An architectural rendering of a two-story brick building with large glass windows, identified as the Ward 8 Senior Wellness Center. The building is set in a landscaped area with trees, a sidewalk, and a fence in the foreground. The sky is blue with scattered clouds. The text 'Ward 8 Senior Wellness Center' is overlaid in large white letters on the left side of the image.

# Ward 8 Senior Wellness Center

SEPTEMBER 15, 2022 – CFA CONCEPT PRESENTATION #CFA-2613

**PERKINS EASTMAN DC**  
DESIGNING THE DISTRICT

**SALVI**



# DESIGN PRINCIPLES

## DESIGN PRINCIPLES



SENIOR WELLNESS CENTER FOR ALL 8 WARDS



COMMUNITY CONTEXT



MULTIGENERATIONAL APPROACH



# DESIGN PRINCIPLES

## DESIGN PRINCIPLES



NUTRITION FOCUSED

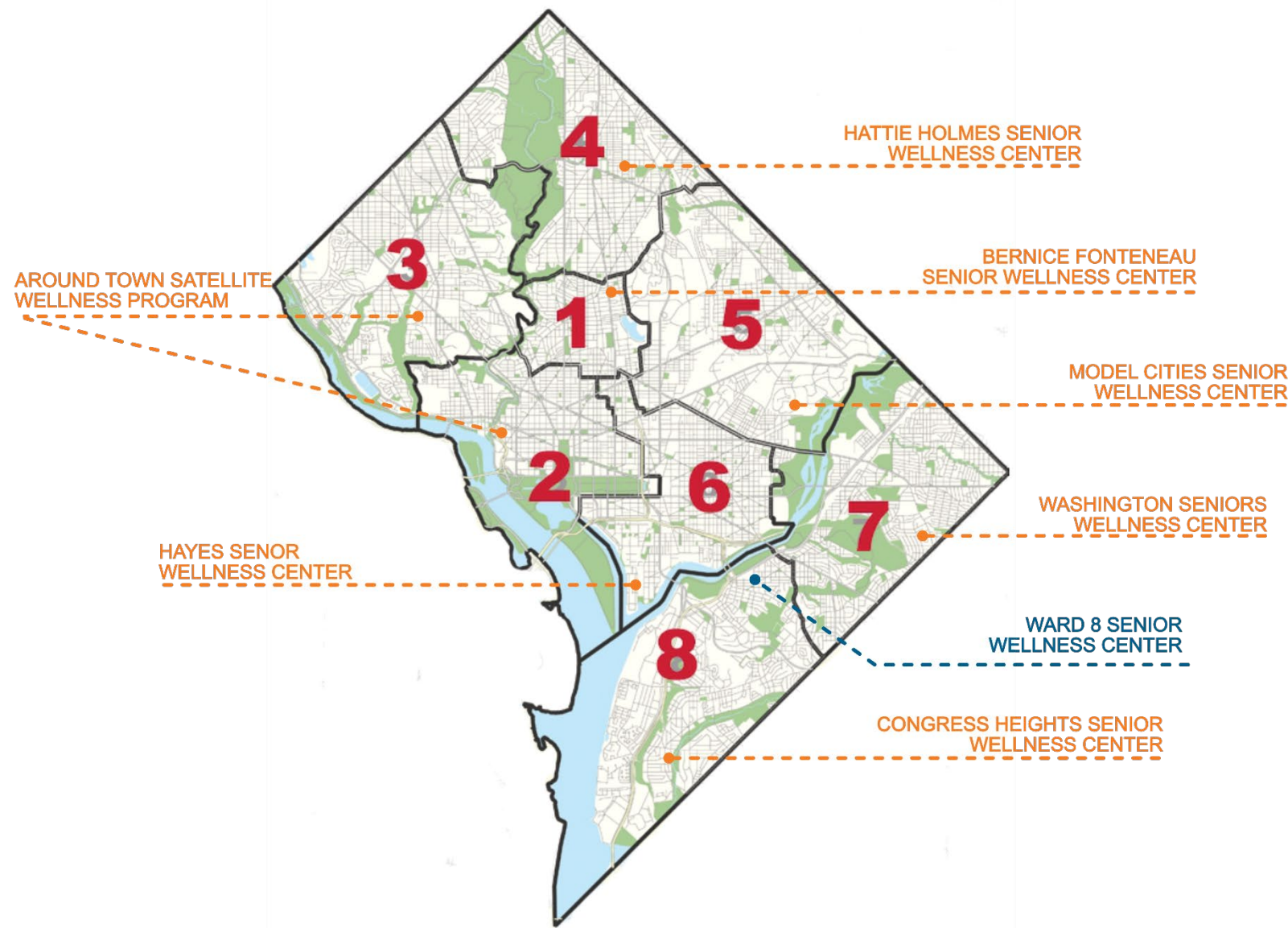


SEAMLESS INDOOR-OUTDOOR CONNECTION

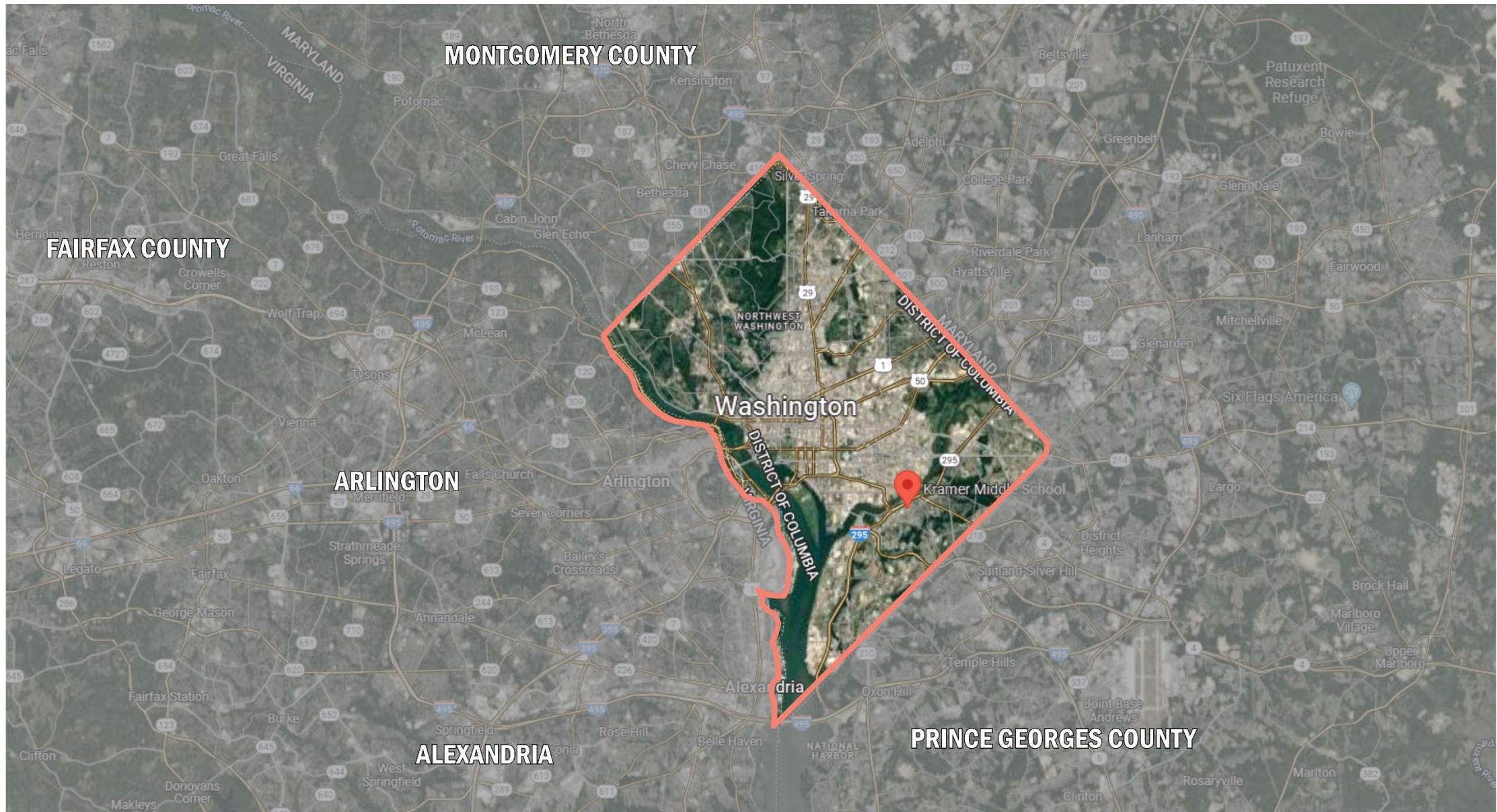


PASSIVELY SUSTAINABLE

# WASHINGTON, DC WELLNESS CENTERS









# SITE – NEIGHBORHOOD









# SITE - TRANSPORTATION



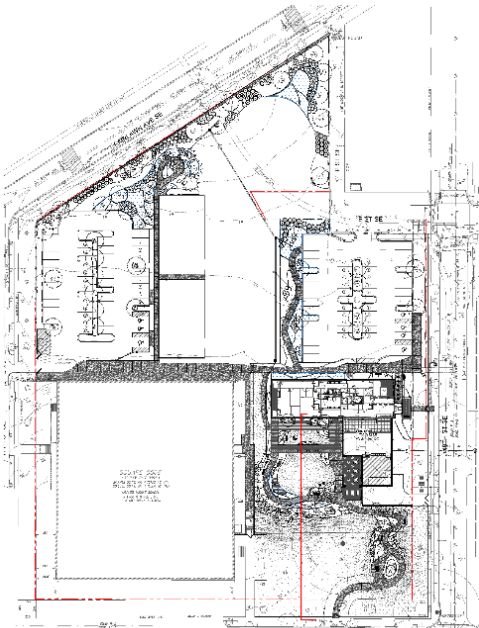


# SITE – KEY ORGANIZATIONAL FEATURES





# TOPOGRAPHY



EXISTING



PROPOSED



# SITE ACCESS & ENTRIES





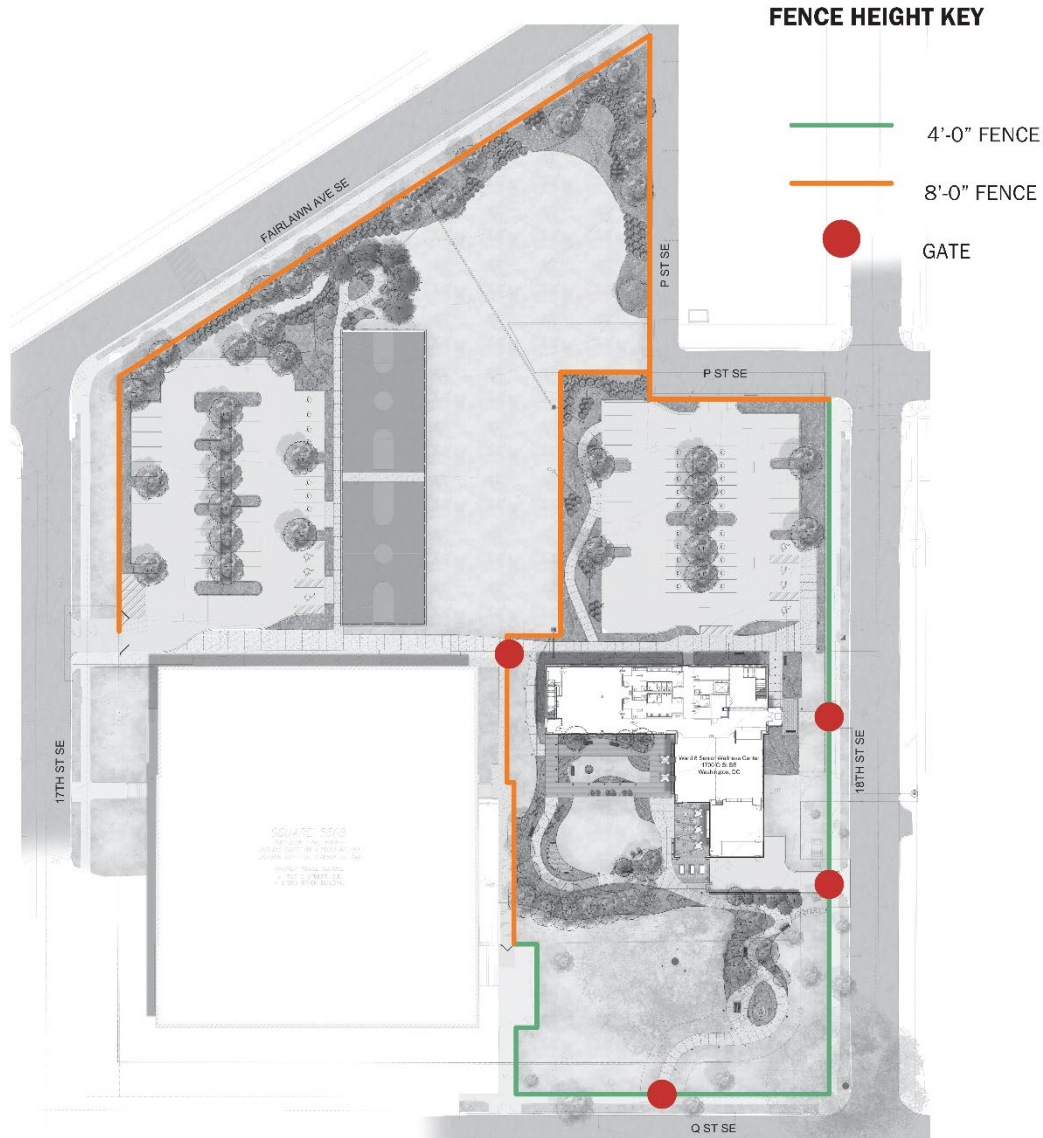
# SITE PLAN – EXTENTS OF FENCING



Existing Low Fence to Remain



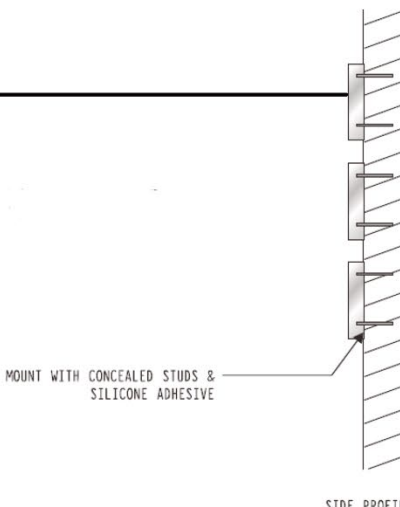
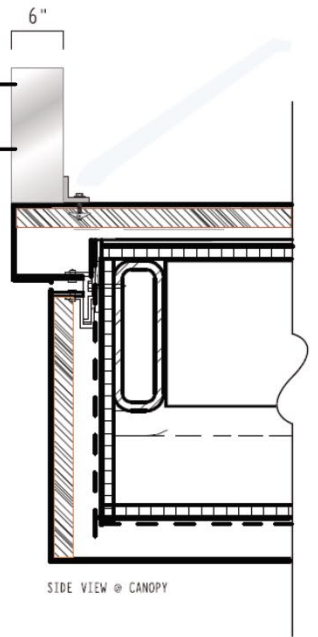
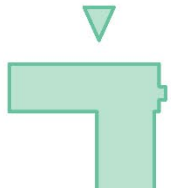
Existing High Fence to Remain



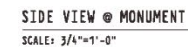
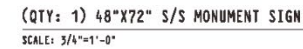


# SITE SIGNAGE

PRECEDENT IMAGE



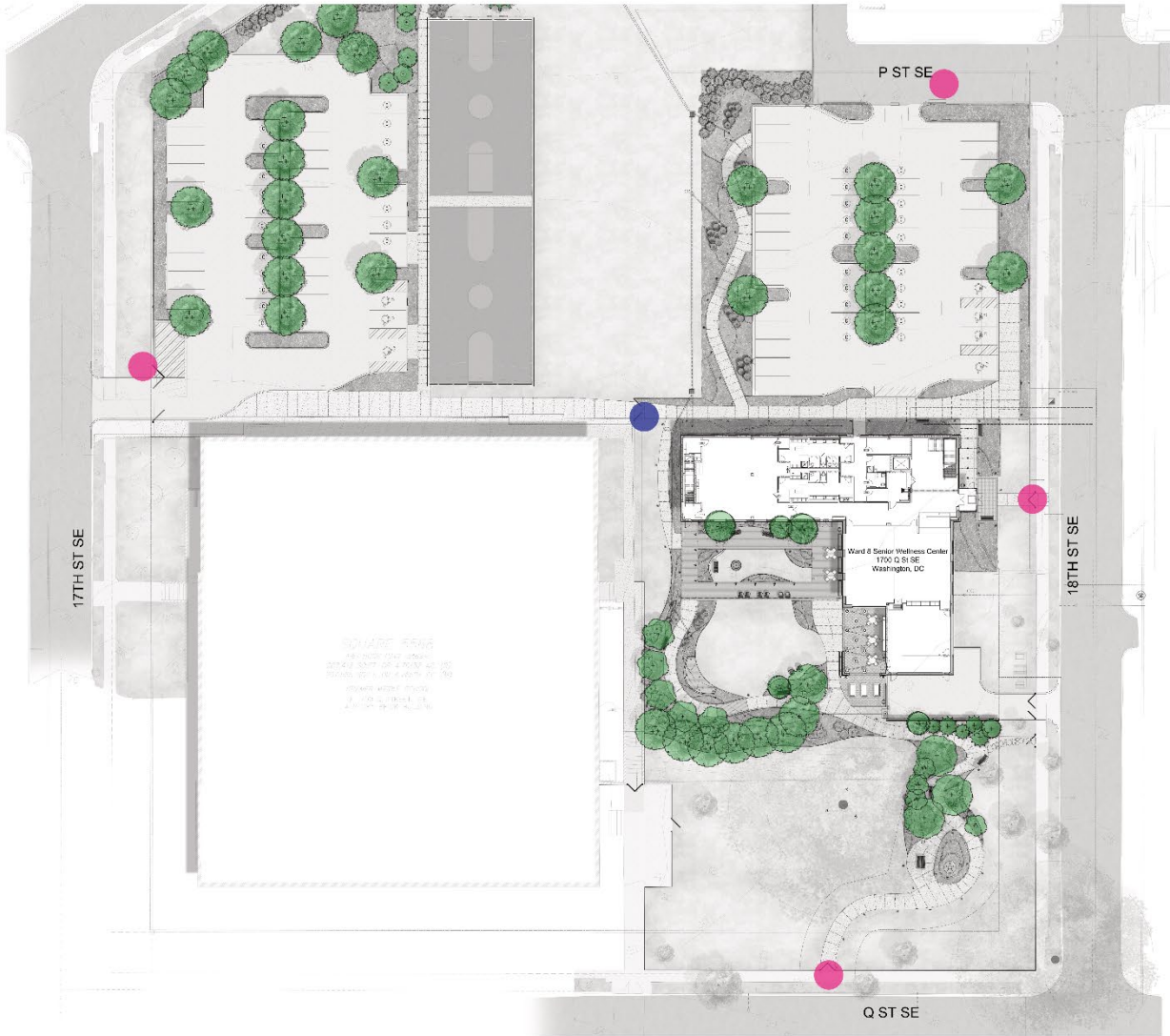






# SITE SIGNAGE

## GATE AND WAYFINDING





## WAYFINDING SIGNAGE



## GATE SIGNAGE

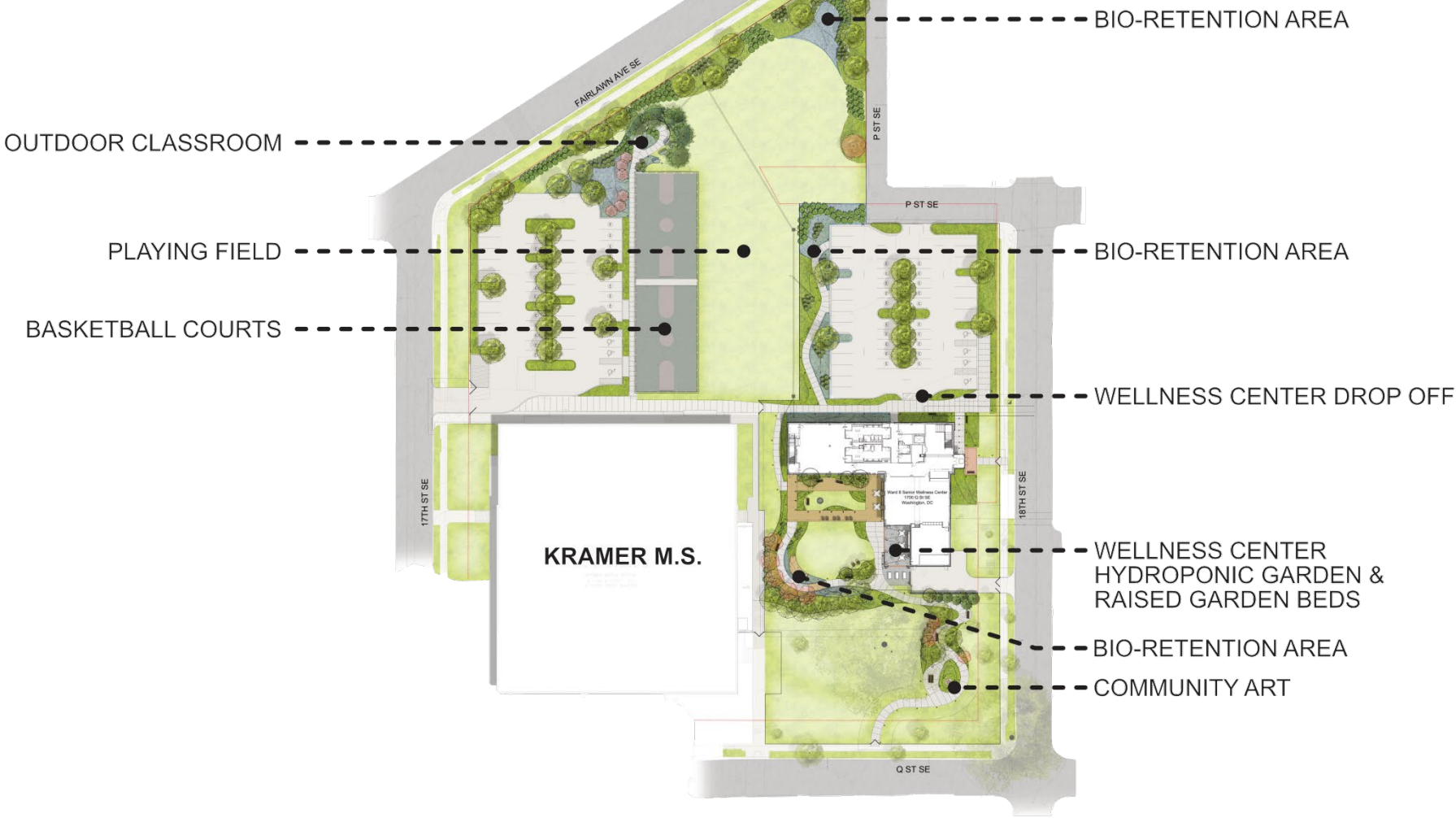


## SIGNAGE KEY

-  GATE SIGNAGE
-  WAYFINDING SIGNAGE



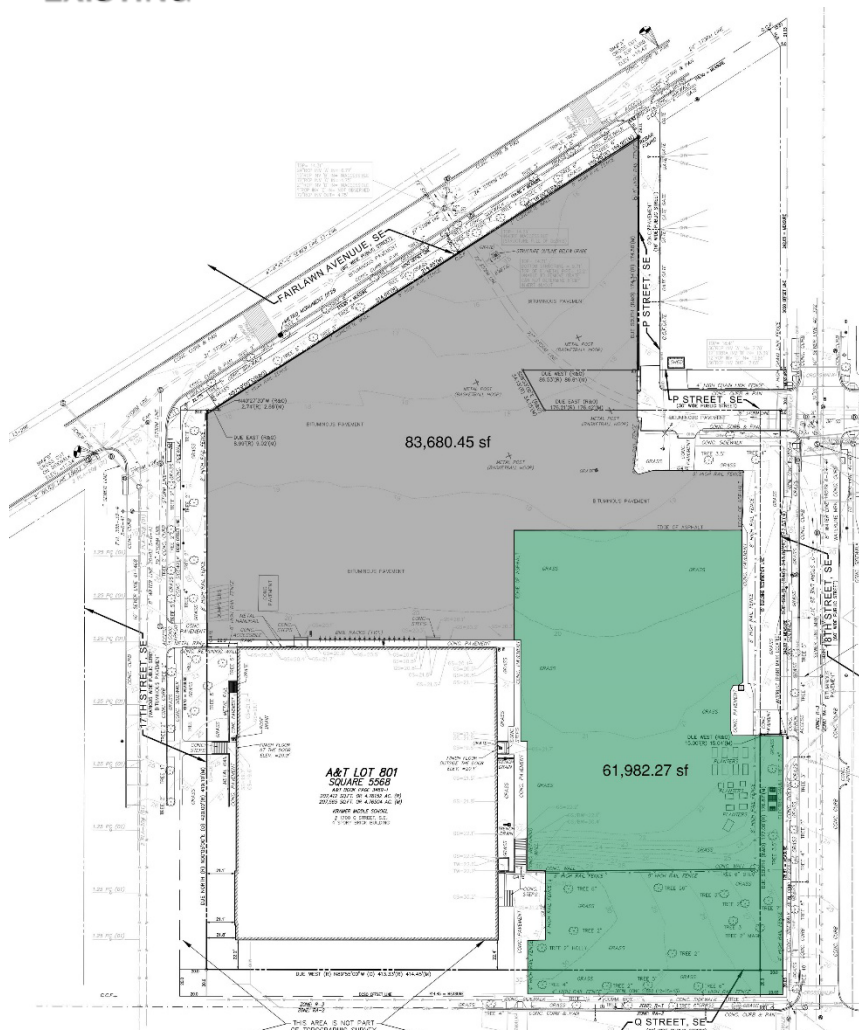
# PROJECT SCOPE & SITE FEATURES



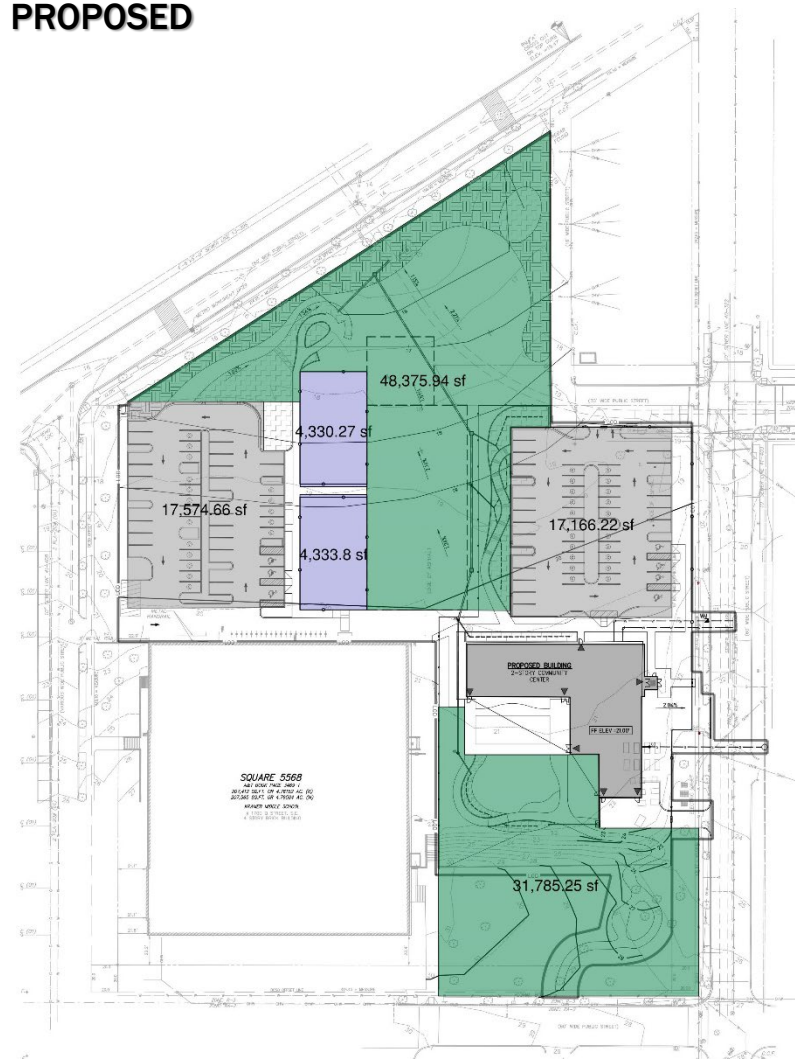


# SITE PLAN – PAVED VS UNPAVED

EXISTING



PROPOSED





# LEED SCORECARD



**LEED v4 for BD+C New Construction**  
DGS Ward 8 Wellness Center  
Design Development Review - July 8, 2022

1	0	0	Integrative Process	Possible Points:	1
Y	?	N			
1			Credit 1 Integrative Process	1	

11	0	5	Location and Transportation	Possible Points:	16
Y	?	N			
		16	Credit 1 LEED for Neighborhood Development	16	
1			Credit 2 Sensitive Land Protection	1	
1		1	Credit 3 High Priority Site	2	
3		2	Credit 4 Surrounding Density & Diverse Uses (v4.1)	5	
4		1	Credit 5 Access to Quality Transit	5	
1			Credit 6 Bicycle Facilities (v4.1)	1	
		1	Credit 7 Reduced Parking Footprint (v4.1)	1	
1			Credit 8 Electric Vehicles (v4.1)	1	

6	1	3	Sustainable Sites	Possible Points:	10
Y	?	N			
Y			Prereq 1 Construction Activity Pollution Prevention	Required	
1			Credit 1 Site Assessment	1	
	1	1	Credit 2 Site Development - Protect or Restore Habitat (v4.1)	2	
1			Credit 3 Open Space	1	
3			Credit 4 Rainwater Management (v4.1)	3	
		2	Credit 5 Heat Island Reduction	2	
1			Credit 6 Light Pollution Reduction	1	

6	1	4	Water Efficiency	Possible Points:	11
Y	?	N			
Y			Prereq 1 Outdoor Water Use Reduction	Required	
Y			Prereq 2 Indoor Water Use Reduction	Required	
Y			Prereq 3 Building-Level Water Metering	Required	
2			Credit 1 Outdoor Water Use Reduction	2	
3	1	2	Credit 2 Indoor Water Use Reduction	6	
		2	Credit 3 Cooling Tower Water Use (v4.1)	2	
1			Credit 4 Water Metering	1	

14	10	9	Energy and Atmosphere	Possible Points:	33
Y	?	N			
Y			Prereq 1 Fundamental Commissioning and Verification	Required	
Y			Prereq 2 Minimum Energy Performance	Required	
Y			Prereq 3 Building-Level Energy Metering	Required	
Y			Prereq 4 Fundamental Refrigerant Management	Required	
	3	3	Credit 1 Enhanced Commissioning	6	
8	7	3	Credit 2 Optimize Energy Performance	18	
1			Credit 3 Advanced Energy Metering	1	
1		1	Credit 4 Demand Response (v4.1)	2	
4		1	Credit 5 Renewable Energy (v4.1)	5	
		1	Credit 6 Enhanced Refrigerant Management	1	

SBP modifications from previous Scorecard (G-015).  
Project team evaluation required to proceed.



6	5	2	Materials and Resources	Possible Points:	13
Y	?	N			
Y			Prereq 1 Storage and Collection of Recyclables	Required	
Y			Prereq 2 Construction and Demolition Waste Management Planning	Required	
1	2	2	Credit 1 Building Life-Cycle Impact Reduction (v4.1)	5	
1	1		Credit 2 Product Disclosure & Optimization - EPDs (v4.1)	2	
1	1		Credit 3 Product Disclosure & Optimization - Sourcing of Raw Materials (v4.1)	2	
1	1		Credit 4 Product Disclosure & Optimization - Material Ingredients (v4.1)	2	
2			Credit 5 Construction and Demolition Waste Management (v4.1)	2	

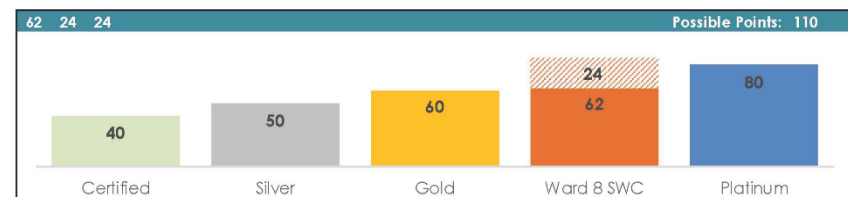
9	6	1	Indoor Environmental Quality	Possible Points:	16
Y	?	N			
Y			Prereq 1 Minimum Indoor Air Quality Performance	Required	
Y			Prereq 2 Environmental Tobacco Smoke Control (v4.1)	Required	
1	1		Credit 1 Enhanced Indoor Air Quality Strategies	2	
2	1		Credit 2 Low-Emitting Materials (v4.1)	3	
1			Credit 3 Construction Indoor Air Quality Management Plan	1	
	2		Credit 4 Indoor Air Quality Assessment (v4.1)	2	
1			Credit 5 Thermal Comfort	1	
1	1		Credit 6 Interior Lighting	2	
2	1		Credit 7 Daylight (v4.1)	3	
1			Credit 8 Quality Views	1	
		1	Credit 9 Acoustic Performance (v4.1)	1	

6	0	0	Innovation	Possible Points:	6
Y	?	N			
1			Credit 1.1 Exemplary Performance: BPDO: EPDs	1	
1			Credit 1.2 Innovation Credit: Green Education	1	
1			Credit 1.3 Innovation Credit: Low-Mercury Lamps	1	
1			Credit 1.4 Pilot Credit: Social Equity / Passive Survivability / Local Food Production	1	
1			Credit 1.5 Pilot Credit: Integrative Analysis of Building Materials	1	
1			Credit 2 LEED Accredited Professional	1	

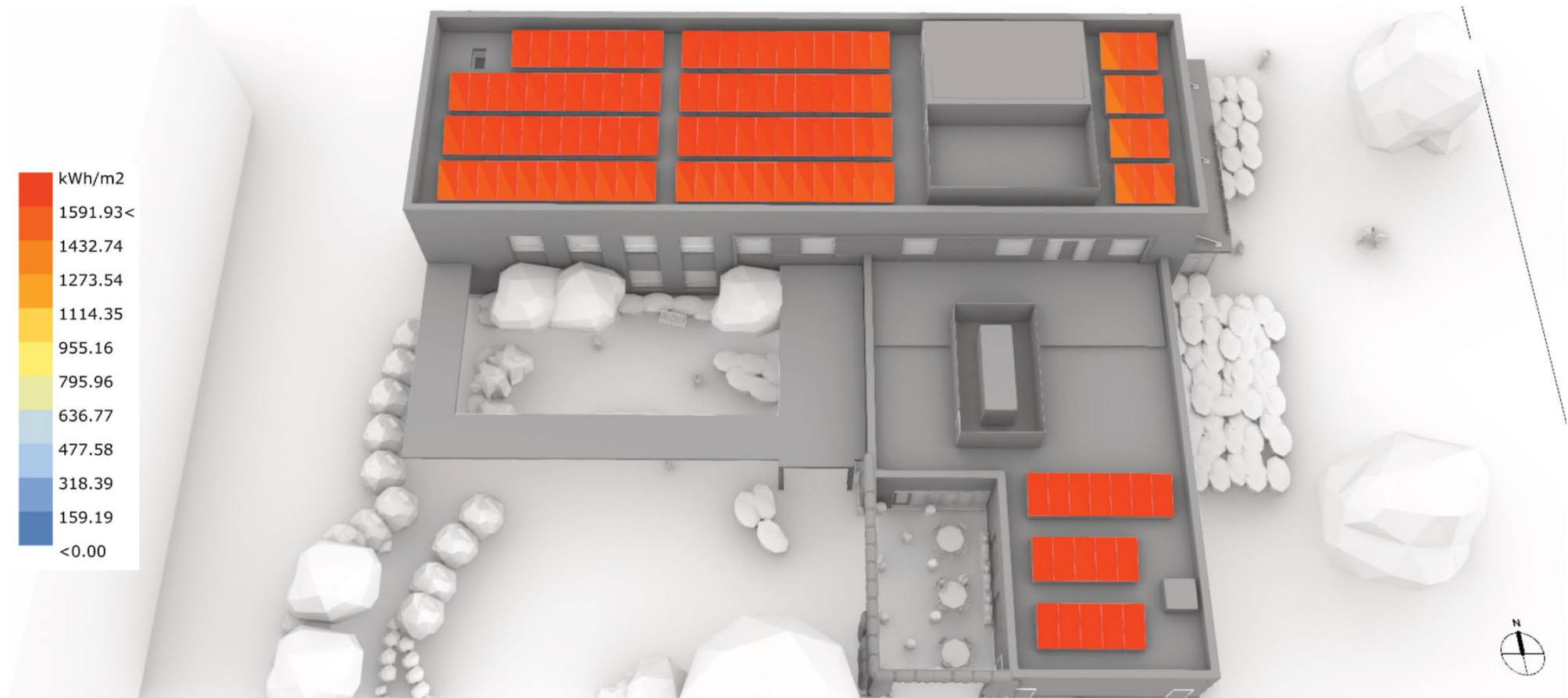
  

3	1	0	Regional Priority Credits	Possible Points:	4
Y	?	N			
1			Credit 1 Regional Priority: Access to Quality Transit (Threshold: 4 pts)	1	
1			Credit 2 Regional Priority: Green Vehicles (Threshold: 1 pt)	1	
1			Credit 3 Regional Priority: Rainwater Management (Threshold: 3 pts)	1	
	1		Credit 4 Regional Priority: Optimize Energy Performance (Threshold: 10 pts)	1	





# SOLAR ENERGY GENERATION ANALYSIS



- **TOTAL SOLAR RADIATION ON SOLAR PANELS: 392,398 KWH**
- **AC ENERGY GENERATION: 75,400 KWH**



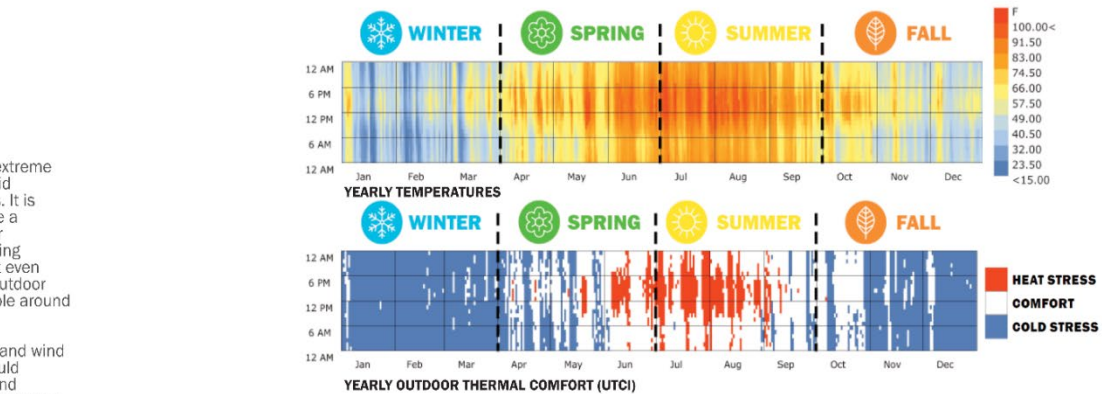
# SUSTAINABILITY CONSIDERATIONS

## SOLAR ORIENTATION

### SUN PATH

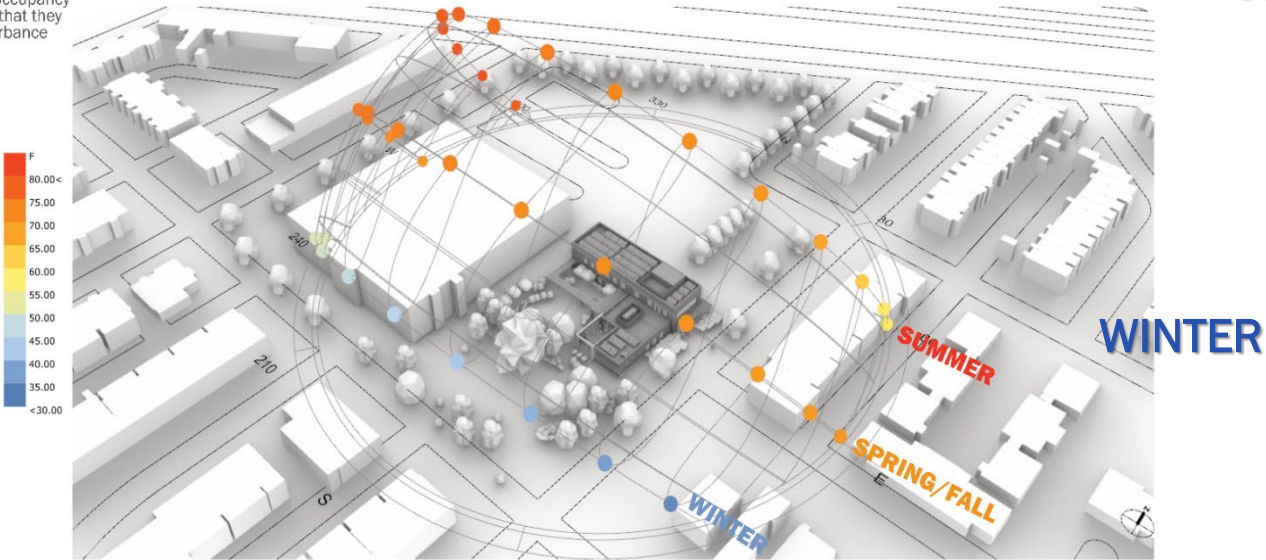
Washington, DC experiences extreme weather swings, with hot humid summers and cold dry winters. It is therefore challenging to create a thermally comfortable outdoor environment, except in the swing seasons of spring and fall, but even including these seasons the outdoor environment is only comfortable around 11% of the year.

Additional measures for solar and wind control in outdoor spaces should therefore be employed to extend thermal comfort. Core learning spaces and areas with high levels of occupancy will be oriented in such a way that they are protected from glare disturbance and unwanted heat gains.



SUMMER

SPRING/FALL



Perkins Eastman DC & Salvi Associates LLC



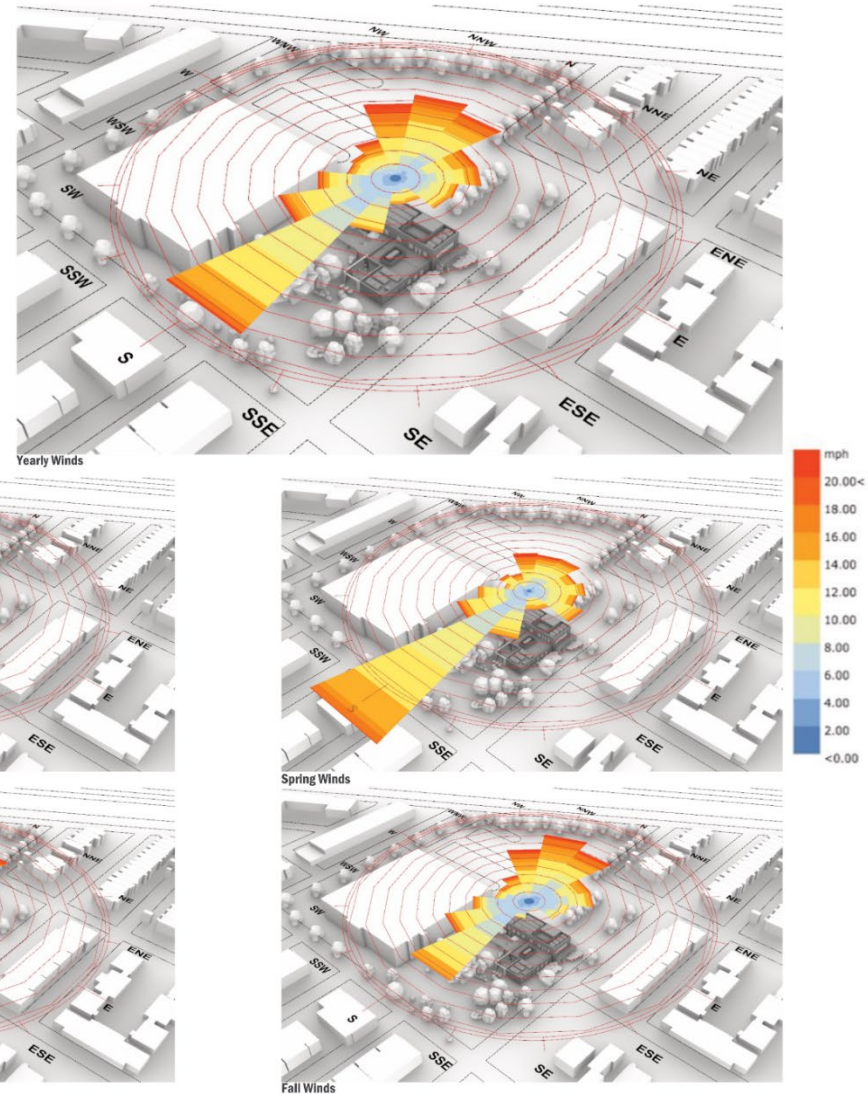
# SUSTAINABILITY CONSIDERATIONS

## WIND PATTERN

In the Washington, DC region, prevailing winds shift by season.

Cold winter winds tend to come from the northwest with relatively high velocity, making outdoor areas that face north relatively inhospitable.

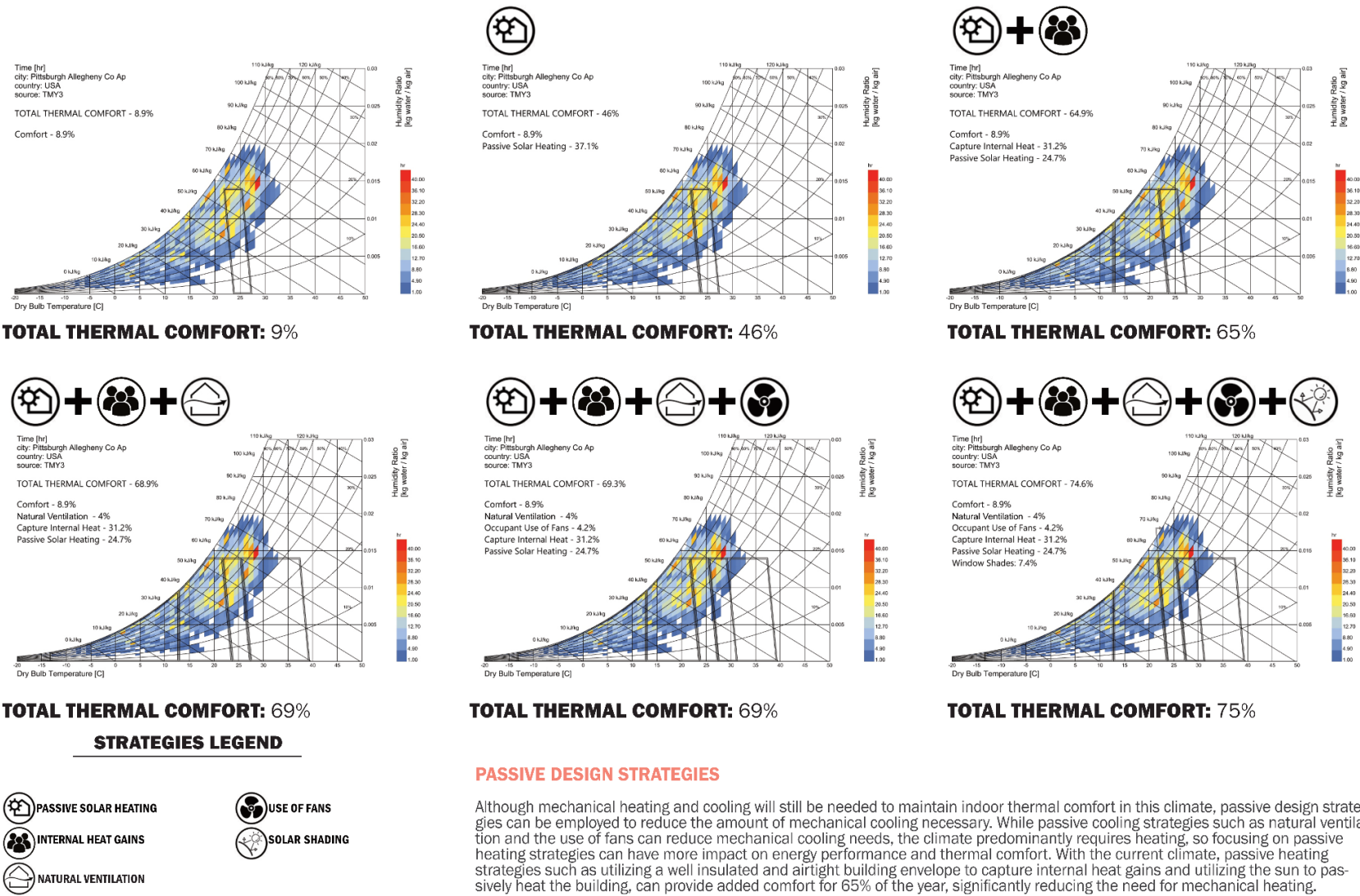
During the rest of the year, winds come from the south primarily, especially in the summer months. These breezes are more welcome for ventilation to extend comfort.





# SUSTAINABILITY CONSIDERATIONS

## PASSIVE DESIGN



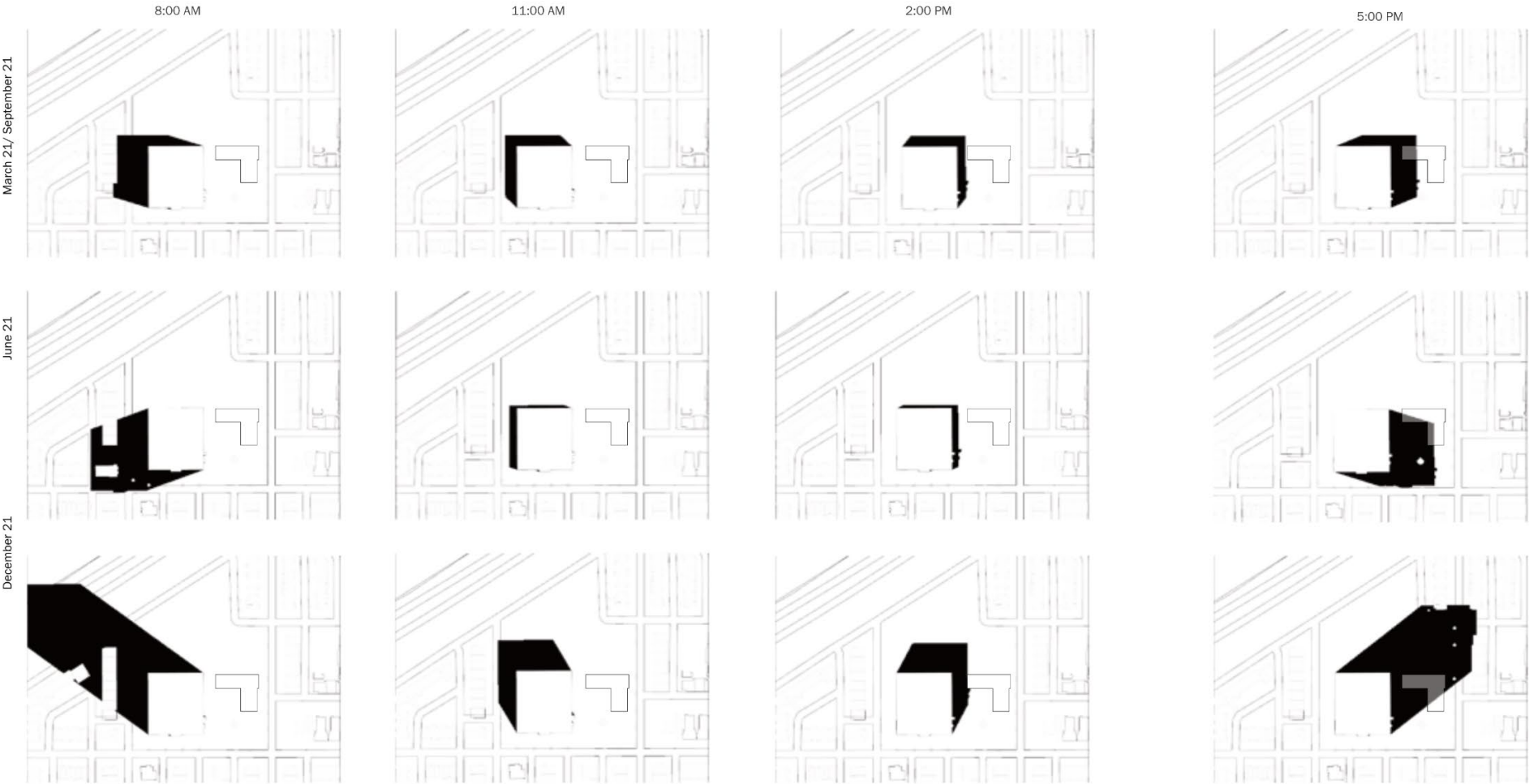
### PASSIVE DESIGN STRATEGIES

Although mechanical heating and cooling will still be needed to maintain indoor thermal comfort in this climate, passive design strategies can be employed to reduce the amount of mechanical cooling necessary. While passive cooling strategies such as natural ventilation and the use of fans can reduce mechanical cooling needs, the climate predominantly requires heating, so focusing on passive heating strategies can have more impact on energy performance and thermal comfort. With the current climate, passive heating strategies such as utilizing a well insulated and airtight building envelope to capture internal heat gains and utilizing the sun to passively heat the building, can provide added comfort for 65% of the year, significantly reducing the need for mechanical heating.



# SUSTAINABILITY CONSIDERATIONS

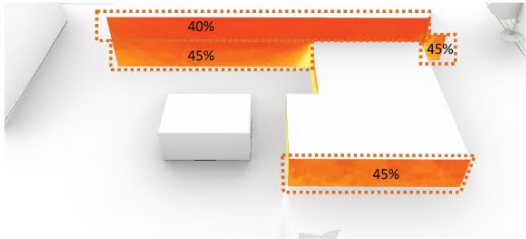
SHADOWS CREATED BY KRAMER MS



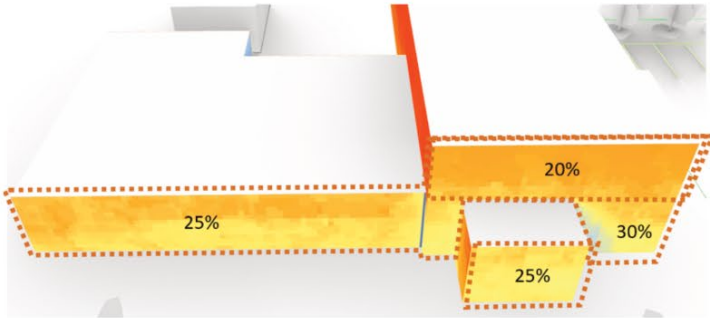


# SUSTAINABILITY CONSIDERATIONS

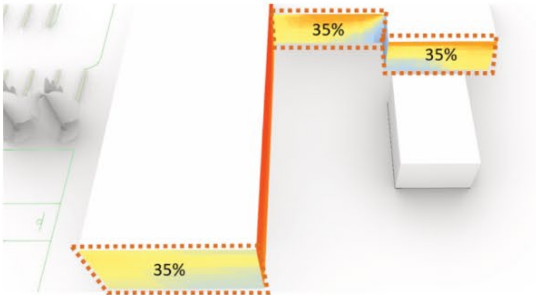
WINDOW/ WALL RATIO



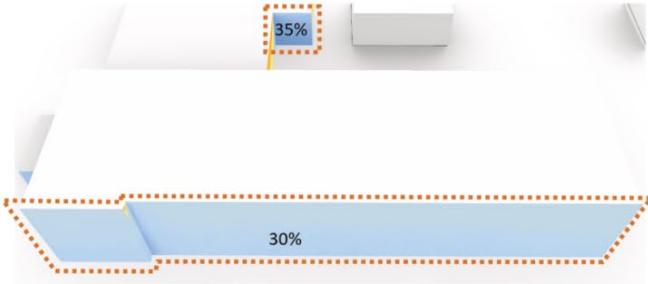
SOUTH FACADE



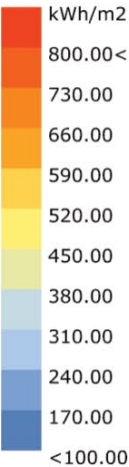
EAST FACADE



WEST FACADE



NORTH FACADE





# SUSTAINABILITY CONSIDERATIONS

## SUSTAINABLE ANALYSIS

### DAYLIGHT AND GLARE ANALYSIS

The daylight study indicates that there is 19% glare in the second floor flex rooms and administrative spaces. The maximum percentage of glare recommended for comfort is 10%. The design team will be exploring solutions to reduce the glare including exterior shading devices and alternative glass.

### TOTAL RESULTS



**DAYLIGHT (SDA): 65%**

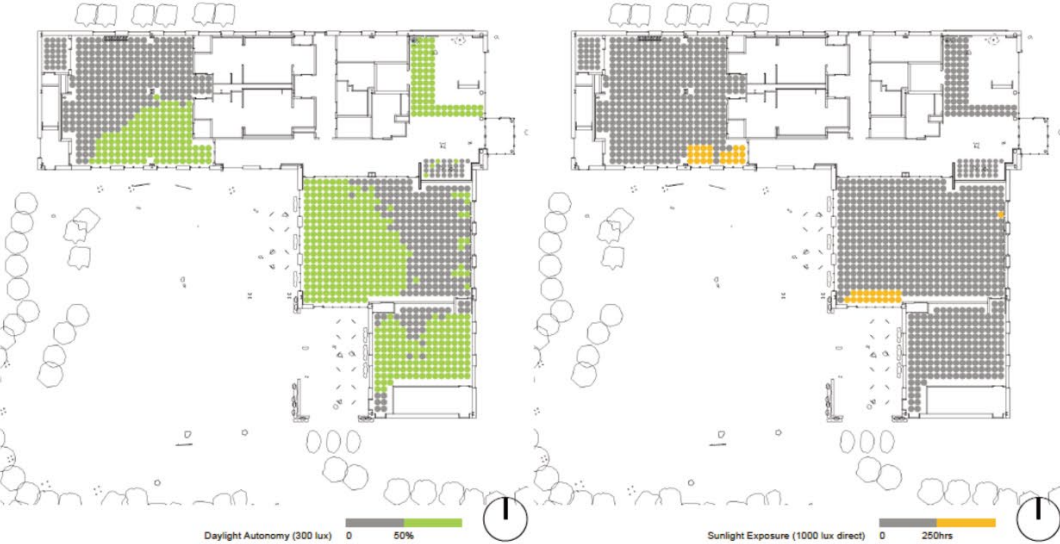
IDEAL: >55%



**GLARE (ASE): 9%**

IDEAL: <10%

FIRST FLOOR

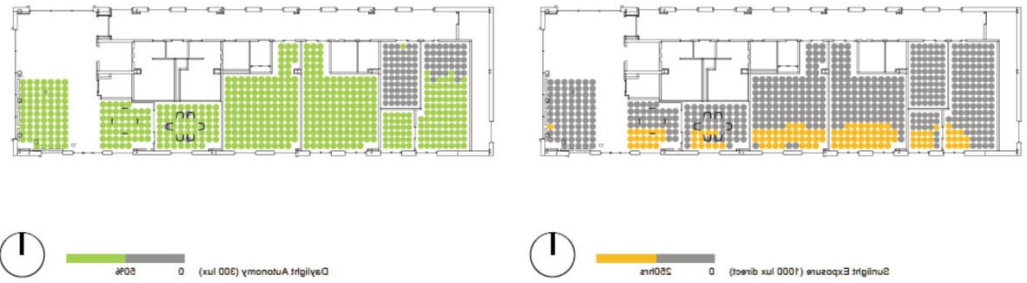


**DAYLIGHT (SDA): 53%**



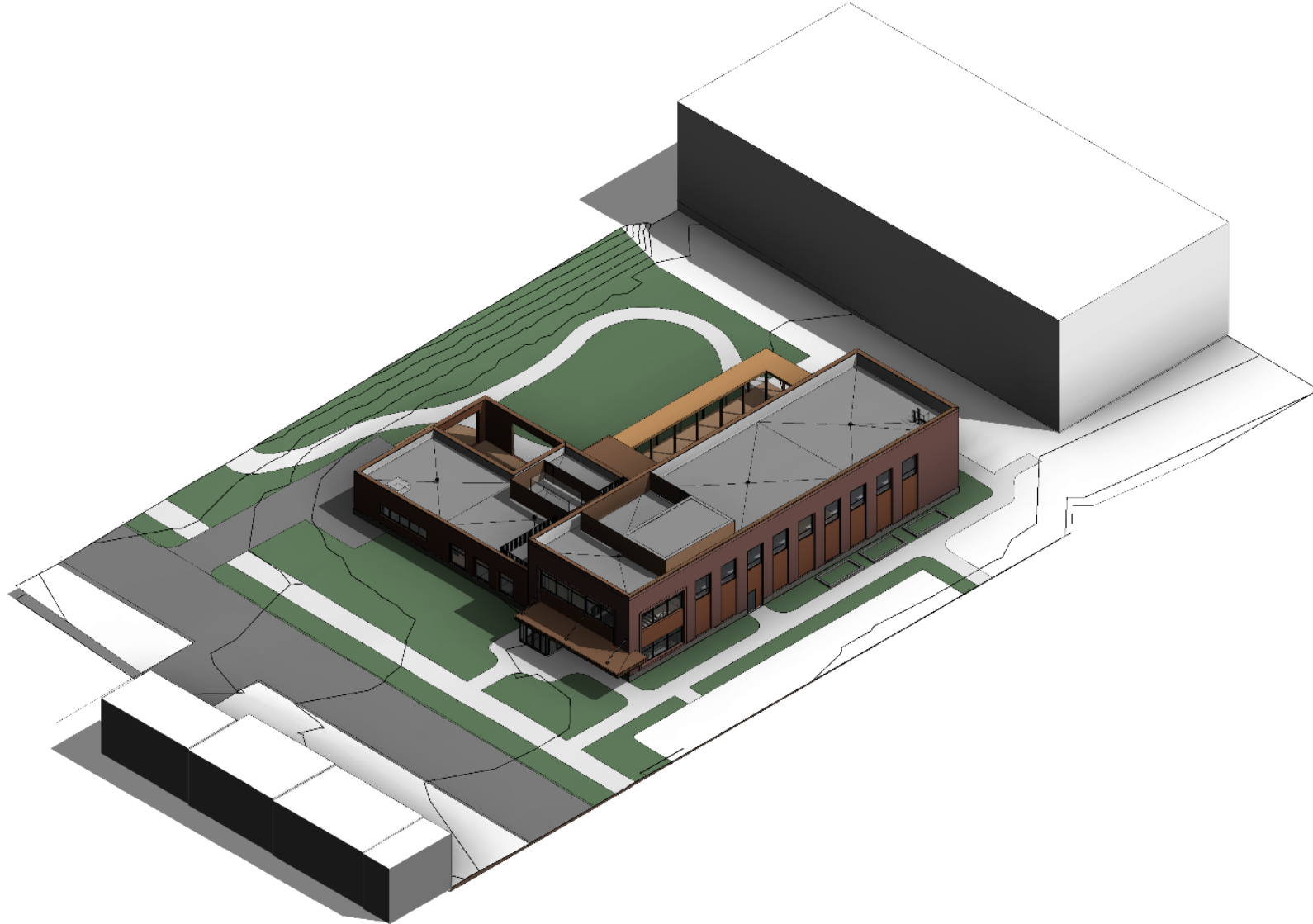
**GLARE (ASE): 3%**

SECOND FLOOR



**GLARE (ASE): 19%**

# **BUILDING MASSING**





# NEIGHBORHOOD FACADES, SCALE, & MATERIALITY

RESPECT ADJACENT URBAN FABRIC





# PERSPECTIVES

ALONG 18<sup>TH</sup> STREET SE





# PERSPECTIVES

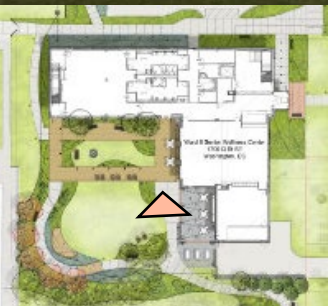
FRONT APPROACH ALONG 18<sup>TH</sup> STREET SE





# PERSPECTIVES

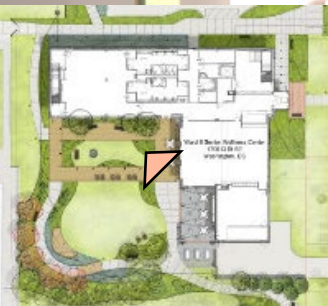
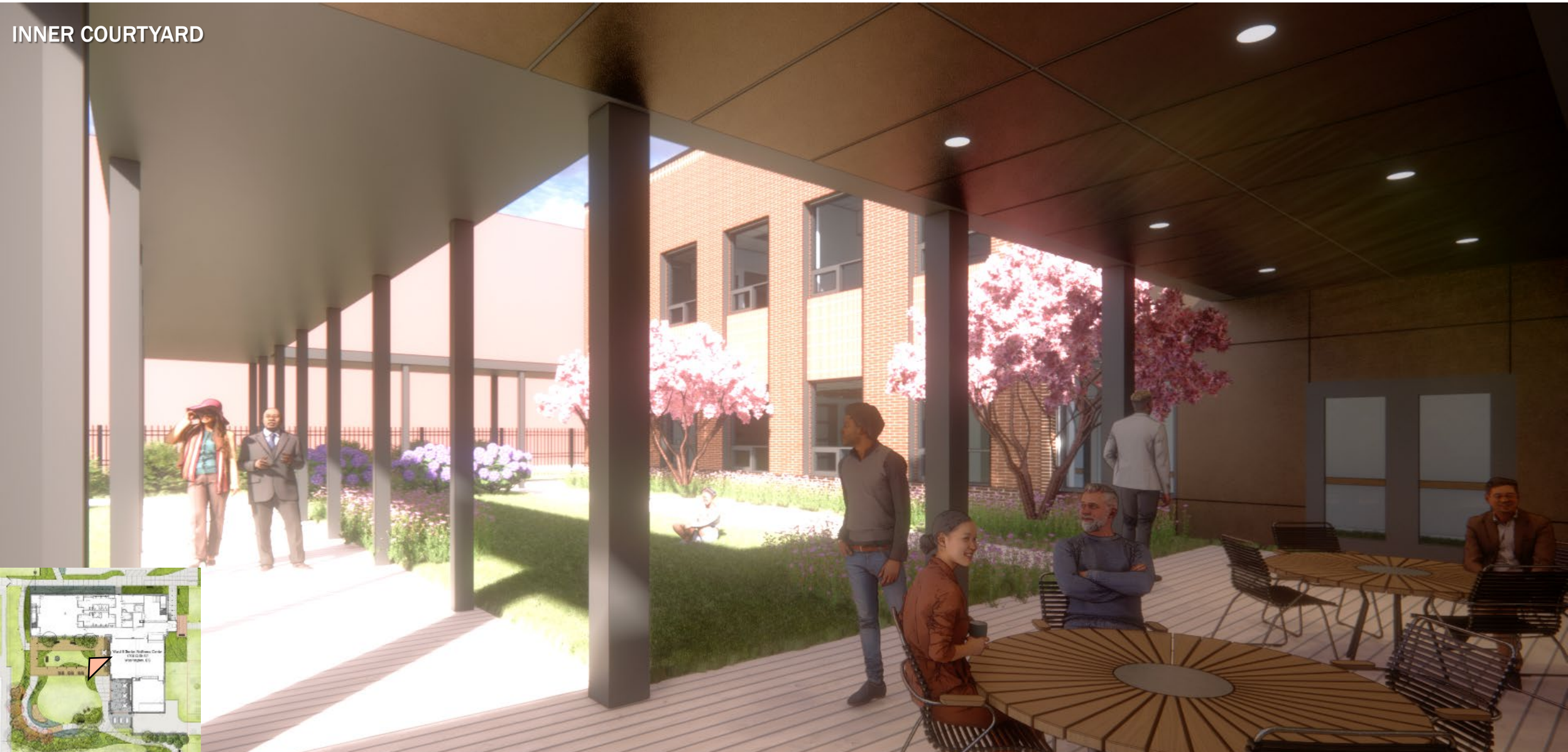
Q STREET PEDESTRIAN APPROACH





# PERSPECTIVES

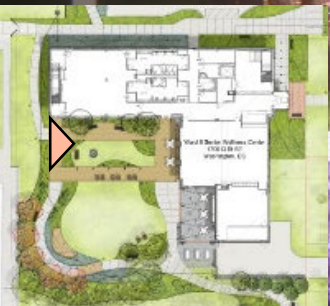
INNER COURTYARD





# PERSPECTIVES

INNER COURTYARD

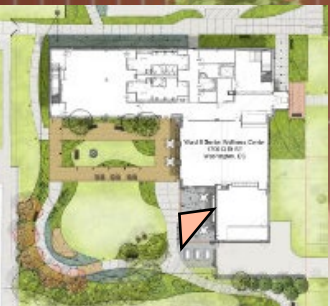




# PERSPECTIVES

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HYDROPONIC GARDEN

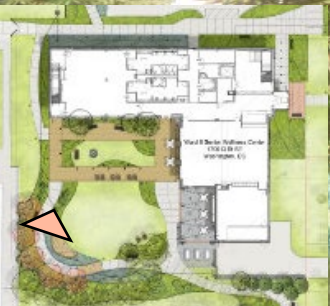




# PERSPECTIVES

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REAR VIEW – OUTER COURTYARD



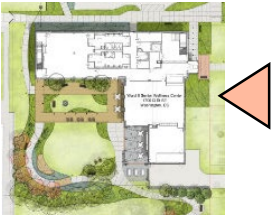
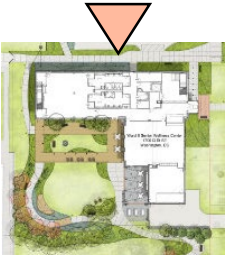


# BUILDING ELEVATIONS

NORTH ELEVATION



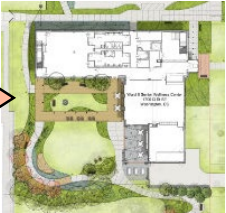
EAST ELEVATION





# BUILDING ELEVATIONS

WEST ELEVATION

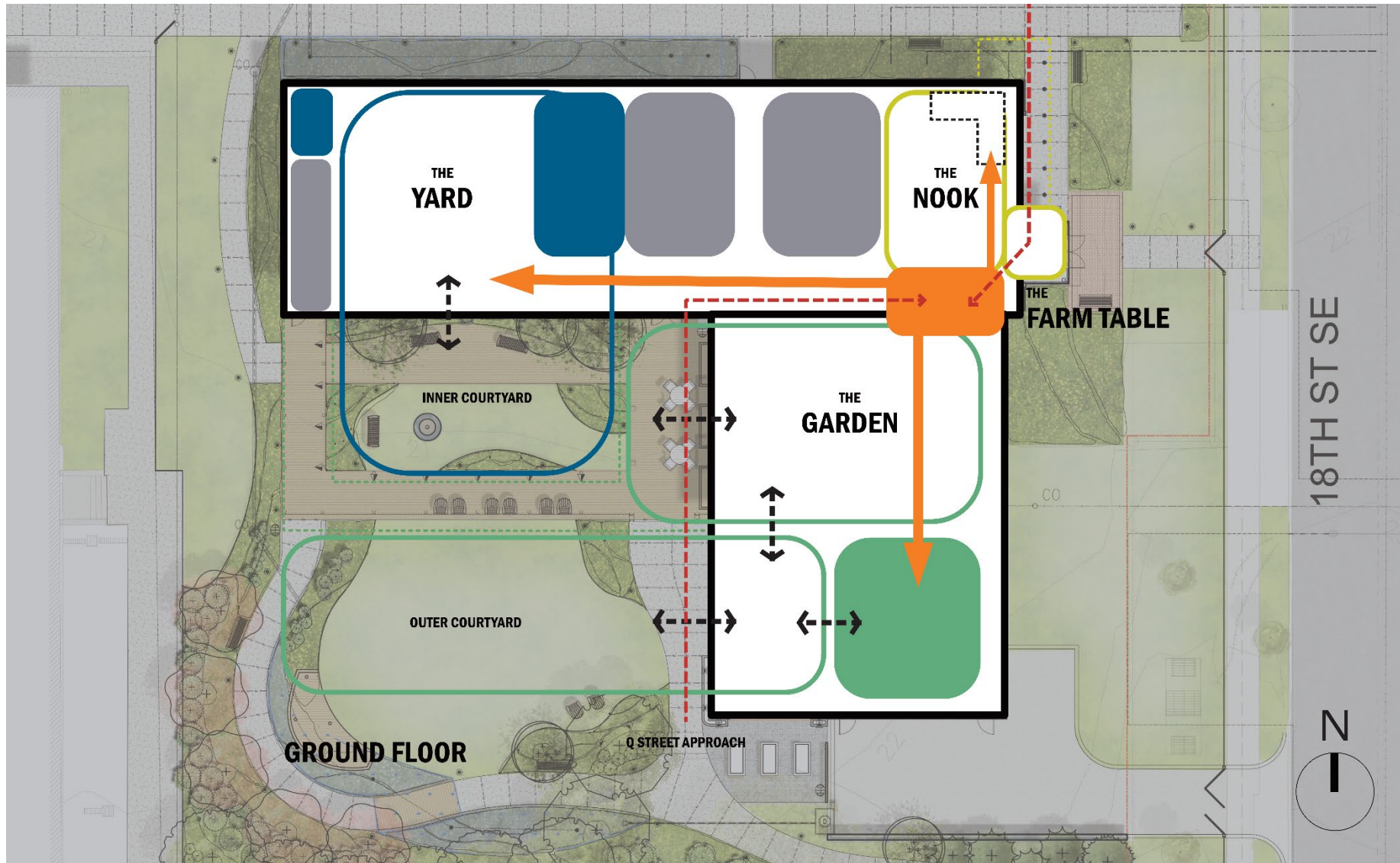


SOUTH ELEVATION



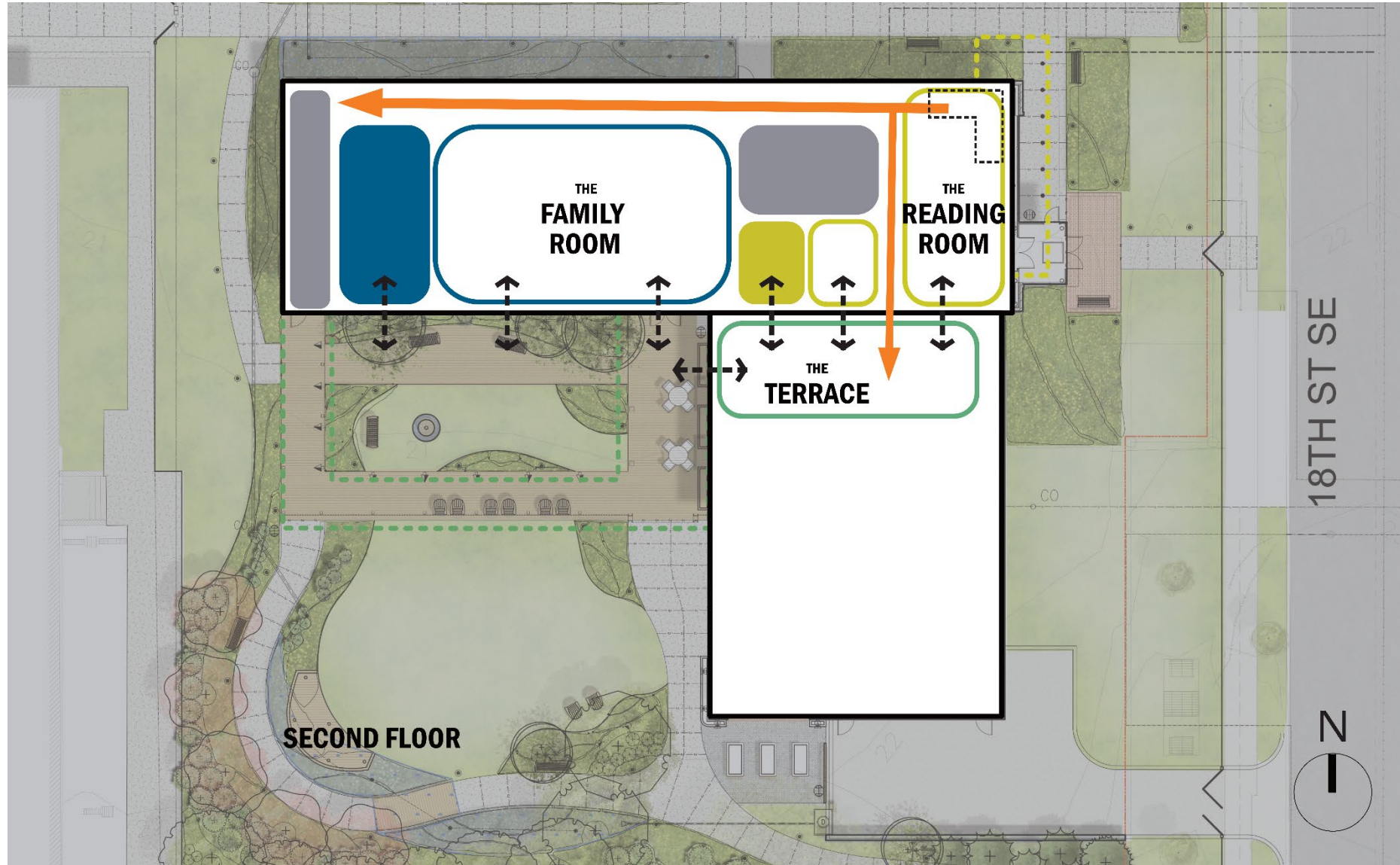


## CONNECTED PLACES



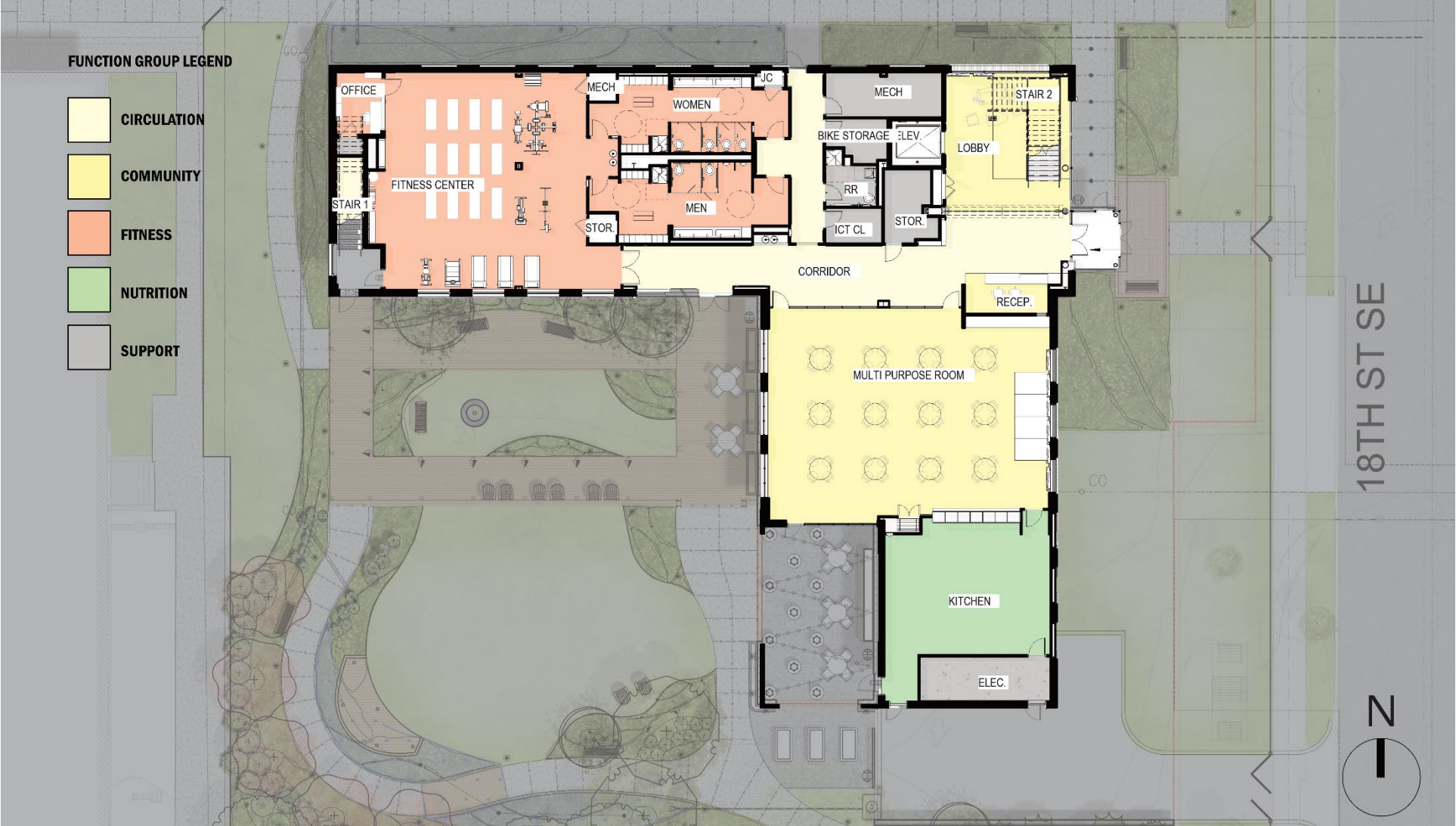


# CONNECTED PLACES





# 1<sup>ST</sup> FLOOR PLAN





# 2<sup>ND</sup> FLOOR PLAN





# ROOF FLOOR PLAN

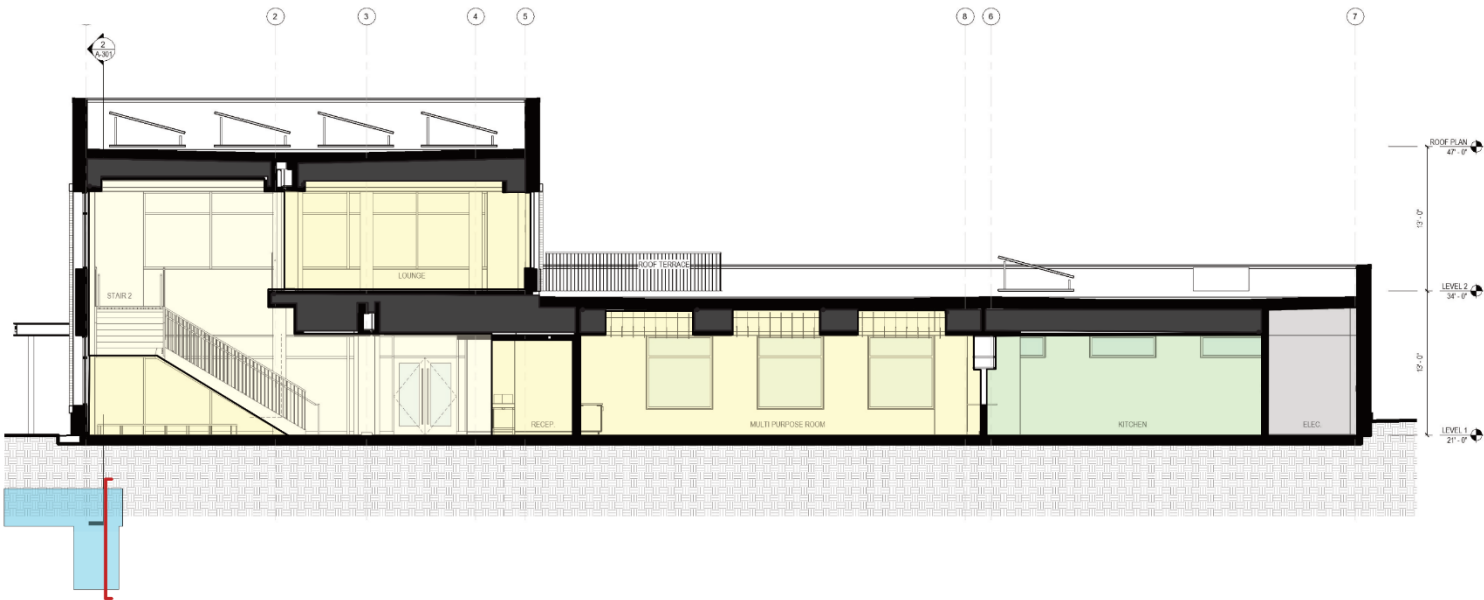




# BUILDING SECTION

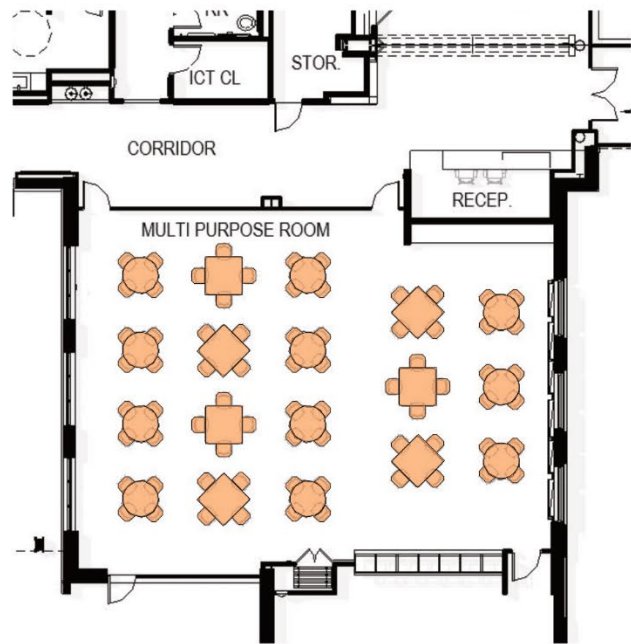
FUNCTION GROUP LEGEND

- CIRCULATION
- COMMUNITY
- FITNESS
- NUTRITION
- ADMINISTRATION
- SUPPORT

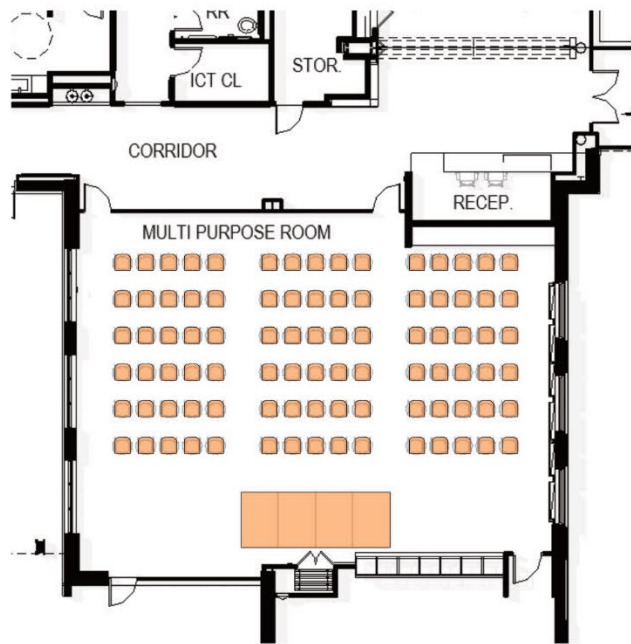




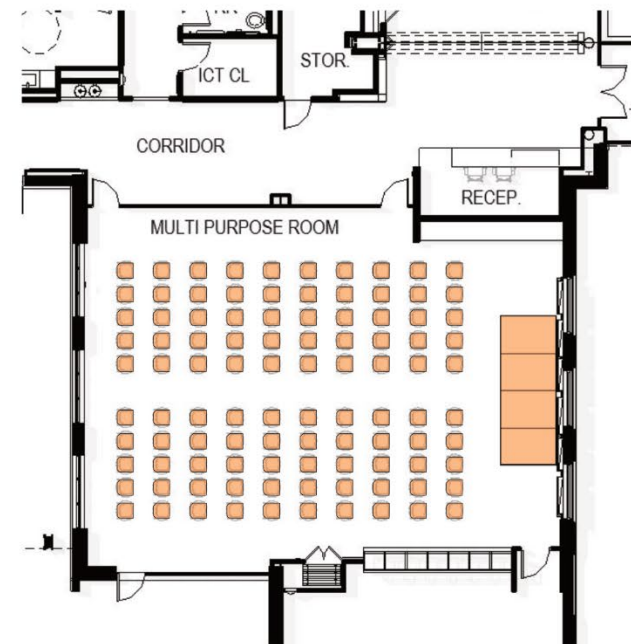
# MULTIPURPOSE PROGRAM



PRIMARY DINING: SEATS 72 PEOPLE

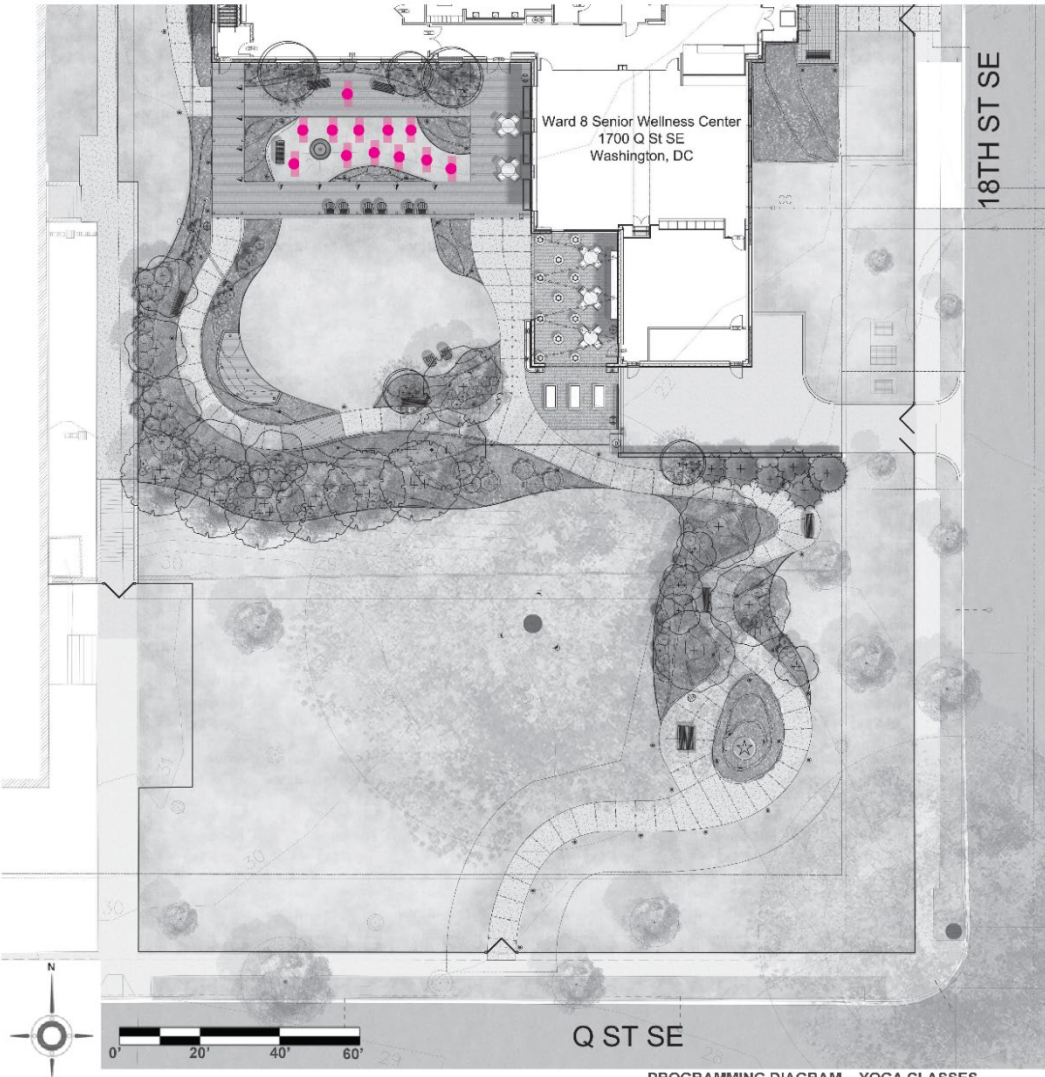


PERFORMANCE E/W: SEATS 90 PEOPLE



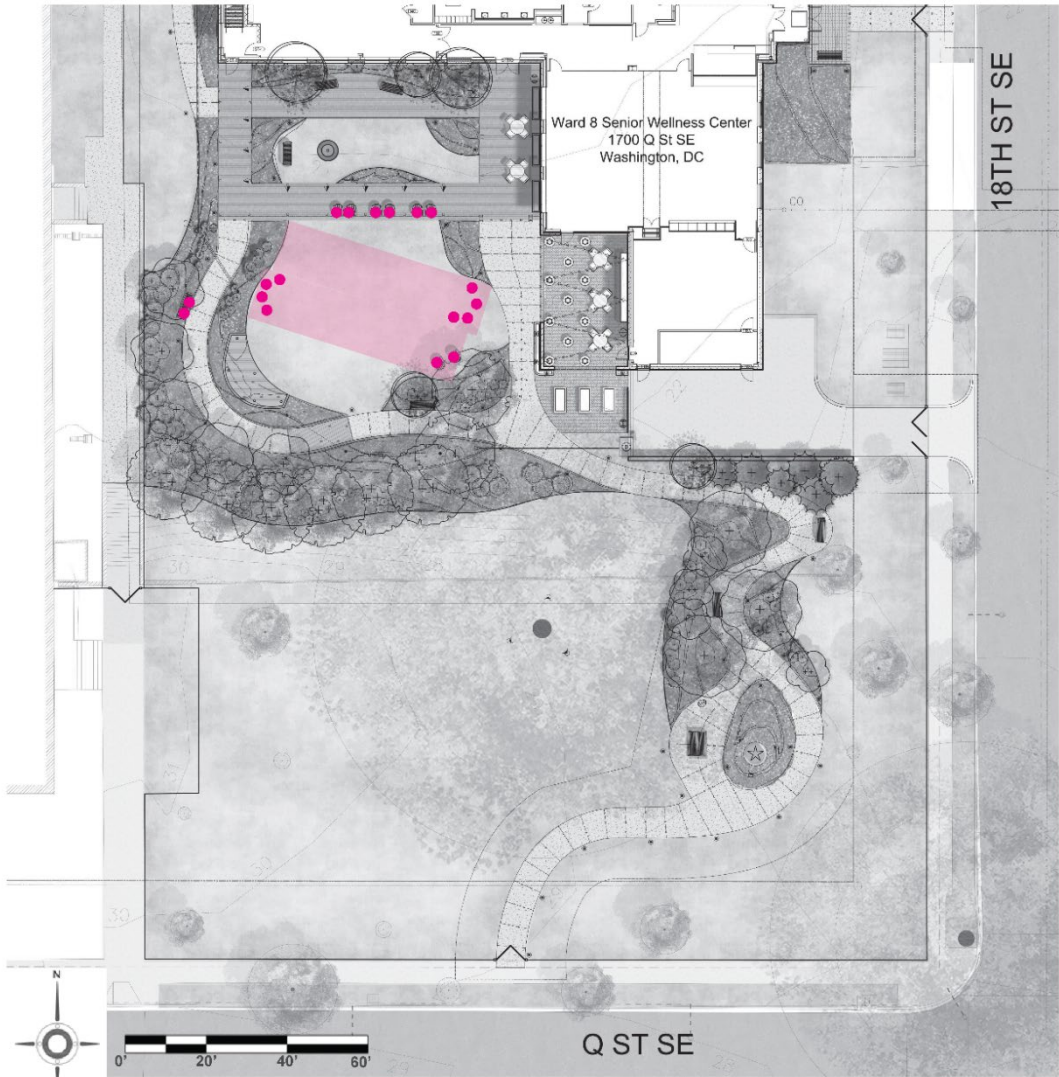
PERFORMANCE N/S: SEATS 100 PEOPLE

# LANDSCAPE PLAN - PROGRAM



PROGRAMMING DIAGRAM - YOGA CLASSES  
WARD 8 SENIOR WELLNESS CENTER | AUGUST 22, 2022 Landscape Diagrams

3

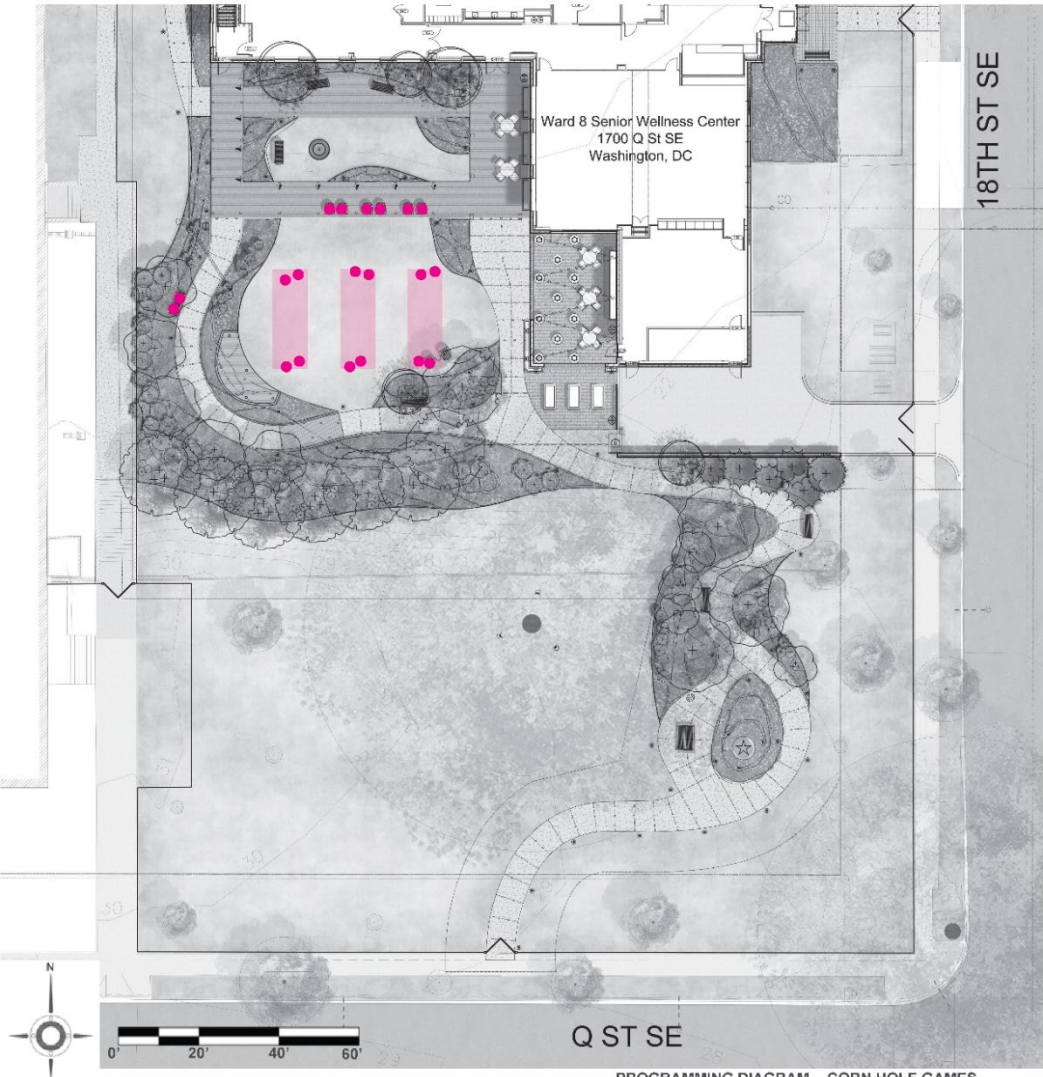


PROGRAMMING DIAGRAM - BOCCE GAMES  
WARD 8 SENIOR WELLNESS CENTER | AUGUST 22, 2022 Landscape Diagrams

4

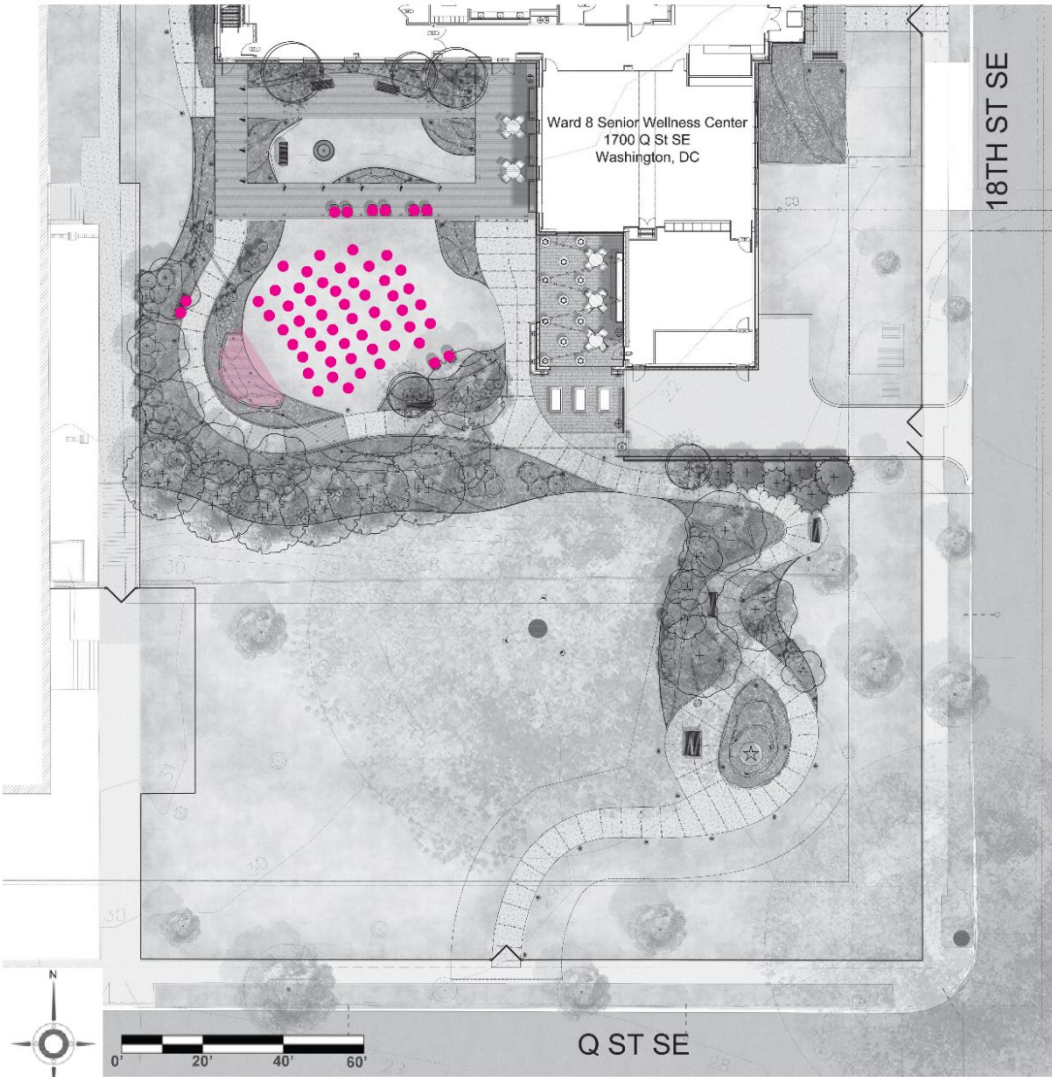


# LANDSCAPE PLAN - PROGRAM



PROGRAMMING DIAGRAM - CORN HOLE GAMES  
WARD 8 SENIOR WELLNESS CENTER | AUGUST 22, 2022 Landscape Diagrams

5

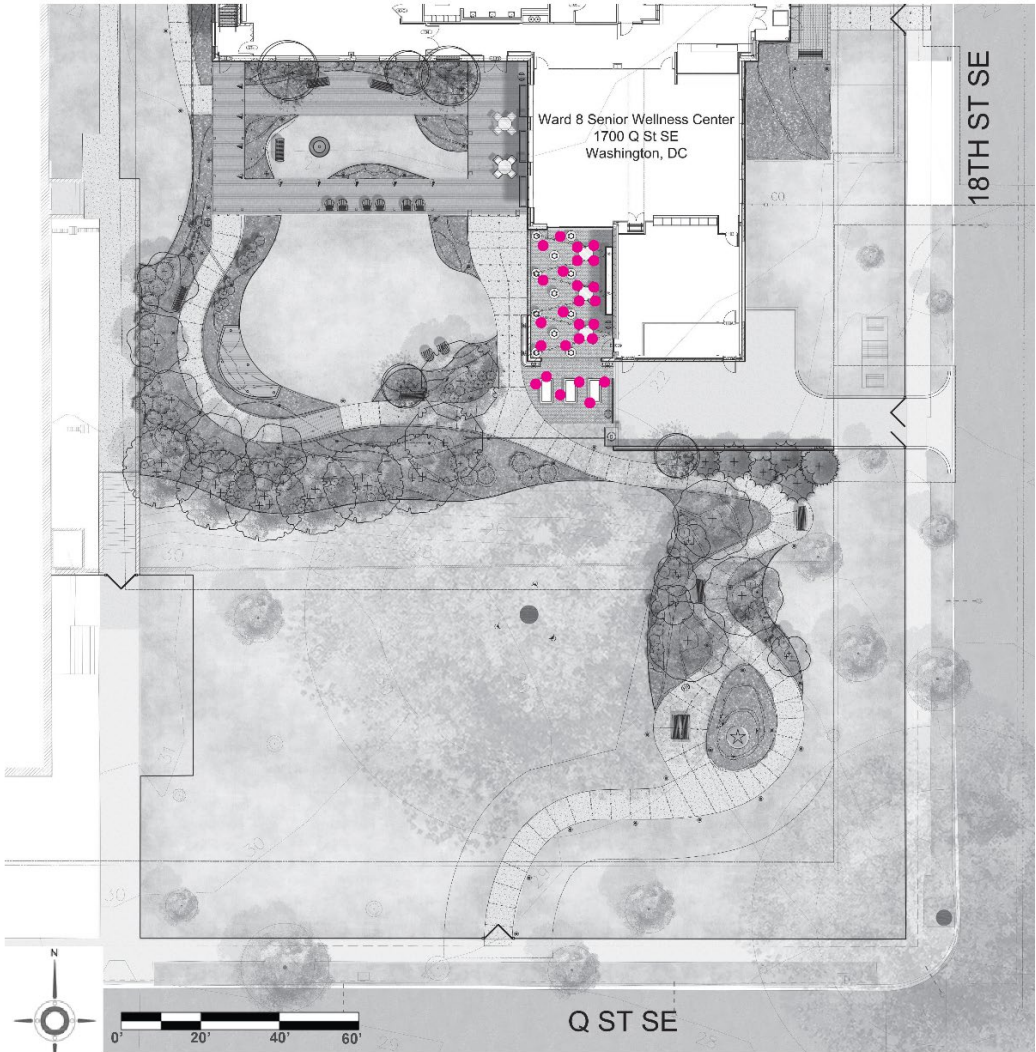


PROGRAMMING DIAGRAM - LIVE PERFORMANCE  
WARD 8 SENIOR WELLNESS CENTER | AUGUST 22, 2022 Landscape Diagrams

6

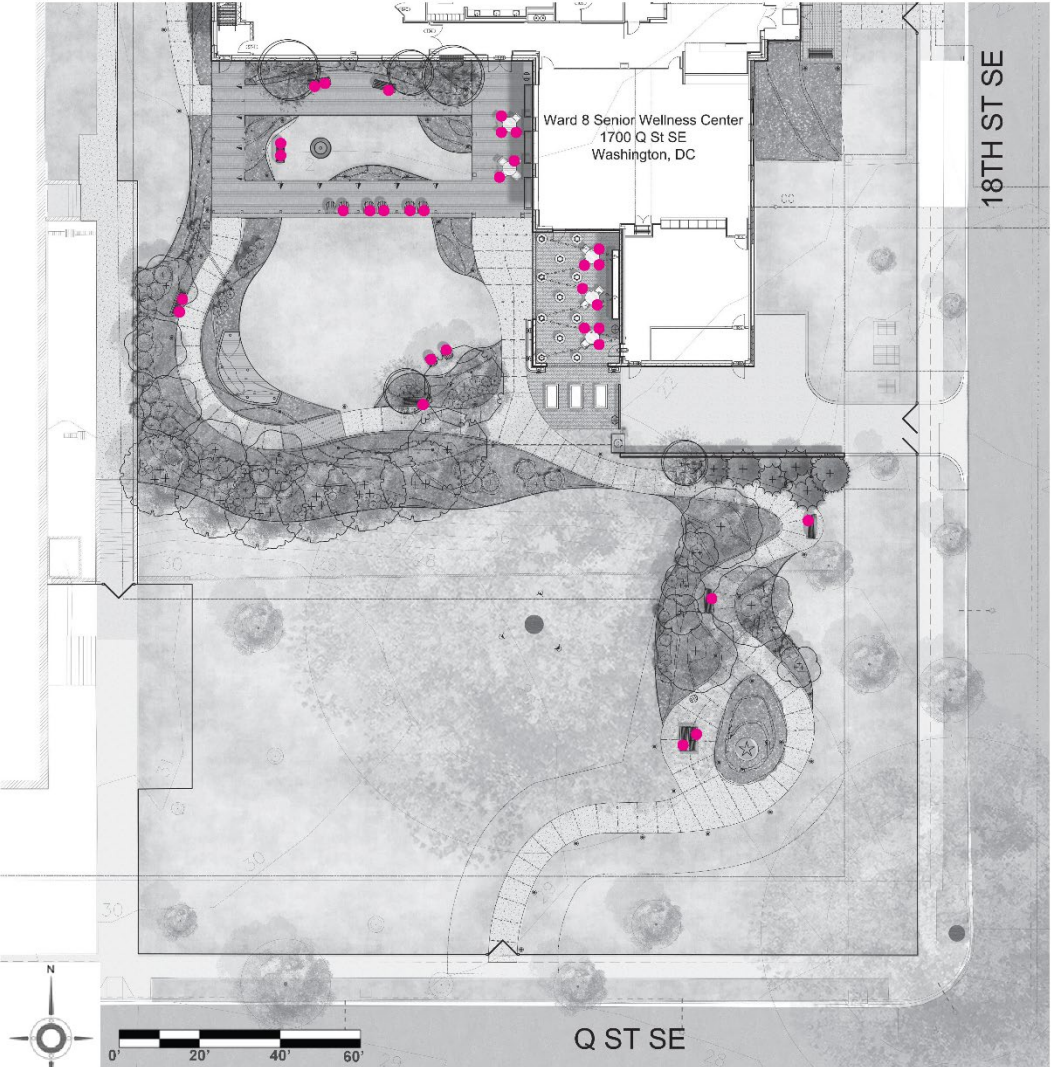


# LANDSCAPE PLAN - PROGRAM



PROGRAMMING DIAGRAM - GARDENING ACTIVITIES  
WARD 8 SENIOR WELLNESS CENTER | AUGUST 22, 2022 Landscape Diagrams

7

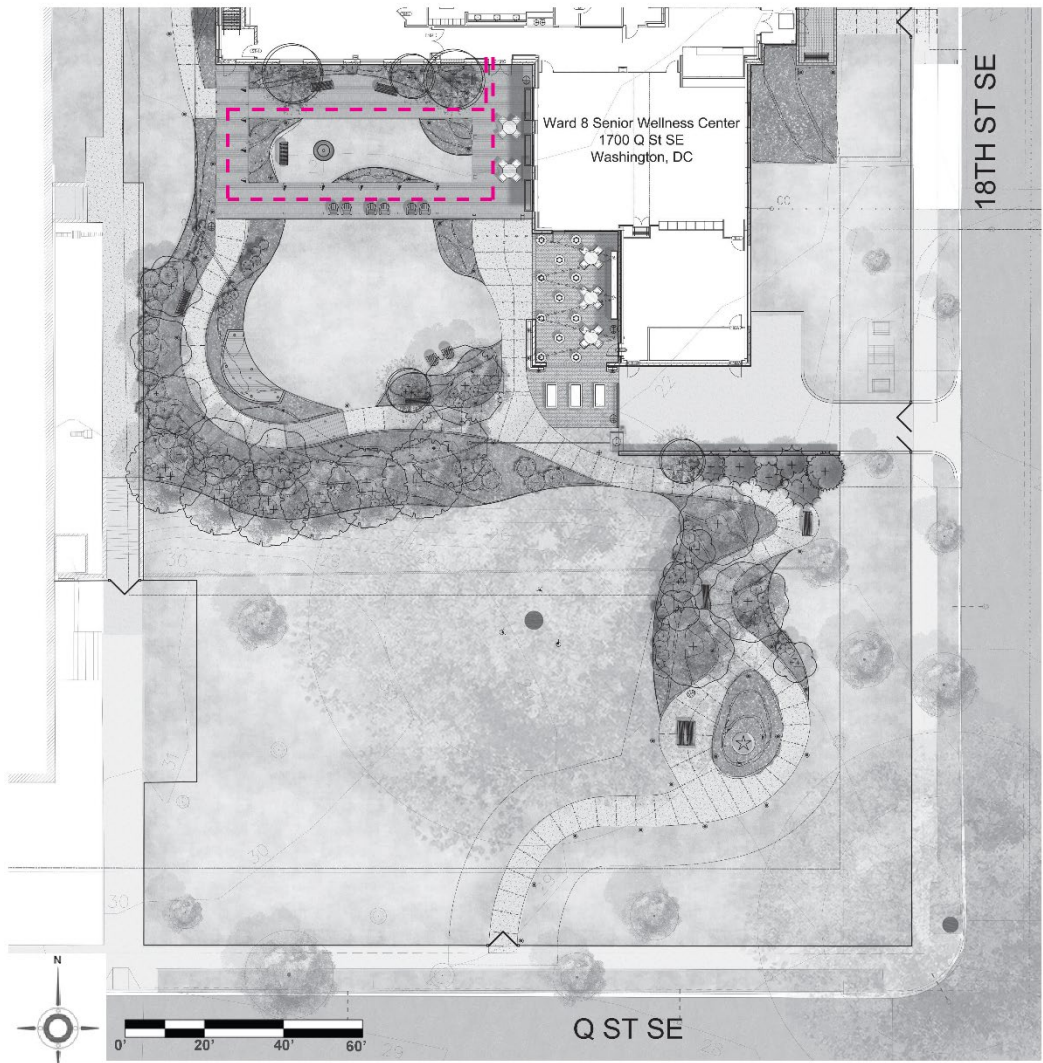


PROGRAMMING DIAGRAM - SEATING  
WARD 8 SENIOR WELLNESS CENTER | AUGUST 22, 2022 Landscape Diagrams

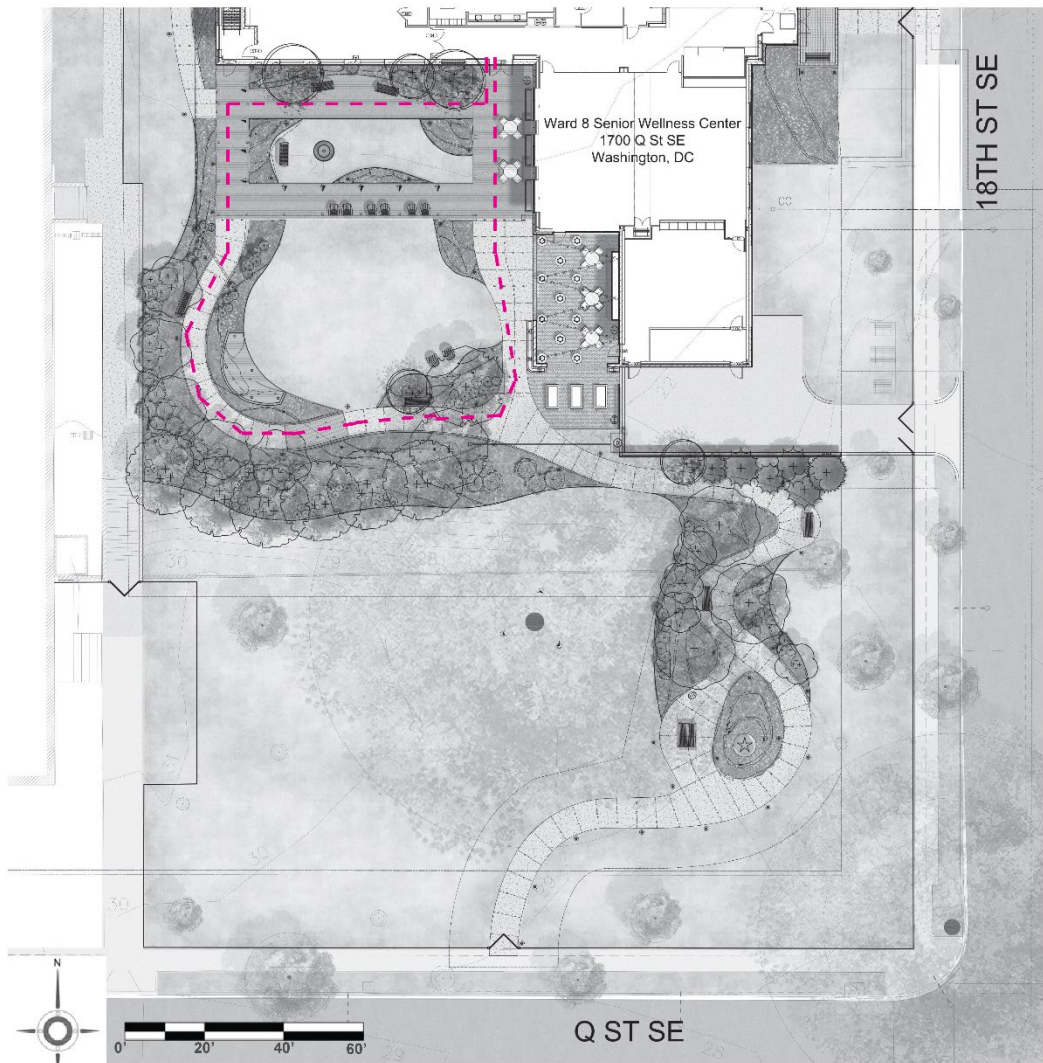
8



# LANDSCAPE PLAN – PROGRAM



WALKING PATH DIAGRAM - SHORT LOOP  
WARD 8 SENIOR WELLNESS CENTER | AUGUST 22, 2022 Landscape Diagrams 9



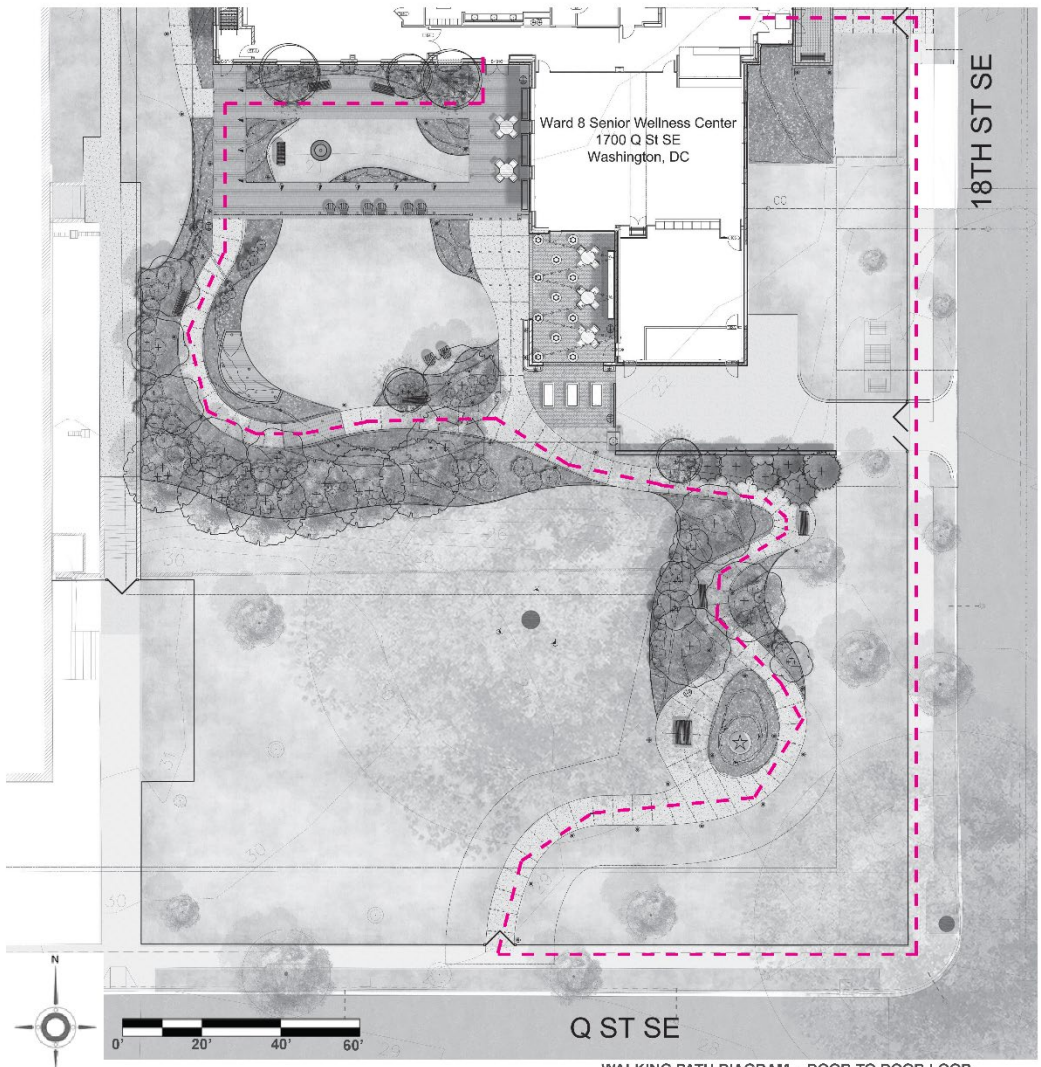
WALKING PATH DIAGRAM - MEDIUM LOOP  
WARD 8 SENIOR WELLNESS CENTER | AUGUST 22, 2022 Landscape Diagrams 10



# LANDSCAPE PLAN – PROGRAM



WALKING PATH DIAGRAM - LONG LOOP  
WARD 8 SENIOR WELLNESS CENTER | AUGUST 22, 2022 Landscape Diagrams 11



WALKING PATH DIAGRAM - DOOR TO DOOR LOOP  
WARD 8 SENIOR WELLNESS CENTER | AUGUST 22, 2022 Landscape Diagrams 12



**PERKINS EASTMAN DC**

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DESIGNING THE DISTRICT