

# GREENING FIVE POINTS

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Prepared for Client  
August 4, 2022



Prepared by

**DESIGNWORKSHOP**

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# INTRO



Ciara Knight, Raleigh



Christian Galindo, Denver



Selah Grant, Houston



Ivan Vazquez, Raleigh



Eneyda Salcedo, Chicago



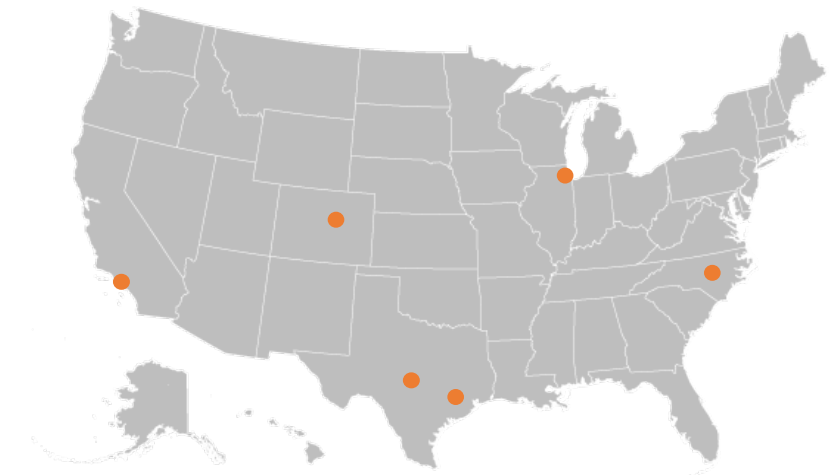
Dylan Smith, Austin



Gauri Patil, Los Angeles

CHARLES  
FOUNTAIN  
INTERNSHIP

2022



TEAM

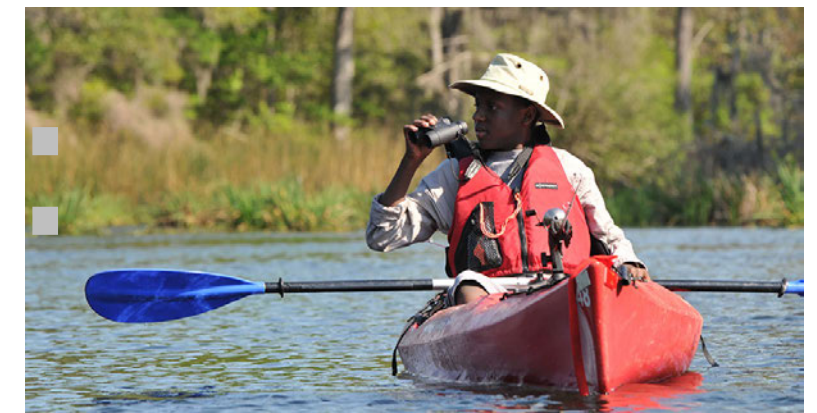
## PROJECT BRIEF

The Five Points greening project aims to increase access to the benefits provided by green infrastructure such as **climate resilience, wellness, and economic benefits**. The project also aims to increase green space for residents of the Five Points neighborhood and surrounding communities, specifically those that have traditionally faced barriers to accessing healthy outdoor spaces.

The Green Dot Coalition, led by the National Wildlife Federation, small business Green Spaces, and multiple Five Points community-led organizations, are working to create a green community vision for the Five Points Neighborhood. They want to implement practices and policies that: **restore climate-resilient, water-smart, and pollinator-friendly greenery** reflecting the values of the neighborhood; **bolster efforts by local business leaders to transform their own spaces** within the community; **foster a workforce development program** that leads to sustainability; and **serve as a model** for other communities to drive their own green infrastructure investments, in Denver and beyond.



# CLIENTS



## GREEN DOT COALITION



 Green Spaces

# CLIENT'S VISION



- “Green Metropolis”
- Bring nature to the urban spaces “in-between”
- Protect existing small businesses
- Community involvement
- Green infrastructure

- Mitigate flooding
- Improve air quality
- Decrease heat and increase shade
- Support wildlife
- Put people first
- Accessible green spaces
- Maintain community identity



# DILEMMA

**The Five Points neighborhood** has served as a **cultural hub** in Denver for generations. Seeing many transformations through its time, this community has **proven itself resilient** in the face of change, holding true its legacy of **art and culture**. Within the last decade, the neighborhood has seen a new period of transition especially in the Northwest, where **multi-story apartment buildings are going up in the place of warehouses and industry** that once supported the adjacent Union railway. This once industrial sector eventually became a haven for artists due to inexpensive housing costs before becoming an up-and-coming **hotspot** for residents and retail alike. This area, **not originally intended for human use**, has a severe lack of trees and vegetation which exacerbates the urban heat island effect while leaving the area susceptible to flooding. Historic streets further to the Southeast such as Welton and 22nd have a severe lack of shade and vegetation that has left small businesses **seeking solutions to manifest a more inviting and comfortable atmosphere**.

**How can we implement green infrastructure in a neighborhood with limited space which was not originally designed for human use?**

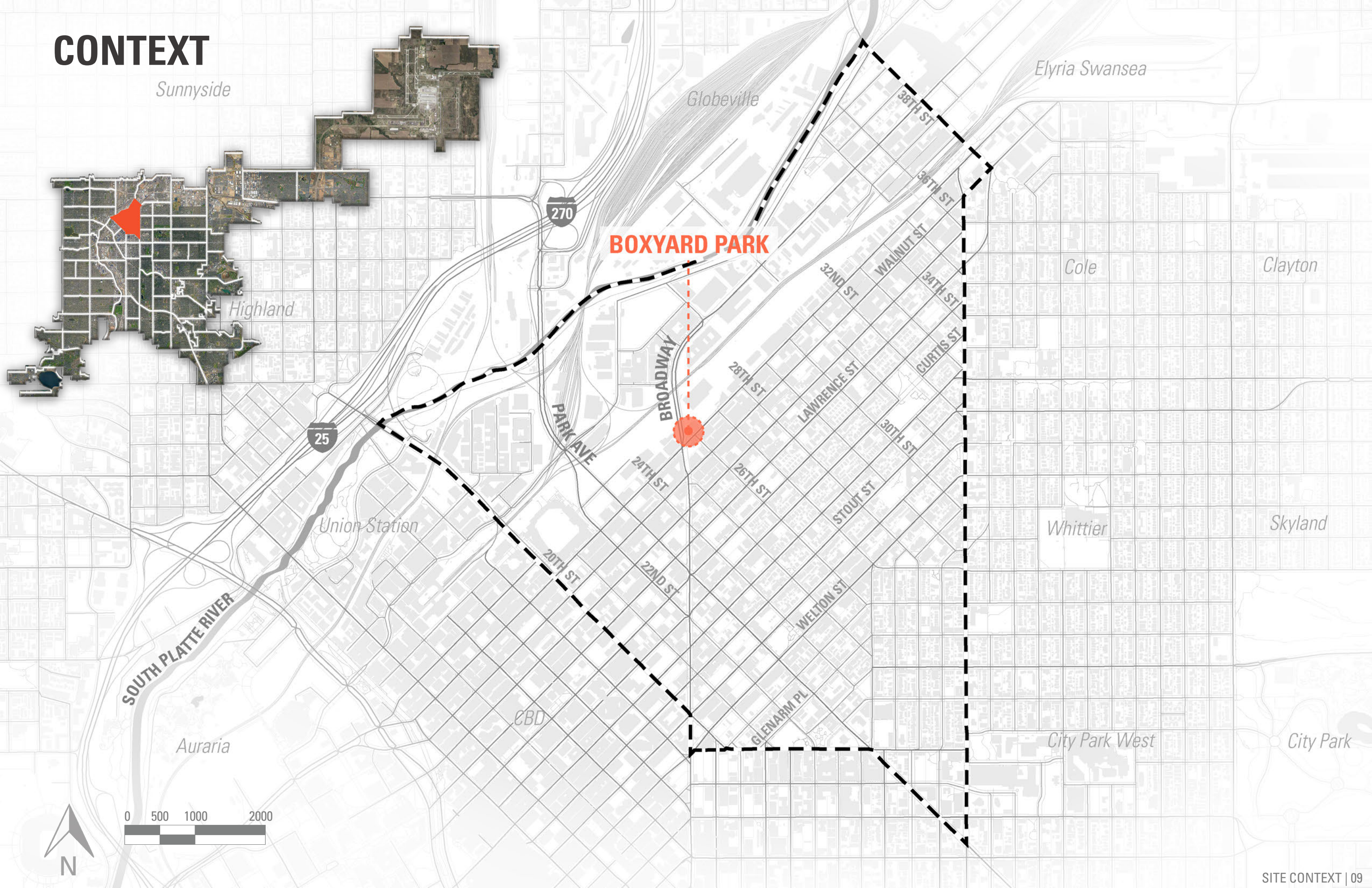
**How can we communicate the value of green infrastructure to the broader community and encourage involvement through design?**

# THESIS

Taking advantage of the **missed opportunities** for green infrastructure and vegetation in the 5 points neighborhood, the Charles Fountain Intern team seeks to **identify priority areas** that have the greatest need for re-design and **create a series of typologies** that will address the needs of the site. The team's work will include **a re-design of Boxyard park**, a space in the once industrial section of the neighborhood that is notorious for being an eyesore and overly-exposed to the sun's heat. This work will culminate in a series of **"green ribbons"** that connect amenities, small businesses, and residences with various green infrastructure strategies that will **improve human thermal comfort, reduce instances of flooding, and support small businesses.**

# SITE CONTEXT

# CONTEXT



# FIVE POINTS

FIVE POINTS

**BLACK COMMUNITY**

FIVE POINTS

FIVE POINTS

FIVE POINTS

FIVE POINTS

**RAILYARDS**

FIVE POINTS

EUROPEAN IMMIGRANTS

HARLEM OF THE WEST



FIVE POINTS

INTERSECTION OF STREETS

FIVE POINTS

**SOUTH PLATTE RIVER**

FIVE POINTS RINO ART DISTRICT

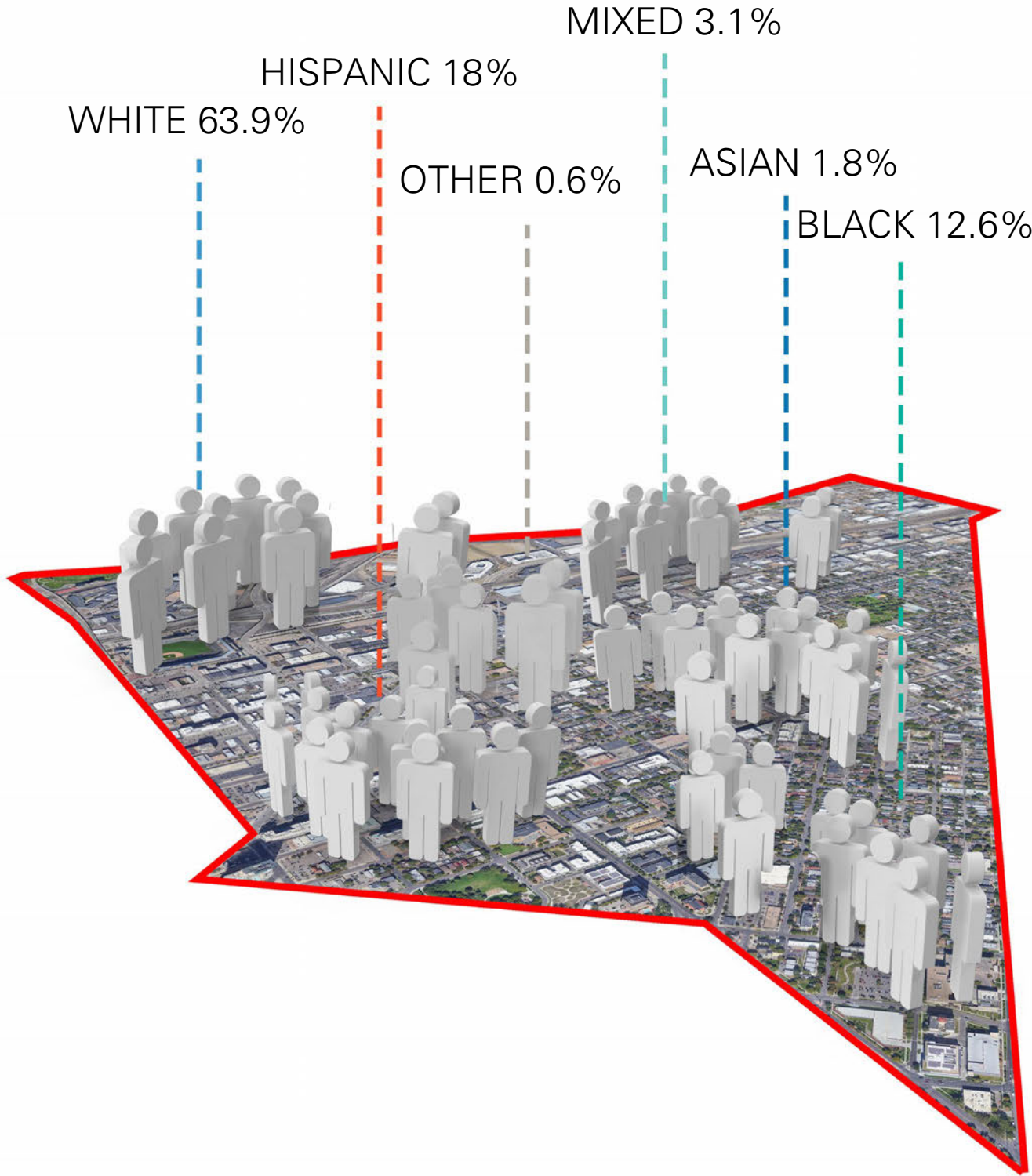
FIVE POINTS

FIVE POINTS

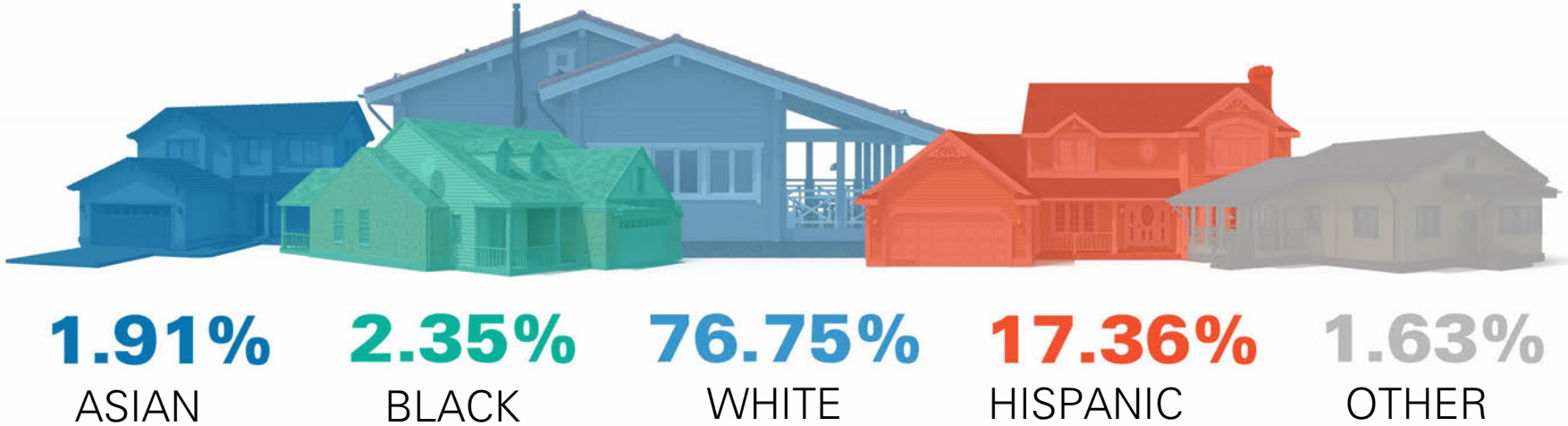
FIVE POINTS

# DEMOGRAPHICS

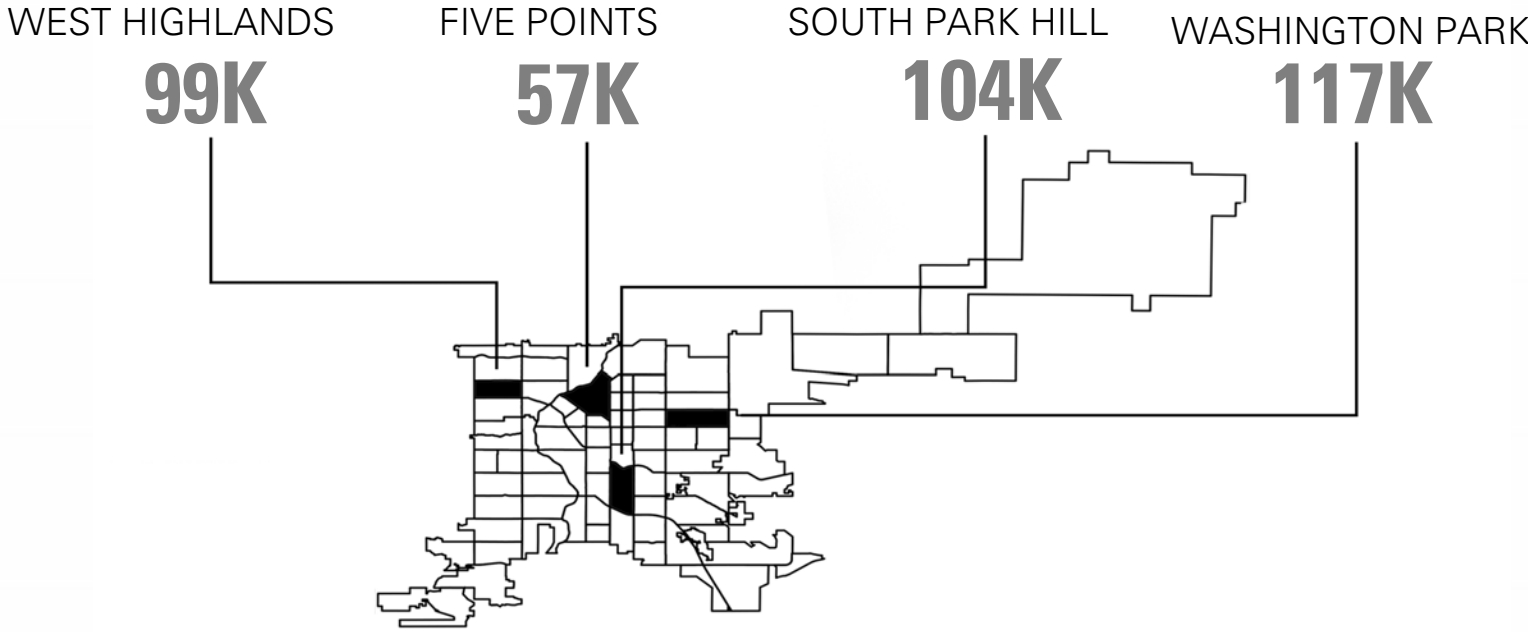
## FIVE POINTS RACE POPULATION



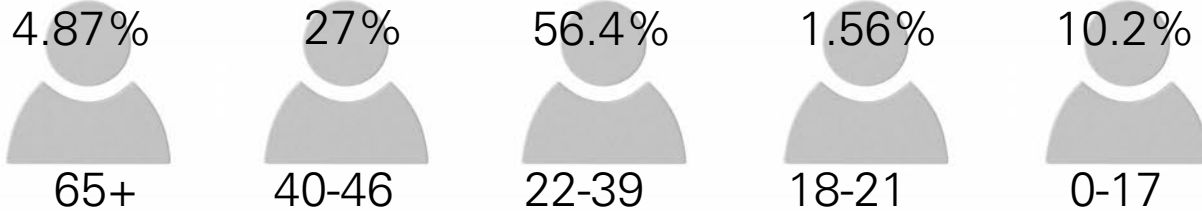
## FIVE POINTS HOME OWNERSHIP













## MEDIAN HOUSEHOLD INCOME

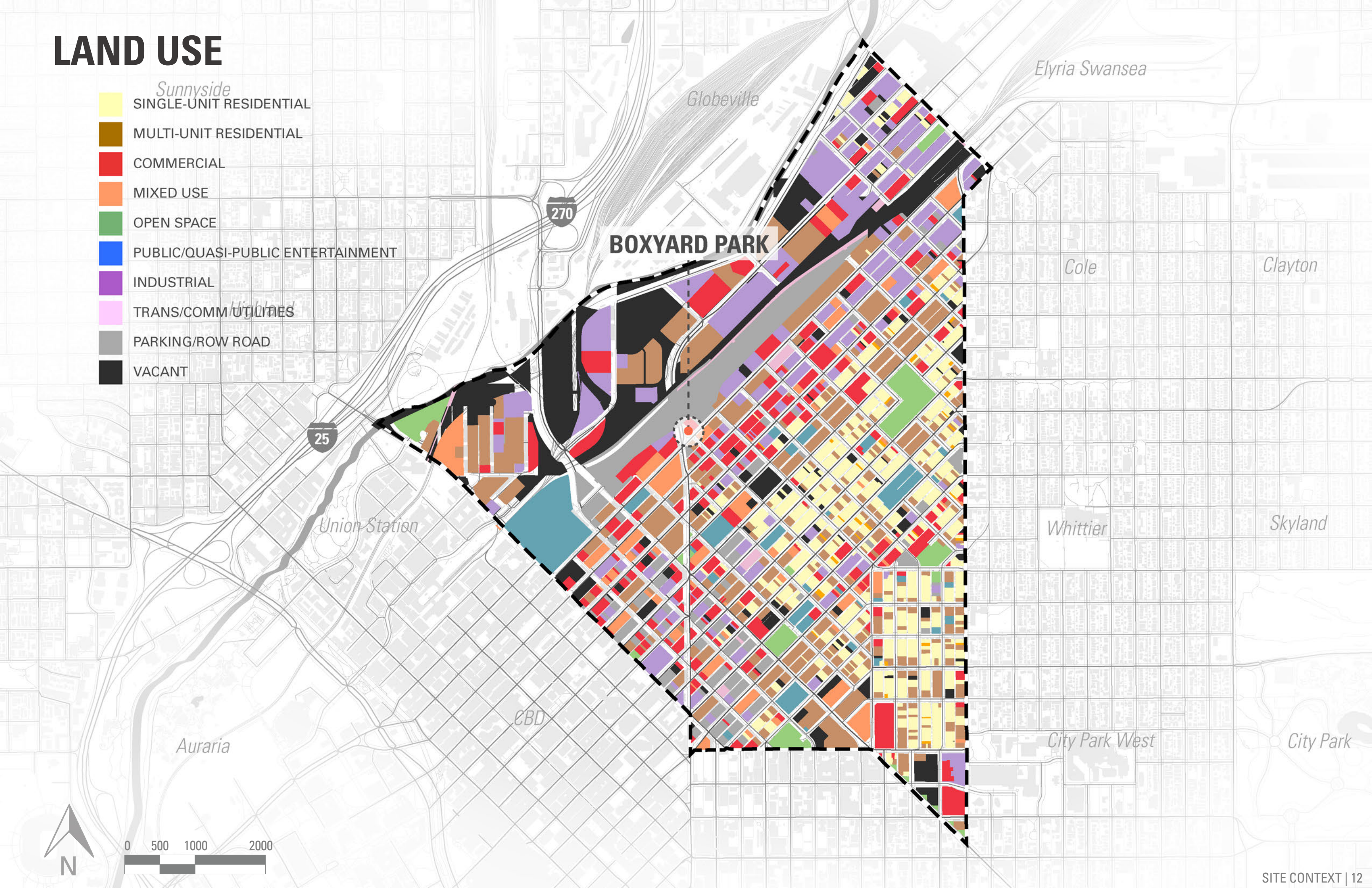


## FIVE POINTS AGE RANGE



# LAND USE

-  SINGLE-UNIT RESIDENTIAL
-  MULTI-UNIT RESIDENTIAL
-  COMMERCIAL
-  MIXED USE
-  OPEN SPACE
-  PUBLIC/QUASI-PUBLIC ENTERTAINMENT
-  INDUSTRIAL
-  TRANS/COMM UTILITIES
-  PARKING/ROW ROAD
-  VACANT



**BOXYARD PARK**

Elyria Swansea

Globeville

270

Cole

Clayton

25

Union Station

Whittier

Skyland

Auraria

CBD

City Park West



City Park

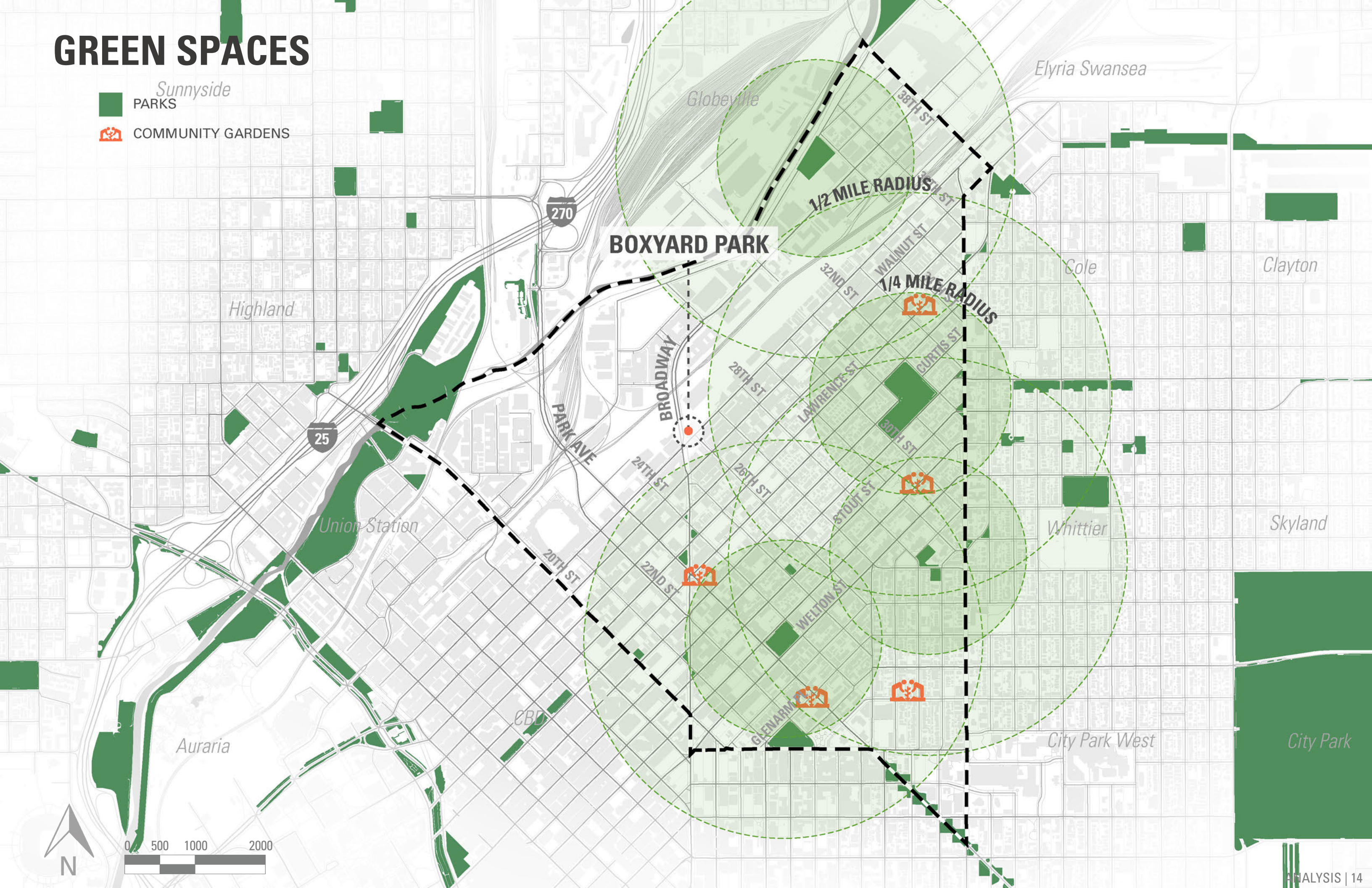


# ANALYSIS



# GREEN SPACES

-  Sunnyside PARKS
-  COMMUNITY GARDENS



# TREE CANOPY

Sunnyside

Elyria Swansea

Globeville

## BOXYARD PARK

Highland

Cole

Dayton

25

270

BROADWAY

PARK AVE

Union Station

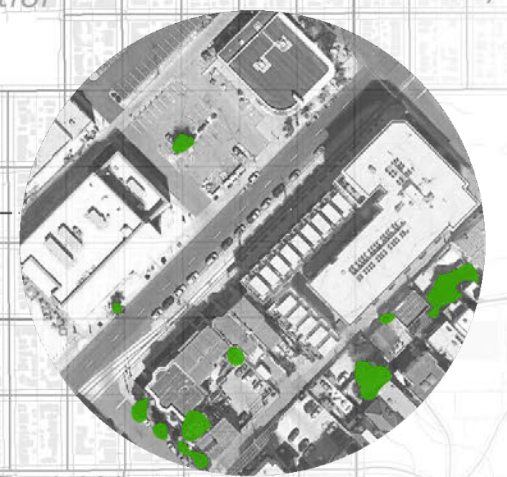
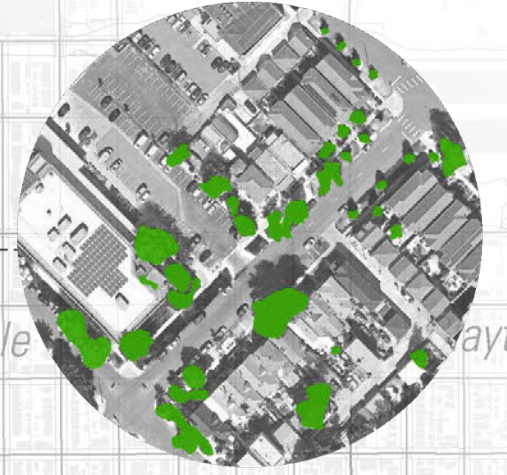
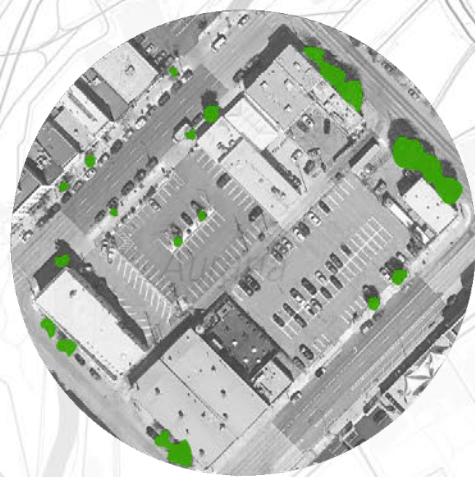
Whittier

Skyland

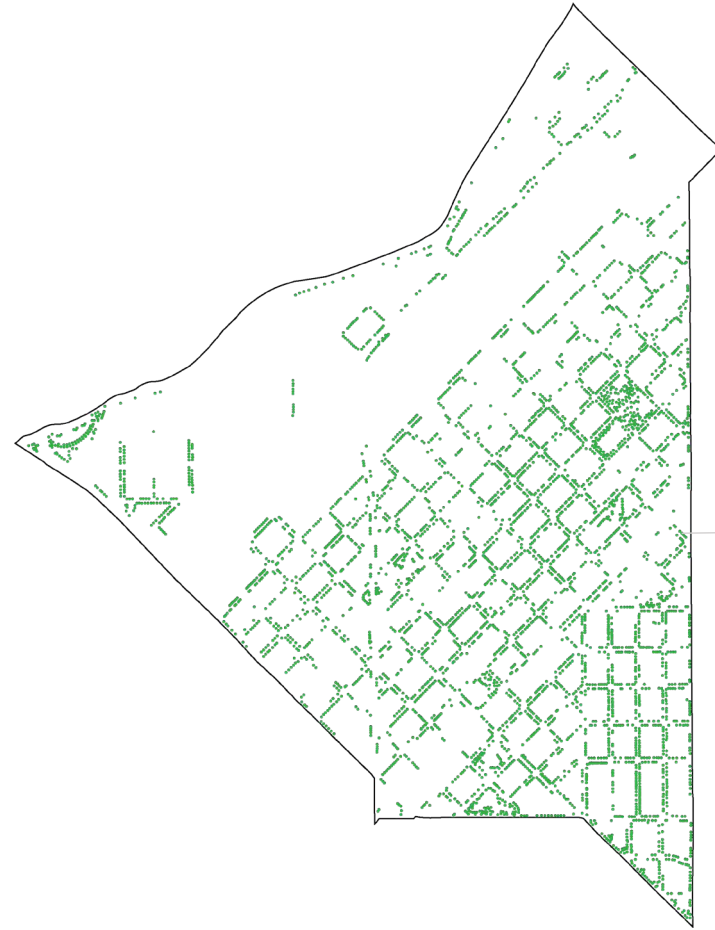
CBD

City Park West

City Park



# TREE CANOPY COMPARISON



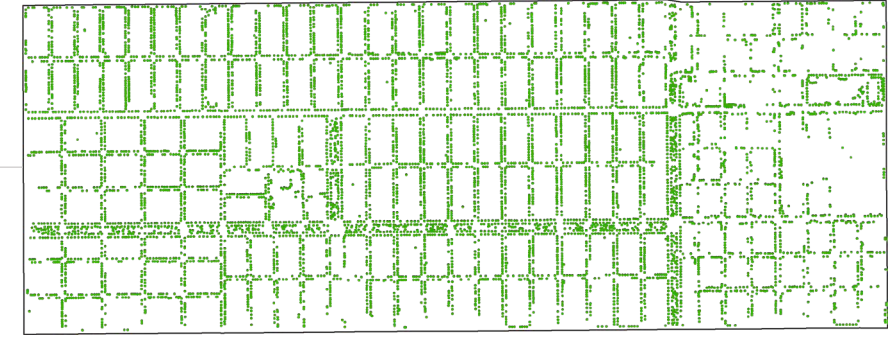
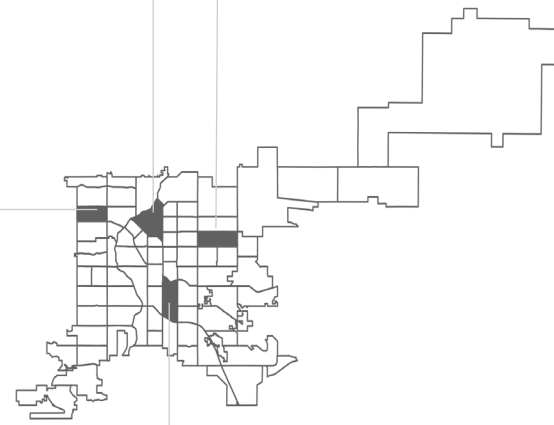
## FIVE POINTS

Neighborhood Size: 1,125 acres  
Number of trees: 4,998  
**4 trees/acre**



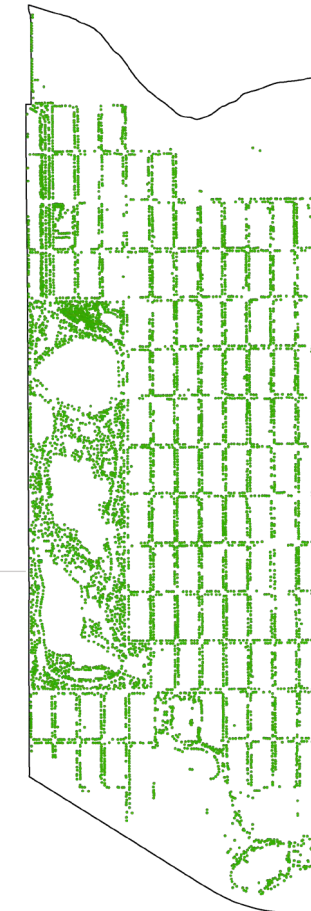
## WEST HIGHLAND

Neighborhood Size: 718 acres  
Number of trees: 5,185  
**7 trees/acre**



## SOUTH PARK HILL

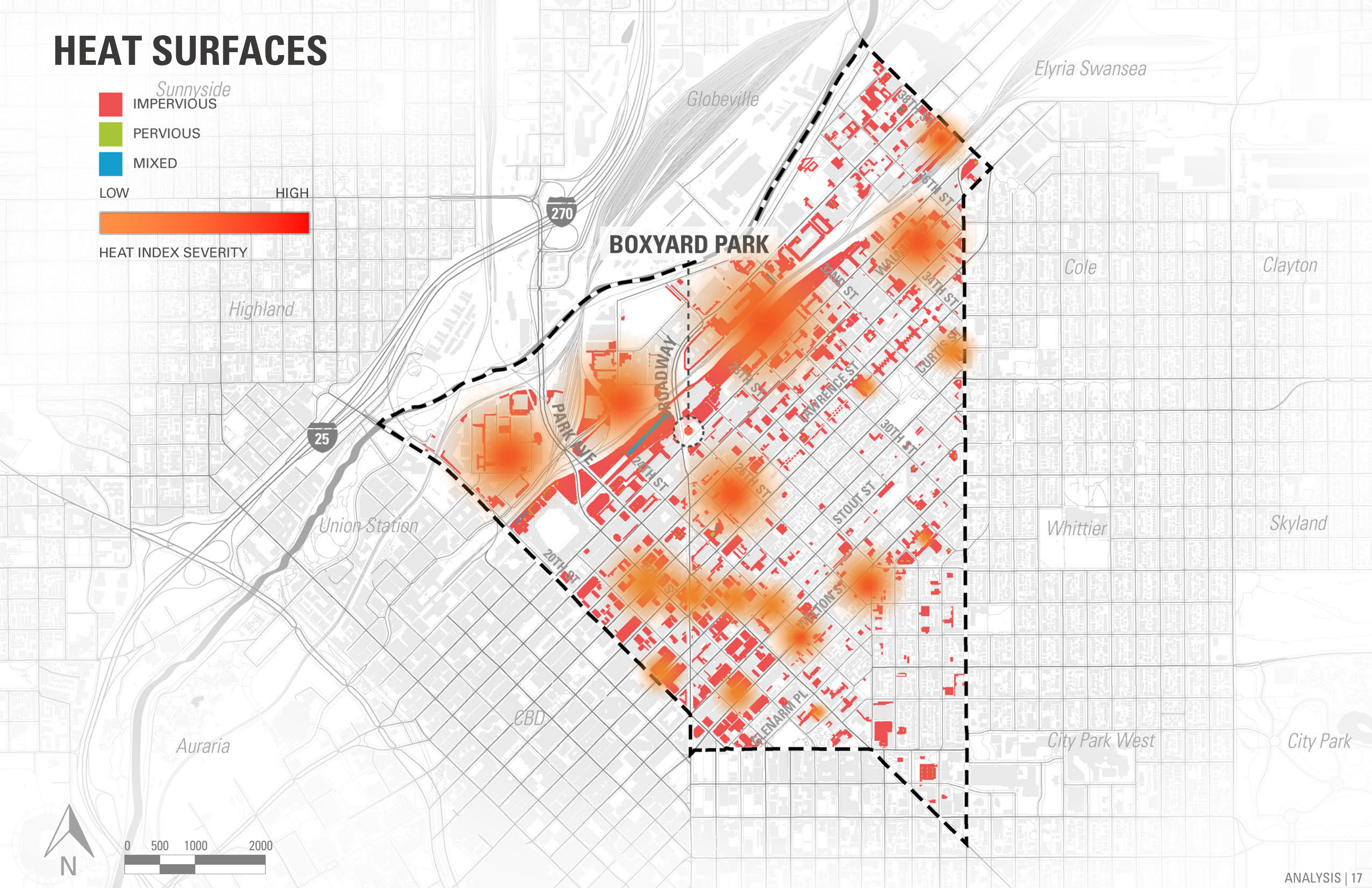
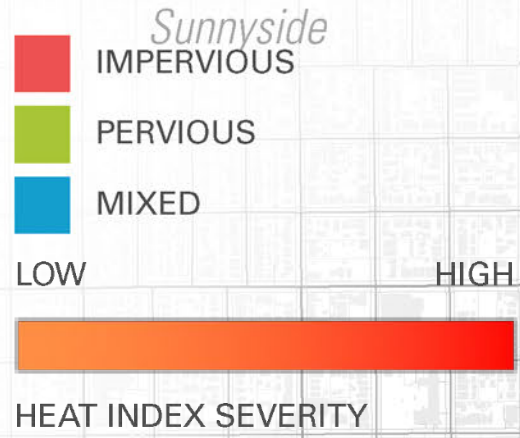
Neighborhood Size: 953 acres  
Number of trees: 8,019  
**8 trees/acre**









## WASHINGTON PARK

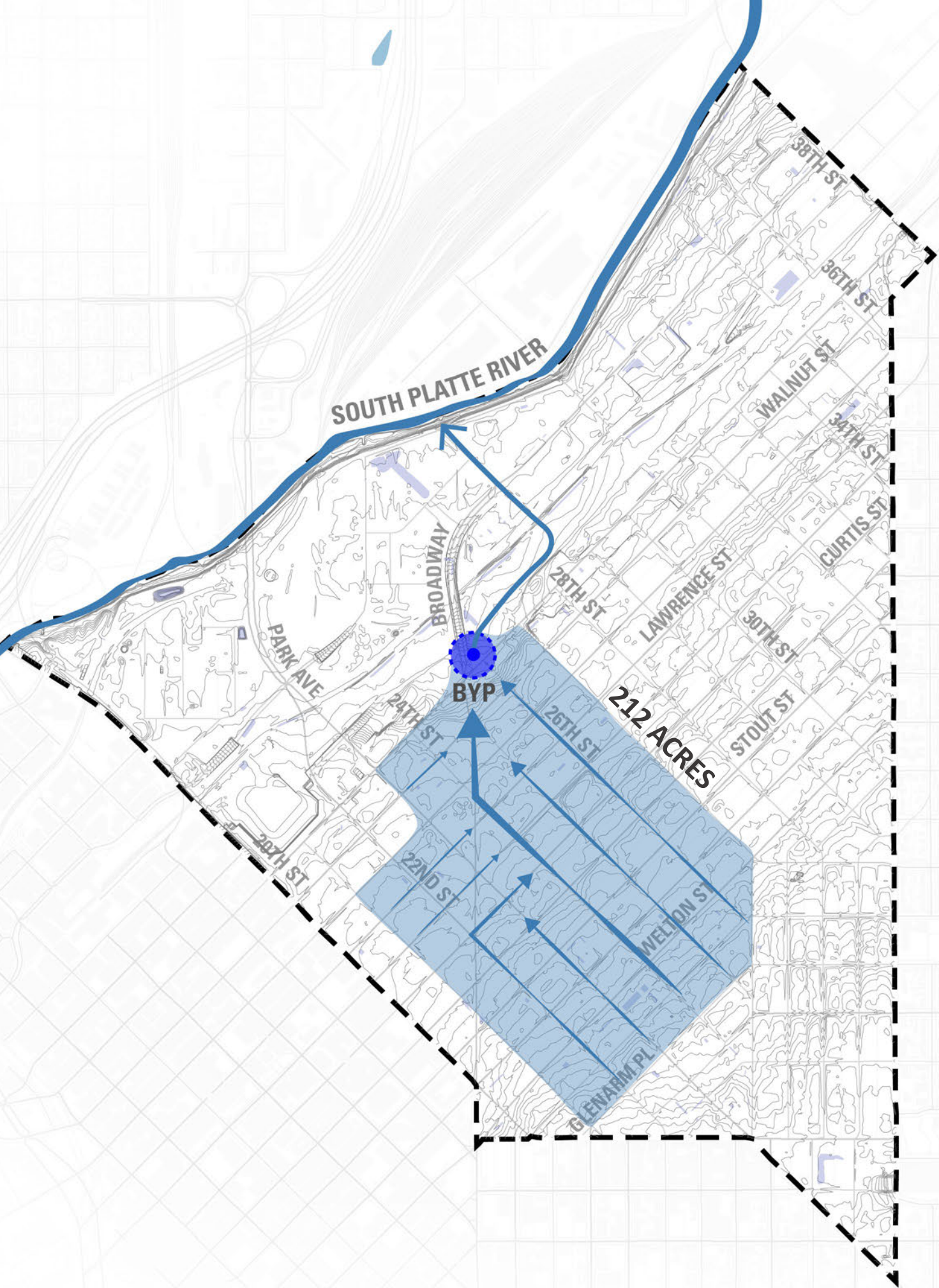
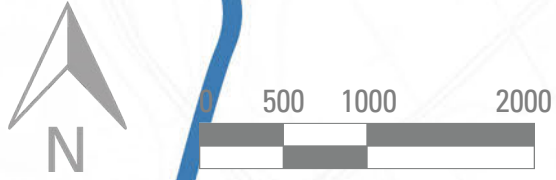
Neighborhood Size: 966 acres  
Number of trees: 7,763  
**8 trees/acre**

# HEAT SURFACES

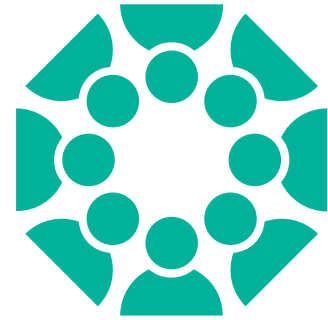


# HYDROLOGY

-  SURFACE FLOWS
-  UNDERGROUND PIPE FLOW
-  1-FOOT CONTOURS
-  STORM DETENTION
-  LAKES & PONDS
-  BOXYARD PARK WATERSHED



# GOALS



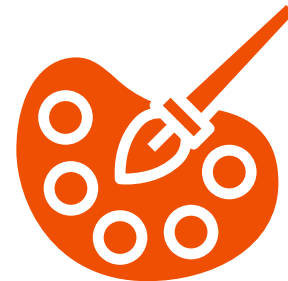
## COMMUNITY

- Facilitate community learning on green infrastructure and the environments
- Cultivate a sense of community through maintaining shared spaces
- Expose the community to nature through implementing native plantings and strategies to attract and support wildlife



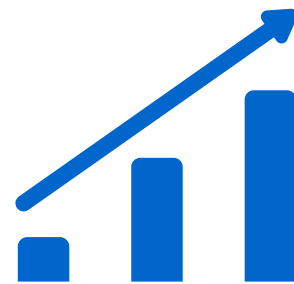
## ENVIRONMENT

- Increase tree canopy cover and vegetation to improve human thermal comfort, air quality, and overall human health
- Implement green infrastructure strategies to manage stormwater in areas susceptible to flooding
- Introduce pollinator species in the neighborhood



## ART

- Celebrate the industrial history by maintaining a local materials palette
- Celebrate the successional evolution and history of the neighborhood: past, present, and future



## ECONOMICS

- Promote and identify P3 partnerships and investment opportunities
- Demonstrate value of green infrastructure to property owners
- Address restricted pedestrian mobility to increase human traffic to local businesses

# METRICS BASELINE

## FIVE POINTS NEIGHBORHOOD



Number of affordable housing units: **259** Units/3 Properties



Historic Districts: **6**



Existing number of trees on site: **4,998** – 4 Trees/acre



Transit: **9** Public Transit Lines



Percent Impervious Cover: **37.07%**



Number of Parks: **8**



Heat Vulnerability Score: **63.12**



CDC Social Vulnerability Index: **0.468** vulnerability



Number of Public Art Installations: **22**



Acres of park land per 1k population: **1.81** (Denver Average is 8.9)



Home Ownership: **25.6%**



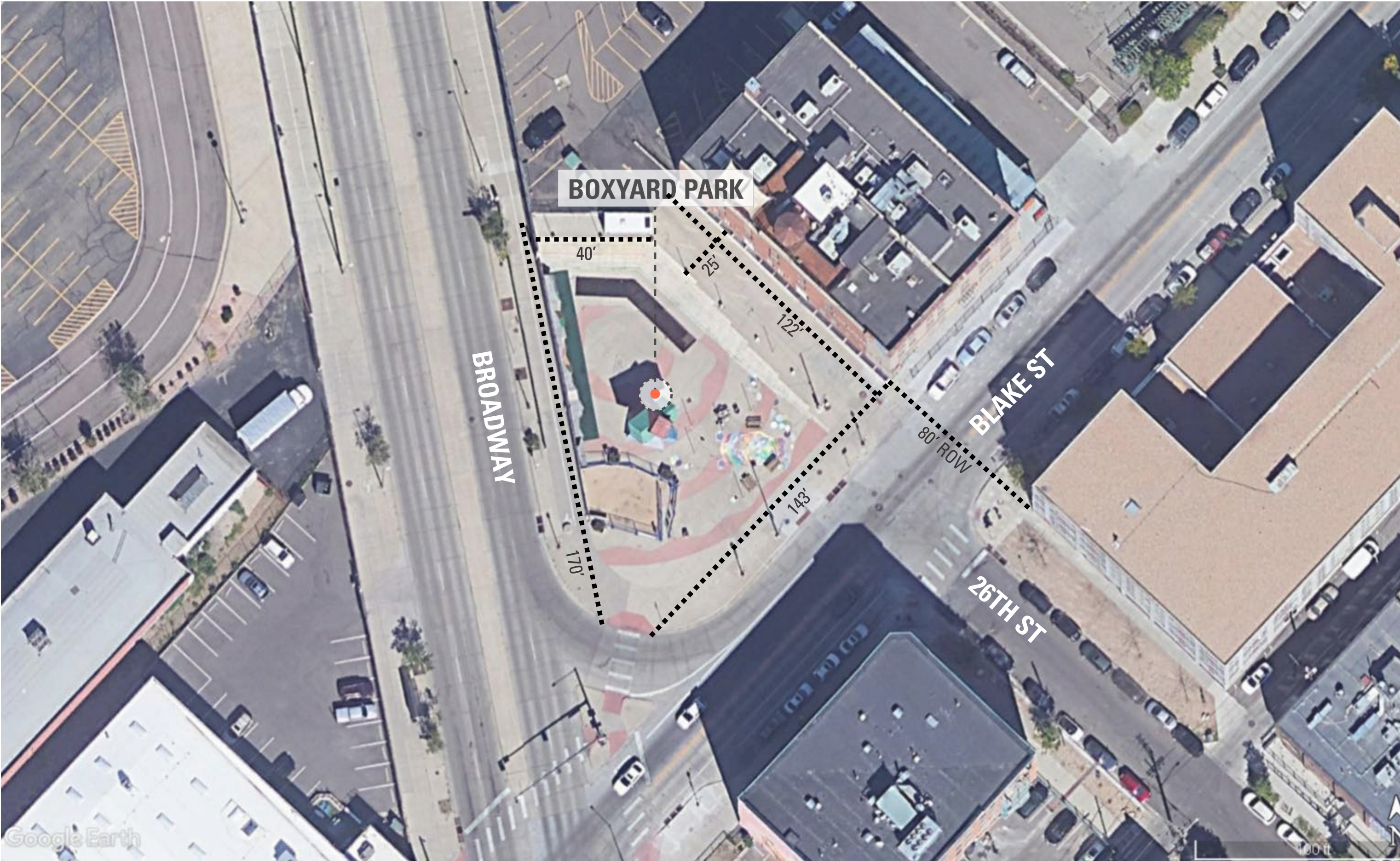
Acres of park land: **26**

SITE DESIGN

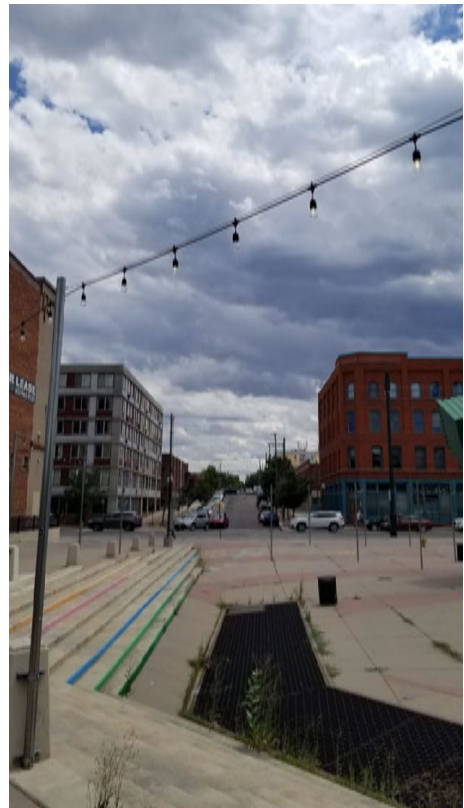
BOXYARD PARK



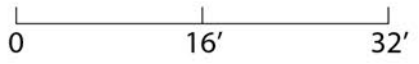
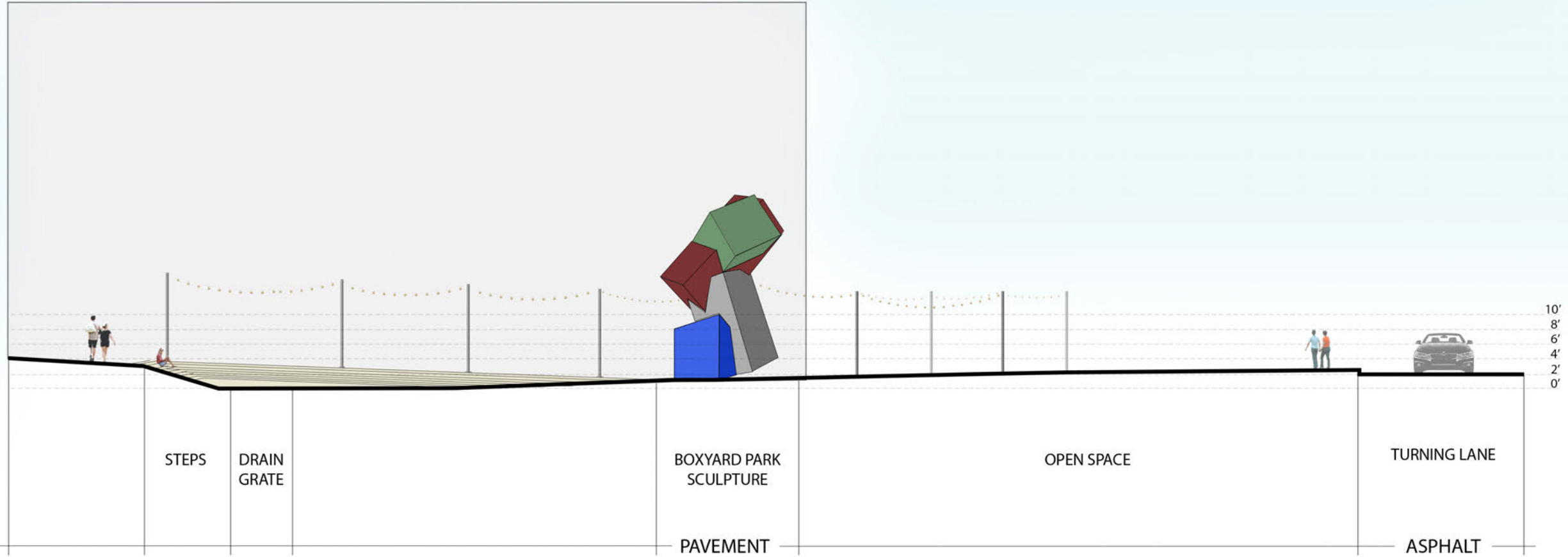
# SITE AERIAL



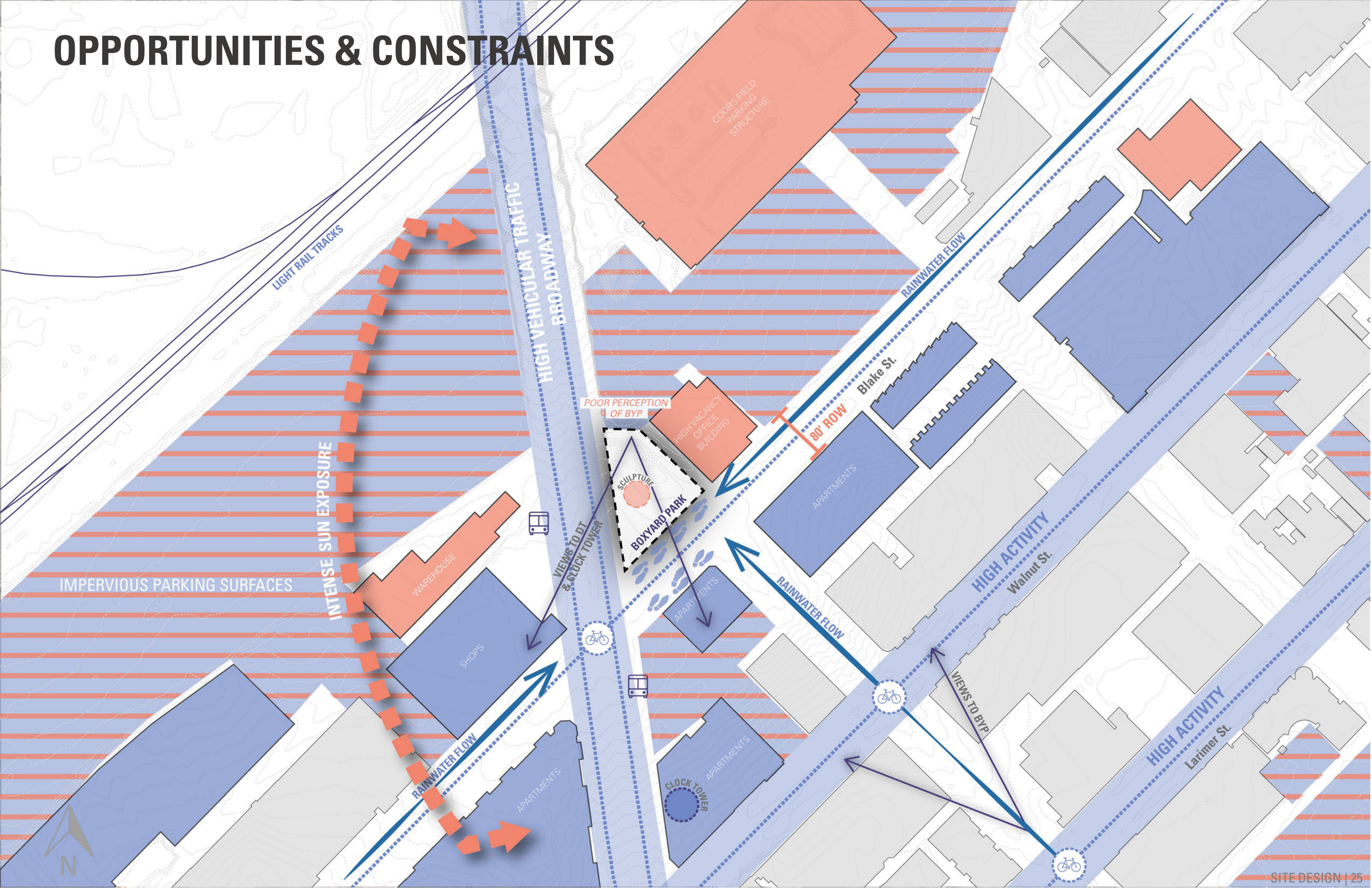
# SITE PHOTOGRAPHY



# SECTION STUDY - EXISTING



# OPPORTUNITIES & CONSTRAINTS



# ENGAGEMENT PLAN

## City Council

There are no successful green infrastructure areas in Denver

## Mobetta Green

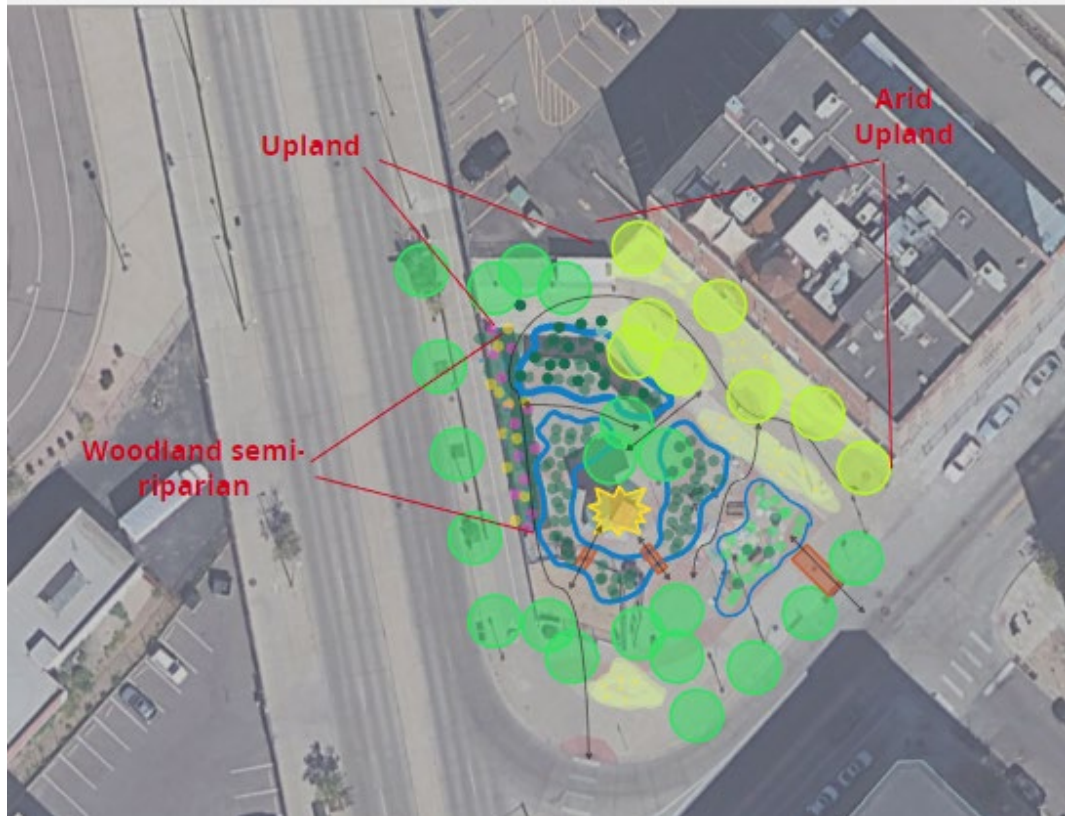
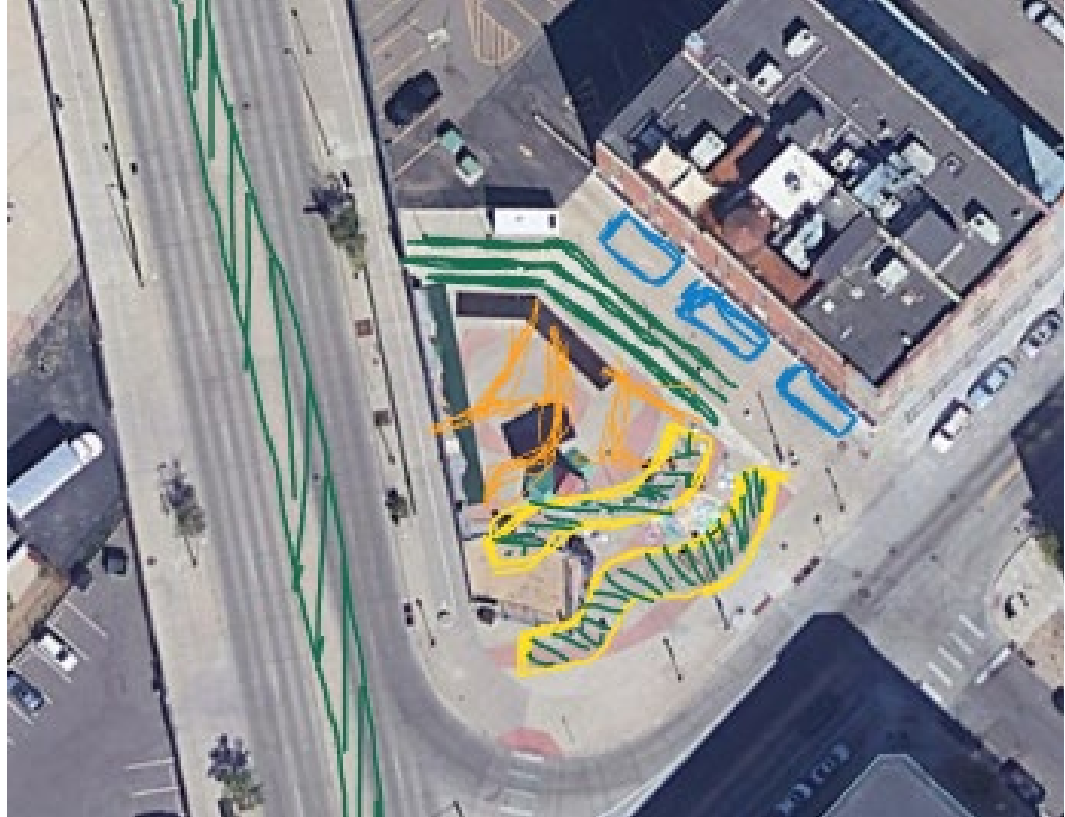
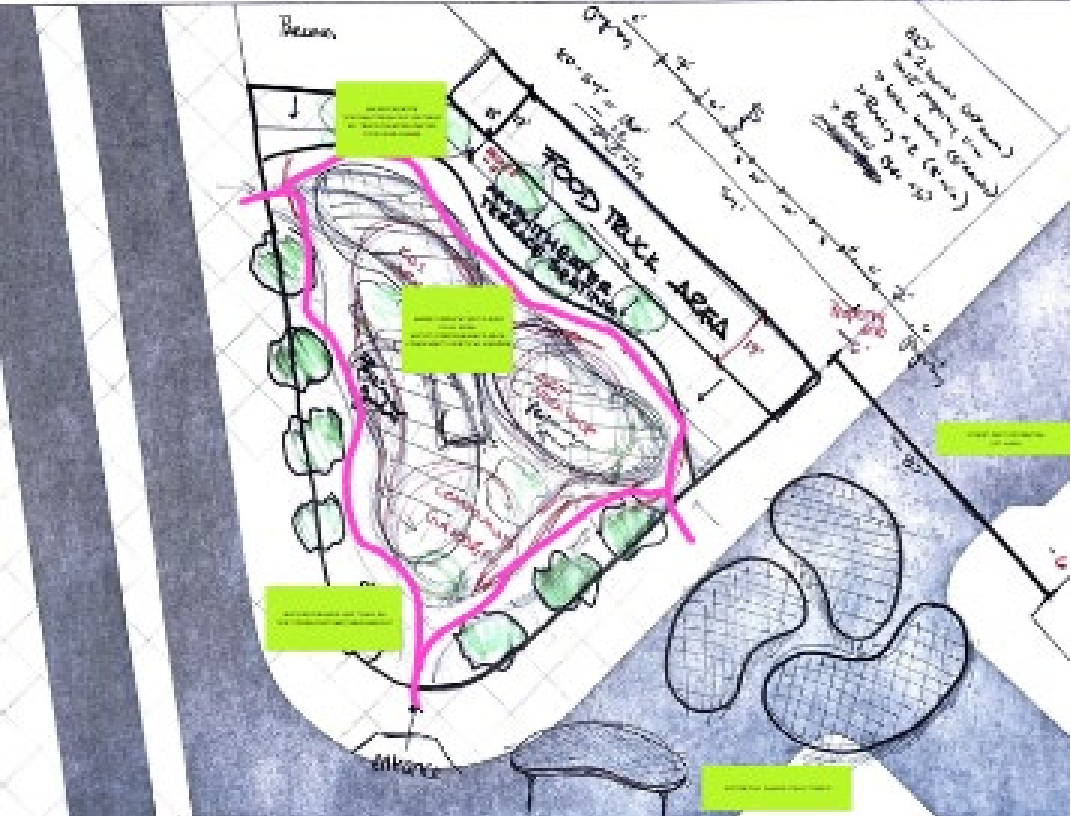
Health  
Eating  
Active  
Living

## Community Workshop

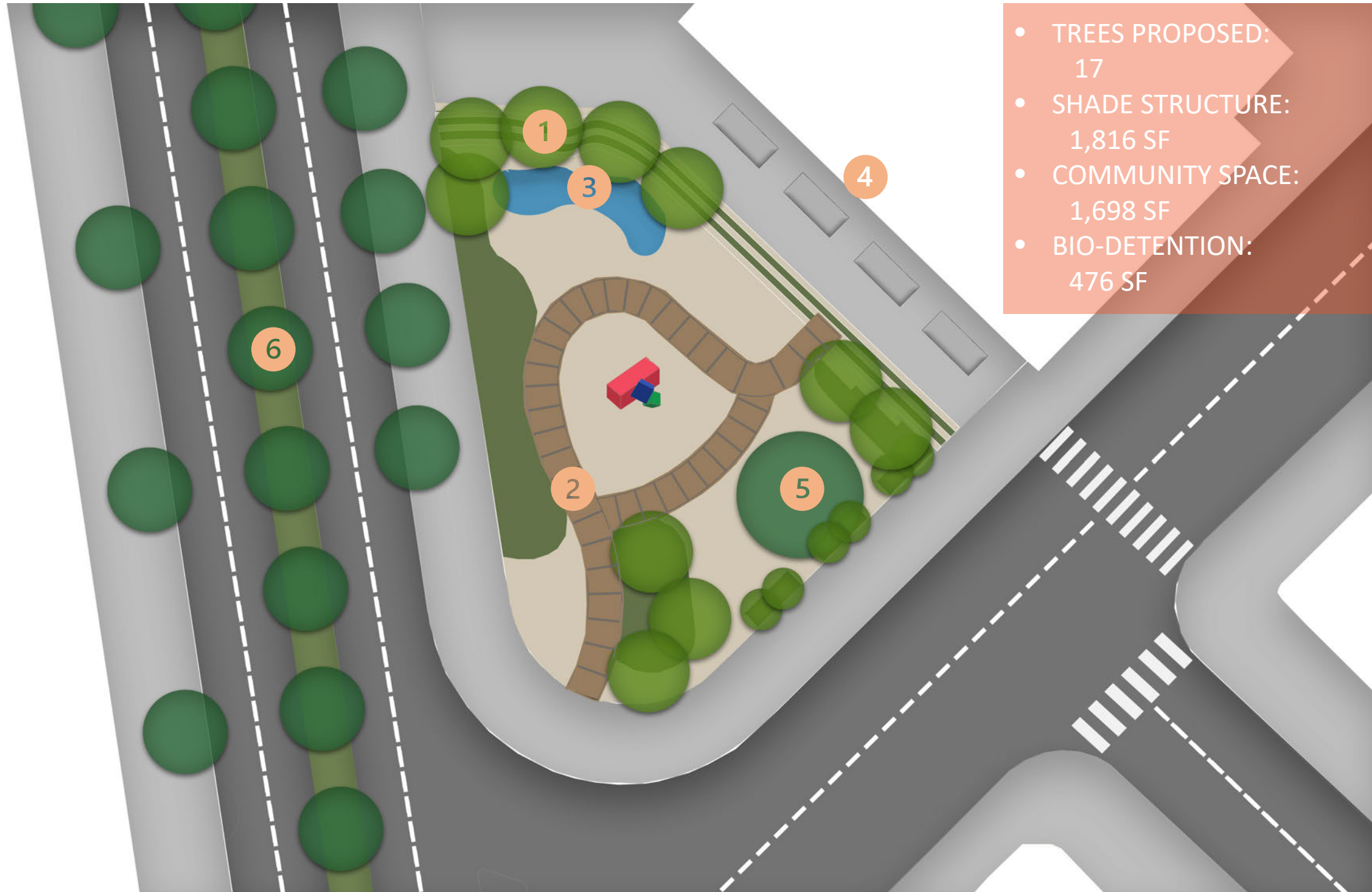
No attachment to Boxyard Structure



# SKETCHES



# ALTERNATIVE – CIRCULATION



- TREES PROPOSED:  
17
- SHADE STRUCTURE:  
1,816 SF
- COMMUNITY SPACE:  
1,698 SF
- BIO-DETENTION:  
476 SF

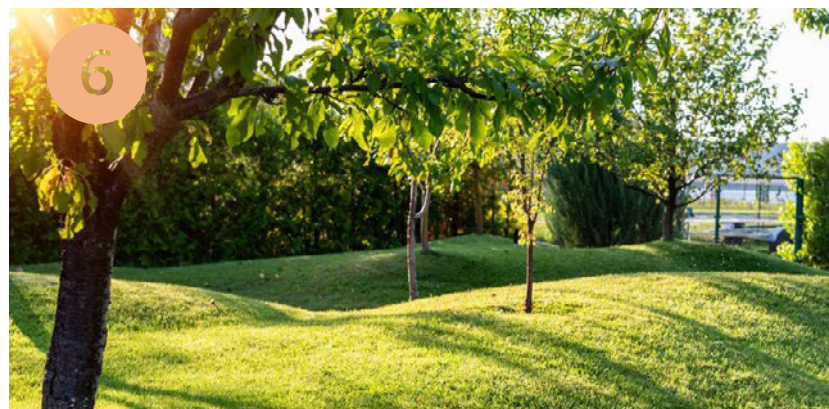
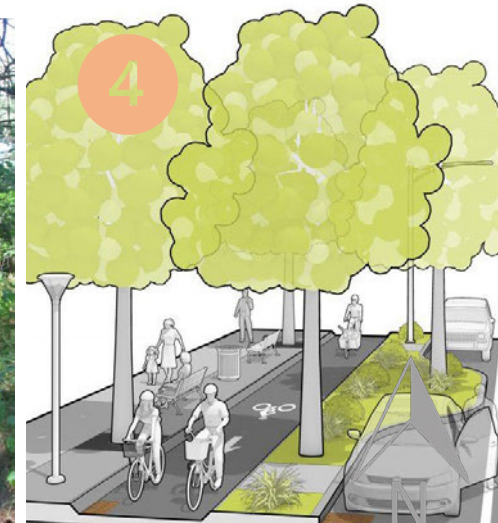
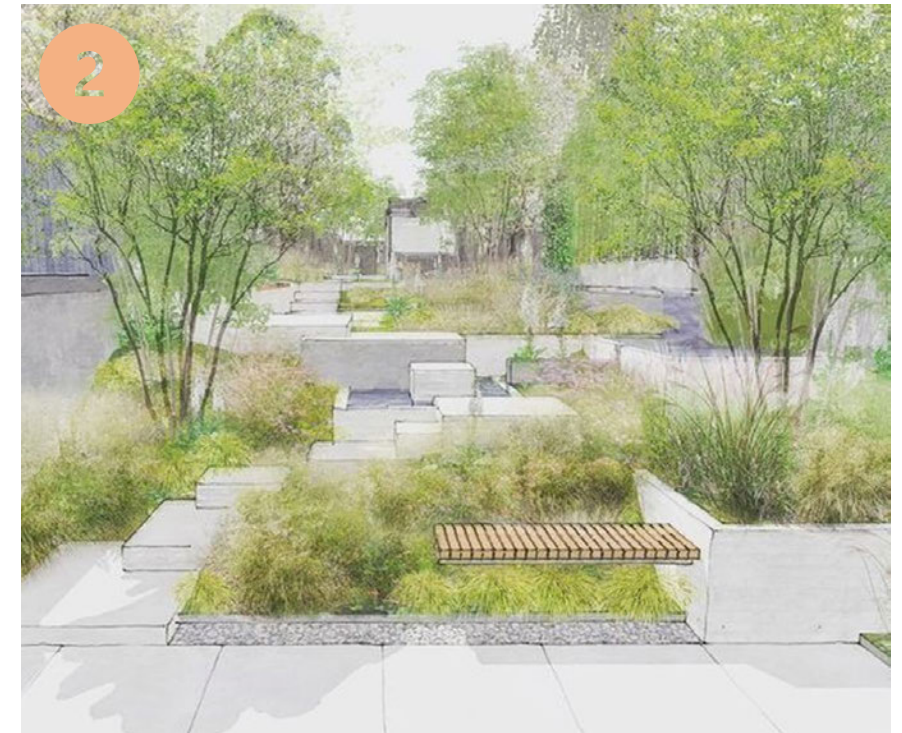


#1

# ALTERNATIVE – GREEN SPACE



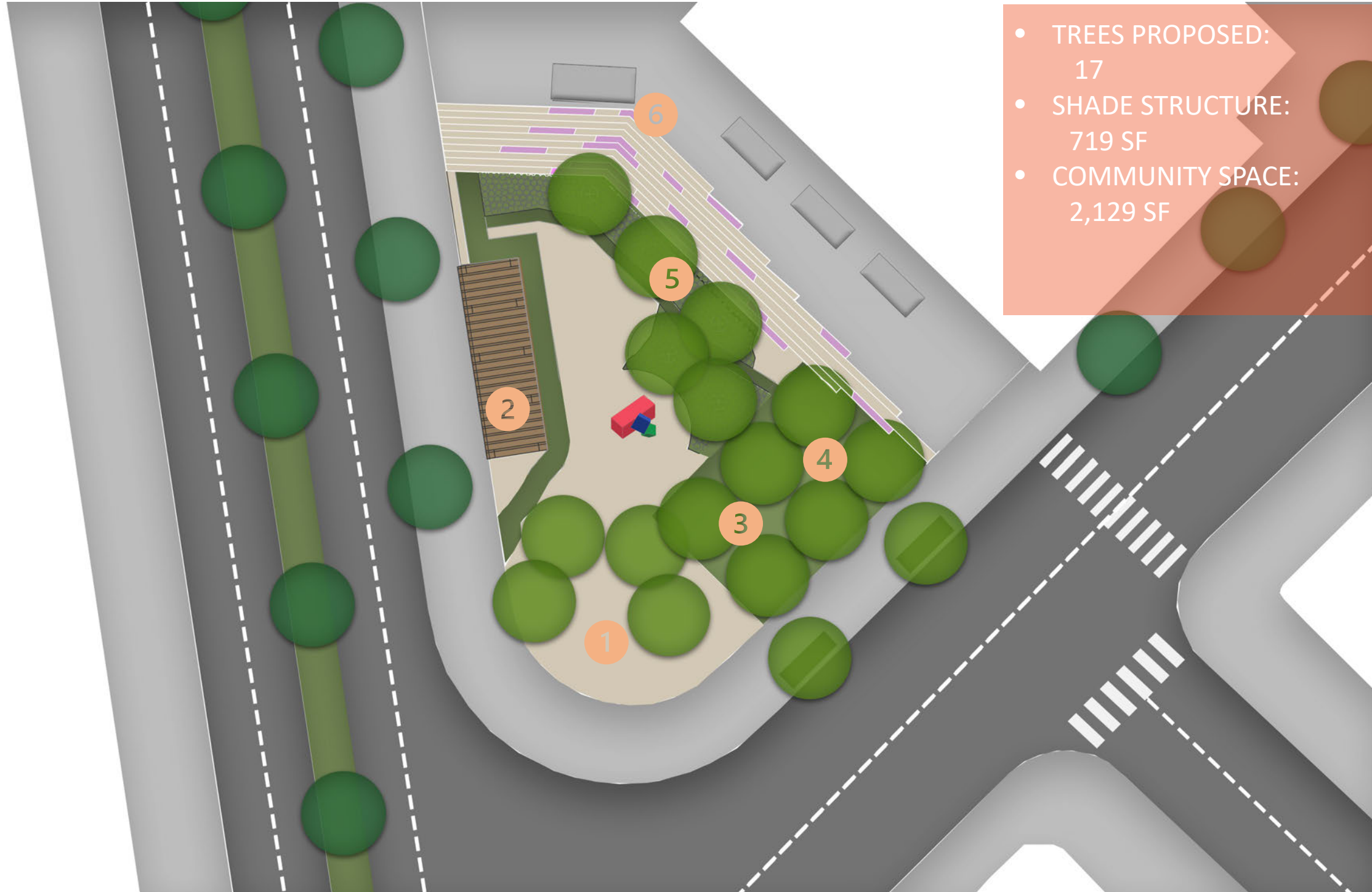
- TREES PROPOSED:  
17
- GREEN SPACE ADDED:  
5,245 SF
- BIKE LANE ADDED:  
1
- SCULPTURE REMOVED:  
1



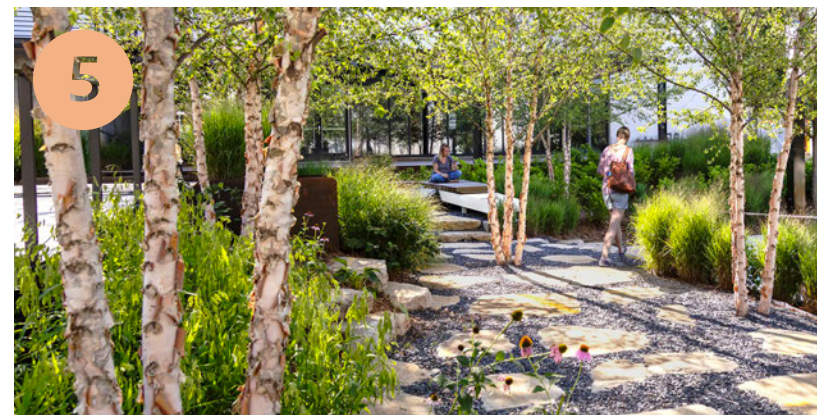
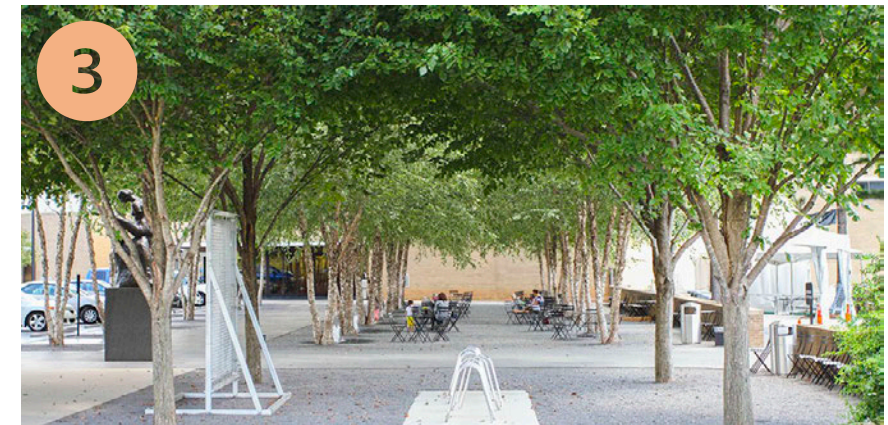
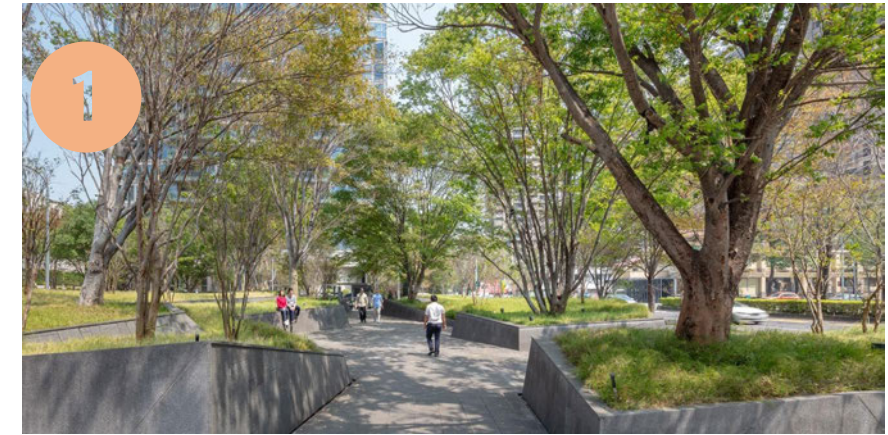
#2



# ALTERNATIVE – COMMUNITY



- TREES PROPOSED: 17
- SHADE STRUCTURE: 719 SF
- COMMUNITY SPACE: 2,129 SF



#3

# PREFERRED ALTERNATIVE

BROADWAY

BIO-DETENTION  
BASIN

PERFORMANCE  
+ COMMUNITY  
ENGAGEMENT

COMMUNITY  
GATHERING

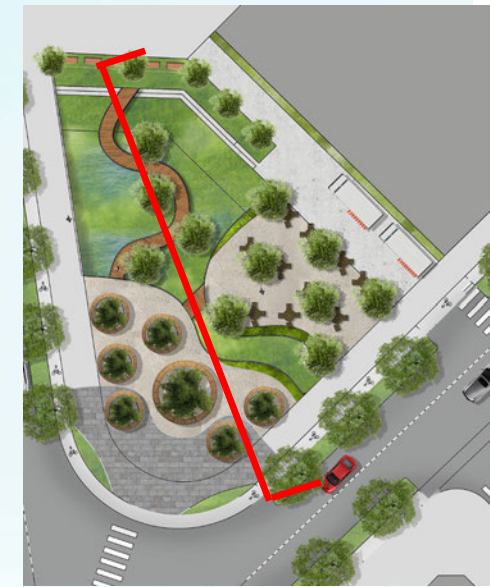
BLAKE ST

26TH ST

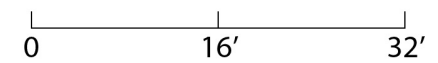
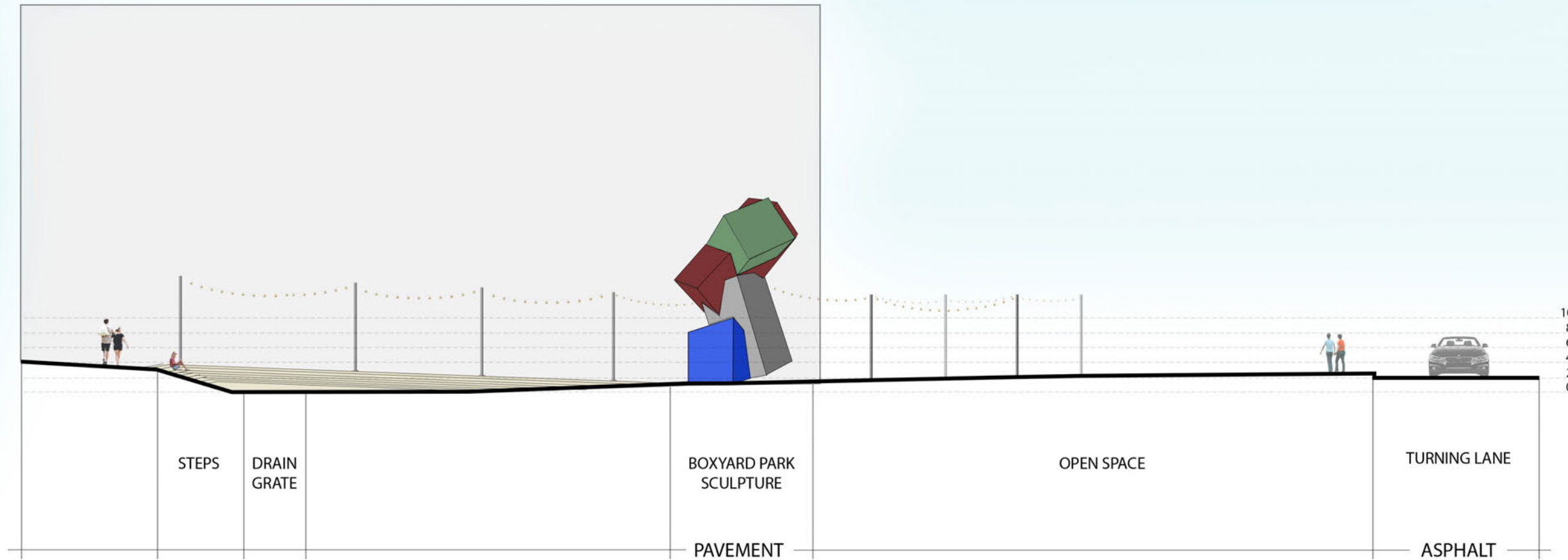


# SECTION STUDY - PROPOSED

PROPOSED



EXISTING



# ART & COMMUNITY



50% of Park Space dedicated to art & community gathering



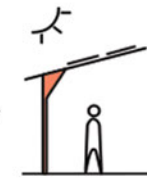
# ENVIRONMENT



Boxyard Park Structure



Demolition



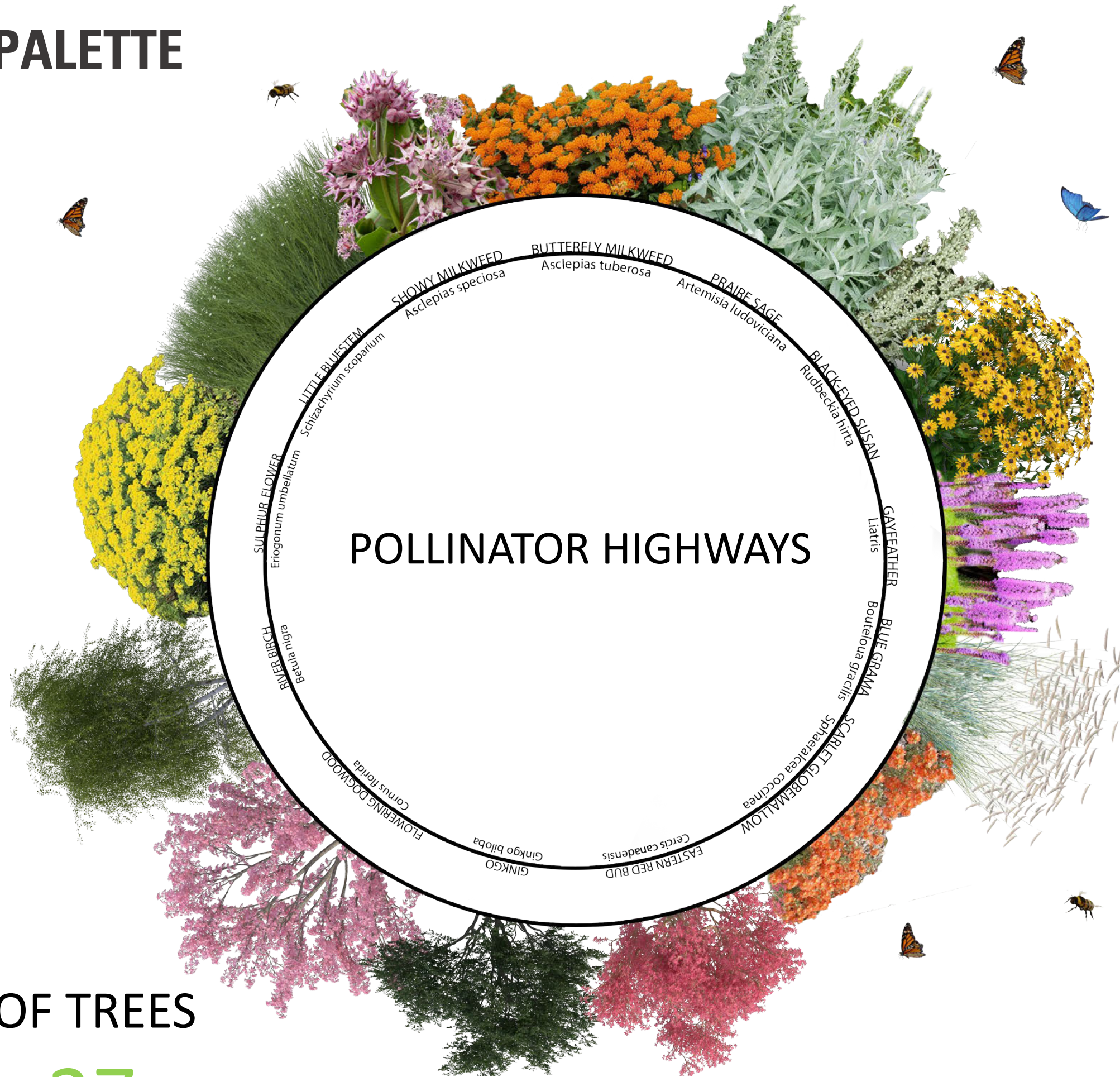
Shade structure with Solar panels



40% of Park Space dedicated to **bio-remediation**

# PLANTING PALETTE

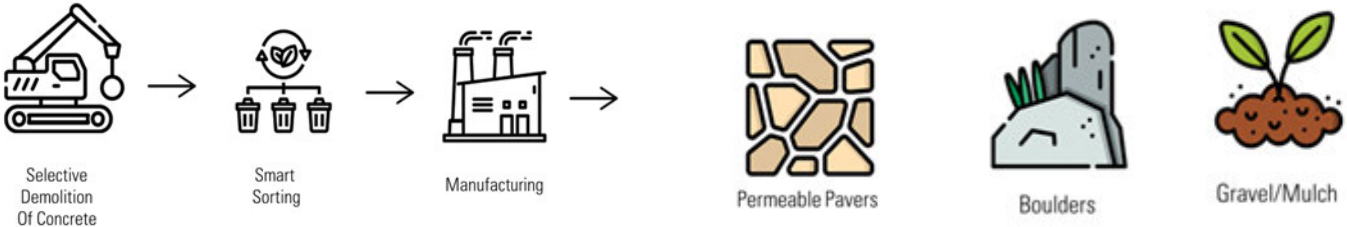
3,100 SF  
PLANTING IN  
BIO-DETENTION



NUMBER OF TREES

PROPOSED: 27

# ECONOMY



30% of Park Space dedicated to **business pop-ups**

# PREFERRED ALTERNATIVE





# GREENING FIVE POINTS

# LANDSCAPE



Number of Parks: 8



*City of Cuernavaca Park*



*Stout Street Children's Park*



*Benedict Fountain Park*



*RiNo Art Park*



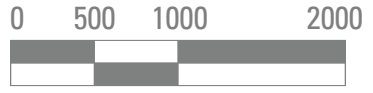
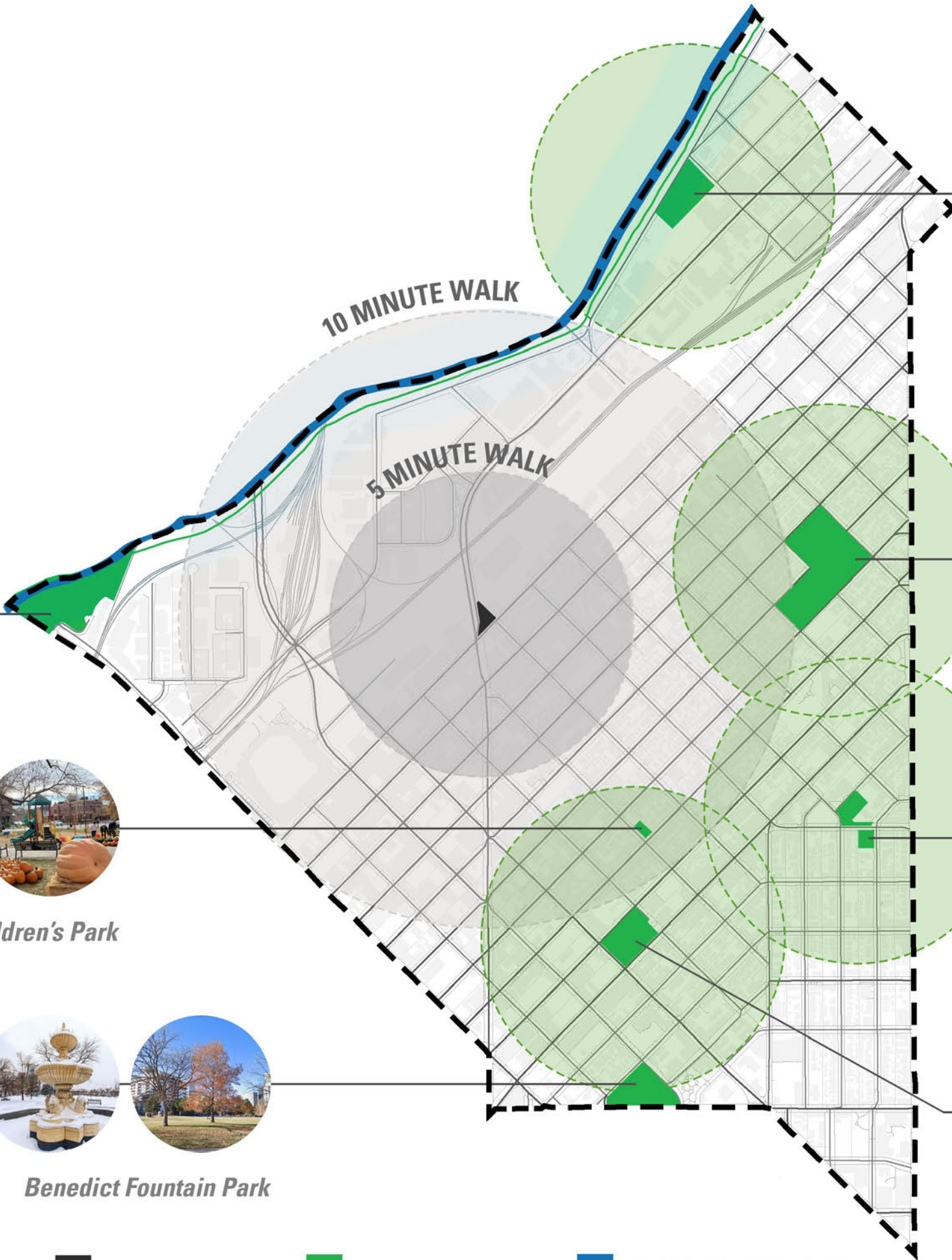
*Mestizo-Curtis Park*



*Lenore B. Quick Park*



*Sonny Lawson Park*

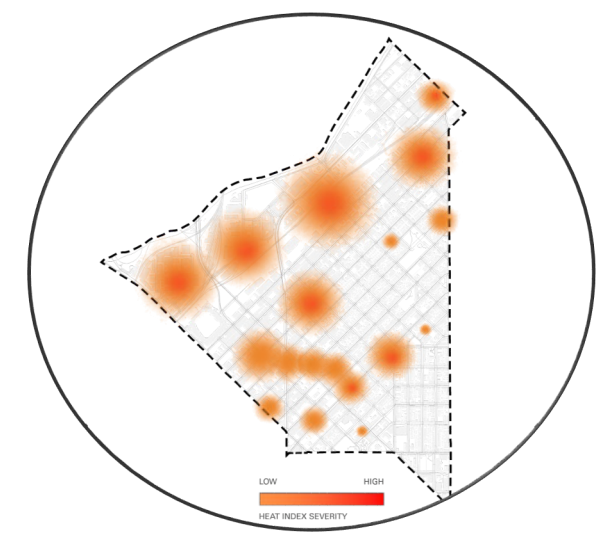


BOXYARD PARK
  EXISTING PARKS
  SOUTH PLATTE RIVER

# PRIORITY AREA ANALYSIS



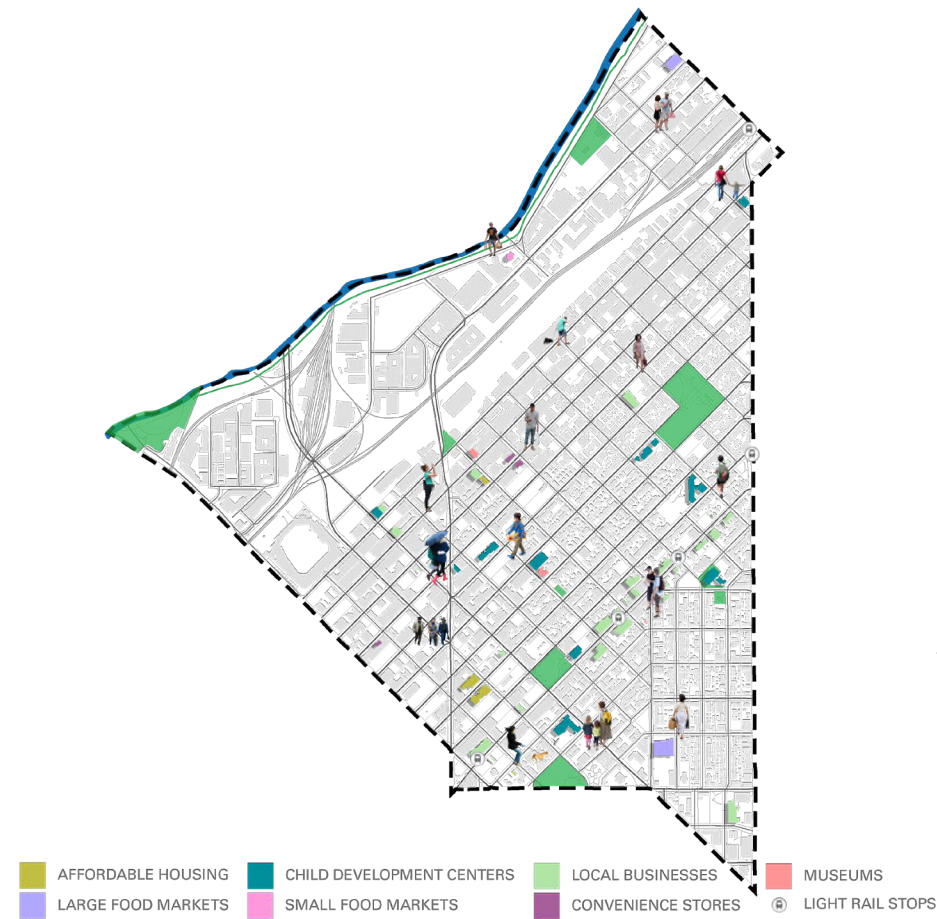
Heat Vulnerability Score: **63.12**



## LANDUSE



## LANDMARKS



## HAZARD AREAS



Existing number of trees on site: **4,998** – 4 Trees/acre











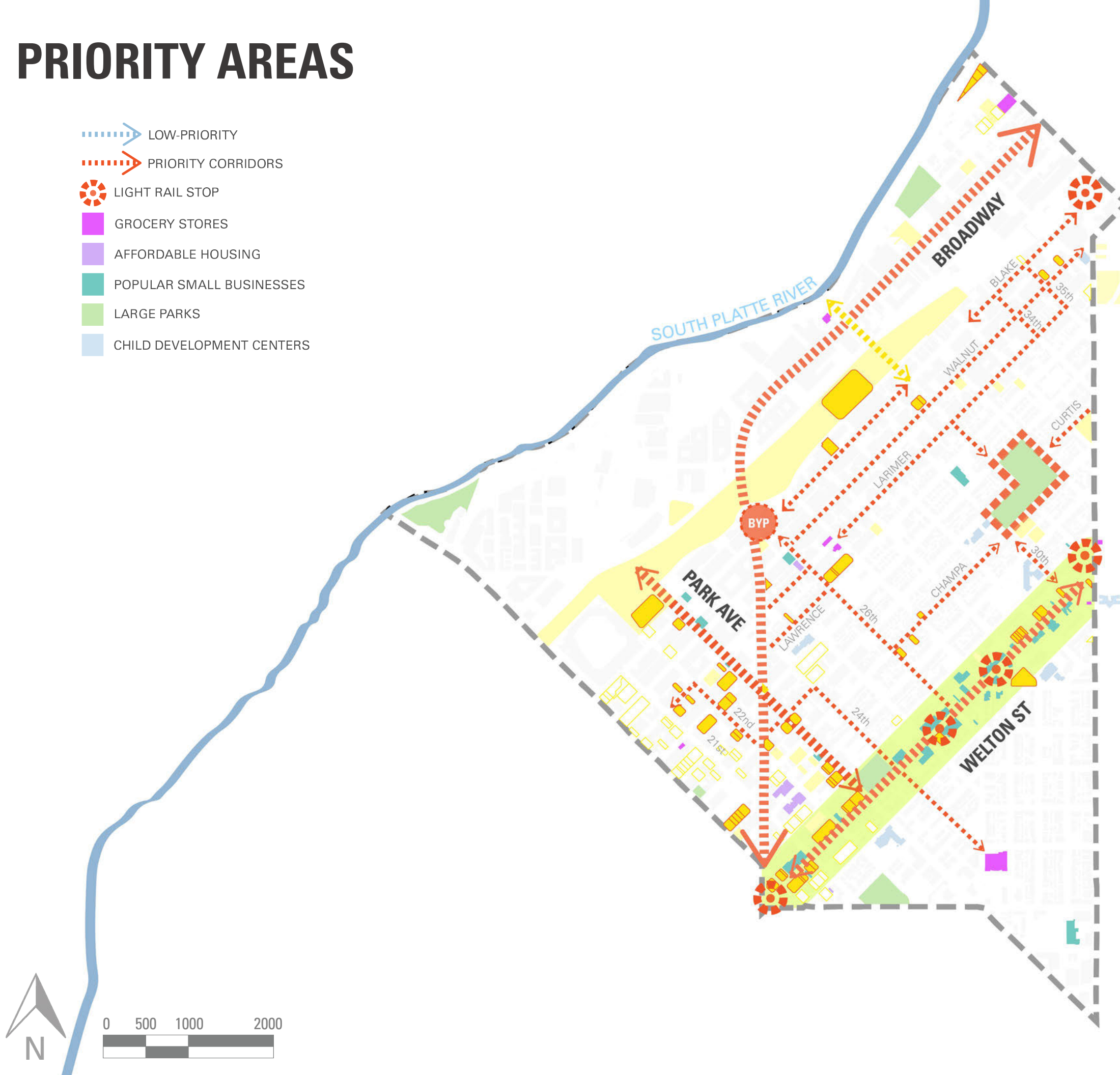
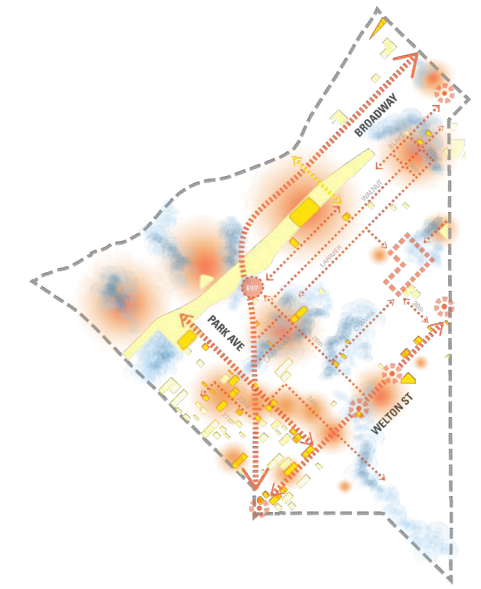
Number of affordable housing units: **259** Units/3 Properties






Percent Impervious Cover: **37.07%**

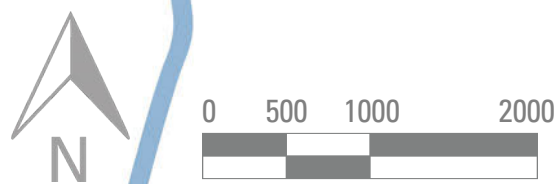
# PRIORITY AREAS

-  LOW-PRIORITY
-  PRIORITY CORRIDORS
-  LIGHT RAIL STOP
-  GROCERY STORES
-  AFFORDABLE HOUSING
-  POPULAR SMALL BUSINESSES
-  LARGE PARKS
-  CHILD DEVELOPMENT CENTERS



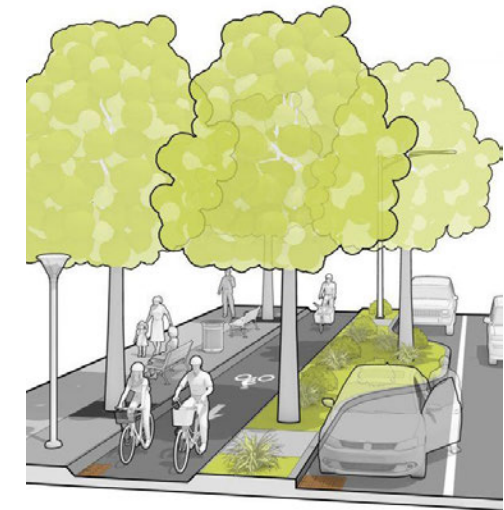
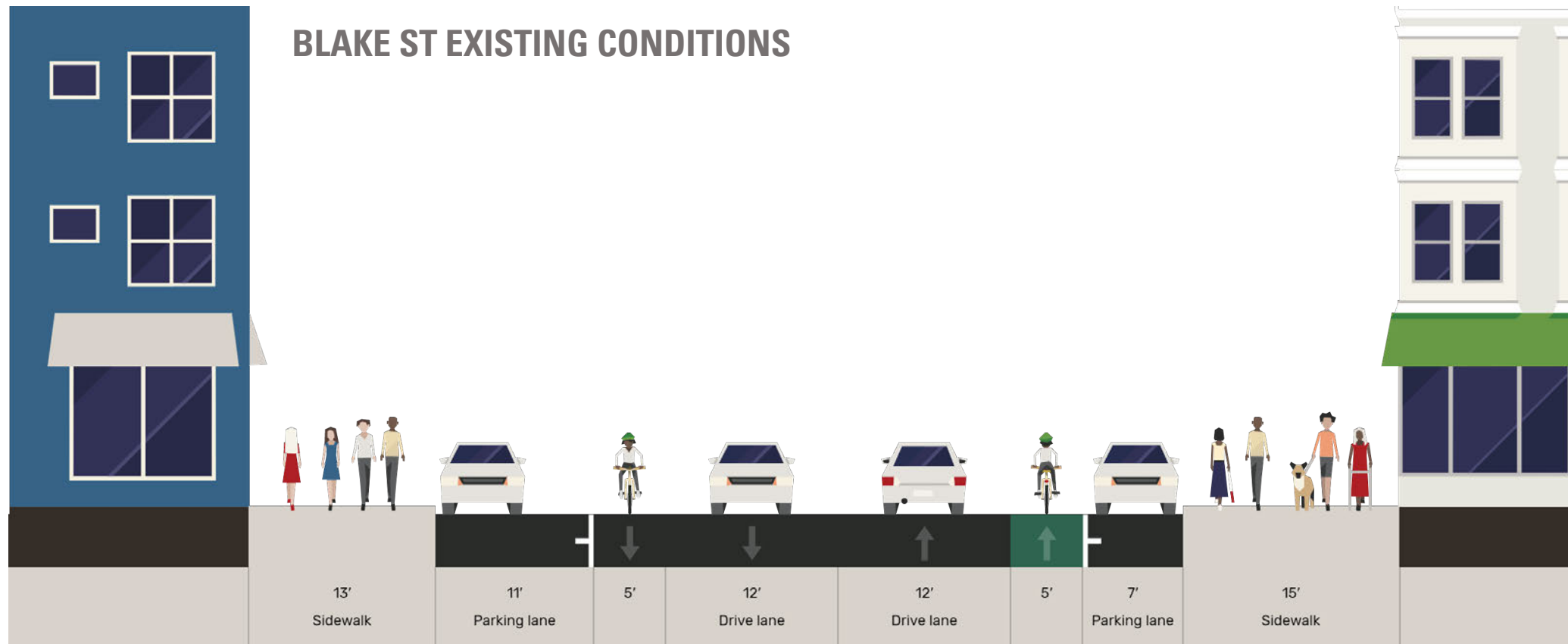
PRIORITY FOR GI INTERVENTION:  
VACANT & PARKING LOTS

-  HIGH
-  MEDIUM
-  LOW



# PROTOTYPE TYPOLOGIES – STREETSCAPE

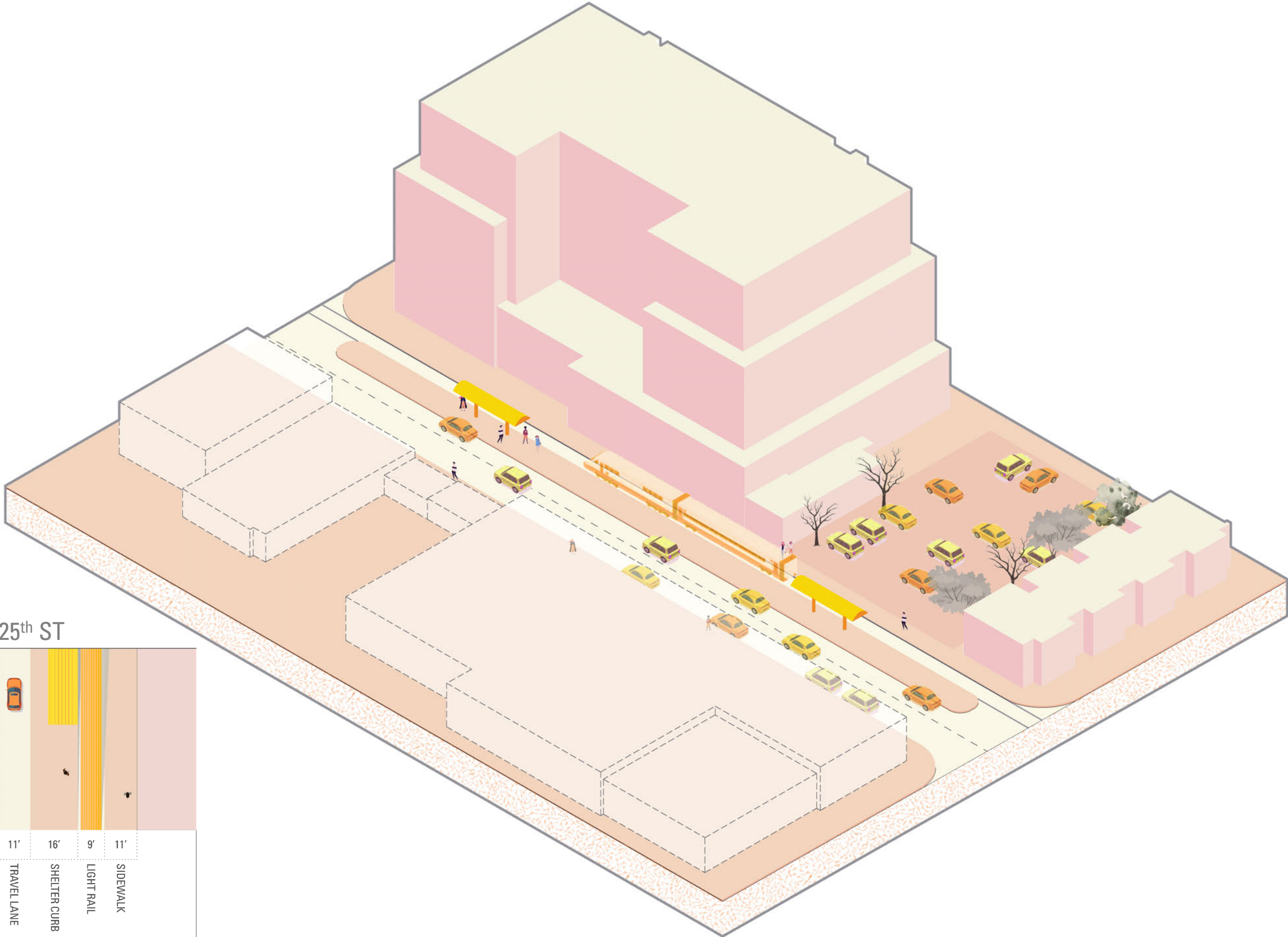
BLAKE ST EXISTING CONDITIONS



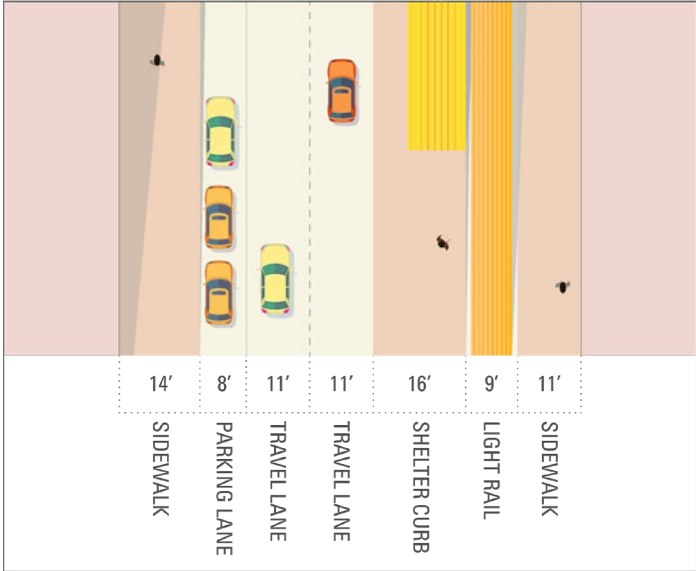
BLAKE ST PROPOSE STREET DESIGN



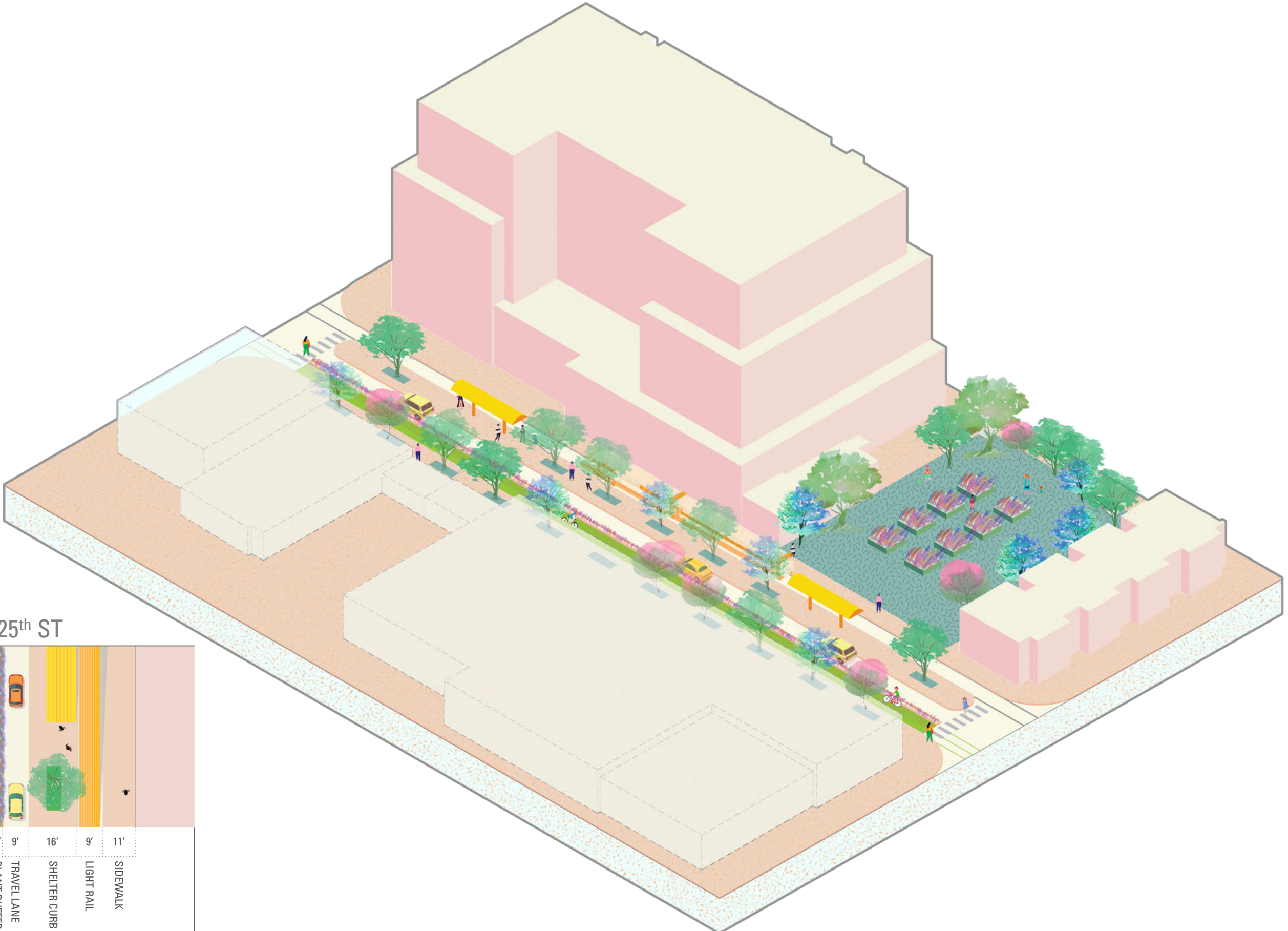
# EXISTING CONDITIONS – STREETScape



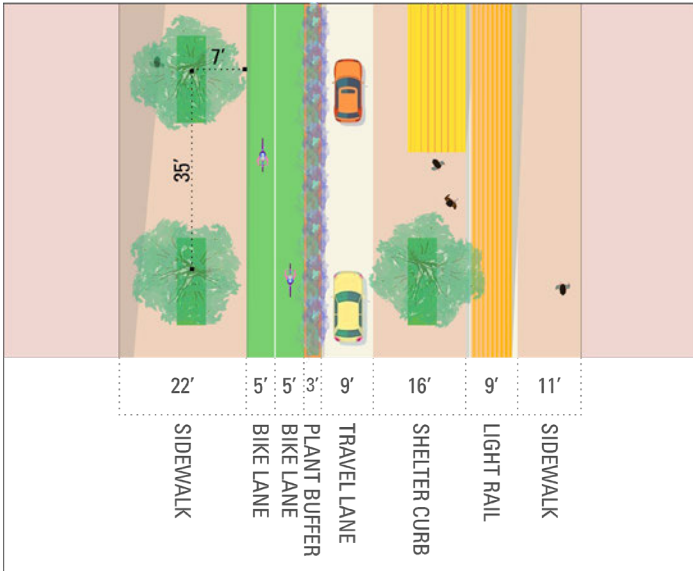
WELTON ST & 25<sup>th</sup> ST



# PROPOSED TYPOLOGIES – STREETSCAPE



WELTON ST & 25<sup>th</sup> ST

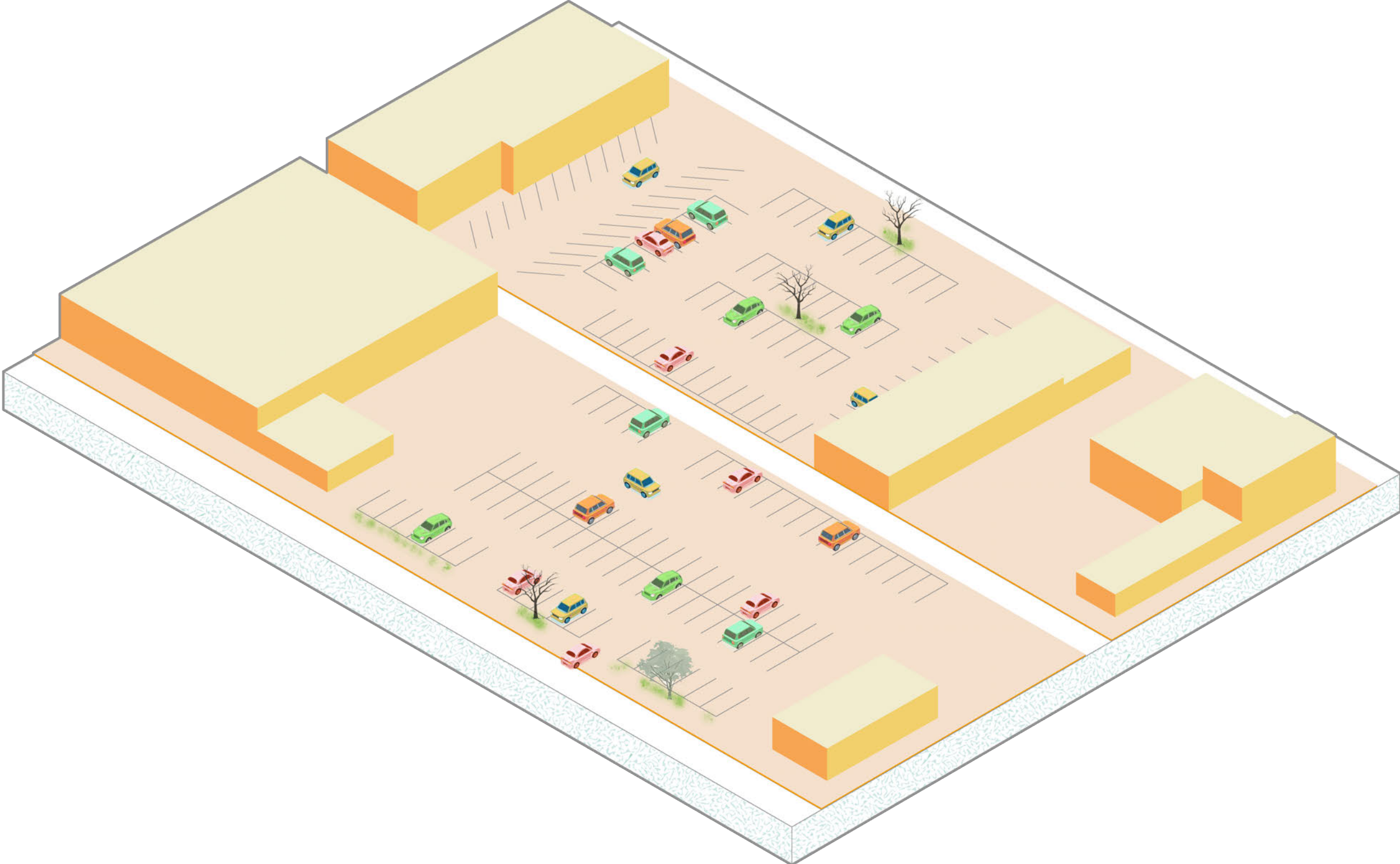


# PROTOTYPE TYPOLOGIES – PARKING LOT

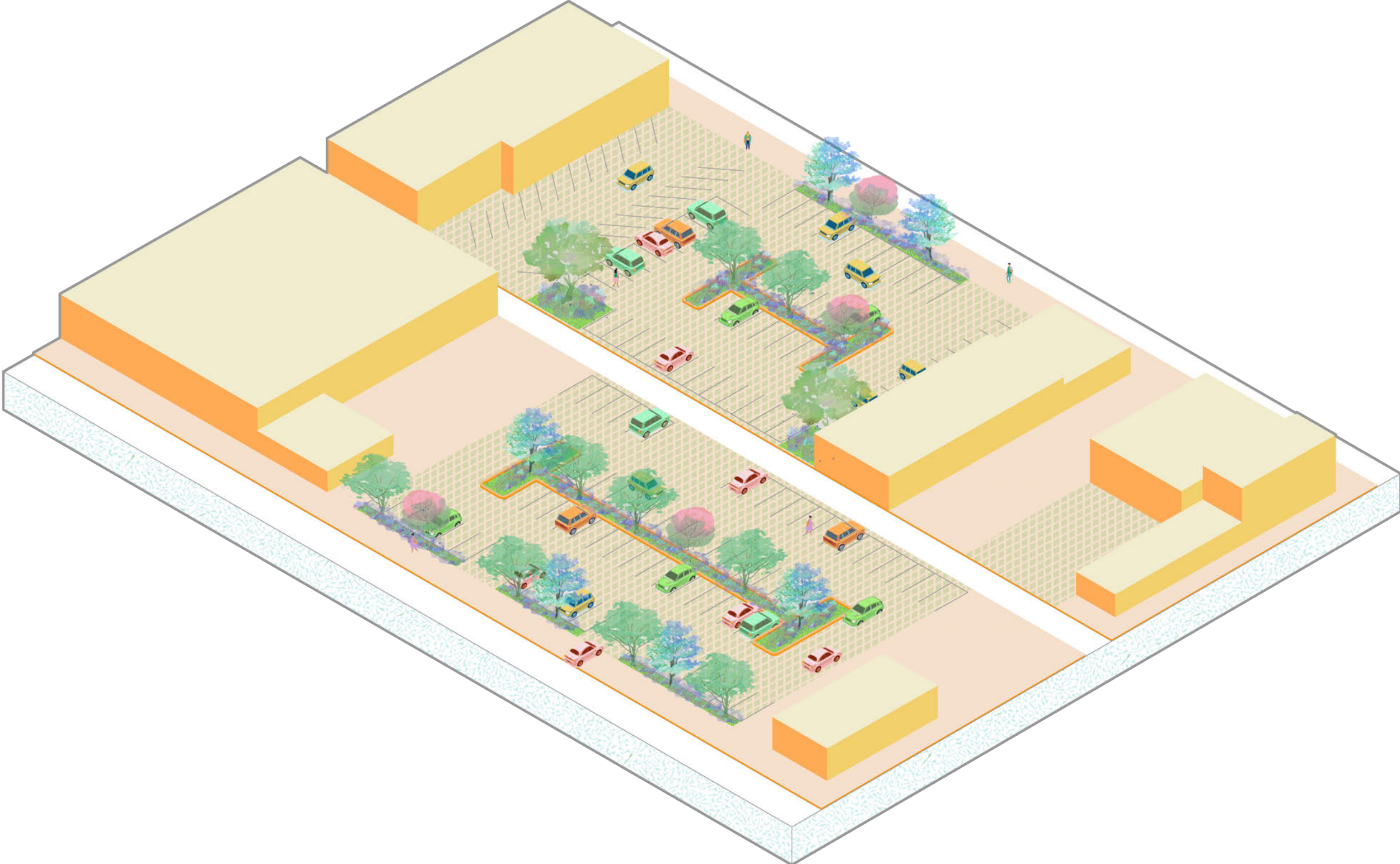




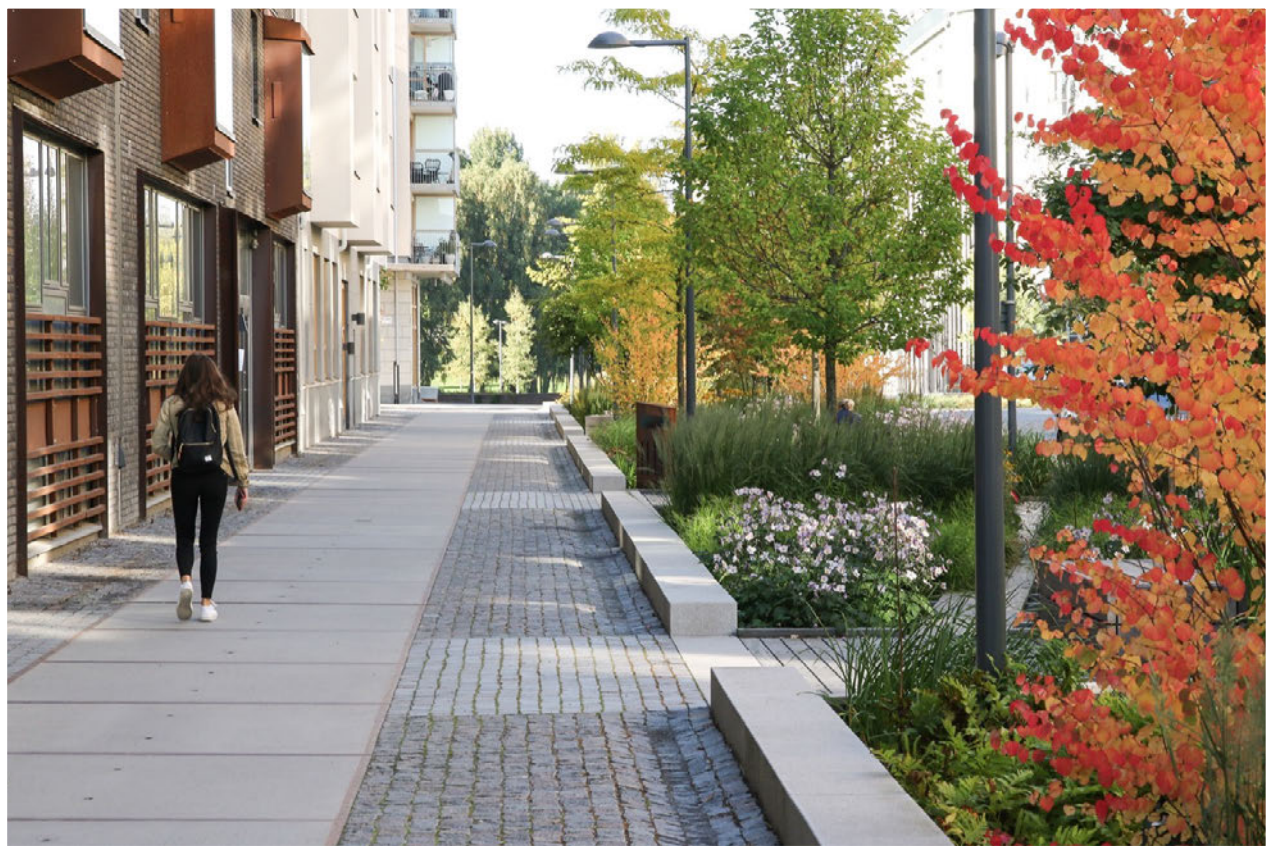
# EXISTING CONDITIONS – PARKING LOT



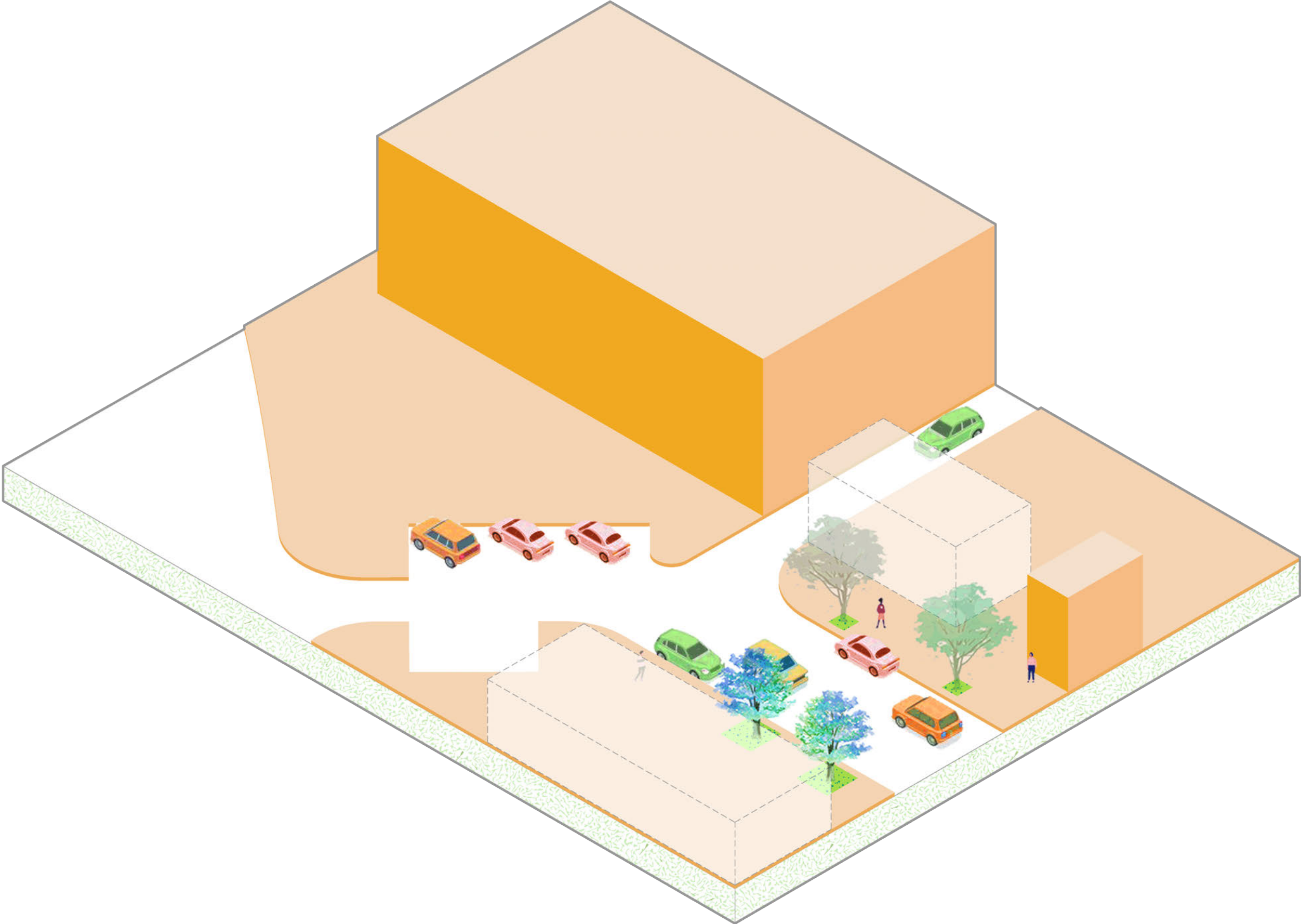
# PROPOSED TYPOLOGIES – PARKING LOT



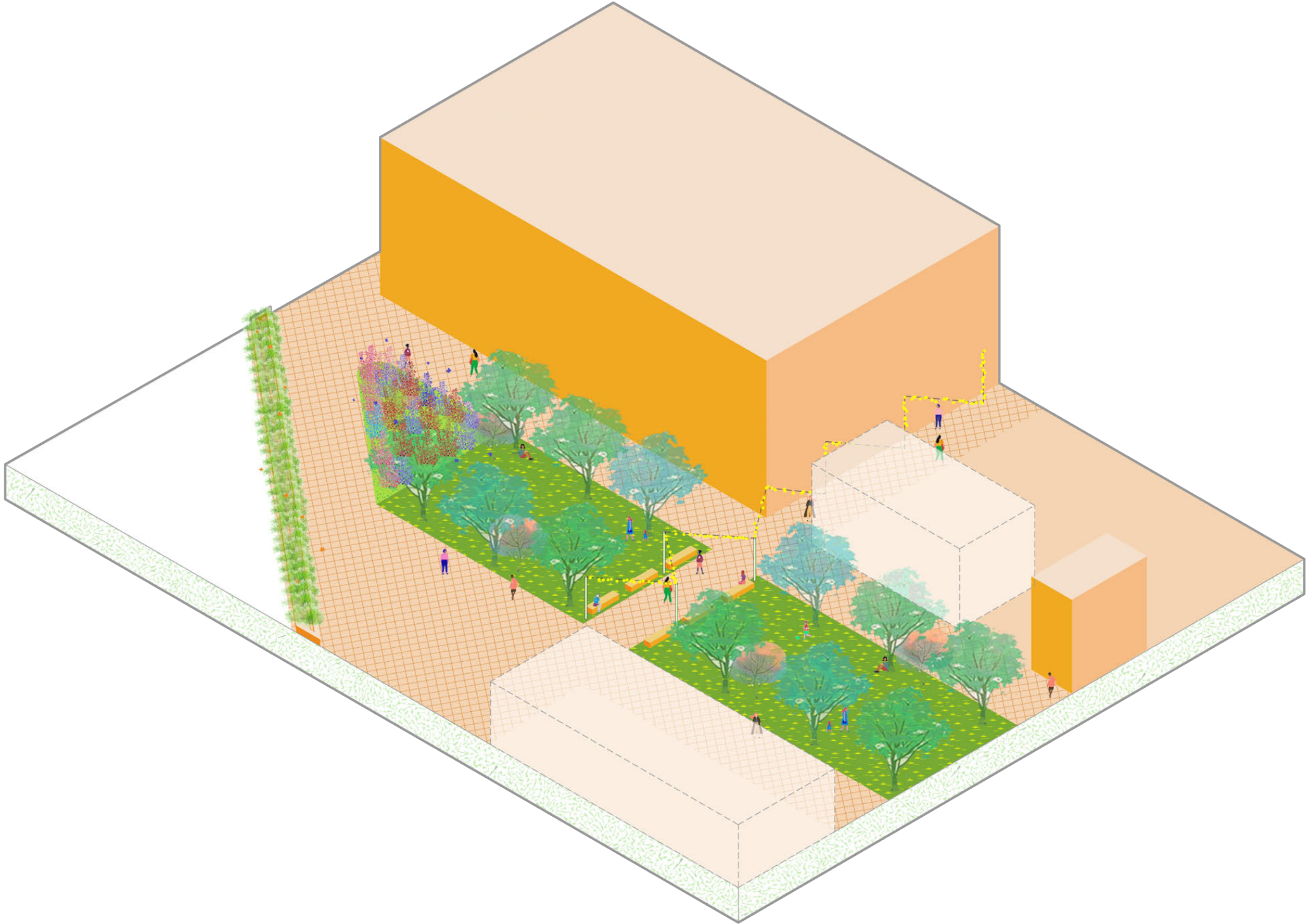
# PROTOTYPE TYPOLOGIES – COMMERCIAL FRONTAGE



# EXISTING CONDITIONS – COMMERCIAL FRONTAGE

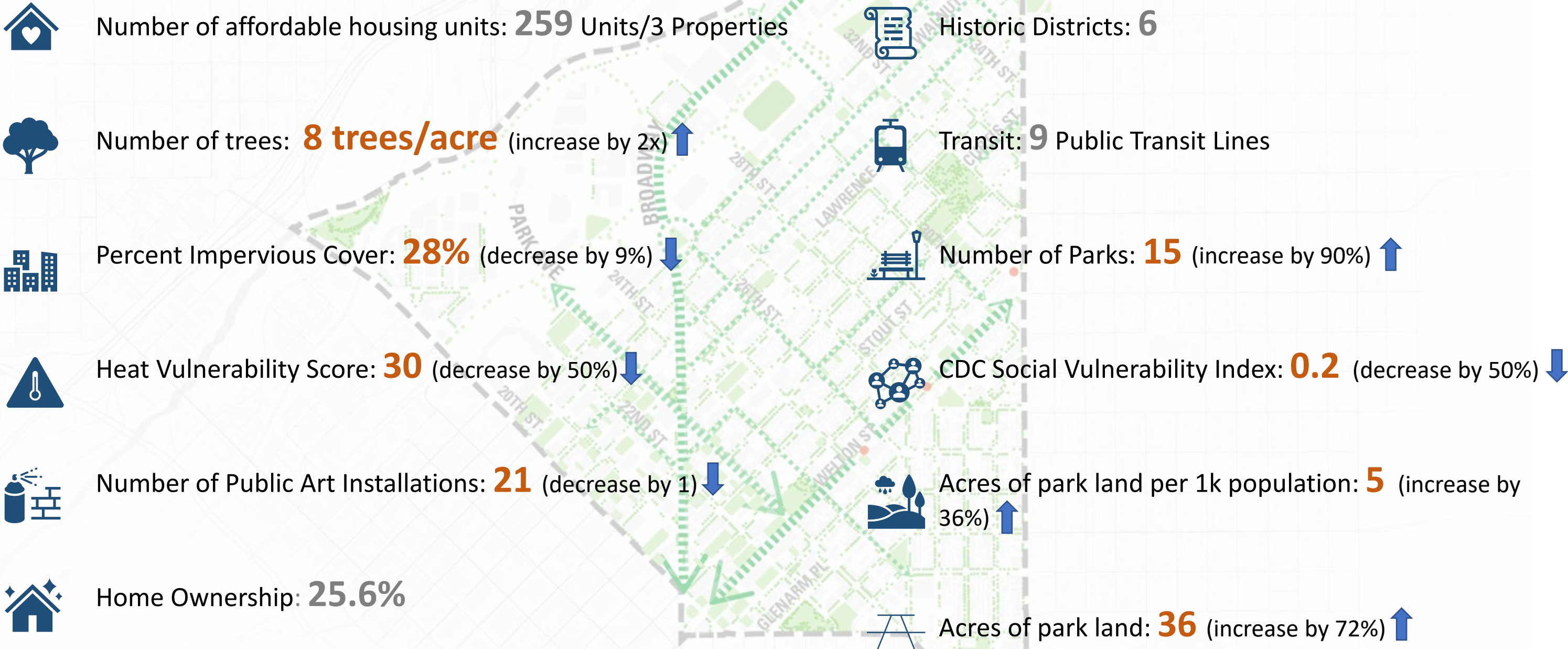


# PROPOSED TYPOLOGIES – COMMERCIAL FRONTAGE



# PROPOSED METRICS

## FIVE POINTS NEIGHBORHOOD



# PROJECT GOALS APPLICATIONS



## COMMUNITY

Facilitate community learning on green infrastructure & the environments  
 Cultivate a sense of community through shared space  
 Expose the community to nature through implementing native plants and strategies to attract and support wildlife

----- Green Infrastructure with signage, Workshops, Garden  
 ----- Varied intimate and larger gathering space, Pockets, Views  
 ----- Introduce native plantings



## ENVIRONMENT

Implement green infrastructure strategies to manage stormwater in areas susceptible to flooding  
 Increase tree canopy cover and vegetation to improve human thermal comfort, air quality, and overall human health  
 Introduce pollinator species in the neighborhood

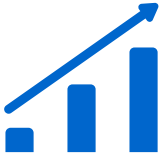
----- Pervious parking lots, Green business frontages  
 ----- Streetscapes, Road diets, +27 trees  
 ----- Planters, Pollinator highway



## ART

Celebrate the industrial history by maintaining a local materials palette  
 Celebrate the successional evolution and history of the neighborhood: past, present, and future

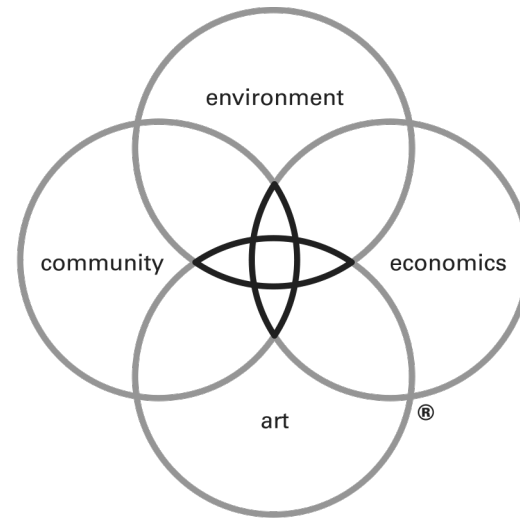
----- Local artists + Community, (mural, painted seat walls, events)  
 ----- Small business spotlight, Multi-generational programming



## ECONOMICS

Promote and identify P3 partnerships and investment opportunities  
 Demonstrate value of green infrastructure to property owners  
 Address restricted pedestrian mobility to increase human traffic to local businesses

----- Mobetta Green, Lincoln Hills Cares  
 ----- Projected money saved on gray infrastructure  
 ----- Road diets, Pedestrian friendly borders/pavement



## DW LEGACY DESIGN<sup>®</sup>

Legacy Design is the defining element of our practice. It is our commitment to an elevated level of design inquiry to arrive at the optimal solutions for clients. The process ensures that our projects reflect the critical issues facing the built environment and that they deliver measurable benefit to clients and communities. It is the foundation of the firm's workshop culture and guides all projects.

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