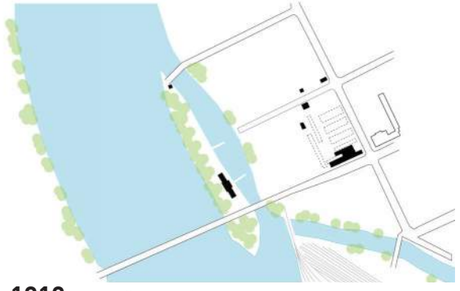
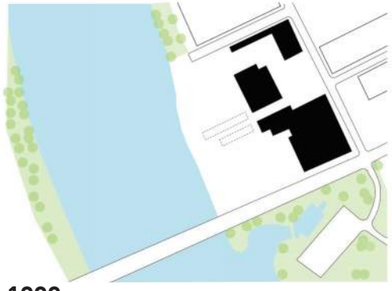
MISSISSIPPI RIVER PARK AND COMMUNITY CENTER

Minneapolis MN

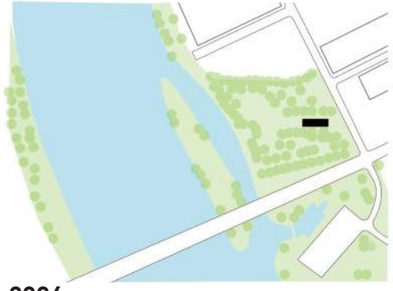
Pre-1850's Oak Savannah and Dakota Land



1912 Early Sawmill Activity and Hall's Island Bath House



1988 Expanded Mill and and Island Annexation



2024 Graco Park and Hall's Island Restoration

SITE TRANSFORMATION

ECOLOGICAL BALANCE

INDUSTRIAL HERITAGE

EQUITY AND ACCESS

ORIGINS

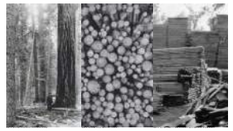
Pre 1850 Site home to Dakota people and blanketed in Oak Forest

1851 In Treaty with the Sioux, Dakota cede lands including modern day Minneapolis to US Goverment. Over next decade, Dakota people were forcibly removed from region

1855 Town of St. Anthony incorporated on the East Bank fo the Mississippi River. Merged with Minneapolis 15 years later

INDUSTRIALIZATION

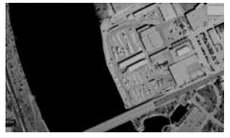
1883 Horace Cleveland first envisions Park System, including a necklace of green spaces along the Mississippi River. The flat, featureless, and industrial riverside of NE Minneapolis is ignored for the next century.



1885 Saw Milling operations begin on site

1902 Dr. Pearl Hall purchases the Island from the State and builds a Public Bath House.

1930 Scherer Bros. Lumber begins using the site.



1930 Scherer Bros. fills in channel separating Hall's Island from East Bank

RESTORATION

2010 Minneapolis Park Board purchases land from Scherer Bros. and razes Lumber Buildings

2017 Hall's Island reconstructed

2021 Park Board builds first Spark'd Studio - a technology makers space for teens - at Powderhorn Park

2024 Planned Grand Opening of Graco Park, which seeks to integrate recreation, opportunity incubation and restoration of habitat

PARK PROGRAM

GATHERING AND EDUCATION

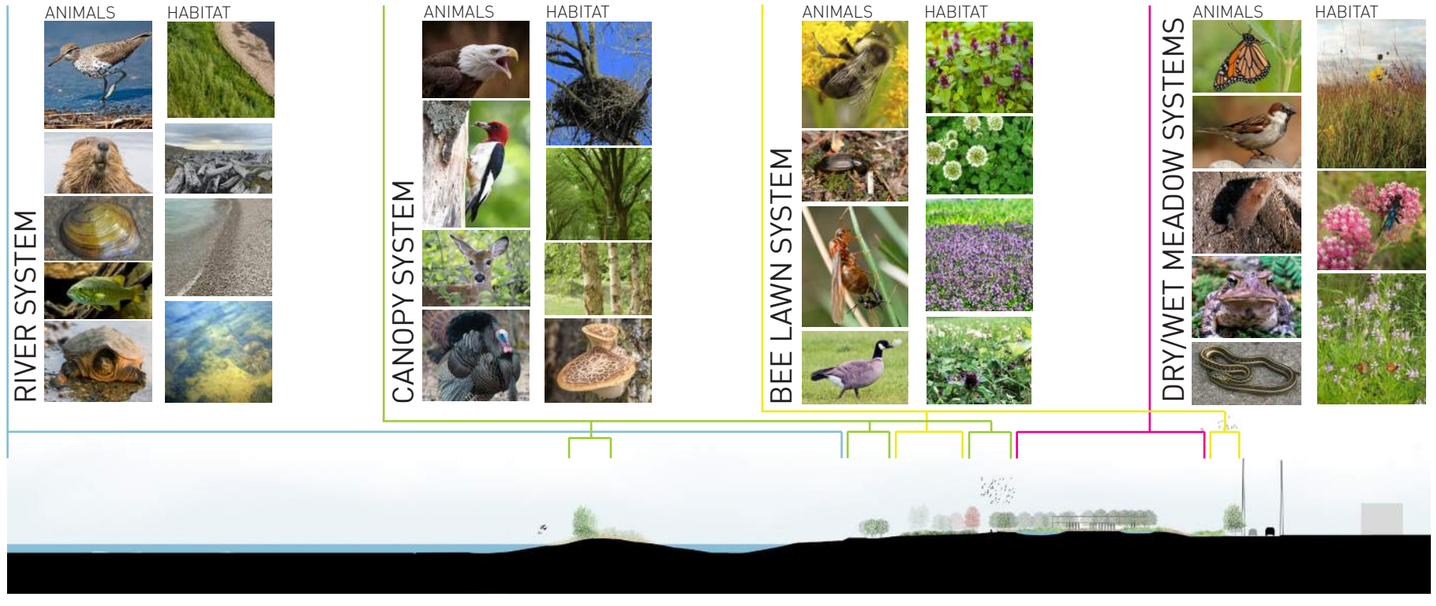
1 Community Center
2 Porch / Proscenium
3 Amphitheatre
4 Entry Plaza
5 Future Shade Pavilion
6 Picnic Area

HABITAT AND RESTORATION

7 Great Bee Lawn
8 Prairie / Geothermal Ground Loop
9 Wet Meadow
10 Riverwalk
11 Gravel Beach

ACCESS AND CONNECTION

12 Tunnel Connection to Regional Bike Trail
13 Regional Bike Trail Extension
14 Hall's Island Promenade
15 Intersection Improvements
16 Accessible Parking

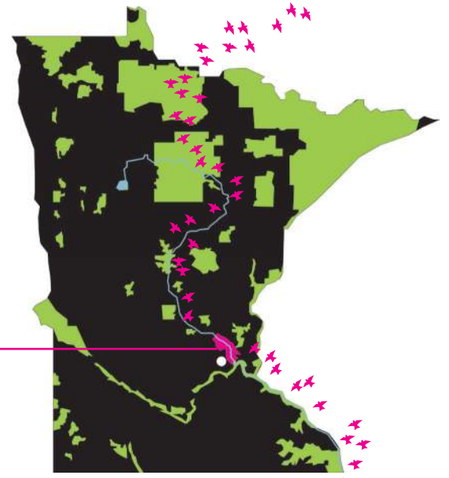


HABITAT SYSTEMS

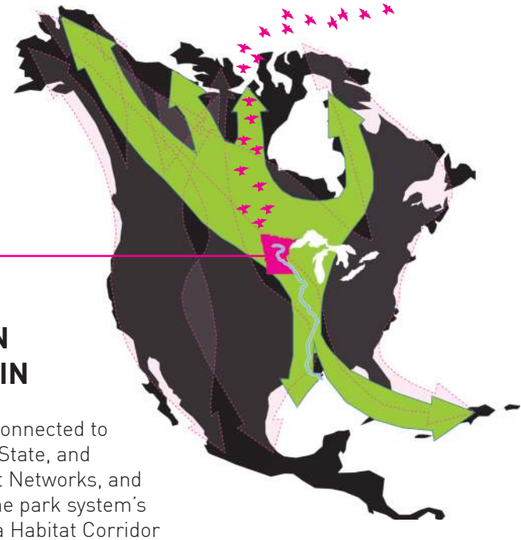
The Park is structured by Habitat Systems that relate groupings of plant species, tree types, and ground cover to key species who reside and migrate through the Mississippi River Corridor.

MINNEAPOLIS PARK SYSTEM

MINNESOTA CRITICAL BIRD HABITAT



MISSISSIPPI RIVER FLYWAY



A LINK IN THE CHAIN

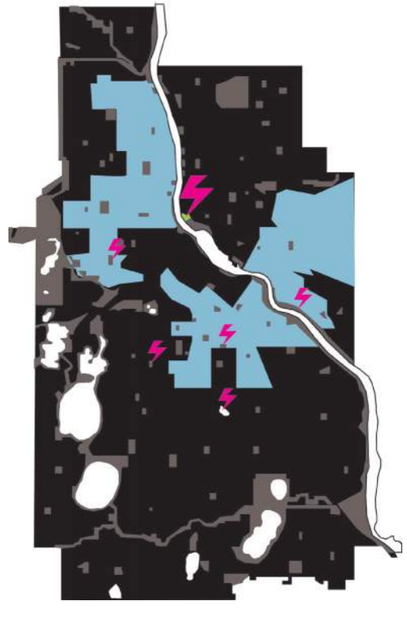
The Park is connected to Continental, State, and Local Habitat Networks, and maximizes the park system's potential as a Habitat Corridor

PARK AS OPPORTUNITY INCUBATOR

Spark'd Studios are creative technology spaces being built within the park system to support self-expression, interest-driven activities, and self-actualization for young people. Programming includes:

1 E-SPORTS
2 VIDEO PRODUCTION
3 WEB DEVELOPMENT
4 MUSIC PRODUCTION
5 DIGITAL FABRICATION
6 PHOTOGRAPHY
7 PODCAST PRODUCTION
8 ENTREPRENEURSHIP
9 STORYTELLING
10 ART AND MIXED MEDIA

Spark'd Studio Locations
Poverty Rate > 30%

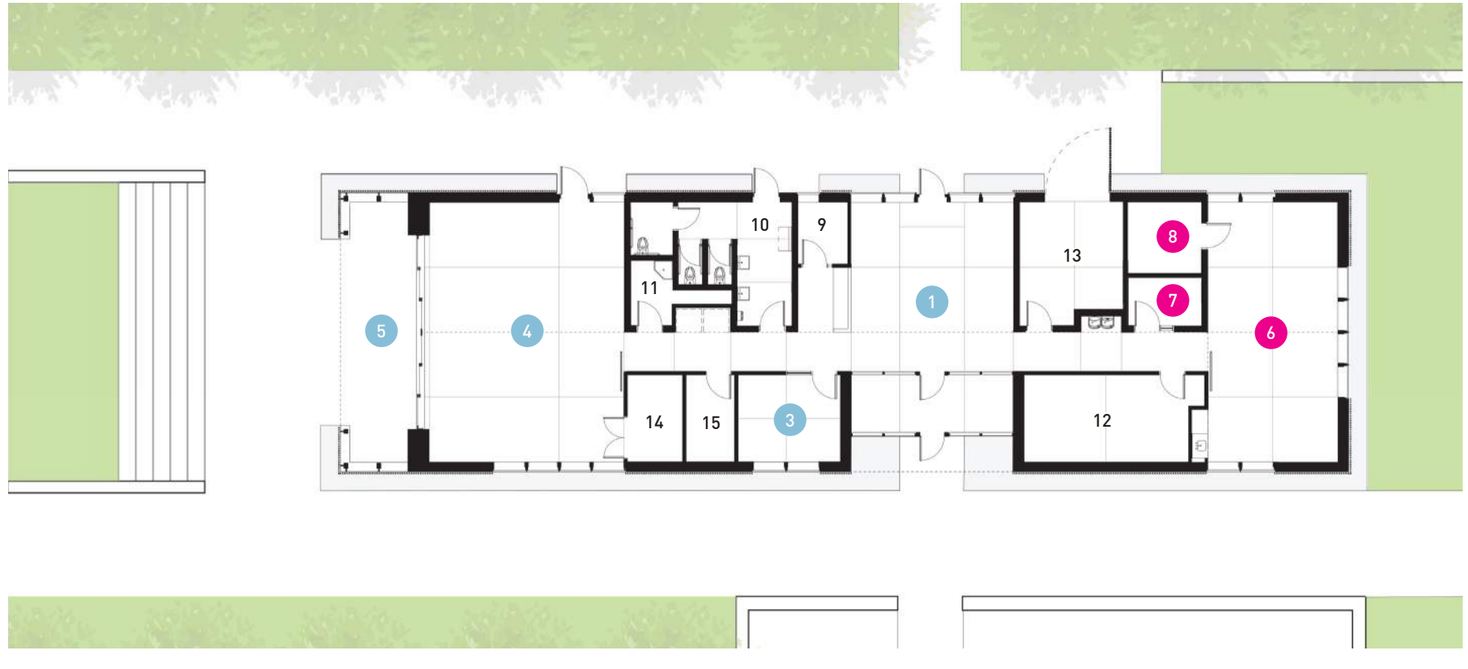


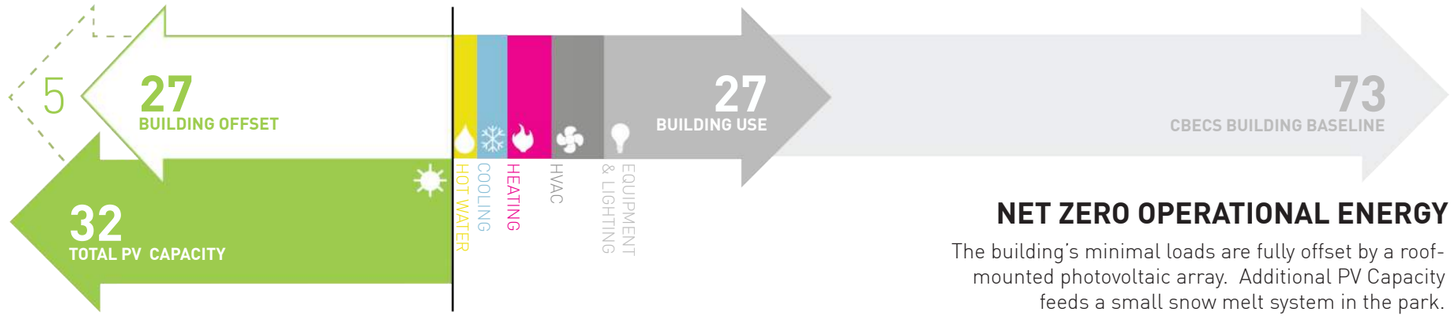
COMMUNITY CENTER PROGRAM

COMMUNITY GATHERING
1 Commons
2 Reception
3 Small Conference Room
4 Multipurpose Room
5 Porch / Proscenium

SPARK'D STUDIO
6 Spark'd Studio
7 Recording Studio
8 Studio Storage

SUPPORT
9 Office
10 All Gender Restroom
11 Janitor's Closet
12 Storage
13 Maintenance Garage
14 Mechanical
15 Electrical

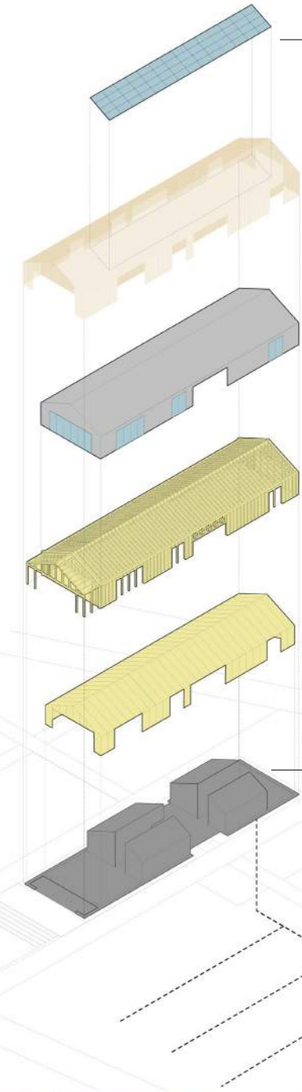




NET ZERO OPERATIONAL ENERGY

The building's minimal loads are fully offset by a roof-mounted photovoltaic array. Additional PV Capacity feeds a small snow melt system in the park.

0 BUILDING pEUI kbtu/sf/yr



PHOTOVOLTAIC ARRAY 7

Roof-Mounted Photovoltaic Array
with South Orientation

EXTERIOR SKIN 6

Wood Screen Wall
Corrugated Metal Roof

BUILDING ENVELOPE 5

R63 Roof
R40 Walls
Triple Pane, Bird-Safe Glazing
Enhanced Airtightness

WOOD FRAMING 4

Conventional Roof Trusses
Double Wythe Wood Stud Walls
24 in O.C. Advanced Framing
Timber Framing at Porch and Entry

INTERIOR PLYWOOD SHELL 3

Birch Plywood Interior Paneling
48 in module to Reduce Waste

INTERIOR PROGRAM VOLUMES 2

GEOTHERMAL GROUND LOOP 1

PERFORMATIVE LAYERS

ENERGY EFFICIENCY

1 Recessed Photovoltaic Array
2 R63 Dense Pack Cellulose in Conventional Wood Trusses
3 R40 Dense Pack Cellulose in Double Wythe Wood Stud Wall
4 Triple-Glazed Windows

MOISTURE RESISTANCE

5 Ventilated Corrugated Metal Roof
6 Continuous Ventilation Below Deck
7 Continuous Interior Air Barrier
8 Service Chase interior of Air Barrier

THERMAL COMFORT

9 In floor Radiant Heat
10 Overhead Fan
11 DOAS with Energy Recovery
12 Wood Slat Shading

The building assemblies carefully balance economical and conventional systems such as Corrugated Metal Roofing, Wood Stud Framing, Prefabricated Wood Roof Trusses and Cavity Insulation with increased attention to Energy Efficiency, Moisture Resistance, and Thermal Comfort

BALANCING ECONOMY AND PERFORMANCE

PORCH AND PROSCENIUM

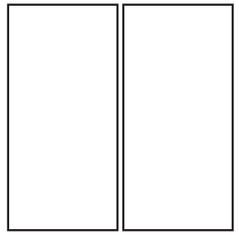
On its west end, the building's wood rainscreen slips past the thermal envelope, creating an open air Porch & Proscenium for social gathering and performance.

A MULTIPURPOSE COMMUNITY HUB

The Multipurpose Room, provides an expanded footprint for space intensive Spark'd Studio activities and a venue for community-wide events. On precious good weather days, a pocketing glass door opens to the amphitheater and river beyond.

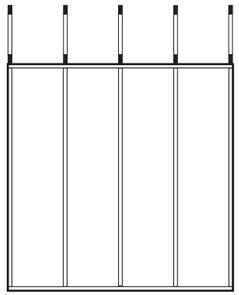
PLYWOOD ROOF SHEATHING
GYPSUM EXT WALL SHEATHING
COATED OSB INT WALL SHEATHING

C 96" MODULE



INTERIOR PLYWOOD
WALL PANELS

B 48" MODULE

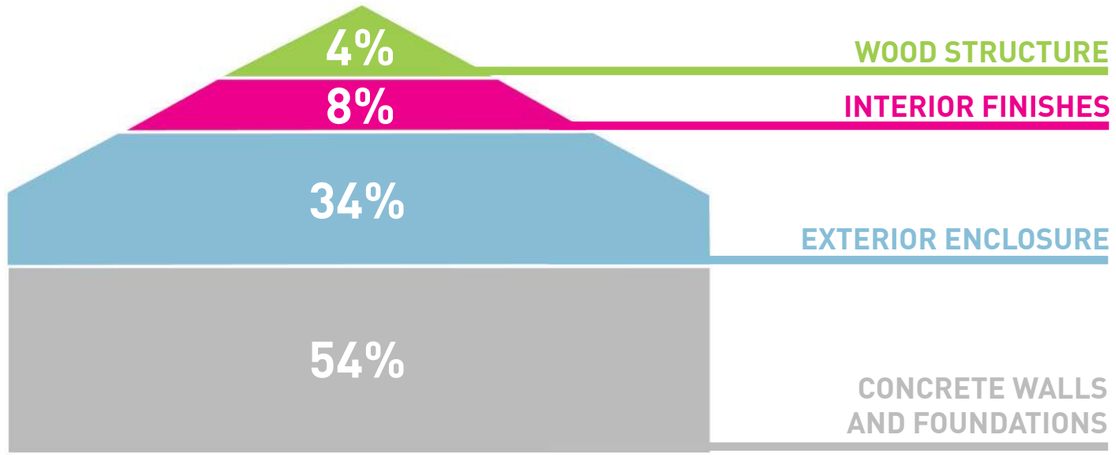


WOOD STUD WALL
AND WOOD TRUSS SPACING

A 24" MODULE

The building is planned on a strict module system based on standard panel sizes and thermally efficient 24" stud spacing, minimizing waste and reducing cost and embodied carbon.

MODULARITY



176 kgCO2e/m2 **TOTAL**

The building's embodied carbon use is limited by the use of wood for both the primary structure and interior finish., offsetting the high embodied carbon of necessary concrete components.

EMBODIED CARBON USE

1 DOUBLE-WYTHE STUD WALL

Double-Wythe Stud Walls use conventional wood framing to provide more space for insulation and a thermal break between wythes. Panelized detailing and Advanced Framing techniques bolster economy and thermal performance, respectively.

2 WOOD TRUSSES

Wood Trusses are a conventional and low carbon means of roof framing that uses small, rapidly grown sections of lumber.

3 DENSE-PACK CELLULOSE

Double-wythe stud walls and Wood Trusses are infilled with economic, moisture-tolerant, and low-embodied carbon Dense Pack Cellulose insulation.

4 PLYWOOD INTERIOR

Birch Plywood Interior finish provides material warmth, durability and low embodied carbon use.

EMBODIED CARBON REDUCTION MEASURES

SITE PREPARATION AND PLANNING | SCHEMATIC DESIGN | DETAILED DESIGN | CONSTRUCTION

2010 — Minneapolis Park Board purchases site from Scherer Bros. Lumber

2017 — Hall's Island Restoration

JUNE 2021 — COMMUNITY ENGAGEMENT ROUND 1
- Online Survey
- Neighborhood Meetings
- Virtual Open House
- Park Pop-up Event
- Youth Bus Tour / Design Charette

AUG 2021 — COMMUNITY ENGAGEMENT ROUND 2
- Online Survey
- Neighborhood Meetings
- Virtual Open House
- Open House

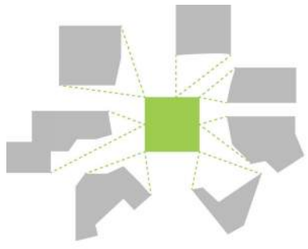
OCT 2021 — COMMUNITY ENGAGEMENT ROUND 2
- Virtual Whiteboard Session
- Open House

NOV 2021 — SCHEMATIC DESIGN COMPLETION

MAR 2023 — DETAILED DESIGN COMPLETION

2024 — ANTICIPATED COMPLETION

2 ONLINE SURVEYS



7 NEIGHBORHOOD MEETINGS

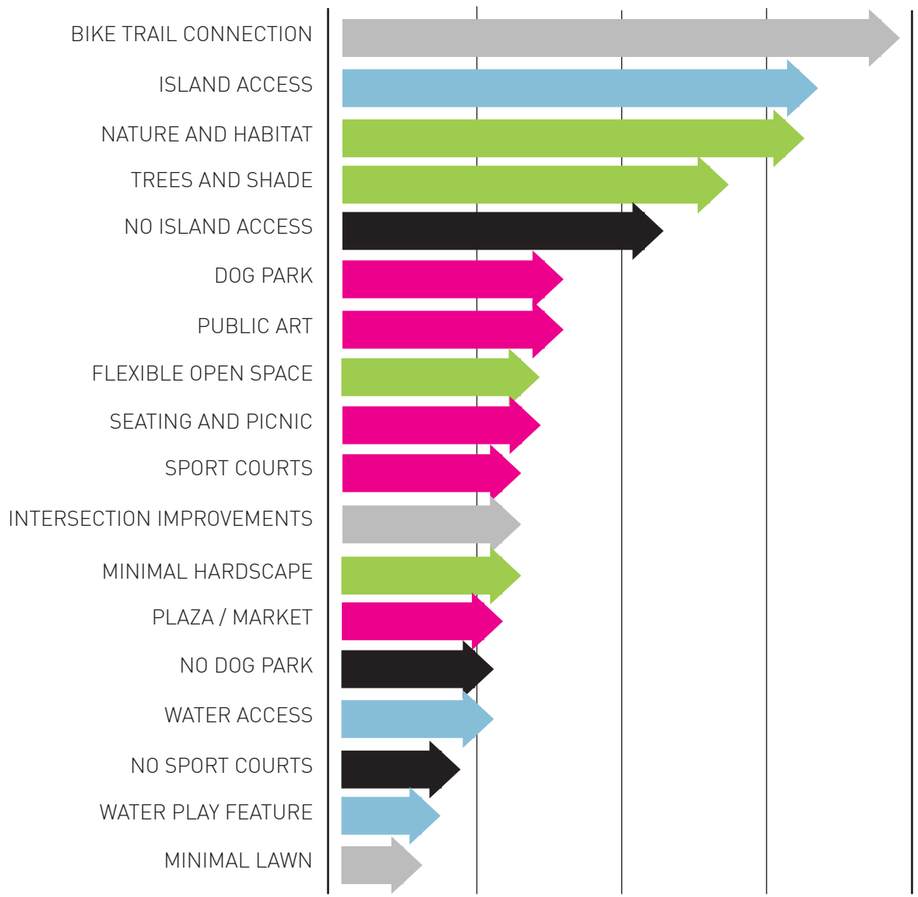
1 PARK POP-UP

2 OPEN HOUSES

2 VIRTUAL OPEN HOUSES

1 YOUTH BUS TOUR & DESIGN CHARETTE

COMMUNITY ENGAGEMENT MATRIX



COMMUNITY PREFERRED ACTIVITIES