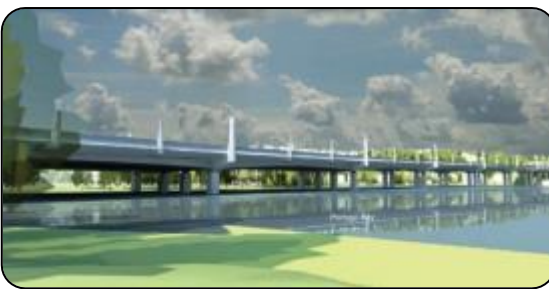


# SR 520 Program

Seattle Design Commission



SR 520 Rest of the West Design Team

June 2, 2016

# Design Presentation Overview

## Program Overview

- SR 520 Program
- Rest of the West
- Sustainability/Vision

## Design Presentation

- Context and History
- User Experience

## Today, seeking endorsement of:

- Refined Montlake lid design and programming



# Purpose and Need

## Safety and Mobility Improvements

The SR 520 Bridge Replacement and HOV Program is a \$4.56 billion investment in the regional transportation system. The program is enhancing a vital connection from Seattle to the Eastside via Lake Washington, resulting in major improvements for drivers, transit riders, bicyclists and pedestrians.

### Replacing vulnerable structures



**The SR 520 program is improving safety by:**

- Replacing aging and vulnerable bridge structures currently at risk of failure
- Adding full outside shoulders
- Adding safer, smoother merges and sightlines
- Improving bicycle and pedestrian connectivity

### Enhancing mobility

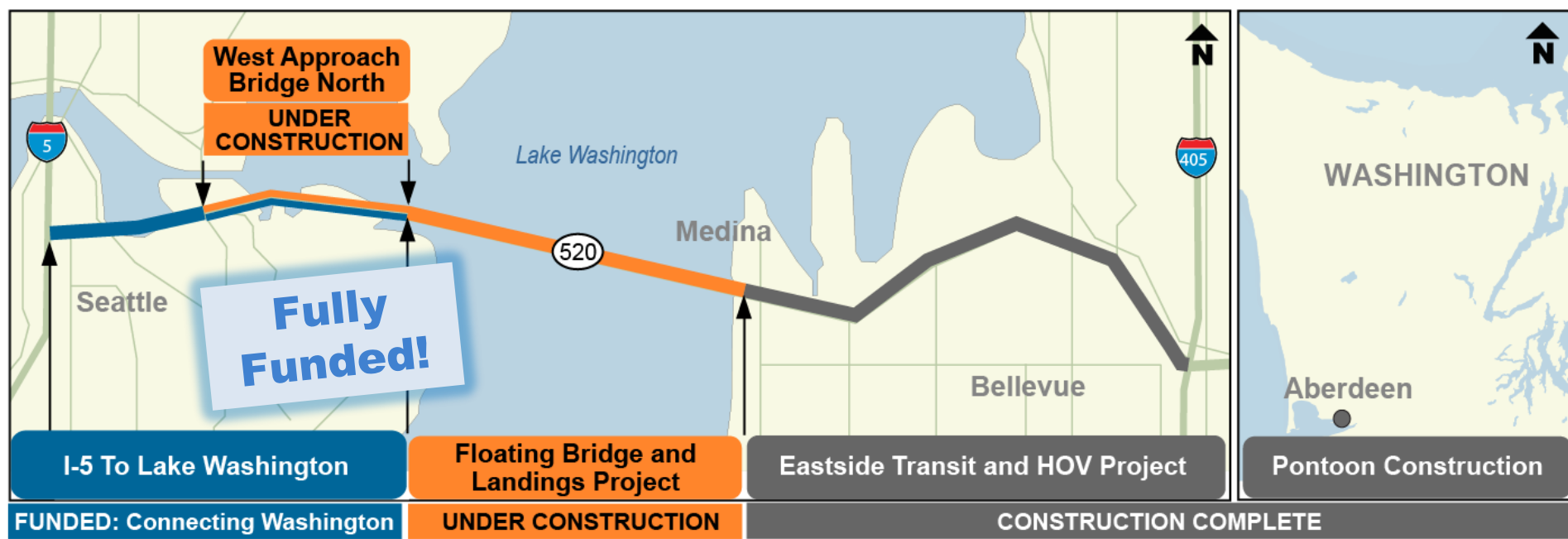


**The SR 520 program is enhancing mobility by:**

- Adding new transit/HOV lanes for better bus and carpool trip reliability
- Building a new 14-foot-wide bicycle and pedestrian path
- Adding new median transit stops and direct-access ramps along the corridor

# SR 520 Program Overview and Timeline

## Program map



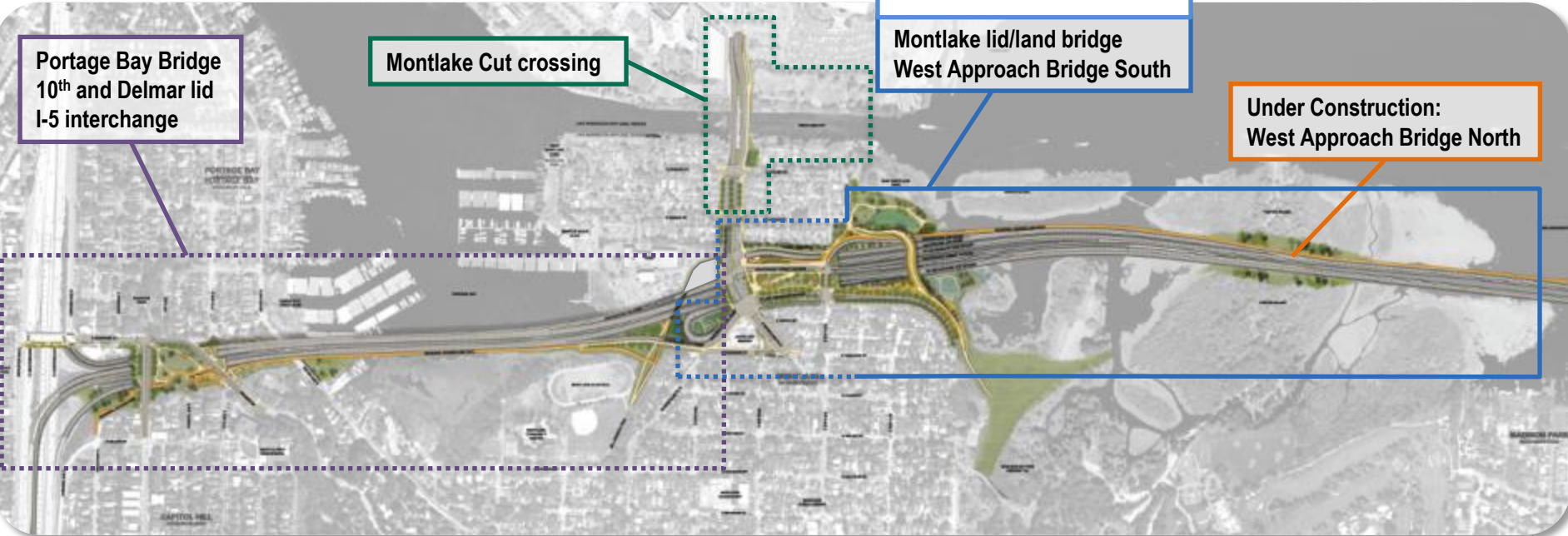
## Program schedule

- Eastside Transit and HOV Project: Opened 2014
- Pontoon Construction Project (Aberdeen): Completed 2015
- New floating bridge: Completed April 2016
- West Approach Bridge North: Construction began fall 2014; opening summer 2017
- Remaining west side corridor: Fully funded

# Rest of the West Project Overview

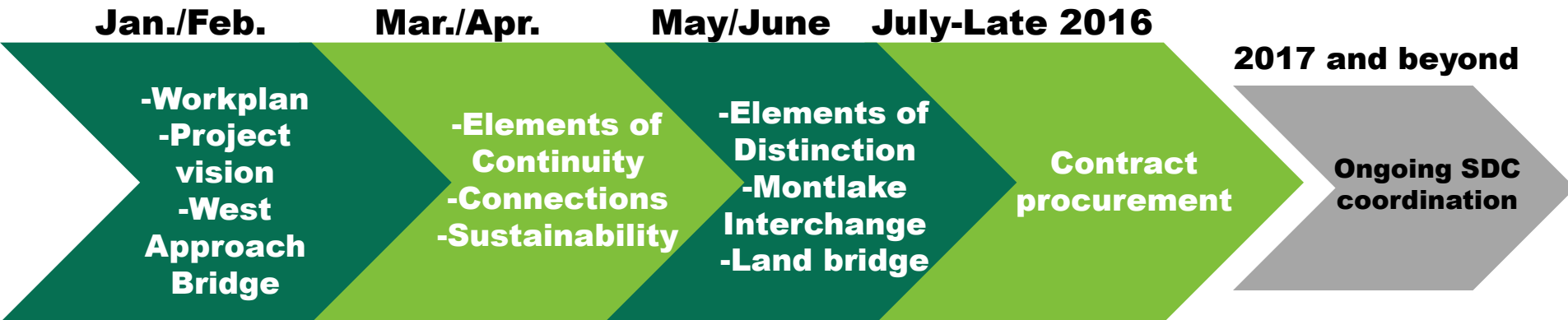


*Possible future use of a portion of NOAA property, approximating the area shown in the FEIS, for public pedestrian-bike path is subject to agreement by NOAA as a part of ongoing mitigation discussion*

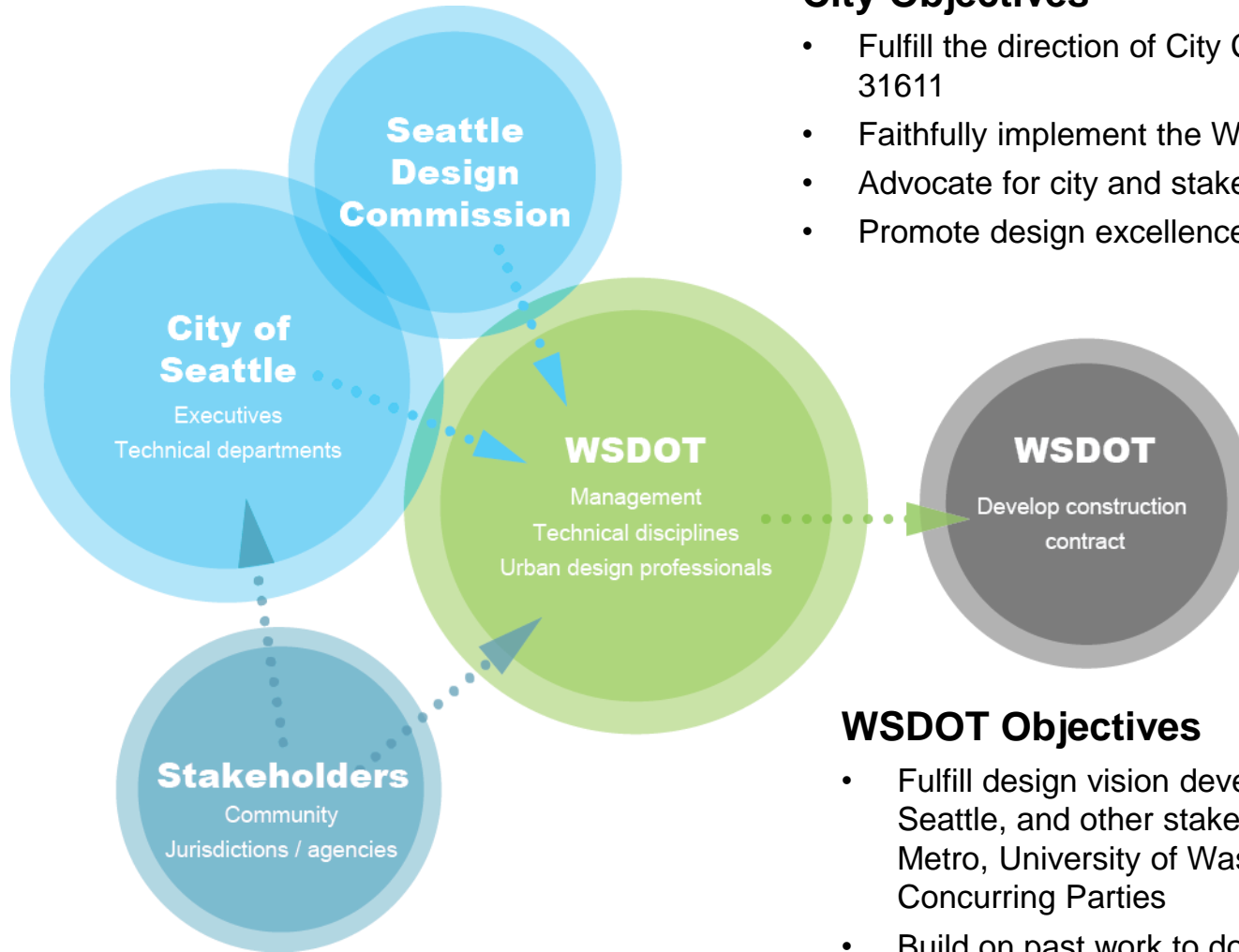


# Timeline

- **Jan. – June 2016: Design Focus**
  - Ongoing coordination with SDC Subcommittee
  - Briefings with full SDC
  - Coordination with key stakeholders and broader public
- **Summer – Late 2016: Contract Procurement Focus**
  - Reach maintenance agreements
  - Participation in contract procurement process



# Stakeholder Coordination



## City Objectives

- Fulfill the direction of City Council Resolutions 31427 and 31611
- Faithfully implement the West Side Final Concept Design
- Advocate for city and stakeholder interests
- Promote design excellence

## WSDOT Objectives

- Fulfill design vision developed with the SDC, City of Seattle, and other stakeholders including King County Metro, University of Washington, Section 106 Concurring Parties
- Build on past work to document urban design criteria for future construction contracts

# SR 520 Program Vision – “Nature meets City”

Our vision for the SR 520 corridor is to become a sequence of gateways for the City of Seattle by **reconnecting to the Seattle vision of Nature meets City.**

We intend to implement our Program in a manner that yields **practical solutions** and fosters **sustainability** practices that support regional and local connectivity, ecology and the use of low-carbon materials. Further, the design of the corridor will **balance aesthetics, functionality, proportion and sense of speed** along the SR 520 facility to provide a **memorable experience** for all users.



# WSDOT Sustainability Values



# What We Heard

- ✓ Community Aesthetic Design Consultant
- ✓ Column folly
- ✓ *User experience along pathways\**
- ✓ Gateway design – unique multimodal experience
- ✓ *Viewpoint opportunities\**
- ✓ *Lid character and program\**
- ✓ Process delivery overview

\* *Items we're discussing today*

- ✓ Items we continue to discuss with the SDC subgroup

# Design Goals Checklist

- ✓ Improves regional and neighborhood non-motorized connections
- ✓ Enhances transit experience and vehicular functionality
- ✓ Creates a practical solution to multiple needs
- ✓ Restores and improves ecological systems and connectivity
- ✓ Improves air quality and reduces noise
- ✓ Produces safe and functional space for neighborhood and regional use
- ✓ Brings human scale and community character to create distinctive spaces
- ✓ Forms a memorable and layered gateway experience

# Disclaimers



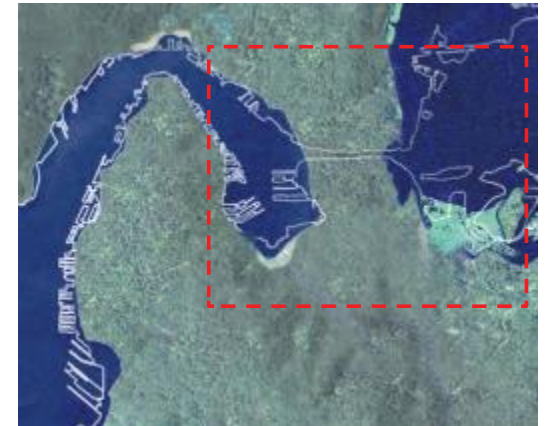
# Ecology, Geology, and Portage



## 1850

Pre-1851: Duwamish, and other first nations settlements and byways.

Local place name “Carry a Canoe” indicates passage between the waterways.



## Connectivity

- Transportation
- Landscape



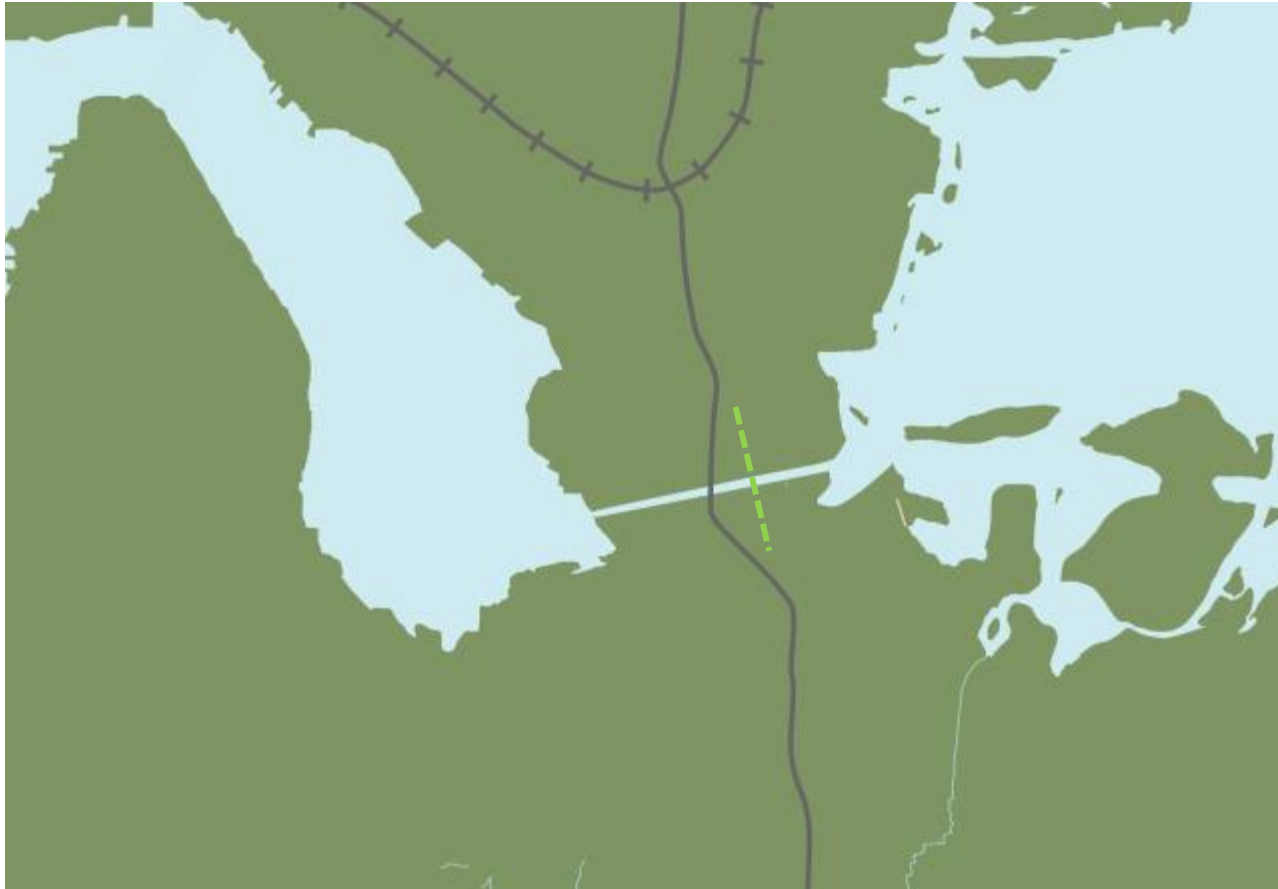
Courtesy Paul Dorpat.



Concepts and materials shown may be further refined pending outcomes of ongoing maintenance conversations between WSDOT, the City of Seattle, and King County Metro.



# Transportation and Infrastructure



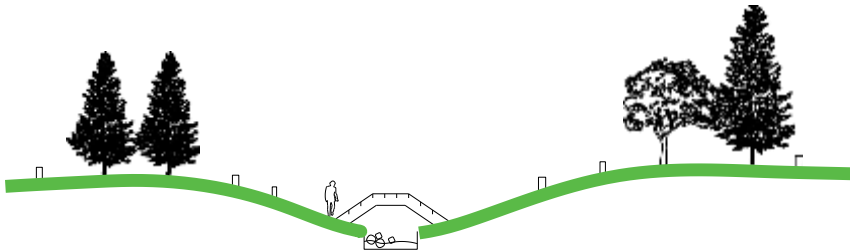
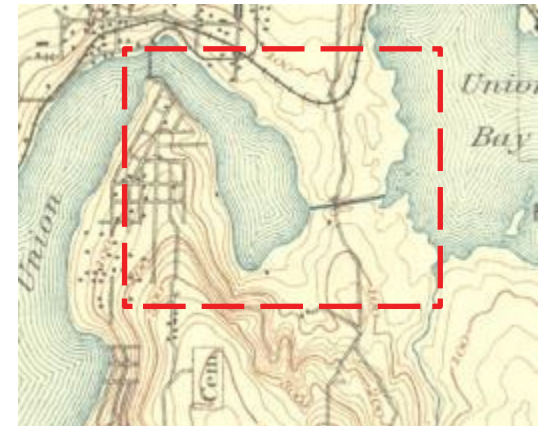
## 1894

1851: European American settlers arrive.

1869: Seattle incorporated.

1876: Land for Volunteer Park & Lakeview Cemetary set aside.

1860s-1880s: Montlake Ditch constructed to aid logging transport between waterways.

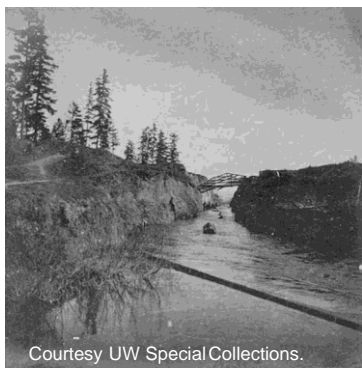


## Connectivity

- Transportation
- Landscape



Courtesy MOHA, Seattle



Courtesy UW Special Collections.





# Transportation and Infrastructure

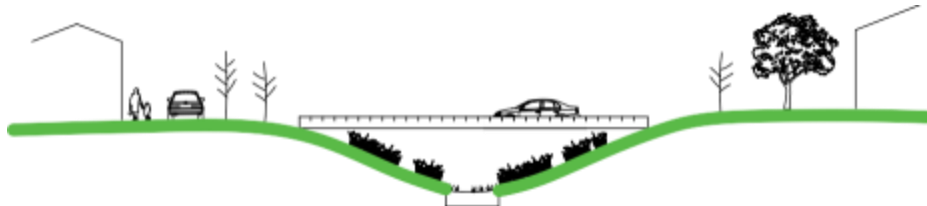
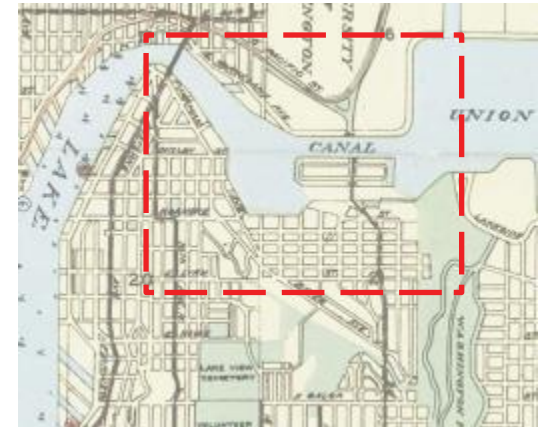


## 1918

1898: Canal Reserve established around Montlake Ditch.

1907: Olmstead Brothers propose Lake Washington Boulevard extension to Alaska-Yukon Exhibition at UW site.

1909-1916: Dredging of Montlake Cut. Lake Washington water level lowered by 9 feet.



## Connectivity

- Transportation
- Landscape



Courtesy MOHAI, Seattle

# Olmsted Master Plan

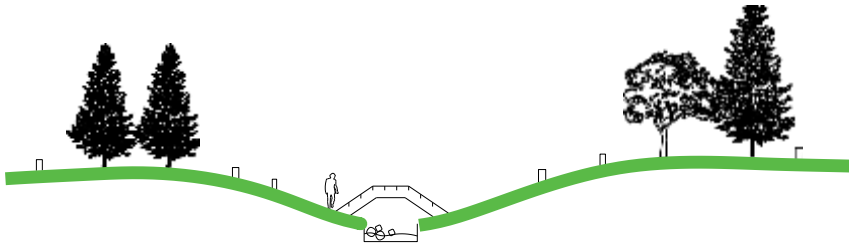
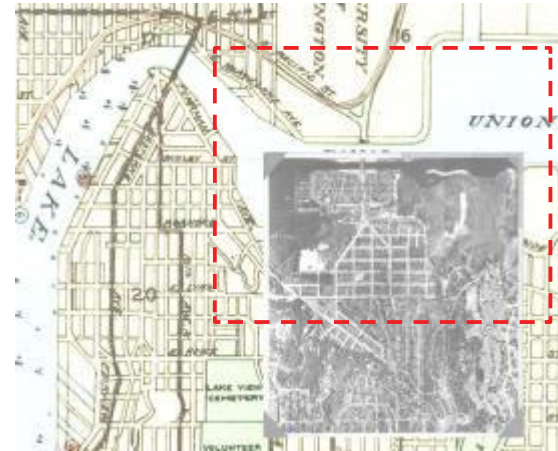


## 1937

1925: Montlake Bridge opens.

1934-1935: UW Arboretum established Washington Park site. Olmsted Brothers submit plans.

1935-1941: Arboretum lands graded & planted, major structures constructed (including canal reserve).



## Connectivity

— Transportation

■ Landscape





Courtesy MOHA, Seattle

# Federal and Civic Development

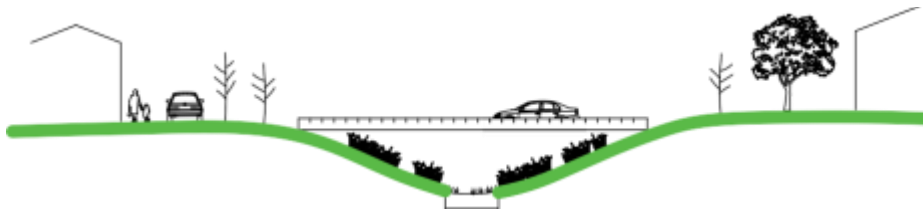


## 1942

1941: WPA assistance to Arboretum discontinued.

1940s-1950s: development of Arboretum slows but continues.

1952: MOHAI opens, primary access from south via Lake Washington Boulevard.



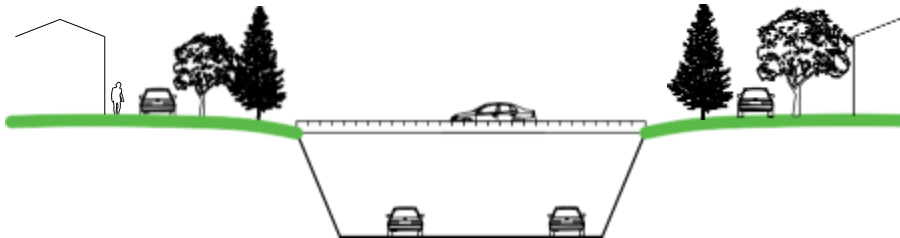
## Connectivity

— Transportation

■ Landscape



# Heroic Infrastructure

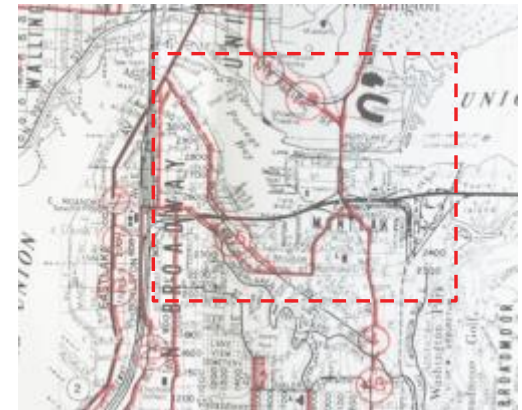


## 1967

1961-1963: Construction of SR520 floating bridge. R.H.Thompson expressway proposed, cutting through arboretum.

1968: Waterfront / Foster Island trail constructed.

1969-1972: Freeway protests. Thompson Expressway plan rejected by voters.



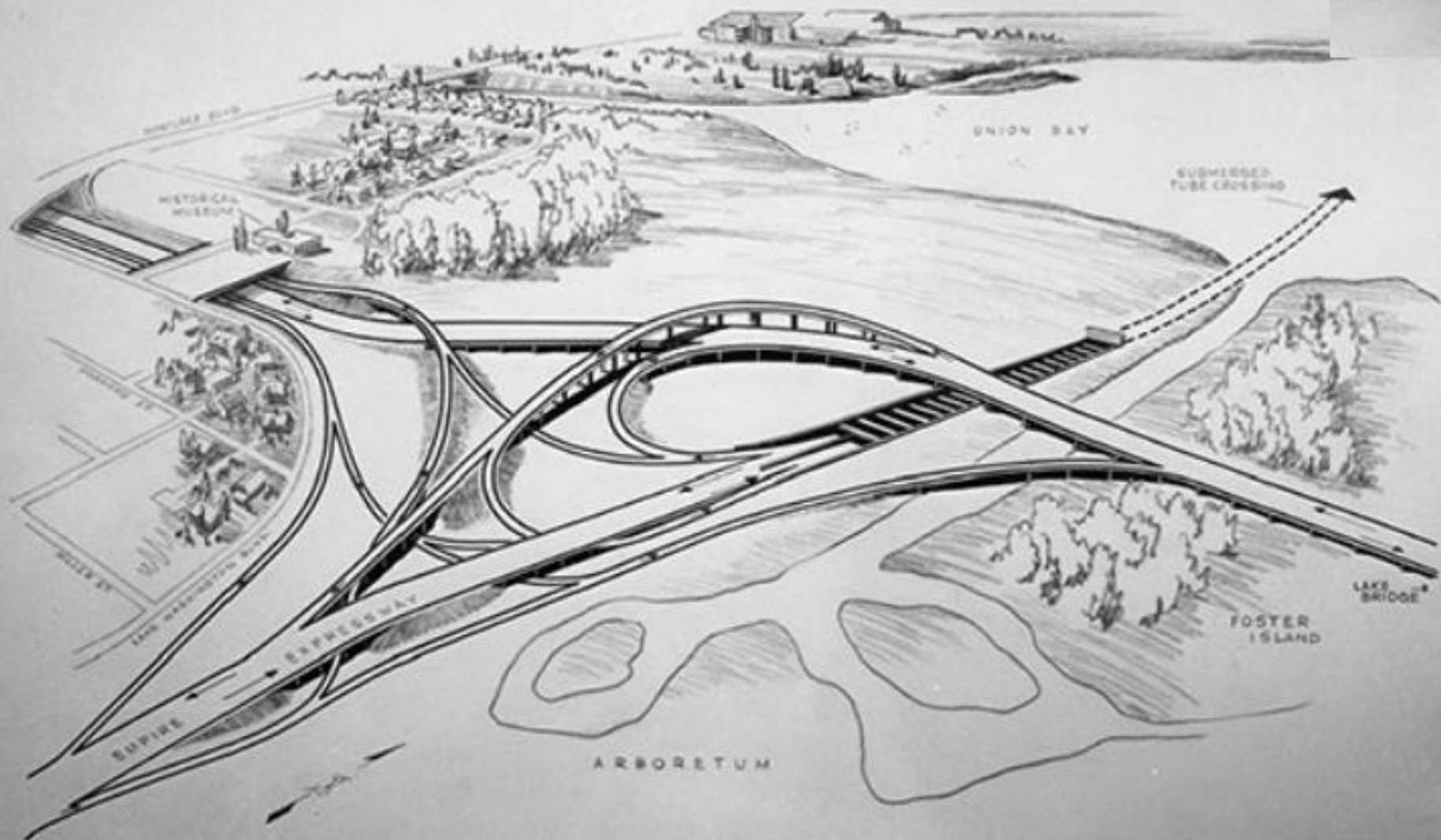
## Connectivity

- Transportation
- Landscape



# EMPIRE EXPRESSWAY

- ARBORETUM INTERCHANGE -





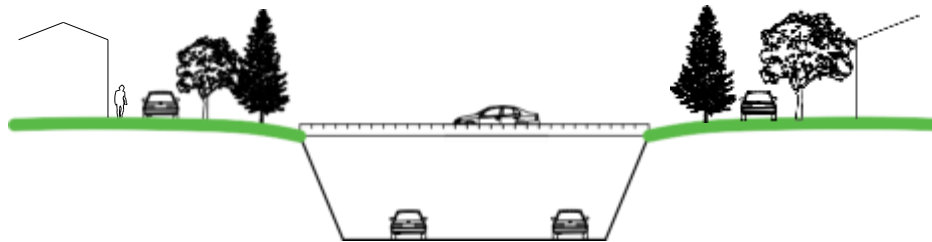
# Dominant Infrastructure



## 2015

1972-2014: “Ramps to Nowhere”

2000-2010s: SR520 improvements

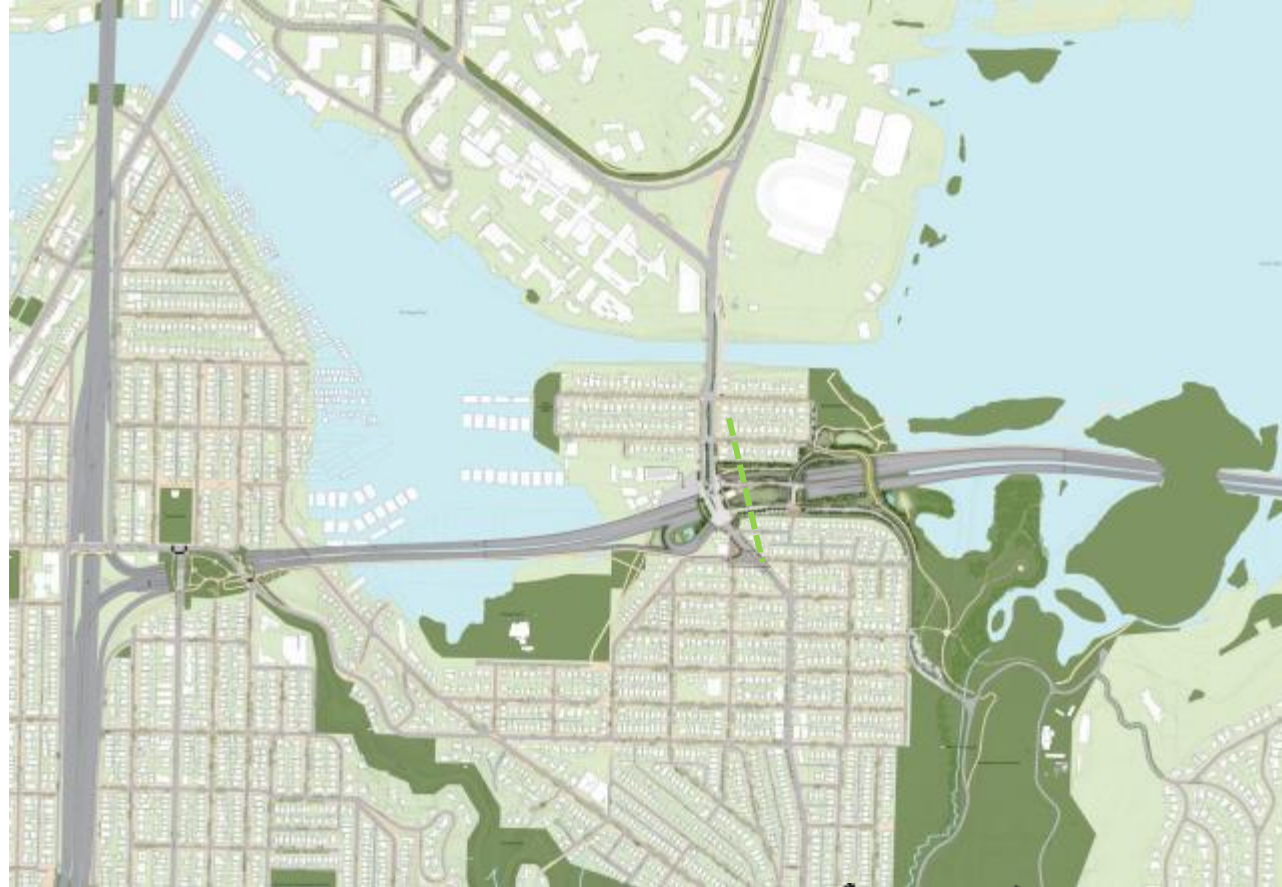


## Connectivity

- Transportation
- Landscape

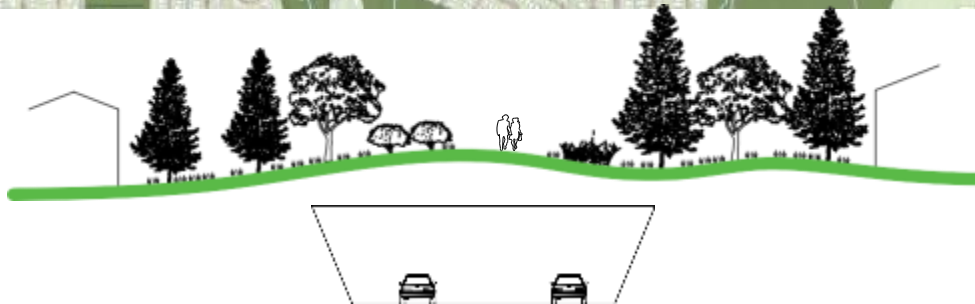
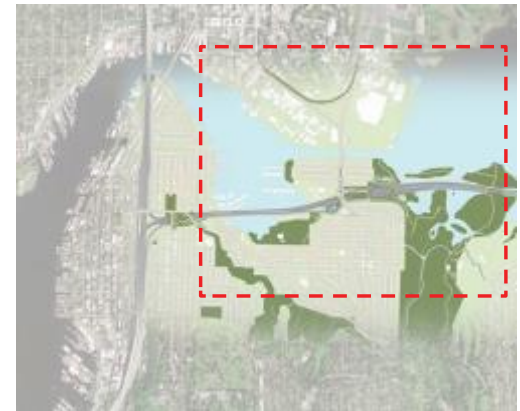


# Reconnected Greenways and Urban Fabric



## FUTURE

SR520 improvements complete



### Connectivity

- Transportation
- Landscape



# Vehicular Context

## Traffic Volumes and Transit Routes

**Montlake Boulevard** – 57,400 Average Daily Traffic (2014)  
**Lake Washington Boulevard** – 15,600 Average Daily Traffic (2014)  
**SR 520** - 80,000 Average Daily Traffic

**East-West Transit: Routes 167, 242, 252/257, 255, 271, 277, 296, 311, 540, 542, 556, 545, 555**  
**North – South Transit: Route 43, 48**

**We seek to create a new Civic Infrastructure that integrates future-compatible transportation needs, restores the local ecology, neighborhood and greenway connections, and draws on the significance of the place.**





# Olmsted Principles

## **Comprehensive Approach:**

Connect Multiple Smaller spaces to form larger network

## **Unified Composition**

Borrowed landscape

## **Genius of Place**

Embracing the uniqueness of site

## **Orchestration of Use and Movement**

Clear and varied

# Nature Meets City

## Progression of Experience



# Nature Meets City



Possible future use of a portion of the NOAA property, approximating the area shown in the FIS, for aquatic recreation facilities is subject to agreement by NOAA as part of ongoing mitigation discussions.

Area under review with the City of Seattle

# Path Alignment



# Node Design



# Transitions



# Intersection Design



# Neighborhood Open Space





# Outlooks



Possible future use of a portion of the NOAA property, approximating the area shown in the FIS, for aquatic recreation will continue to be subject to agreement by NOAA as part of ongoing mitigation discussions.

Area under review with the City of Seattle

# Elements of Continuity:



# Elements of Continuity

## Gateway Experience Looking East



# Elements of Continuity

## View Looking West at Land Bridge



# Elements of Continuity

## View Along Regional Shared Use Path



# Elements of Continuity

View from Portage Bay Looking East



# USER EXPERIENCE

## Neighborhood



Casual Strollers



Neighborhood Families

## City



Bicyclist



Weekend Warrior



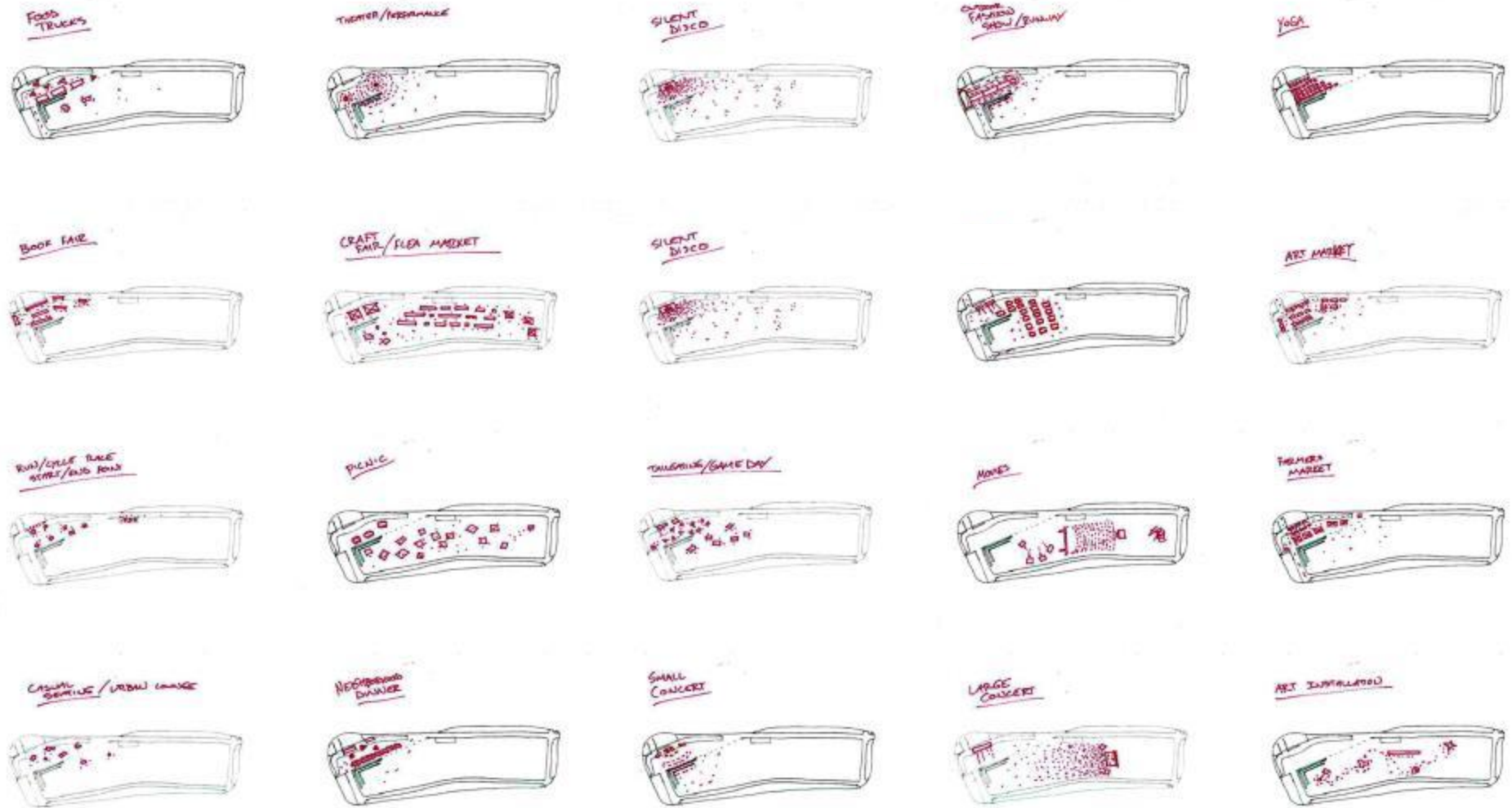
Transit User



Special Event

# Lid Program

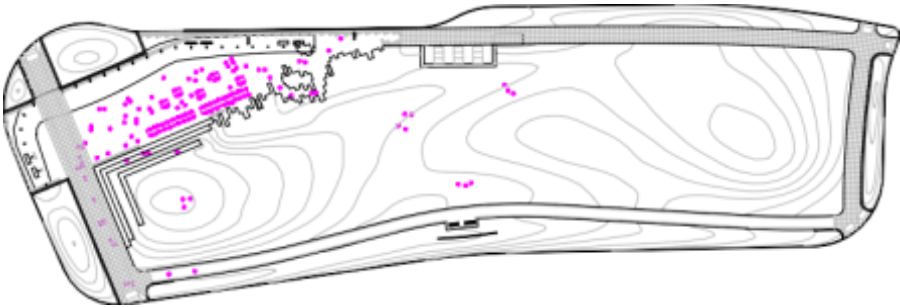
## Forward Compatibility



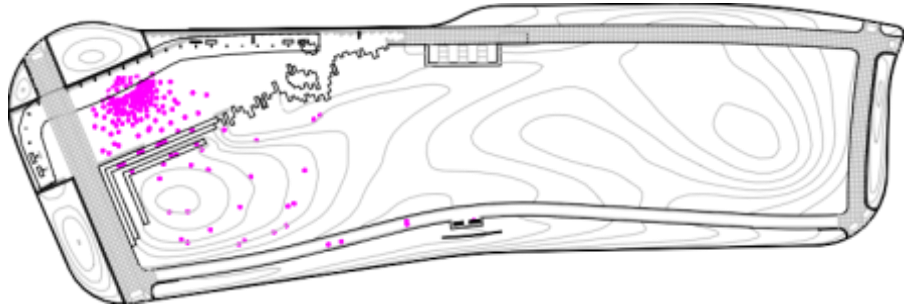


# Lid Program

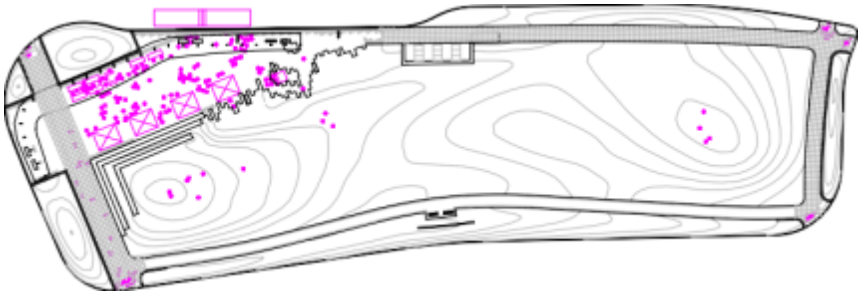
## Forward Compatibility



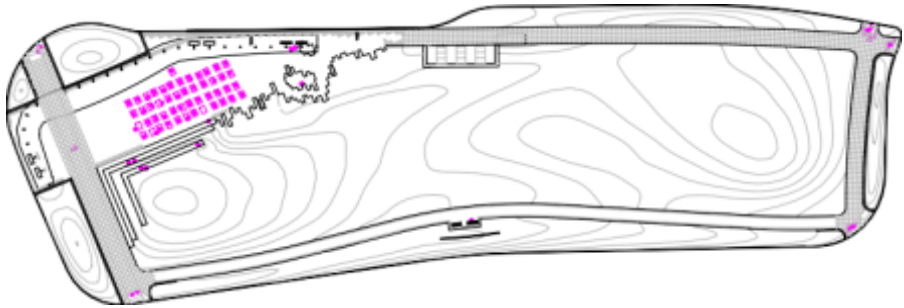
COMMUNITY DINNER



SMALL CONCERT/BUSKER



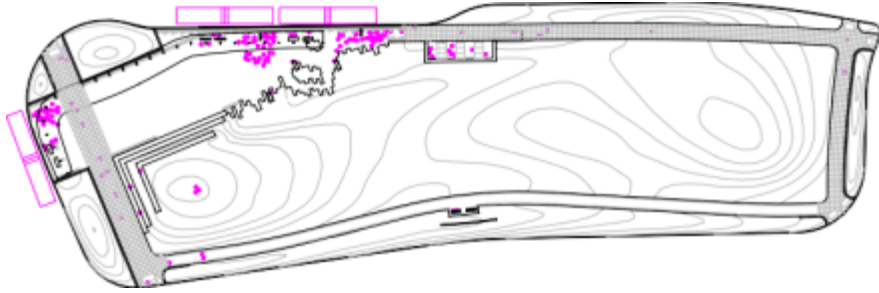
COMMUNITY MARKET/VENDORS



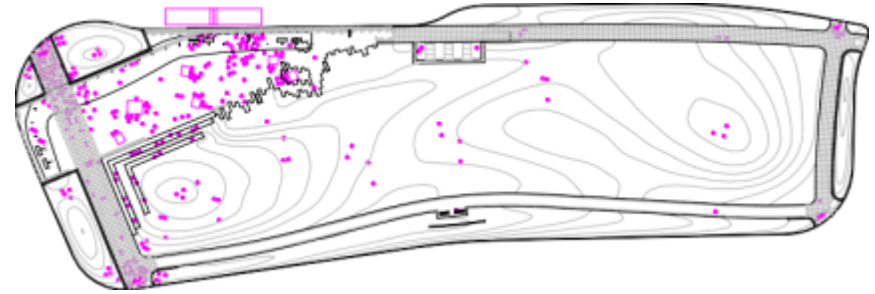
YOGA

# Lid Program

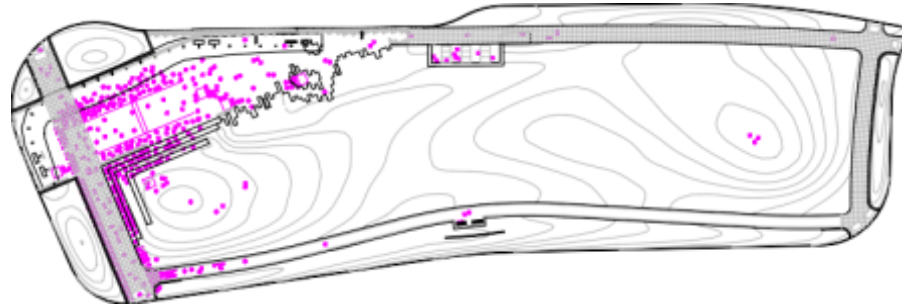
## Forward Compatibility



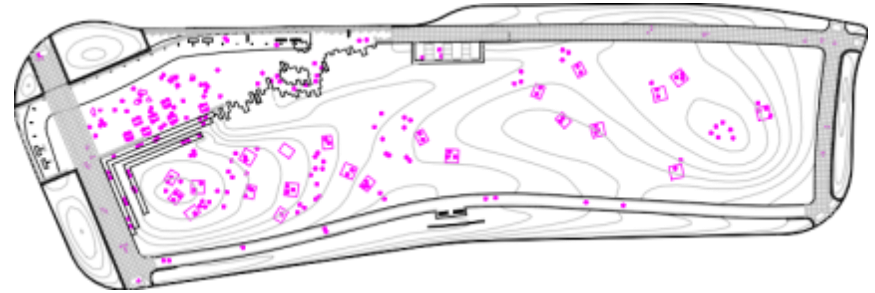
TRANSIT



GAME DAY / OPENING DAY



RACE DAY



SUNBATHING / PICNIC / URBAN LOUNGE

# Possible Historic/Cultural Elements



**GEOLOGIC HISTORY/  
REMNANTS:** erratics  
and other stone elements



**RECENT-HEROIC:** ur-  
ban erratics  
cut pieces of the hollow  
columns and 520 structure



**RECENT-HEROIC:** ur-  
ban erratics  
520 structure repurposed  
concrete



**CULTURAL:**  
urban erratics  
Montlake neighborhood  
history - stair/ porch detail  
recalled on site, other  
small residential architec-  
tural "details"



**CULTURAL:**  
hand-crafted texture  
adzed patterns elements,  
refined Pacific NW crafts,  
craftsman

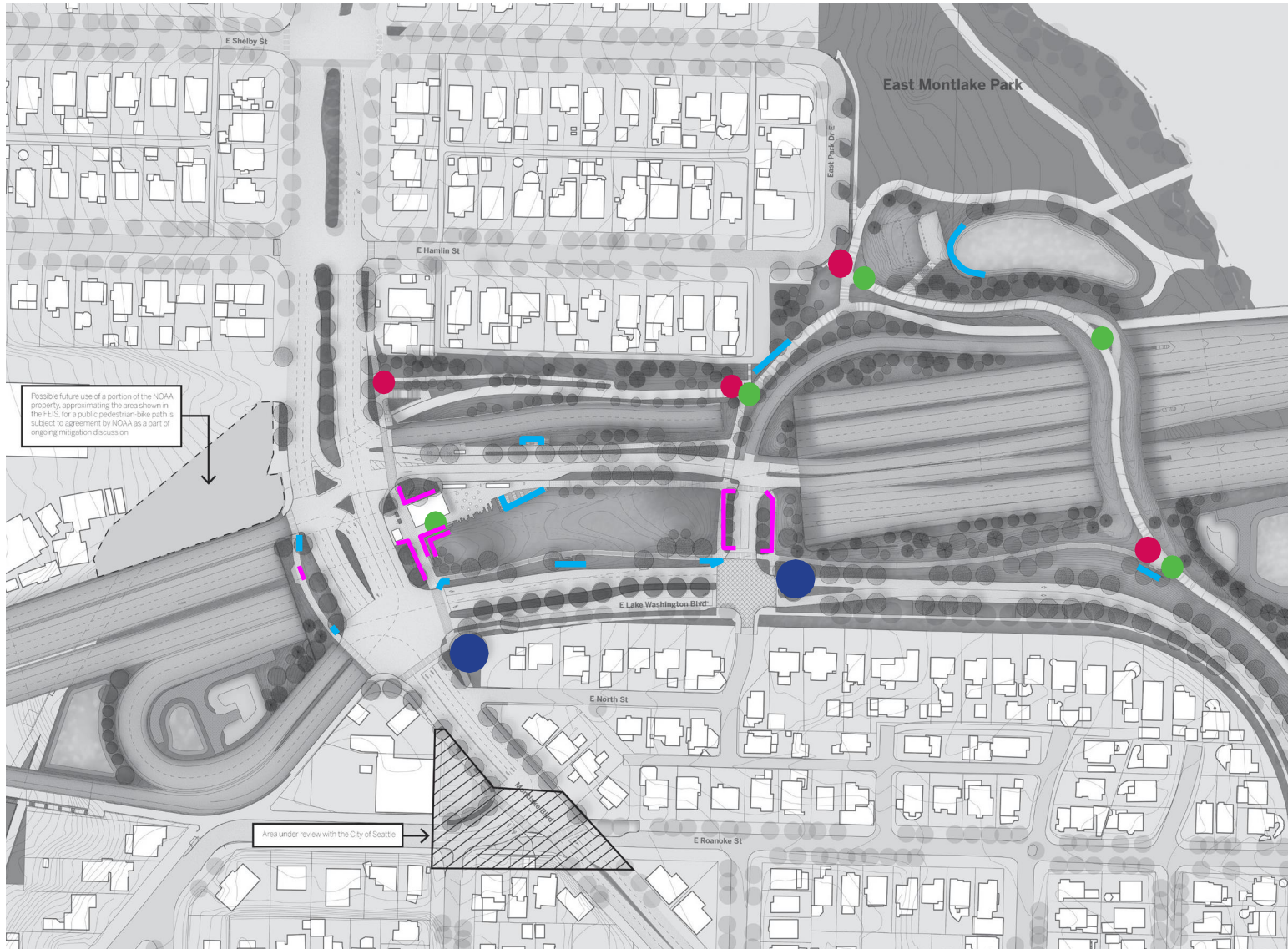


**CULTURAL:** oars mark-  
er pole shapes, pattern  
element



**Interpretive Signage**  
Complementary to Arbore-  
tum system

# Interpretive Elements Concept Plan



- System Map/Interpretive Signs
- Urban Erratics: Cultural History
- Lake Washington Boulevard Stone transition features
- | Site Wall Repurposed concrete from 520 demo
- | Site Wall Repurposed concrete from 520 demo

# Plant Communities

## Progression of Experience



# User Experience

## Possible Activities



# Casual Stroller



Lives or works near the site. Uses the space as an opportunity for fresh air, socialize with neighbors, and a place to walk the dog.

# Casual Stroller





# E Lake Washington Blvd

Looking West near 24th Street



Casual Stroller



paving



existing 2x2 sidewalk

lighting



domus fixture

planting



Olmsted legacy

paving



gravel pathway with concrete edging

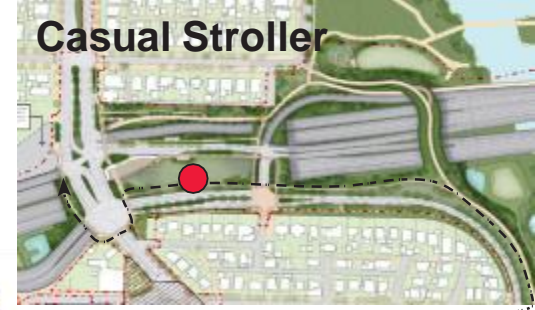
site walls



moss inducing textured concrete

# E Lake Washington Blvd

Looking West at open space



paving



existing 2x2 sidewalk

lighting



domus fixture

planting



Olmsted legacy

paving



gravel pathway with concrete edging

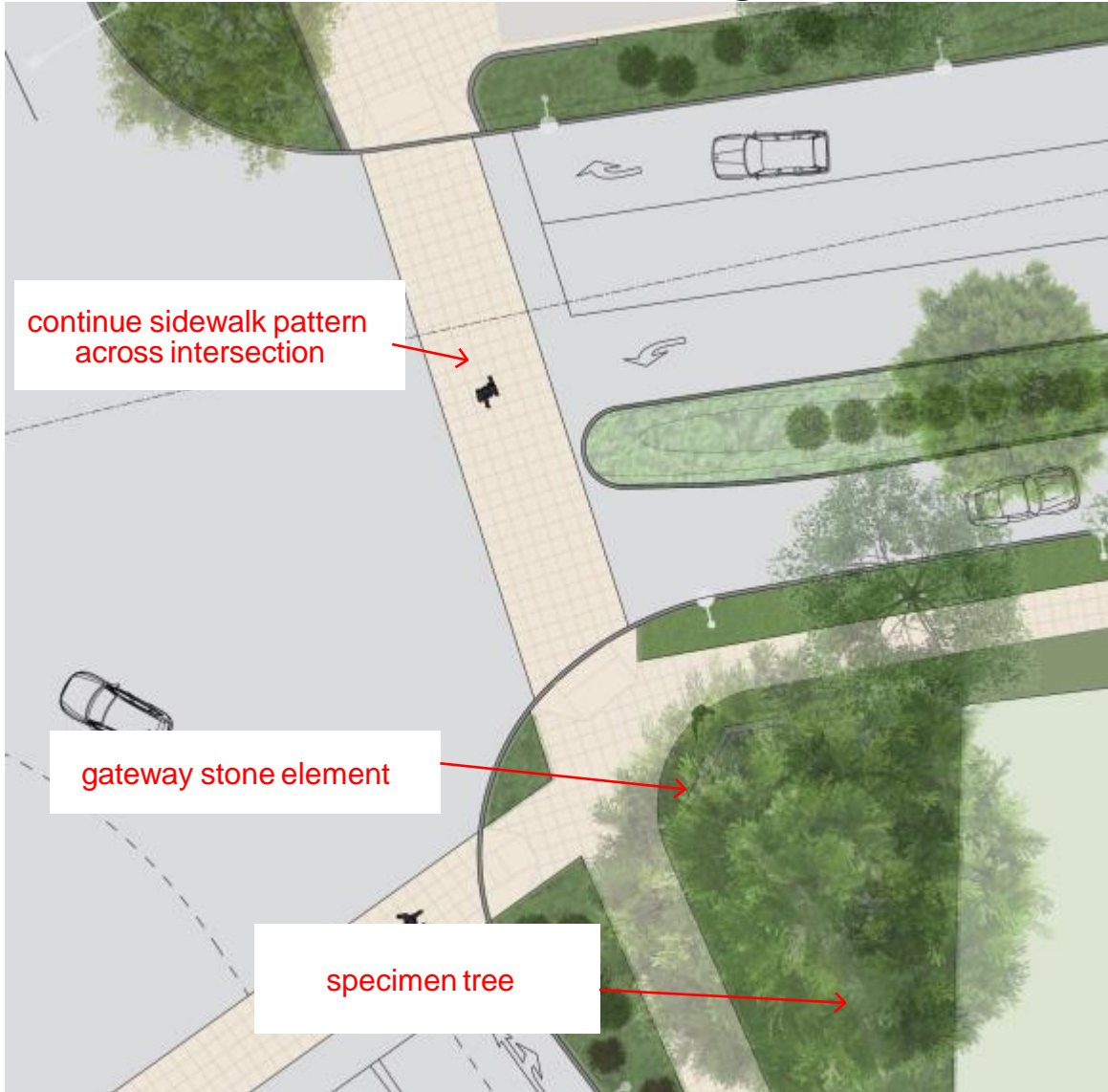
site walls



World's Fair bench

# Montlake Blvd

## SE Corner of Lake Washington Blvd Intersection



referential stone gateway element



large specimen tree



lawn

# Montlake Blvd

Looking north at main open space



EB SR 520



street lighting



City street light

street edge planting sidewalk paving



Olmsted legacy



2x2 scored concrete

plaza paving



horizontal scored concrete

plaza lighting



undermount in site walls along plaza per city precedent

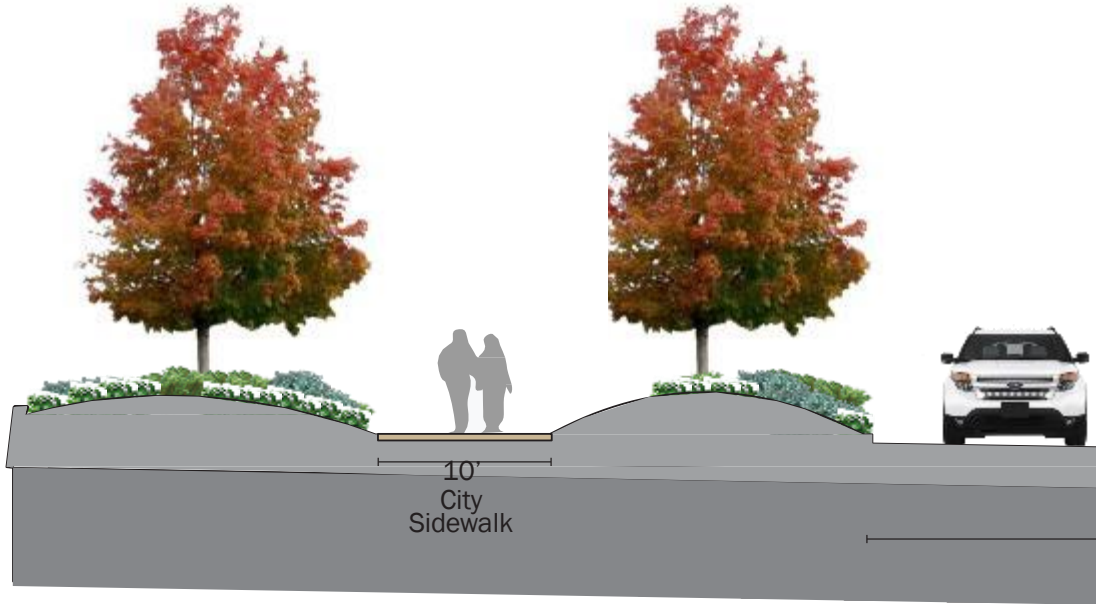
site walls



adze texture concrete

# Montlake Blvd

Looking at north west side of Montlake Blvd



street lighting



City street light

street edge planting



Olmsted legacy

sidewalk paving



2x2 scored concrete

plaza paving



horizontal scored concrete

plaza lighting



undermount in site walls along plaza

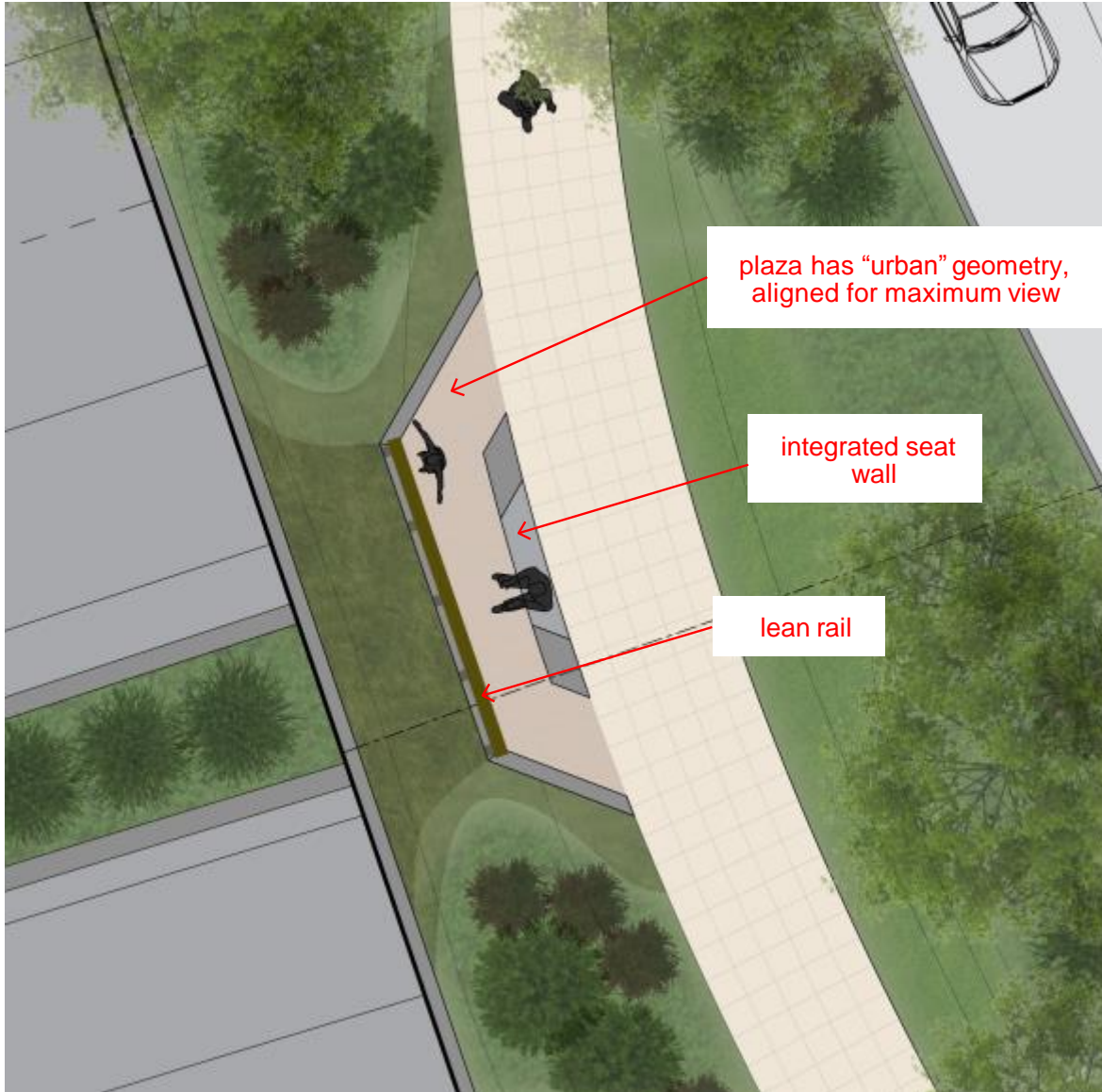
site walls



adze texture concrete

# Montlake Blvd

at outlook Lid Edge



lighting

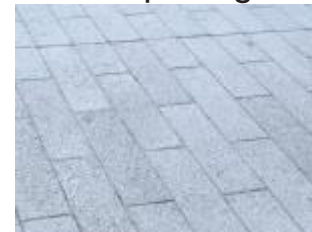


City street light  
site wall



adze texture con-  
crete wall

outlook paving



horizontal tiled scoring

street edge planting



Olmsted legacy

retaining wall



moss inducing  
textured concrete

sidewalk paving



2x2 scored concrete

# Montlake Blvd Outlook

Looking west



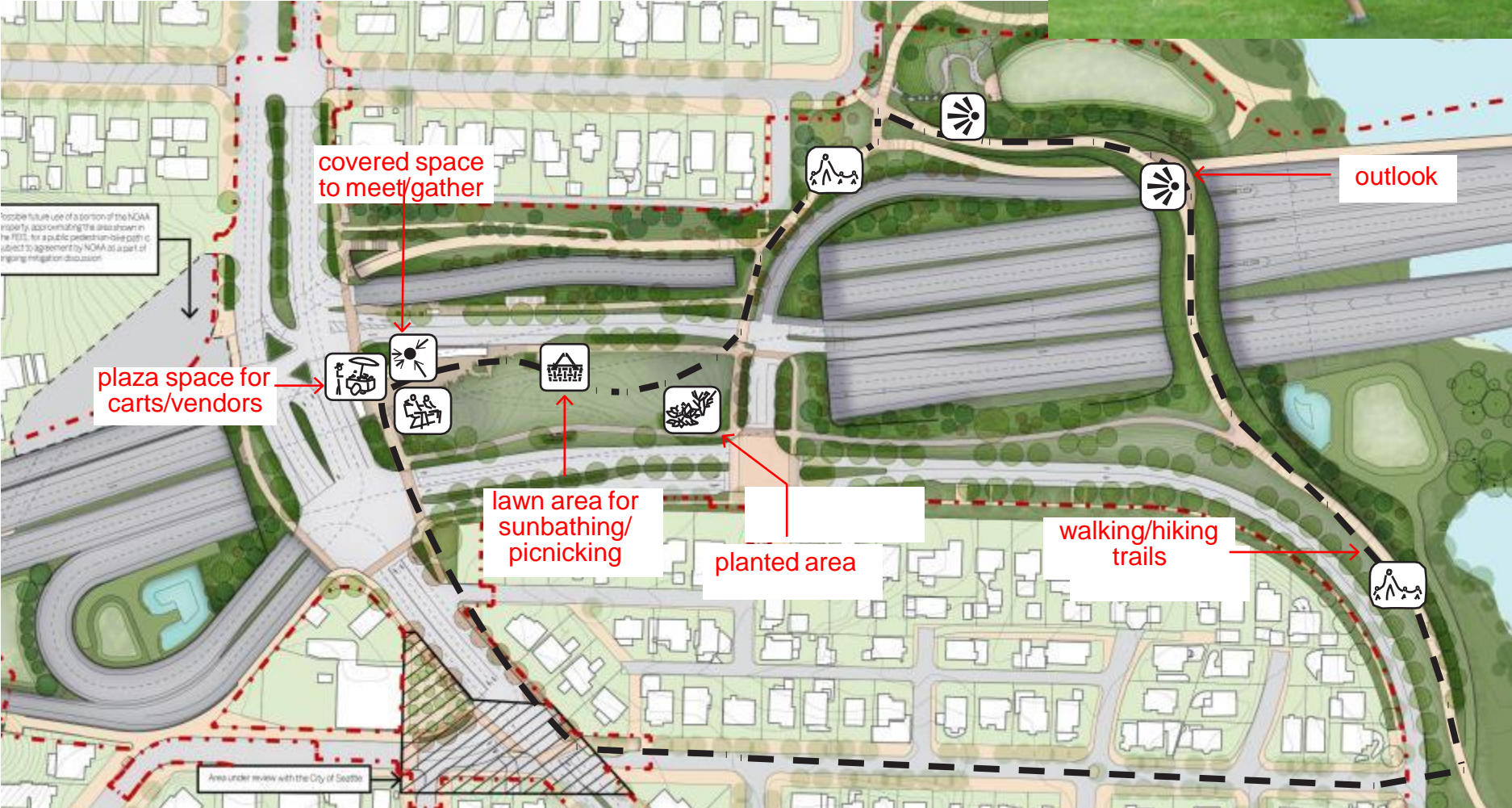
# Neighborhood Family

Lives within walking distance. Looking for places to learn, explore, and play.





# Neighborhood Family



# Neighborhood Open Space



24th Ave E

Montlake Blvd E



Olmsted legacy



lawn



World's Fair bench

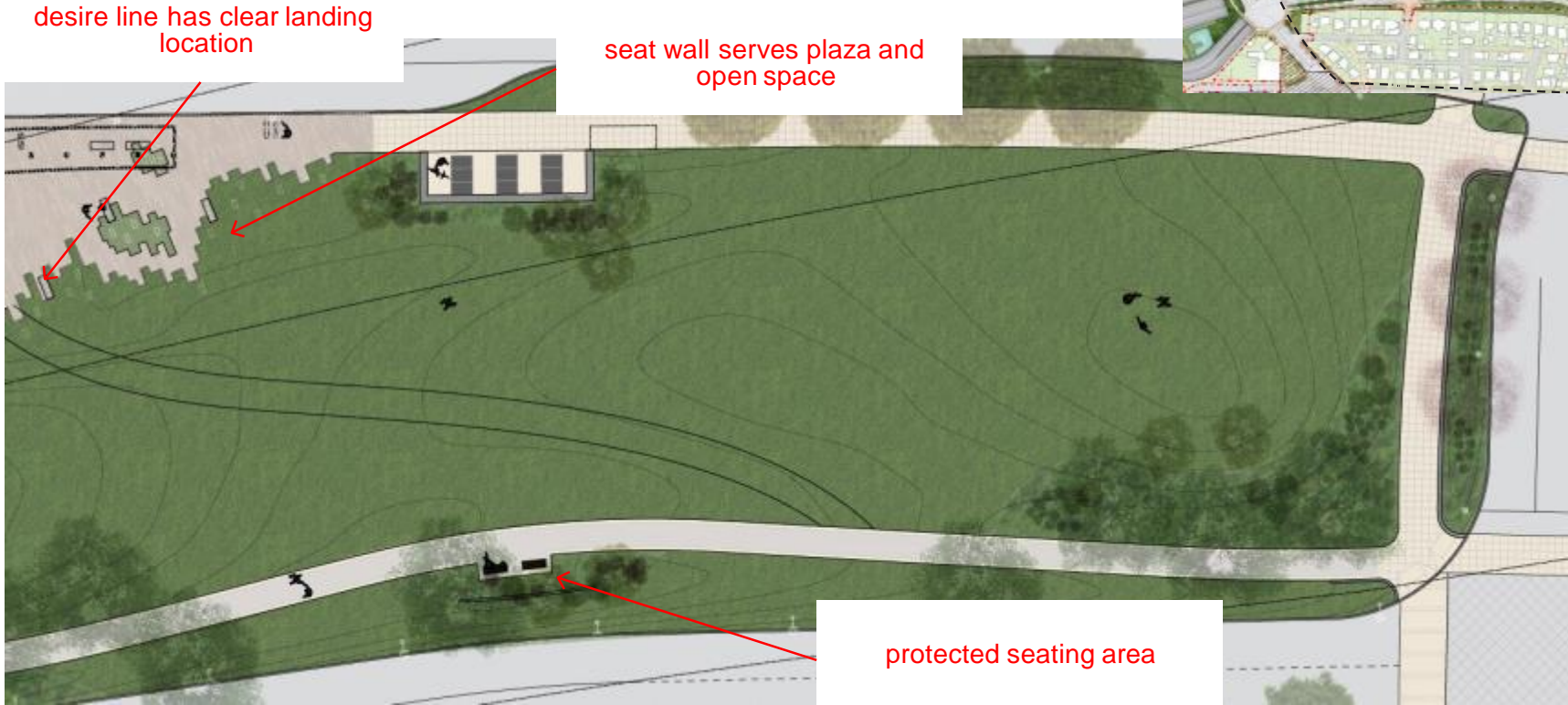


adze texture concrete walls



integrated shelter

# Neighborhood Open Space



plaza paving



paving

central open space planting



lawn

Lake Washington Blvd planting



Olmsted legacy

Lake Washington Blvd paving



gravel edged with concrete

Lake Washington Blvd seating



furniture

# Neighborhood Open Space

View looking East from Montlake Blvd



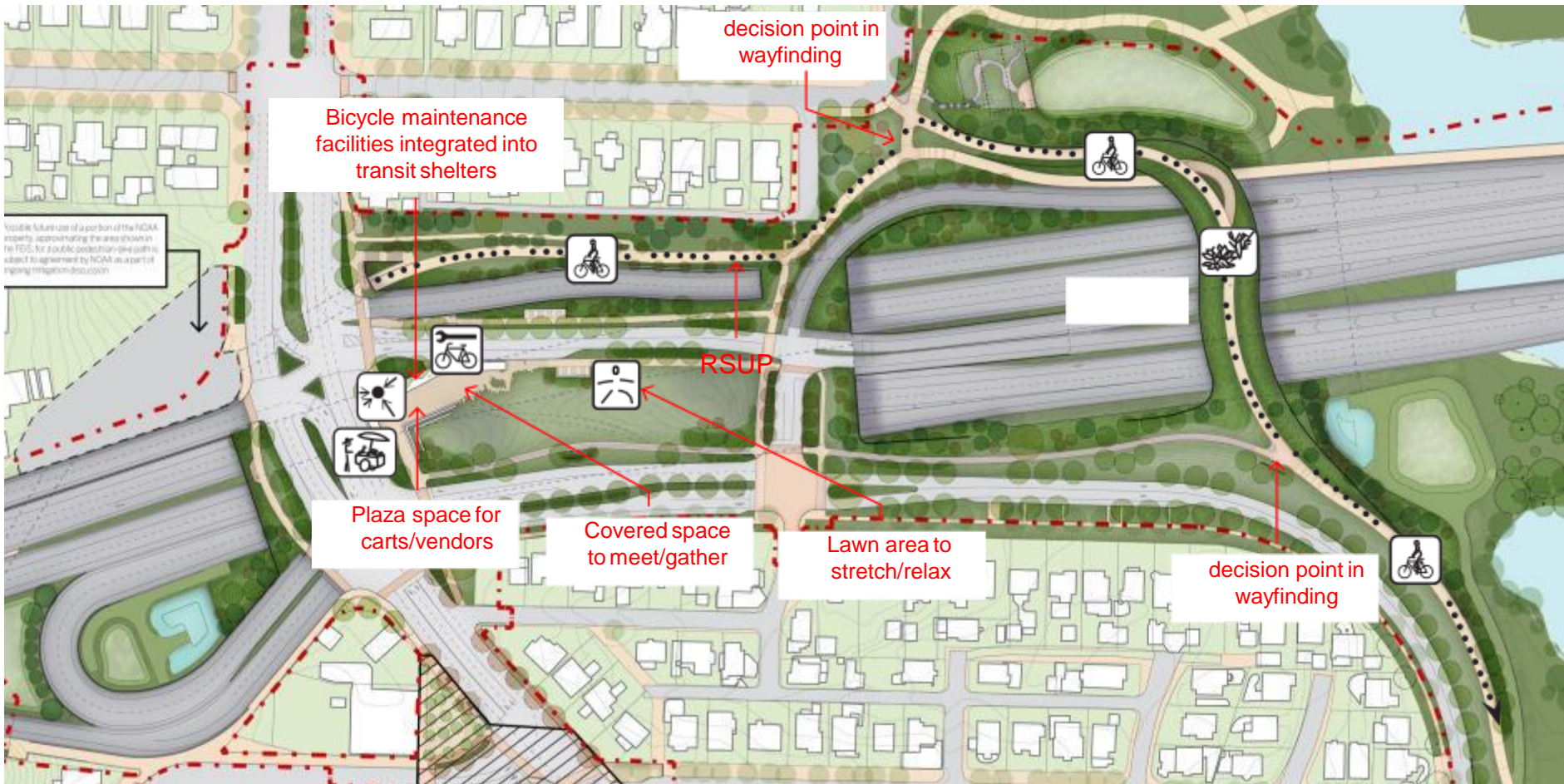
# Bicyclist

Meets up with colleagues for an afternoon ride.

Needs bike amenities, legible network, shelter from rain.



# Bicyclist



# Regional Shared Use Path

Looking west



planting



portage passage

RSUP lighting



bollard system

RSUP paving



asphalt

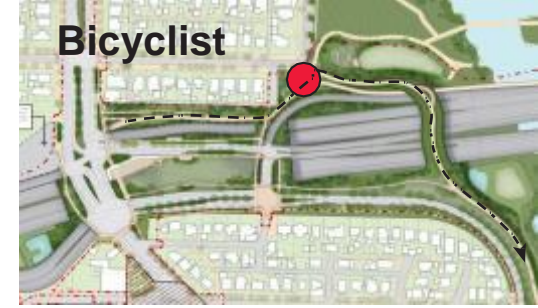
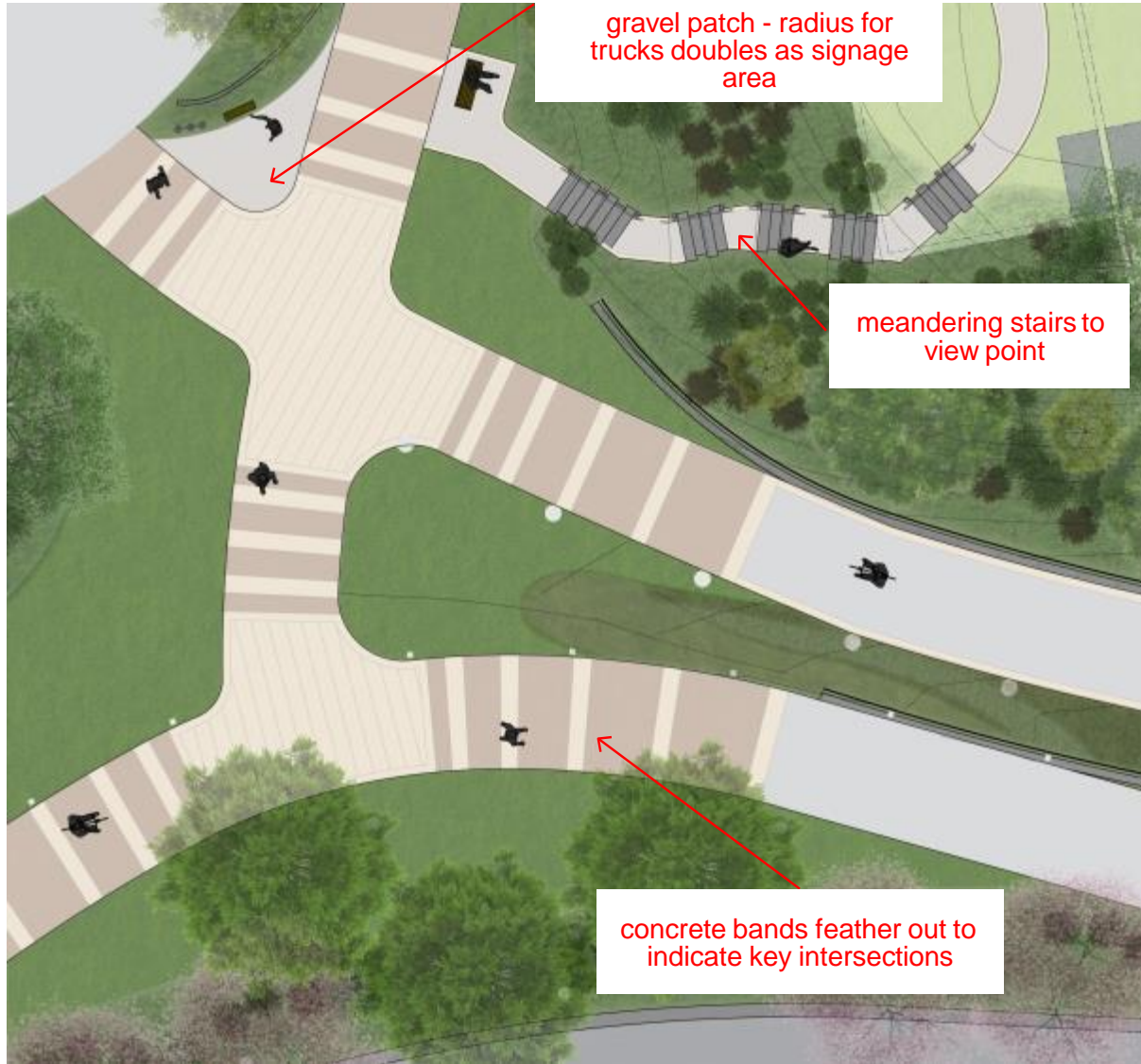
sidewalk paving



scored concrete

# Knuckles

## RSUP and land bridge intersection



path intersection



scored horizontal concrete/pavers

land bridge paving



asphalt with gravel shoulder

RSUP paving



asphalt

planting

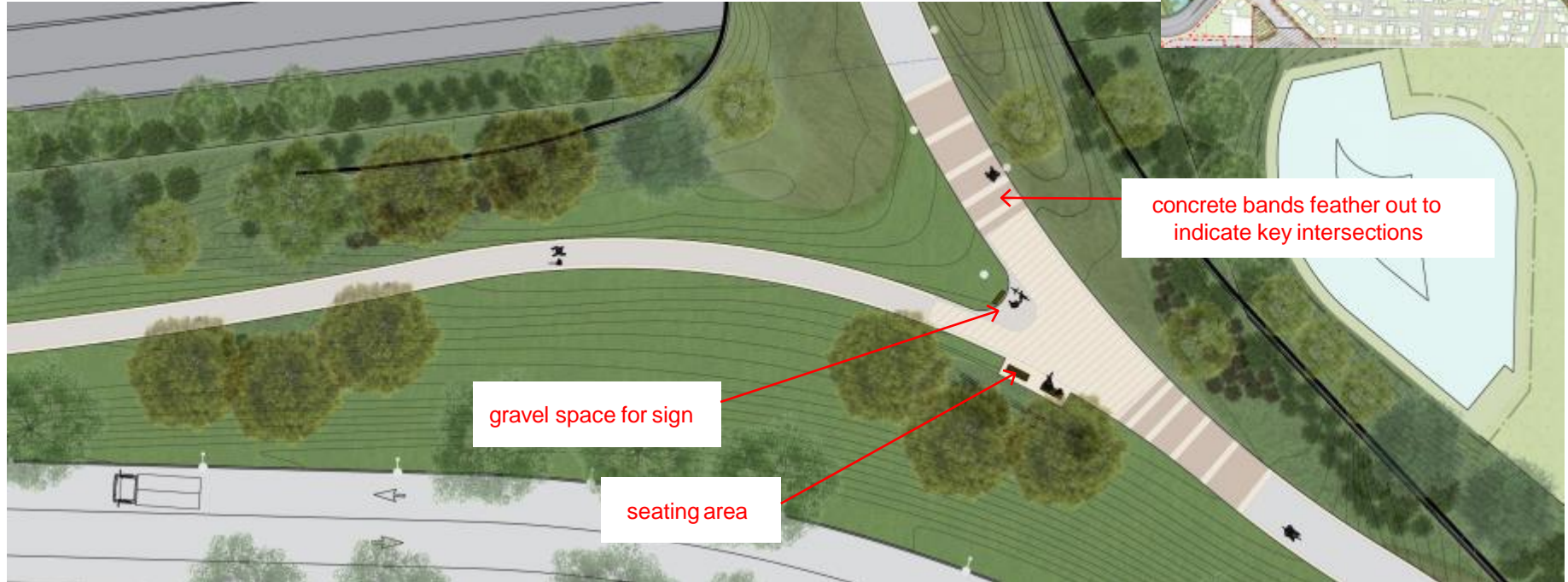


portage passage



# Knuckles

## Olmsted bend and land bridge intersection



path intersection



scored horizontal concrete

lighting



domus fixture

planting



Olmsted legacy

paving



gravel pathway with concrete edging

site walls



recycled concrete

# Knuckles

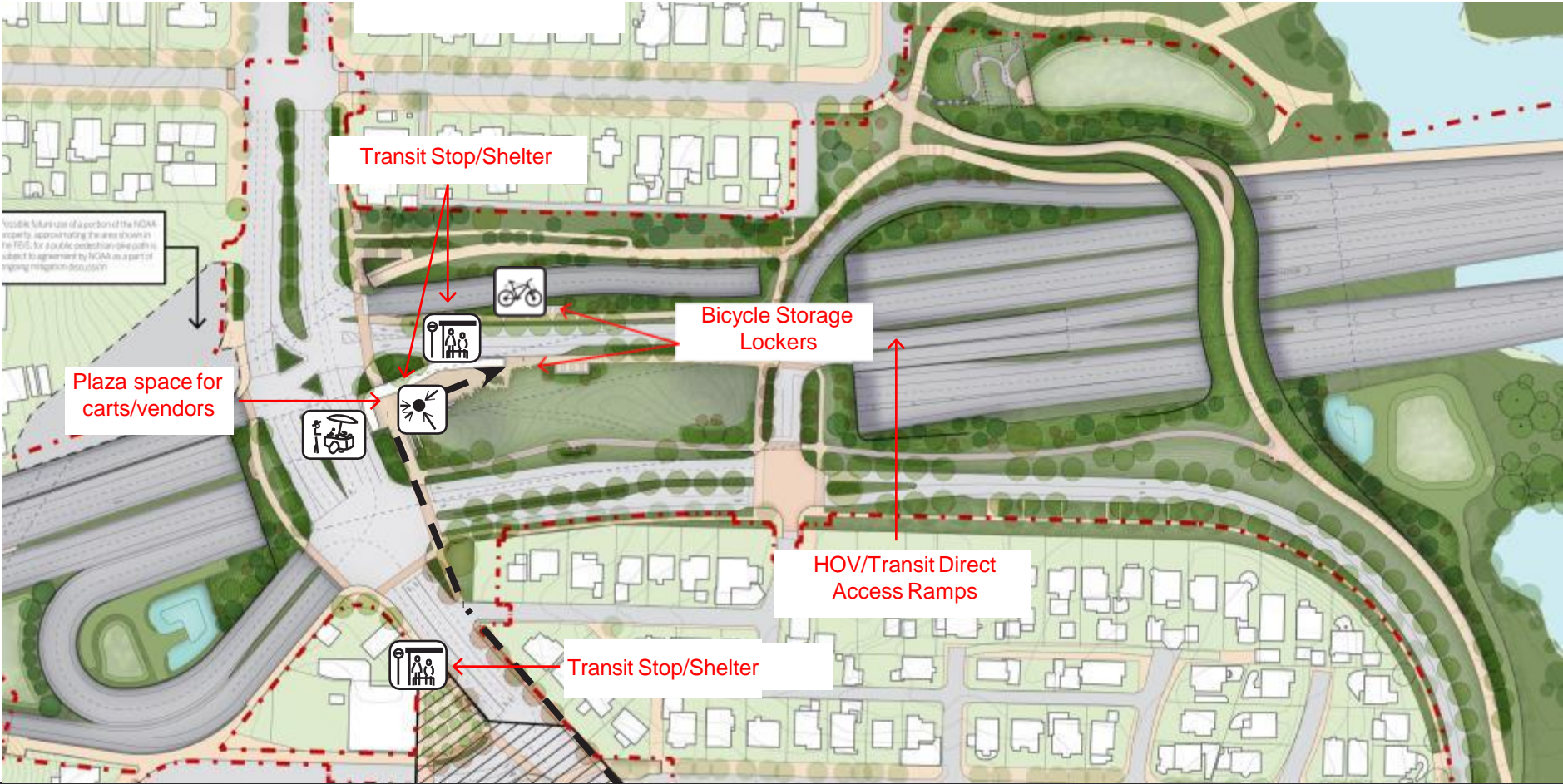
Olmsted bend and land bridge intersection



# Transit User

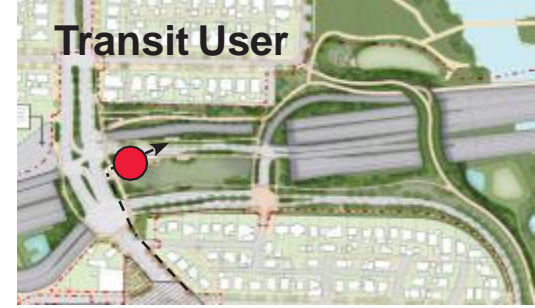
Commutes using multiple modes. Spends time in the plaza everyday, has a ritual.

# Transit User



# Urban Trailhead

## North-South Section: Plaza



Olmsted Legacy

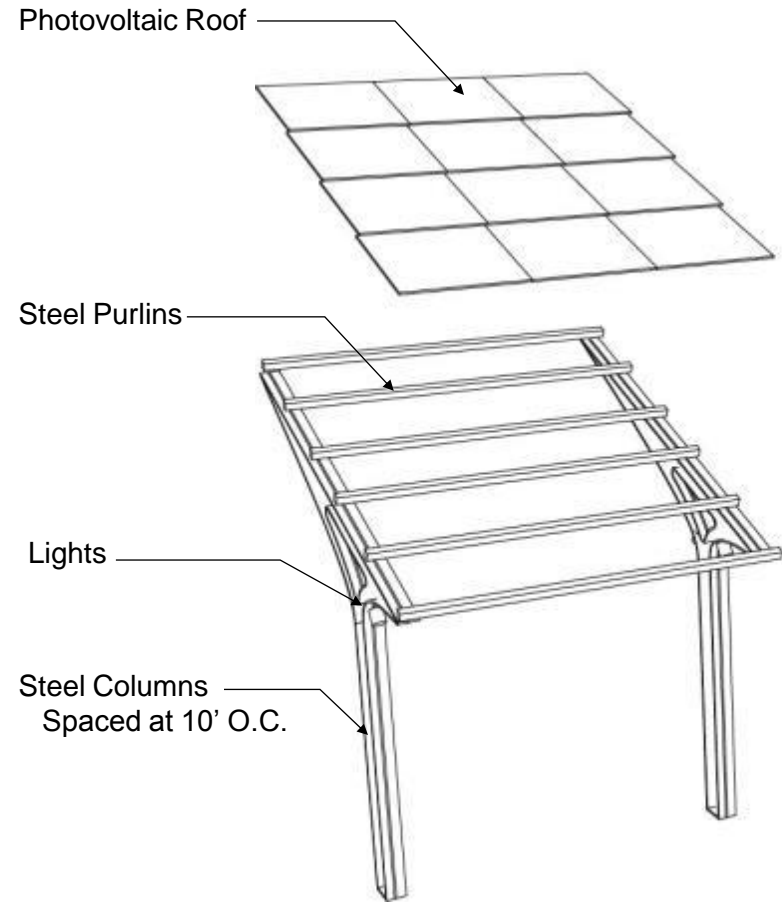
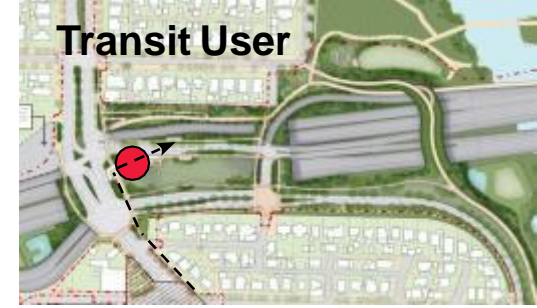
lawn

World's Fair bench

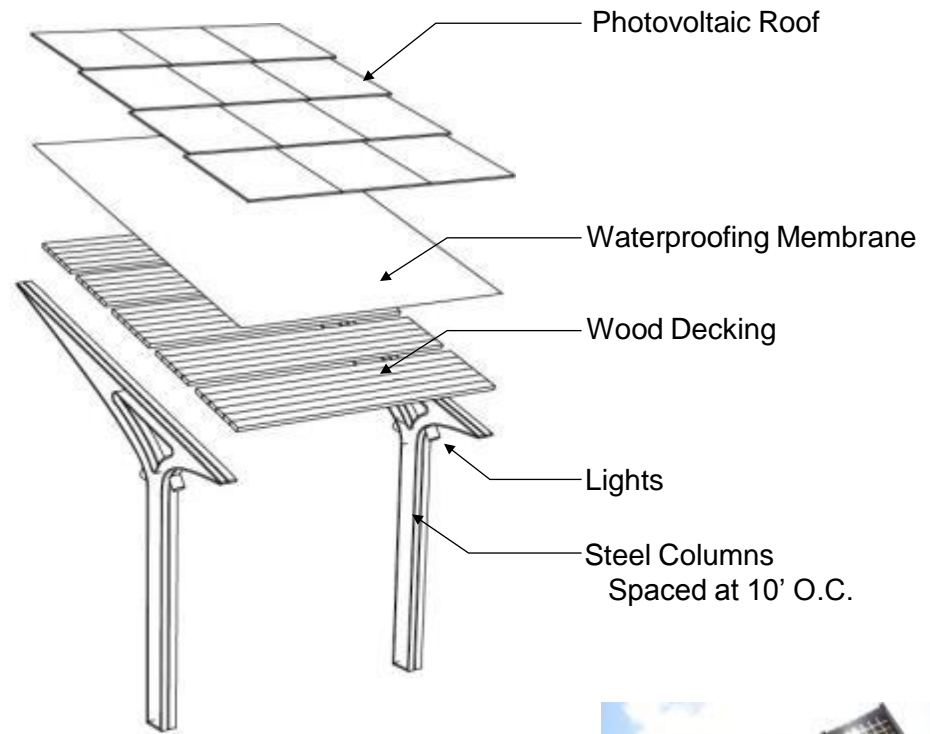
textured site walls

integrated shelter  
with bike program

# Pavilion/Shelter Concept



Steel only Condition



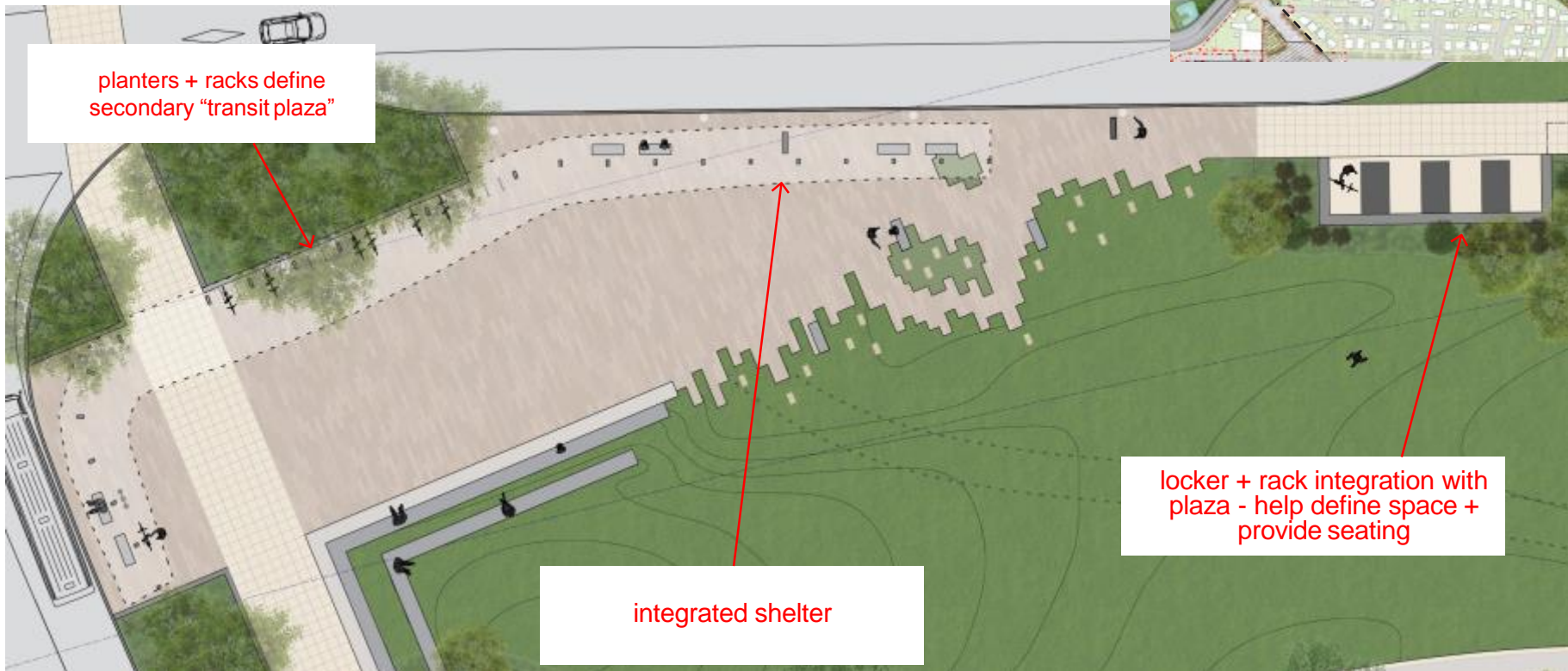
Steel + Wood Condition



integrated shelter

# Urban Trailhead

## Plaza



feathered in paving



adze texture concrete site walls



integrated shelter



pedestrian scaled lighting along HOV street, per city precedent

# Plaza

Looking East towards Montlake Blvd





# Weekend Warrior

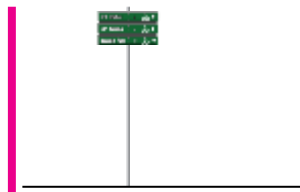
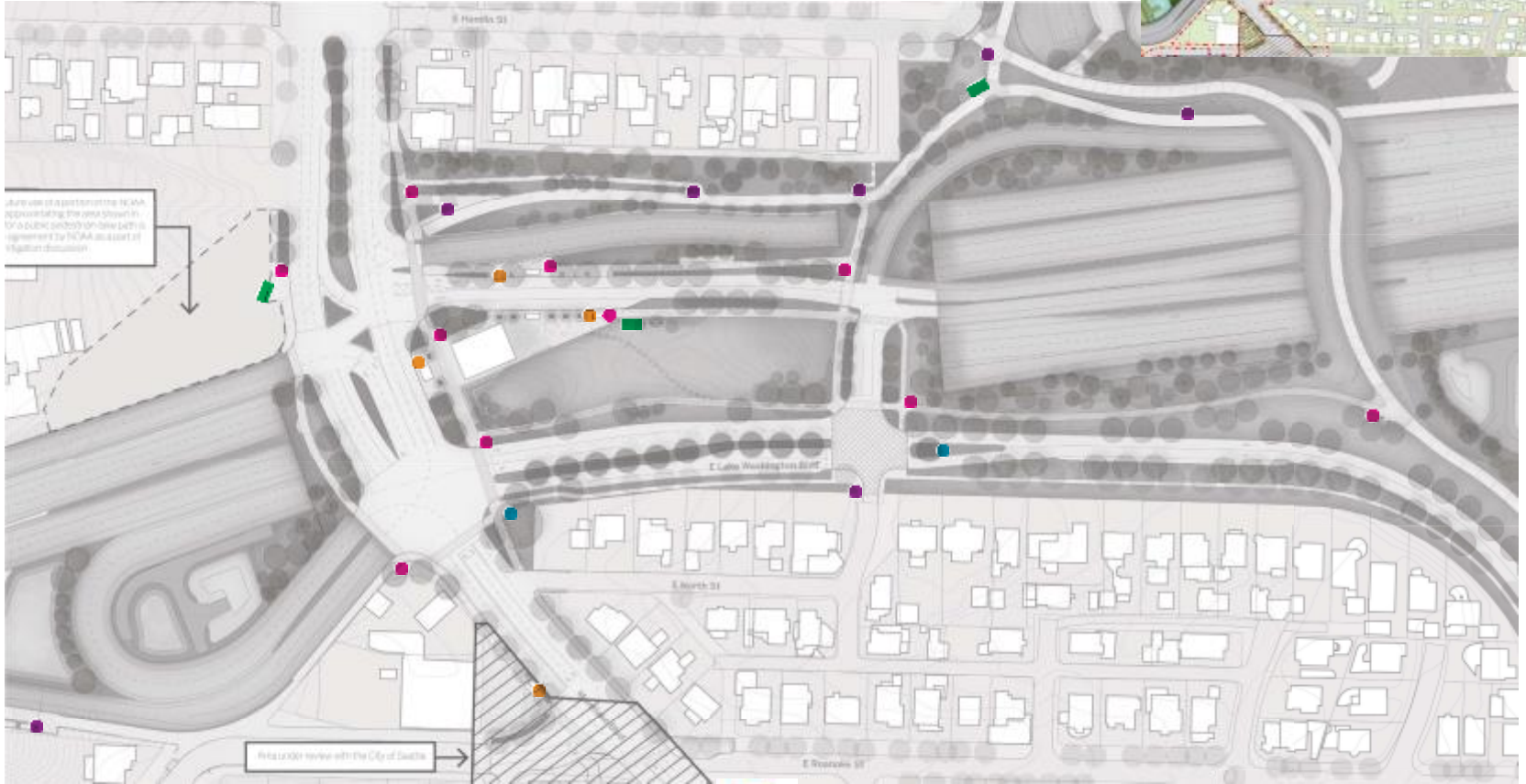
Out to get some exercise on the weekend. Looking to discover new engaging routes around the region.



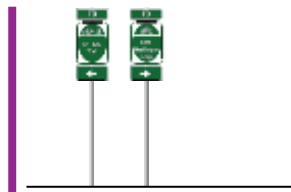
# Weekend Warrior



# Wayfinding System



City connections



Regional path and trail systems



Transit connections



System map



Lake Washington Boulevard system  
• Stone transition features

# 24th Ave E

## Looking North



EB SR 520

site walls



adze textured concrete

lighting



pedestrian scaled fixture per city precedent

sidewalk paving



2x2 scored concrete

planting



Olmsted legacy

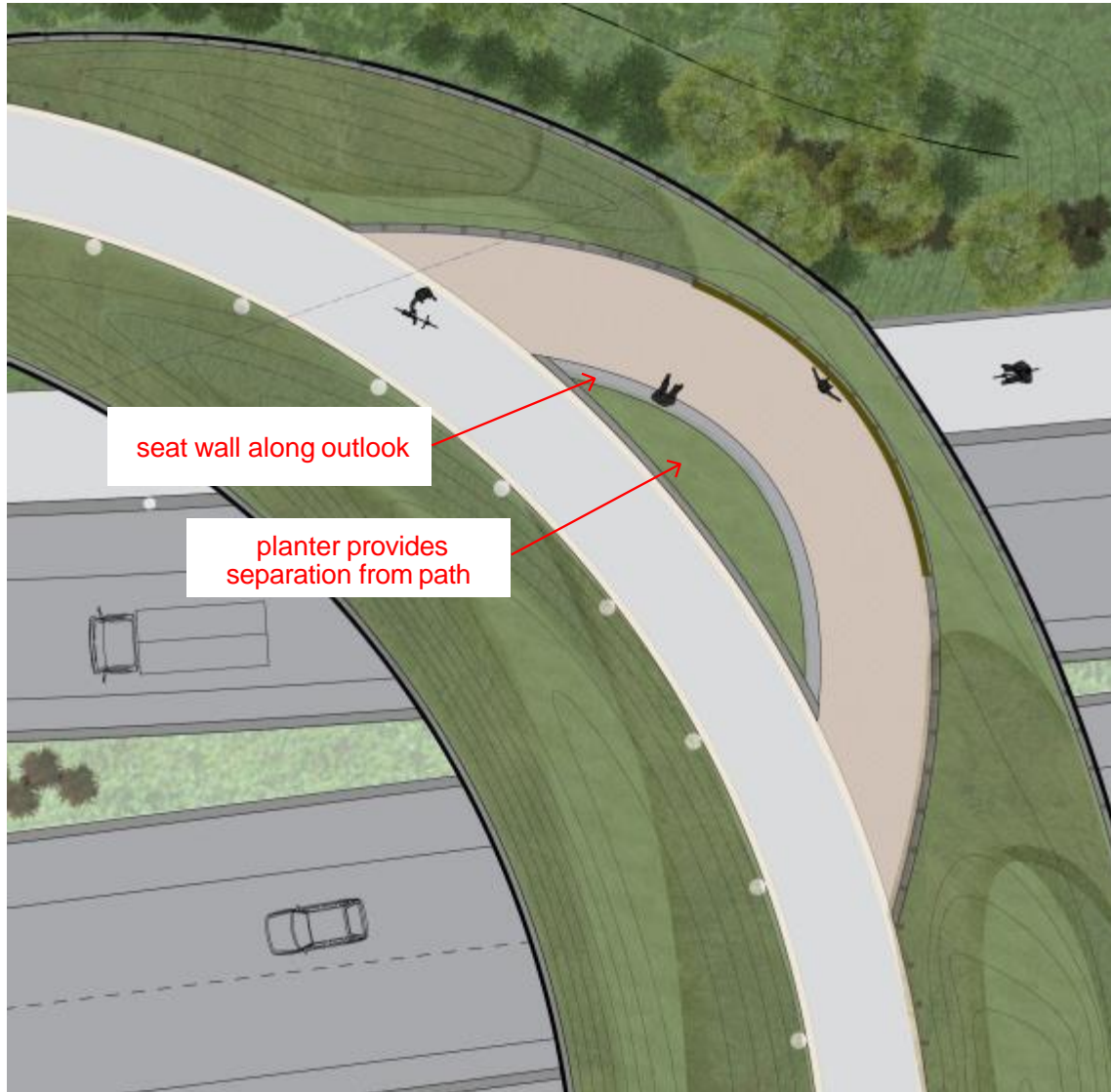
gateway wall



moss inducing textured concrete

# Landbridge

at outlook



outlook paving



scored concrete/  
pavers

pathway paving



asphalt with gravel  
shoulder

lighting



within planting, inset along site walls

planting



land bridge meadow

# Land bridge

Looking Northwest



NOTE: For clarity renderings do not show all utilities, transit infrastructure and signage.

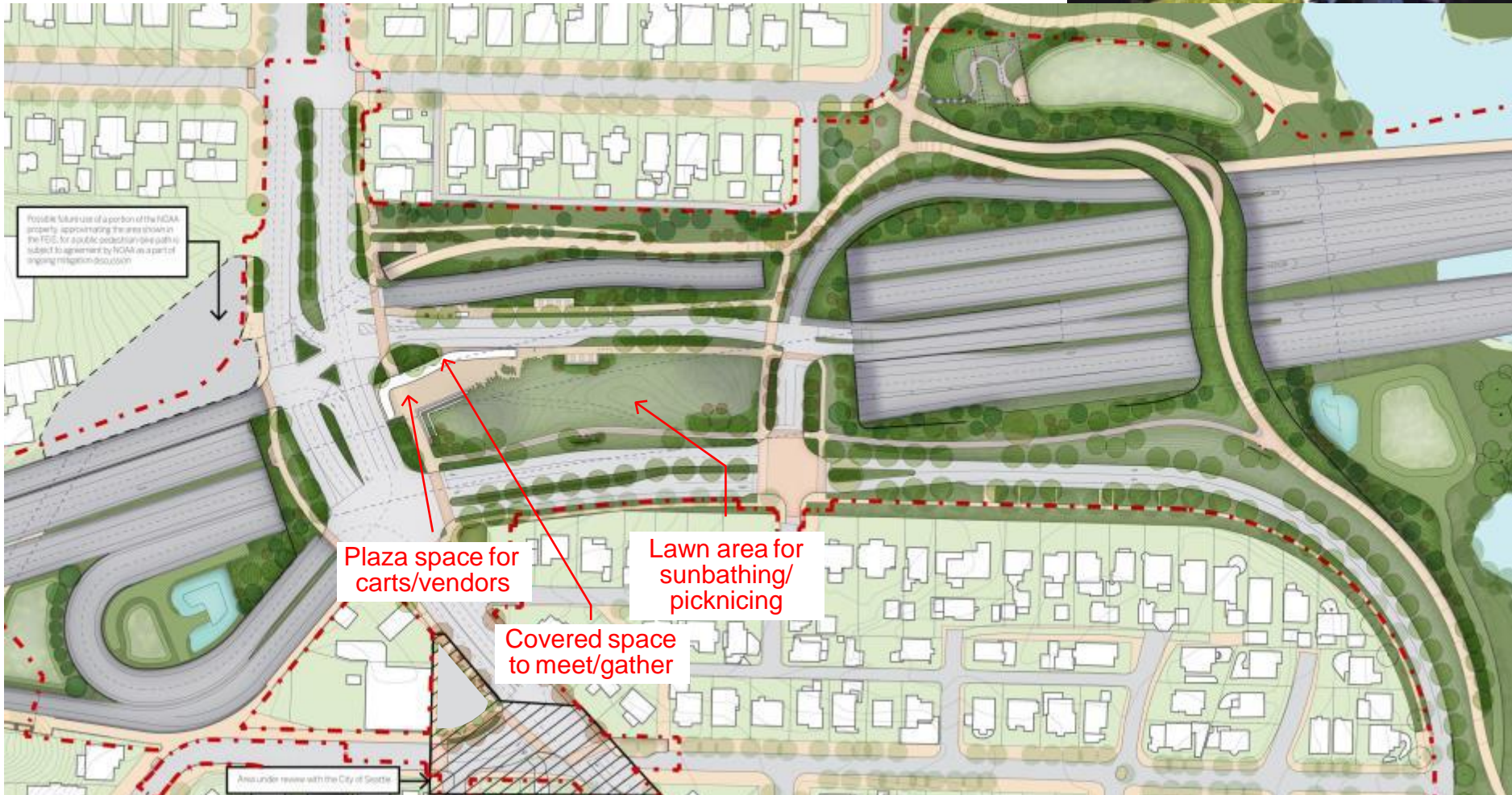
Concepts and materials shown may be further refined pending outcomes of ongoing maintenance conversations between WSDOT, the City of Seattle, and King County Metro.

# Special Event

Large gatherings, community activities, pre-event space for neighborhood events (husky games, opening day. . .)



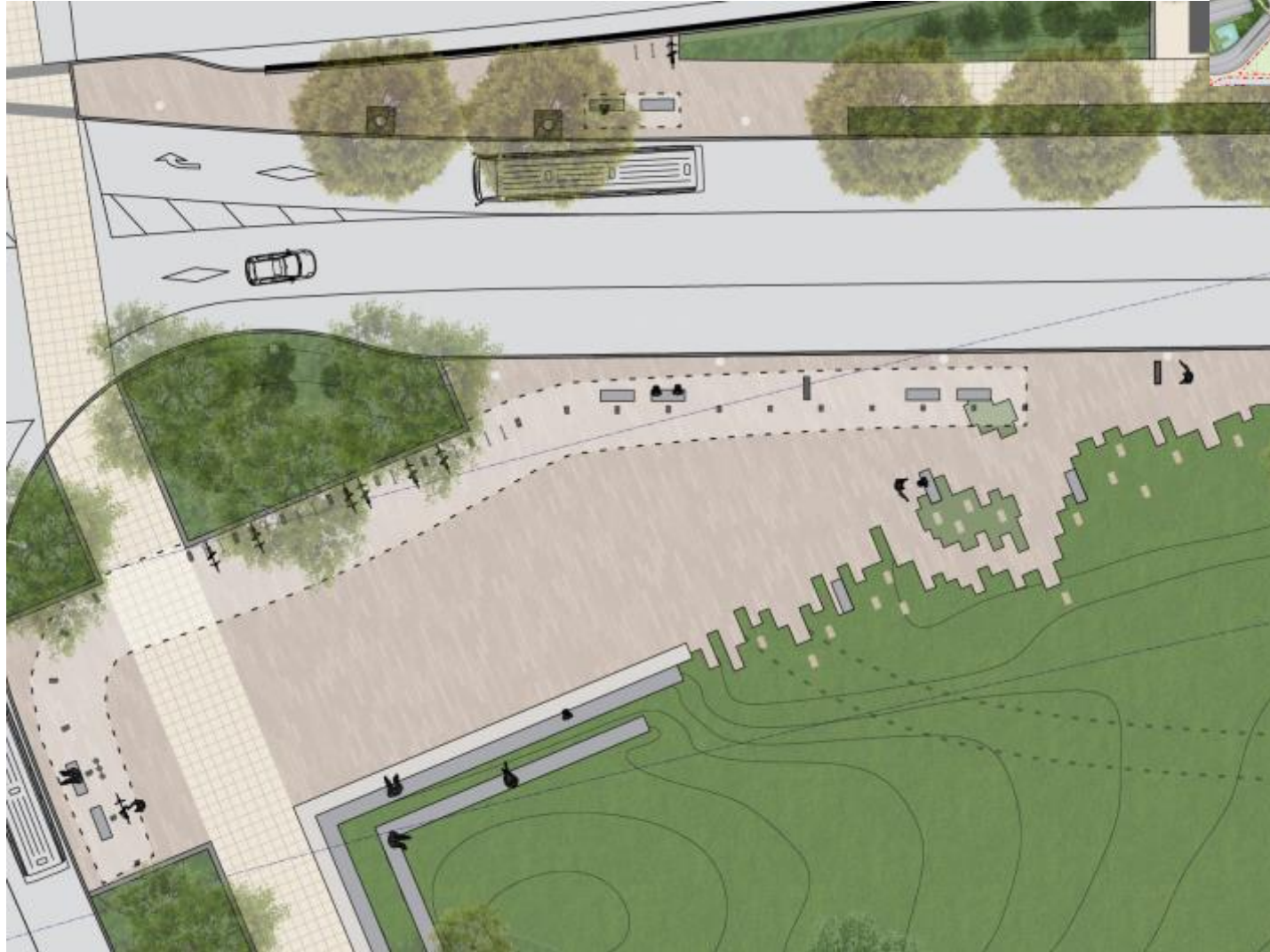
# Special Event





# Urban Trailhead

## Plaza Detail



integrated shelter



adze texture concrete seating walls



feathered in paving

# Urban Trailhead

## Plaza Detail



# Urban Trailhead

## Plaza Detail



# Design Goals

- Improves regional and neighborhood non-motorized connections
- Enhances transit experience and vehicular functionality
- Creates a practical solution to multiple needs
- Restores and improves ecological systems and connectivity
- Improves air quality and reduces noise
- Produces safe and functional space for neighborhood and regional use
- Brings human scale and community character to create distinctive spaces
- Forms a memorable and layered gateway experience

# Next steps

