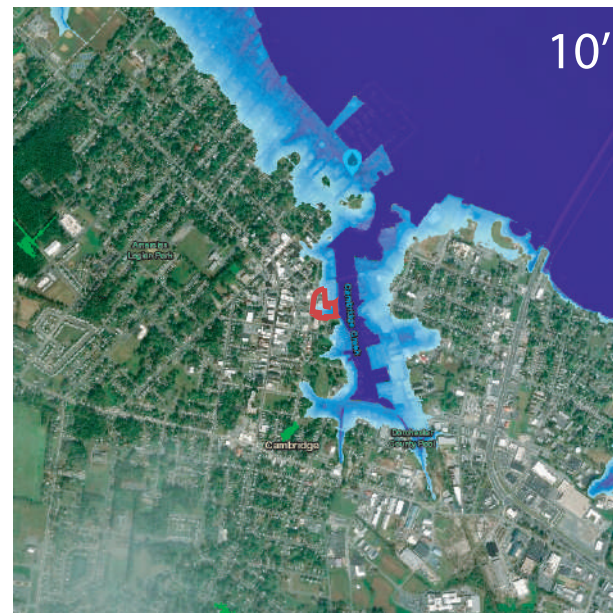


CAMBRIDGE  
Multi-Family  
Housing

ISABELLA ADEKOYA

'By 2050, hundreds of millions of people will be displaced from their homes either temporarily or permanently due to climate related hazards and climate induced conflicts. What is the role of architecture in climate- related forced migration?'

Nerea Elorduy



Sea Level Rise Viewer Cambridge, MD [coast.noaa.gov/slr/](https://coast.noaa.gov/slr/)

# BLACK RESILIENCE: PINE STREET RACIAL UNREST



Gloria Richardson and protestors facing National Guard troops, Cambridge, Maryland, ca. 1963

Cambridge Maryland has a significant history and was once a “stop” on the Underground Railroad. The Choptank River was used many times by Harriet Tubman and her “passengers” on their northward journeys. In the 1960s, the Pine Street neighborhood was the center of a nationally significant chapter in the civil rights movement. The civil-rights-era chapter ended badly for Pine Street, with a tragic fire in 1967 that destroyed two blocks of the community.

# PSYCHOLOGY OF BLACK RESILIENCY

## BUILD CONNECTIONS

- Prioritize Relationships
- Join a group

## FOSTER WELLNESS

- Mindfulness
- Avoid Negativity

## FIND A PURPOSE

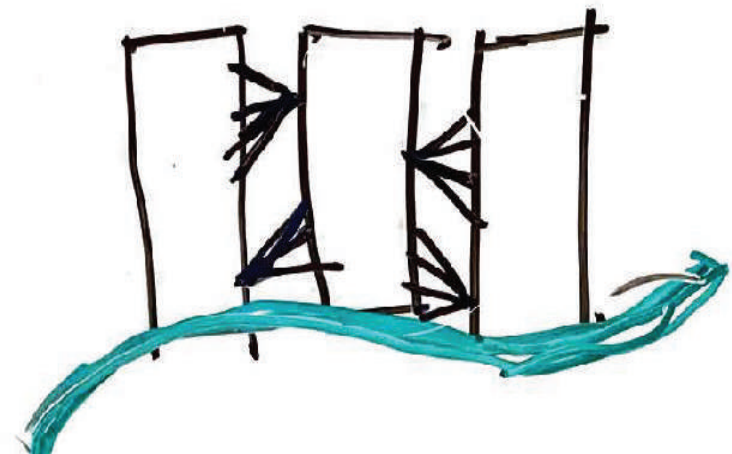
- Help Others
- Be Proactive

## EMBRACE

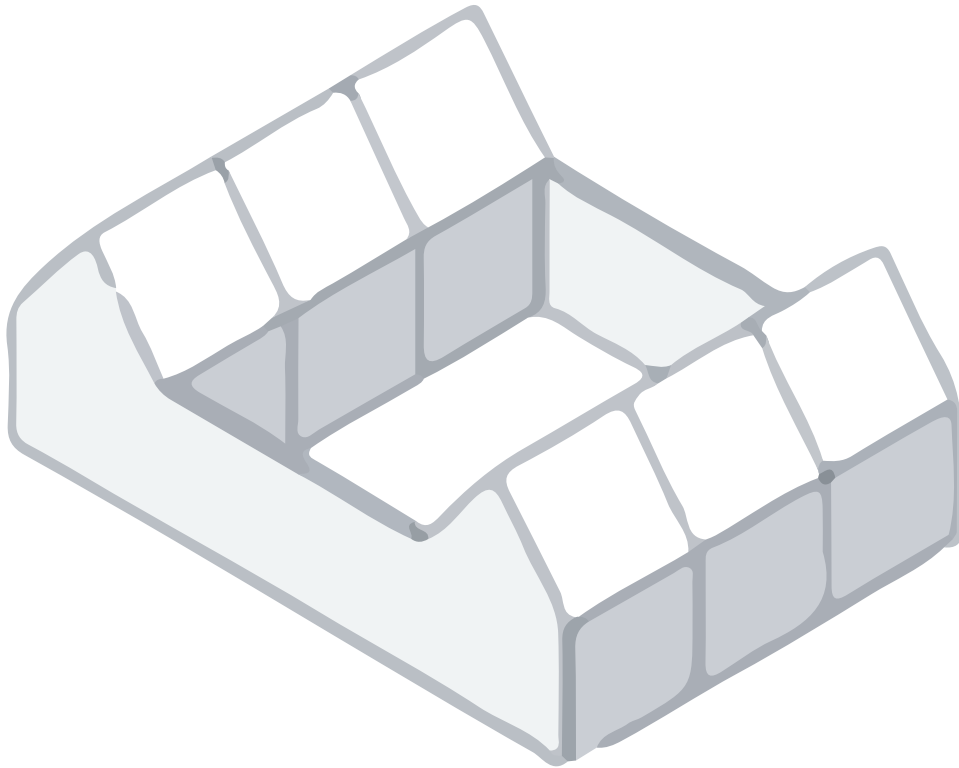
- Accept Change
- Learn
- Hopeful Outlook

HOW CAN THE IDEA OF RESILIENCY  
BE REFLECTED IN FORM?

Provid strategies to  
recognize and  
respond to adversities  
the displaced  
residents face.



# HOUSING TYPOLOGY PRECEDENTS



ATTACHED UNITS WITH  
COURTYARD



CONCEPT SKETCH:  
CONNECTIVITY BETWEEN  
BUILDINGS AND  
EMBRACING WATER

# HOUSING TYPOLOGY PRECEDENTS

Scandinavian design is a design movement characterized by simplicity and functionality along bodies of water. Many Nordic countries **embrace** the water with their architecture.



Town hall in Tønder, Denmark



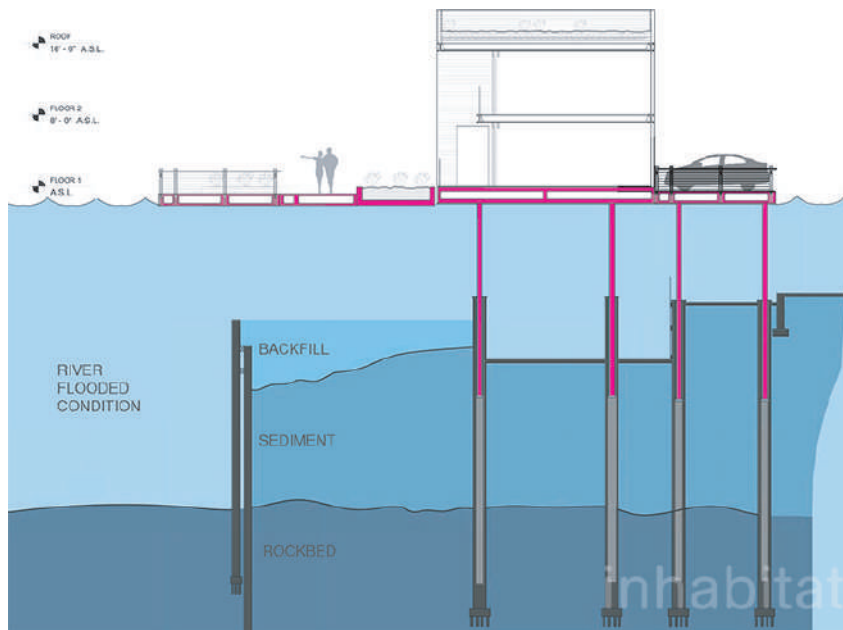
Krøyer Square / Vilhelm Lauritzen Architects + COBE



Floating homes in Amsterdam's IJburg neighborhood

# RESILIENT DESIGN

Dynamic platform of poles and 98% air foam structure and magnetized anchors that rise with the sea level.



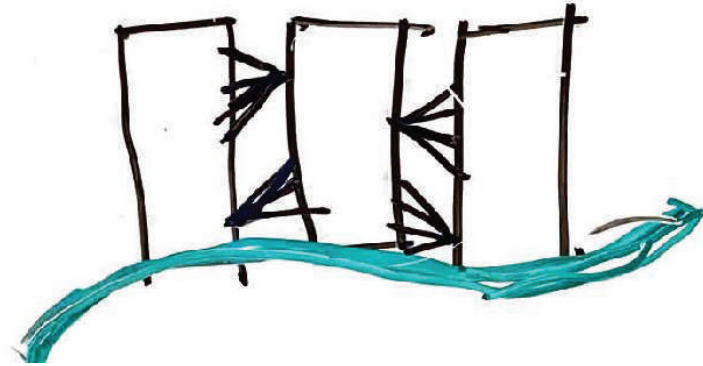
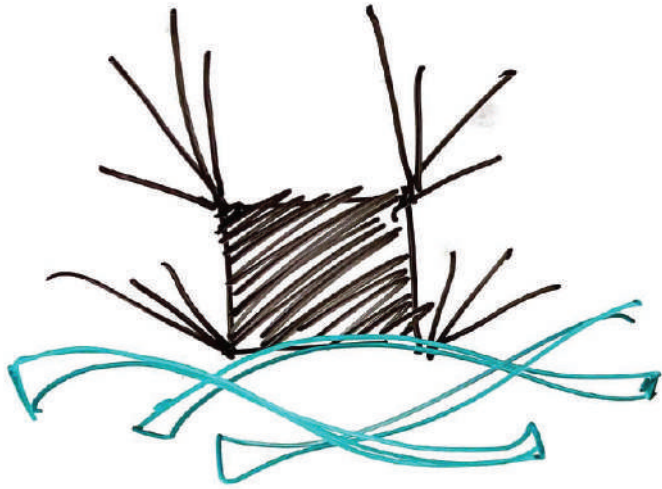
Mantella Amphibious Housing sideways

Concrete with resilient waterproofing sealant

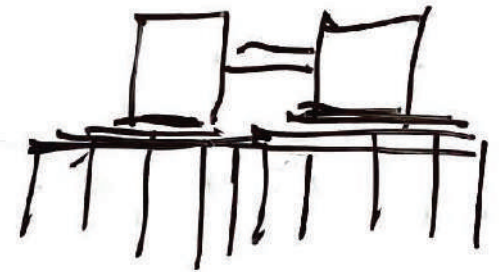
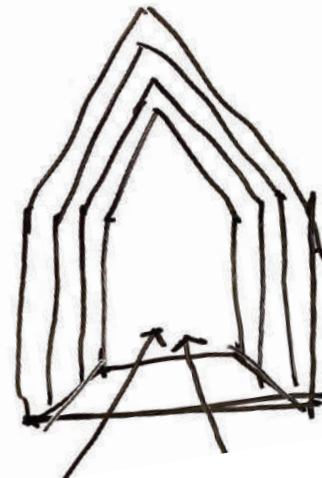


## SITE ANALYSIS

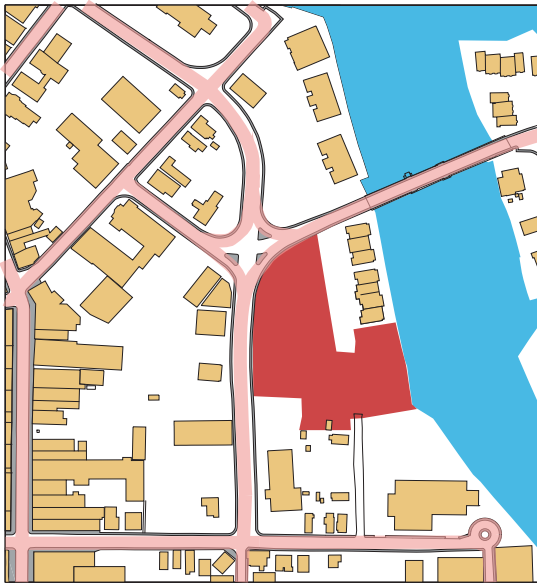
# PARTI DEVELOPMENT



RHYTHM  
PILOTIS  
CONNECTIVITY  
FLUIDITY  
EMBRACE






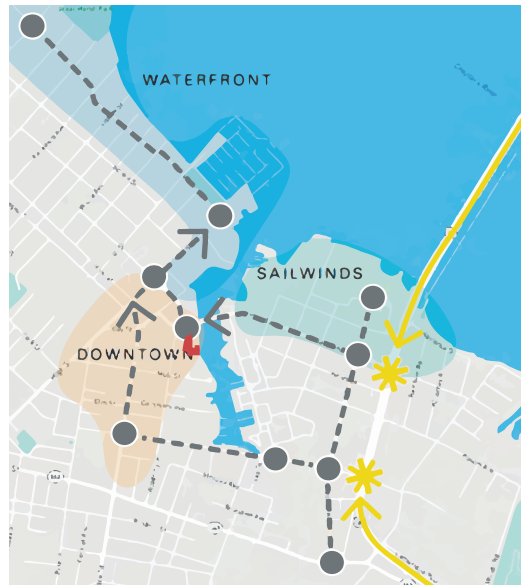






 PEDESTRIAN + VEHICULAR CIRCULATION





 PEDESTRIAN ACCESS  
 VEHICULAR ACCESS  
 NODE OPPORTUNITY



 PRIMARY DECISION POINTS  
 MAIN GATEWAY ELEMENT



 PRIVATE WATERFRONT SPACES  
 PROPOSED WATER TAXI STOP

# WHAT IS RESILIENCY

1. "Resilience means designing adaptable structures that can "learn" from their environments and sustain life, even in the face of disaster."

**Resilience to Adaptation**  
[www.architectmagazine.com/](http://www.architectmagazine.com/)

2. "Resilience means architects can learn from their buildings and deploy evermore-refined designs."

**Resilience to Adaptation**  
[www.architectmagazine.com/](http://www.architectmagazine.com/)

3. "Resilient" is when and individual or group is healthy, given the level of exposures to a wide range of psychosocial risk factors.

**Black Americans may be more resilient to stress than White Americans**  
[ihpi.umich.edu](http://ihpi.umich.edu)

# COURTYARD MARKETPLACE



Mixed-use courtyard  
activation of an  
entrepreneurial loop

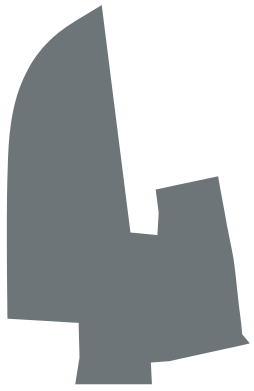


Perkins+Will Atlanta's Summerhill

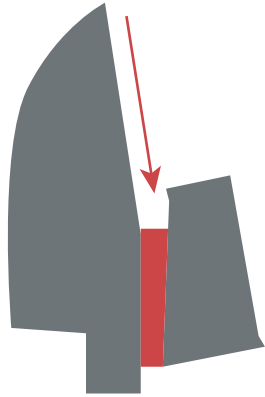


ADRIAN SMITH + GORDON GILL ARCHITECTURE

# SITE STRATEGY



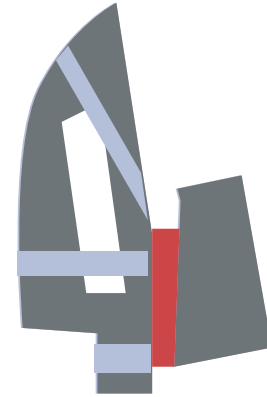
SITE



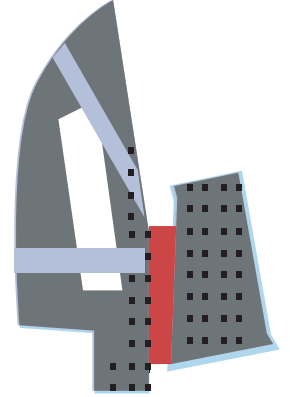
VEHICULAR  
ACCESS



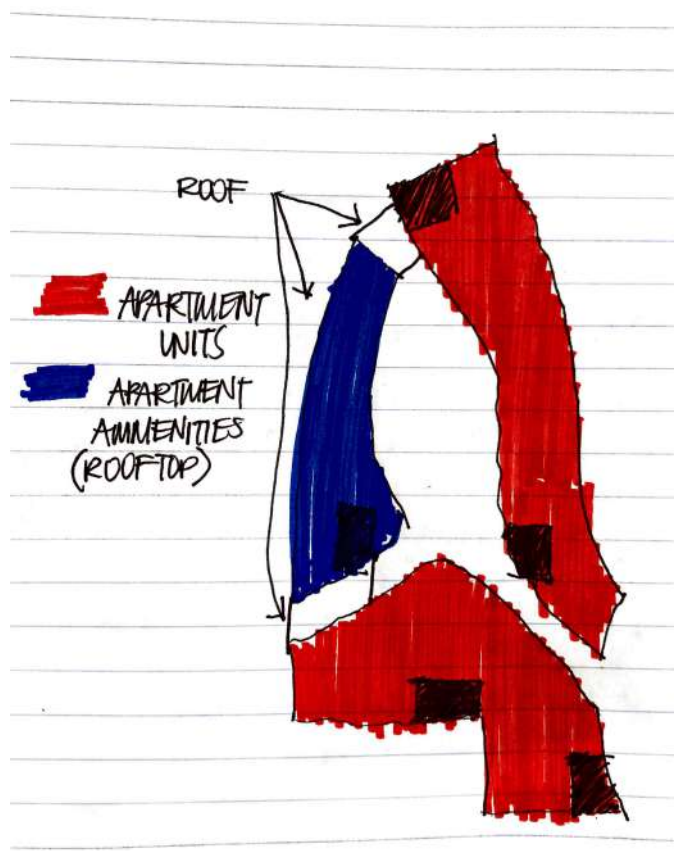
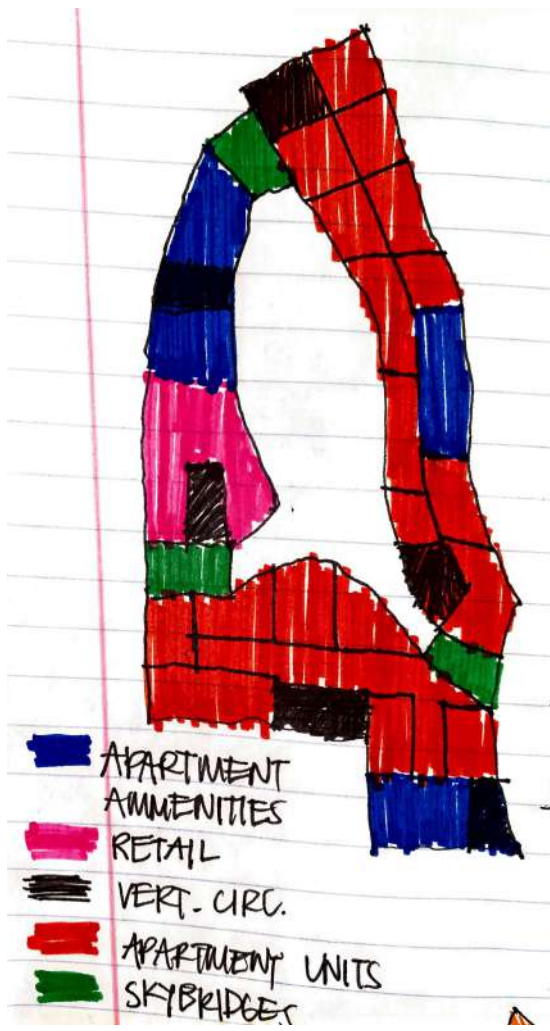
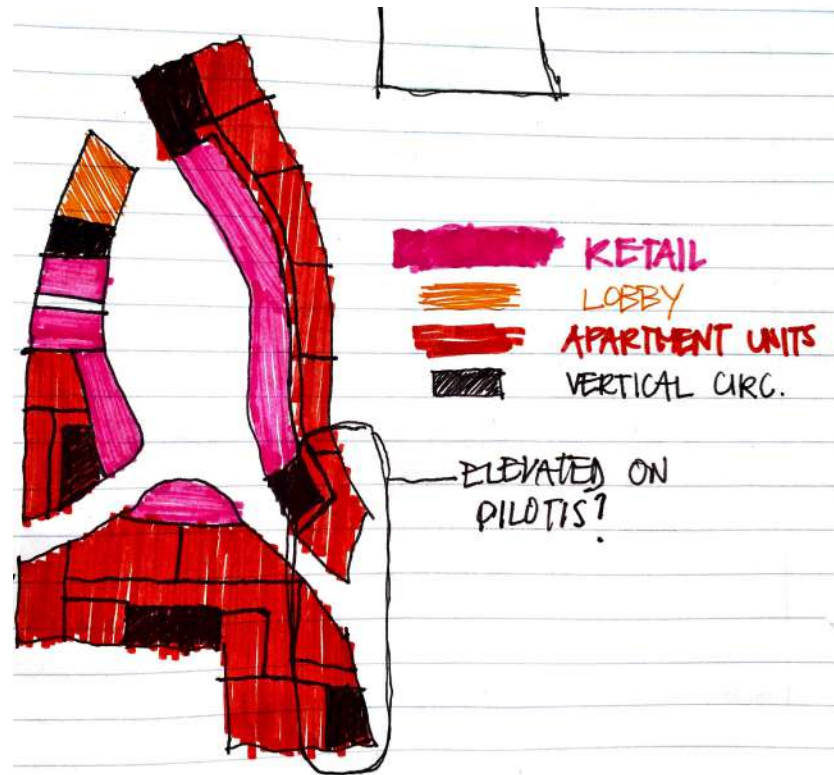
COURTYARD  
OPENING



WATERFRONT  
ACCESS



PILOTI  
RESILIENCE

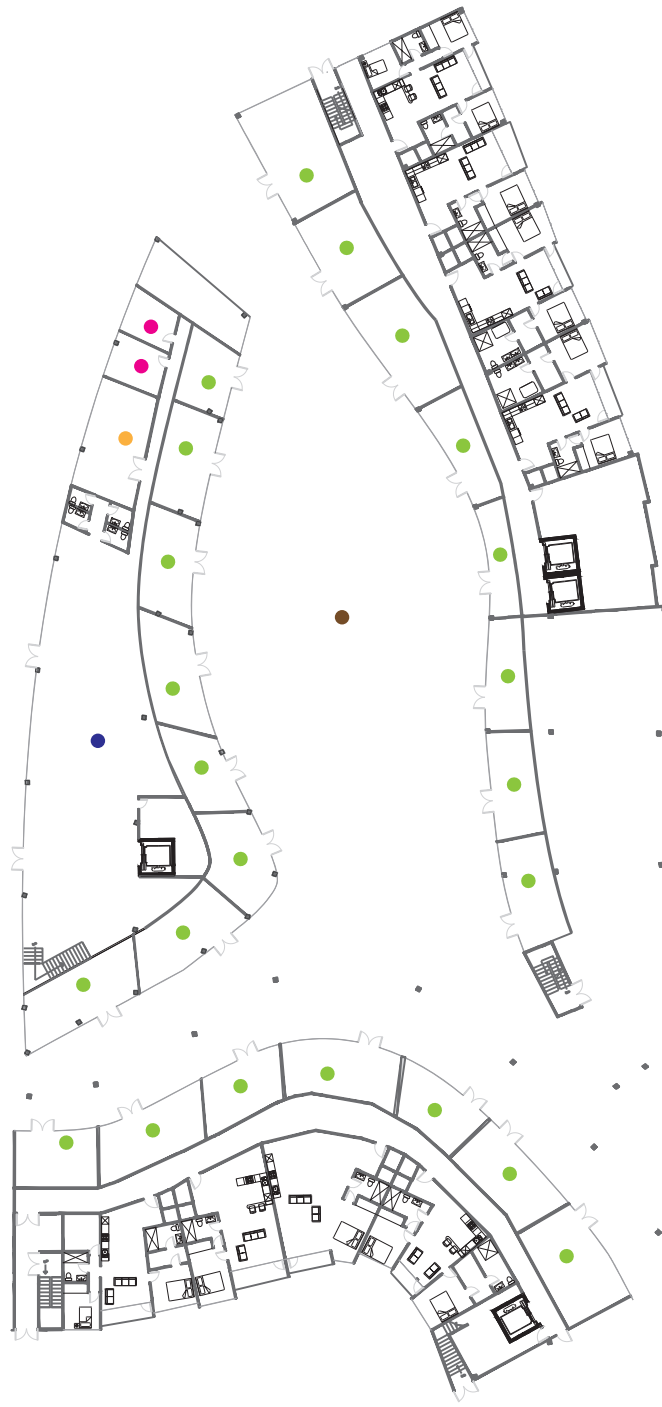


# S I T E P L A N



# GROUNDZLOOR

- Lobby
- Mail Room
- Office
- Shop
- Courtyard



# SECOND FLOOR

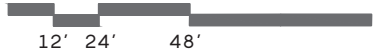
- Library
- Gym
- Conference Room
- Community Space
- Game Room
- Pool + Spa
- Balcony

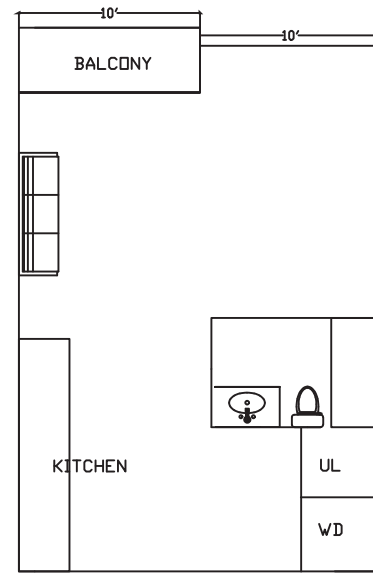
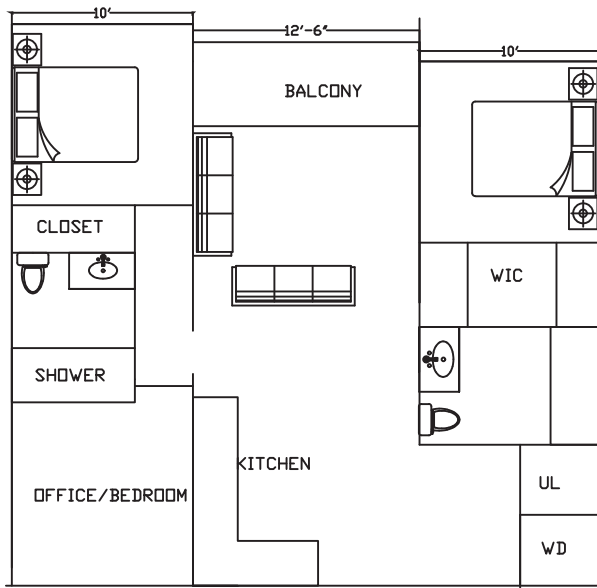
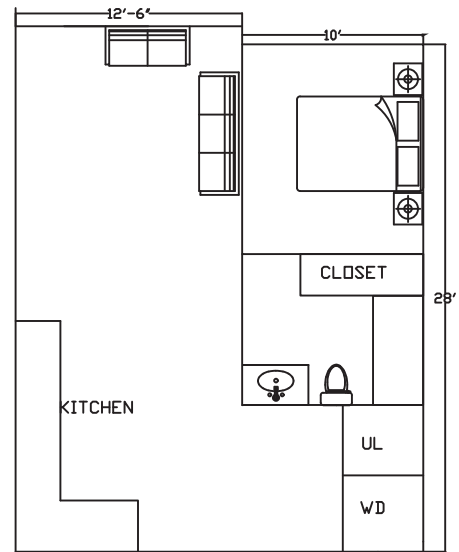
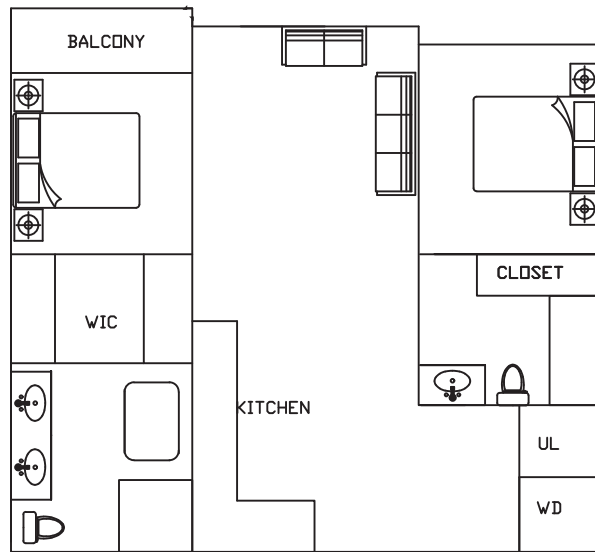


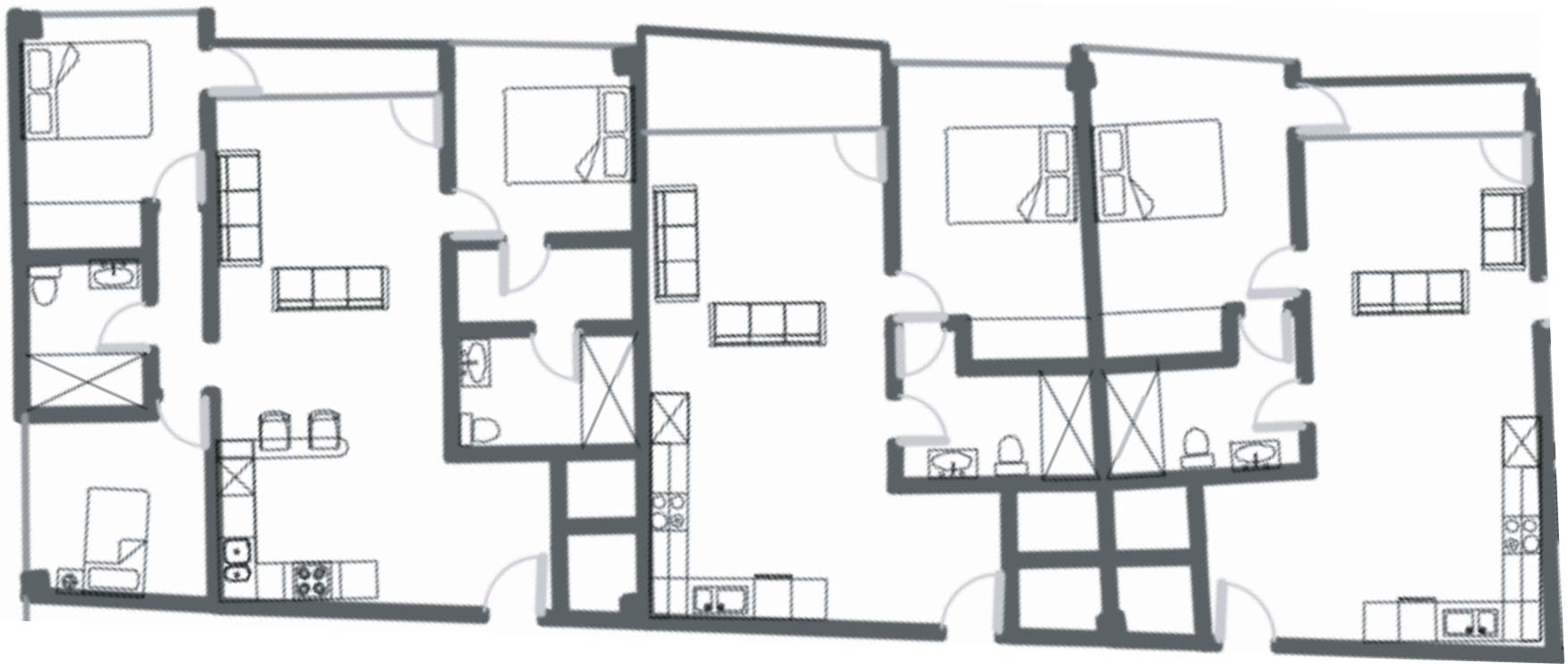


# THIRDFLOOR

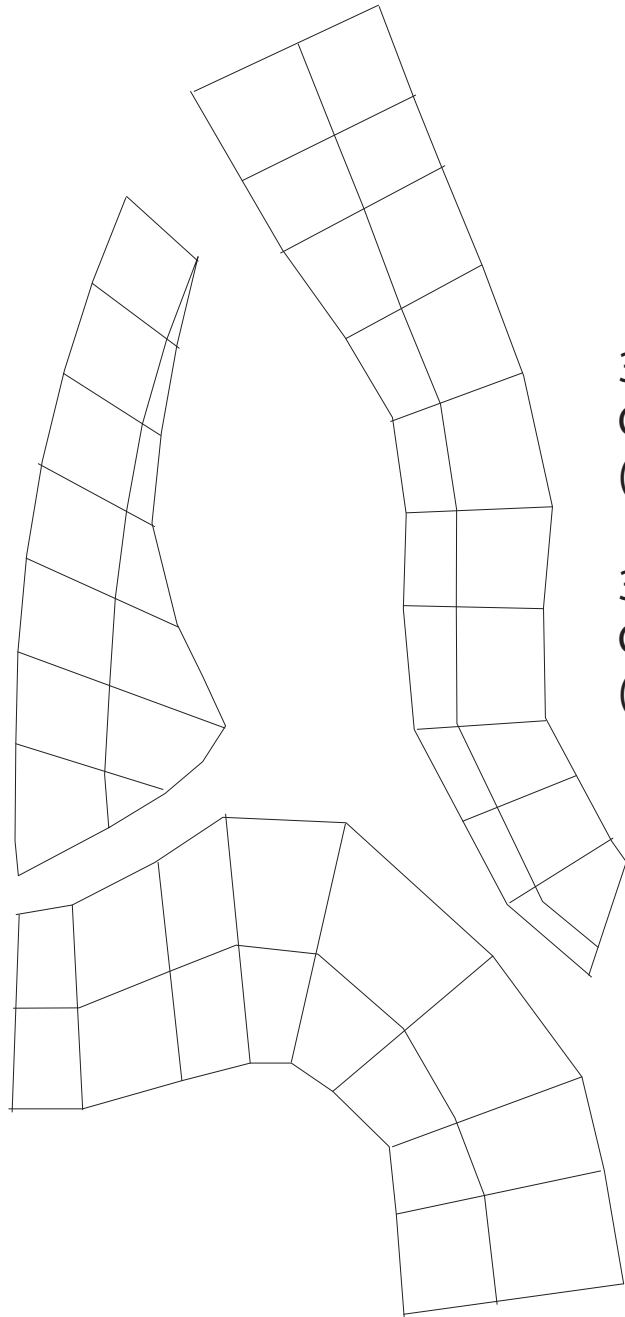
- Rooftop Patio
- Rooftop Garden
- Community Space
- Balcony





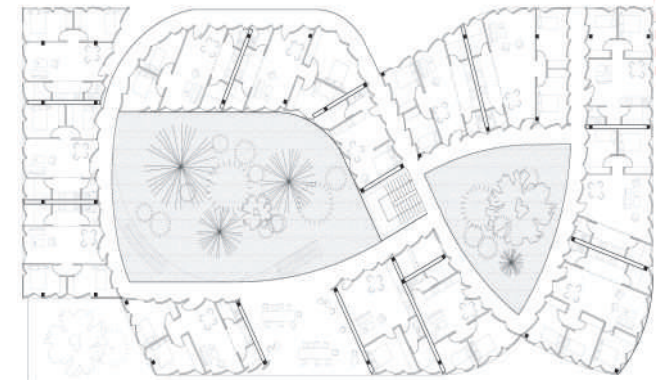


# STRUCTURAL GRID



32' SPACED (1'X1')  
CONCRETE COLUMNS  
(FIRST FLOOR)

32' SPACED (1'X1')  
GLULAM COLUMNS  
(SECOND+THIRD FLOOR)

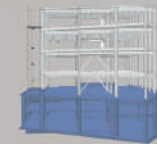


Las Americas Social Housing, Leon, Mexico,  
2016

## STRUCTURAL MATERIALS

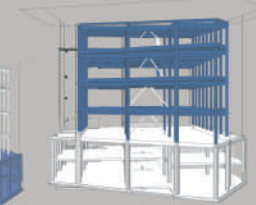
All structural materials used in the Bullitt Center are locally sourced, from within 300 miles for steel and concrete and 600 miles for wood

CONCRETE  
BASE



Concrete base accommodates overall structure's substantial load and keeps earth away from underground levels

BUILDING CENTERPIECE:  
WOOD STRUCTURE



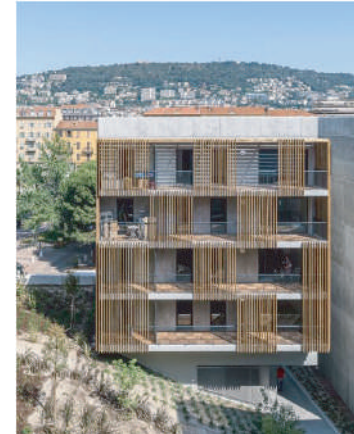
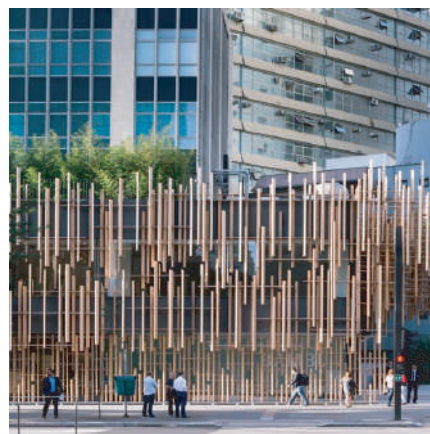
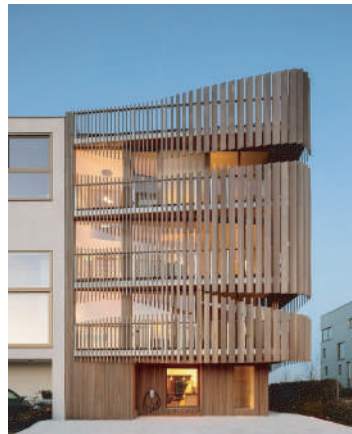
Heavy timber structure above 3rd floor is Forest Stewardship Council certified. Wood from responsibly managed forests has lower carbon footprint, aligns with historic regional traditions, and adds to aesthetic appeal

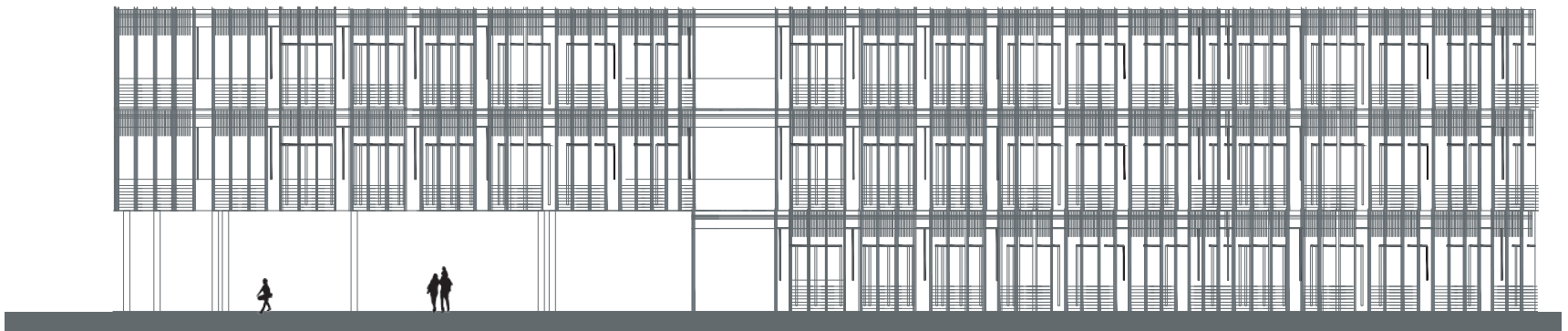
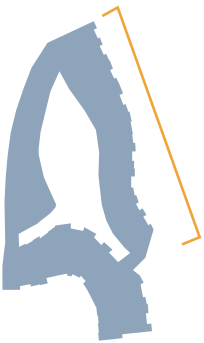
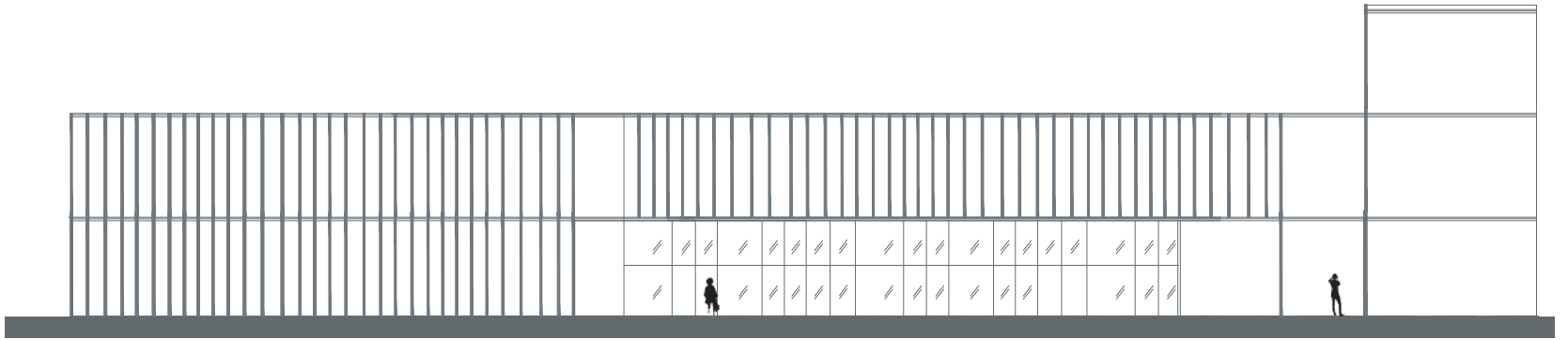
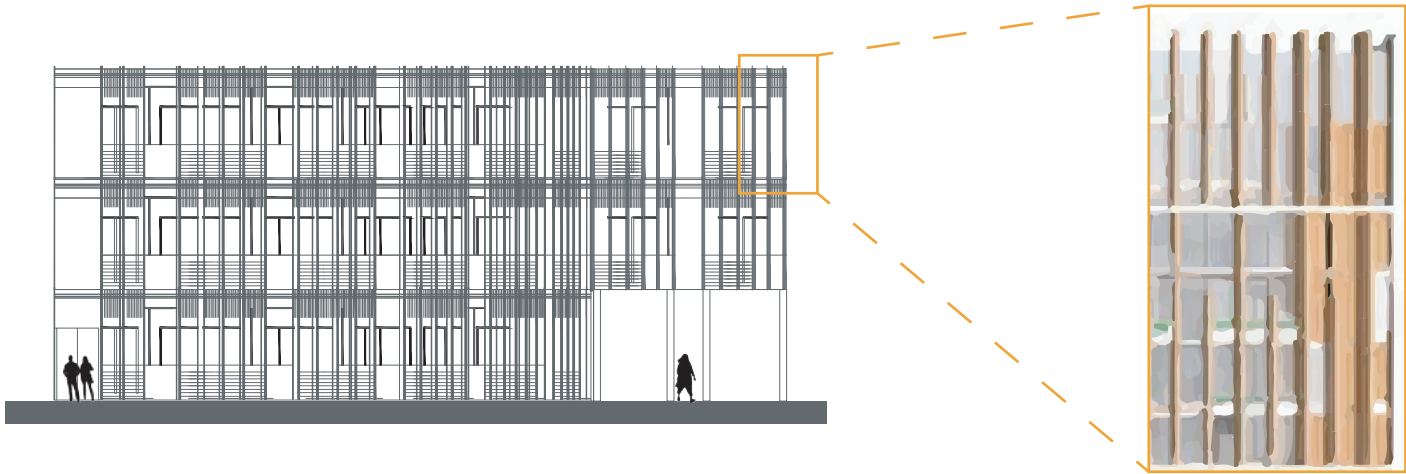
STEEL  
REINFORCING

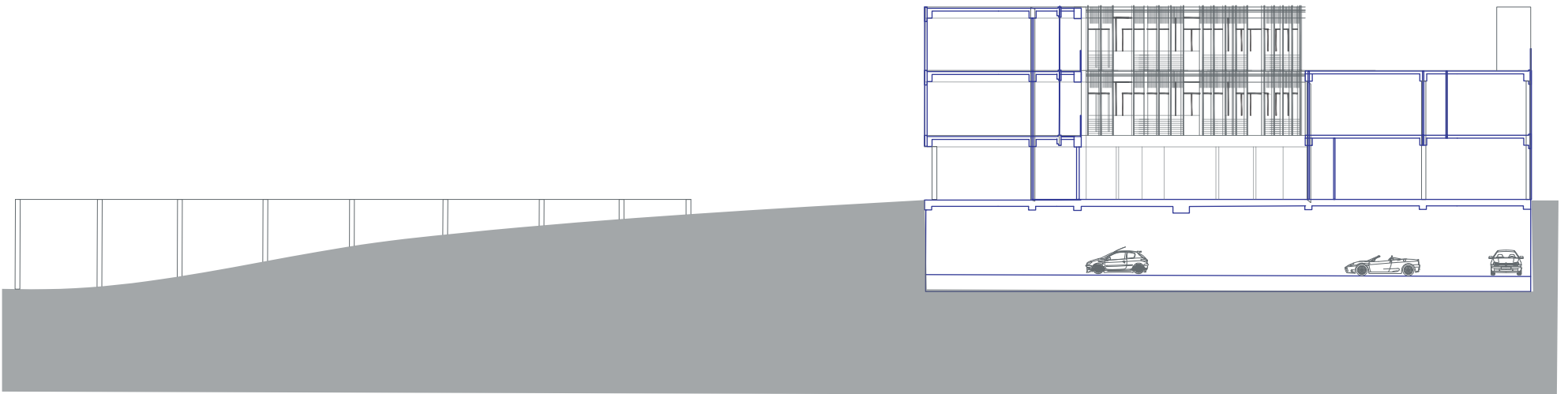
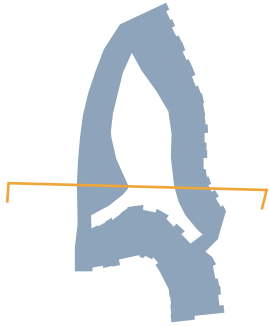
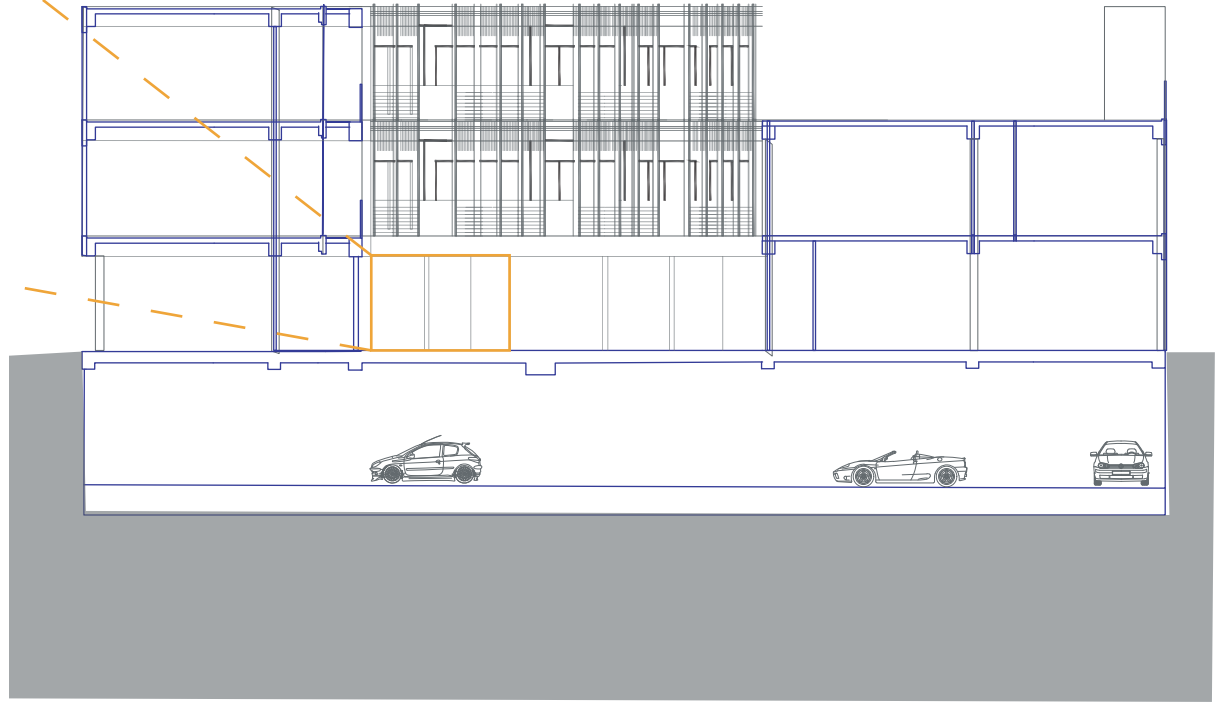


Steel connectors provide seismic and fire safety reinforcement, holding wooden beams together

# FACADE DEVELOPMENT



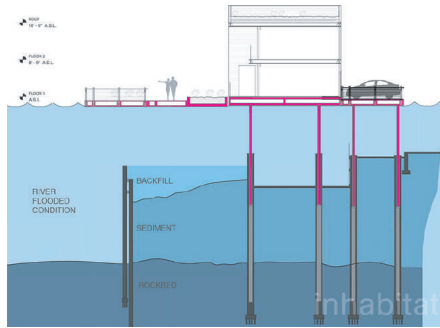




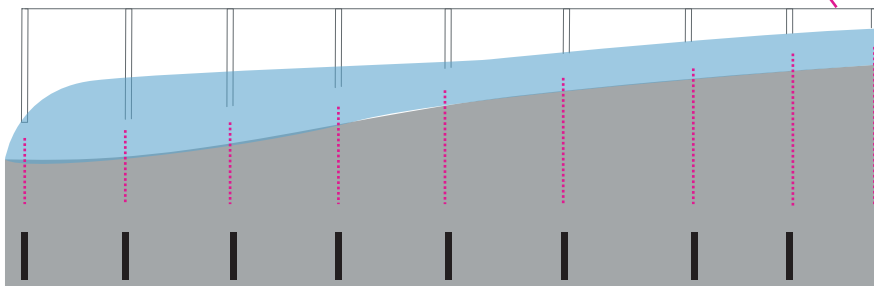
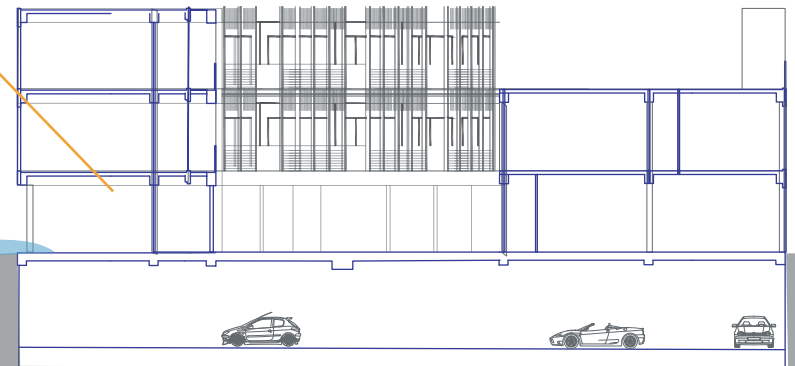
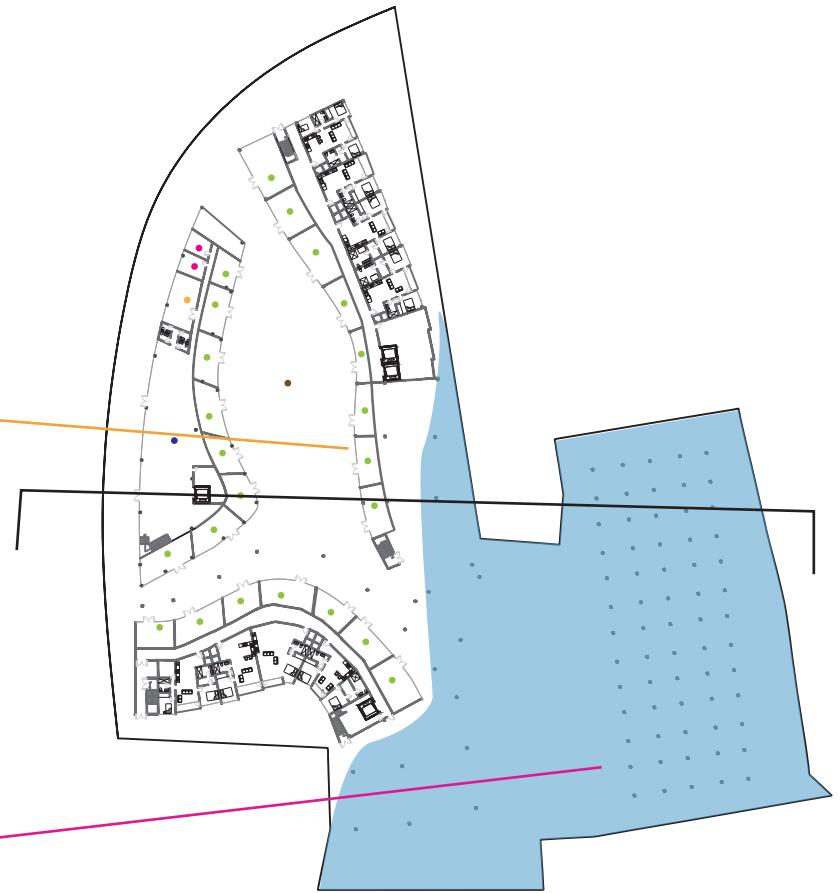
Concrete with resilient waterproofing sealant



Dynamic platform of poles and 98% air foam structure and magnetized anchors that rise with the sea level.

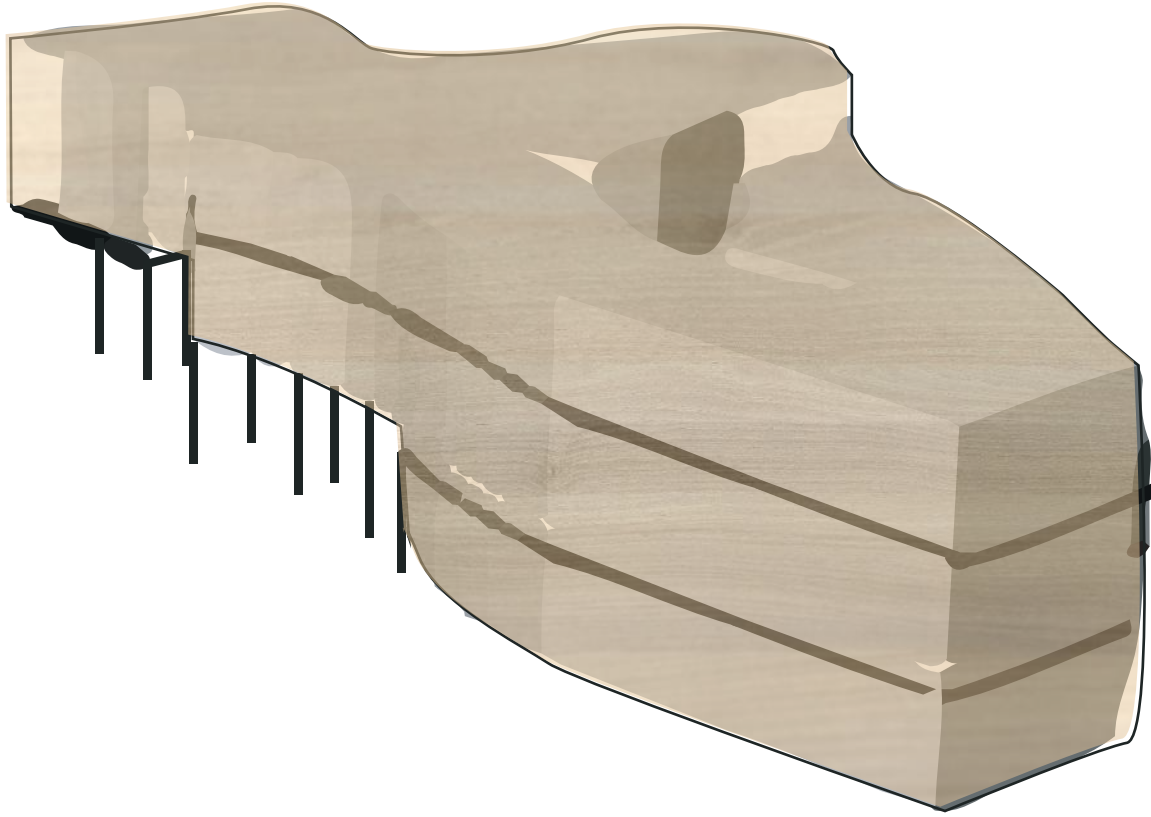


Mantella Amphibious Housing sideways



magnetized anchors





THANK YOU

