



# North Boulder Branch Library

Concept Plan Review Application  
Architectural Character Sketches

January 2019



## SITE PHOTO

### 4540 BROADWAY

The site for the North Boulder Branch Library is located at 4540 Broadway at the intersection of Broadway and Fourmile Canyon Creek. It is bordered by Broadway to the west, Fourmile Canyon Creek and Violet Avenue to the south, the Boulder Meadows manufactured home community to the east, and the Uptown Broadway Apartments development to the north.





SETBACKS, EASEMENTS, ZONING, FLOODPLAIN

LEGEND

- Property Lines
- Zoning MU-2
- Zoning RM-2
- Zoning BMS
- EASEMENTS & SETBACKS
  - 25' Utility Easement
  - Drainage Easement
  - 0' Front Yard Setback (FYS)
  - 0-5' Side Yard Setback (SYS)
  - 10' Rear Yard Setback (RYS)
- CITY WETLAND BUFFERS
  - Outer Buffer
  - Inner Buffer
- CITY HIGH HAZARD FLOODPLAIN ZONE
  - No new parking lots allowed
  - No new structure intended for human occupancy

OVERALL SITE AREA: 120,466 SF

MU - 2 ZONING REQUIREMENTS:

- Max. Height:

35'
- Max. No of Stories

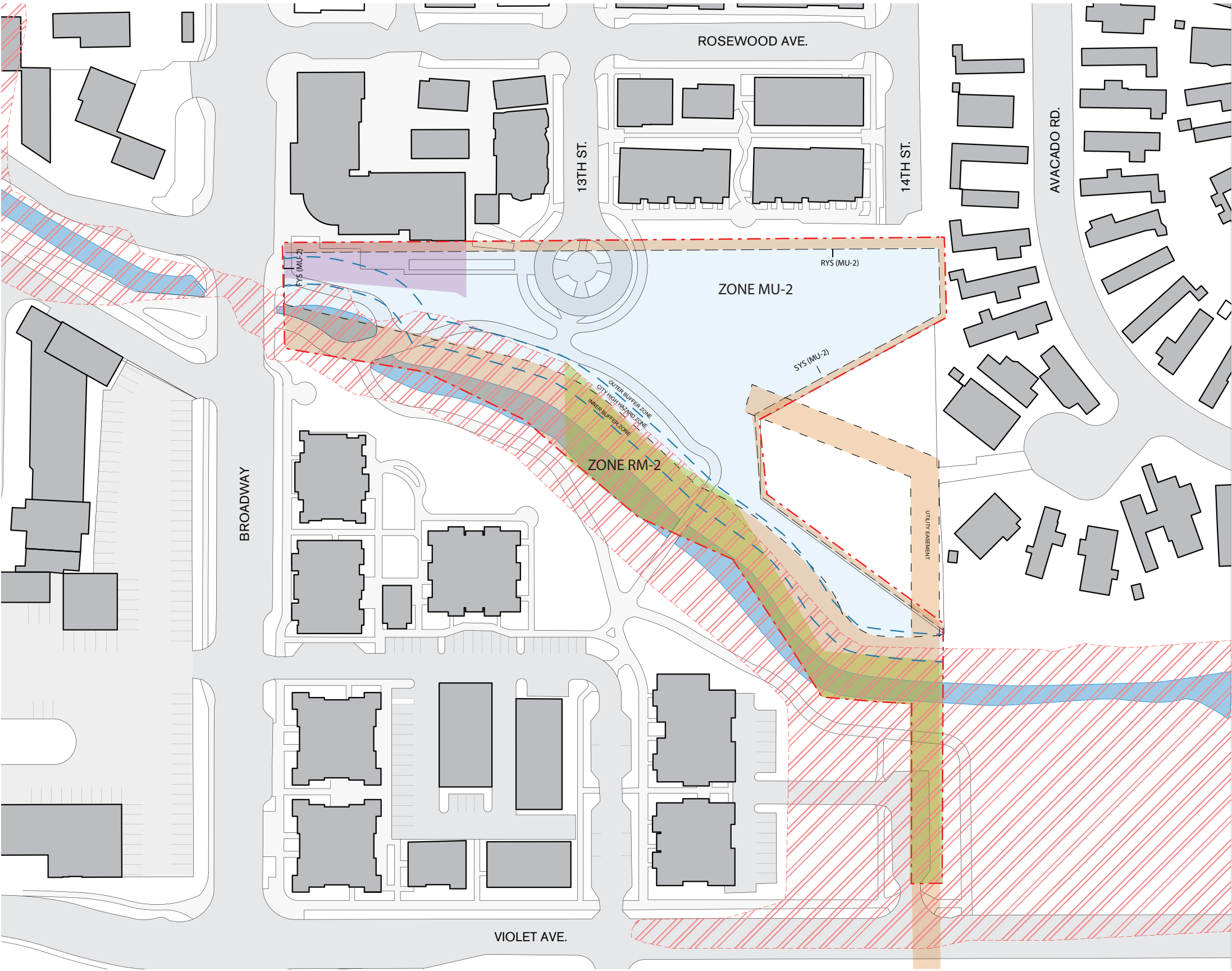
2
- Max. FAR:

0.6:1
- Max. Floor Area:

15,000 SF
- Min. Open Space:

15%

50% of lot frontage must contain building  
Primary building entrance location to face street





## SITE ANALYSIS

The site is currently undeveloped, accessed via a dead-end on 14th Street and a cul-de-sac extending from 13th Street to the center of the site. There are substantial views south to the Flatiron Mountains and nearby foothills.

The site strategy removes the existing cul-de-sac, replacing it with a new two-way connector street between 13th Street and 14th Street that forms a natural continuation of the existing street grid. Primary car access to the site will be prioritized from 14th Street into a new 28-space parking area on the east end of the site. Primary pedestrian connections occur at Broadway and the existing trail system along Fourmile Canyon Creek as well as through the less trafficked streets to the north.





PROGRAM ADJACENCIES:  
INSIDE VS OUTSIDE

WORKac and Library staff engaged in a series of community engagement events in 2018 to meet members of the North Boulder community on their experiences and solicit input on how the new library could best support their needs.

From these meetings, discussions, and collected questionnaires, a set of criteria developed to help define programmatic considerations. Principal among these considerations was a relationship between the new library building and the outdoors.

Four critical adjacencies emerged between indoor and outdoor spaces; a “quiet” environment with open views and connections to nature and the mountains beyond for the main reading rooms, expanded community spaces with presence and access from Broadway, a generous kids space with connection to an outdoor playground, and a large maker space with access to outdoor working space and a community garden.

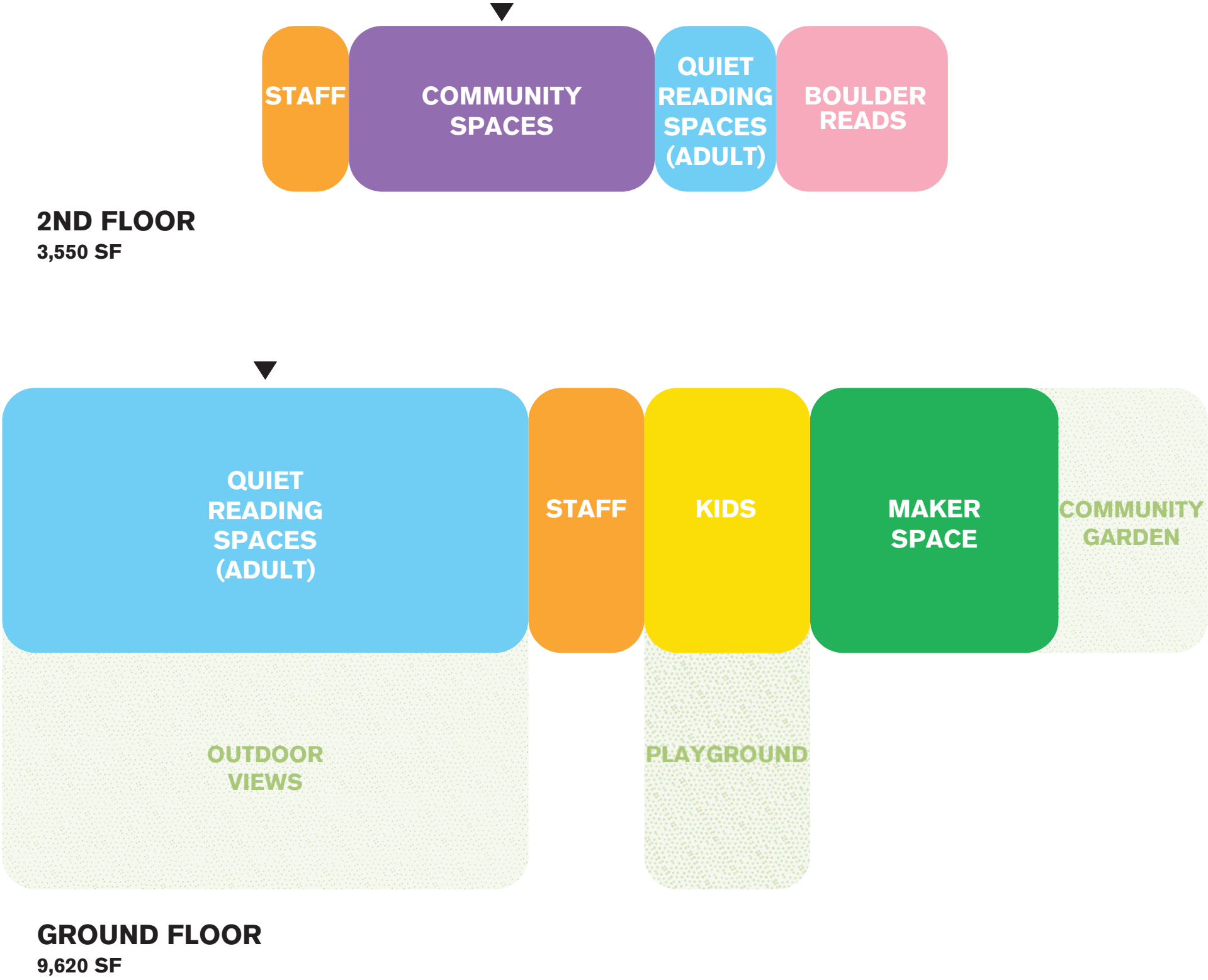




PROGRAM ADJACENCIES:  
FIRST & SECOND FLOOR

The library programs are distributed among two floors. Although the majority of library uses and programs are required to remain on the ground floor, a number of spaces have been located on the second floor in order to reduce the overall building footprint. This includes limited staff area, large community spaces, quiet reading areas, and BoulderReads offices and classrooms.

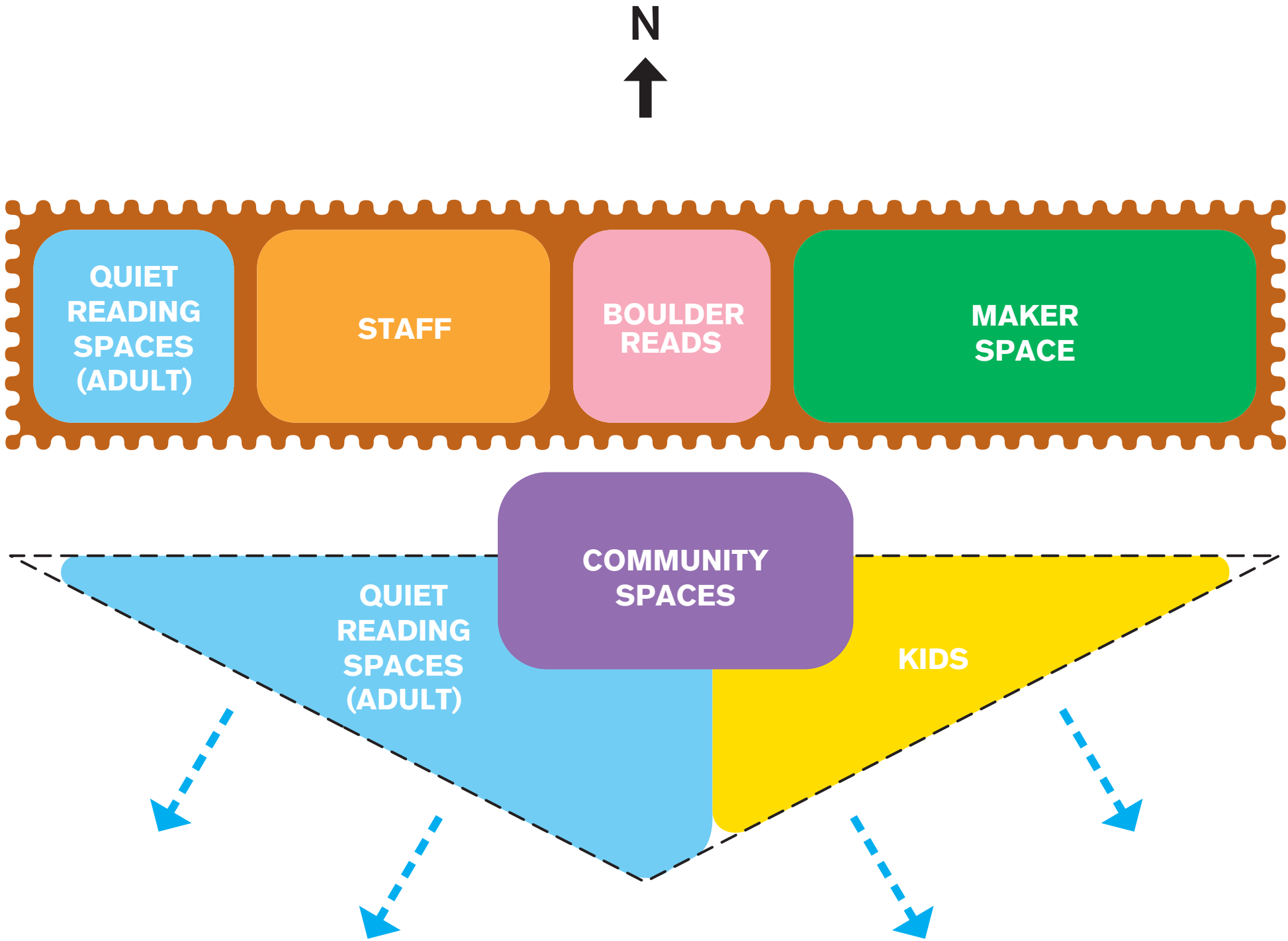
Maximizing the amount of program on the second floor maintains a minimal building footprint on the site, creating space for generous outdoor amenities and a reduced impact on neighboring residents.





PROGRAM ADJACENCIES:  
FRONT VS BACK

The building is conceptualized as two parts; a more solid and enclosed area to the north that includes fewer windows and maintains the privacy or insulation desired by specific programs, and a more open space to the south featuring views to the mountains and connections to outdoor spaces and amenities.



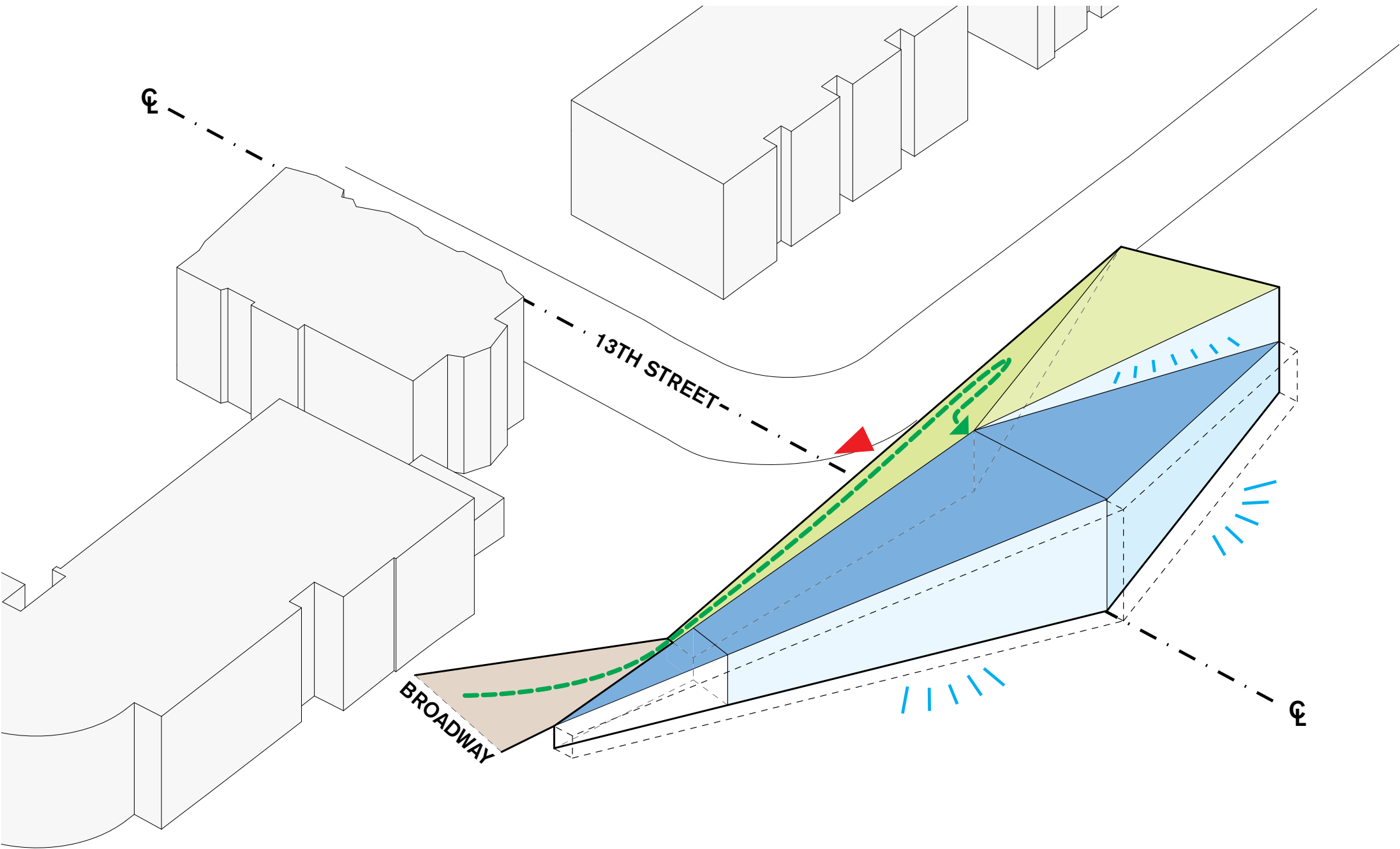
MASSING DIAGRAM

The massing of the building is defined with its highest point aligned to the center of 13th Street. While maintaining views to the south, the massing tapers down to both the east and west, reducing the impact on the views of residents north of the library and creating a dramatic and iconic image for the building.

The building's main entrance is located at the center of the ground floor, aligned with 13th Street. A secondary, after-hours entrance is located on the second floor, accessed from Broadway via a handicapped-accessible ramp that runs along the building's roof.

The northern section will have a planted green roof. It slopes down towards the residential development, minimizing the visual impact while providing a planted surface to view.

The southern section's roof will be covered in photovoltaic panels, and extends out towards the views.





SITE CONCEPT DIAGRAM

The conceptual strategy for the new library site has of 5 key elements; the library building, an expanded urban plaza, a 28-space parking area, a new street connecting 13th Street and 14th Street, and a collection of outdoor amenities (5-9).

The building massing (1) is located where a cul-de-sac currently exists, with main pedestrian and vehicle access towards the north and open views and connections to nature to the south. Outdoor amenities are located closer to Fourmile Canyon creek within open green space and away from Broadway.

The new urban plaza (2) enlarges the current public square, allowing for large community events. The plaza extends from Broadway to the new parking area in a pedestrian-oriented streetscape (3) that uses porous pavers and a narrow street design to intentionally slow traffic, reduce impervious cover, and create a safer space for pedestrians, bikers, and vehicles. This portion of the street is thought of as primarily pedestrian.

The parking area (4) employs a similar strategy, using a pedestrian-oriented streetscape with a porous paver distinct from the ones used in the plaza, street design controls, and a green median. The parking area will also contain electric vehicle charging.

Where 14th Street meets the new connector street and library parking area, a potential opening (10) is integrated to connect the Boulder Meadows neighborhood to the site.

LEGEND

- 1

NoBo Branch Library
- 2

Urban Plaza/Event Space
- 3

New Connector Street
- 4

NoBo Library Parking Area
- 5

Outdoor Maker Space Area
- 6

Playground
- 7

Community Garden
- 8

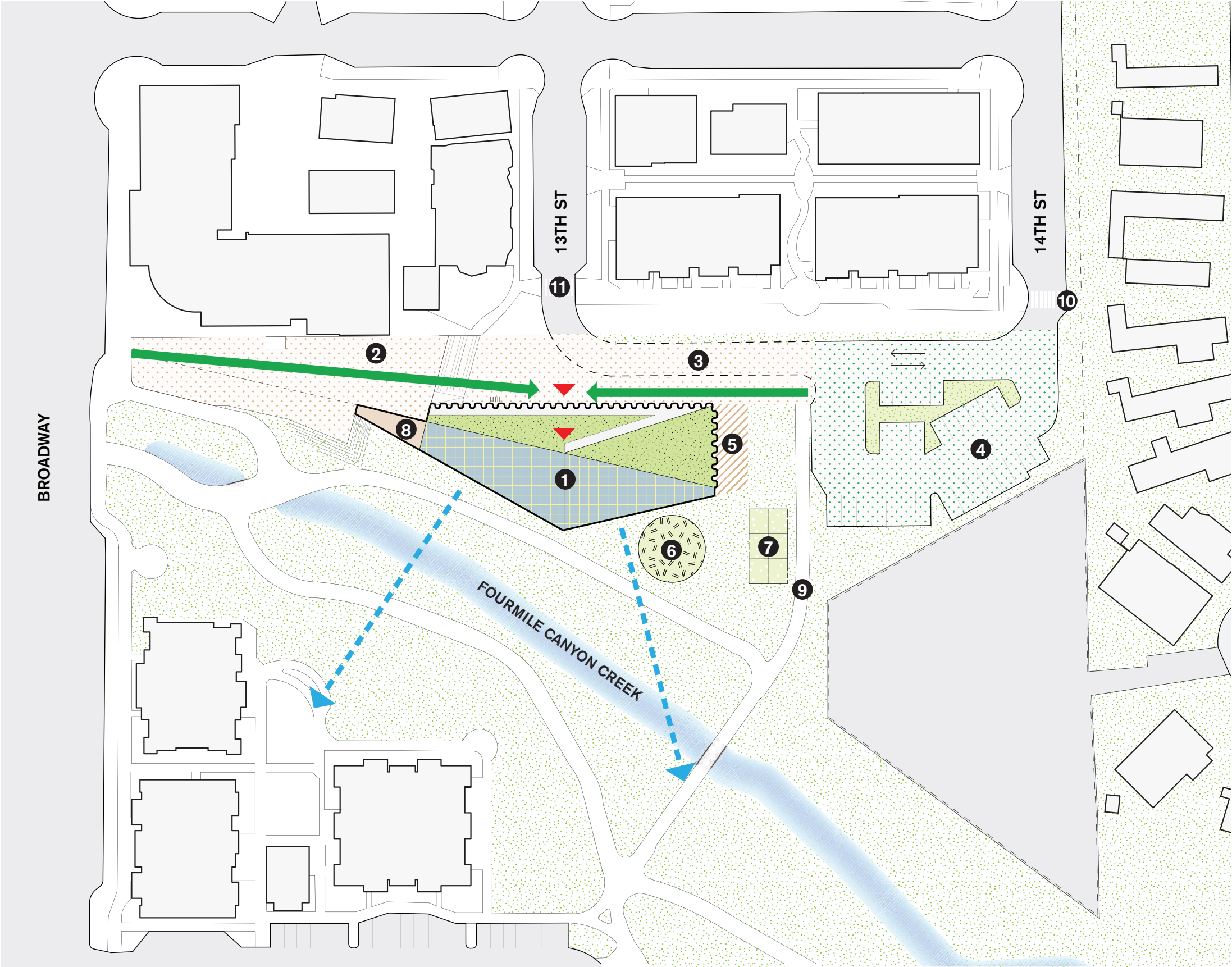
Plaza steps/seating
- 9

New bike path
- 10

Potential Connection from Boulder Meadows
- 11

Pedestrian Crosswalk

- Main Pedestrian Access
- NoBo Library Entrance
- Open Views to Fourmile Canyon Creek, Flatiron Mountains, and Foothills
- Porous paving Material 1
- Porous paving Material 2





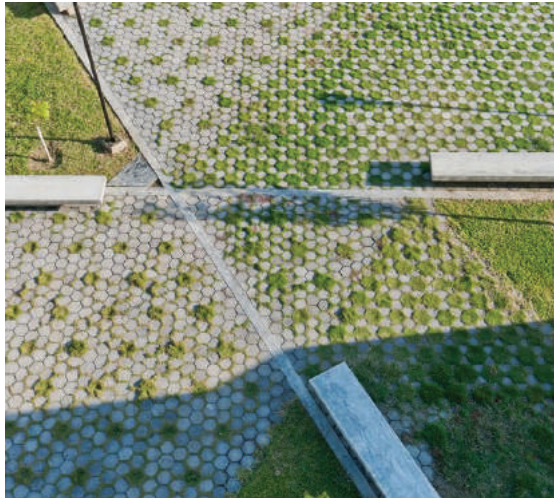
REFERENCES



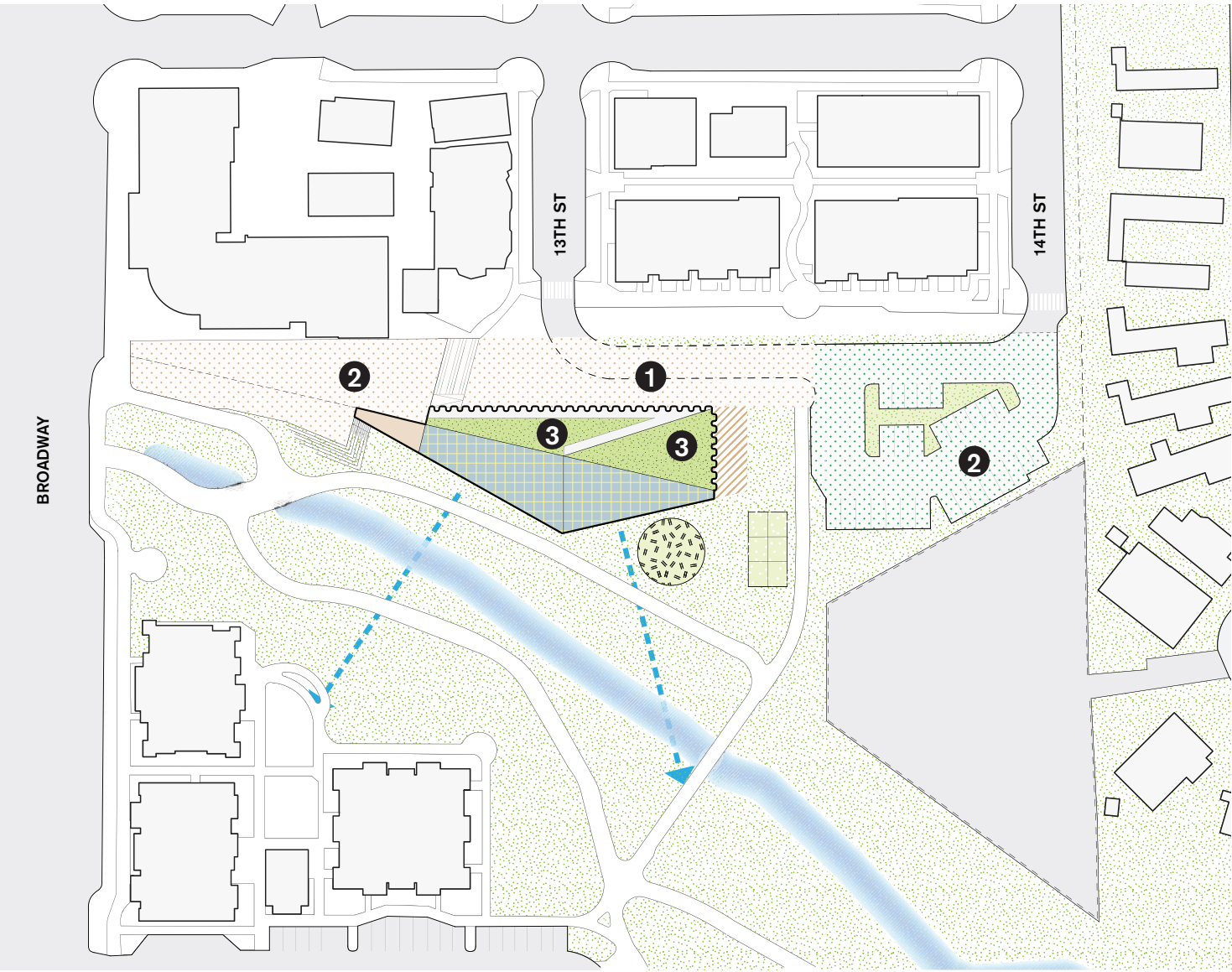
1 PEDESTRIAN ORIENTED PLAZA/STREET



2 POROUS PAVER MATERIALS



3 BUILDING GREEN ROOF



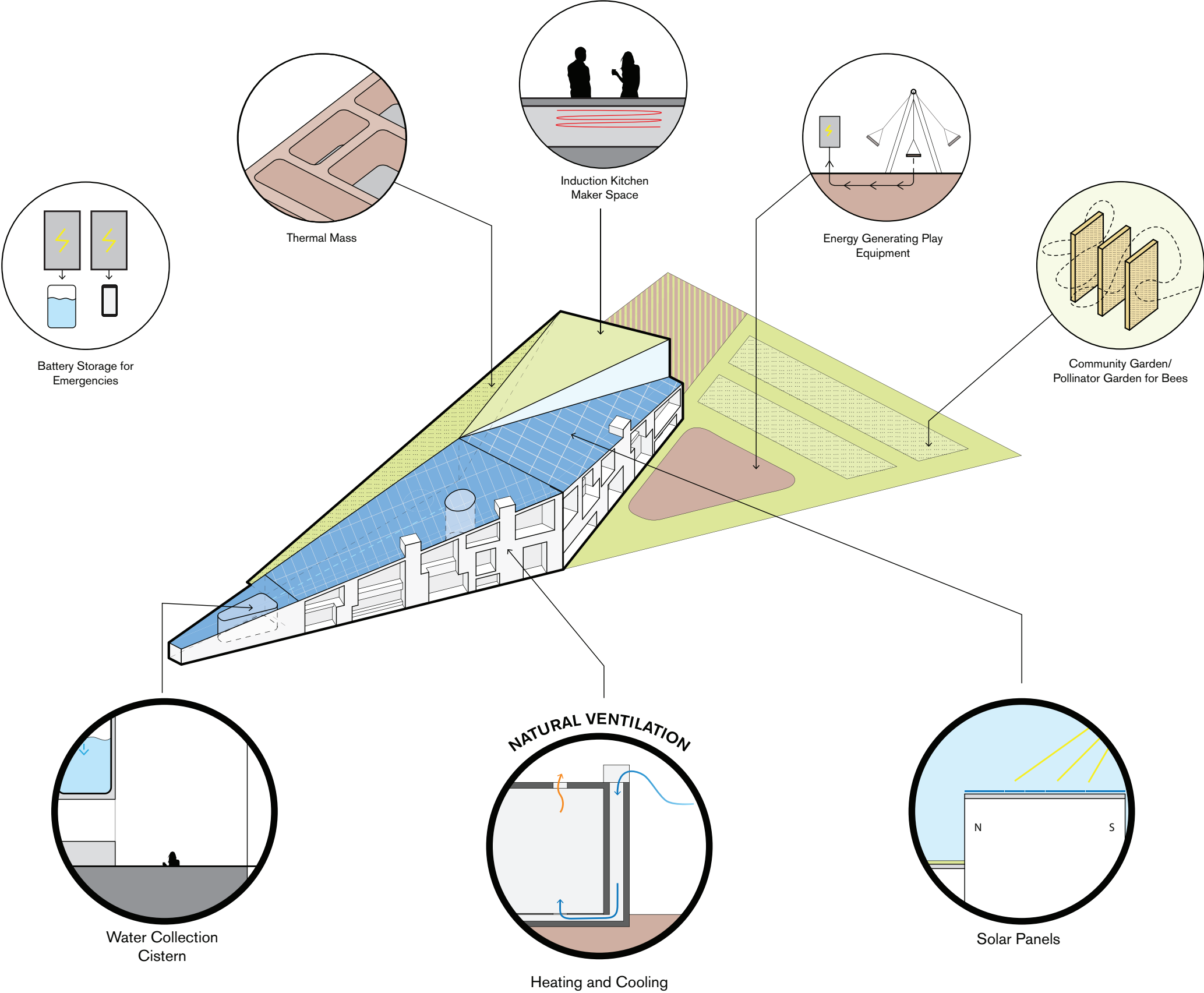


SUSTAINABLE SYSTEMS

In addition to site-specific massing, the building design is generated through the use of several green technologies and systems. These sustainable systems are integrated into the building and site to create “iconic architecture” by utilizing innovative sustainable strategies visibly while achieving the City’s goals of a Net Zero Building.

The main sustainable strategies under consideration are solar panels at the roof, innovative site and storm water management, and a passive downdraft system that uses natural ventilation fueled by prevalent winds to both heat and cool the building.

The building is thus conceived of as an educational opportunity to inform the public of the benefits and possibilities for green architecture. We will work with our consultants to find ways to highlight the green aspects and to visualize energy savings, natural ventilation, and other sustainable systems inside the building as well.



SITE PLAN

LEGEND

- 1

NoBo Branch Library

11,050 SF
- 2

Urban Plaza/Event Space

15,700 SF
- 3

New Connector Street
- 4

NoBo Library Parking Area (28 spaces)

10,600 SF
- 5

Outdoor Maker Space Area

860 SF
- 6

Playground

1,300 SF
- 7

Community Garden

1,000 SF
- 8

Plaza steps/seating
- 9

New bike path
- 10

Potential Connection from Boulder Meadows
- 11


Drop-Off Area
- 12


Handicap parking spaces (2)
- 13


Electric vehicle charging station (3)
- 14

Pedestrian Crosswalk
- 15

Short term bicycle parking
- 16

Long term bicycle parking
- 

NoBo Library Entrance
- 

Porous paving Material 1
- 

Porous paving Material 2





## COMMUNITY DESIGN RESPONSES

### 1 QUIET SPACE

READING AREA WITH VIEWS TO THE MOUNTAINS AND ACCESS TO NATURE

### 2 COMMUNITY SPACE

COMMUNITY ROOM CENTRAL TO THE LIBRARY WITH AFTER-HOURS ACCESS

### 3 CHILDREN'S SPACE

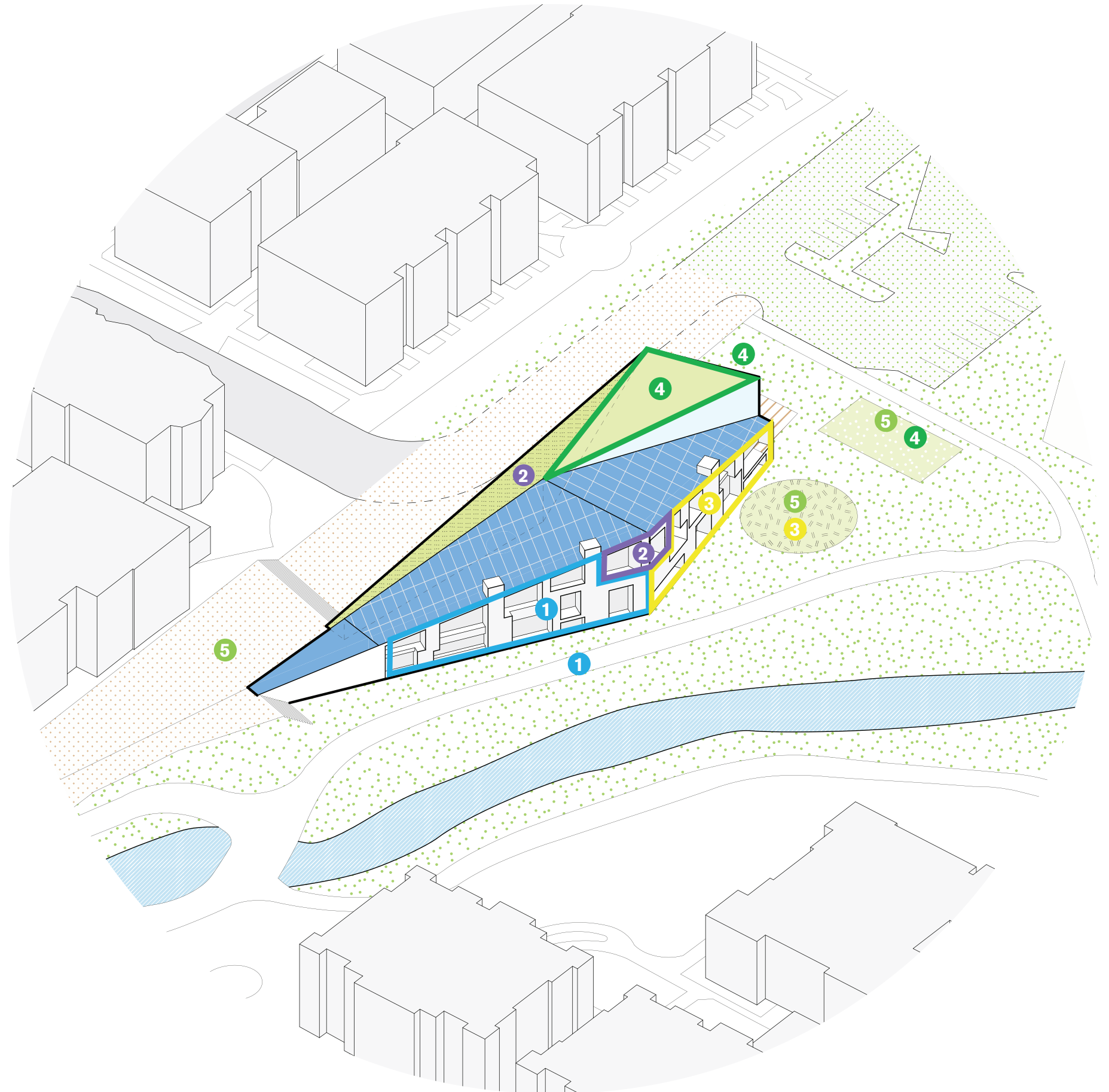
KIDS AREA WITH SIGHTLINES, STORYTIME SEATING, AND ACCESS TO PLAYGROUND

### 4 MAKERSPACE

LARGE MAKERSPACE WITH DEDICATED OUTDOOR WORK AREA AND ACCESS TO COMMUNITY GARDEN

### 5 OUTDOOR SPACE

OUTDOOR AMENITIES SUCH AS A COMMUNITY GARDEN, CHILDREN'S PLAYGROUND, AND LARGE PUBLIC PLAZA





## RESIDENT DESIGN RESPONSES

### 1 SHIFTED MASSING

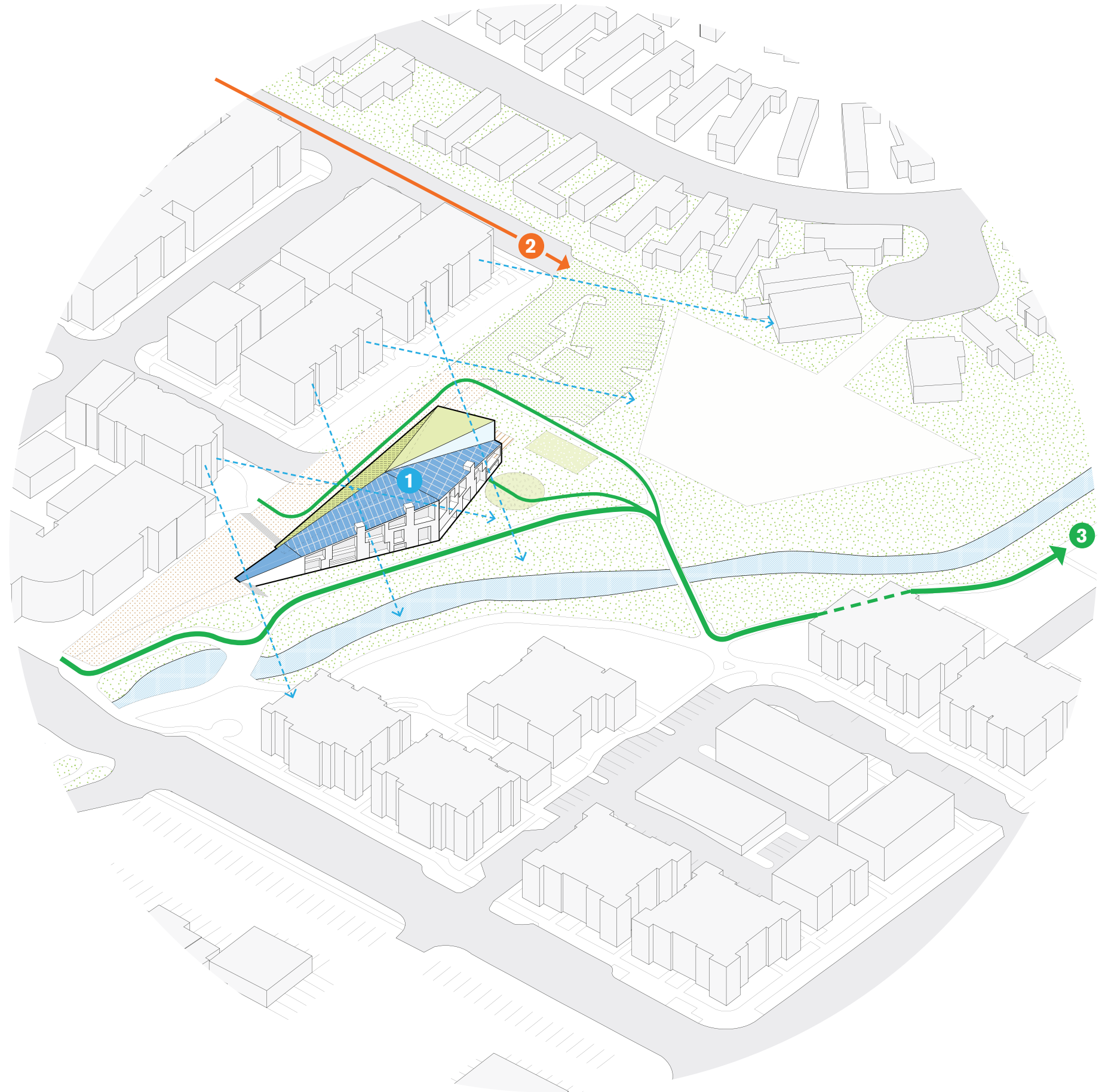
STRATEGICALLY LOCATED BUILDING  
TO MINIMIZE EFFECT ON RESIDENTS

### 2 TRAFFIC DESIGN

TRAFFIC AND PARKING DESIGNED  
TO ENCOURAGE ENTRANCE FROM  
14TH STREET

### 3 CONNECTION TO PARK

MULTIPLE CONNECTIONS TO  
LIBRARY, OUTDOOR AMENITIES, AND  
VIOLET PARK. WORK ON THE LIBRARY  
SITE WILL BE COORDINATED WITH  
THE PARKS DEPARTMENT TO CREATE  
SYNERGIES BETWEEN SITES AND  
ENCOURAGE USE OF THE ENTIRE  
OPEN SPACE



TRAFFIC DIAGRAM

Car access to the new library is available from Broadway and Yarmouth Avenue, where vehicles then turn onto less trafficked streets north of the site. The parking area will be most readily accessed via 14th Street. 14th Street is further prioritized through the use of design controls to reduce traffic speed and distinction in porous paving materials that discourage vehicular connections to 13th Street. The future extension of 14th Street to Violet Avenue is not precluded through the current design, and can be constructed at any time with minimal impact to the new library parking area.

Bike access to the building and bicycle parking areas is available from the south using either the dedicated bike lanes on Broadway or a new path extending from the existing trails along Fourmile Canyon Creek. Bike access is also available from the north using 13th Street or dedicated bike lanes on Broadway to the new pedestrian-oriented streetscape plaza.

Pedestrian access to the building is available from Broadway, the library parking area, the new pedestrian-oriented streetscape, or a new path from the Boulder Meadows Manufactured Home community. Pedestrians access is also available using the new path extending from the existing trails along Fourmile Canyon Creek.

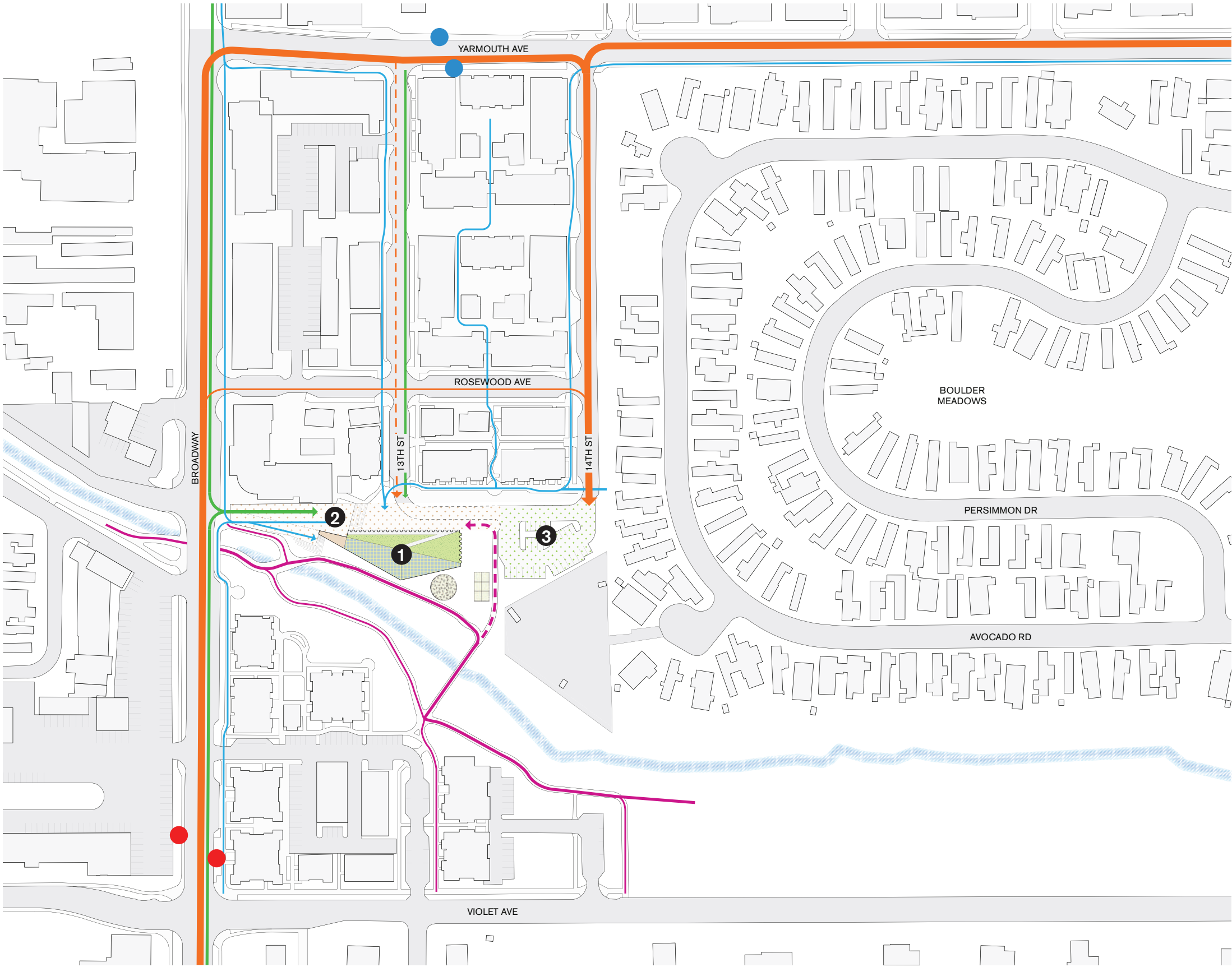
LEGEND

- 1

NoBo Branch Library
- 2

Urban Plaza/Event Space
- 3

NoBo Library Parking Area (28 spaces)
- Car Circulation/Access
- Bike Circulation/Access
- Pedestrian Circulation/Access
- Trail Circulation
- New Trail Connection to 13th/14th St
- SKIP/Y Bus stop
- 204 Bus Stop
- Porous paving Material 1
- Porous paving Material 2





SITE CIRCULATION DIAGRAM

From the prioritized access to the site on 14th Street, circulation through the new library parking area includes a drop-off with direct access to a new bike path and pedestrian-oriented plaza.

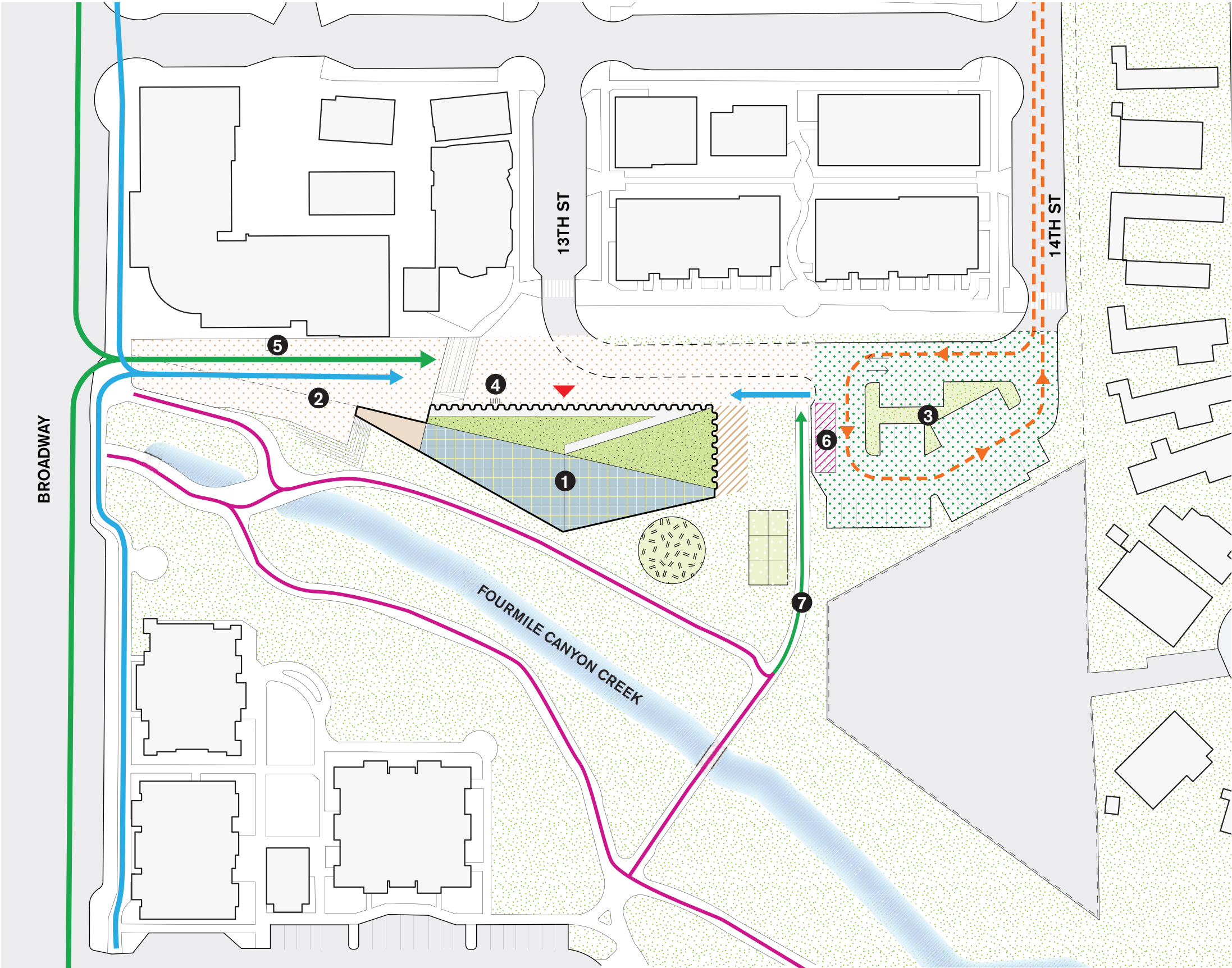
For bicyclists, short term parking is available near the main library entrance, with long term parking and electric bicycle charging available on the new urban plaza.

Both bicyclists and pedestrians will use the new pedestrian-oriented streetscape to access the main library entrance.

LEGEND

- 1 NoBo Branch Library
- 2 Urban Plaza/Event Space
- 3 NoBo Library Parking Area (28 spaces)
- 4 Short term bicycle parking
- 5 Long term bicycle parking
- 6 Drop-Off Area
- 7 New bike path

- ▼ NoBo Library Entrance
- ⬢ Porous paving Material 1
- ⬢ Porous paving Material 2
- ▨ Drop Off Area
- ➡ Car Circulation/Access
- ➡ Bike Circulation/Access
- ➡ Pedestrian Circulation/Access
- ➡ Trail Circulation



## VIEW FROM BROADWAY





## VIEW FROM 13TH STREET





GROUND FLOOR PLAN

LEGEND

- 1

Entrance

140 SF
- 2

Lobby/Digital Display

56 SF
- 3

Circulation Desk

2,300 SF
- 4

Adult Area + Seating Area

245 SF
- 5

Storage

175 SF
- 6

Water Collection Tank

27 SF
- 7

Children's Area

1,700 SF
- 8

Automated Materials Handler

150 SF
- 9

Manager's Office

145 SF
- 10

Security

123 SF
- 11

Private Workspace

365 SF
- 12

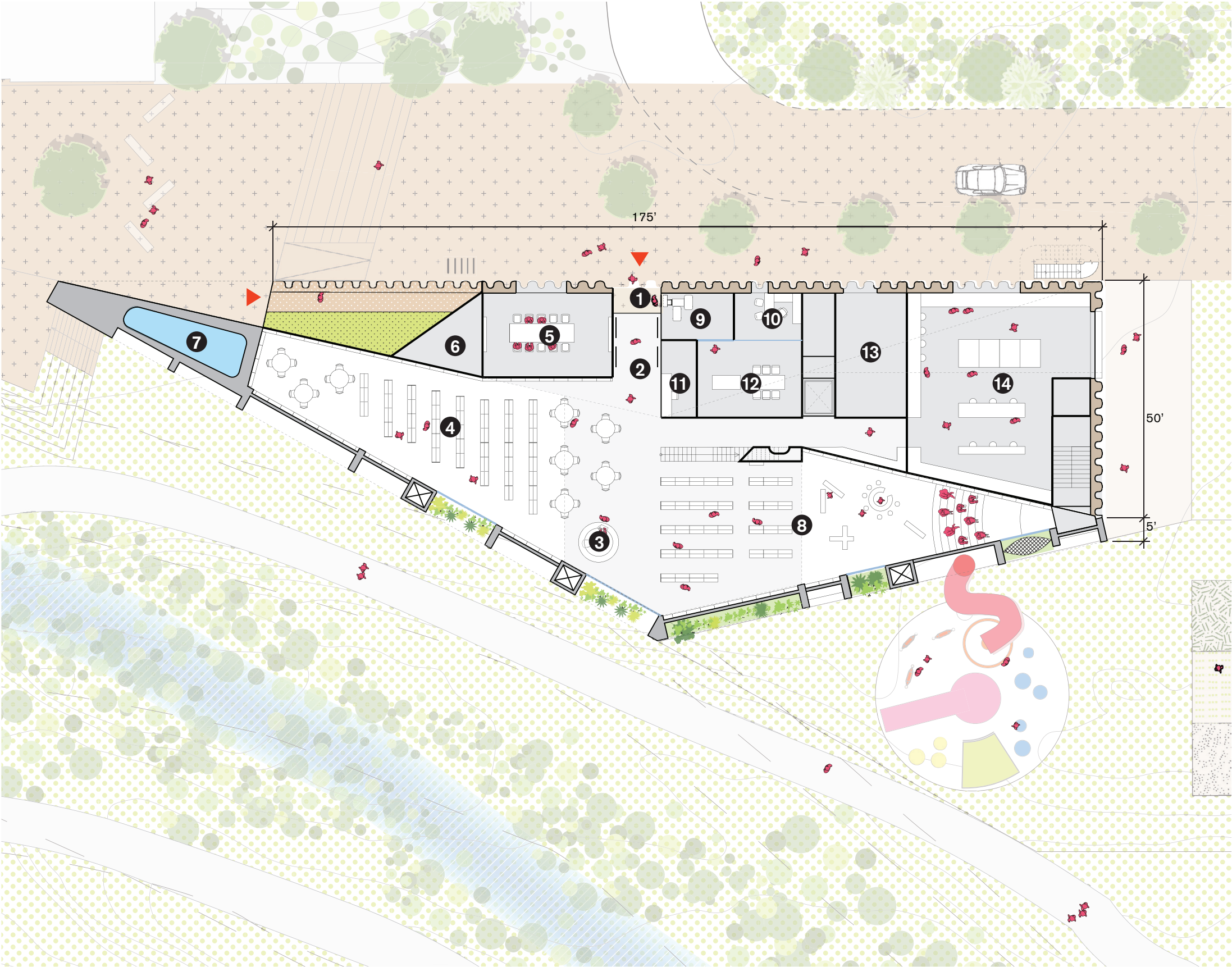
Restrooms

400 SF
- 13

Makerspace

1,260 SF

Total Ground Floor Area 9,620 SF

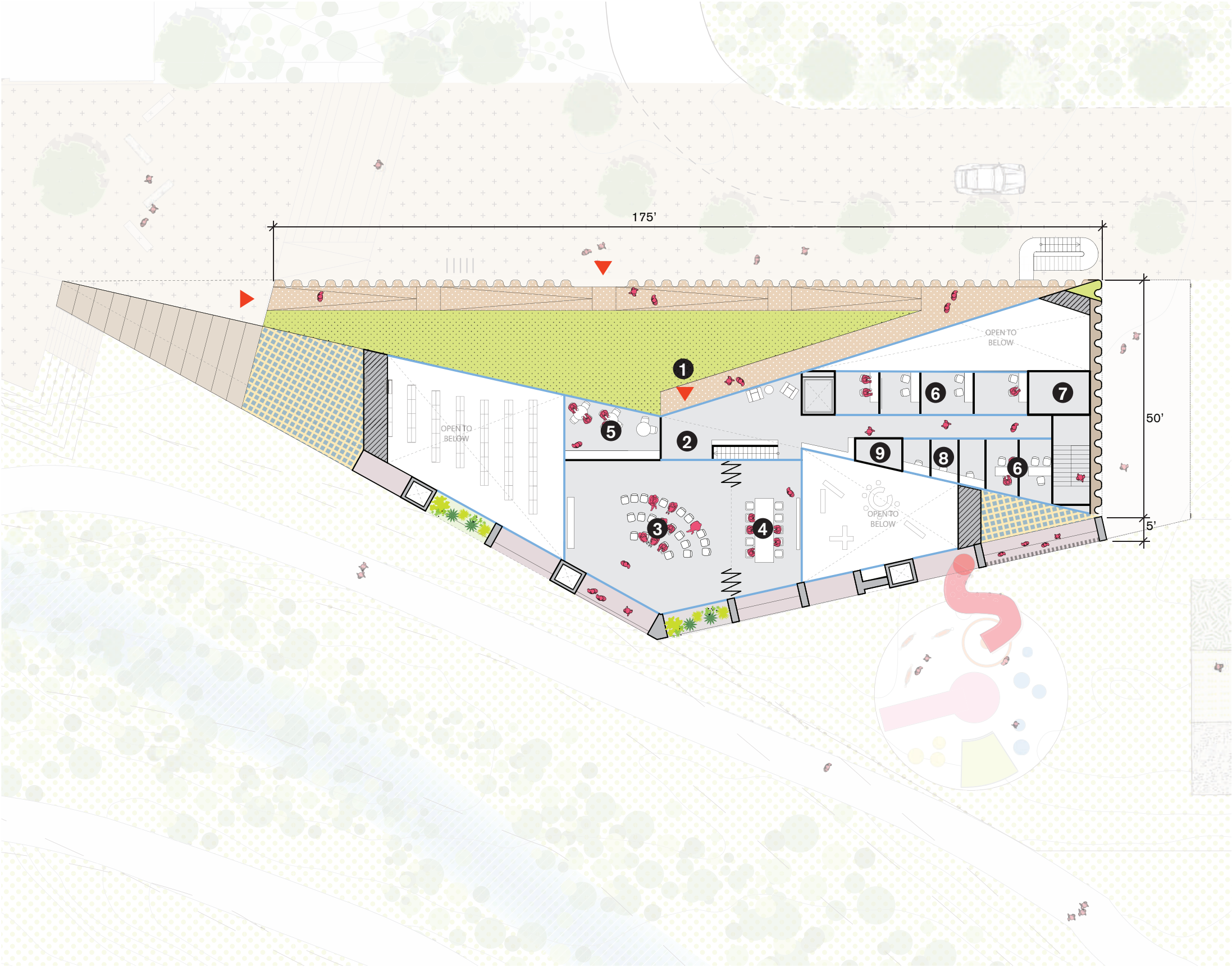




SECOND FLOOR PLAN

LEGEND

1	After-hours Entrance	
2	Lobby + Digital Display	340 SF
3	Community Room	1,000 SF
4	Meeting Room	420 SF
5	Break Room	230 SF
6	BoulderReads	550 SF
7	Storage	120 SF
8	Study Rooms	150 SF
9	Restroom	60 SF
Total Ground Floor Area		3,550 SF



BUILDING ELEVATION

The thickened facade breaks down the large southern elevation to a more human scale that provides a variety of programmatic and sustainable uses.

By thickening the facade, the surface area for photovoltaics is increased and the resulting overhang helps to shade the glass during the summer. The facade also houses a passive downdraft system, where chimneys are optimally placed to capture prevailing southern winds and bring fresh air down and throughout the interior spaces.

Programmatically, the facade features an assortment of spaces, including gardens, seating or reading nooks, a community balcony, and a children’s playground.

LEGEND

- 1 Urban Plaza/Seating
- 2 Passive Downdraft Chimney
- 3 Facade Planter
- 4 Community Space Balcony
- 5 Playground

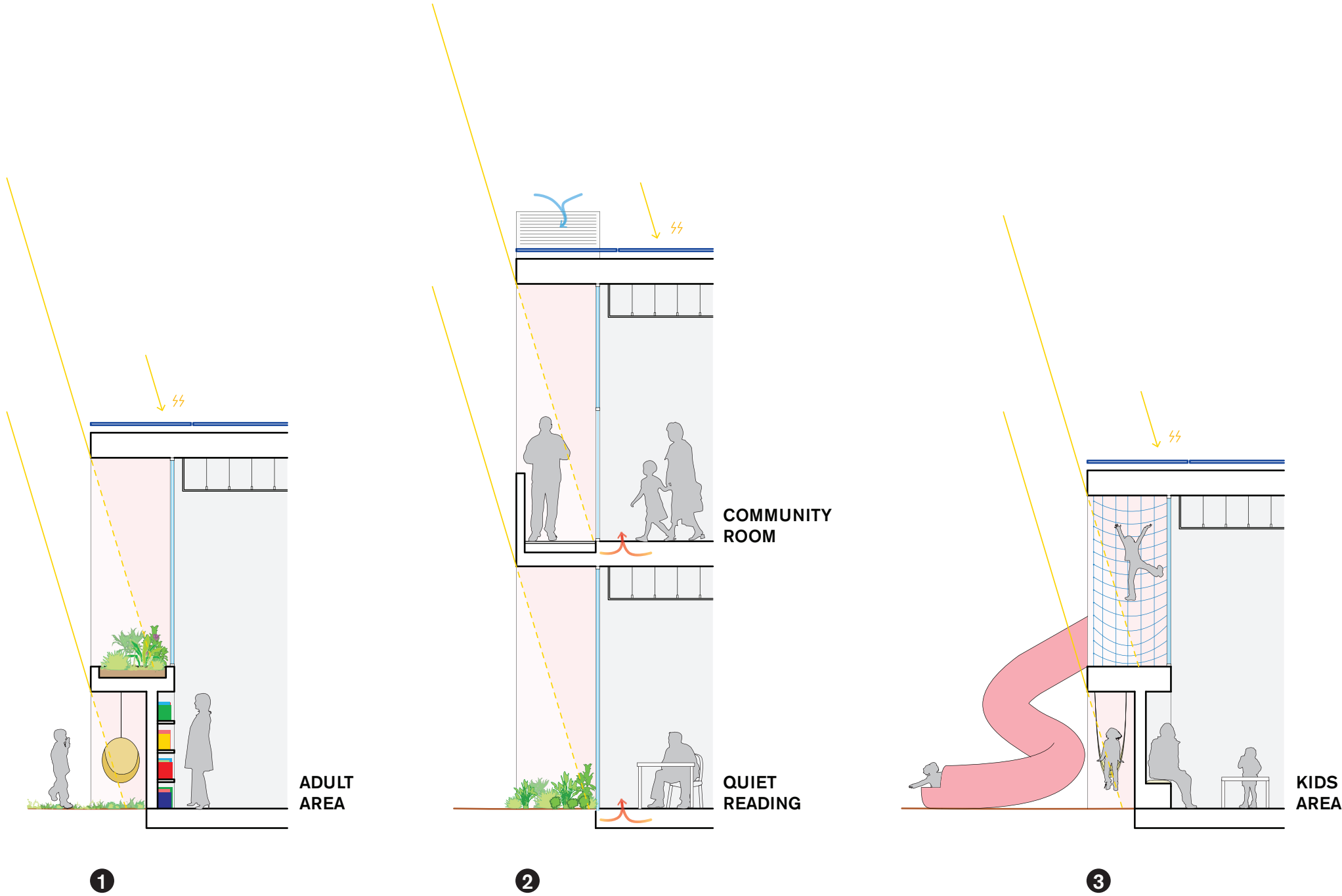




FACADE SECTIONS

The variations within the facade allow for unique adjacencies between interior and exterior programs and spaces:

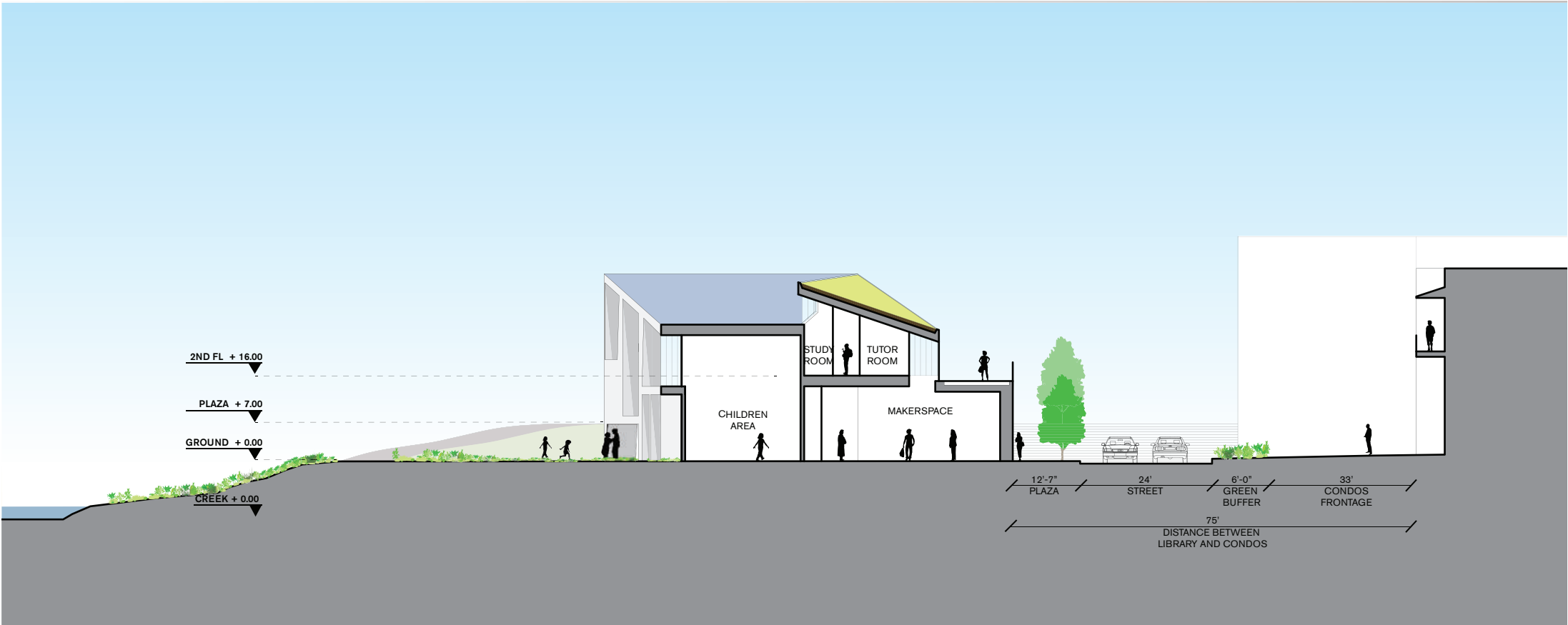
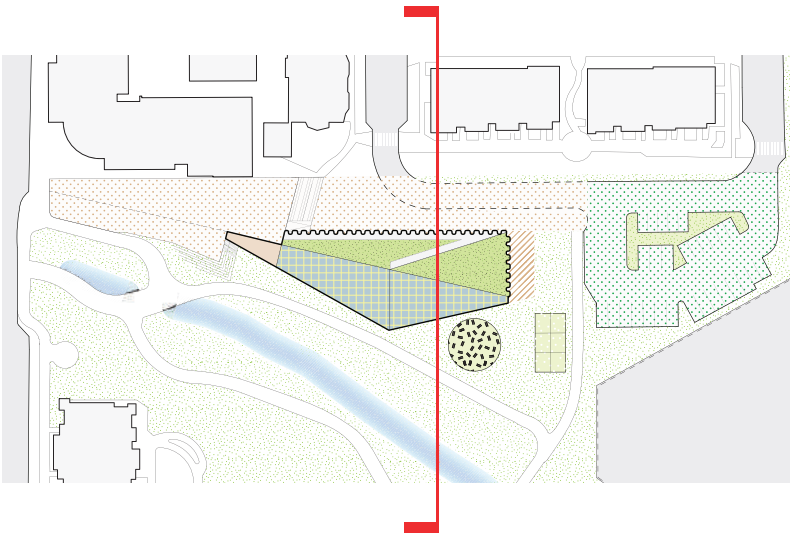
- 1 The adult reading areas on the interior relate to outdoor gardens and shaded reading nooks that are directly connected to outdoor spaces and views.
- 2 The interior community spaces have access to an outdoor balcony, which serves as a special viewpoint for the site and mountains.
- 3 The children's area is envisioned with a visual and physical connection to the playground, extending to the façade as a unique playscape. Seating areas are embedded throughout for both parents and kids.



BUILDING SECTION

In the eastern half of the building, the main space height tapers down as a second story is accommodated with a separate, higher massing. This second story features a green roof angled to the north, minimizing the visual impact of the second story on nearby residents to the north with a pleasing, natural amenity. The building massing breaks down further as it continues towards the new connector street.

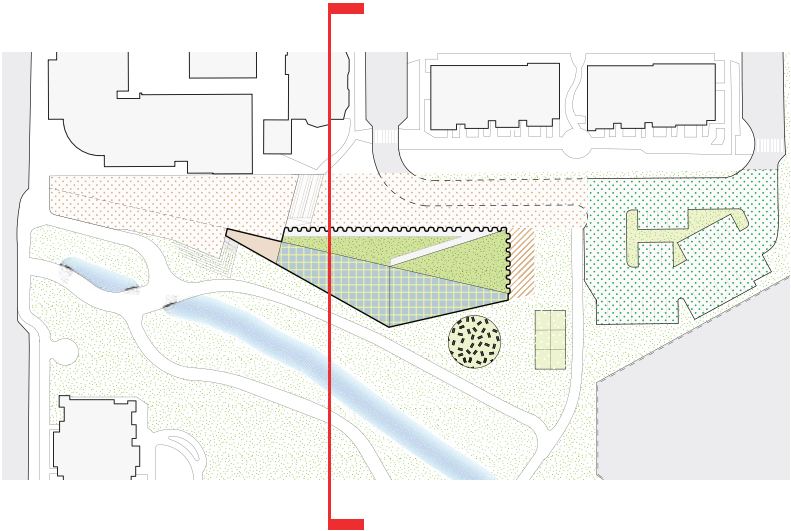
Along the new connector street, a green buffer screens the street from residents, while new trees along the plaza partially screen the building from view.





BUILDING SECTION

In the western half of the building, the height of both the front and back portion of the building taper down, ultimately reaching the level of the plaza along Broadway. The back portion of the building features a green roof with a walkable path to the after-hours access community space. Along the plaza, new trees partially screen the building from nearby residents to the north.





## VIEW FROM NORTHEAST





VIEW FROM NORTH





## VIEW FROM NORTHWEST





## TOP VIEW

