

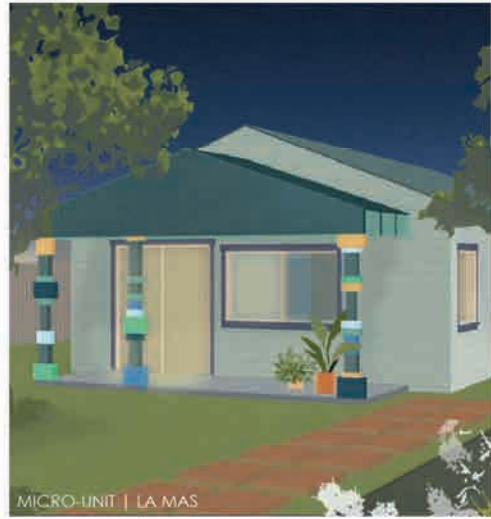
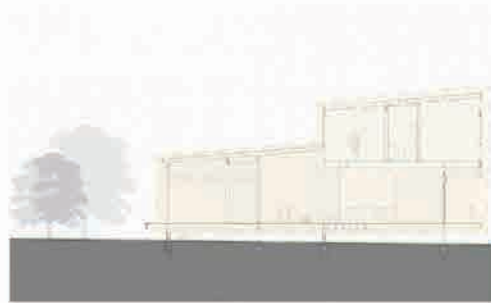
An aerial photograph of New Bern, North Carolina, showing a large dam and surrounding landscape. The image is in a sepia or brownish tone. A large body of water is visible on the left, with a long dam extending across it. The background shows a dense forest and a road winding through the hills. The foreground shows a town with various buildings and a waterfront area with a marina.

AFFORDABLE AND RESILIENT HOUSING FOR NEW BERN

Affordable Housing + Sustainable Communities Initiative | School of Architecture | NC State University



AFFORDABLE HOUSE + ADU
BRIANNA CREVISTON

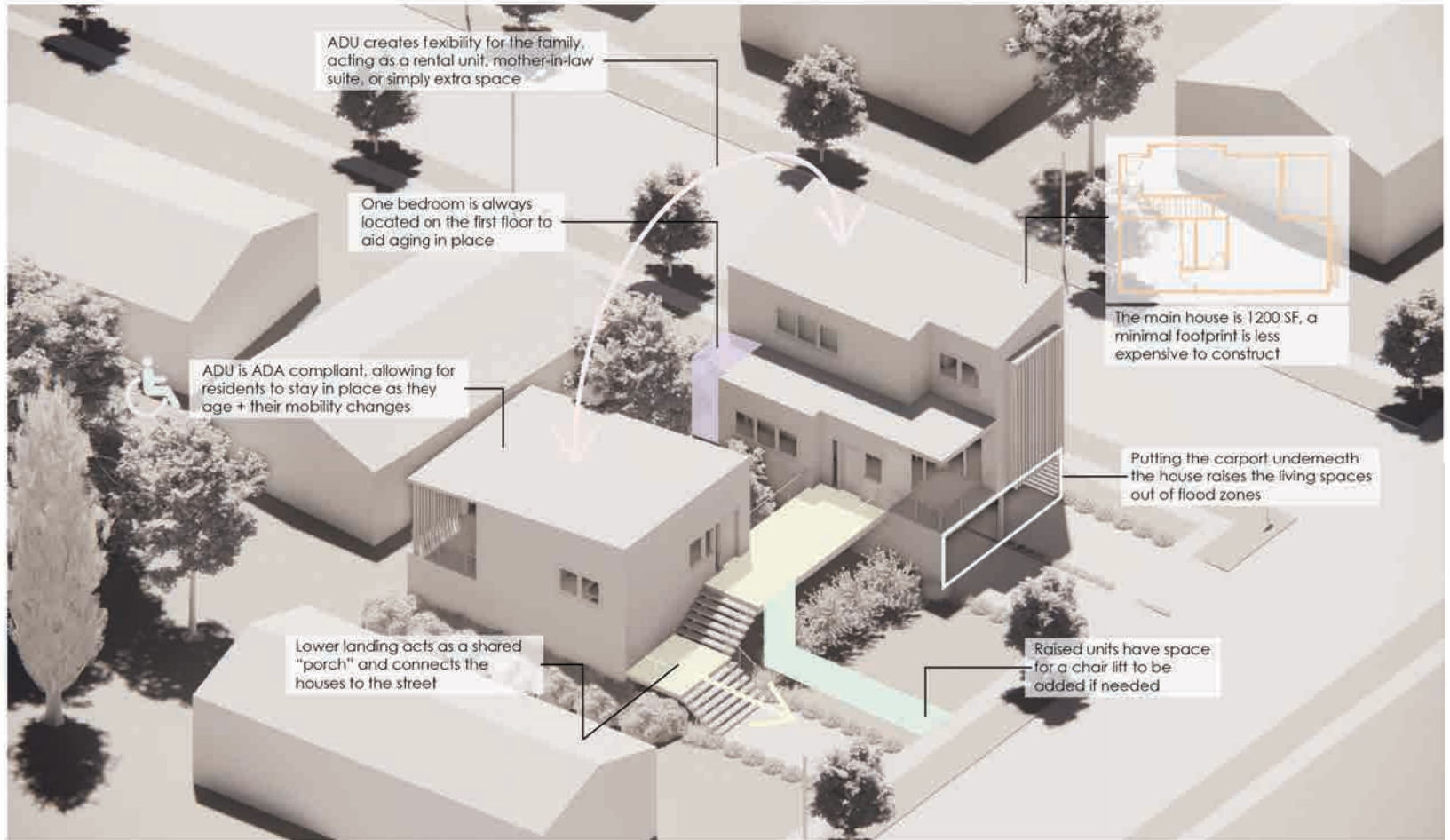


PRECEDENTS:



How might I design a single family house + adu that:

- Allows for aging in place
- Allows for long-term affordability
- Maintains a connection to the street
- Uses an efficient floor plan
- Allows for flexibility
- Mitigates flood risk



ADU creates flexibility for the family, acting as a rental unit, mother-in-law suite, or simply extra space

One bedroom is always located on the first floor to aid aging in place

ADU is ADA compliant, allowing for residents to stay in place as they age + their mobility changes

Lower landing acts as a shared "porch" and connects the houses to the street

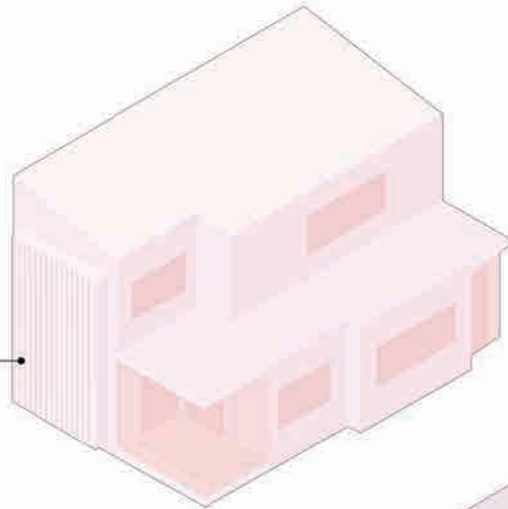


The main house is 1200 SF, a minimal footprint is less expensive to construct

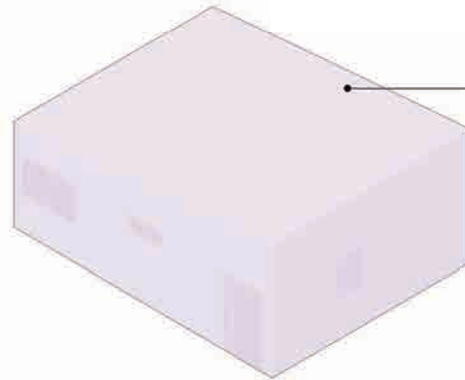
Putting the carport underneath the house raises the living spaces out of flood zones

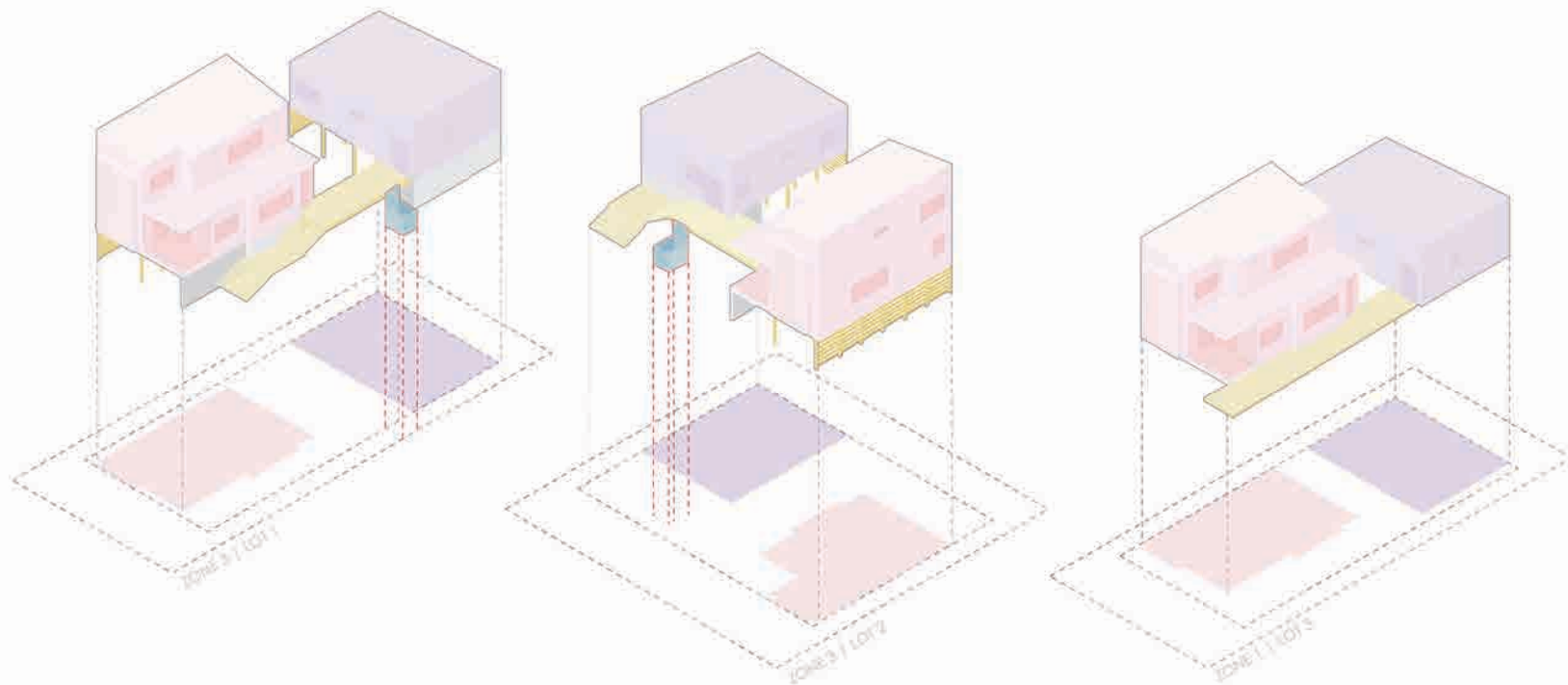
Raised units have space for a chair lift to be added if needed

PROTOTYPICAL 3 BED HOUSE

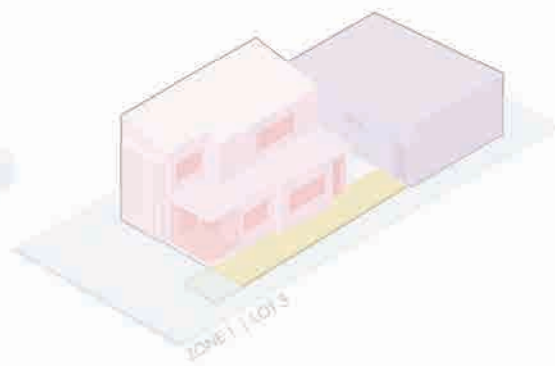
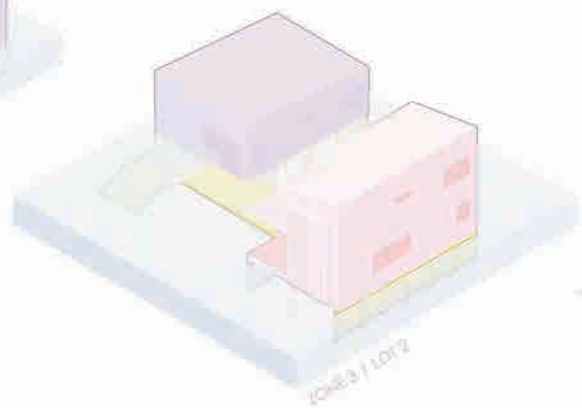
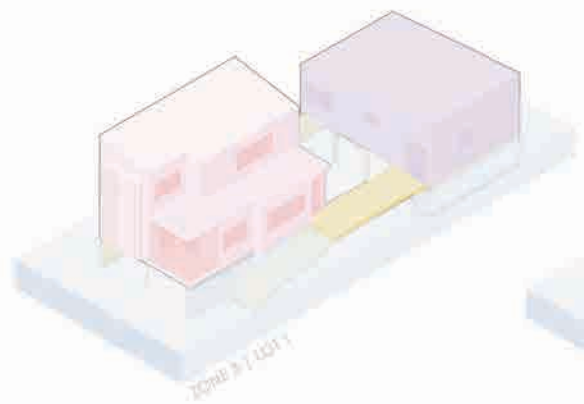


PROTOTYPICAL ACCESSORY DWELLING UNIT

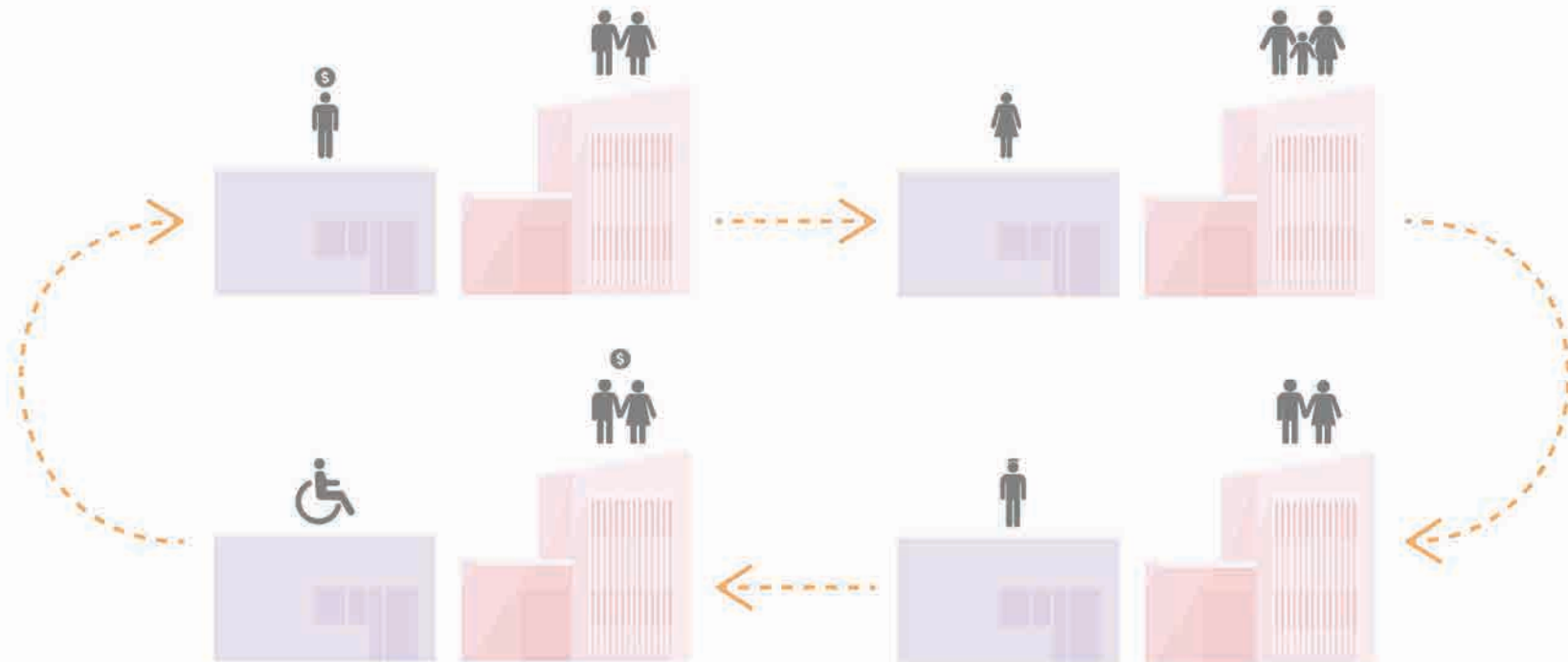


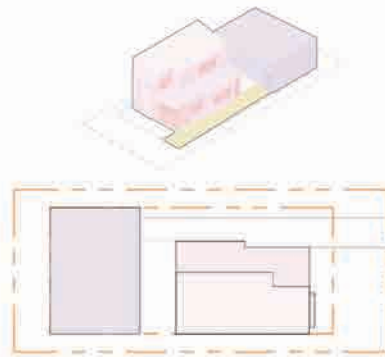


ORGANIZATION OPTIONS W/ LIFT OPTIONS



FLOOD LEVELS





LOT 3
Vacant land
11ft above sea level
+2ft for flood level





MAIN HOUSE

3 bed, 2 bath

1200 SF



LEVEL 2



LEVEL 1

- DINING
- BATHROOM
- KITCHEN
- LIVING ROOM
- BEDROOM
- STORAGE



ACCESSORY DWELLING UNIT

1 bed, 1 bath

700 SF



LEVEL 1

ADA STANDARDS

- Circulation route 42" minimum width

- Clear floor space (18" minimum) beside door on pull side at latch jamb

- Turning space in all rooms (5' diameter) 

- Clear door opening width (34")

- Minimum 5' x 5' level clear space inside and outside entry door

- Curbless roll-in shower

- Clear space (3') in front and to one side of toilet

- Toilet centered 18" from any side wall, cabinet, or tub

- Counter height 32" minimum (w/ clear space underneath)

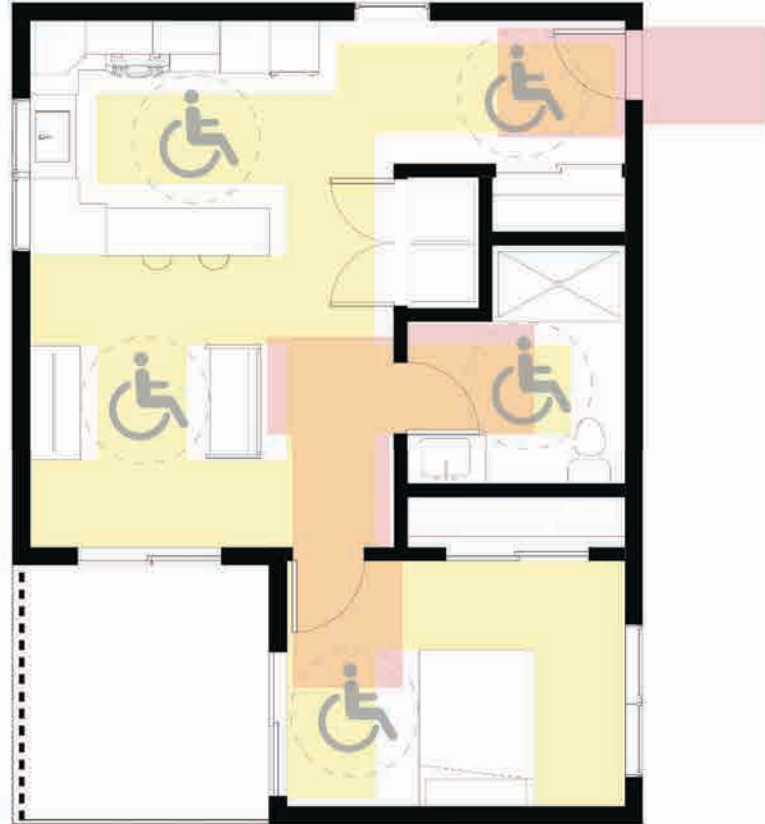
- Full height pantry storage

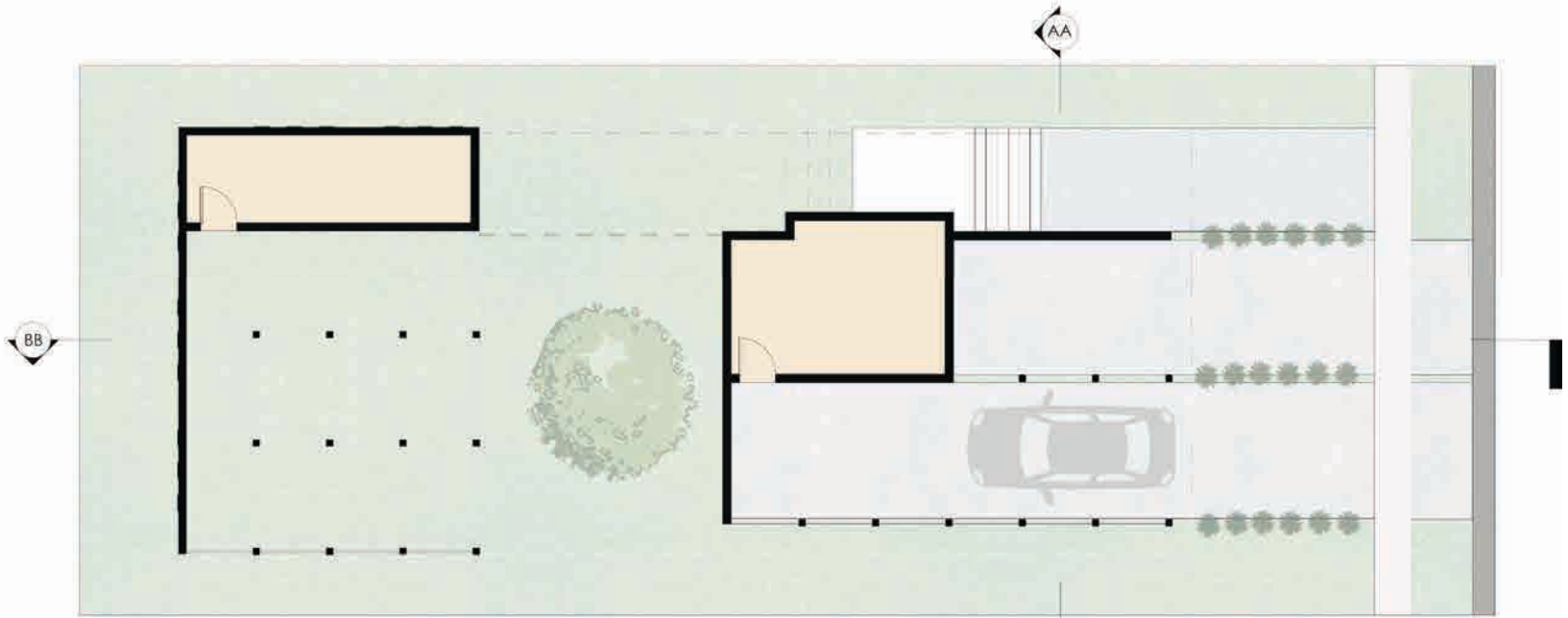
- Adjustable Shelves

- Front-mounted controls on all appliances

- Front-loading washers and dryers, with front controls, raised on platforms

- Opportunity for lift to be added to raised plans*





STORAGE

LOT 1 | GROUND LEVEL
1/4" = 1'0"



LEVEL 2



- DINING
- BATHROOM
- KITCHEN
- LIVING ROOM
- BEDROOM
- STORAGE

LOT 2 | LEVEL 1
1/4" = 1'0"

ROOF
33'-0"

LEVEL 2
23'-0"

LEVEL 1
13'-0"

GROUND
5'-0"

SEA LEVEL
0'-0"

SECTION AA
1/4" = 1'-0"

DINING BATHROOM LIVING ROOM KITCHEN BEDROOM STORAGE



ROOF
33'-0"

LEVEL 2
23'-0"

LEVEL 1
13'-0"

GROUND
5'-0"

SEA LEVEL
0'-0"

SECTION AA
1/4" = 1'-0"

- DINING
- BATHROOM
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- STORAGE



ROOF
33'-0"

LEVEL 2
23'-0"

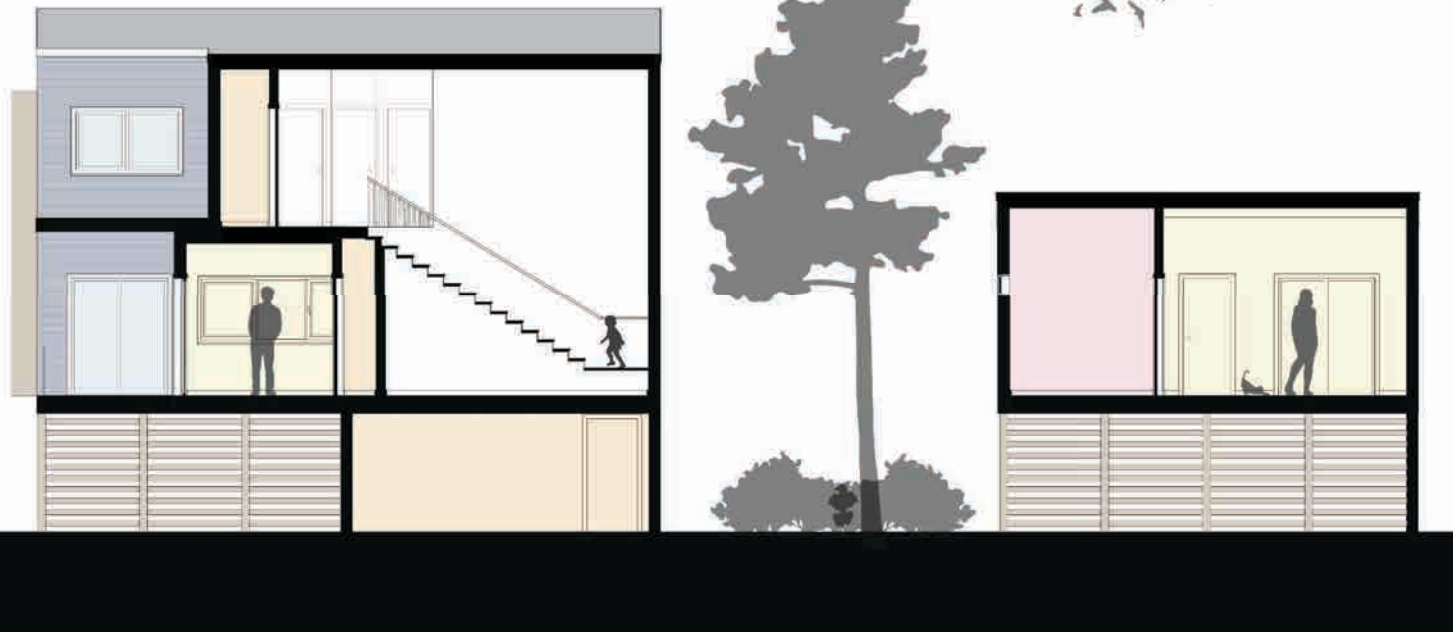
LEVEL 1
13'-0"

GROUND
5'-0"

SEA LEVEL
0'-0"

SECTION BB
1/4" = 1'-0"

DINING BATHROOM LIVING ROOM KITCHEN BEDROOM STORAGE



ROOF
33'-0"

LEVEL 2
23'-0"

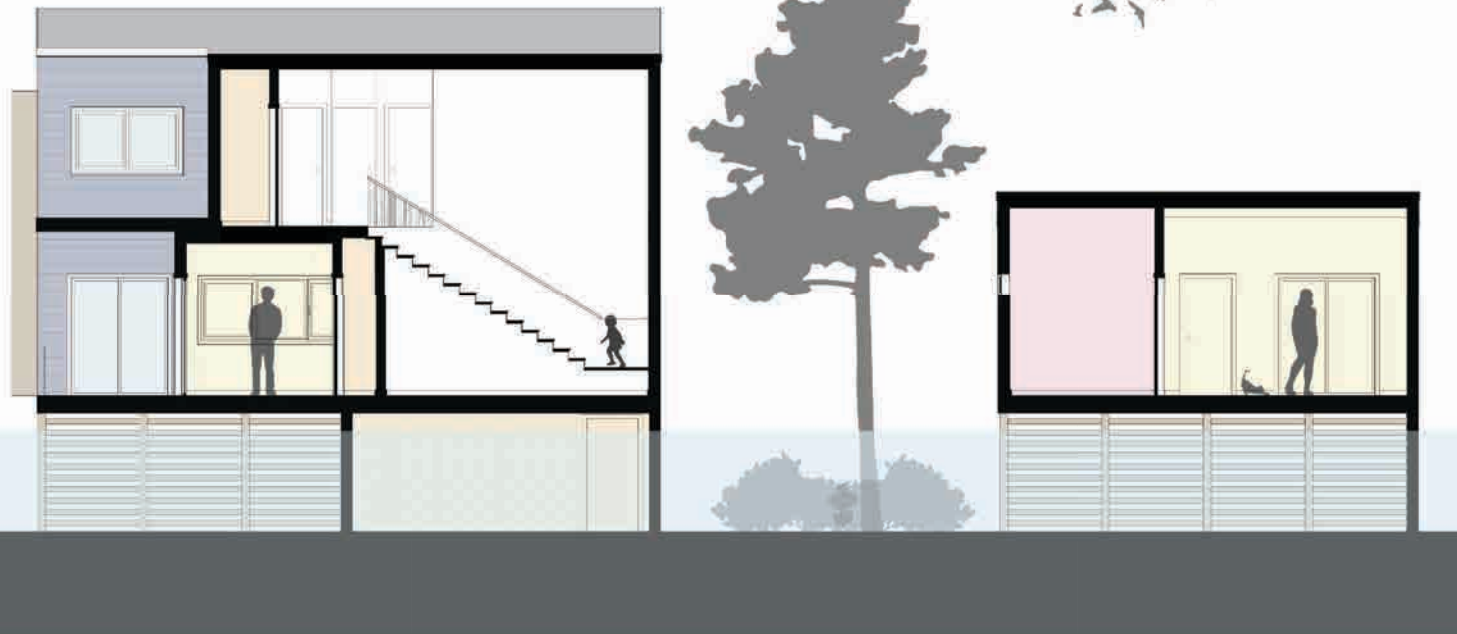
LEVEL 1
13'-0"

GROUND
5'-0"

SEA LEVEL
0'-0"

SECTION BB
1/4" = 1'-0"

DINING BATHROOM LIVING ROOM KITCHEN BEDROOM STORAGE





STORAGE

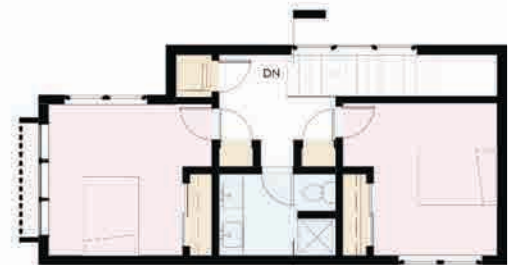
LOT 2 | GROUND LEVEL
1/4" = 1'0"





LOT 2 | LEVEL 1
1/4" = 1'0"

- DINING
- BATHROOM
- KITCHEN
- LIVING ROOM
- BEDROOM
- STORAGE



LEVEL 2



ROOF
36'-0"

LEVEL 2
26'-0"

LEVEL 1
16'-0"

GROUND
8'-0"

SEA LEVEL
0'-0"

SECTION CC
1/4" = 1'-0"

- DINING
- BATHROOM
- LIVING ROOM
- KITCHEN
- BEDROOM
- STORAGE





ROOF
36'-0"

LEVEL 2
26'-0"

LEVEL 1
16'-0"

GROUND
8'-0"

SEA LEVEL
0'-0"

SECTION CC:
1/4" = 1'-0"

- DINING
- BATHROOM
- LIVING ROOM
- KITCHEN
- BEDROOM
- STORAGE





LEVEL 2

-  DINING
-  BATHROOM
-  KITCHEN
-  LIVING ROOM
-  BEDROOM
-  STORAGE



LOT 3 | LEVEL 1
1/4" = 1'0"



ROOF
33'-0"

LEVEL 2
23'-0"

LEVEL 1
13'-0"

SEA LEVEL
0'-0"

SECTION BB
1/4" = 1'-0"



DINING BATHROOM LIVING ROOM KITCHEN BEDROOM STORAGE



ROOF
33'-0"

LEVEL 2
23'-0"

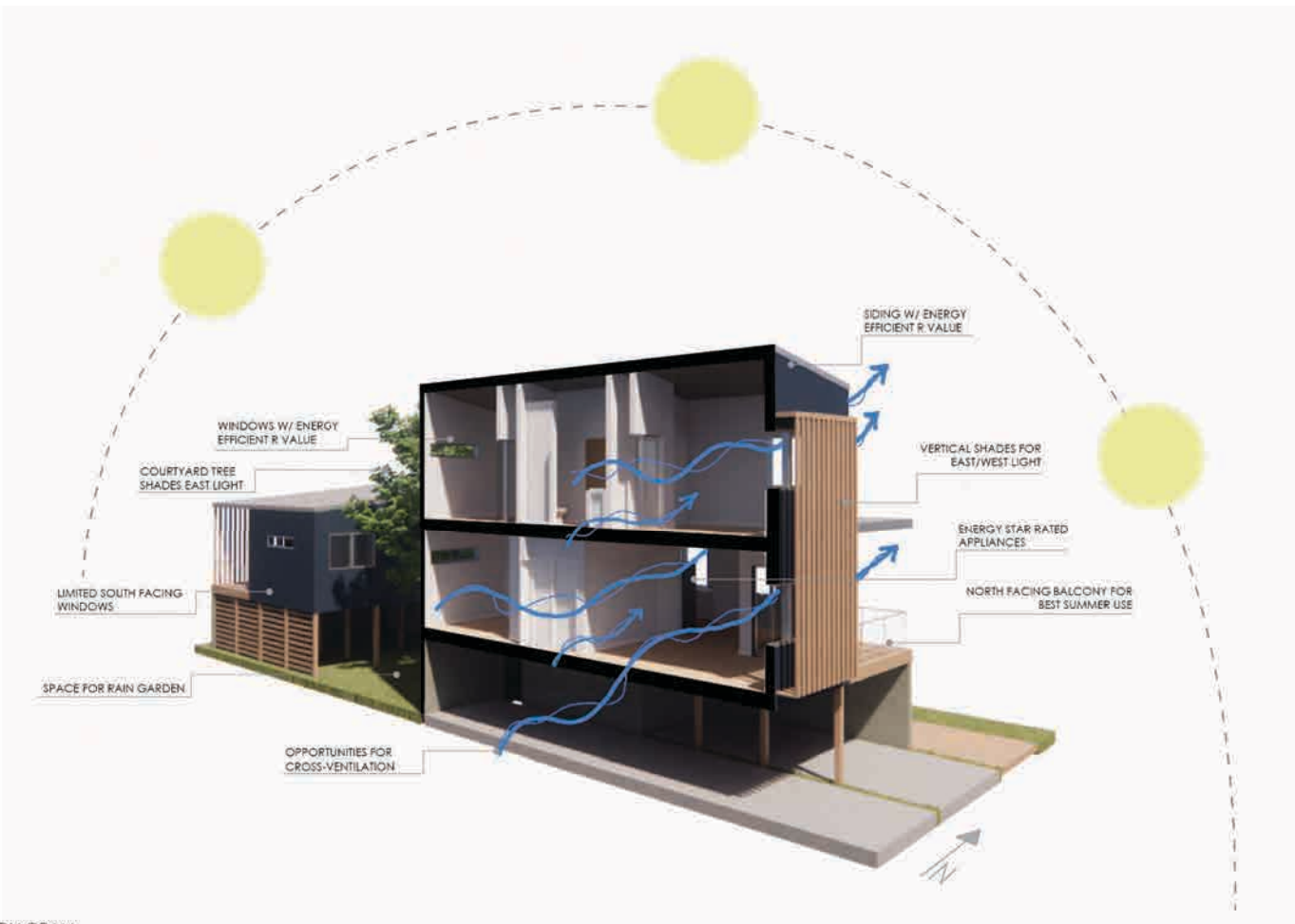
LEVEL 1
13'-0"

SEA LEVEL
0'-0"

SECTION BB
1/4" = 1'-0"



- DINING
- BATHROOM
- LIVING ROOM
- KITCHEN
- BEDROOM
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SUSTAINABILITY DIAGRAM



MATERIAL PALETTE















THANK YOU

