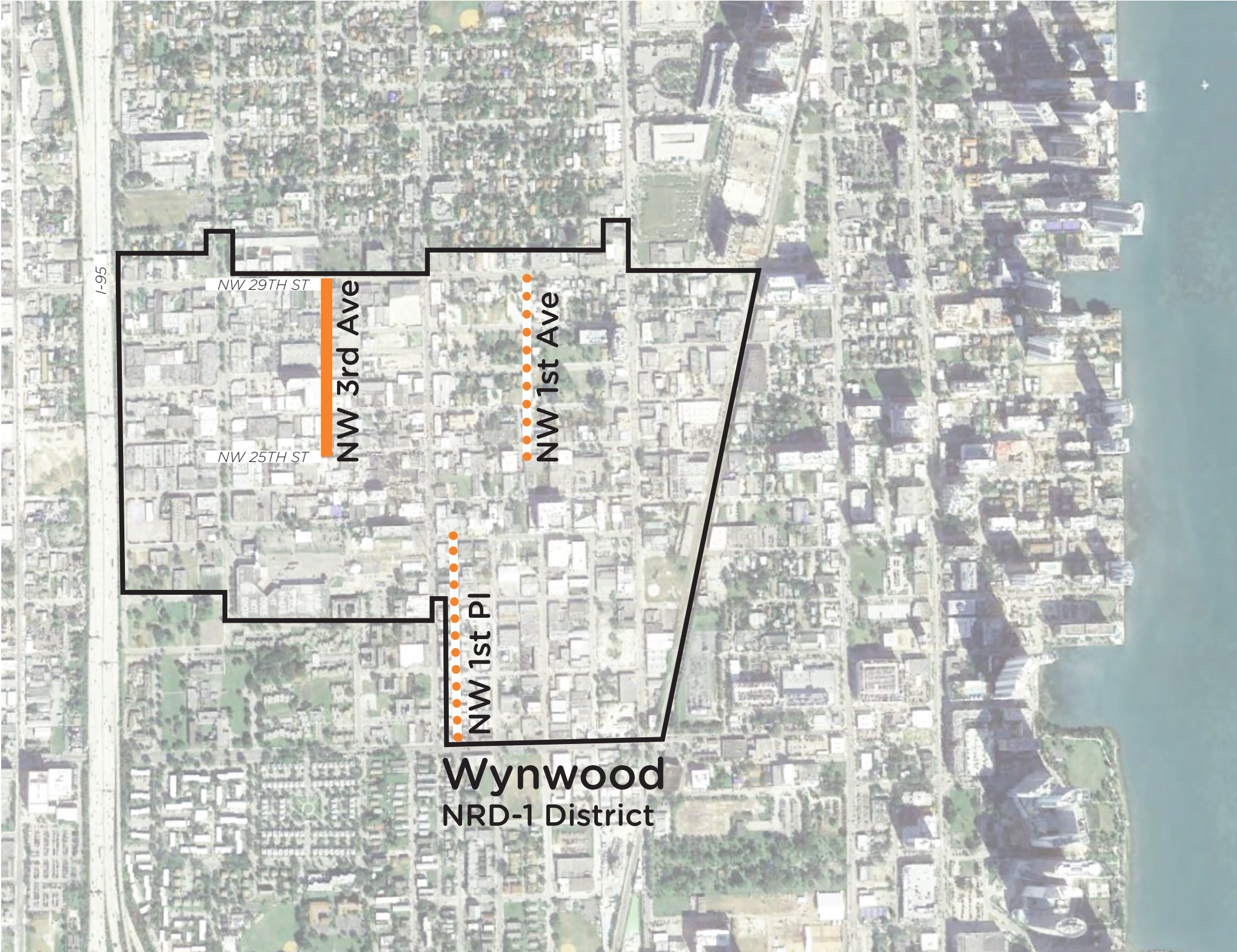




Wynwood Woonerf Outreach Meeting

NW 3rd Avenue - Analysis Findings

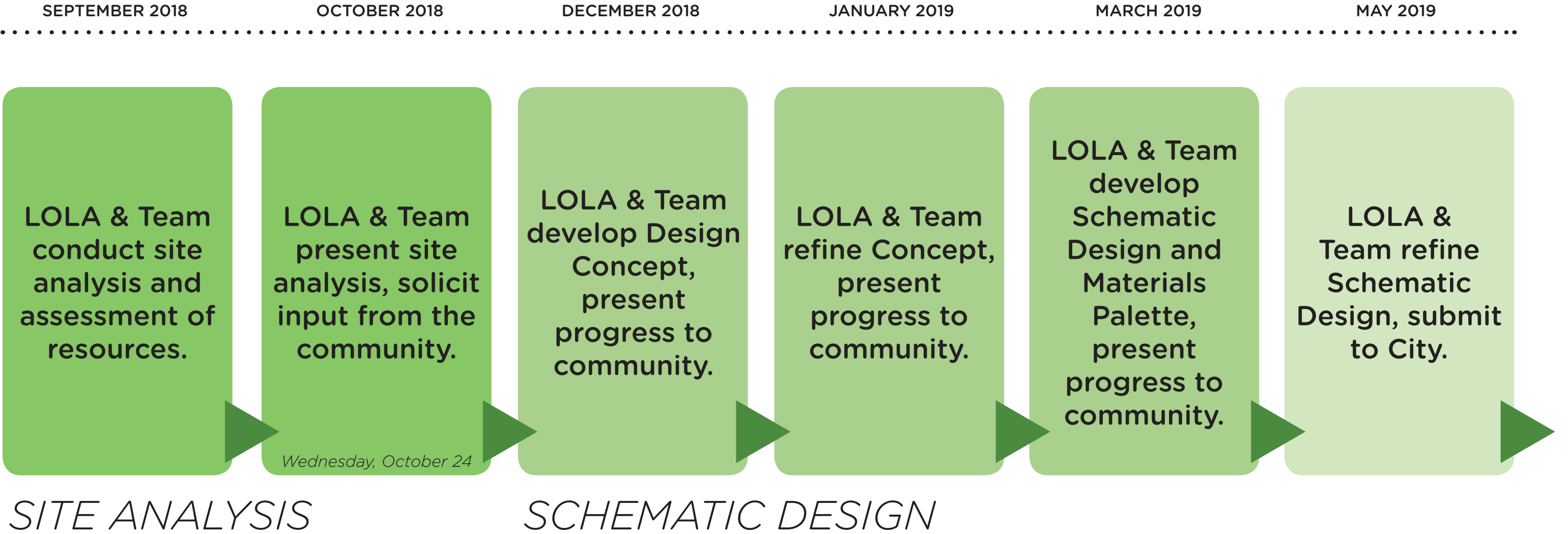
Wynwood Woonerf | NW 3rd Ave Pilot

A dynamic new street design developed to convert a public throughfare into a pedestrian primary zone which acts as a public open space



-  Pilot Woonerf
-  Planned Woonerfs

Project Process and Timeline



Analysis and Findings | NW 3rd Avenue

i. Introductions

Jennifer Bolstad (Local Office Landscape and Urban Design)

Walter Meyer (Local Office Landscape and Urban Design)

Nina Johnson (Nina Johnson Gallery)

Tony Garcia (Street Plans Collaborative)

Patrick Shearer (E-Sciences)

Orestes Betancourt (Coastal Systems International)

ii. Analysis | Constraints and Opportunities

Art and Identity

Architectural Streetscape

Natural Systems

Infrastructure Systems

iii. Principles for a Wynwood Woonerf

iv. Questions/Comments

v. Questionnaire

ART ASSESSMENT

NINA JOHNSON

History of Public Art in Miami

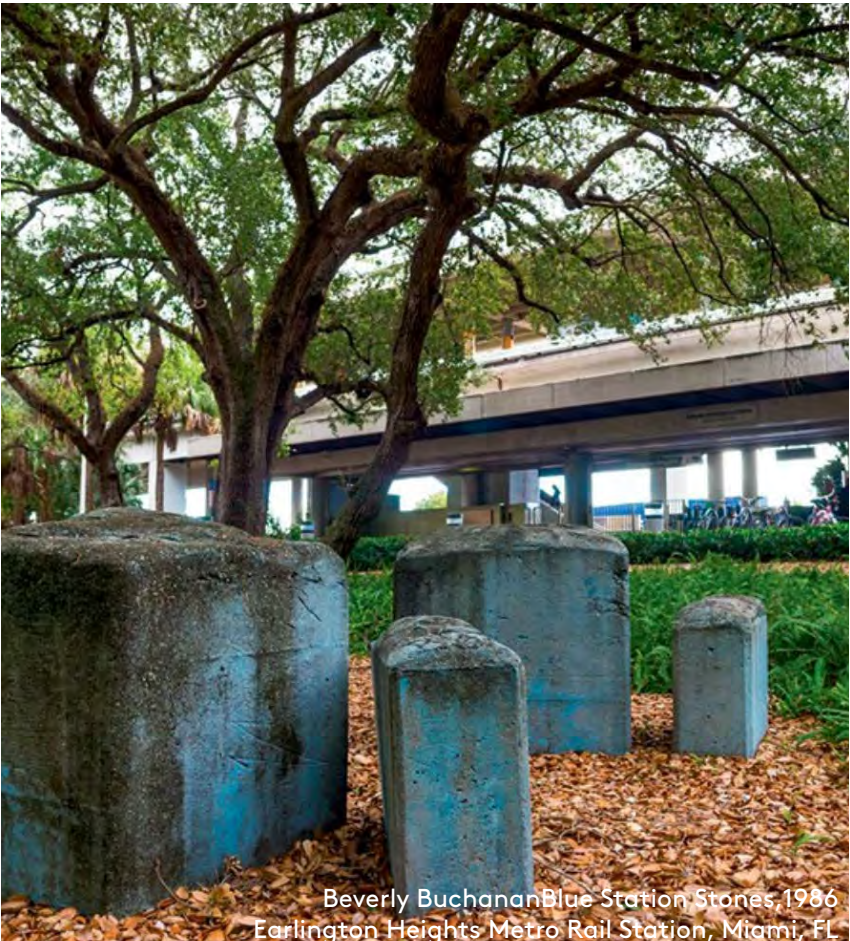
Art Assessment



Christo and Jean-Claude
Surrounding Islands, 1982
Biscayne Bay, Miami, FL



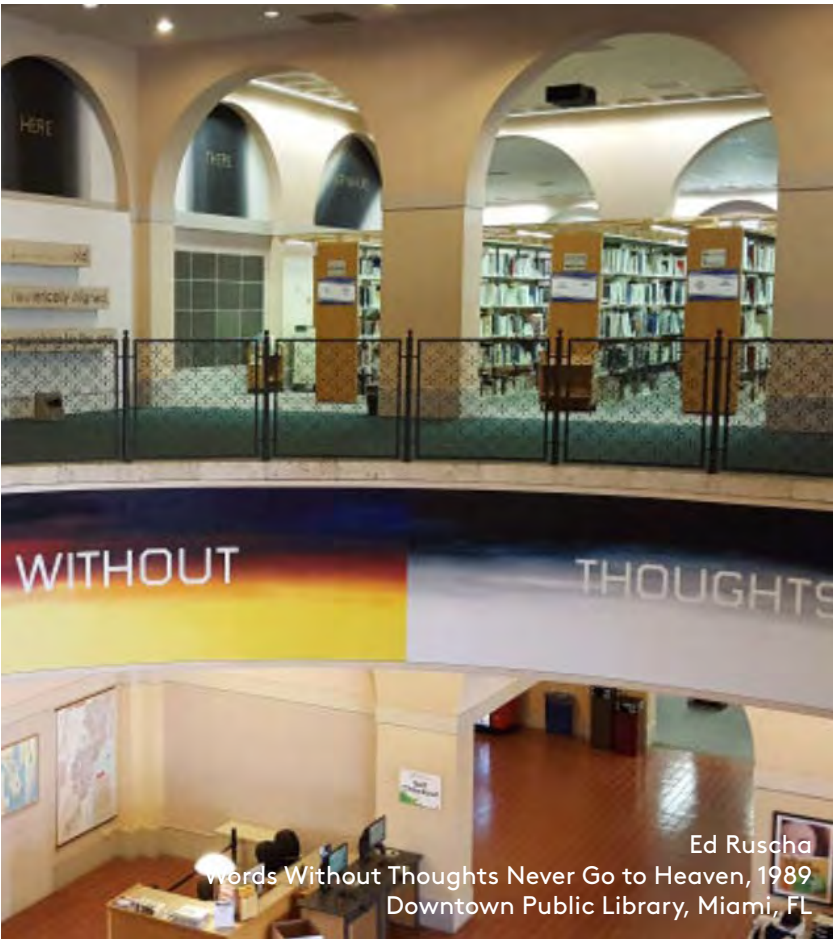
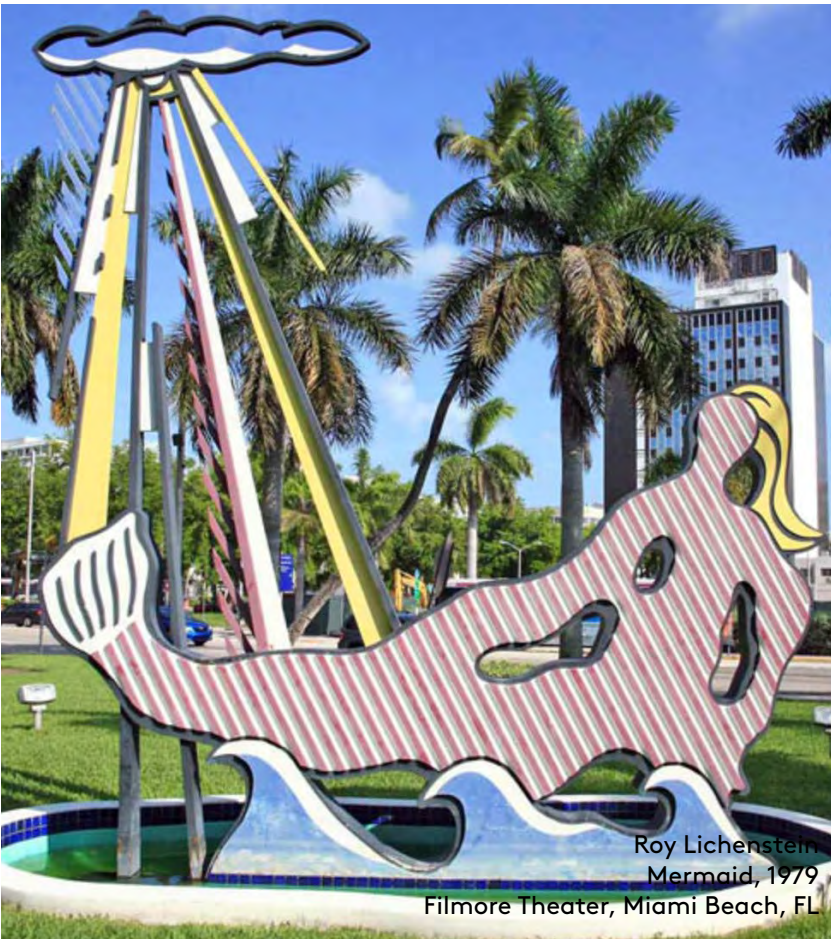
Isamu Noguchi
Slide Mantra, 1991
Bayfront Park, Miami, FL



Beverly Buchanan
Blue Station Stones, 1986
Earlington Heights Metro Rail Station, Miami, FL

History of Public Art in Miami

Art Assessment



Current Public Art in Miami

Art Assessment



Ai Weiwei
According to What, 2017
Perez Art Museum, Miami, FL



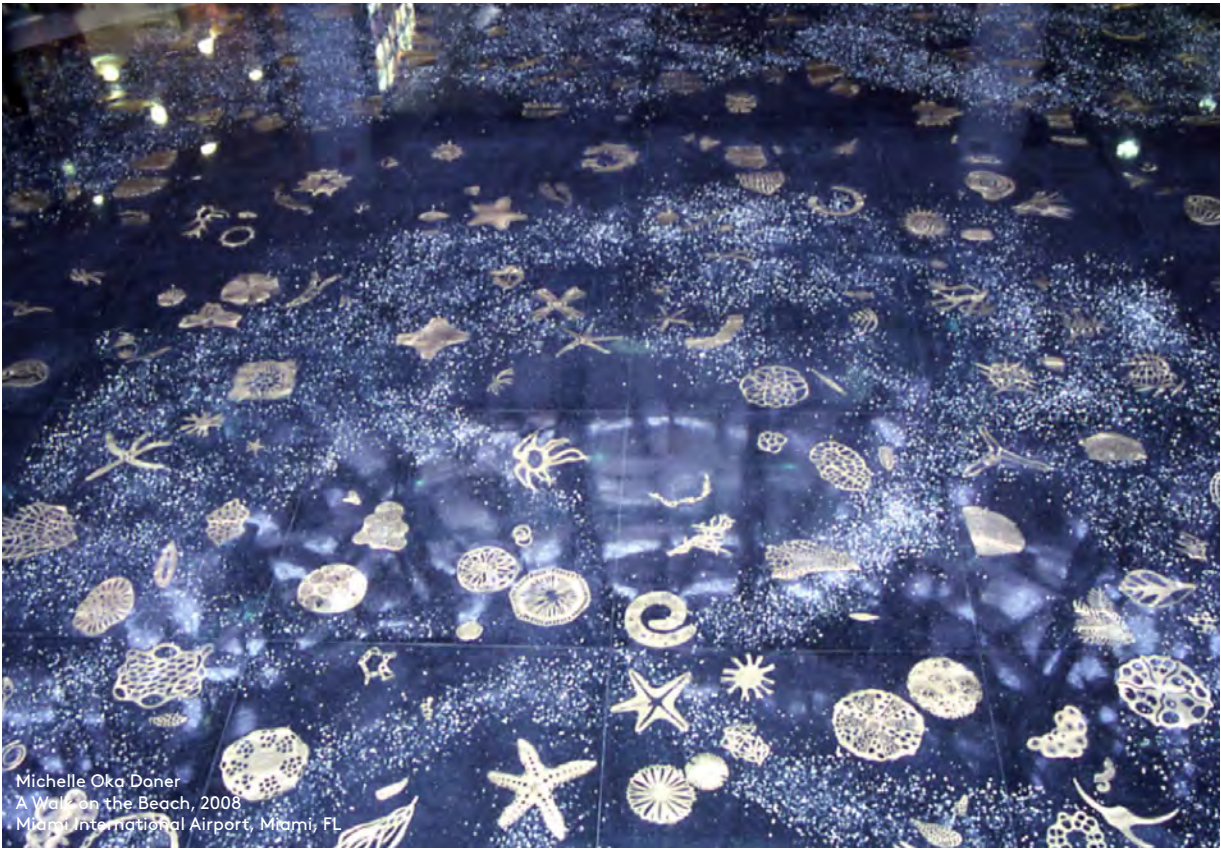
Ugo Rondinone
Miami Mountain, 2016
Miami Beach, FL



Donal Judd
ICA Retrospective, 2018
Design District, Miami FL

Current Public Art in Miami

Art Assessment



Current Public Art in Wynwood

Art Assessment



Future of Wynwood | Installations

Art Assessment



Camila Walala
Brooklyn Facade, 2018
Brooklyn, NY



Anish Kapoor
Cloud Gate, 2017
Commissioned for AT&T Millenium Park, Chicago, IL



Isa Genzken,
Rose III, 2016
Zucatti Park, New York, NY

Future of Wynwood | Shading

Art Assessment



Michael Fores
Pleated Inflation, 2015
Commissioned by Lycée Christian Bourquoin, Argelles, FR



Olaf Breuning
Clouds, 2014
Commissioned by Public Art Fund, New York, NY



ETH Zurich + Urban Think Tank
Xarranca Pavillion, 2017
Organized by EMBT, Barcelona, SP

Future of Wynwood | Seating

Art Assessment



Jurgen Mayer H
XXX Times Square With Love
Commissioned by Times Square Alliance, New York, NY



Snarkitecture
Playhouse, 2017
Commissioned by Exhibit Columbus, Columbus, IN

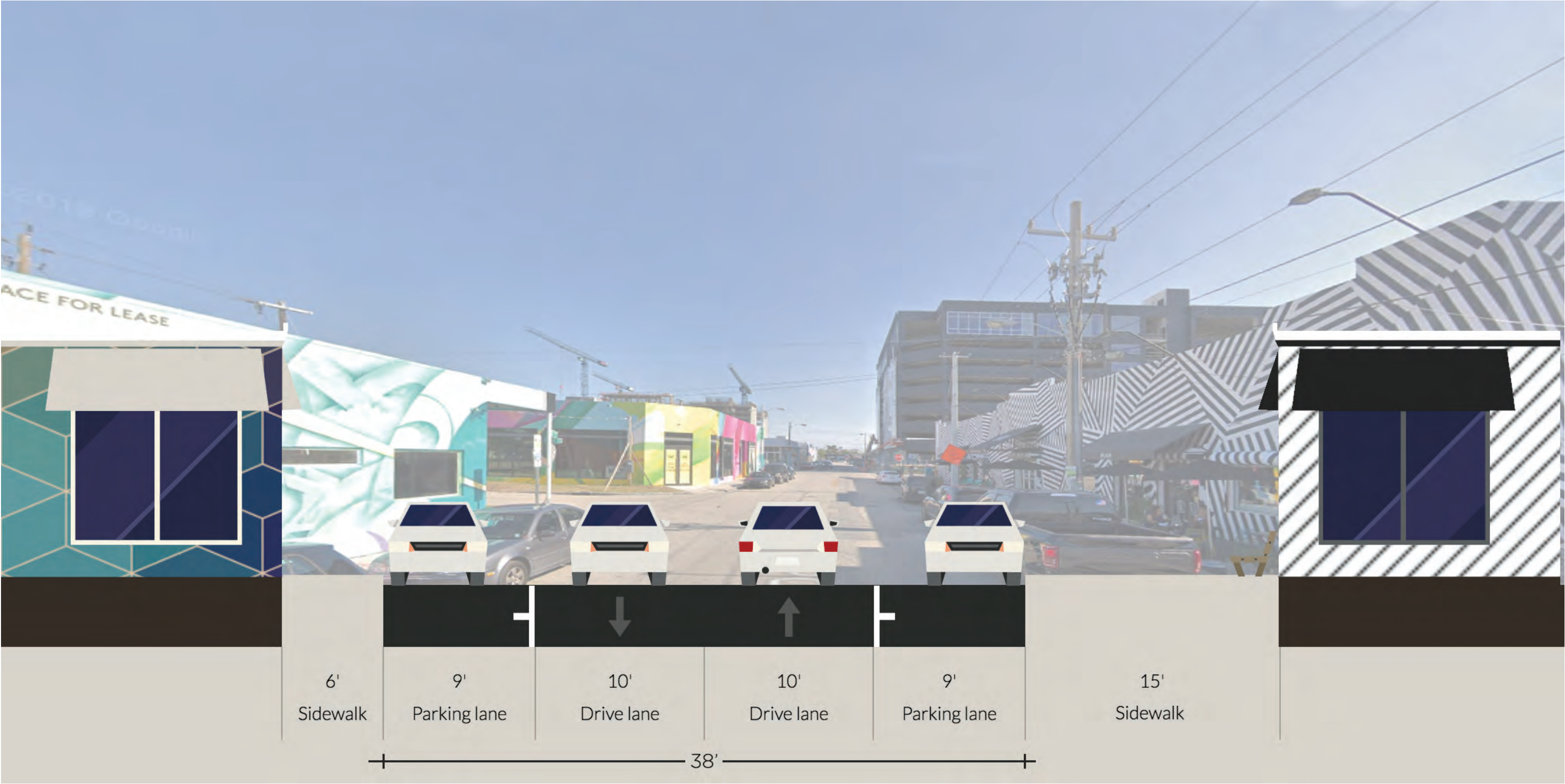


Jonathan Nesci
The Nesci Dome, 2017
Commissioned for the Ace Hotel, Chicago, IL

ARCHITECTURAL STREETSCAPE

THE STREET PLANS COLLABORATIVE

WYNWOOD
WOONERF
NW 3RD AVE
Typical Street Section



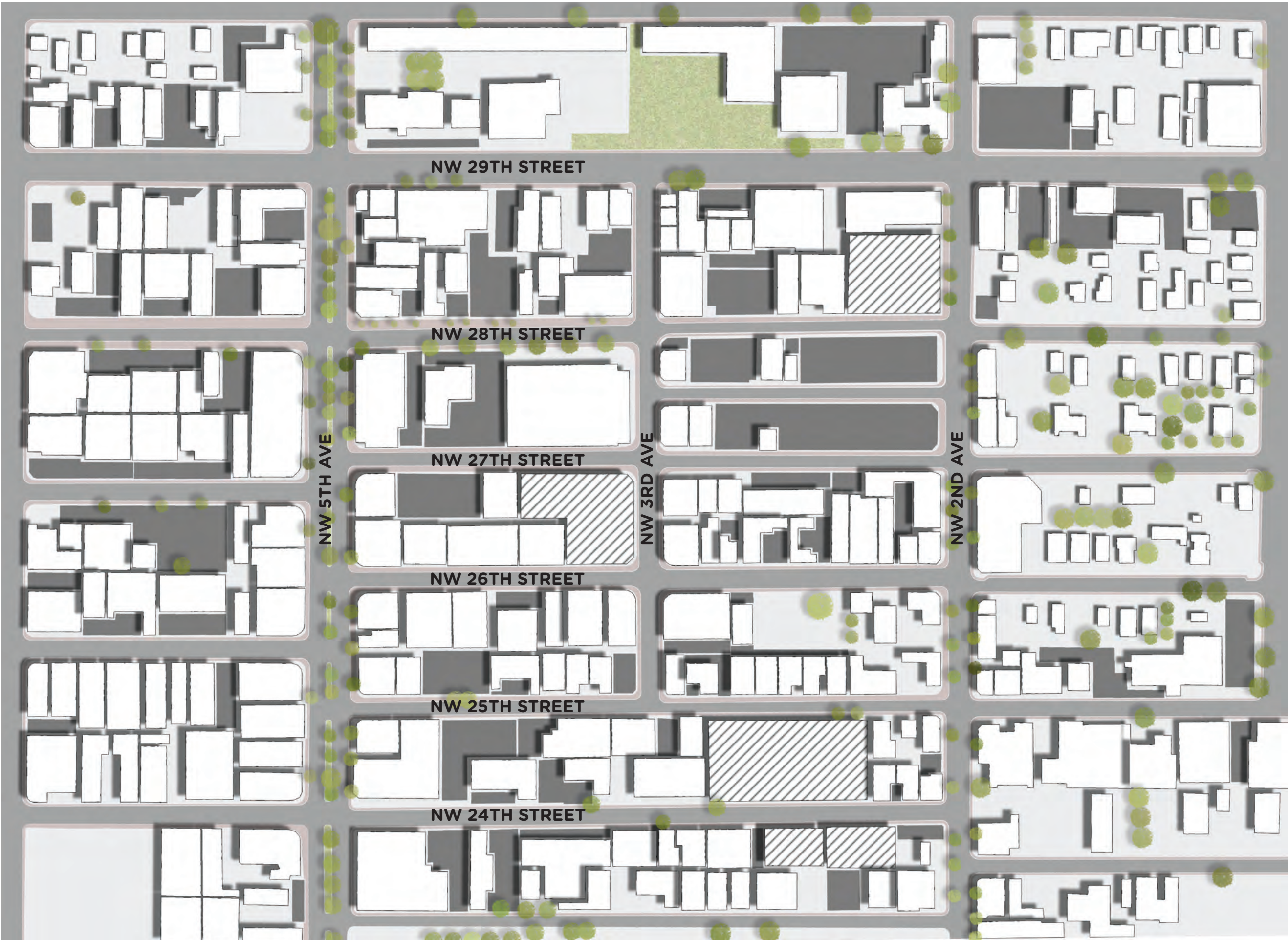
WYNWOOD
WOONERF
NW 3RD AVE

Existing Buildings
Buildings Under Construction



WYNWOOD
WOONERF
NW 3RD AVE

- Existing Buildings
- Buildings Under Construction
- Parking Lots / Loading Zones



WYNWOOD WOONERF

NW 3RD AVE

- Existing Buildings
- Buildings Under Construction
- Parking Lots / Loading Zones
- Existing Public Spaces

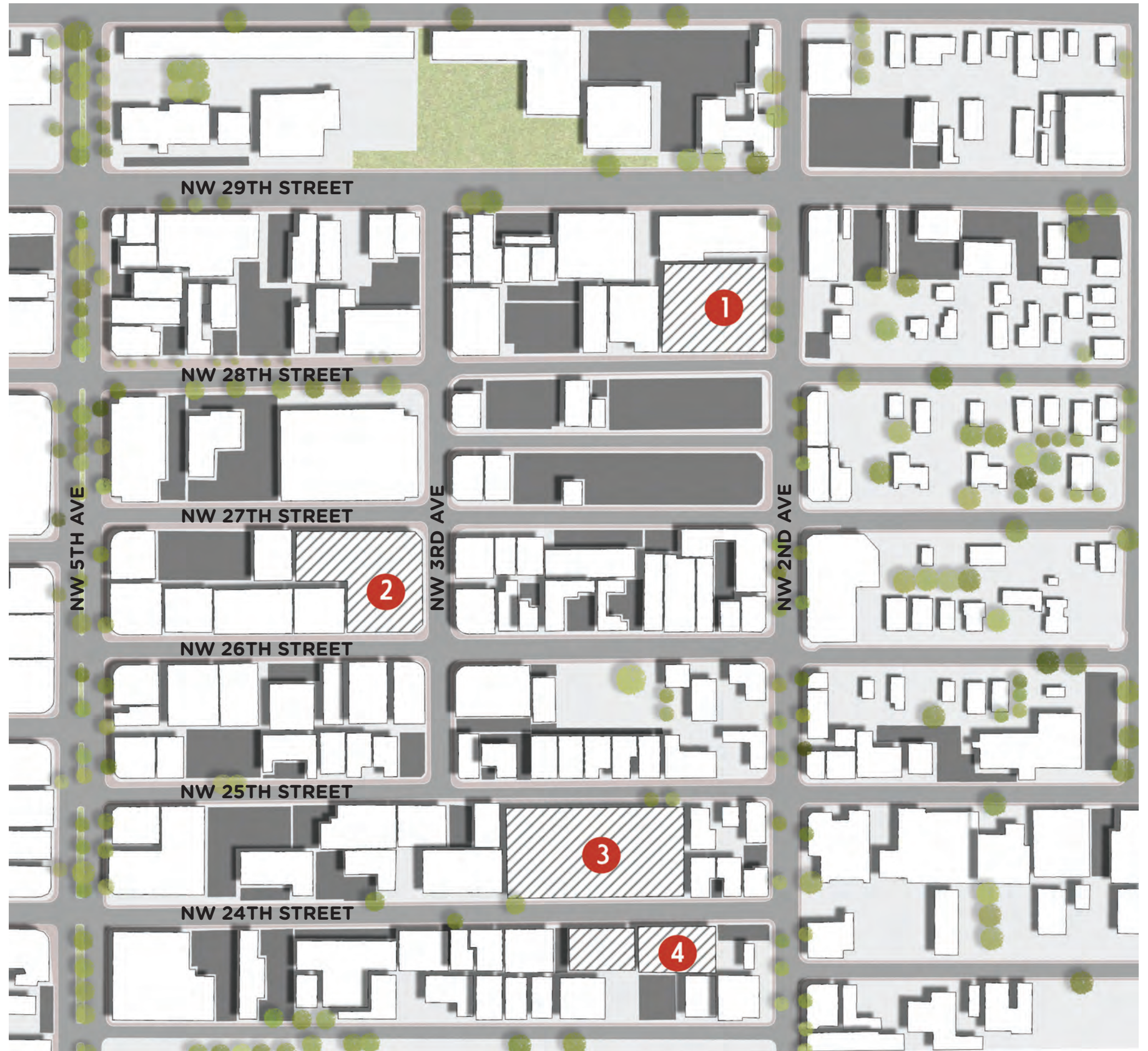


WYNWOOD WOONERF

NW 3RD AVE

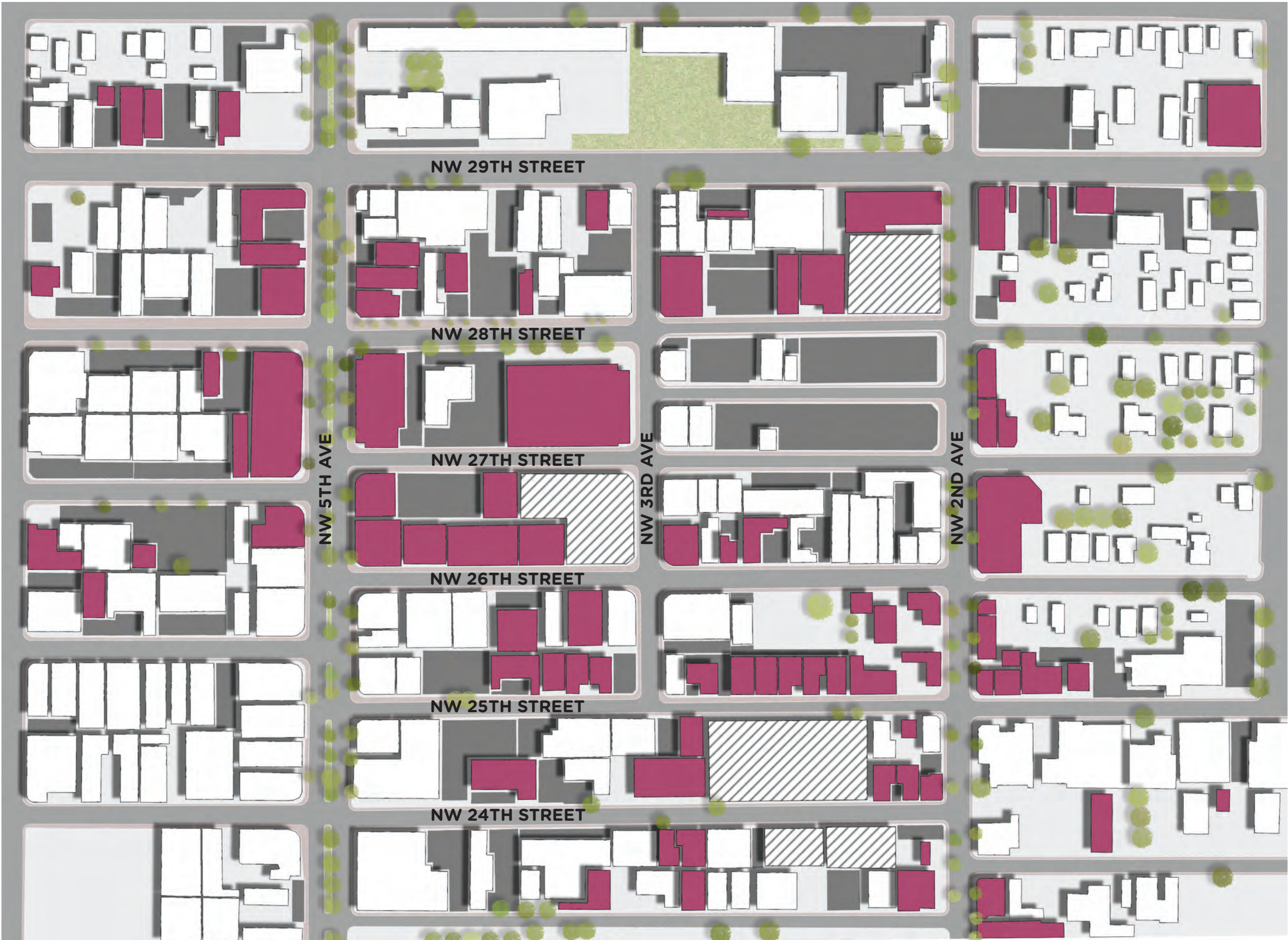
- Existing Buildings
- Buildings Under Construction
- Parking Lots / Loading Zones
- Existing Public Spaces
- Available Semi-Public Spaces





WYNWOOD
WOONERF
NW 3RD AVE

Commercial



WYNWOOD
WOONERF
NW 3RD AVE

Commercial
Industrial



WYNWOOD
WOONERF
NW 3RD AVE

- Commercial
- Industrial
- Residential



WYNWOOD
WOONERF
NW 3RD AVE

- Commercial
- Industrial
- Residential
- Institutional
- Office



WYNWOOD
WOONERF
NW 3RD AVE

Existing AM Peak Traffic
Volumes* (8:00AM - 9:00AM)



Existing PM Peak Traffic
Volumes* (4:30PM - 5:30PM)



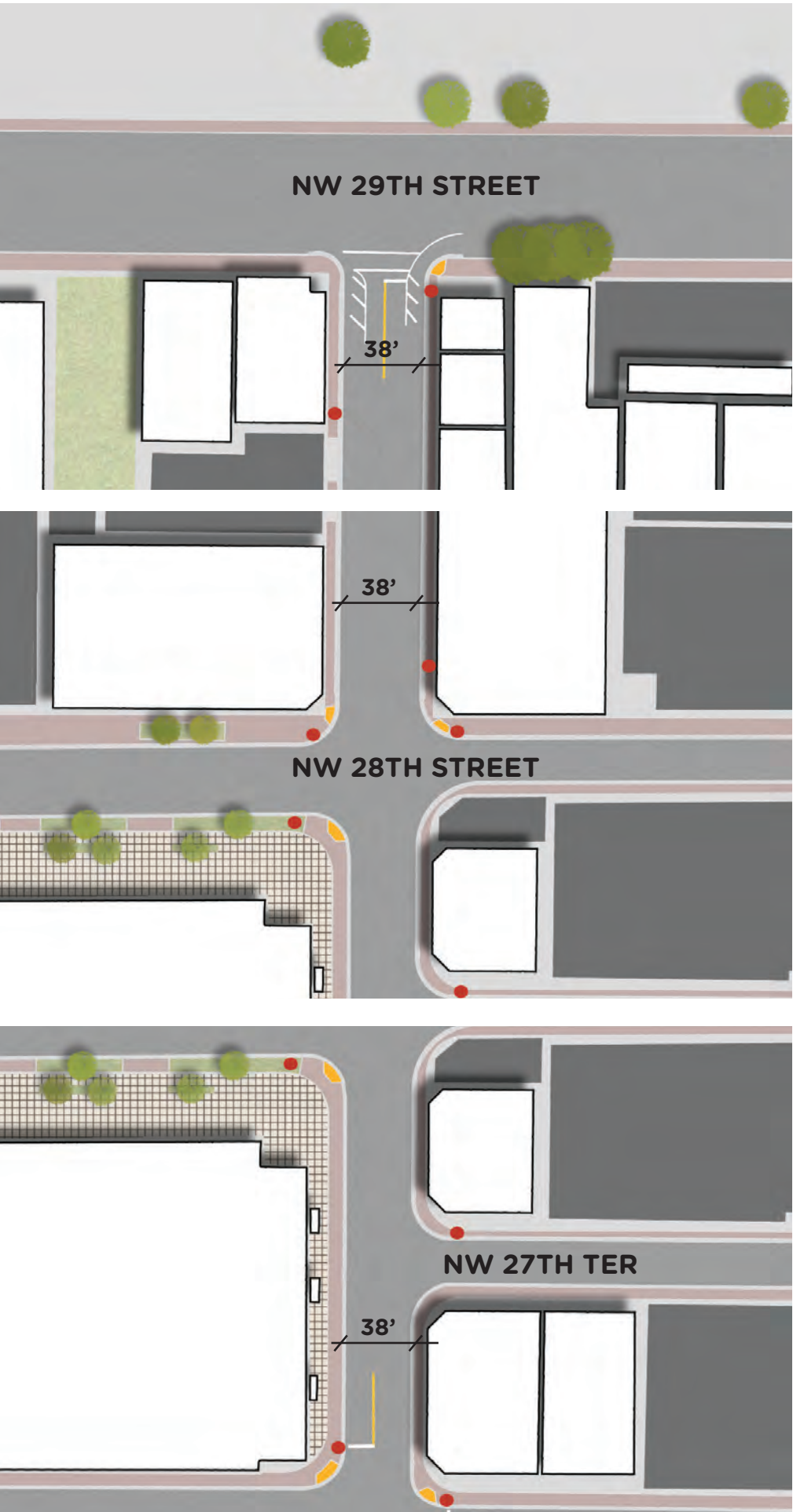
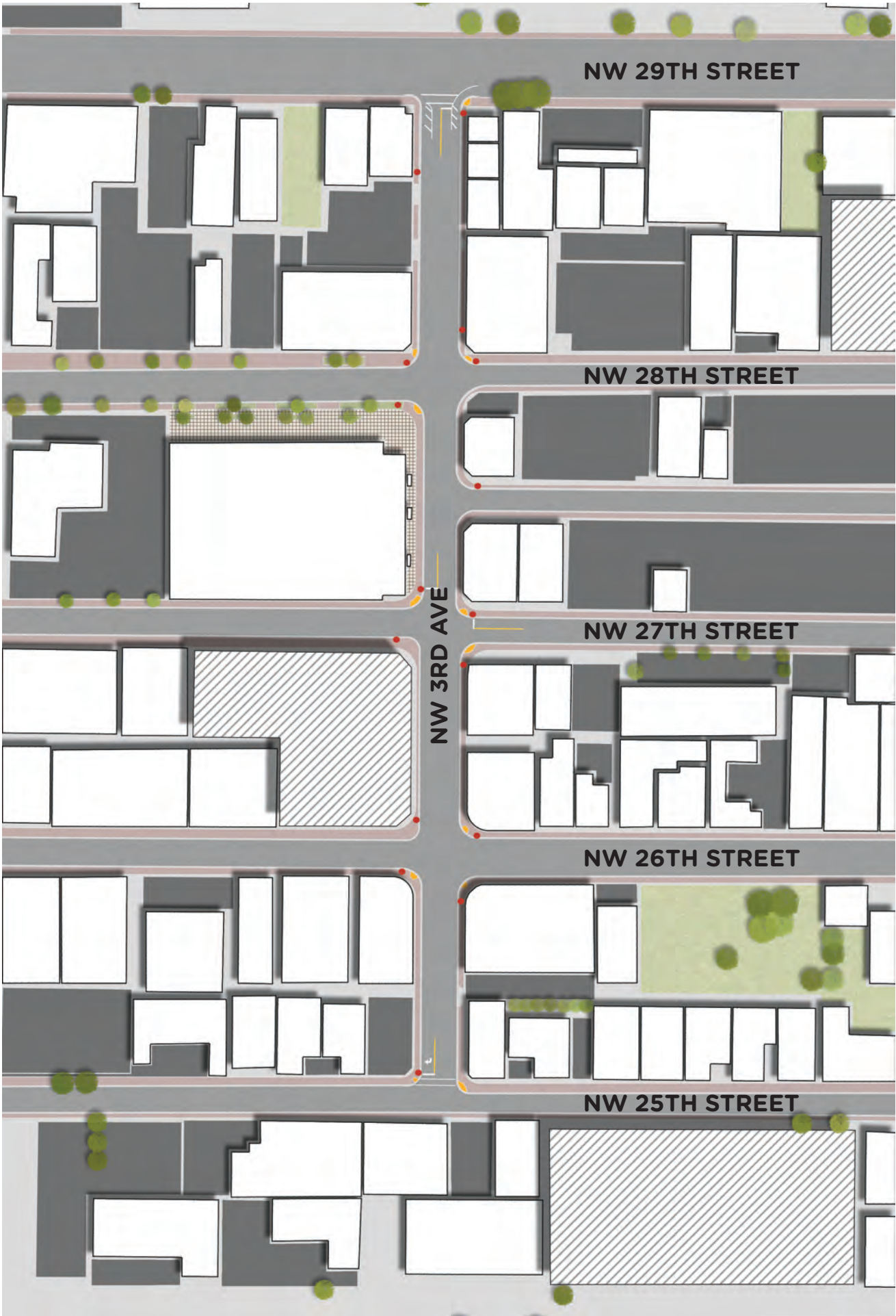
*Data from BID Traffic Study -
Caltran Engineering Group. 2016



WYNWOOD
WOONERF
NW 3RD AVE

NW 3rd Avenue
Intersections

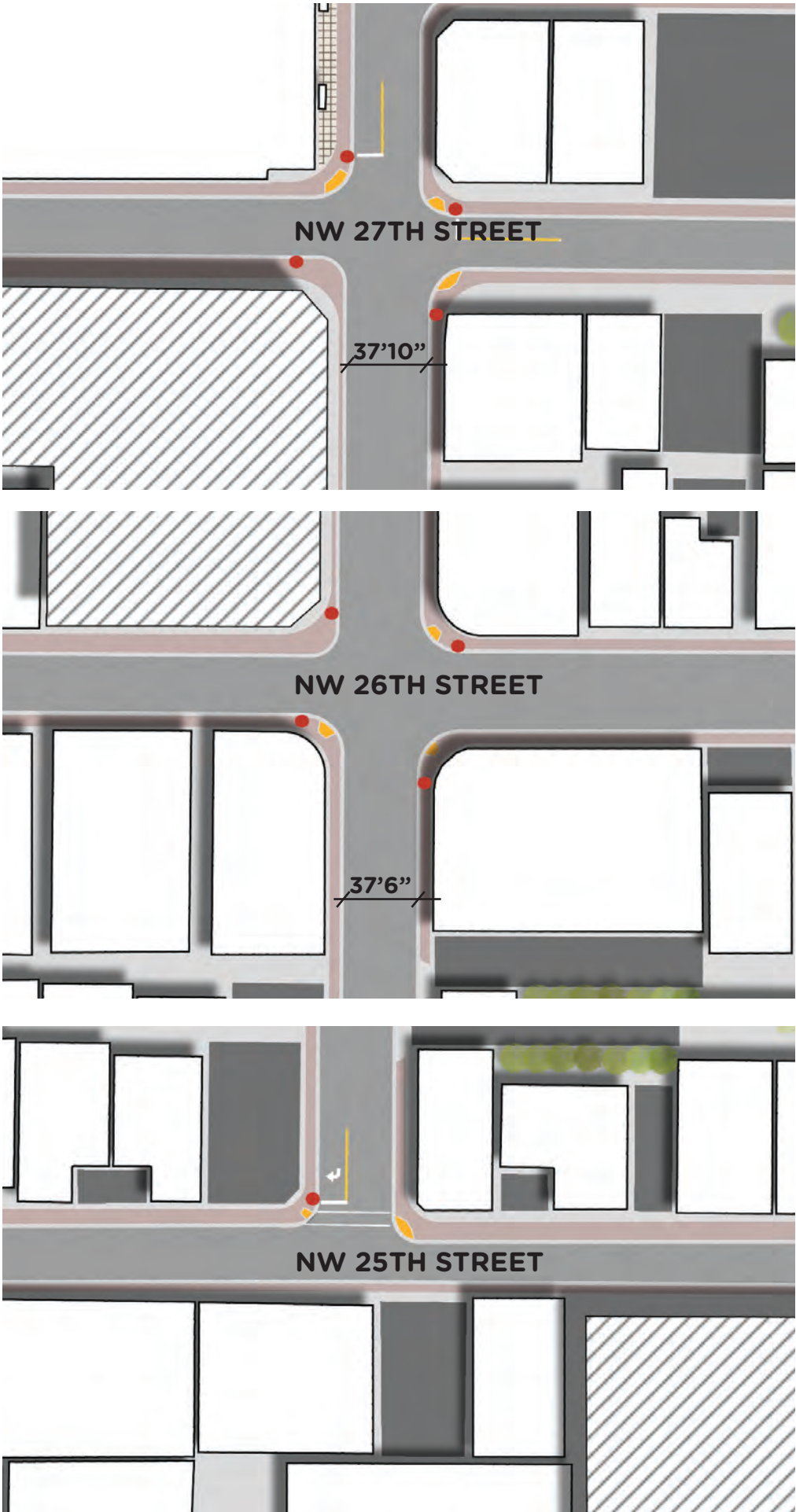
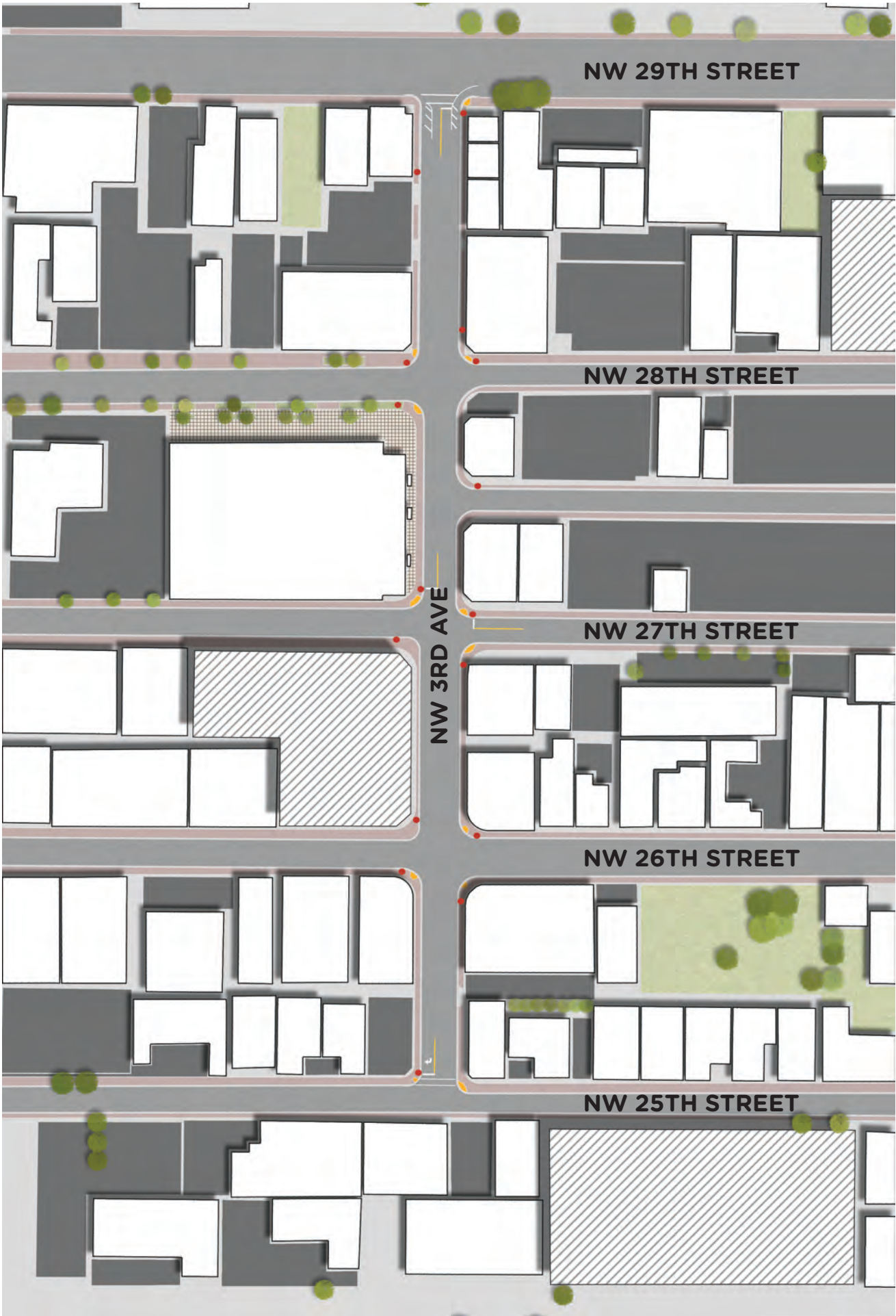
Stop Signs



WYNWOOD
WOONERF
NW 3RD AVE

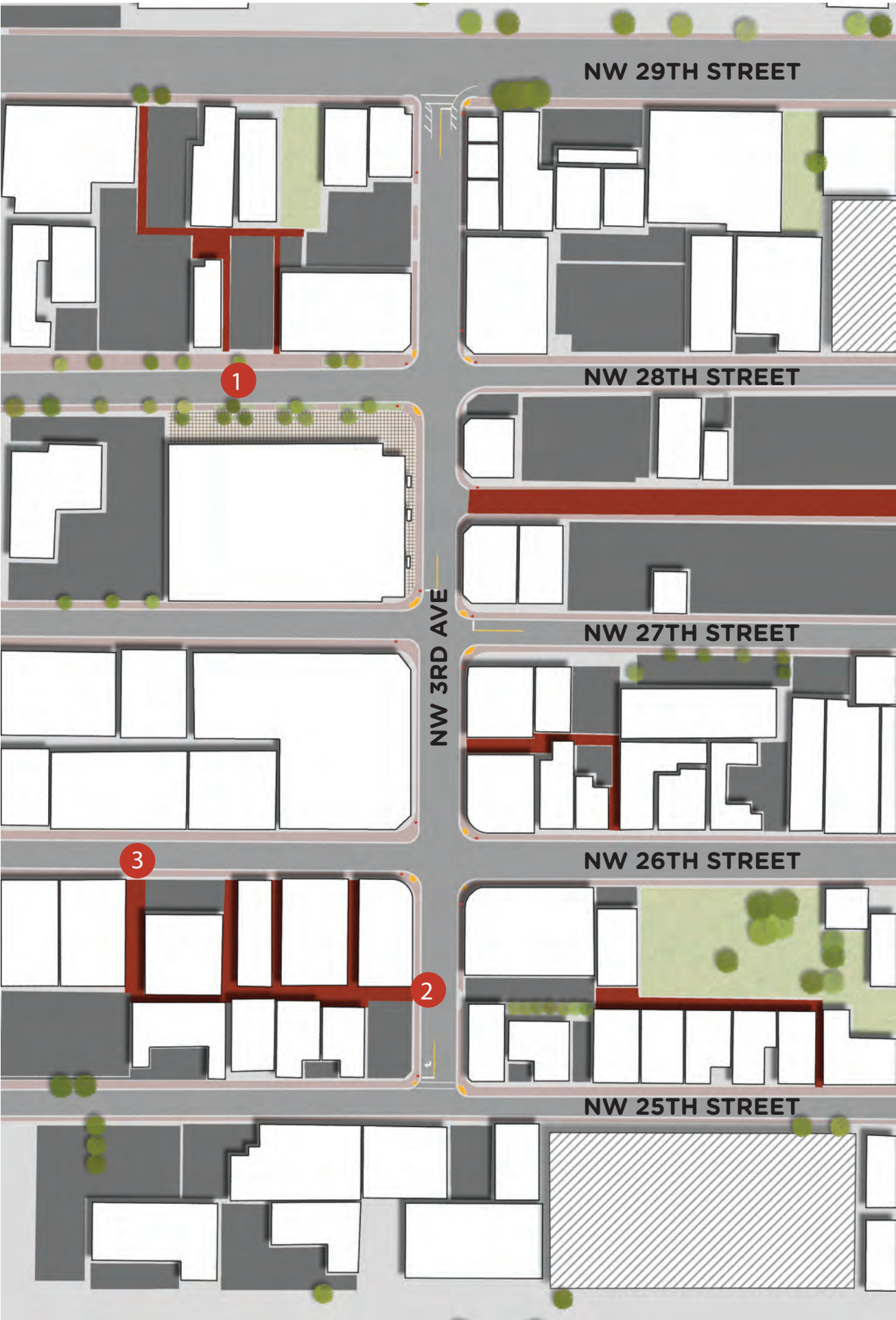
NW 3rd Avenue
Intersections

Stop Signs



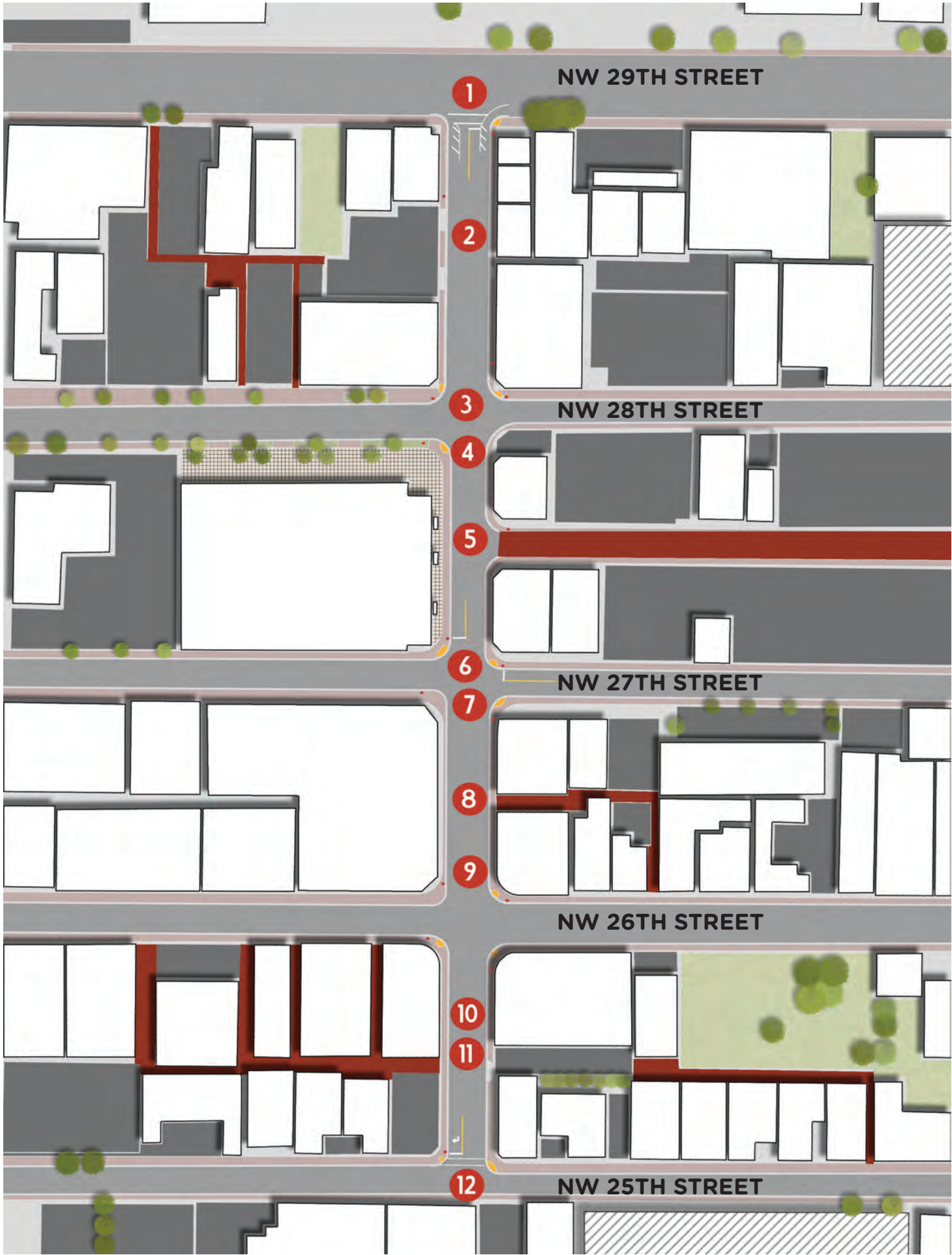
WYNWOOD
WOONERF
NW 3RD AVE

Available Semi-
Public Spaces



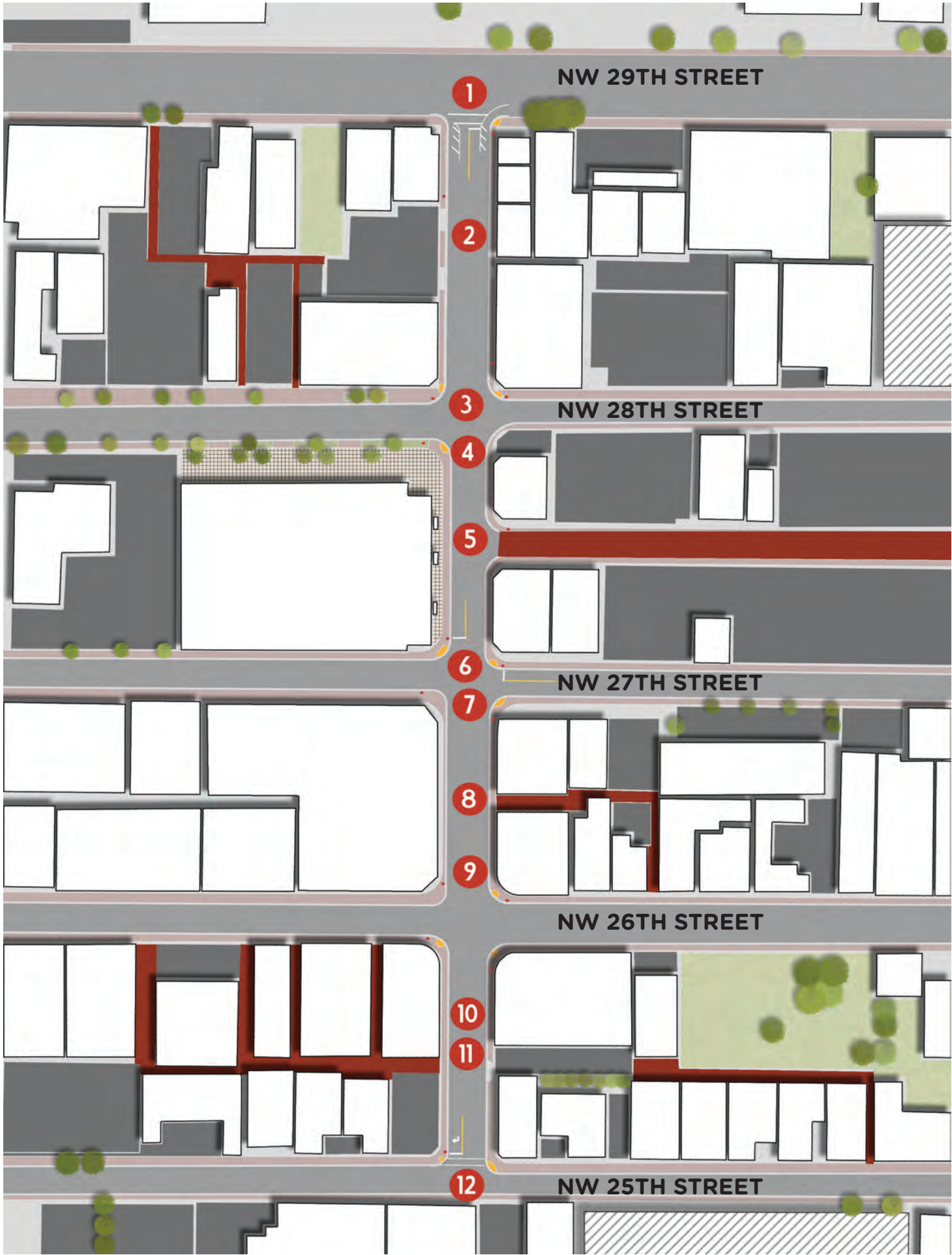
WYNWOOD
WOONERF
NW 3RD AVE

Available Semi-
Public Spaces



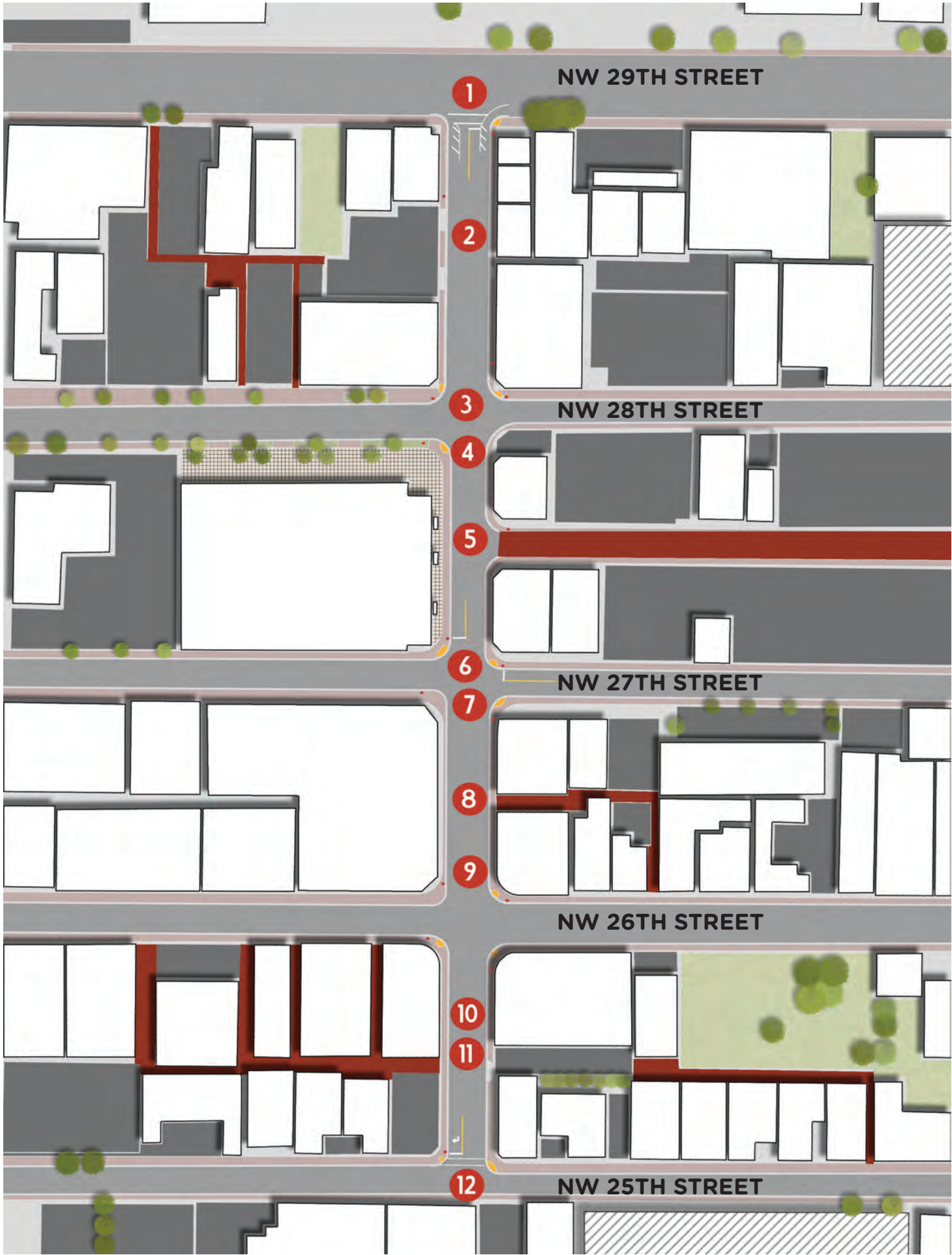
WYNWOOD
WOONERF
NW 3RD AVE

Available Semi-
Public Spaces



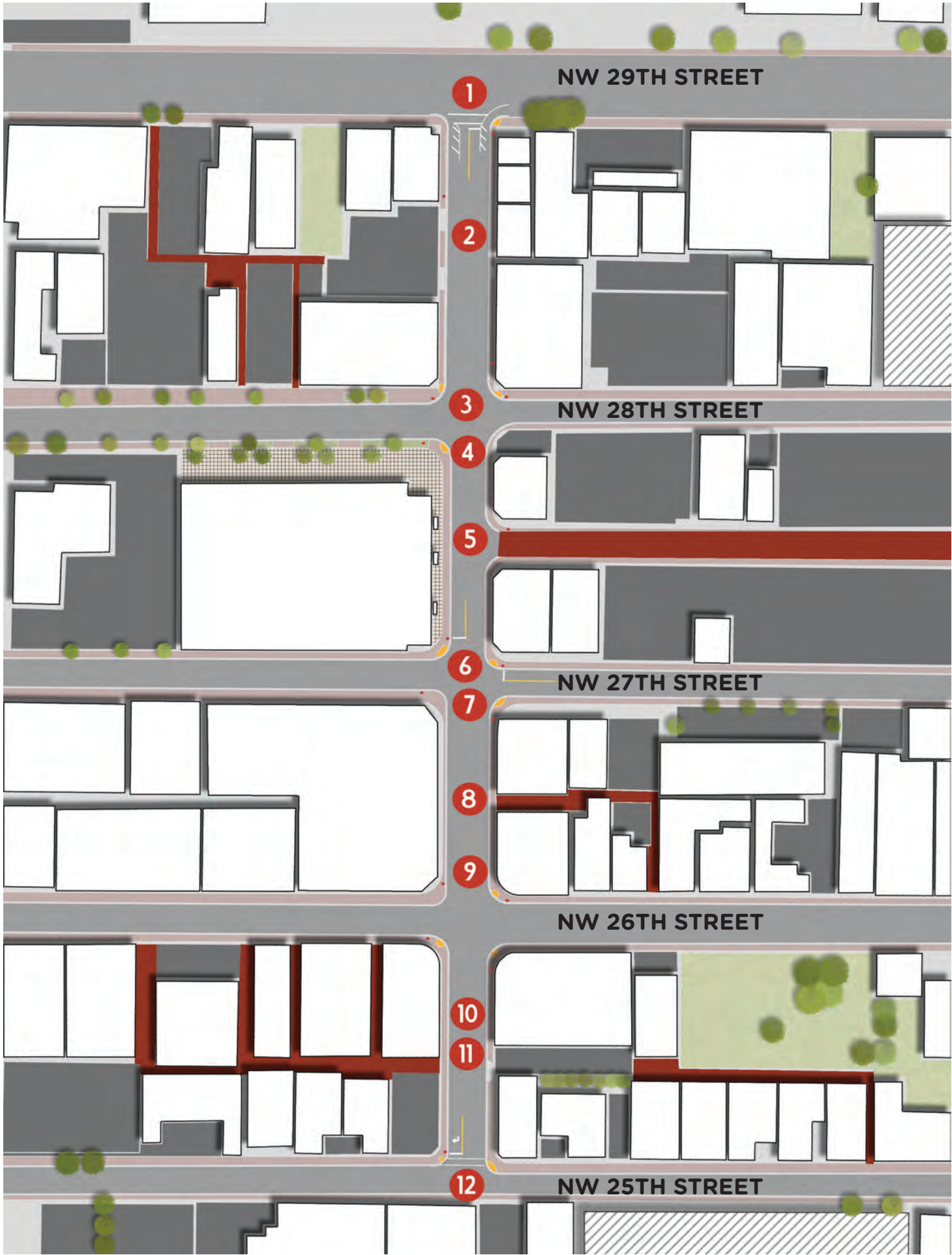
WYNWOOD
WOONERF
NW 3RD AVE

Available Semi-
Public Spaces



WYNWOOD
WOONERF
NW 3RD AVE

Available Semi-
Public Spaces



NATURAL SYSTEMS

E-Sciences

ENVIRONMENTAL SITE ANALYSIS, ENERGY AND VULNERABILITY ASSESSMENTS



ENGINEERING
ENVIRONMENTAL
ECOLOGICAL

Wynwood NW 3rd Avenue Woonerf
October 19, 2018
City of Miami, Florida

science that works

OVERVIEW

- Environmental Site Analysis
- Energy Assessment
 - Stormwater Considerations
 - Green Infrastructure
 - Urban Heat Island
- Vulnerabilities Assessment

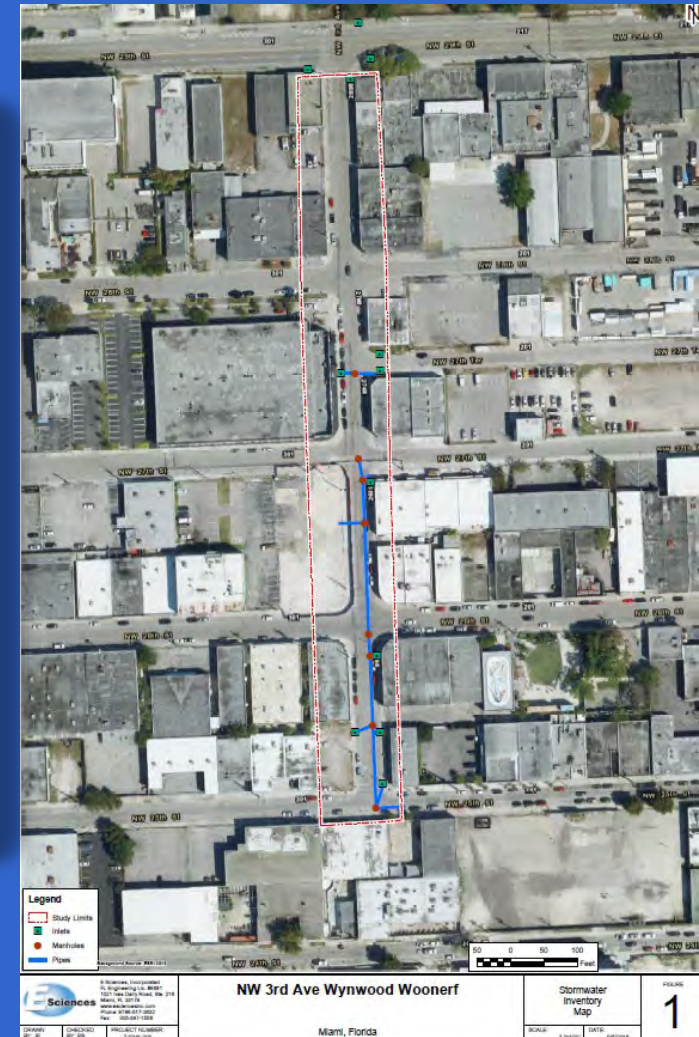
ENVIRONMENTAL SITE ANALYSIS

- Existing Features
- Topography
- Soils
- Groundwater
- Existing Drainage
- Historical Maps, Aerials and Sanborn Maps
- Brownfields
- Contaminated Sites
- Consumptive Water Use Permits



SOURCE: GOOGLE STREET VIEW

ENVIRONMENTAL SITE ANALYSIS

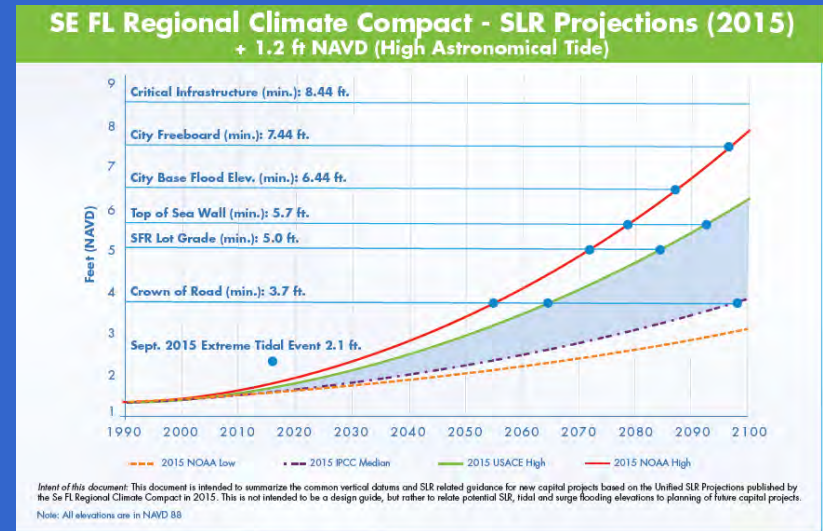


ENERGY ASSESSMENT

- Stormwater Considerations
- Green Infrastructure
- Urban Heat Island Effect affects:
 - Human Health
 - Increased energy demand (can lead to electrical blackouts)
 - Water supply
 - Air pollution
 - Air temperature differences
 - Surface temperature differences
 - Stormwater runoff temperature

VULNERABILITY ASSESSMENT

- Sea Level Rise
- Groundwater Flooding
- Drought
- Extreme Weather Events
- Increased Precipitation
- Permeable Pavement Assessment
- Urban Forestry

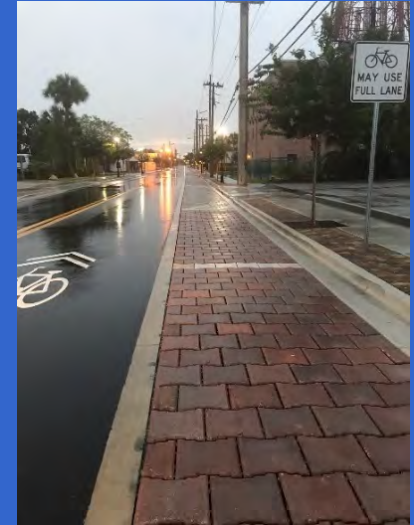


SOURCE: CITY OF MIAMI BEACH,
URBAN LAND INSTITUTE

RECOMMENDED ADAPTATION MEASURES TO FACTOR THIS INTO DESIGN

GREEN INFRASTRUCTURE

- Downspout Disconnection
- Rainwater Harvesting
- Rain Gardens
- Planter Boxes
- Bioswales
- Permeable Pavements
- Green parking
- Green Streets and Alleys (Woonerf)
- Green Roofs
- Urban Tree Canopy
- Tree planter Structural Soil retrofits



Green **Infrastructure** provides Resilience for:

- Reduction of temperatures & Urban Heat Island
- Water quality treatment of runoff
- Reduced vulnerability of Drainage systems
- Landscape Irrigation
- Backup to pump system stormwater network
- Protection of drinking water against salt water intrusion
- Human Health and Air Quality

PERMEABLE PAVEMENT W/ UNDERGROUND EXFILTRATION





INNOVATIVE STORMWATER AS ART

Vine Street Beckoning Cistern

Seattle, Washington



Courtesy Urban Land Institute



Photo by Sam Tenney/DJC,
NE Portland Brewery rooftop runoff to bioswale



Photo: CPL Inc.



Photo: CPL Inc.

Questions?

Patrick Shearer, PE

Project Engineer

E Sciences Inc.

pshearer@esciencesinc.com

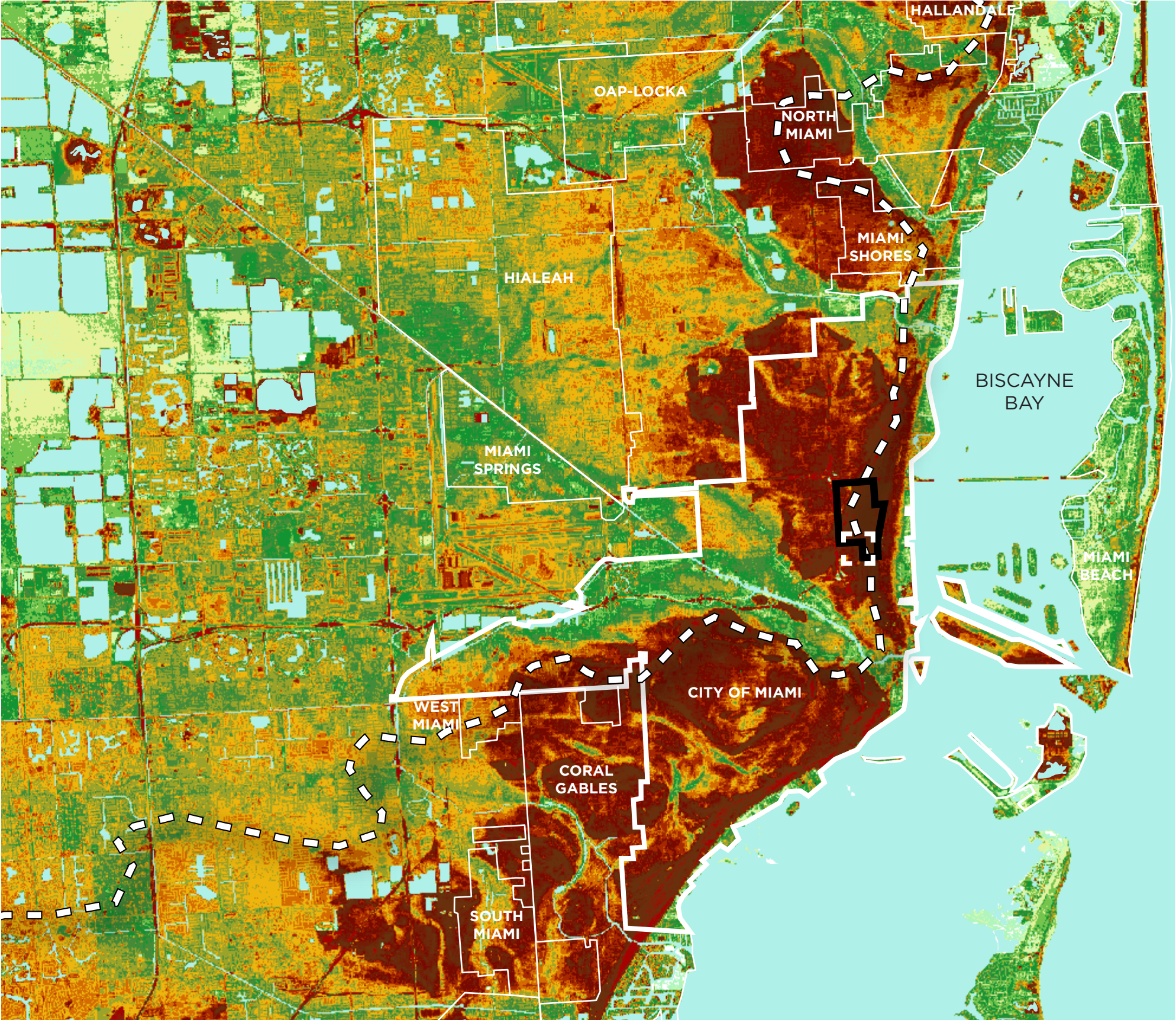


ENGINEERING
ENVIRONMENTAL
ECOLOGICAL

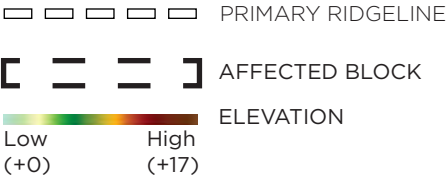
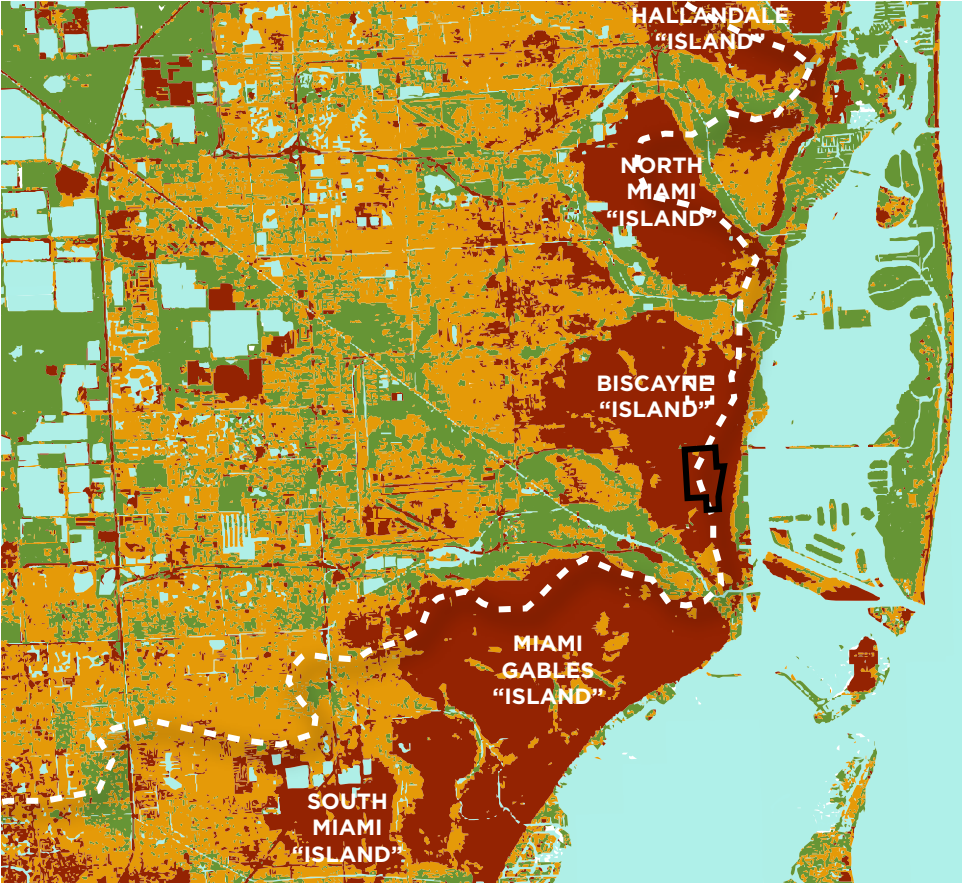
INFRASTRUCTURE SYSTEMS

LOLA and Costal Systems International

Sloughs Elevation



LOCAL OFFICE LANDSCAPE AND URBAN DESIGN, LLC



DATUM: NAD 1983 HARN
SOURCE: Miami-Dade County Information Technology Department (ITD), 2015



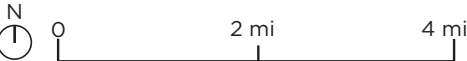
Sloughs Hydrology



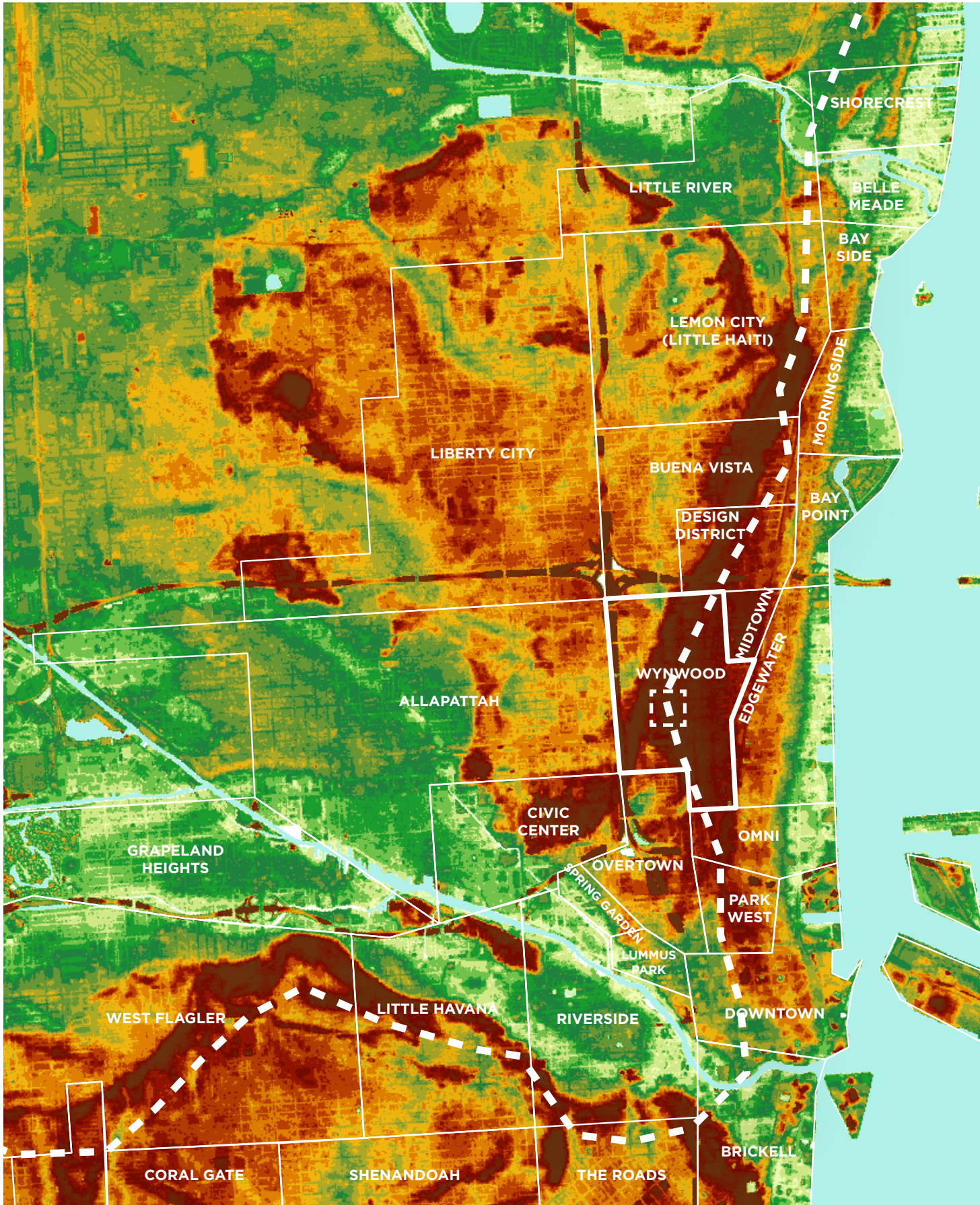
LOCAL OFFICE LANDSCAPE AND URBAN DESIGN, LLC

- SLOUGHS
- AFFECTED BLOCK
- RIDGELINE
- PRIMARY DRAINAGE
- SECONDARY DRAINAGE

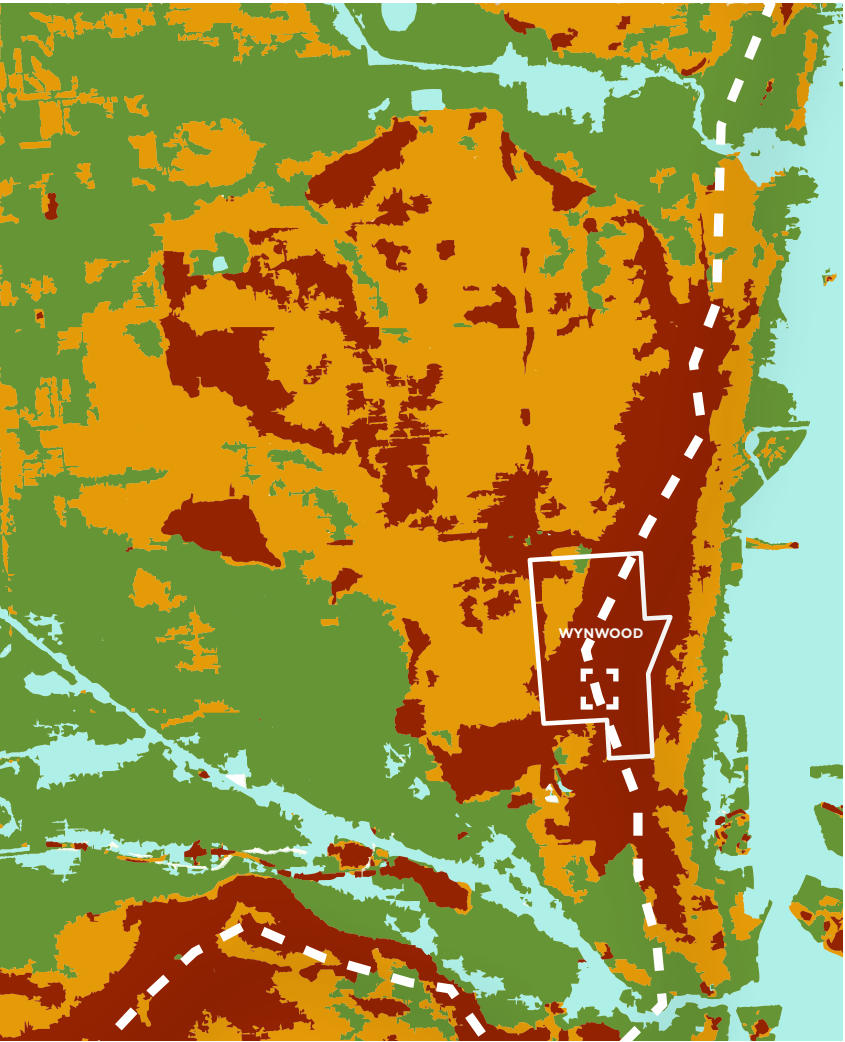
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SOURCE: Miami-Dade County Information
Technology Department (ITD), 2015



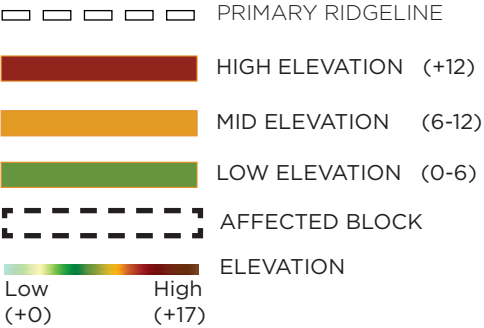
Biscayne 'Island' Elevation



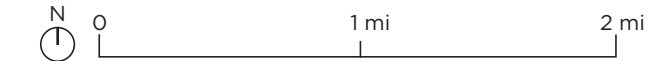
LOCAL OFFICE LANDSCAPE AND URBAN DESIGN, LLC



ELEVATION ANALYSIS



DATUM: NAD 1983 HARN
SOURCE: Miami-Dade County Information
Technology Department (ITD), 2015

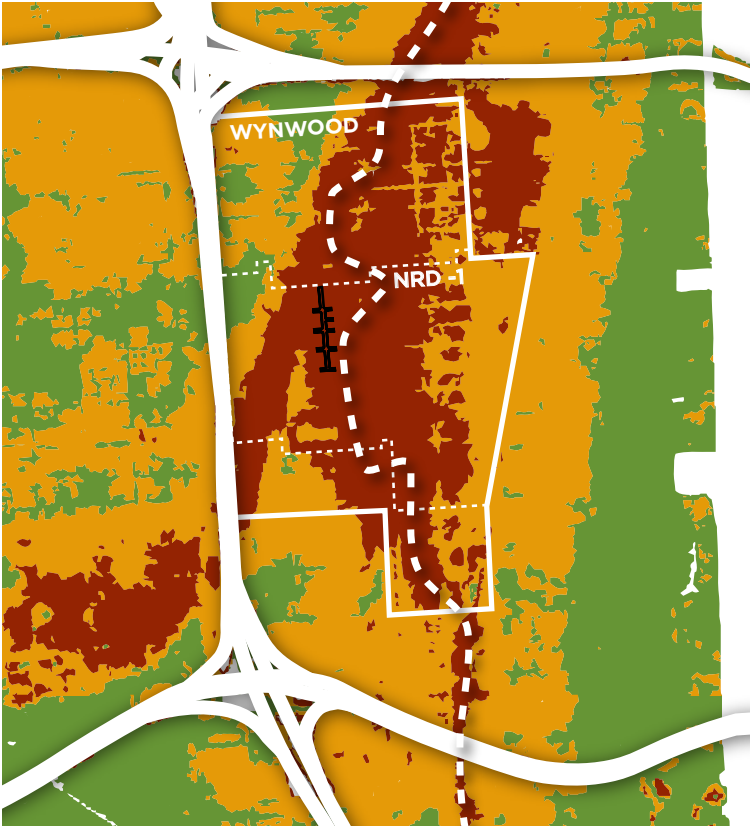


ANALYSIS & FINDINGS | WYNWOOD WOONERF OUTREACH
24 OCTOBER 2018

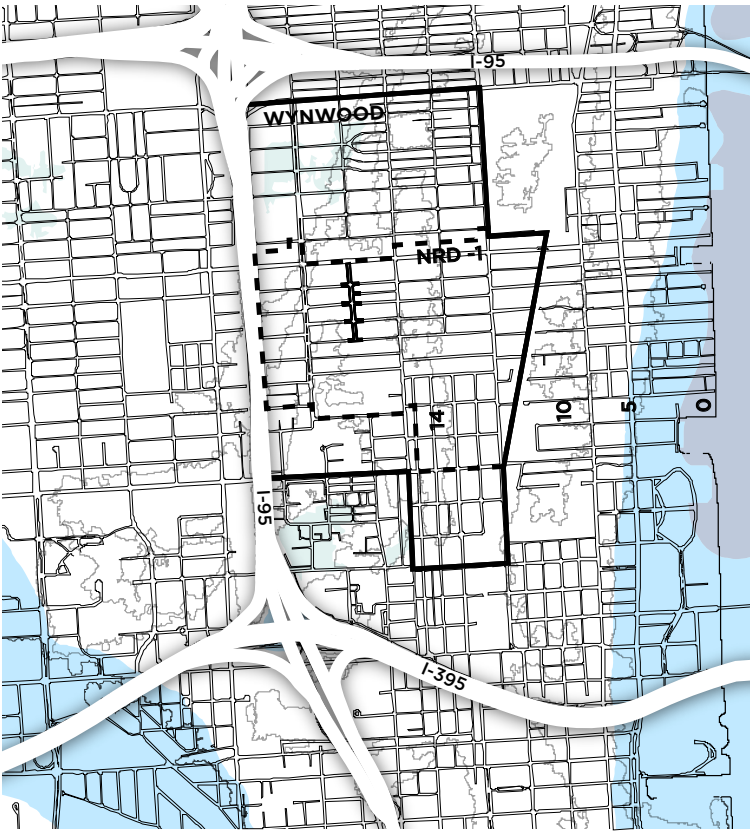
Wynwood Neighborhood Elevation



LOCAL OFFICE LANDSCAPE AND URBAN DESIGN, LLC



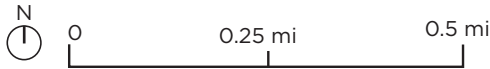
ELEVATION ANALYSIS



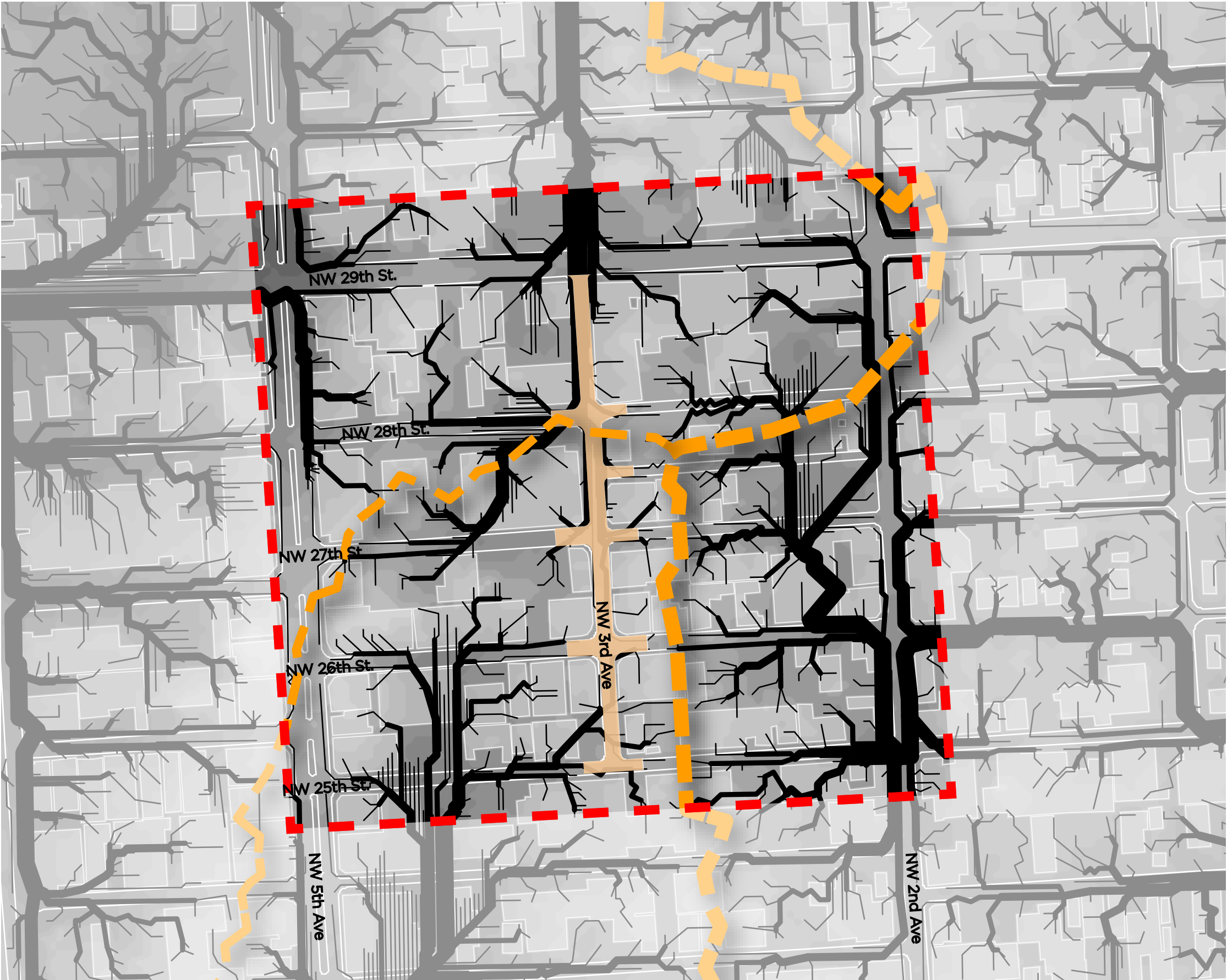
FEMA FLOOD ZONES

- WYNWOOD NEIGHBORHOOD
- NRD-1 BOUNDARY
- WOONERF SITE
- ELEVATION
 - Low (+0)
 - High (+17)
- PRIMARY RIDGELINE
- HIGH ELEVATION (+12)
- MID ELEVATION (6-12)
- LOW ELEVATION (0-6)
- VE: 100 YR FLOODING WITH ADDITIONAL STORM WAVE HAZARDS
- AE: 100 YR FLOODING
- AH: 100 YR SHALLOW FLOODING WITH CONSTANT SURFACE WATER ELEVATION (PONDING) OF 1-3'
- MINIMAL FLOOD RISK

DATUM: NAD 1983 HARN
SOURCE: Miami-Dade County Information Technology Department (ITD), 2015



Site Hydrology



WOONERF

AFFECTED BLOCK

PRIMARY RIDGELINE

SECONDARY RIDGELINE

PRIMARY DRAINAGE

SECONDARY DRAINAGE

DATUM: NAD 1983 HARN
SOURCE: Miami-Dade County Information
Technology Department (ITD), 2015

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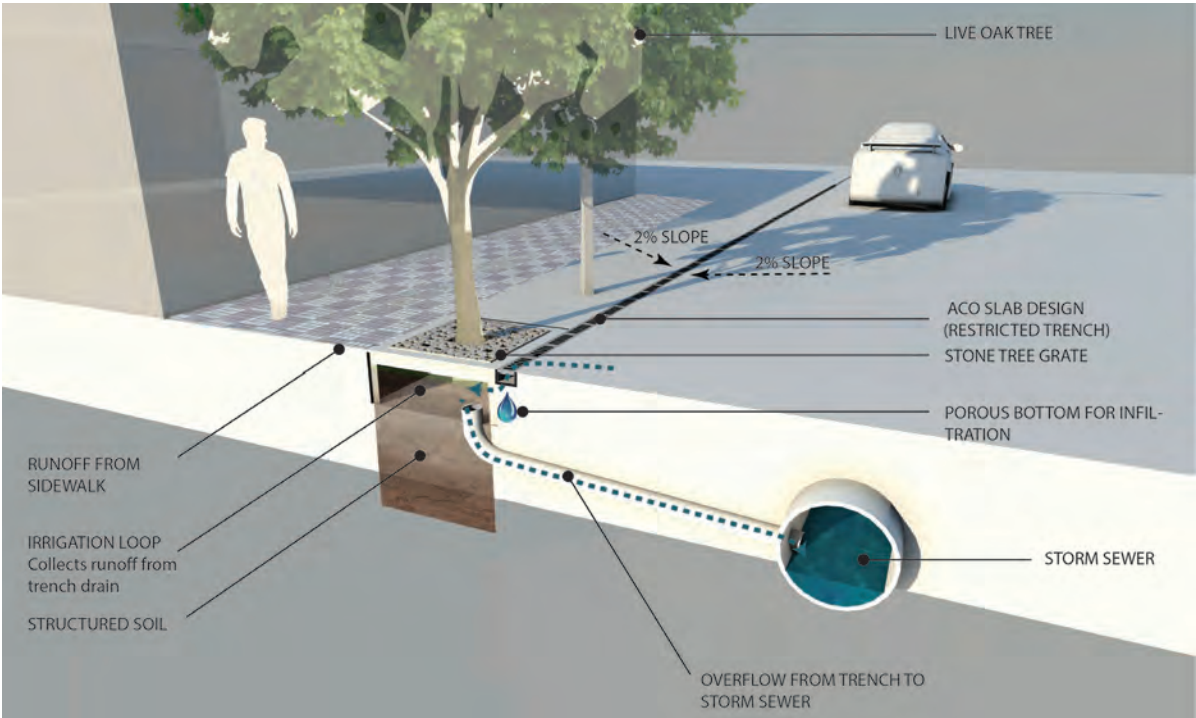
ANALYSIS & FINDINGS | WYNWOOD WOONERF OUTREACH
24 OCTOBER 2018

Hydrology Management

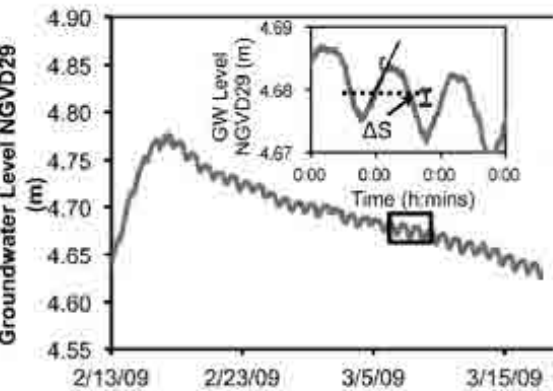
Existing Conditions



Design Potential



A mature tree can transpire as much as 109 gallons/day (USGS)



Groundwater-Surface Water Interactions On Tree Islands In The Everglades, South Florida (Sullivan, Pamela, FIU, 2011)

Accessibility Between Public/Private Realm

Existing Conditions



Design Potential



Principles for a Wynwood Woonerf

1. Create a commons that seamlessly connects the public and private realms

a. Prioritize pedestrian access and safety while providing adequate service, automobile, and bicycle mobility

b. Partner with the BID and private owners to achieve maximum accessibility

2. Express and enhance the identity of Wynwood in the streetscape

- a. The experiences of Wynwood are dynamic and ephemeral. The woonerf design character should be 4-dimensional, embracing change.*
- b. Art activities in Wynwood have shifted from production to consumption. The Woonerf and other public spaces provide opportunities to re-introduce production through the engagement of artists in the designed elements*

3. Ensure the built environment contributes to the health of the natural environment and the social and economic resilience of the community

a. Treat water as an infrastructure of the common

b. Leverage district-wide opportunities for energy production

Principles for a Wynwood Woonerf

- 1. Create a commons that seamlessly connects the public and private realms**
- 2. Express and enhance the identity of Wynwood in the streetscape**
- 3. Ensure the built environment contributes to the health of the natural environment and the social and economic resilience of the community**

Thank you!