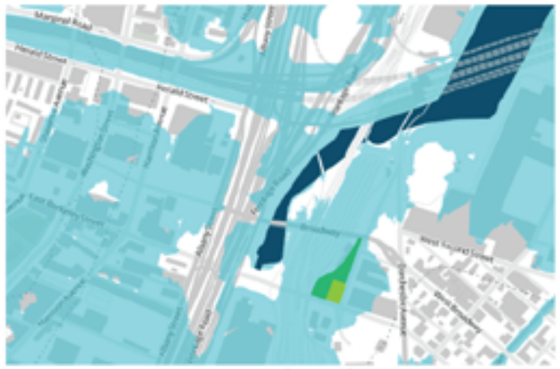
PROJECTED SEA LEVEL RISE



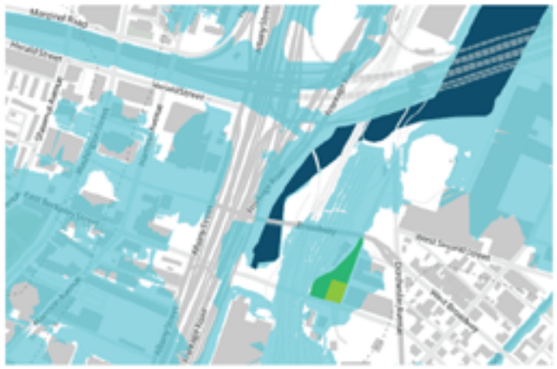
2019



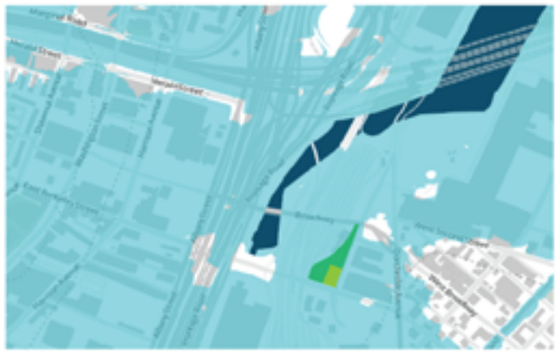
2050 TYPICAL



2050 MAJOR STORM SURGE (SANDY)



2100 TYPICAL



2100 MAJOR STORM SURGE (SANDY)

THE BUILDING IS RAISED ON A PLINTH TO SIX FEET ABOVE STREET LEVEL TO INCREASE BUILDING RESILIANCE TO PROJECTED SEA LEVEL RISE OVER THE NEXT 80 YEARS. MAJOR STORM SURGE EVENTS USE SANDY AS A REFERENCE POINT FOR ANOMALIES

STRUCTURE AND CIRCULATION DIAGRAMS

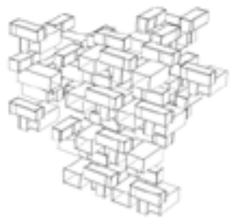
MARKET LEVEL STRUCTURAL WALLS

LIBRARY LEVEL STRUCTURAL WALLS

TRANSFER BEAM AGGREGATION

COMPLETE STRUCTURAL AGGREGATION

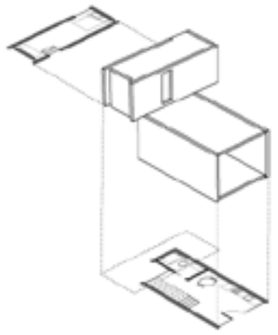
CIRCULATION / SITE CONNECTIVITY



RESIDENTIAL UNIT AGGREGATION

LONGITUDINAL SECTION

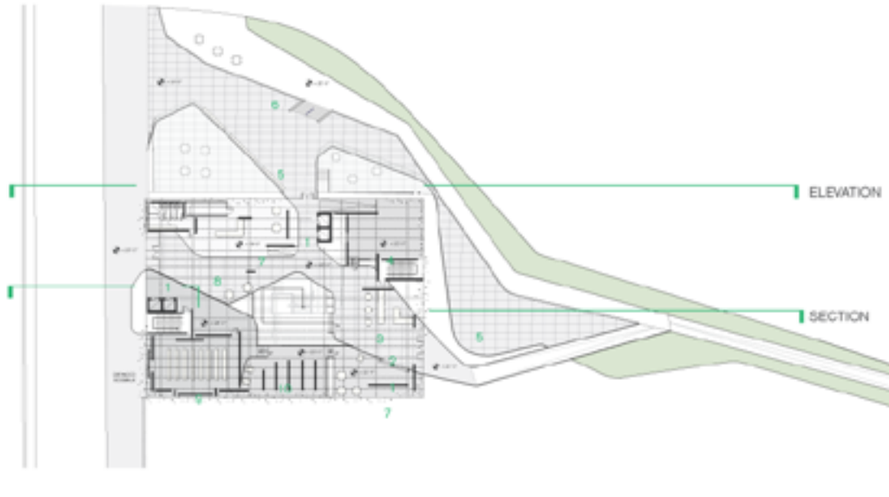
RESIDENTIAL LEVEL PLAN

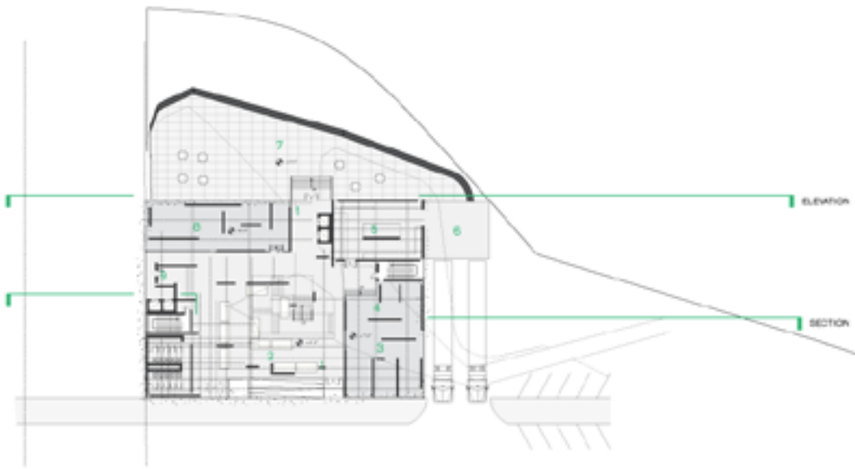


RESIDENTIAL UNIT

LIBRARY LEVEL KEY

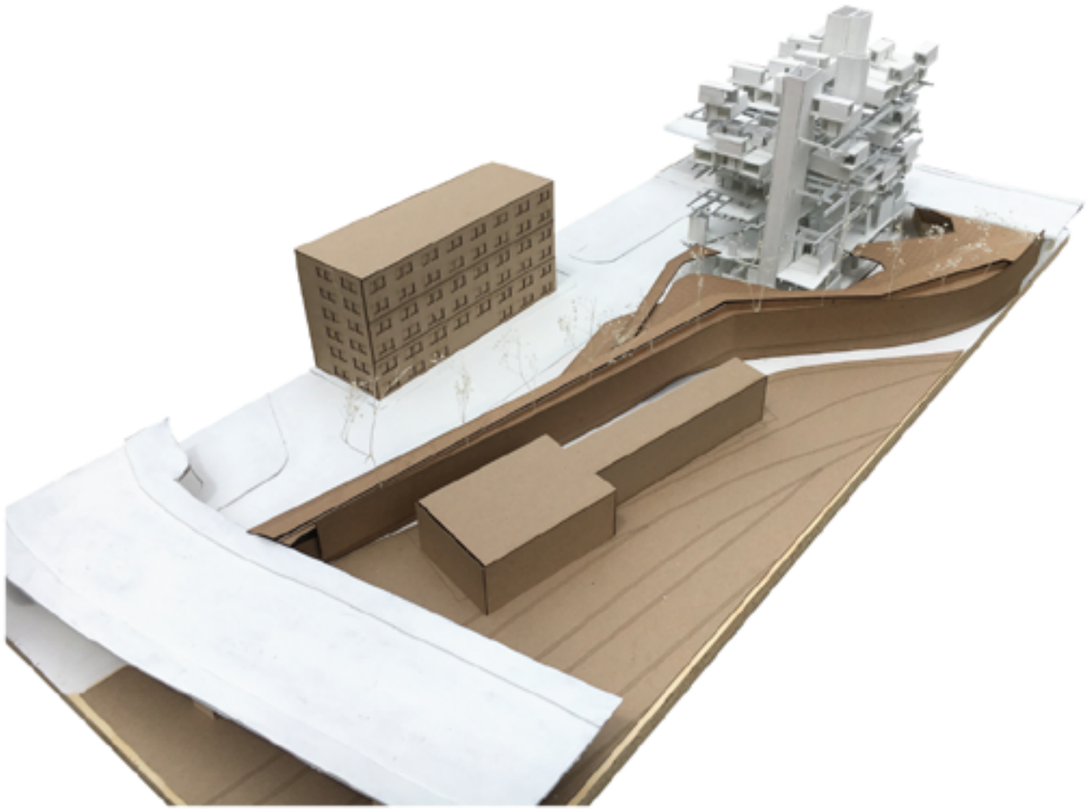
1 - ENTRY
2 - CIRCULATION DESK
3 - COMPUTER STATIONS
4 - SEMI-PRIVATE RENTAL / COMMUNITY ASSEMBLY SPACE
5 - PLAZA
6 - ELEVATED PLAZA
7 - SEATING / READING
8 - CAFE
9 - SCREENING ROOM / THEATRE
10 - STACKS



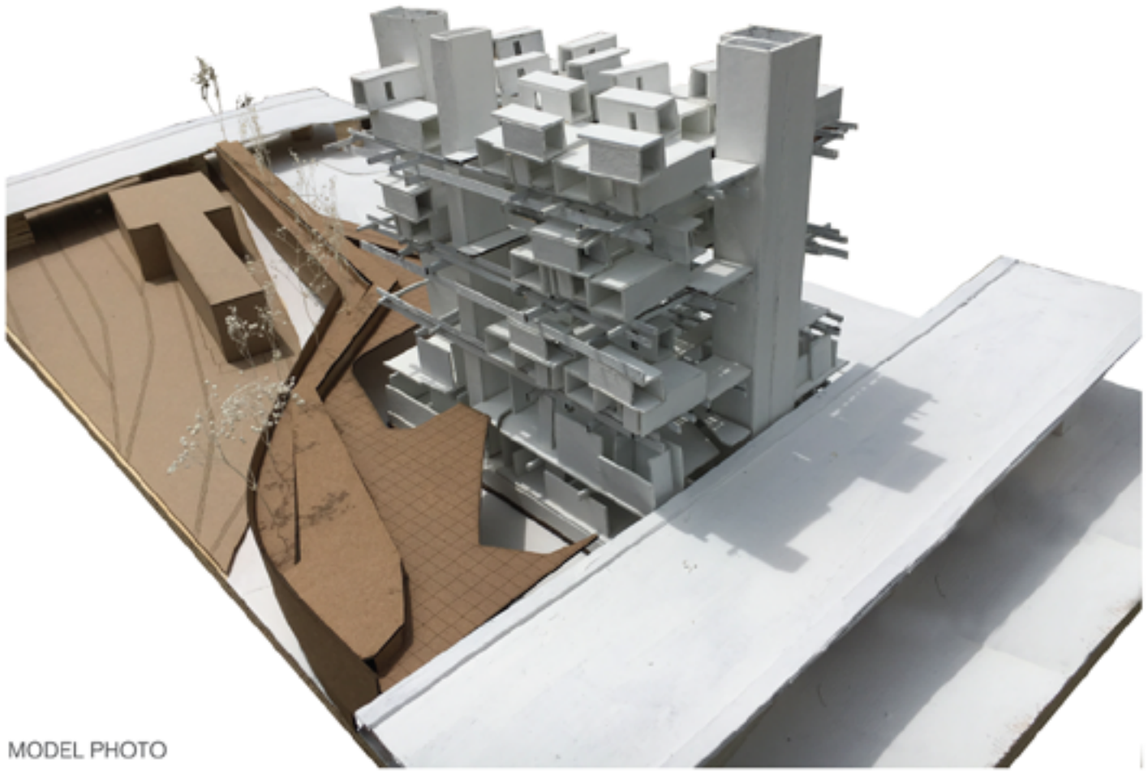


MARKET LEVEL KEY

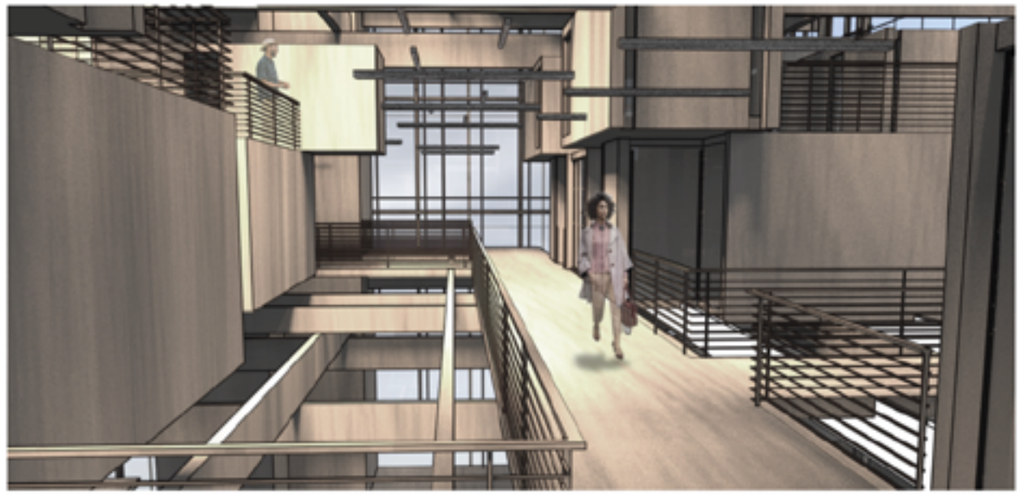
1 - ENTRY
2 - PRODUCE
3 - DRY GOODS
4 - BULK ITEMS
5 - SHIPPING / RECIEVING
6 - LOADING DOCK
7 - LOWER PLAZA
8 - SPECIALTY
9 - DAIRY / COLD



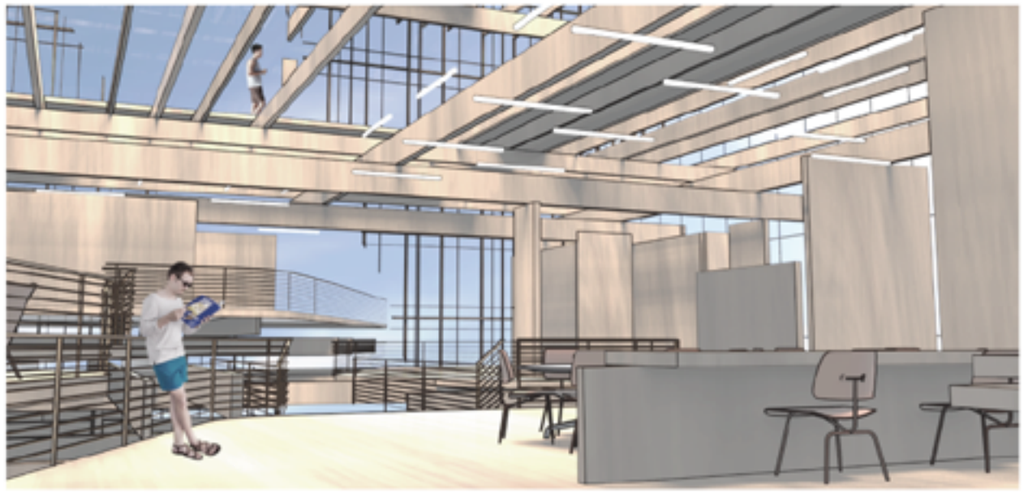
MODEL PHOTO



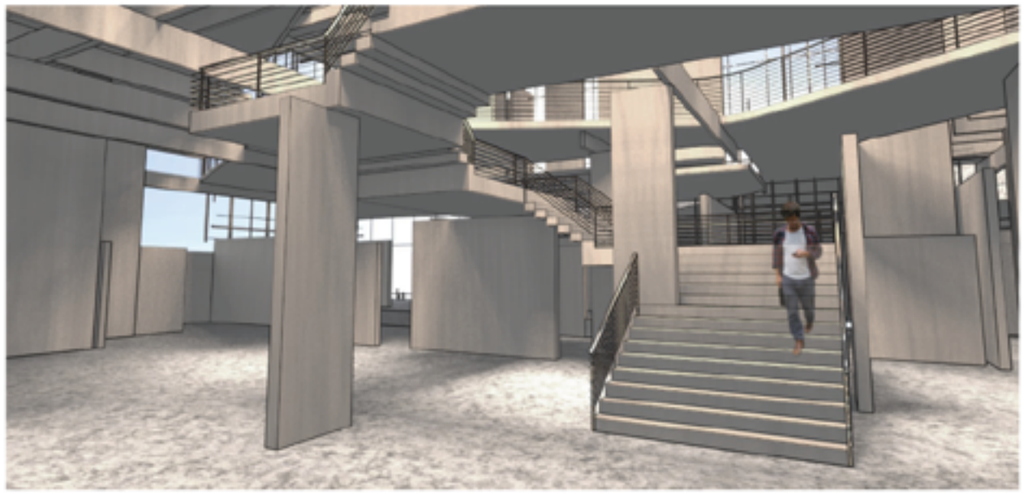
MODEL PHOTO



RESIDENTIAL LEVEL INTERIOR



LIBRARY ANNEX INTERIOR

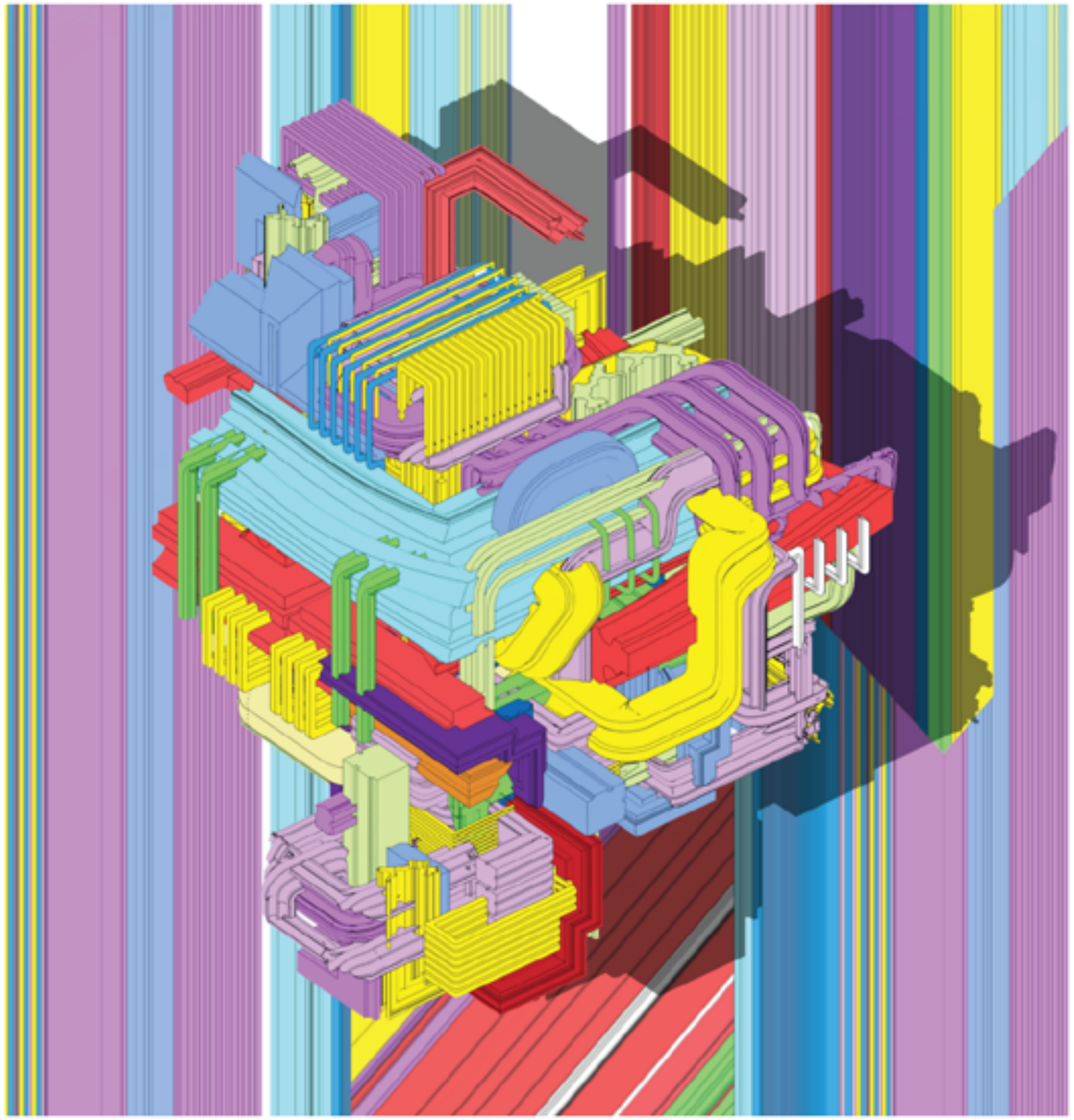


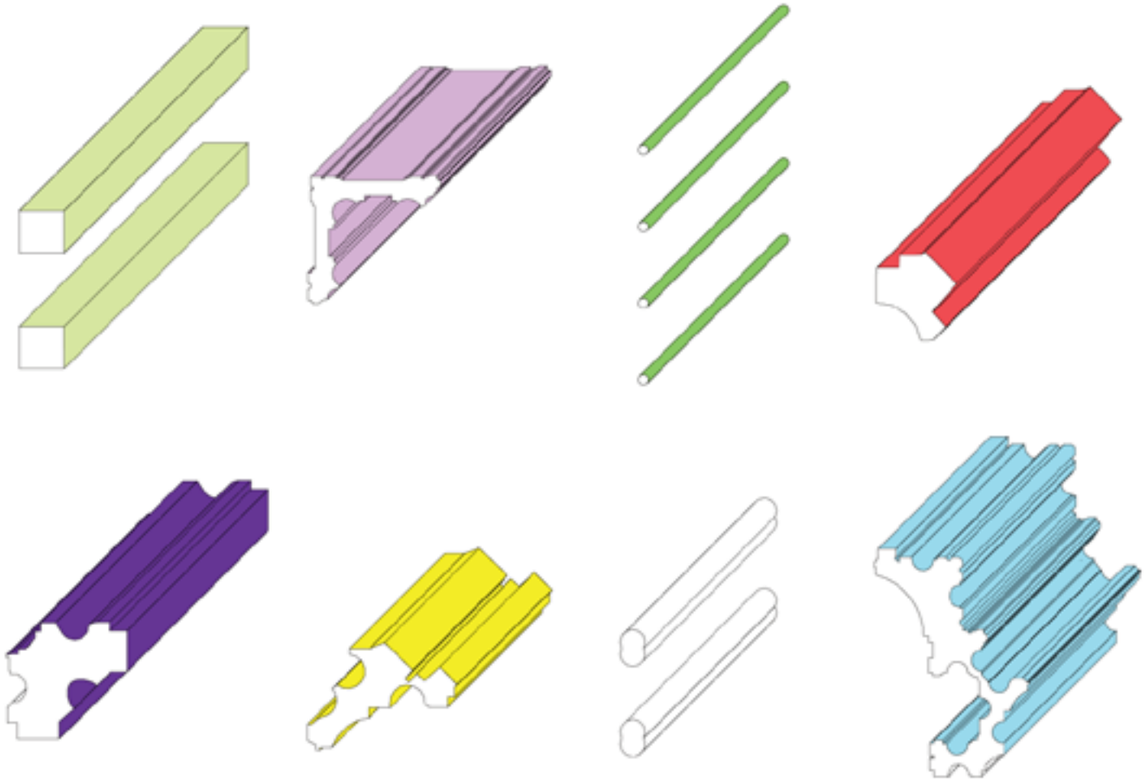
MARKET INTERIOR

Smear

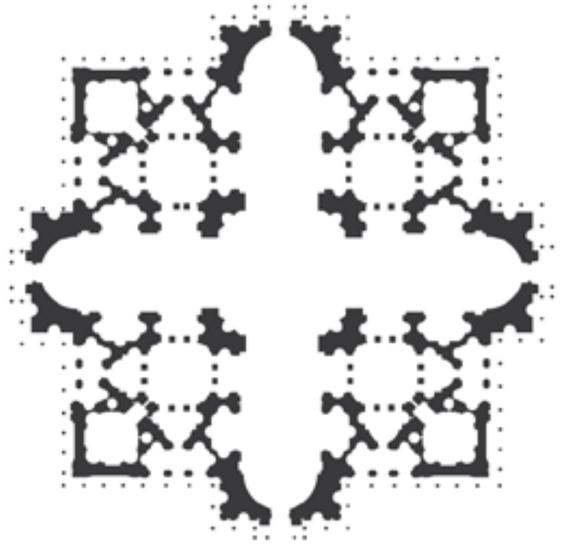
form-making theoretical exercise

Smear works as an exercise in farther removal of authorship. This is executed by beginning with the ready-made of Bramante's plan for St. Peter's Basilica. The qualities of the poche are isolated into "brushstroke" elements that are then swept along lines I defined. The result within that line are entirely up to the software's processes of interpreting these strokes resulting in sometimes glitchy geometries and unexpected surprises.

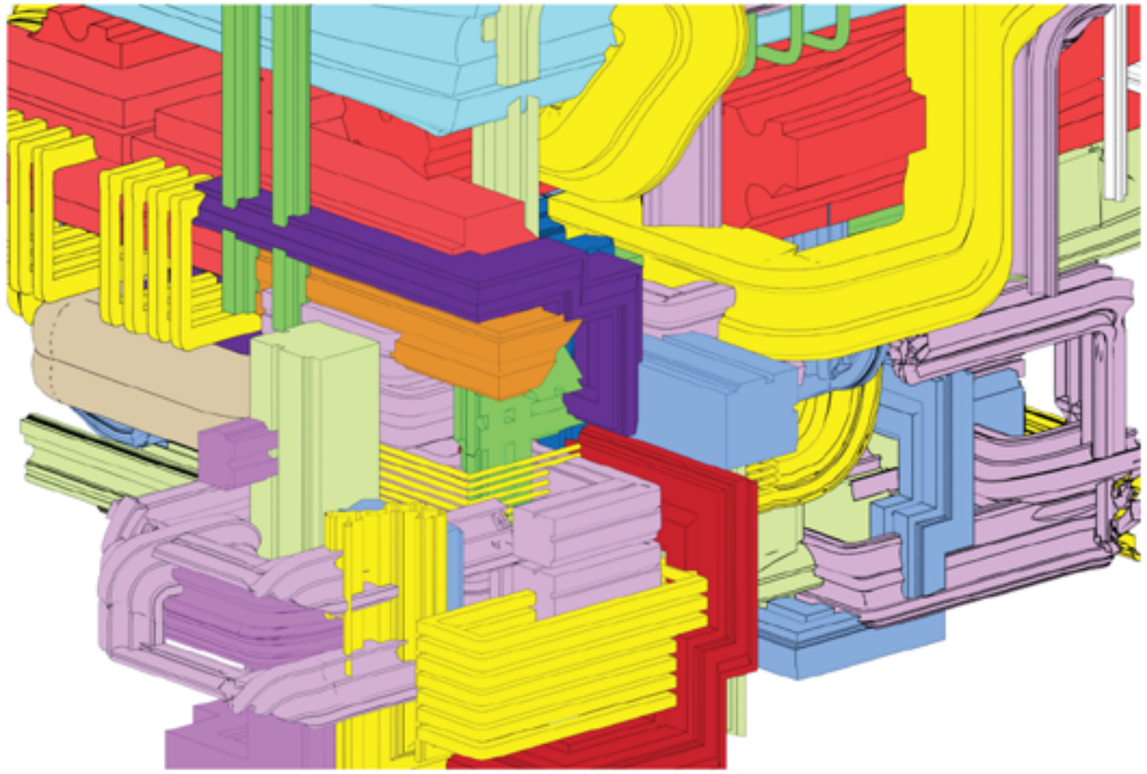


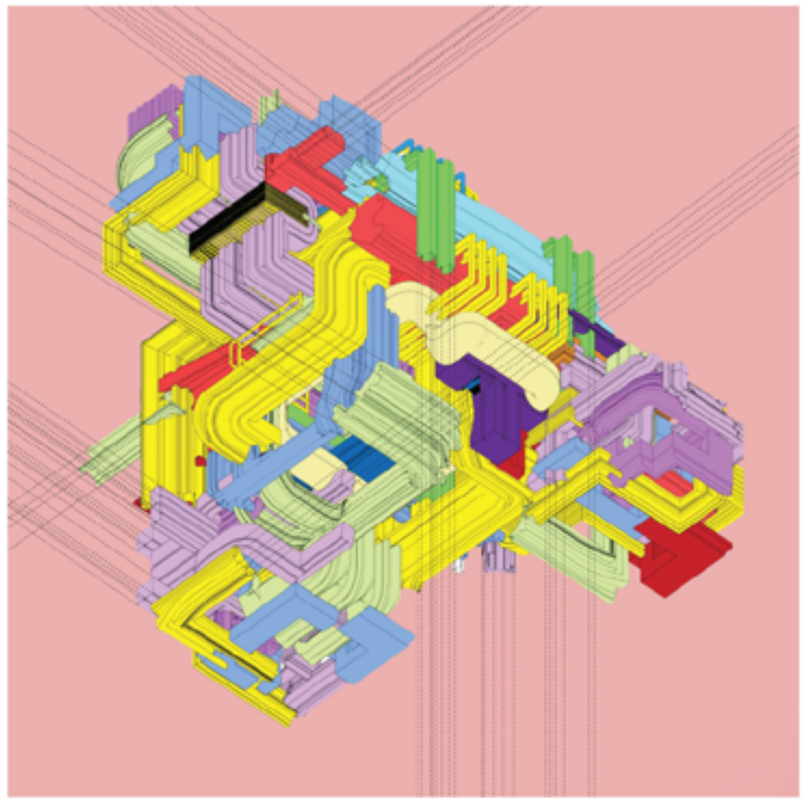


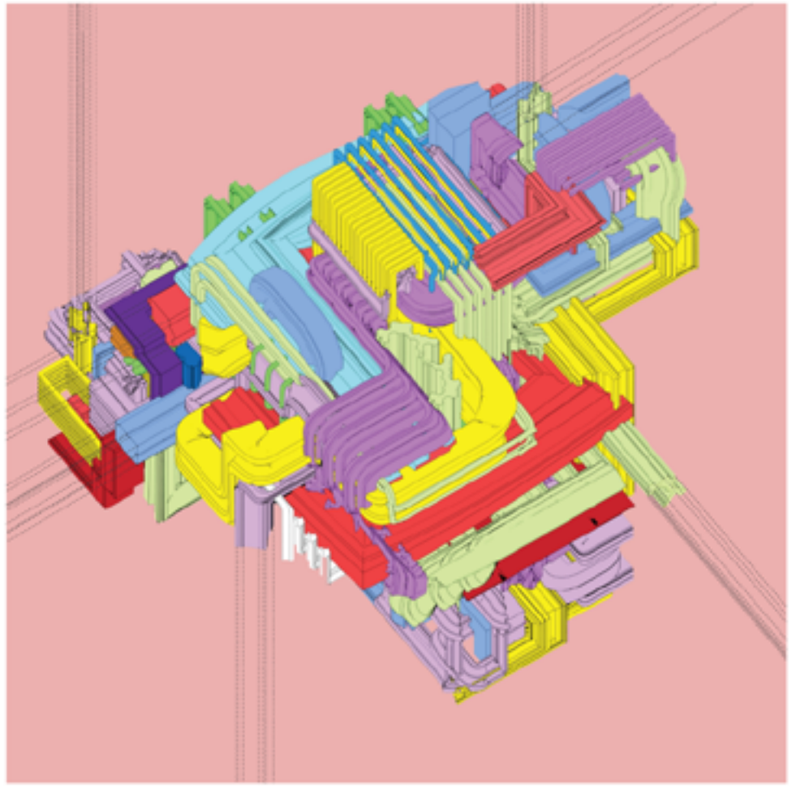
POCHE' FRAGMENTS



DONATO BRAMANTE - ST PETERS BASILICA - 1503



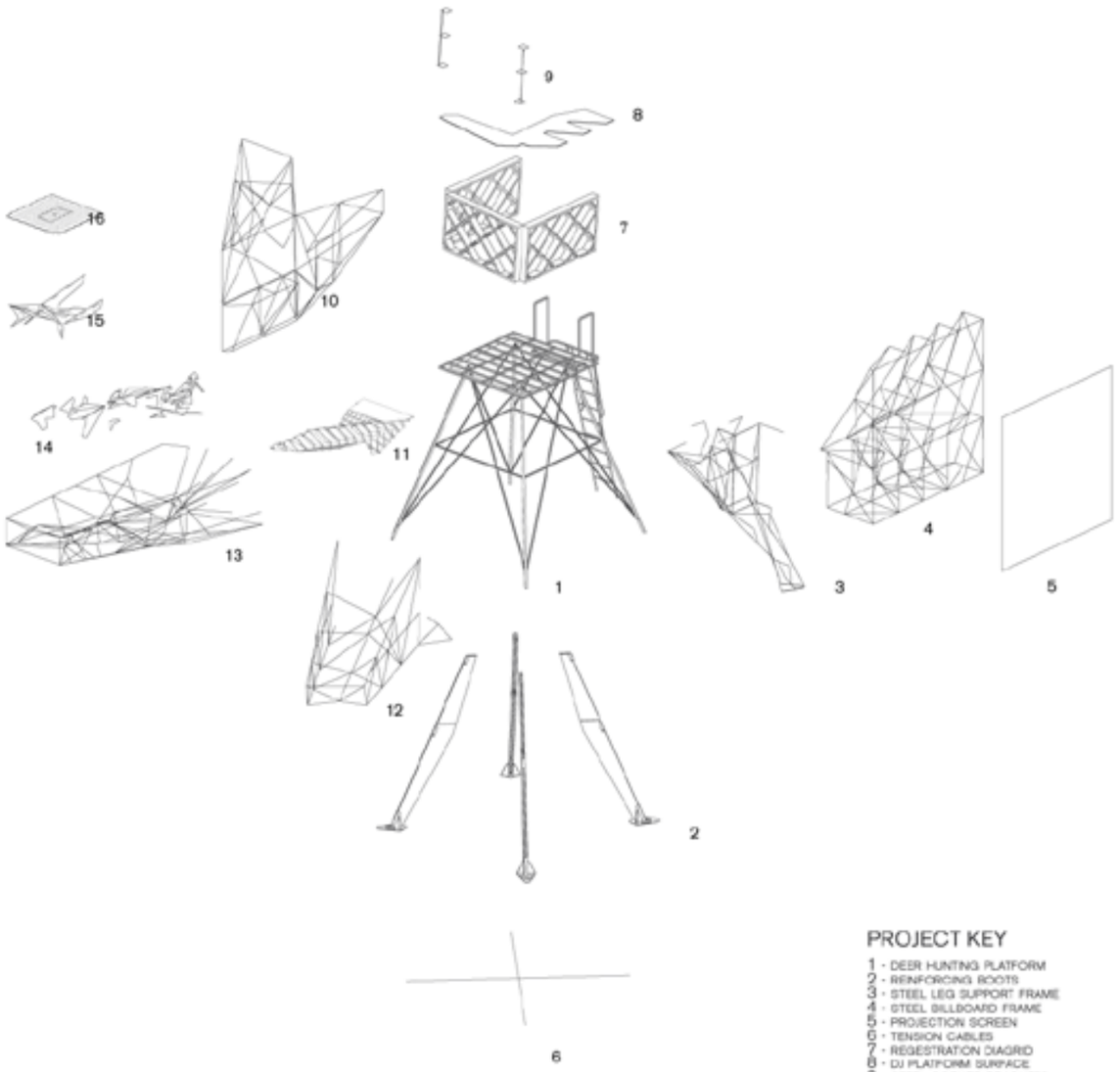




Beacon

professor : keith kaseman
project group : darcy brown, colin grill, michael kollner, richard dempsey, carly todd, monica magcalas, shantanu vijayakumar, clay kinningham,

Beacon is an experimental armature using AR (augmented reality) for construction without the need for expected architectural drawings. The project was developed through digital modelling, and translating the model to a 1 to 1 hologram that was referenced to needed tools for prefabrication and later assembly. The process of creating this project was an enlightening look into future potentials in the construction of complex geometries.



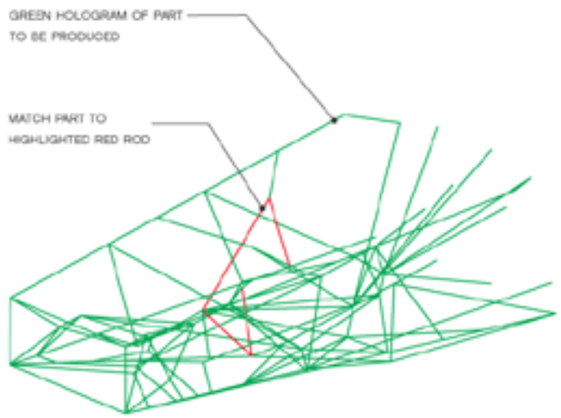
PROJECT KEY

1 - DEER HUNTING PLATFORM
2 - REINFORCING BOOTS
3 - STEEL LEG SUPPORT FRAME
4 - STEEL BILLBOARD FRAME
5 - PROJECTION SCREEN
6 - TENSION CABLES
7 - REGESTRATION DIAGRID
8 - DJ PLATFORM SURFACE
9 - STEEL CORNER BRACKETS
10 - STEEL BACKSPAN AND LIGHTING ARMATURE
11 - PLYWOOD WAFFLE SUPPORT ARM
12 - LOWER STEEL CANTILEVER
13 - UPPER STEEL CANTILEVER
14 - NODE BLOOM GUSSETS
15 - ALUMINUM LANDING PAD SUPPORTS
16 - DRONE LANDING PAD

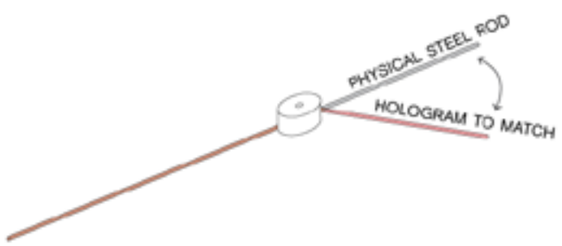
PROJECT COMPONENTS

STEEL CYBER-PHYSICAL WORKFLOW

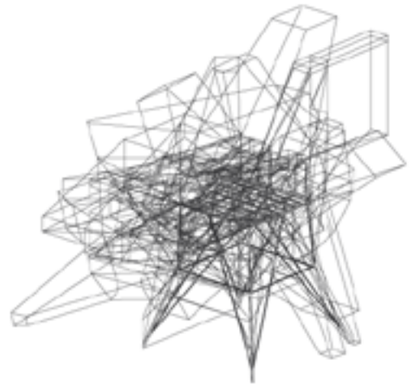
MICROSOFT HOLOLENS | FOLOGRAM | PIPE BENDER W/ AUGMENTED REALITY REGISTRATION | STEEL RODS | ELBOW GREASE | WELDER



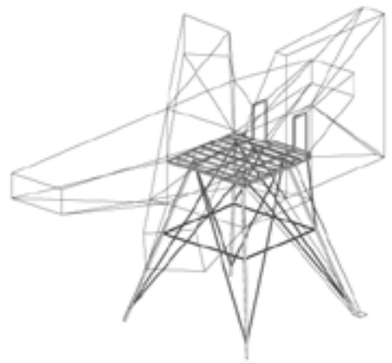
ASSEMBLY HOLOGRAM DRAWING



HOLOGRAM BENDING DIAGRAM

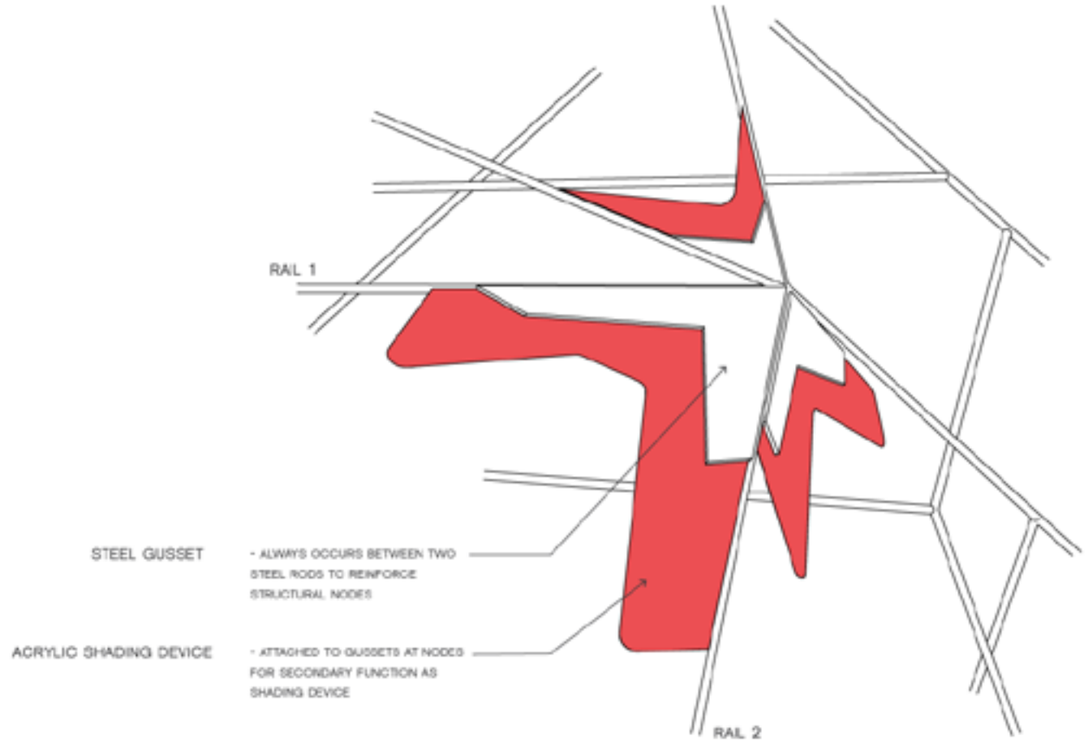


DESIGN PERMUTATIONS



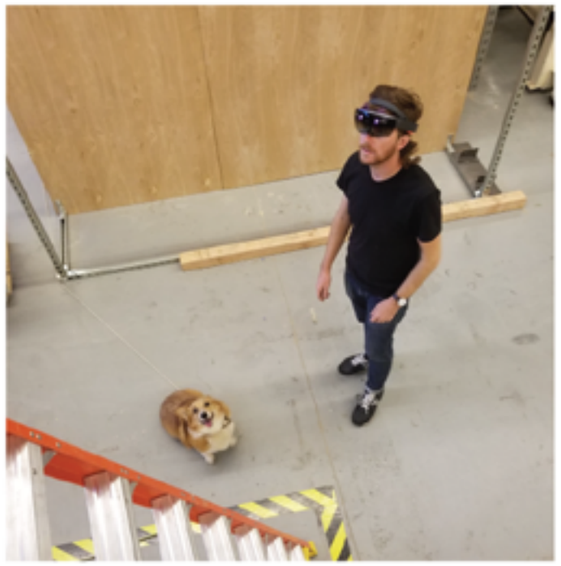
DESIGN DECISIONS TO BE DEVELOPED

BLOOM SHADING DIAGRAM

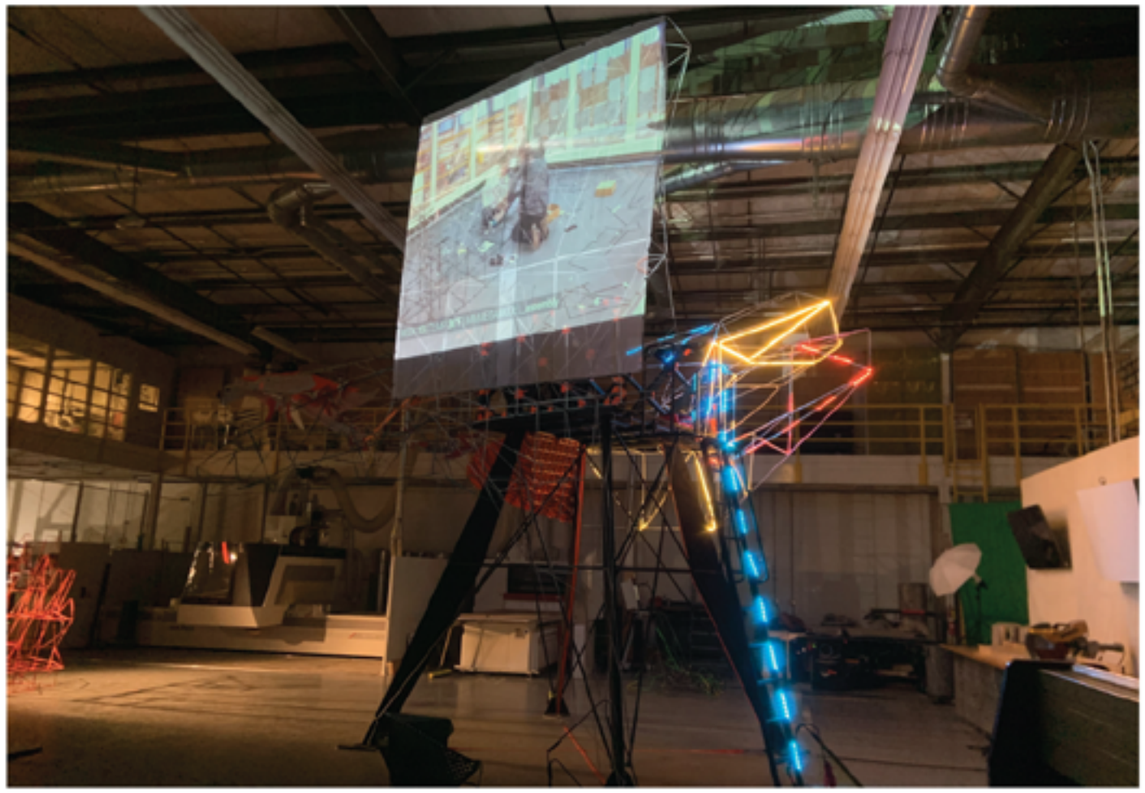


BLOOM NODE GUSSET / SHADING DEVICE

BLOOM NODE TEST FITTING



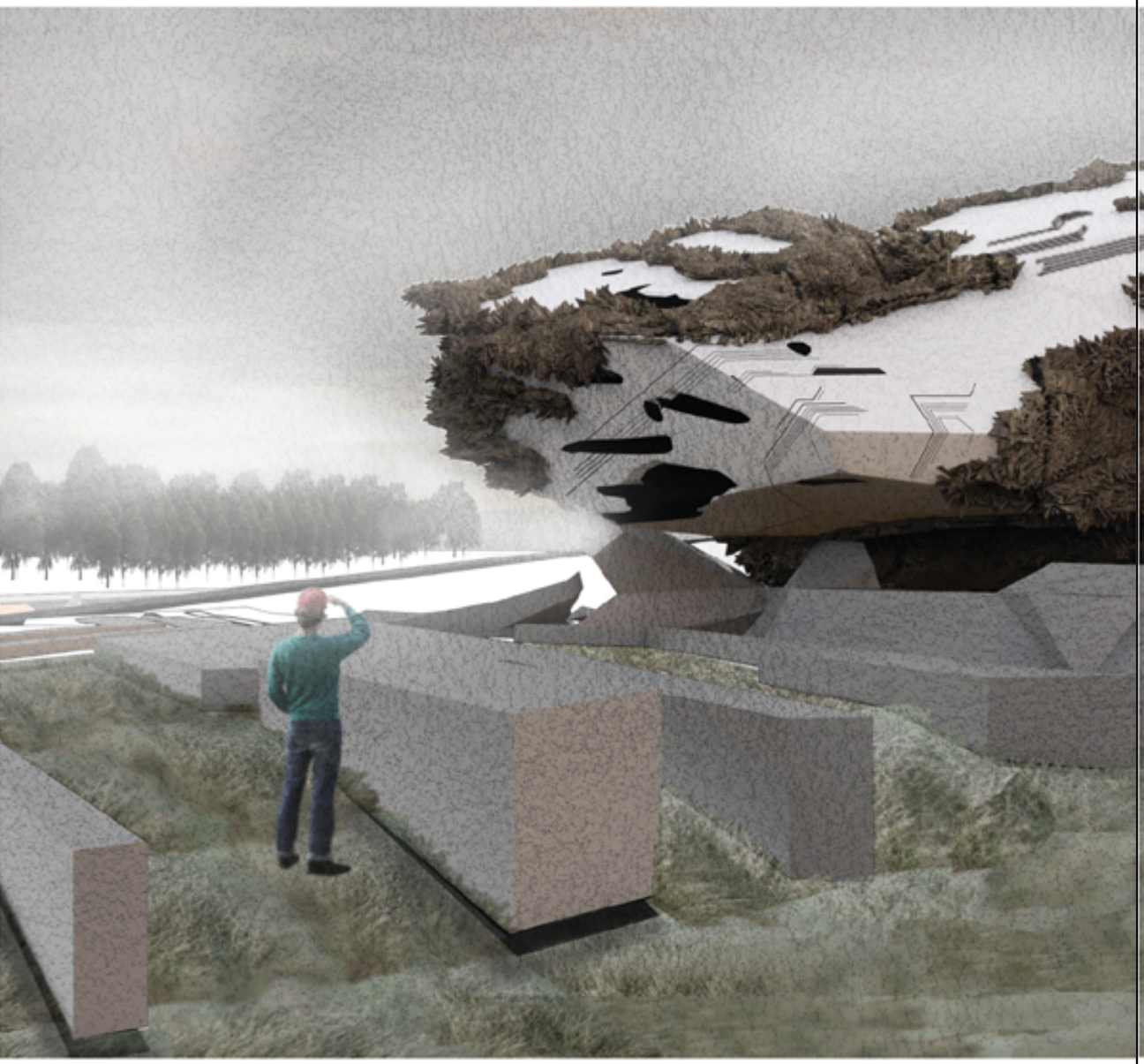
BLOOM NODE LOCATION REGISTRATION



French Broad River Park Redevelopment

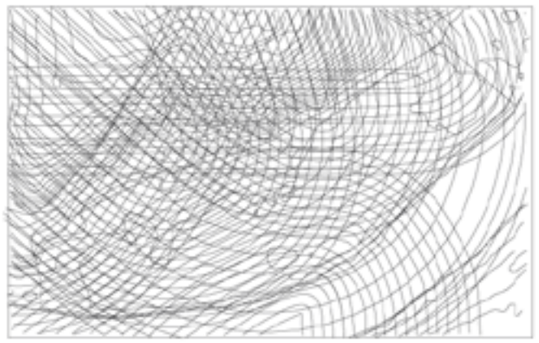
asheville, north carolina
professor : dan brown

Diverging from the expected approach to architectural context by exploring different time-lines and deep context of the geological underpinnings of place. Asheville's geology is composed of schist bedrock which inspired not only building form, but also the site's organizational "plates" The hard edged stone-like forms are visually softened by using a recycled wood rainscreen, as well as adding visual complexity based on viewer perspective and distance. This project consists of three major building objects containing a recreation center, an outdoor outfitters shop, and a cafe. There are also cabins scattered throughout the site for vacation rental.



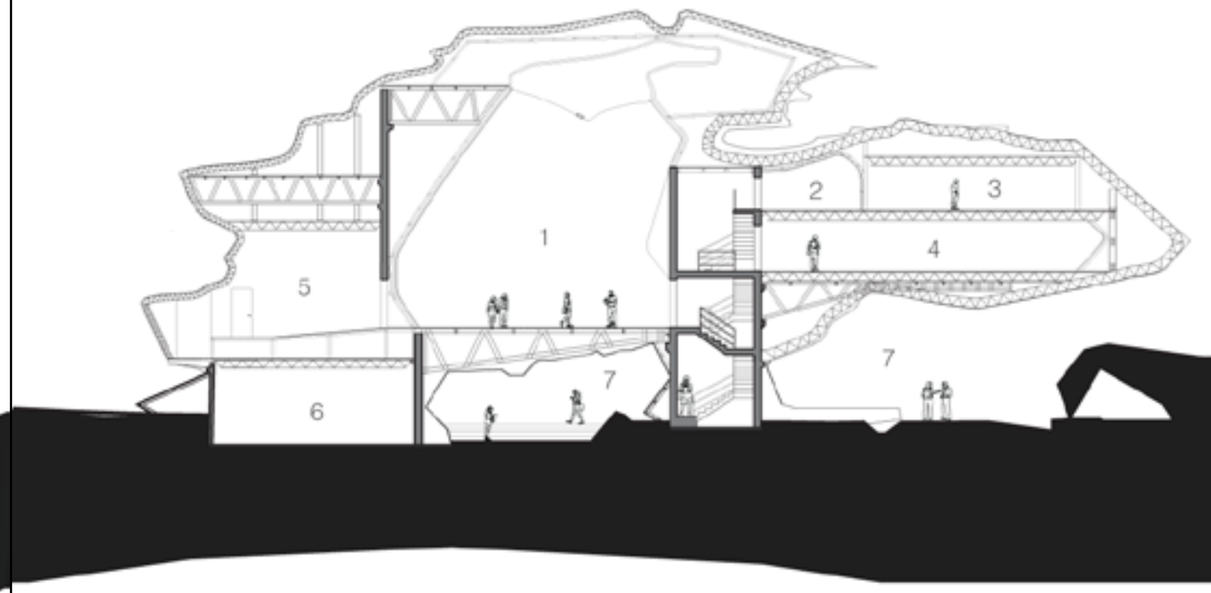
SITE PLAN

ORGANIZATIONAL PLATES



PARABOLIC ORGANIZATIONAL SYSTEM

SITE KEY
1.) RECREATIONAL CENTER
2.) BIKE AND OUTFITTER SHOP
3.) CAFE
4.) PARKING
5.) CABINS
6.) TRADITIONAL CAMPING
7.) CONCRETE SKATEPARK
8.) DOG PARK



RECREATIONAL CENTER KEY
1.) MIXING ATRIUM
2.) HALLWAY
3.) CAFE
4.) INSTRUCTIONAL GYM STUDIO
5.) RECIEVING AND STORAGE
6.) RACQUET BALL COURT
7.) COVERED OUTDOOR AREA

RECREATIONAL CENTER PLANS (LEVITATED OBJECT)

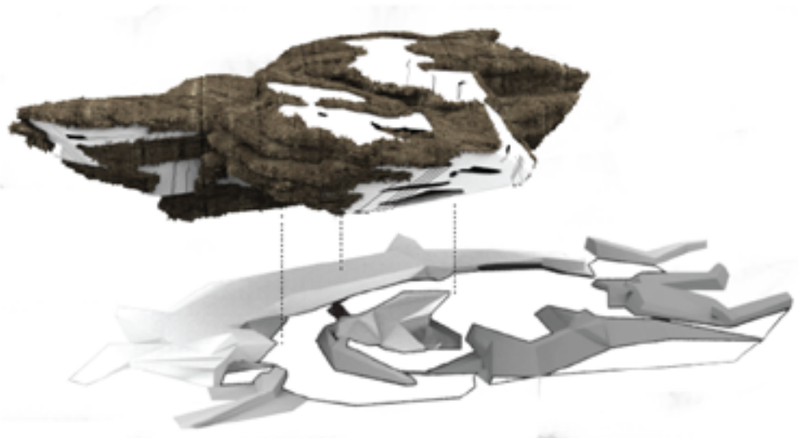
GROUND LEVEL

FIRST LEVEL

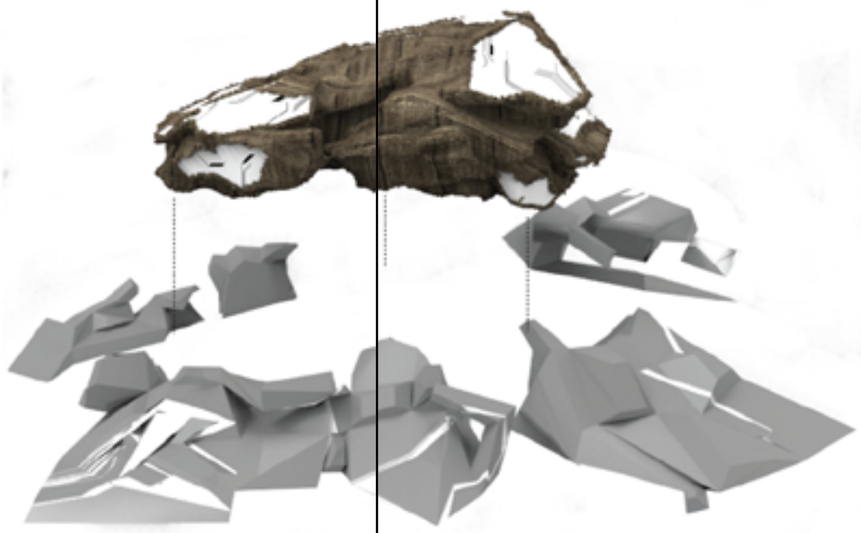
SECOND LEVEL

THIRD LEVEL

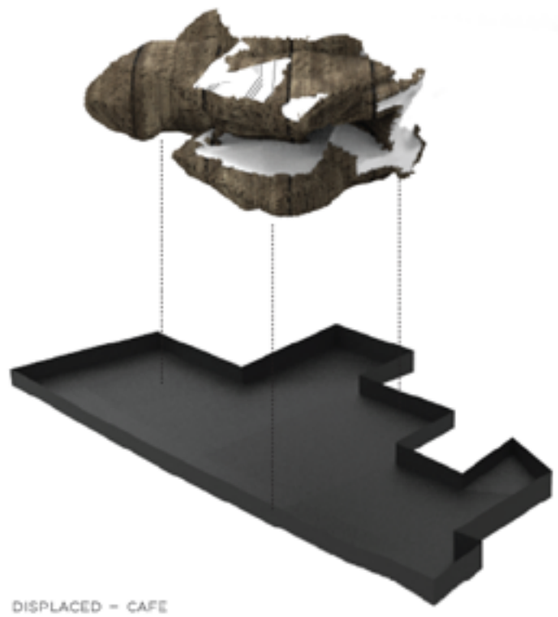
OBJECT GROUNDING METHODS



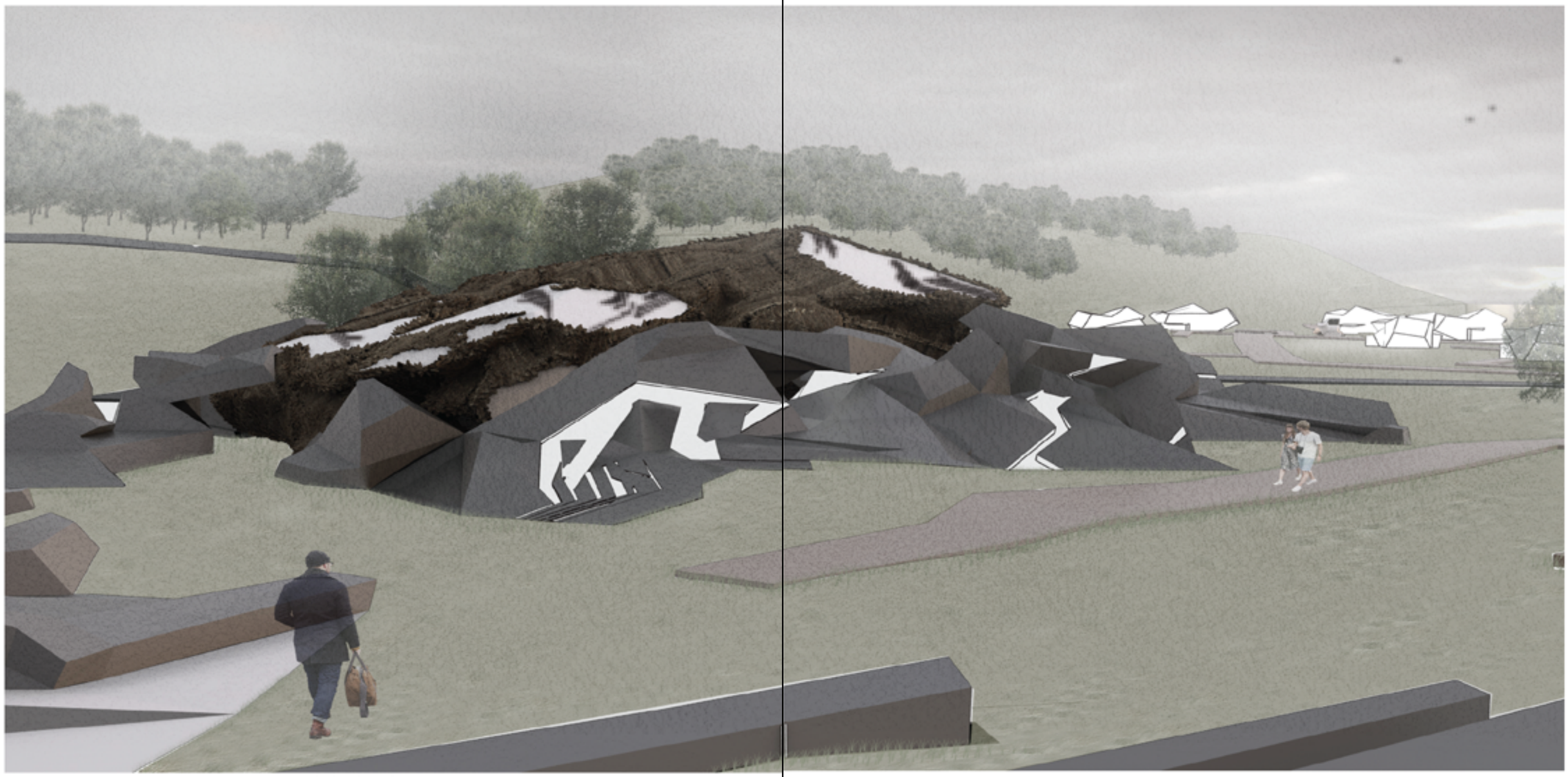
LEVITATED – RECREATIONAL CENTER



NESTED – OUTFITTERS SHOP



DISPLACED – CAFE

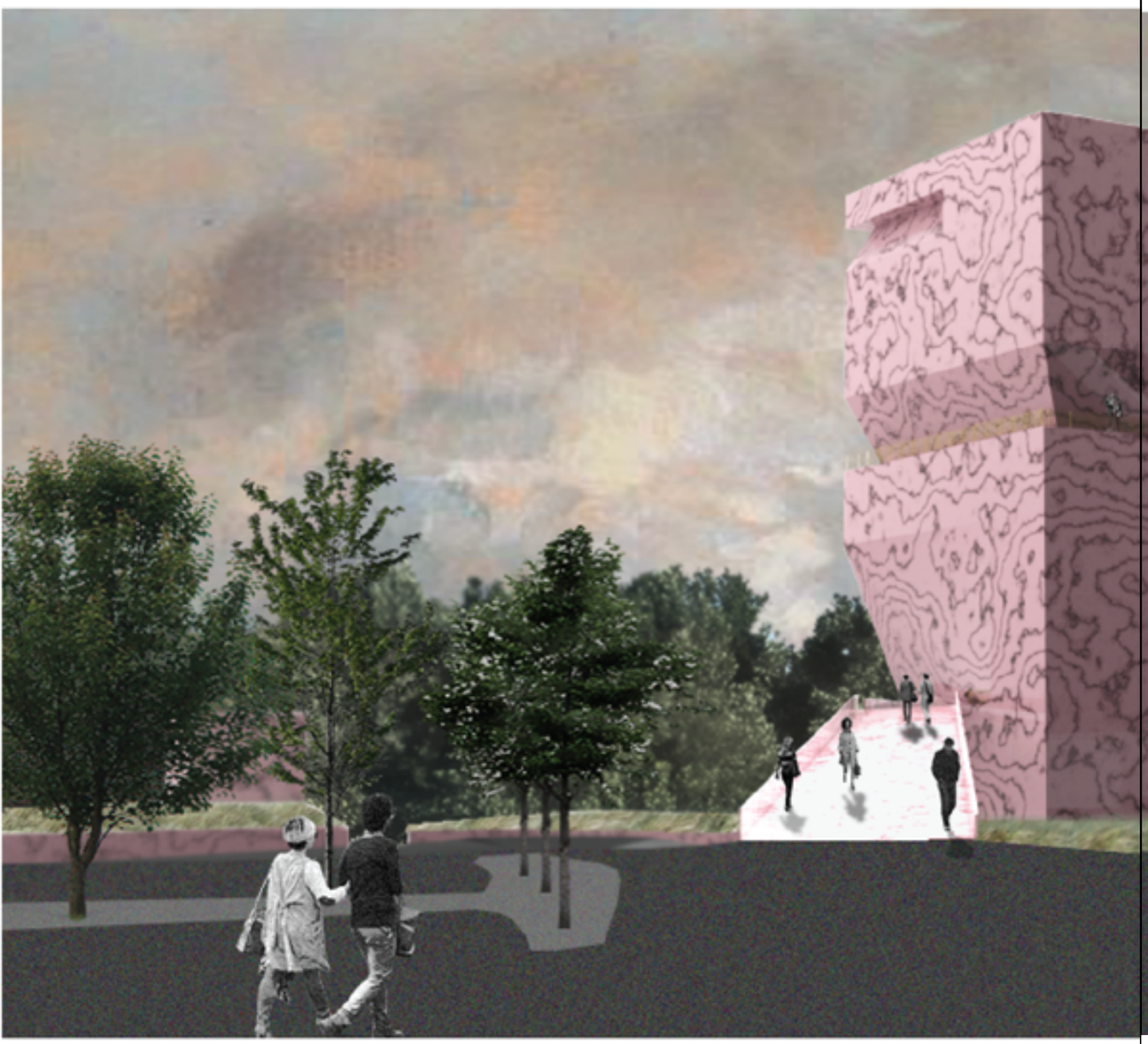


OUTFITTERS SHOP PERSPECTIVE

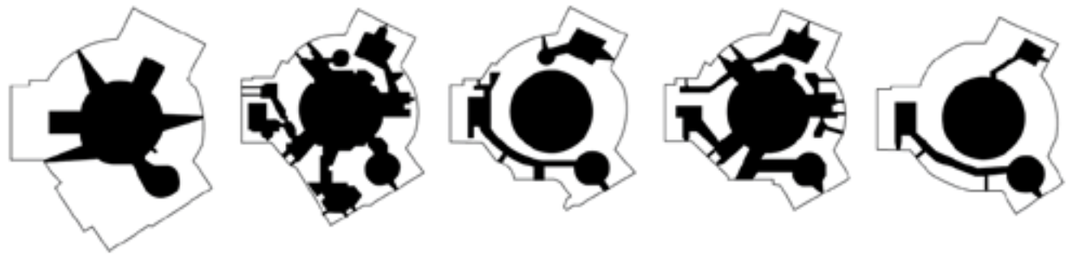
Liminality – A Space For Waiting

atlanta, georgia
professor : brian bell

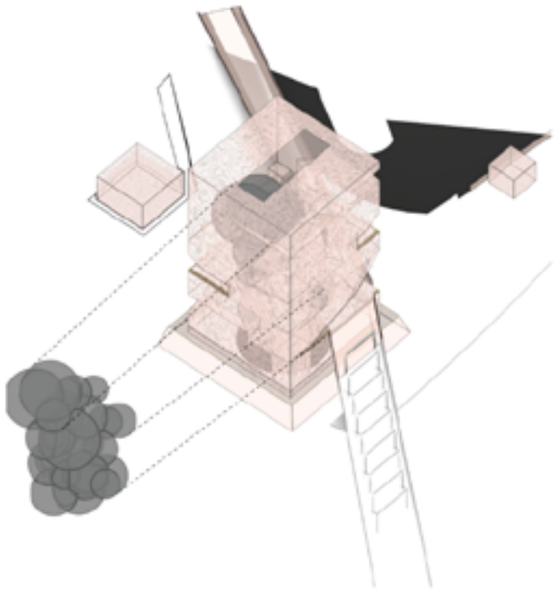
Slowing down is one the most important driving conceptual elements that allows one to perceive liminal spatial changes. The function of this project is a major rail station on Means street in Atlanta, Georgia, but it's more about the act of waiting and how space can change based on ones perception due to speed. The formal generation allows for those in the station to ponder the absent and remaining figures within the atrium of the building. One can begin to piece the puzzle together, but can never truly understand which architecturally elevates the waiting experience.



CASTLE ORFORD 1165 - 1173



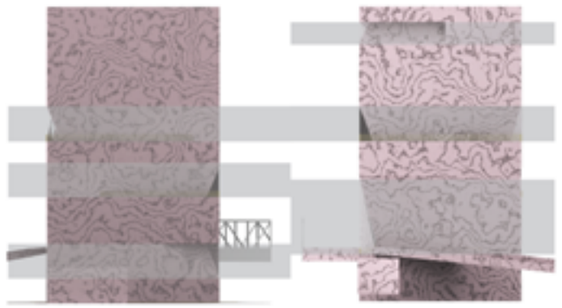
CASTLE ORFORD INVERTED SPATIAL DIAGRAM



ATRIUM FIGURAL ABSENCE RELATIONSHIP DIAGRAM

LIMINAL SPACE

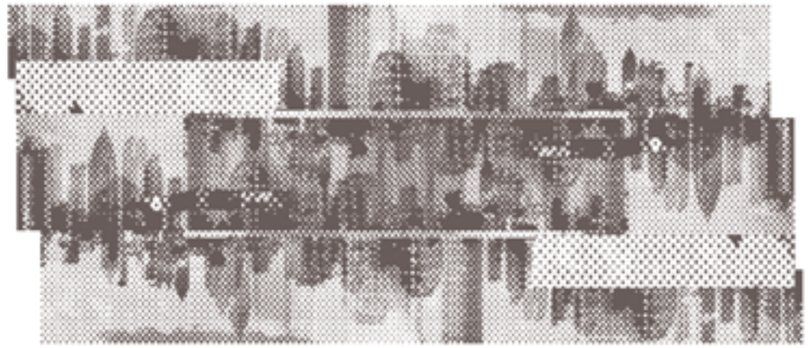
Liminal spaces are transitional or transformative spaces. They are waiting areas between one point in time and space and the next. This constitutes space on the verge of something as we experience in travel.



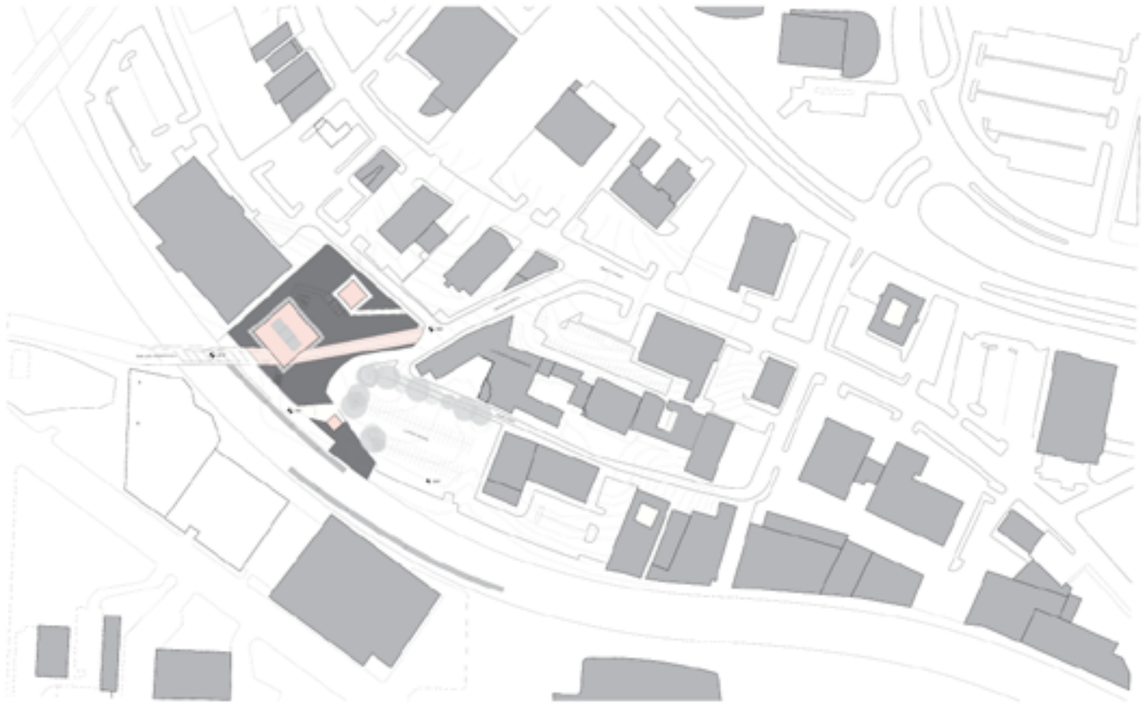
REDACTION - FIGURAL CUTS

EXTERIOR LIGHTING - PERFORATION

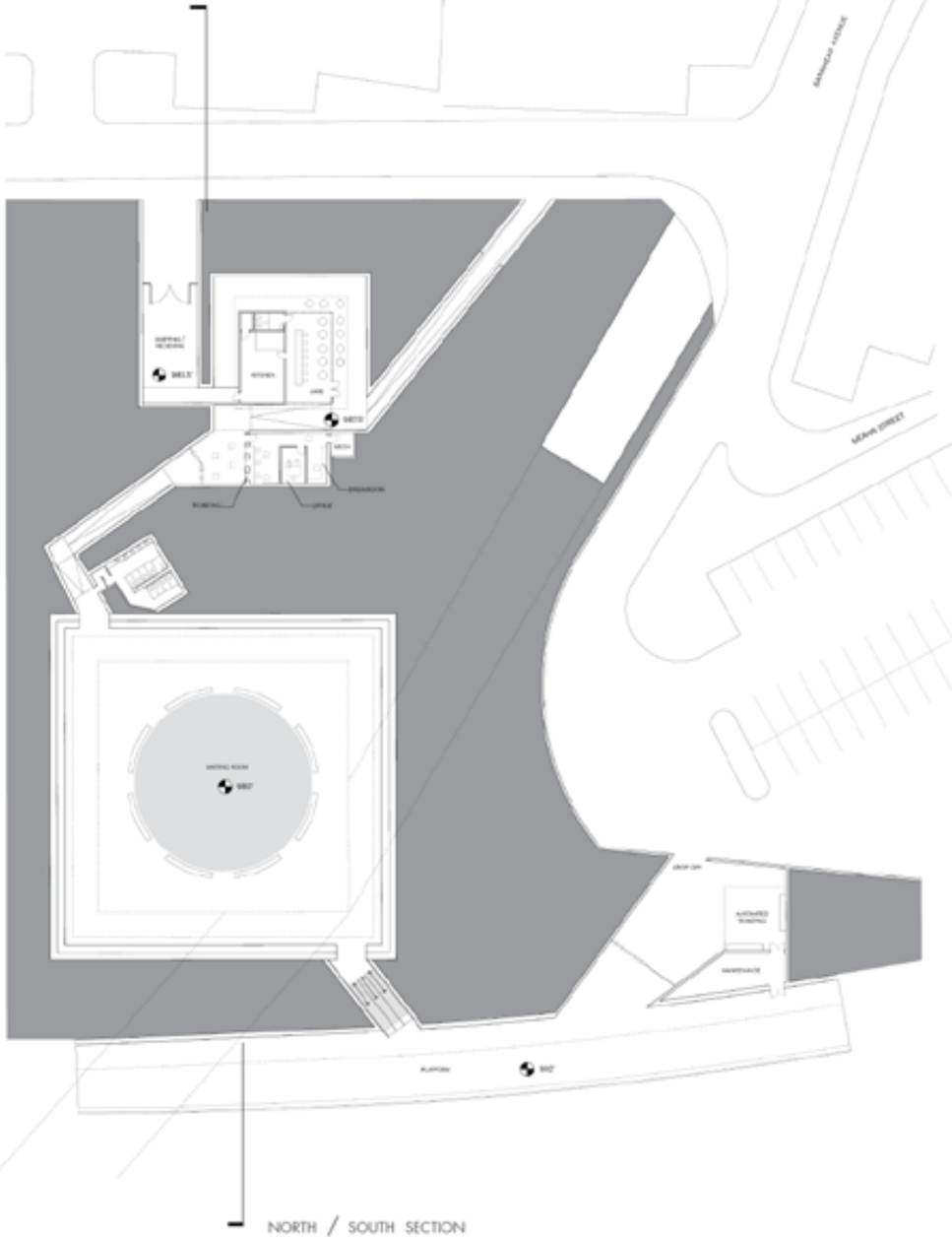
Gordon Bunshaft's Beinecke Library served as an inspiration for the aperture strategy. By allowing varying thickness in the synthetic marble cladding a zip-tone image of the surrounding city could project itself both in and out depending on time of day, interior or exterior.



EXTERIOR LIGHTING PERFORATION - PATTERN STUDY



SITE PLAN

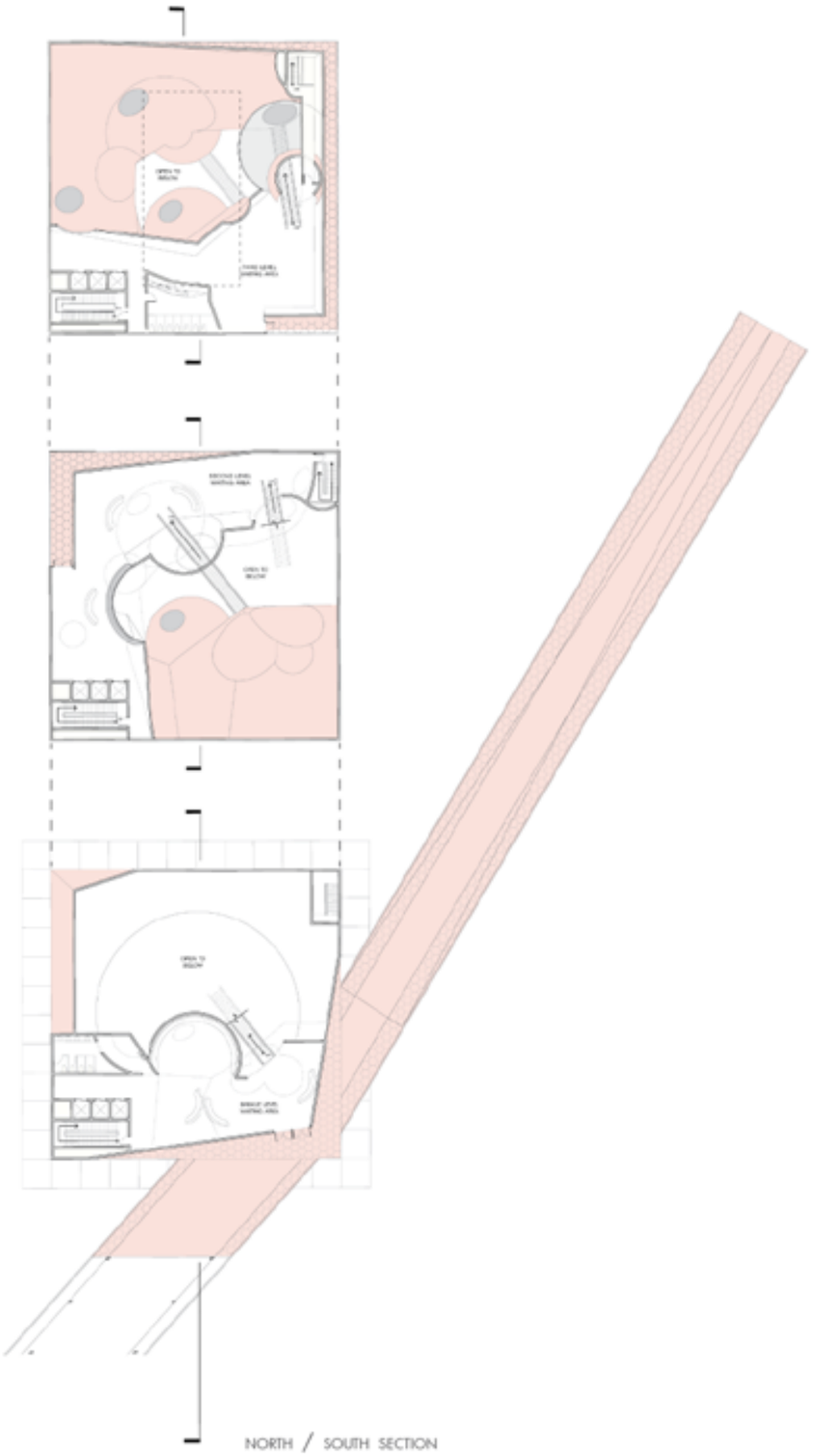


NORTH / SOUTH SECTION

WAITING ROOM, CAFE, AND TICKETING PLAN

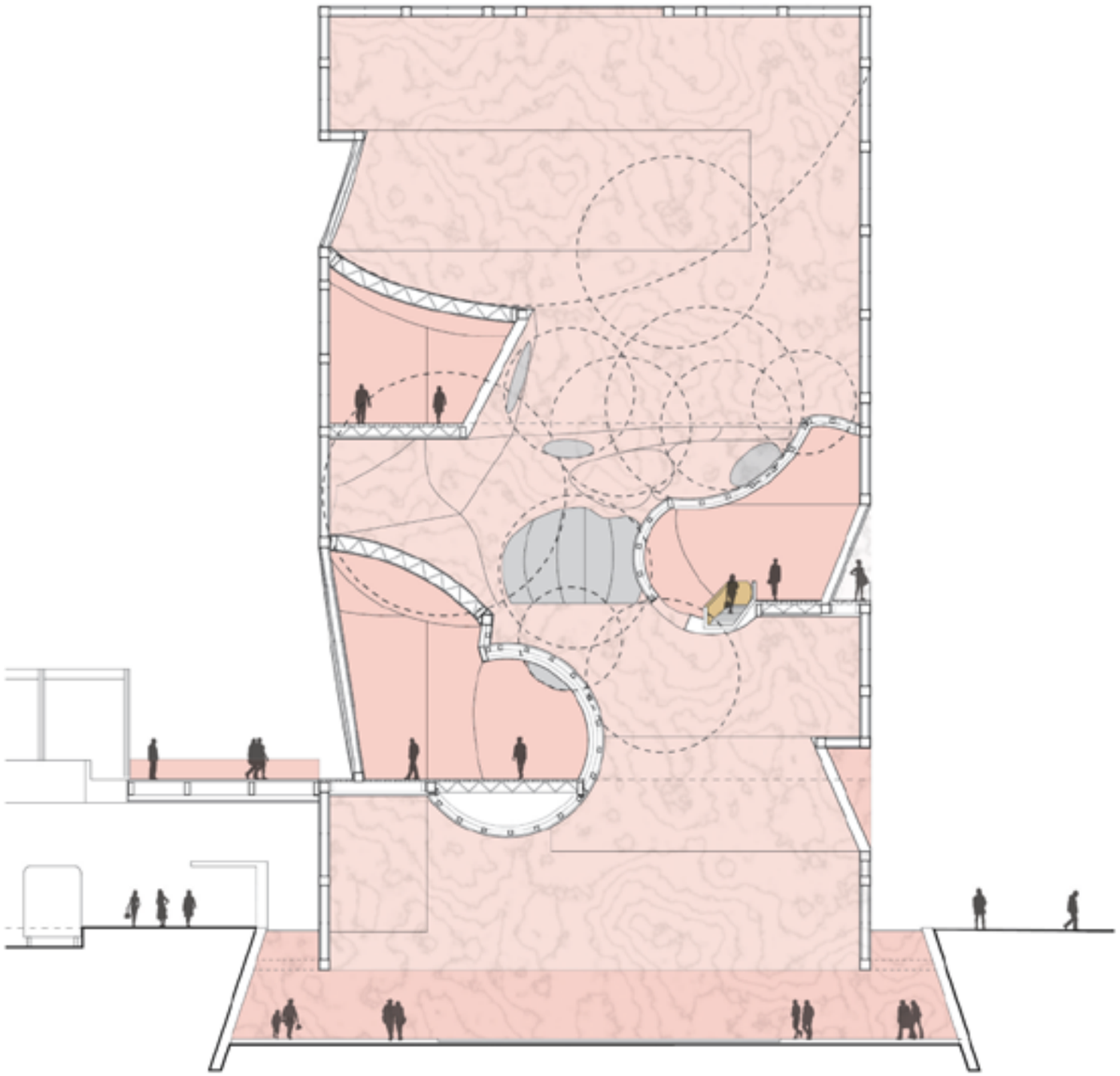
THIRD LEVEL PLAN

SECOND LEVEL PLAN

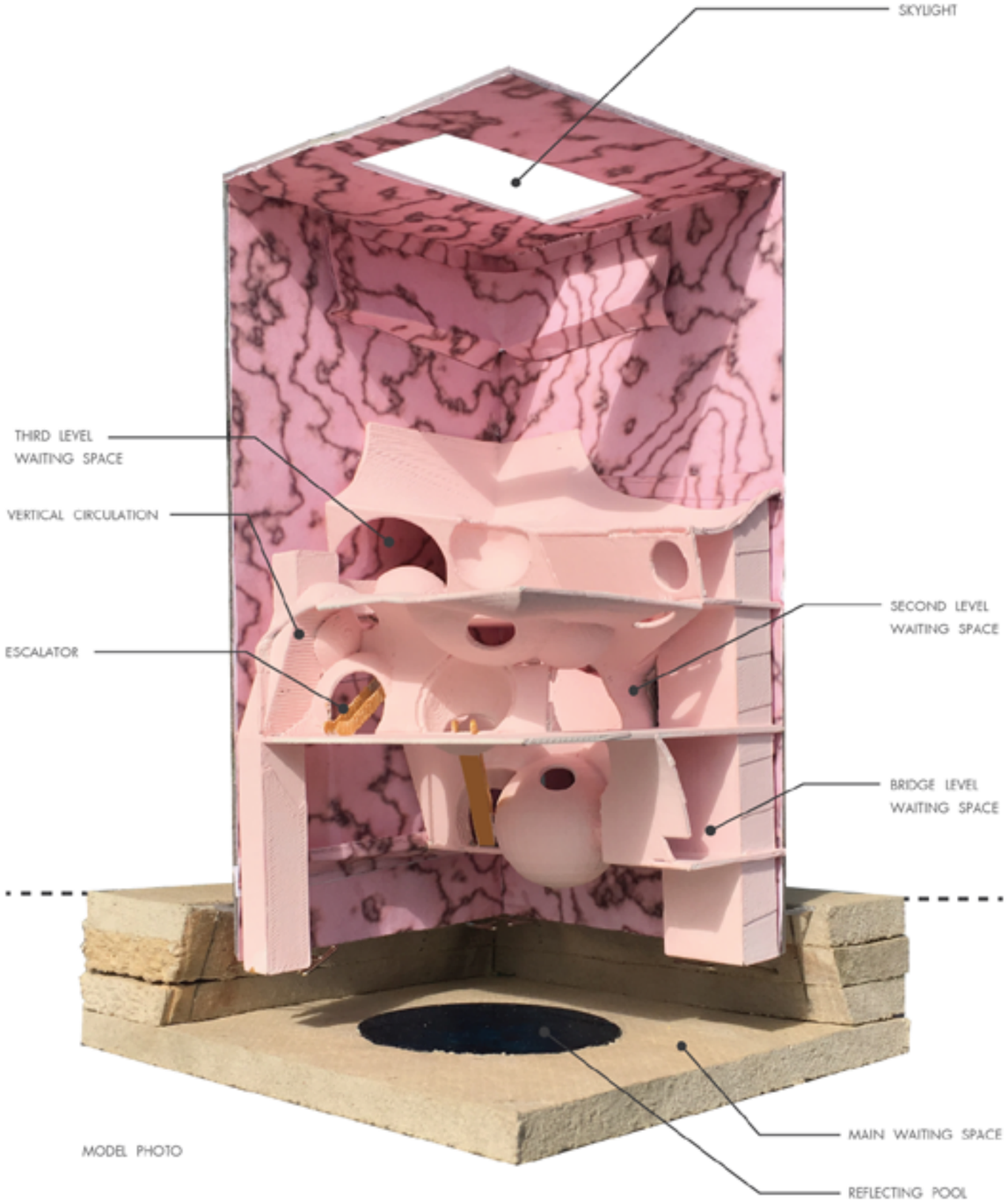


BRIDGE LEVEL PLAN

NORTH / SOUTH SECTION



NORTH / SOUTH SECTION



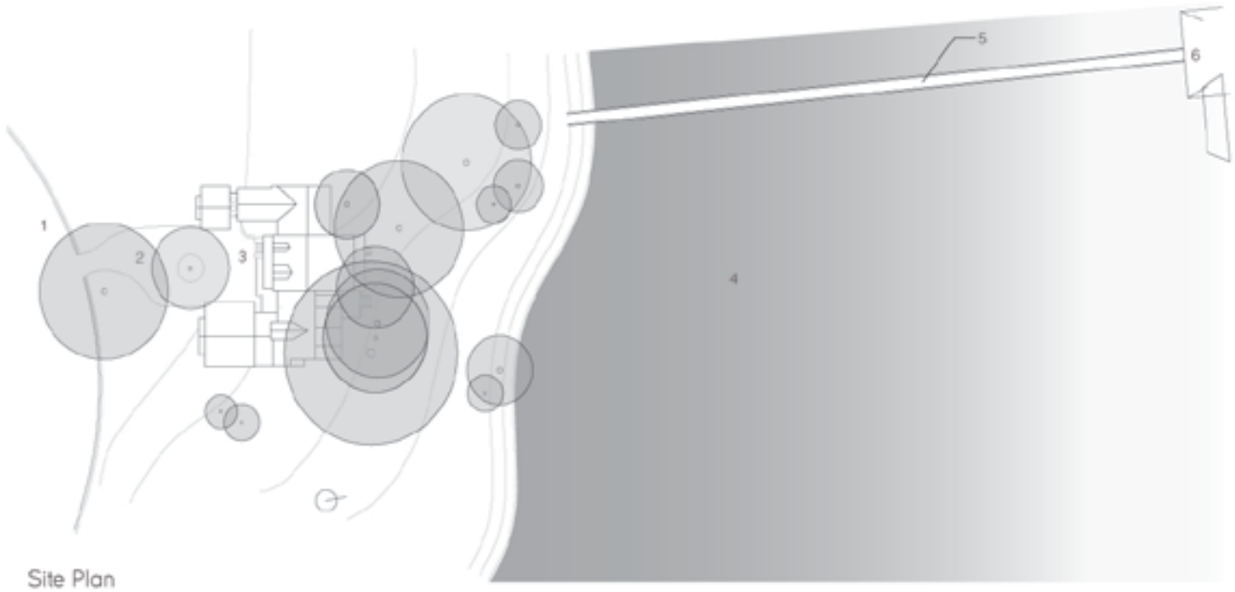
MODEL PHOTO

Surface Tension

utah state universty college of science, logan, utah
Collaboration with Amy Landesberg

Dinkler Residence

wilmington island georgia
Savannah Magazine : Homes Spring 2018
Cowart Group Architects savannah, georgia



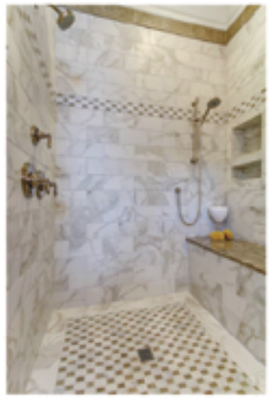
Site Plan

Plan Key

1.) LIVING ROOM
2.) DINING
3.) KITCHEN
4.) LAUNDRY
5.) PANTRY
6.) MUD ROOM
7.) FISHING
8.) TWO CAR GARAGE
9.) ONE CAR GARAGE
10.) HVAC AND GARBAGE
11.) MASTER CLOSET
12.) MASTER BATHROOM
13.) MASTER BEDROOM
14.) ENTRY
15.) LIBRARY
16.) BEDROOM
17.) HALLWAY / GALLERY
18.) BEDROOM
19.) BEDROOM
20.) STORAGE
21.) STORAGE
22.) SEWING

Site Key

1.) STREET
2.) DRIVEWAY
3.) ENTRY
4.) MARSH
5.) PIER
6.) DOCK / BOAT STORAGE



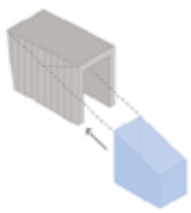
Pulaski Exchange

With Bork Design Architects
athens, georgia

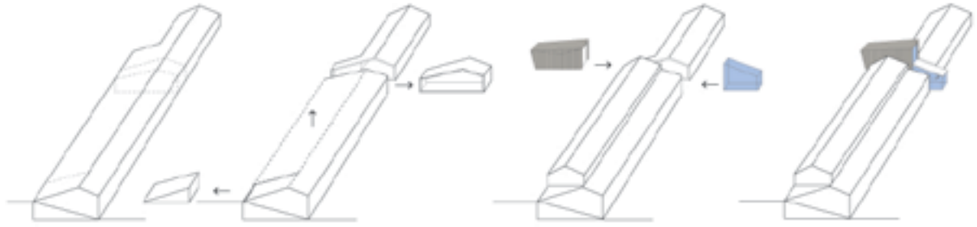
Pulaski Exchange is a mixed use project in downtown Athens, Georgia consisting of the adaptive re-use of a 117 year old cotton seed oil plant with the addition of a grafted on second level to this existing building and two new buildings along Pulaski Street with commercial space at ground level and thirteen condominiums spread between the two buildings' upper floors. The new buildings flank an entry plaza leading visitors from the street into the site and existing building. Entry occurs within a new architectural interjection containing vertical circulation as well more importantlly acting as a signifier of entry into the existing structure, as well as a unification of the new and existing architectural languages. The re-use of the existing building consists of office suites within the grafted second floor, two dedicated tenents below on each end of the building, a restaurant and a coffee shop respectively, and six small booth spaces to allow for walk up counter restaurants or "pop-up" retail spaces creating a local market within the historic factory space. My work on this project consisted of the design for re-use of the existing building as well as being the lead conceptual designer of the entry signifier / connector for the existing building and plaza. As well as construction documentation of all buildings on the site.

MARKET INTERIOR

ENTRY CONNECTOR INTERIOR



ENTRY CONNECTOR



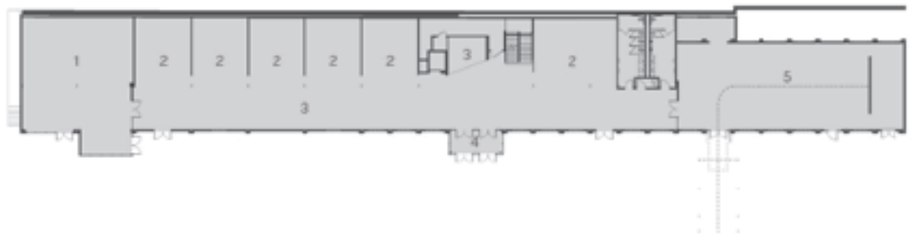
MARKET TRANSFORMATIONS

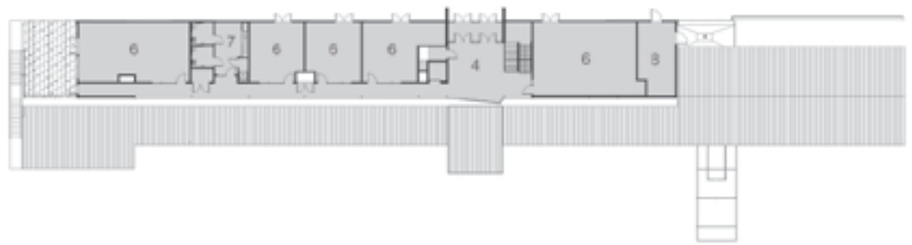
REAR PERSPECTIVE

SECTION THROUGH
ENTRY AND PLAZA

SITE KEY

1.) BUILDING 100 (EXISTING BUILDING)
2.) BUILDING 200
3.) BUILDING 300
4.) PLAZA
5.) PARKING
6.) OUTDOOR SEATING
7.) EXISTING HISTORIC BRICK SIGN
8.) ENTRY



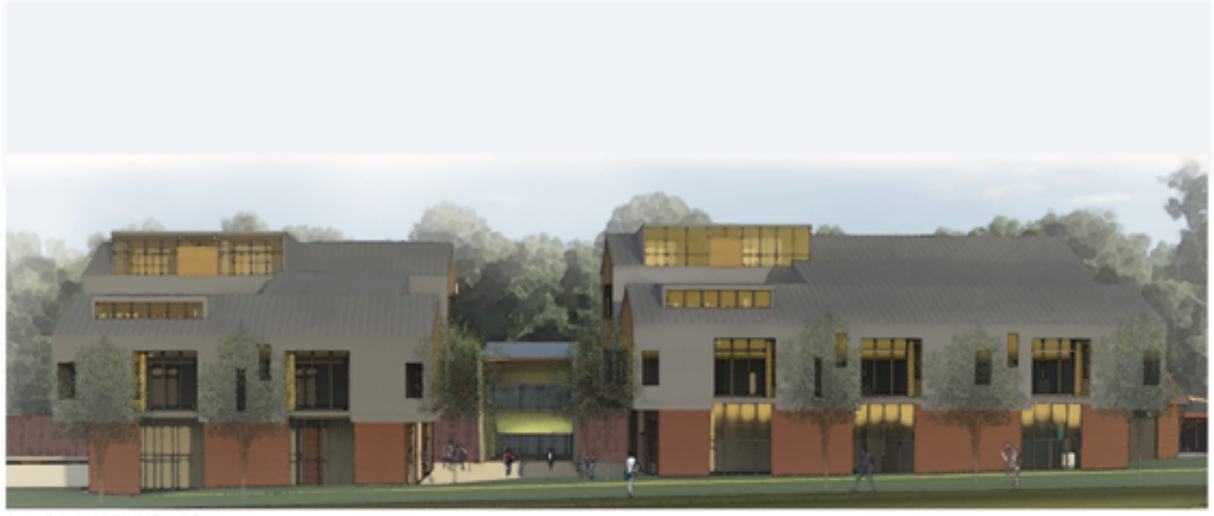


PLAN KEY

1.) CAFE / COFFEE SHOP
2.) BOOTH SPACE
3.) COMMON SEATING
4.) ENTRY
5.) RESTAURANT
6.) OFFICE SUITE
7.) BREAKROOM / RESTROOMS
8.) MECHANICAL

REAR ELEVATION

EXISTING CONDITIONS



PULASKI STREET ELEVATION

Herstand Hall

With Hansen Architects
savannah, georgia

Built in 1926 by architect Cletus Bergen, this five-story, 40,718-square-foot structure originally housed Slotin and Co., one of the largest dry goods wholesalers in Savannah during the early 20th century. The building was partially renovated in the 1980s an effort that included partial removal of the heavy timber structure to create the current open five-story atrium which needed to be completely restructured for its contemporary re-use.

Current renovation plans for Herstand Hall include adding computer labs, foundation studies classrooms, lecture rooms and faculty offices, as well as open lounge, study and gathering spaces. Renovations also included the addition of a mass timber grand stair also incorporating seating, and cantilevered crit spaces suspending students into the atrium while presenting their projects. These elements as well as all railing profiles were parts of the project that I personally designed and developed.

(Photos courtesy of Hansen Architects)

LAMINATED PSL GRAND STAIR WITH INTEGRATED LED LIGHTING FOR DISPLAY PEDESTAL