

# **SR 520 – Portage Bay Bridge & Roanoke Lid Project**

## **Seattle Design Commission**

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**Michael Fitzpatrick**, SR 520 Design Team

**Matt Gurrad**, SR 520 Design Team

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**Adam Amrhein**, SR 520 Design Team

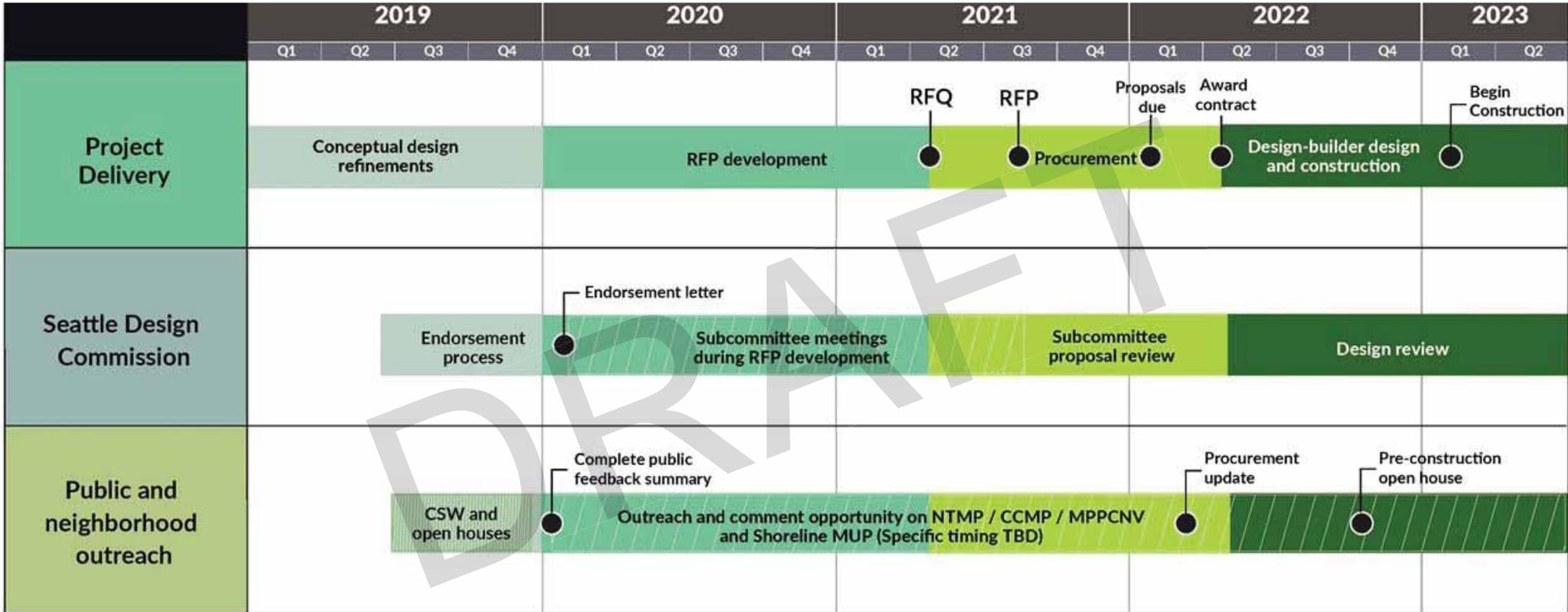
Nov. 7, 2019

## Presentation Outline

- Welcome, introductions, and updates
- Corridor vision
- Major project elements
  - SR 520 Trail and Neighborhood Connections
  - Portage Bay Bridge
  - Roanoke Lid
- Program recap



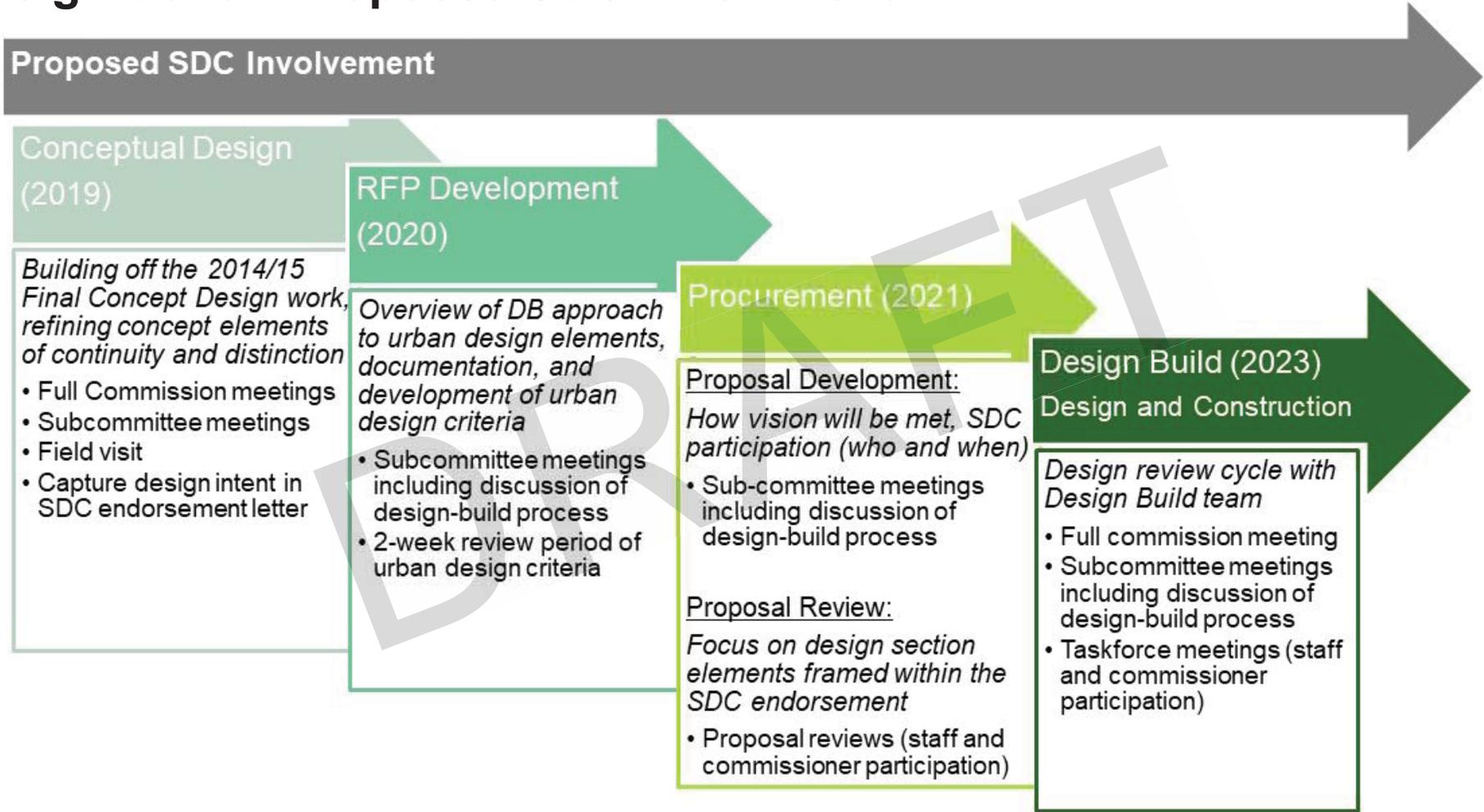
# Project Delivery Schedule



**CCMP:** Community Construction Management Plan  
**CSW:** Community Stakeholder Workshop  
**MPPCNV:** Major Public Project Construction Noise Variance  
**MUP:** Master Use Permit

**NTMP:** Neighborhood Traffic Management Plan  
**RFP:** Request for Proposals  
**RFQ:** Request for Qualifications  
**SDC:** Seattle Design Commission

# Design Build - Proposed SDC Involvement



# Public Outreach Summary

- Community stakeholder workshops focused on:
  - Roanoke Lid look and feel
  - Non-motorized connections
  - Boyer Ave. E. and Bill Dawson under-bridge areas
- Approx. 55 participants across three workshops. Included:
  - Neighbors
  - Local community council representatives
  - Seattle Neighborhood Greenways staff
  - Friends of Seattle's Olmsted Parks representatives
  - Seattle Pedestrian Advisory Board member
  - SDOT, Parks, and OPCD staff
- In person open houses held in June and Oct. to bookend the workshops and invite additional feedback
- Online open house launched on June 20; open through Nov. 13
- Key feedback themes: improve connectivity, consider safety for all users, prioritize viewpoints and outlooks

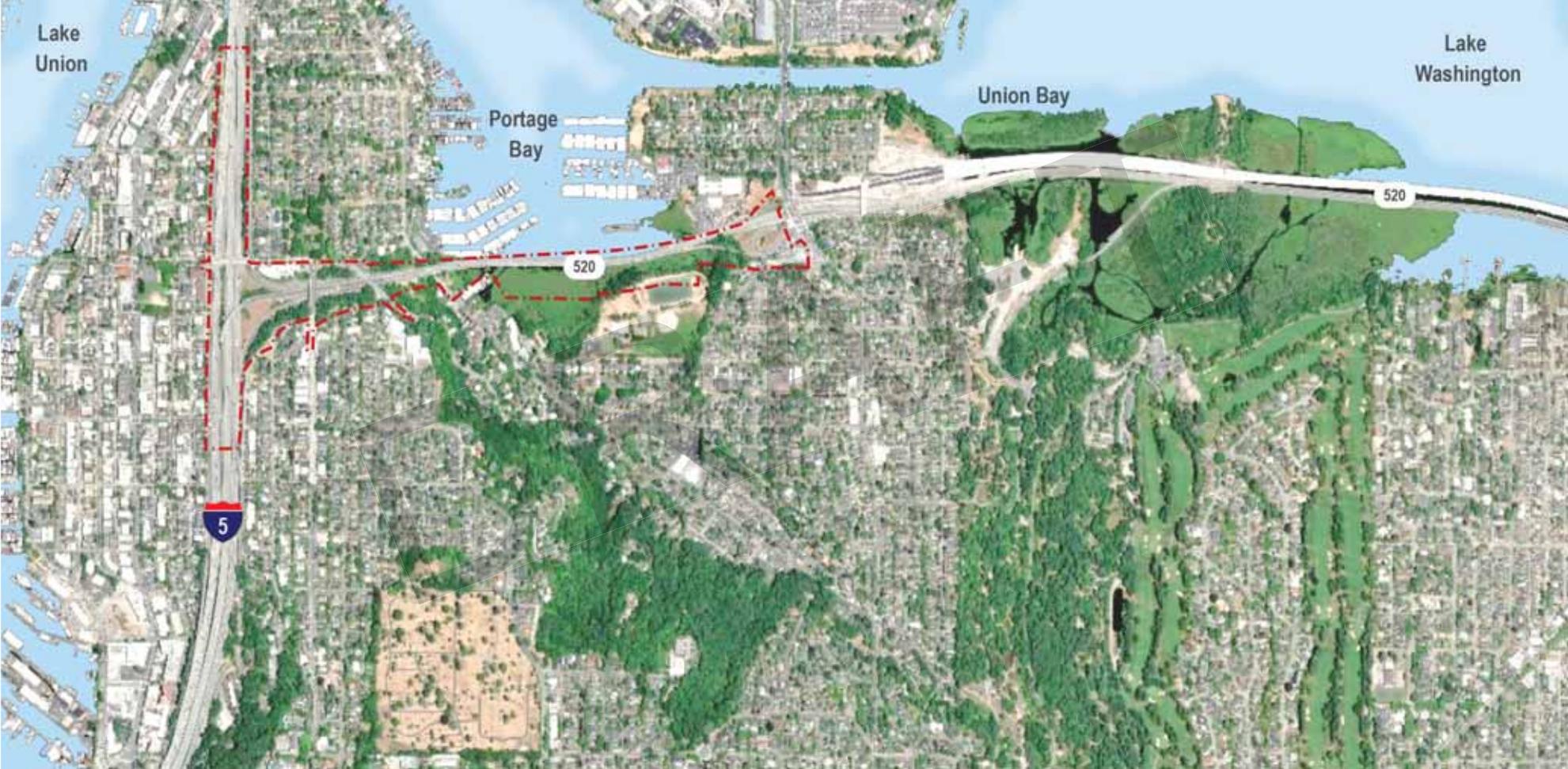


*Attendees at the second workshop on Aug. 15 discuss project plans.*

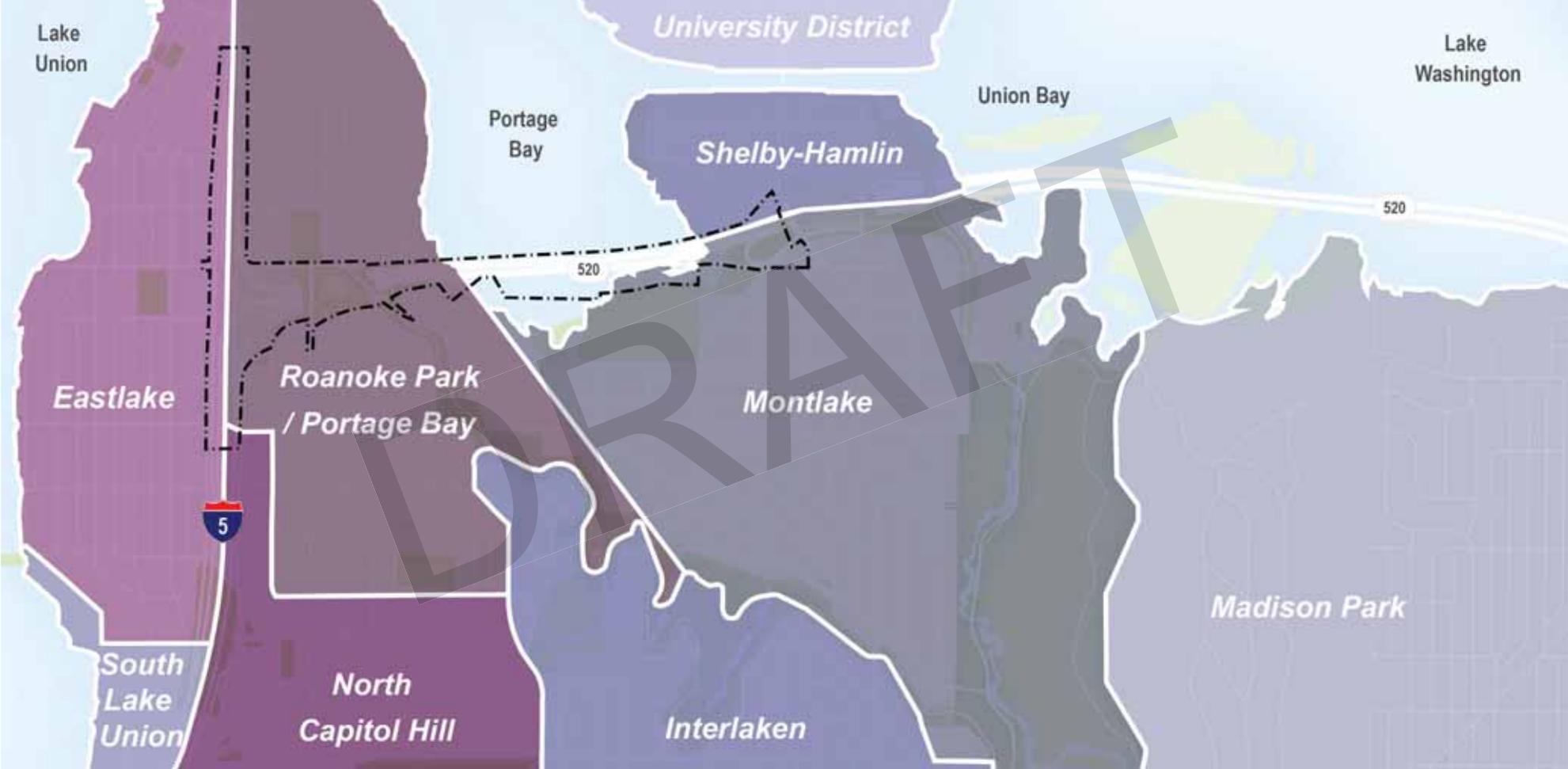


*Attendees and staff at the Oct. 29 SR 520 Rest of the West open house*

# Context



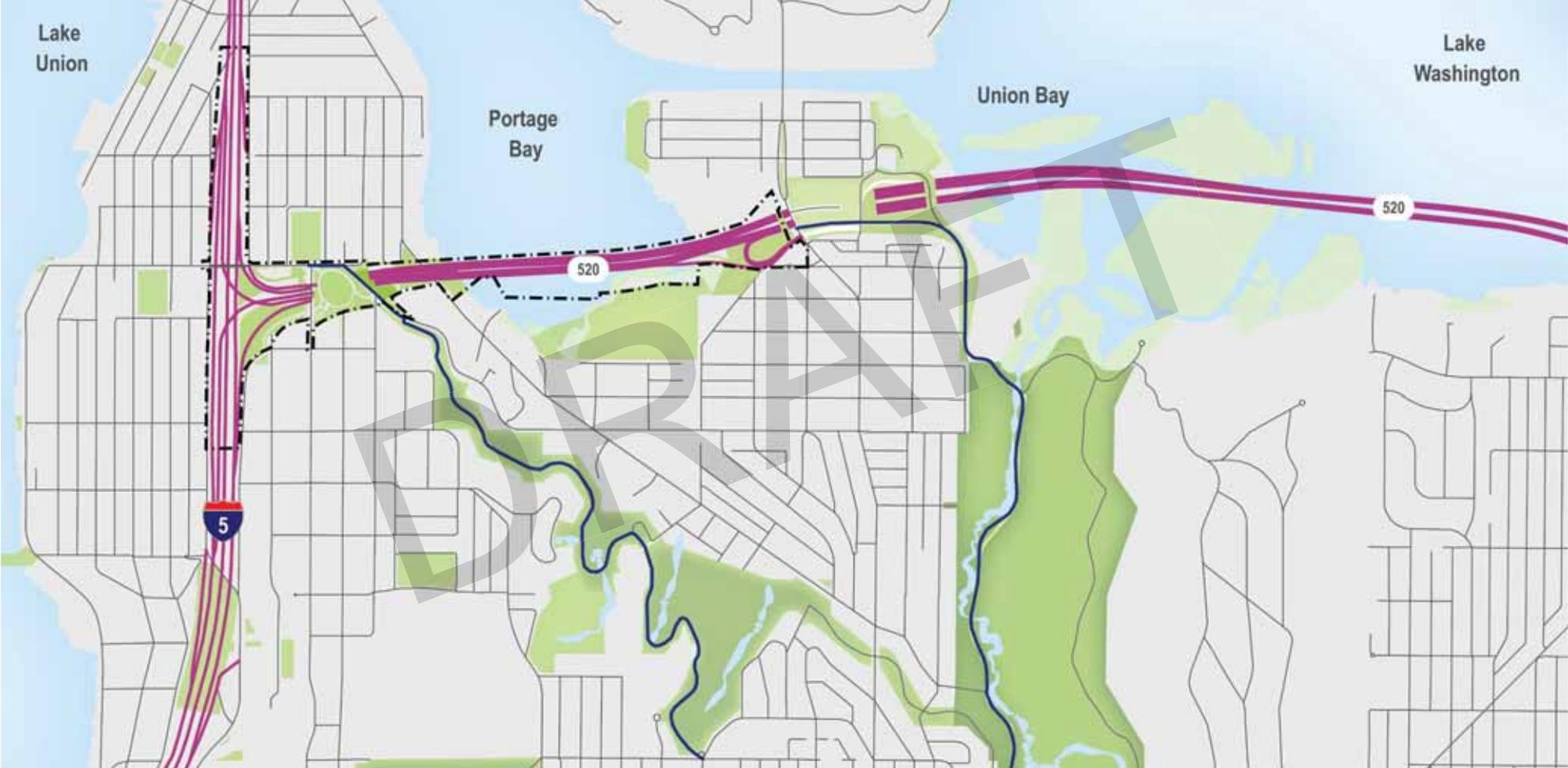
# Context: Neighborhoods



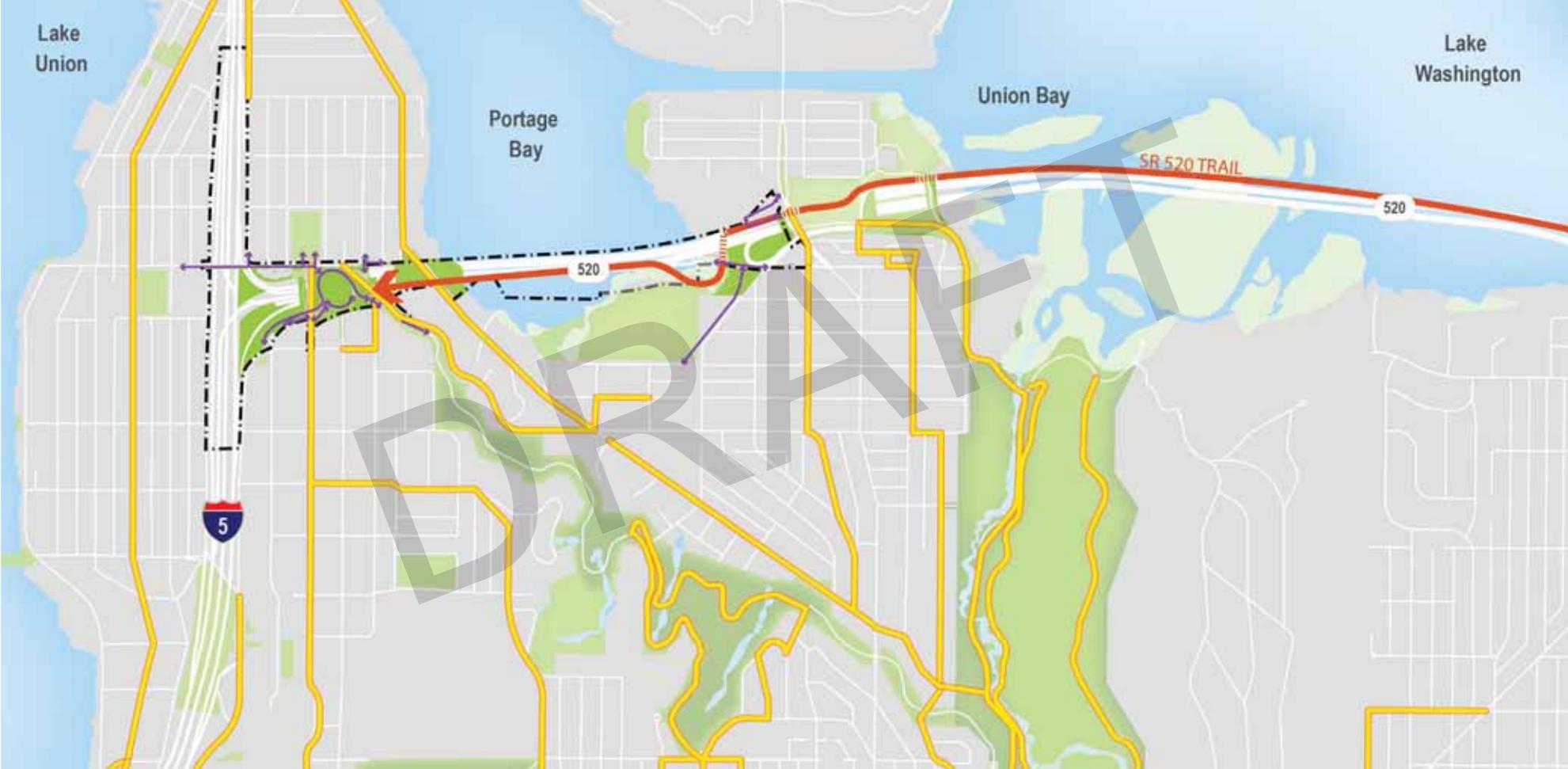
# Context: Topography



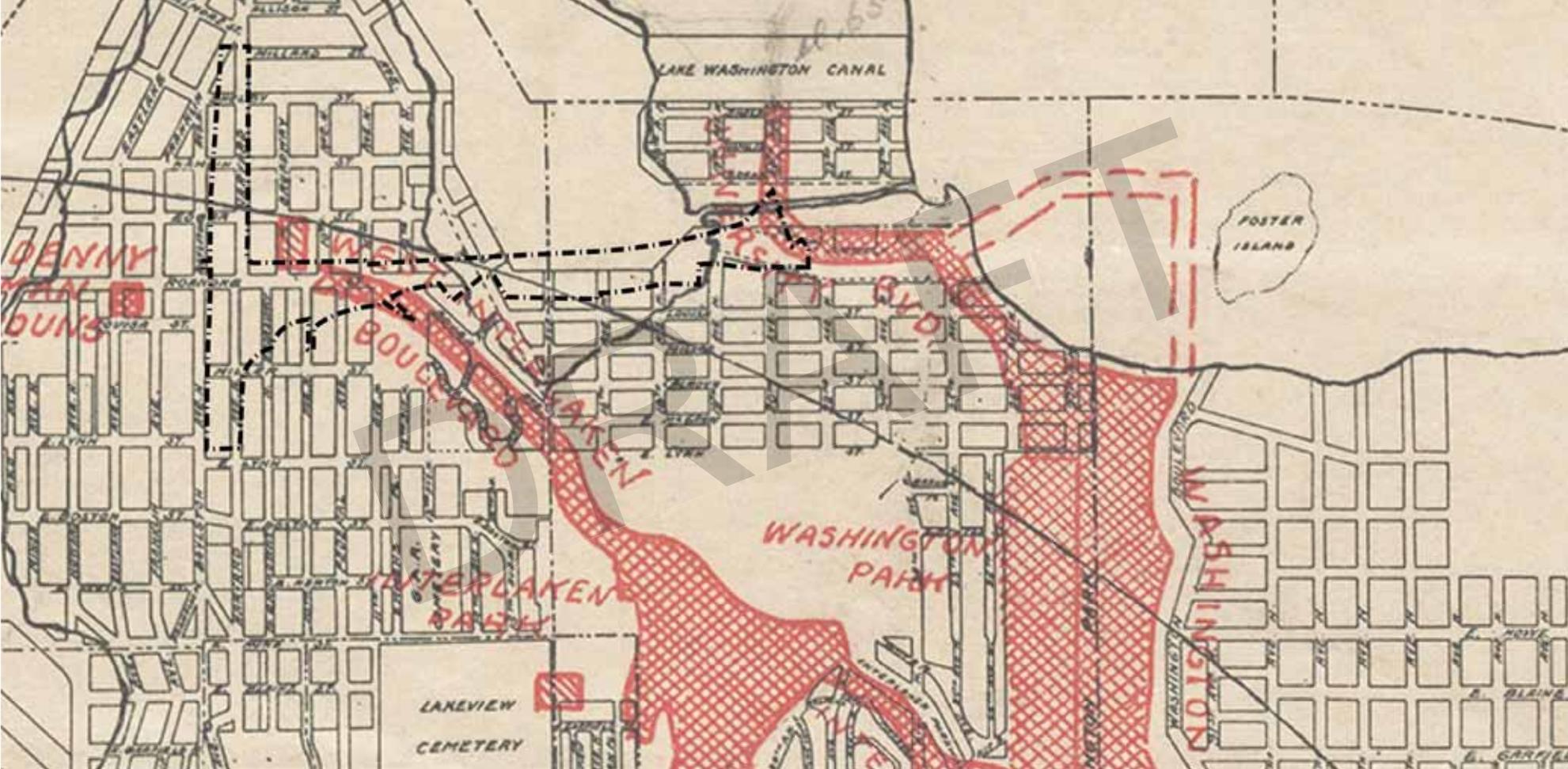
# Context: Vehicular Network



# Context: Bicycle and Pedestrian Network



# Context: Olmsted Legacy



# Context: Olmsted Legacy



# Vision: Olmsted Principles

## Comprehensive Approach

- Connect Isolated Spaces to form Network

## Composition

- Borrowed Landscapes
- Curated Views

## Genius of Place

- Embracing the Uniqueness of Site and Neighborhoods

## Orchestration of Use and Movement

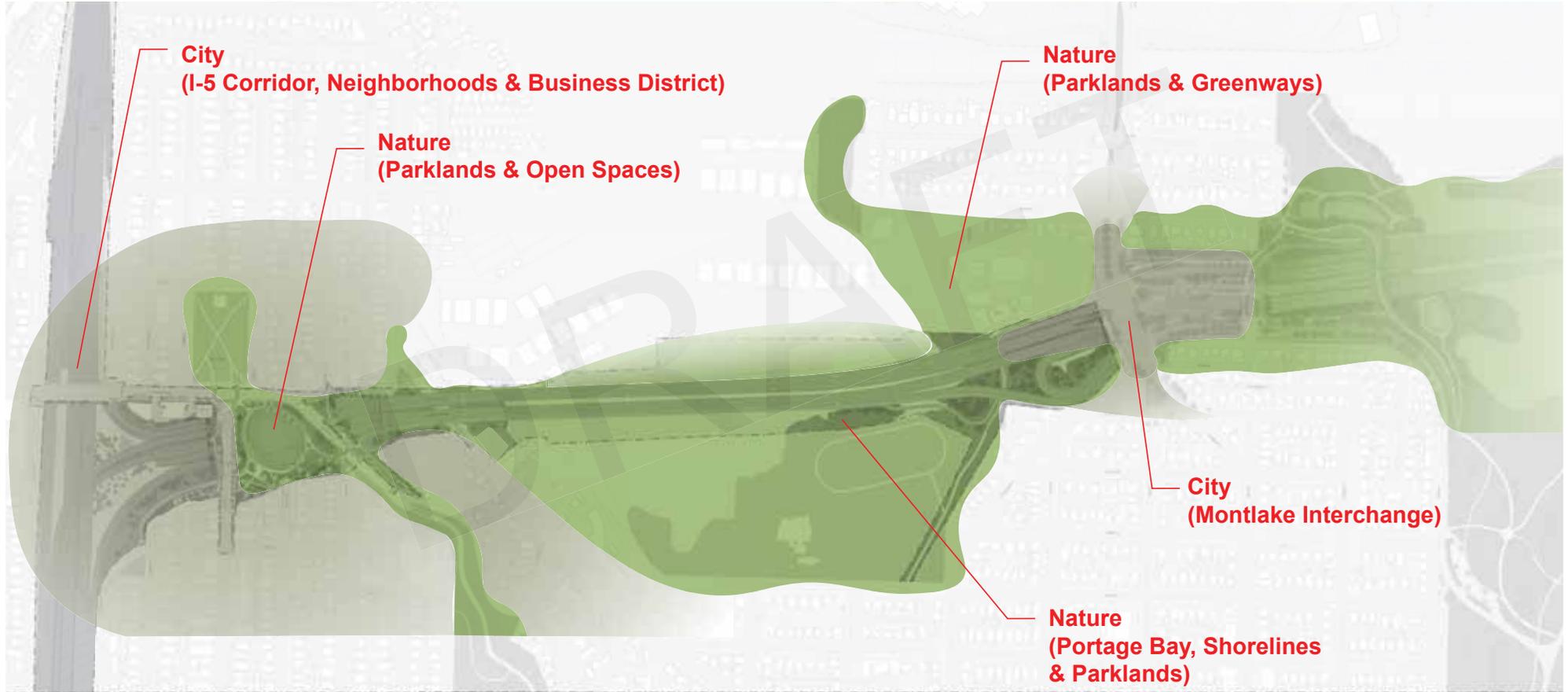
- Clear and Varied



## Vision: Nature Meets City

**We seek to create a new CIVIC INFRASTRUCTURE that integrates future-compatible transportation needs, restores the local ecology and neighborhood connections, and respects the significance of the place.**

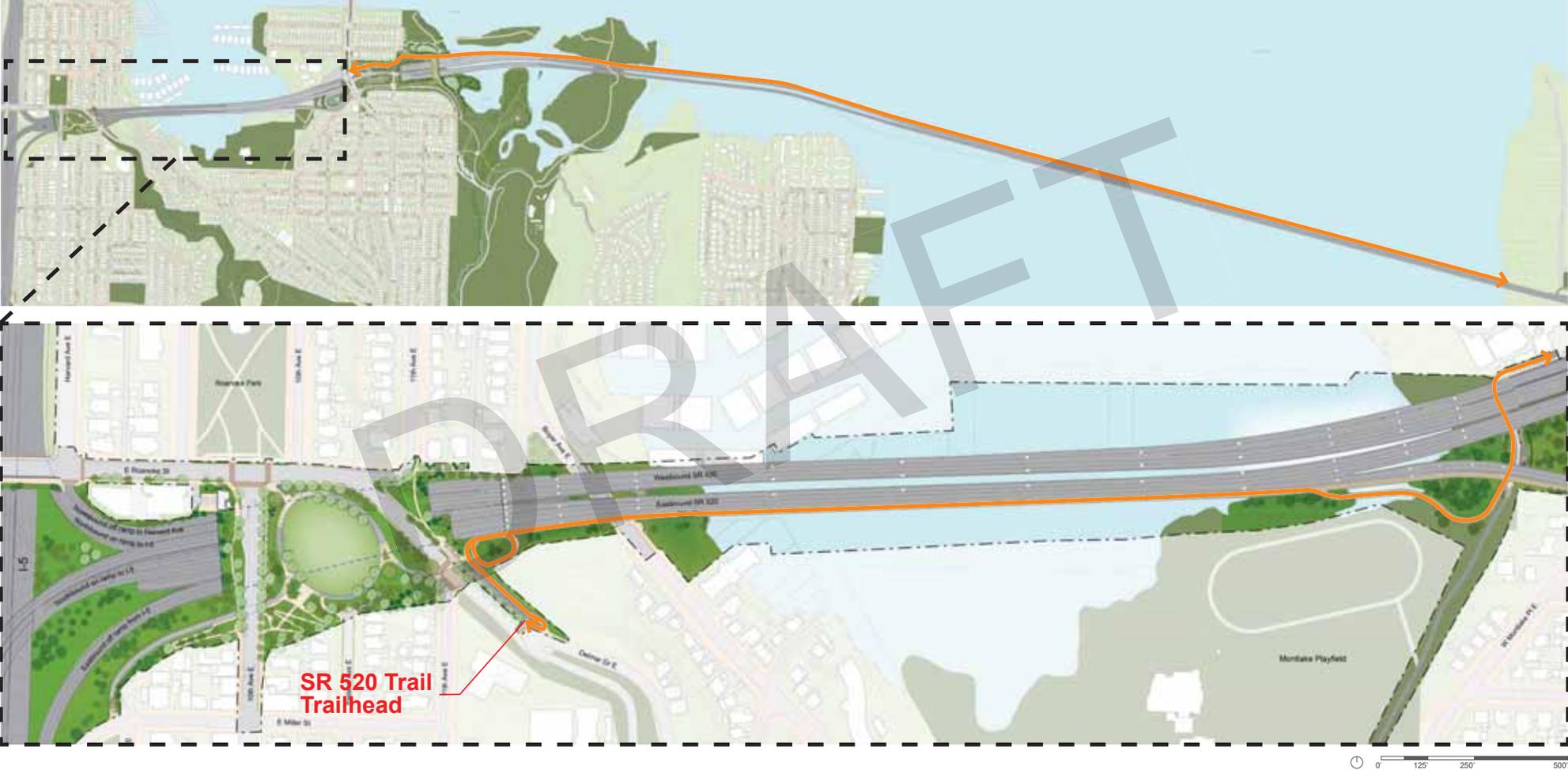
# Vision: Nature Meets City



## **Vision: Sustainability, Resilience, and Equity**

- **New seismically resilient lifeline structures**
- **New non-motorized regional and local connections for all ages and abilities**
- **New public open space**
- **New transit connections**
- **Full stormwater quality treatment**
- **Dark sky compliant energy efficient lighting**
- **Multi-prong approach to highway noise mitigation**
- **Reconnect neighborhoods**
- **Tree canopy replacement**
- **Fewer in-water columns**
- **Completes Olmsted network**

# SR 520 Trail Network



# Major Elements



ROANOKE LID

PORTAGE BAY BRIDGE

SR 520 TRAIL AND NEIGHBORHOOD CONNECTIONS

# SR 520 Trail Guidance

## SDC LETTER TO THE 2012 SEATTLE COMMUNITY DESIGN FINAL REPORT

- **Improve the quality and safety of the experience for all modes of travel.**
- **Enhance the sequential gateway experience along the corridor**
- **The addition of the shared use path on Portage Bay Bridge is an essential element.**
- **Paths should connect seamlessly to the 520 trail on the Portage Bay Bridge.**
- **Delmar Ave. should have a safe crossing for pedestrians and bicycles moving between the Portage Bay Bridge and the open space**

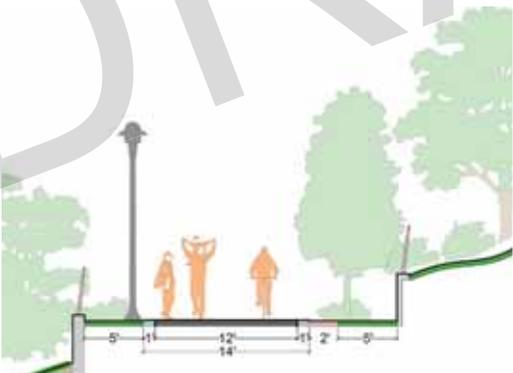
# SR 520 Trail Network



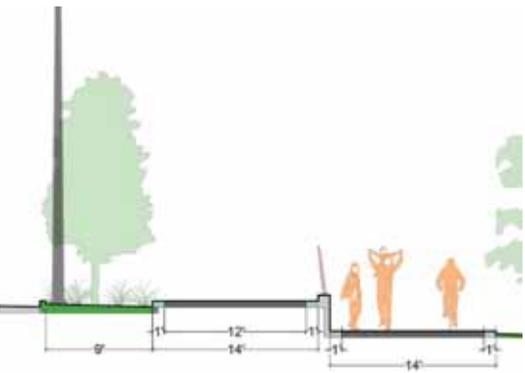
# SR 520 Trail Network: Path Connections



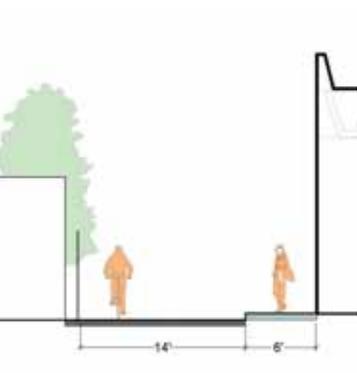
d - I-5 Enhanced Crossing



c - Harvard Connection

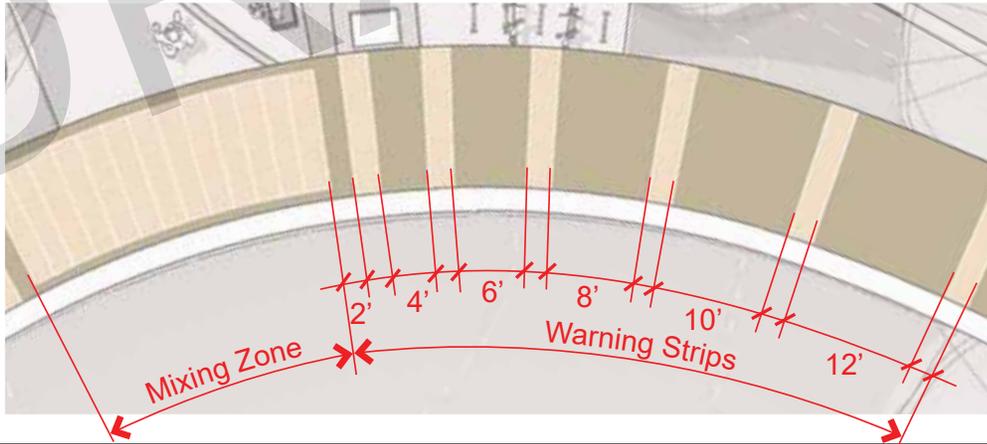


b - Delmar Traverse



a - Bill Dawson Trail

# SR 520 Trail Network: Elements of Continuity



## Design Principles

- Consistent Elements
  - Walls
  - Pedestrian Rails
  - Lighting
  - Mixing Zones
- Intuitive Wayfinding
- Sense of Speed
- Informed Social Behavior

# SR 520 Trail Network: Bill Dawson Underbridge



# SR 520 Trail Network: Bill Dawson Underbridge



# SR 520 Trail Network

## Typical Planting Character



SR 520  
Trail Connection



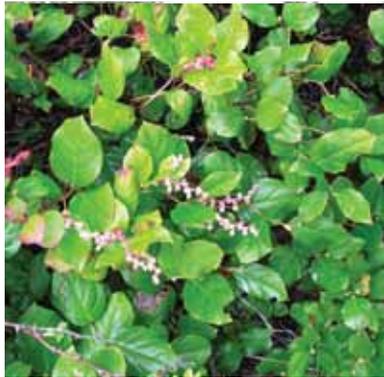
# SR 520 Trail Network

## Typical Planting Character

### Trees



### Groundplane



# SR 520 Trail Network: Bridge Connections

## Design Principles

- Trail geometry biased towards a direct and intuitive regional trail experience
- Sensible and right-sized local network connections

- Clear sight lines along the trail and to decision points
- Defensible decision points
- Path grades maintain views into and out of underbridge areas
- Balance trail connections with views to/from bridge and environmental considerations

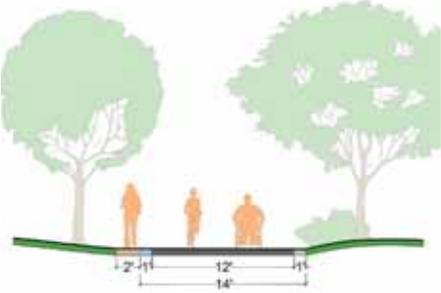
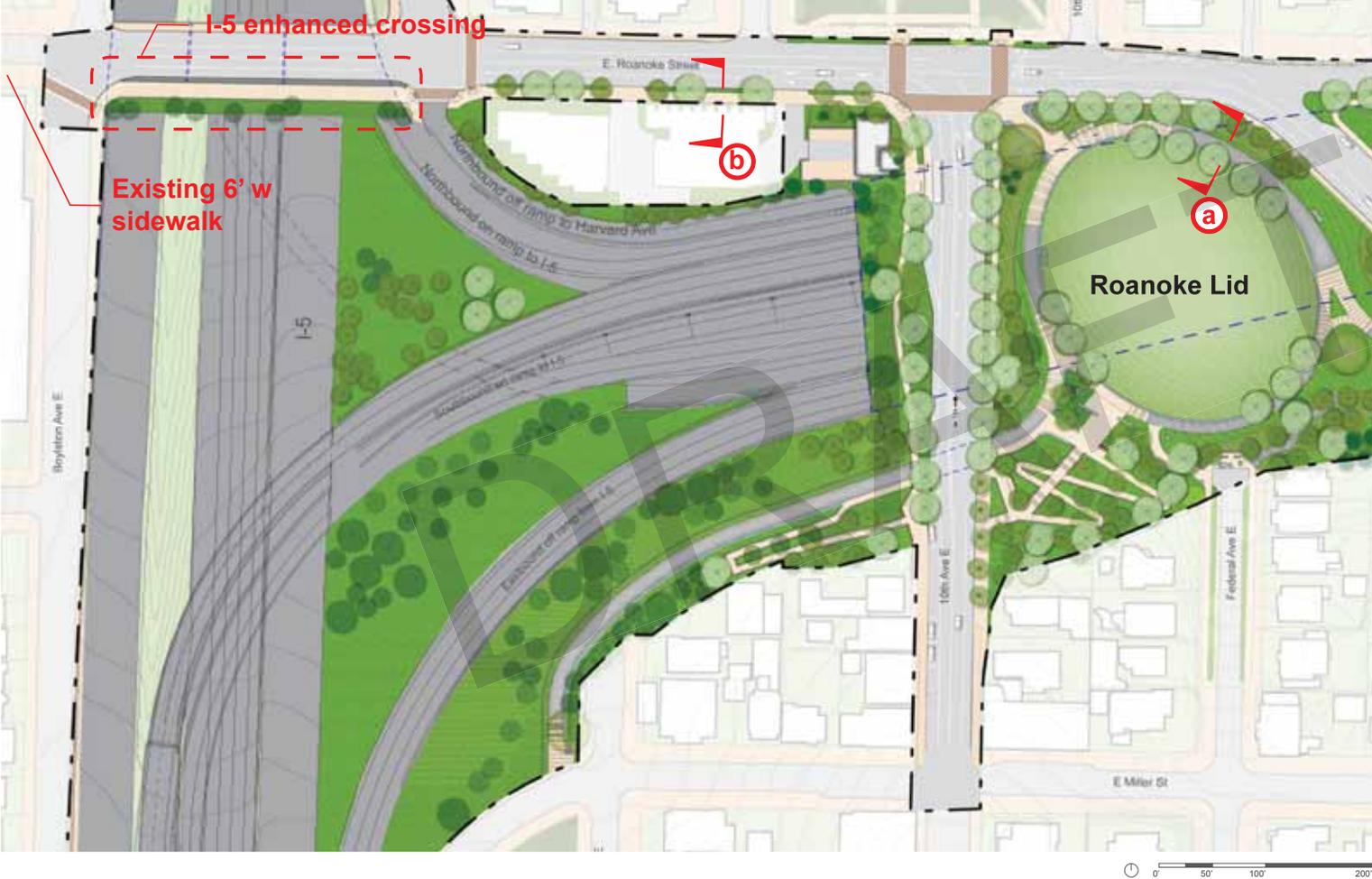


West Connection Baseline

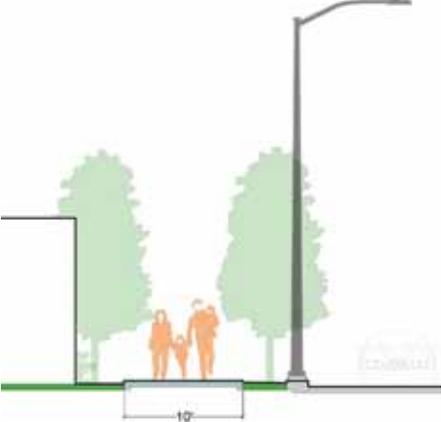


East Connection Baseline

# SR 520 Trail Network: Connections West

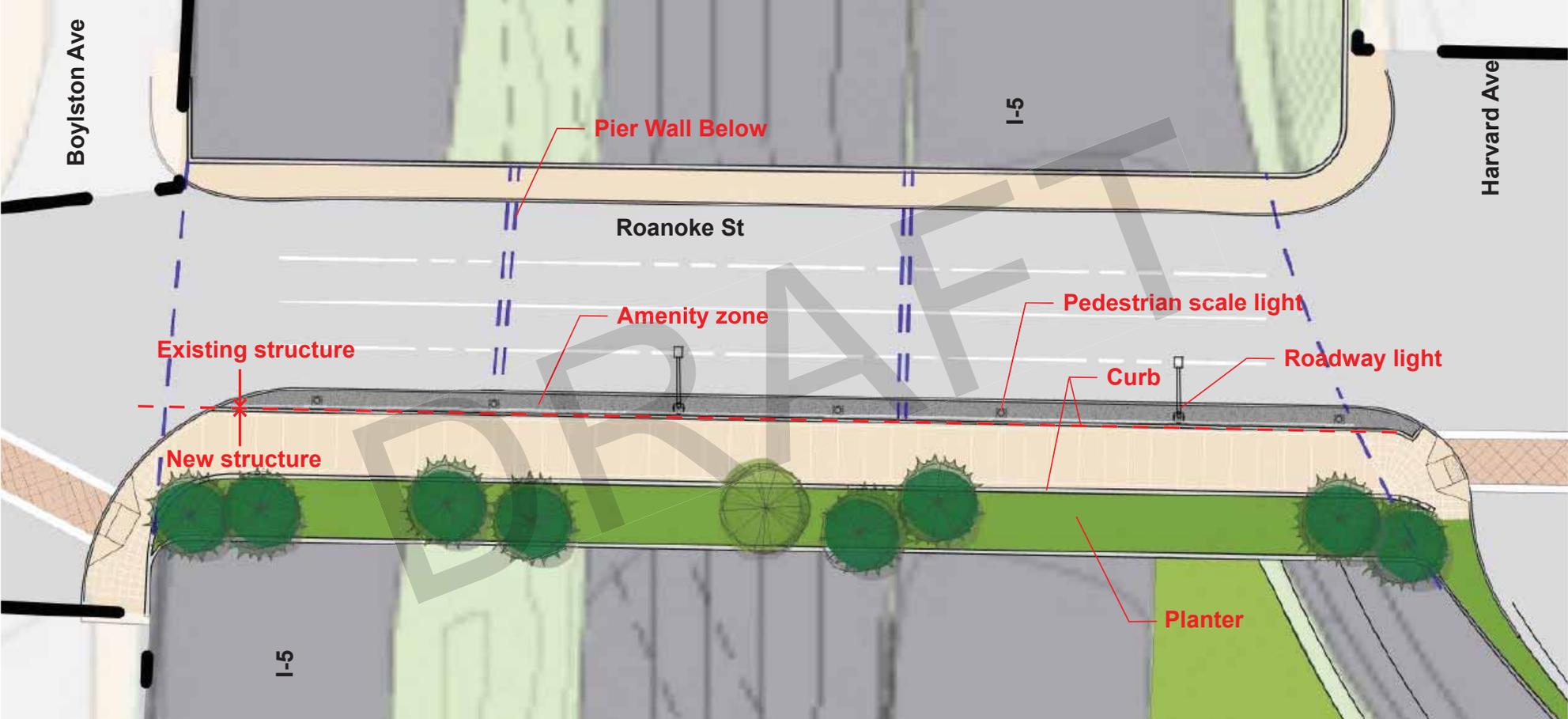


**(a)** Open space multipurpose path

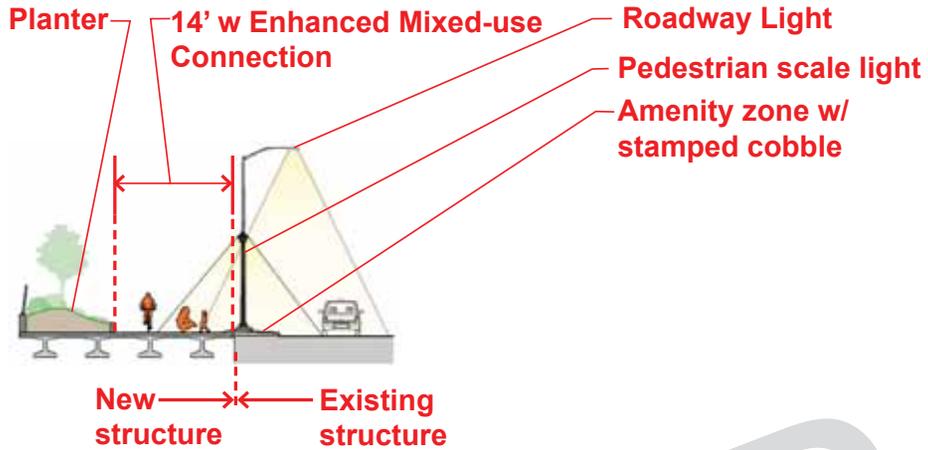


**(b)** Widened Roanoke sidewalk multipurpose path

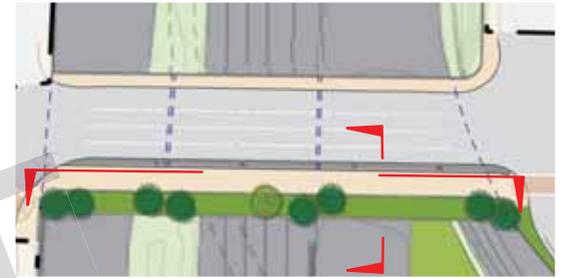
# SR 520 Trail Network: I-5 Enhanced Crossing



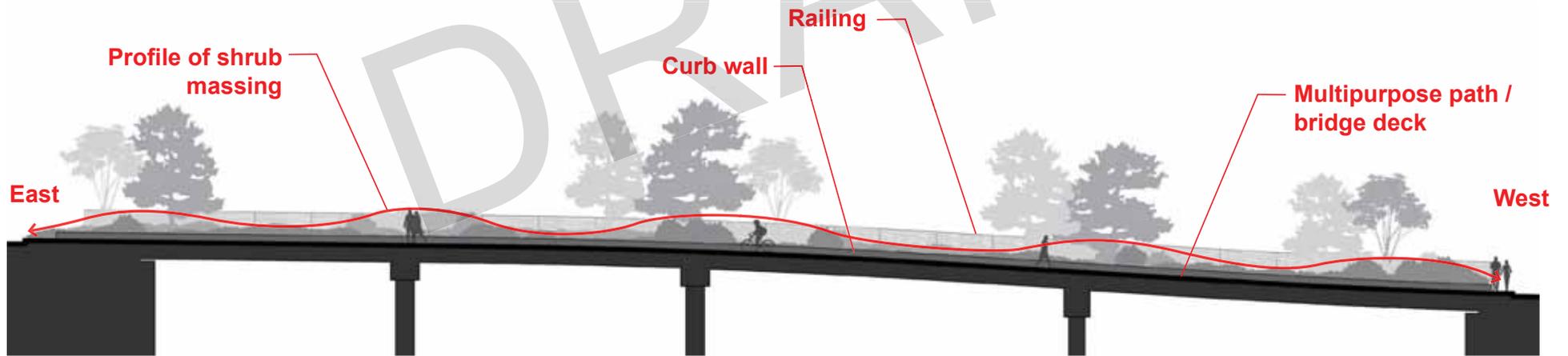
# Neighborhood Connections: I-5 Enhanced Crossing



Stamped Cobble

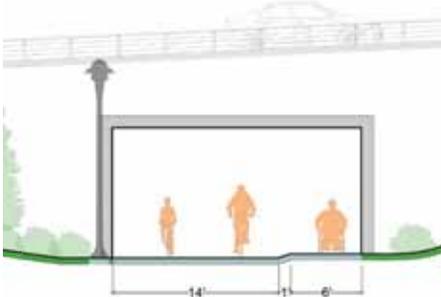


Keymap

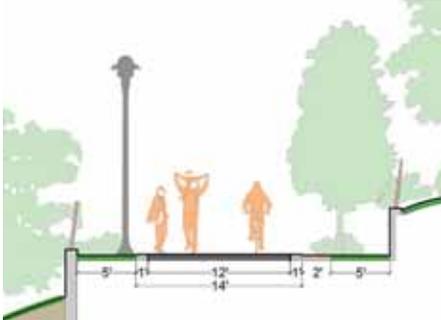


Profile looking south

# SR 520 Trail Network: Connections South

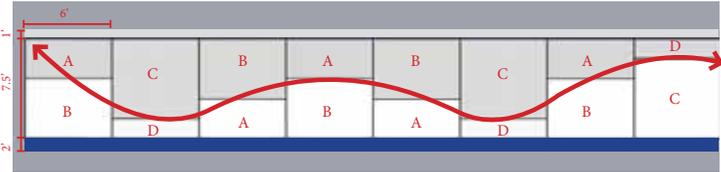


**a** 10th Ave Tunnel



**b** Harvard Connection

# Neighborhood Connections: 10th Ave Tunnel



# Portage Bay Bridge Guidance

## SDC 2014 WEST SIDE FINAL CONCEPT DESIGN REPORT

### What We Heard:

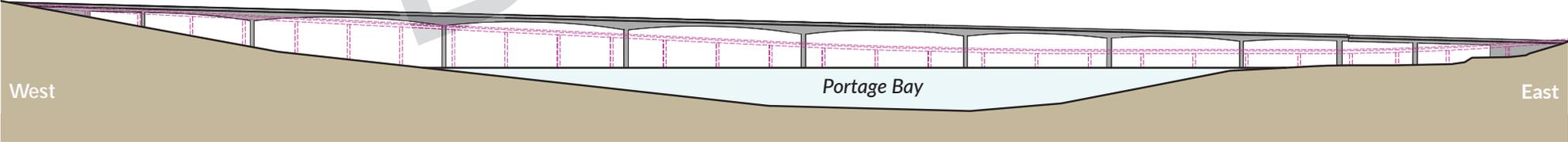
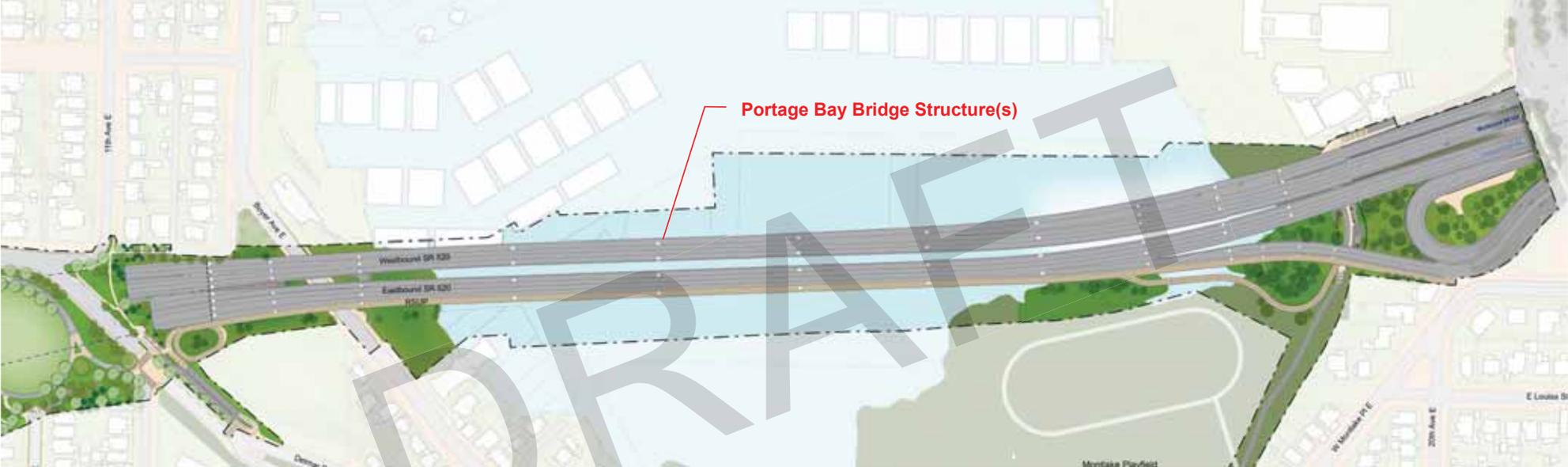
- Emphasize lightness in appearance and scale
- Complement its location within Portage Bay
- Maximize natural light
- Integrate architectural elements

### Proofs:

- Adapted items of continuity
- Bridge rhythm
- Scale and appropriateness

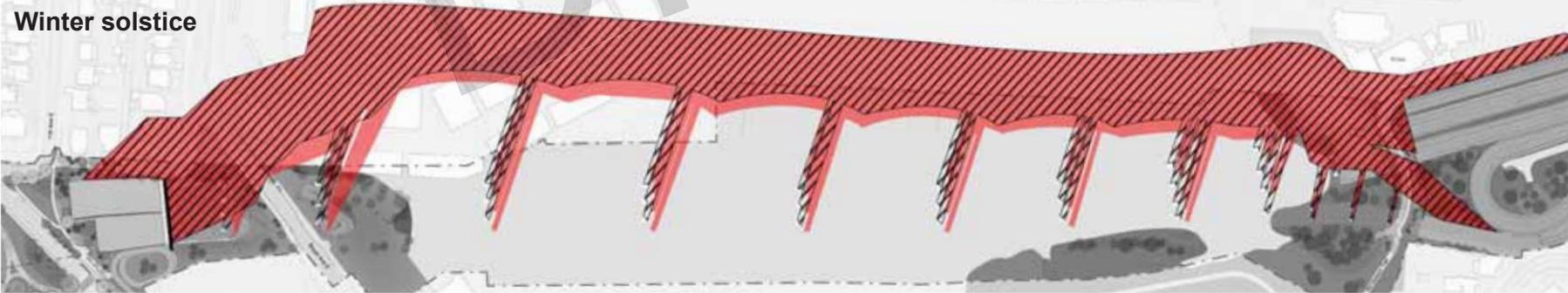
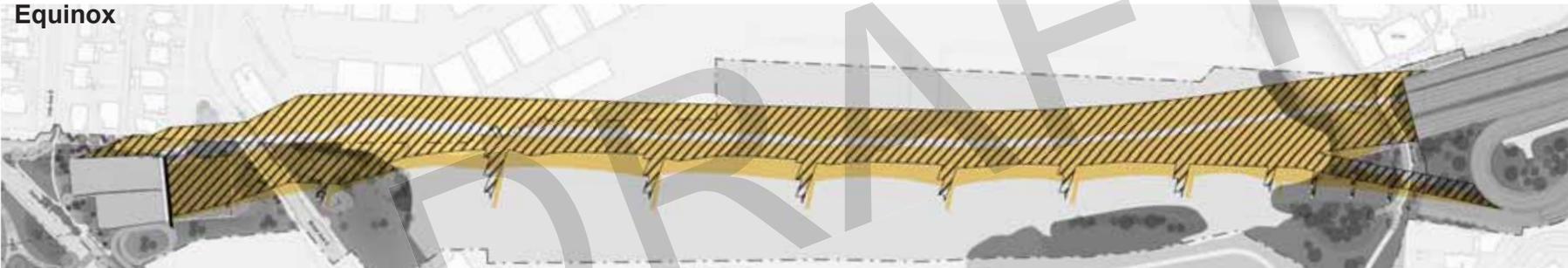
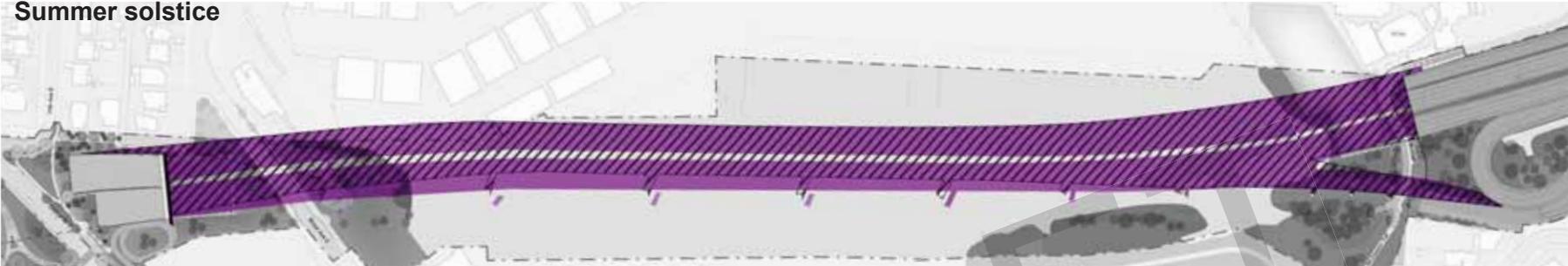
DRAFT

# Portage Bay Bridge

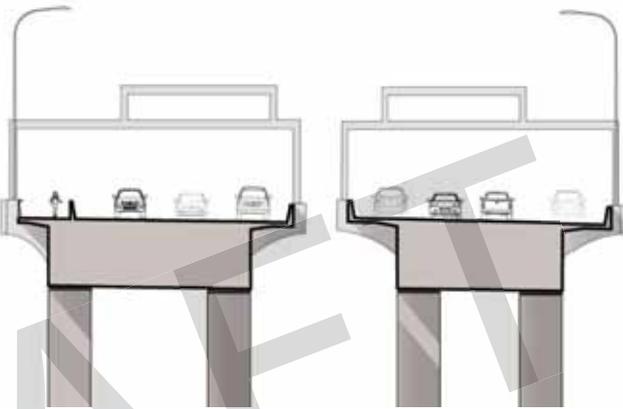
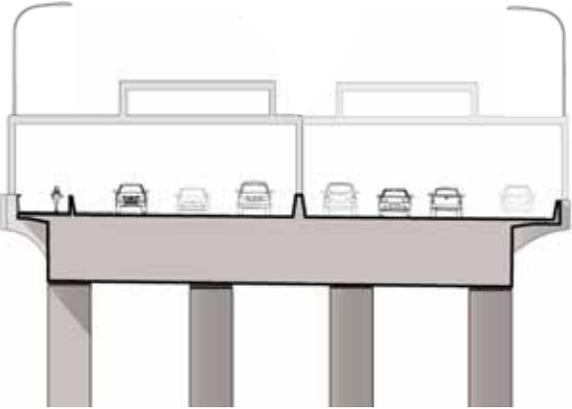


# Portage Bay Bridge: Shadow Analysis

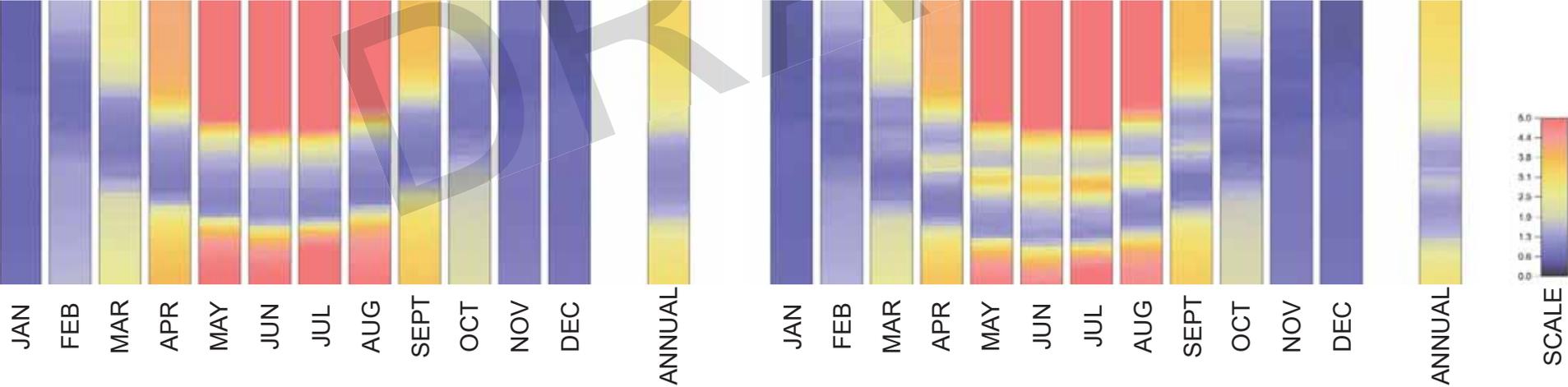
Legend:  
Dual Structure Shadow  
Single Structure Shadow



# Portage Bay Bridge: Structure Analysis

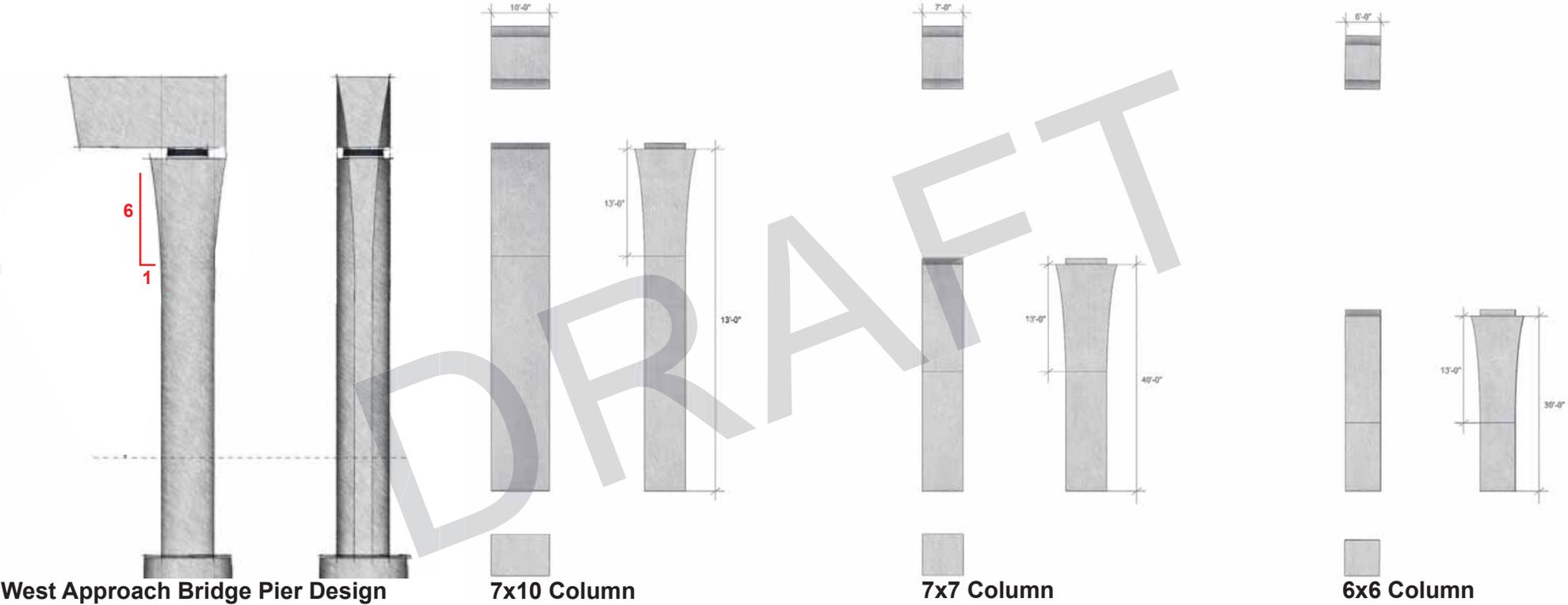


Average Available Light (kWh/m<sup>2</sup>)

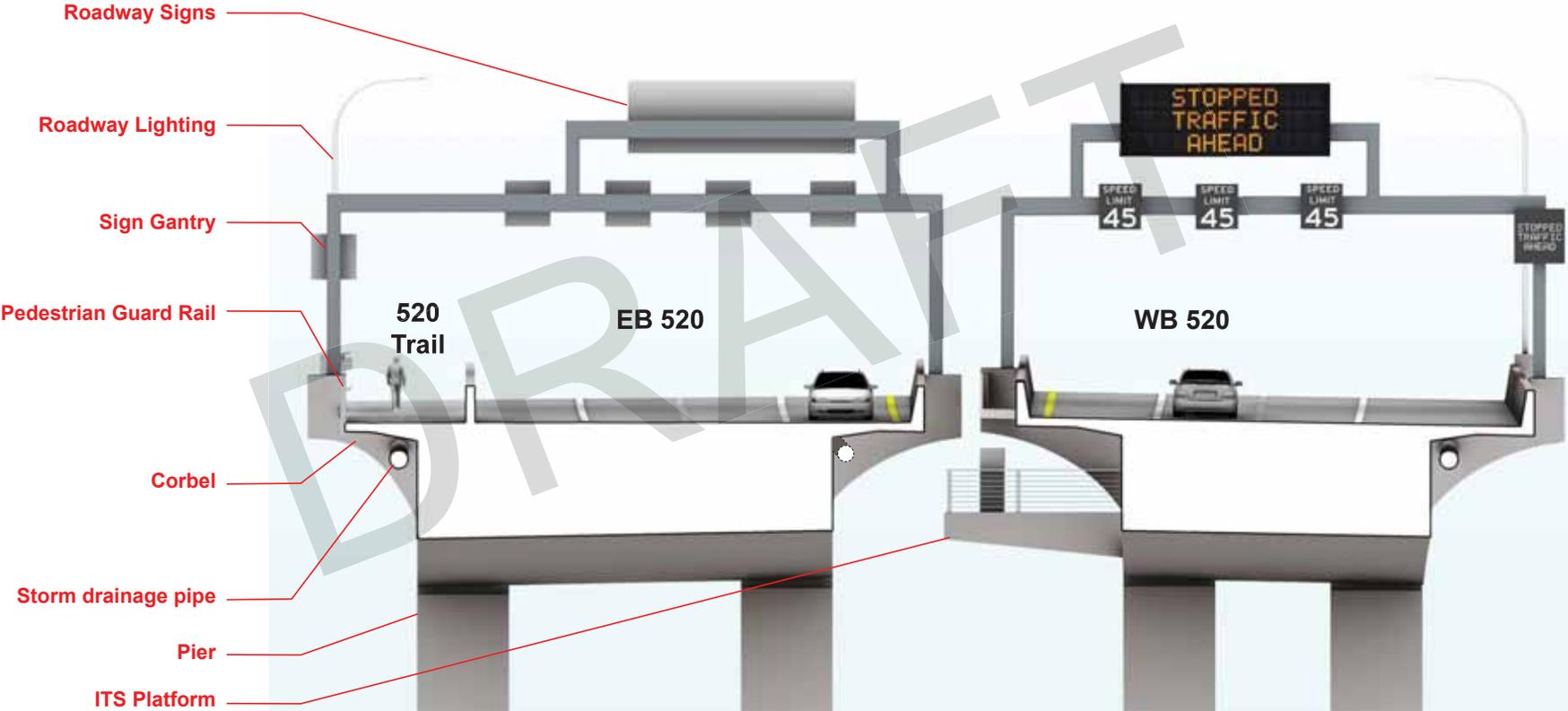


\*analysis performed on span between piers 5 & 6

# Portage Bay Bridge: Pier Typology



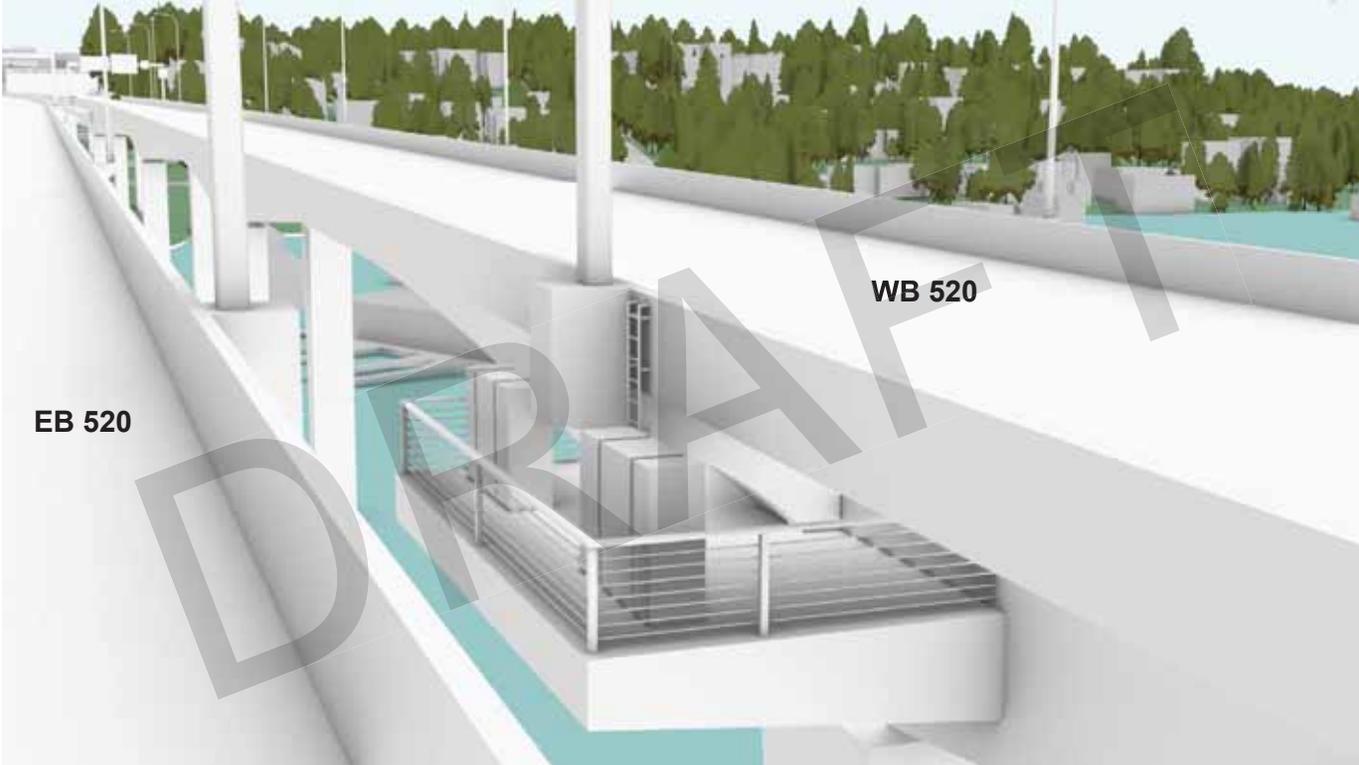
# Portage Bay Bridge: Architectural Features



# Portage Bay Bridge: Above Bridge Appurtenances

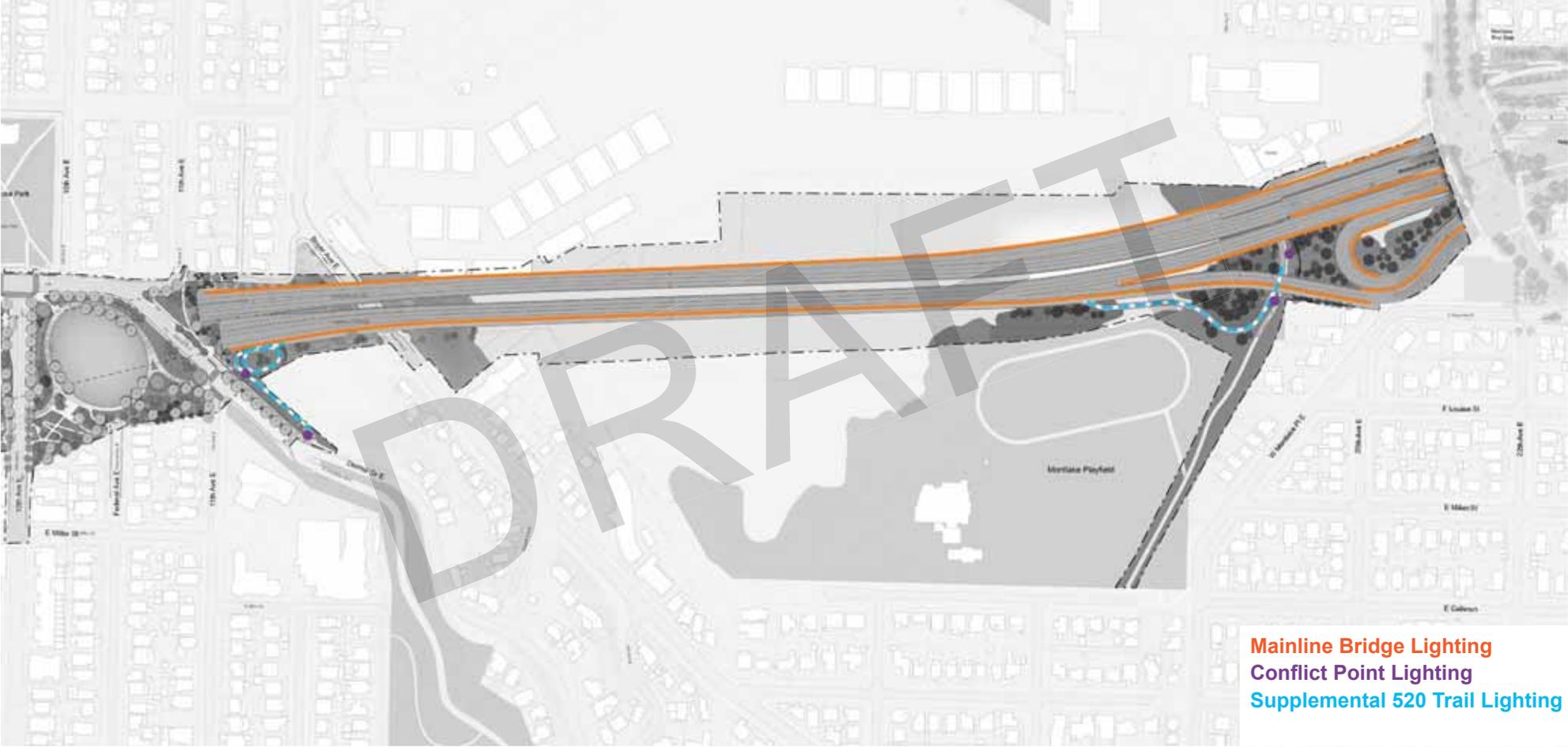


# Portage Bay Bridge: Utility Platform

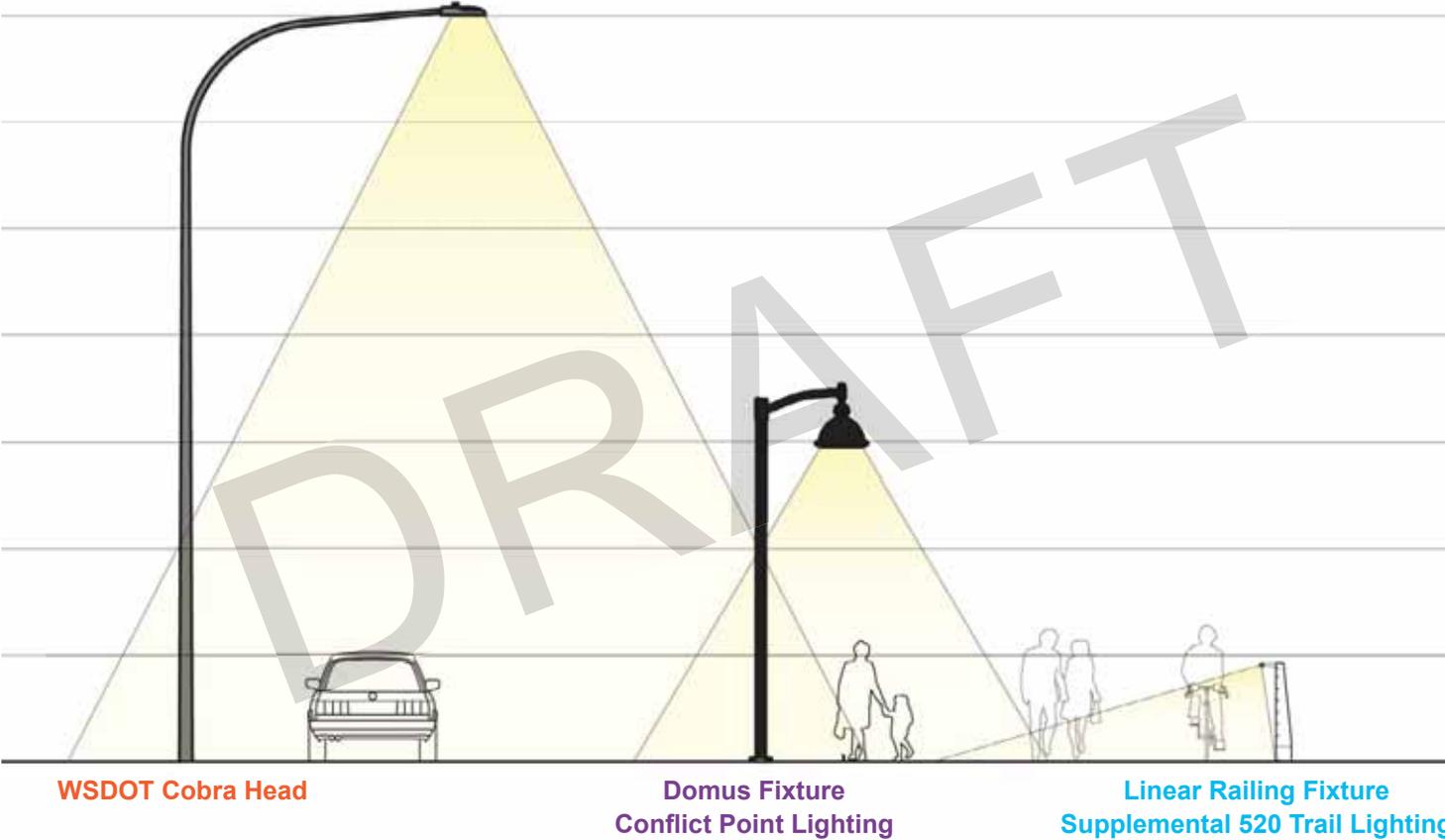


Center Platform (Basis of Design)

# Portage Bay Bridge: Lighting Framework



# Portage Bay Bridge: Light Fixtures



# Portage Bay Bridge: Driver Experience



View looking east on SR 520

# Portage Bay Bridge: Path User Experience



View looking west on the 520 trail

# Portage Bay Bridge: Park User Experience



View from the south

# Portage Bay Bridge: View from the North West



# Portage Bay Bridge: View from the North East



# SR 520 Rest of the West



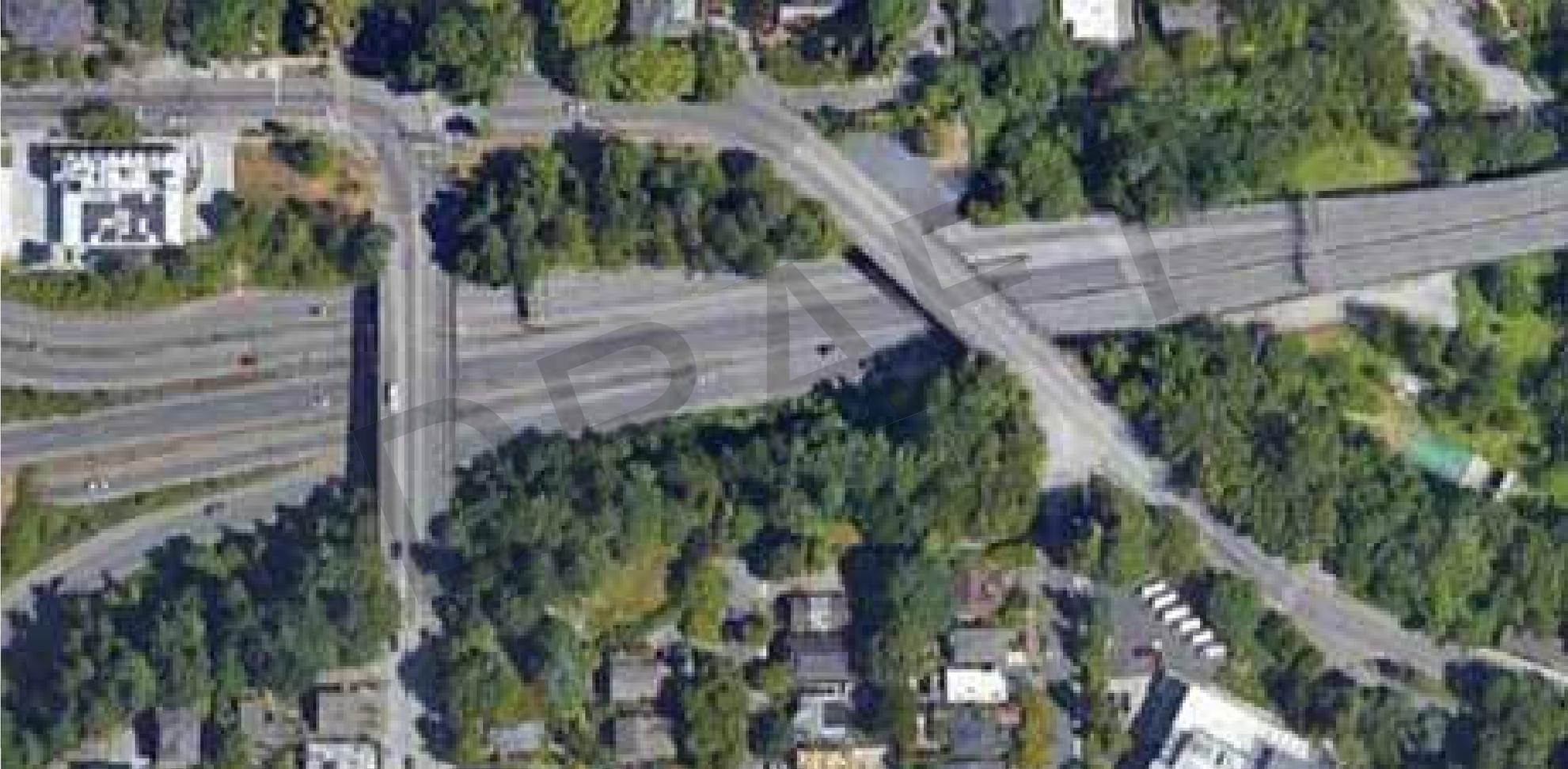
# Roanoke Lid Guidance

## SDC LETTER TO THE 2012 SEATTLE COMMUNITY DESIGN FINAL REPORT

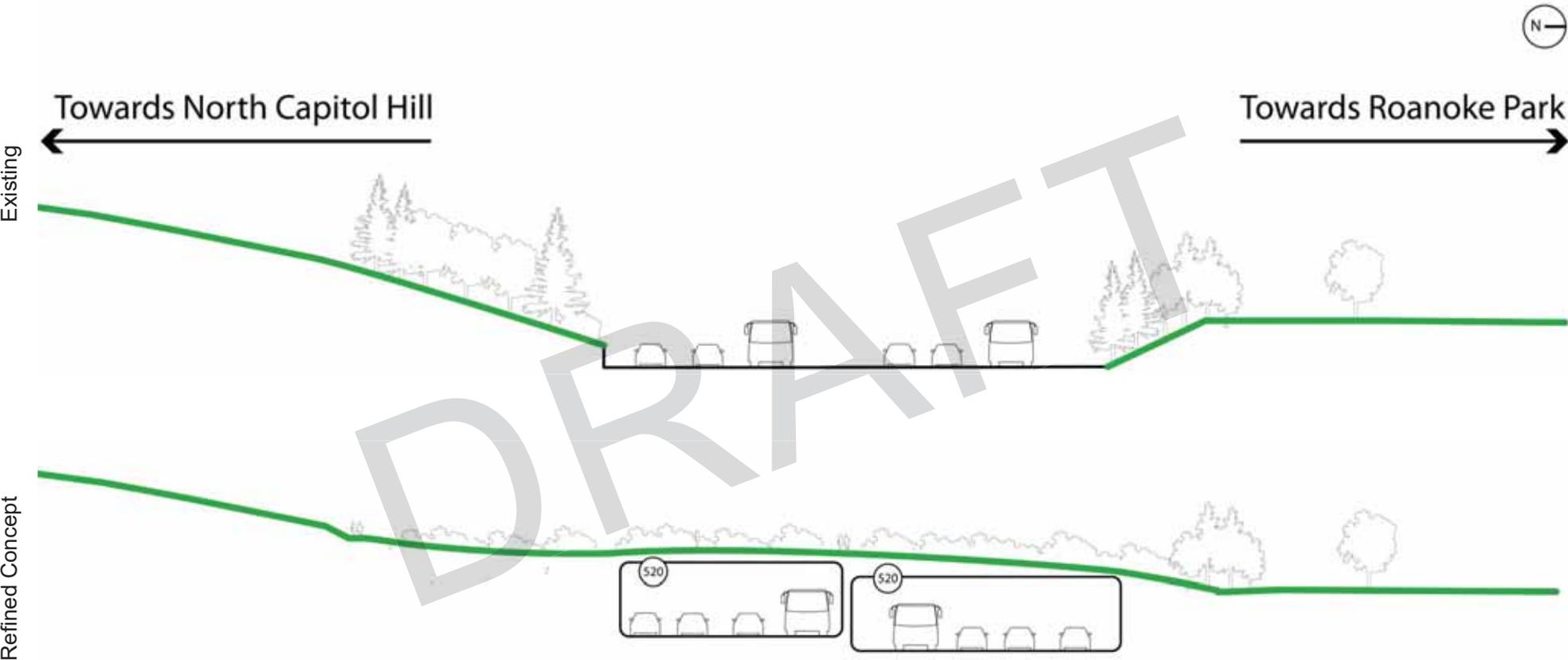
- **Federal street end: ...establish clear physical and social relationships between the public and private realms**
- **The intersection of 10th Ave. E and E Roanoke St. deserve more considered design treatment as it is a key juncture connecting the new park and the existing Roanoke Park**

DRAFT

# Roanoke Lid: Existing Conditions



# “Repairing the Wound” ~ Sam Assefa, Director OPCD



# Roanoke Lid



# Roanoke Lid: Planting Palettes



# Roanoke Lid: Neighborhood Open Space

## Typical Planting Character



# Roanoke Lid: North Capitol Hill Buffer

## Typical Planting Character



# Roanoke Lid: North Capitol Hill Buffer

## Typical Planting Character

### Trees



### Groundplane



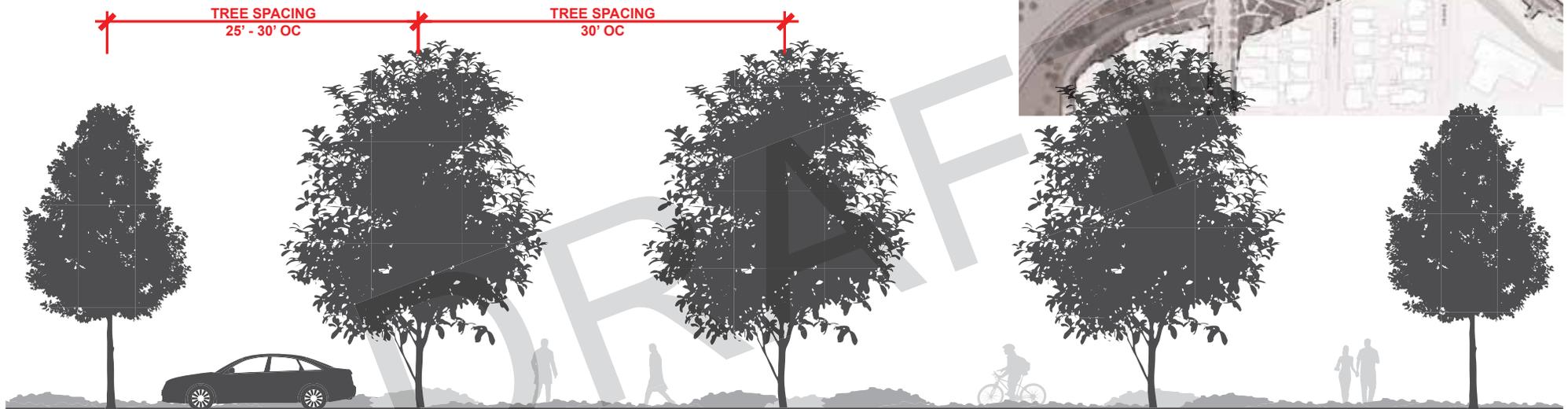
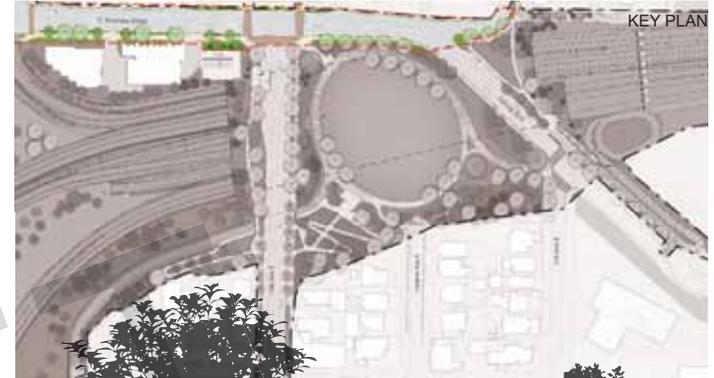
# Roanoke Lid: 10th Avenue East

## Typical Planting Character



# Roanoke Lid: East Roanoke Street

## Typical Planting Character



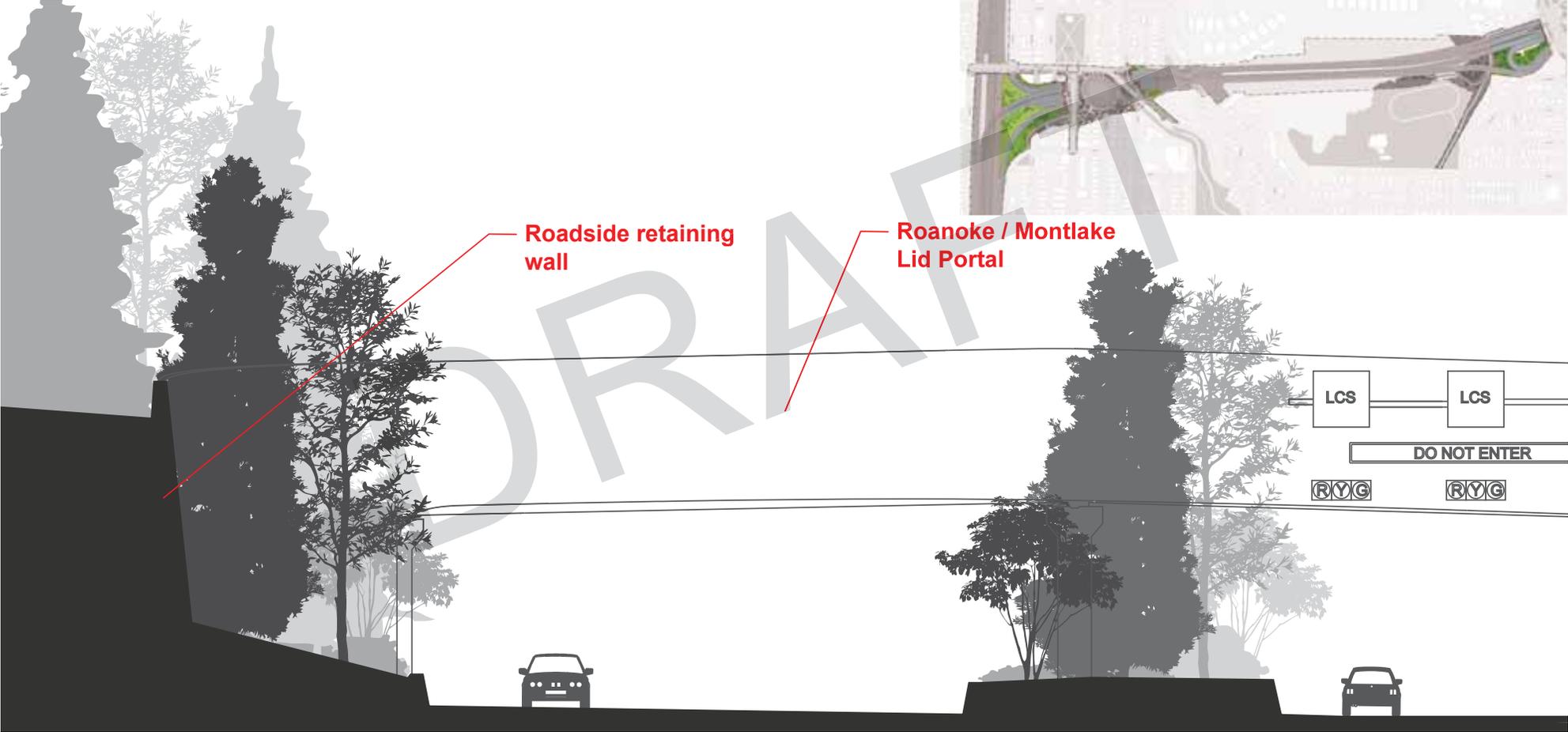
# Roanoke Lid: Delmar Drive East

## Typical Planting Character



# Roanoke Lid: Green Gateway

## Typical Planting Character



# Roanoke Lid: Green Gateway

## Typical Planting Character

### Trees



### Groundplane



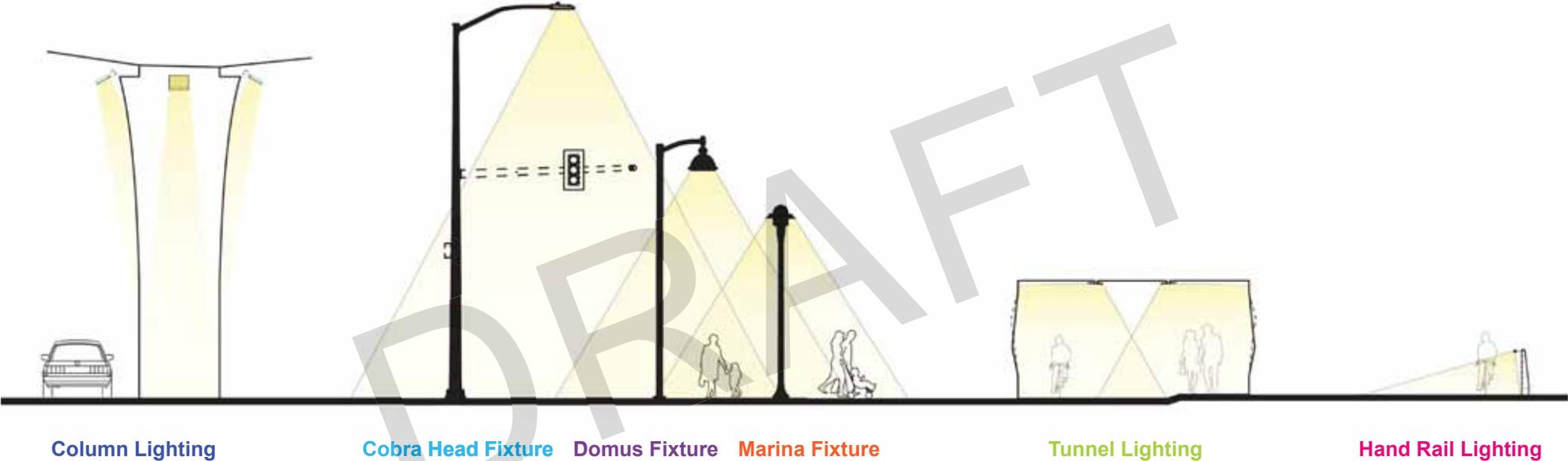
# Roanoke Lid: Lighting Framework



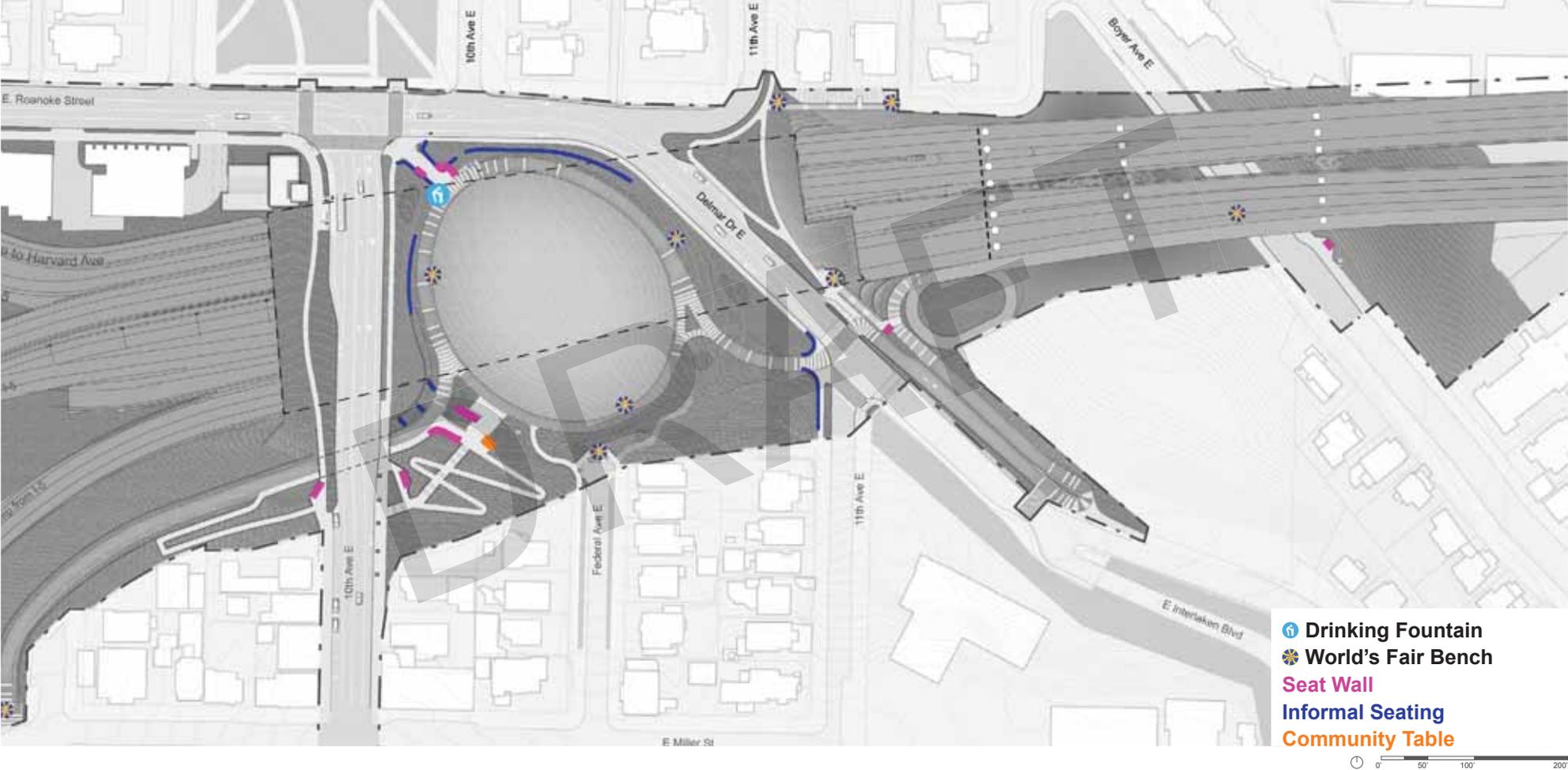
- Cobra Head Fixture
- Marina Fixture
- Domus Fixture
- Tunnel Lighting
- Hand Rail Lighting
- Column Lighting



# Roanoke Lid: Light Fixtures



# Roanoke Lid : Site Furnishings Framework



# Roanoke Lid: Site Furnishings



World's Fair Bench



Seat Wall



Drinking Fountain



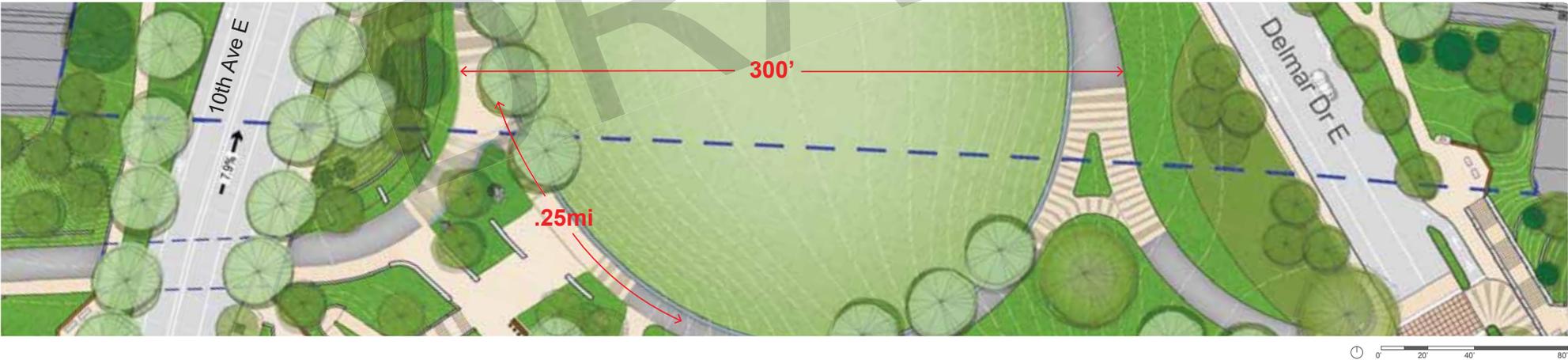
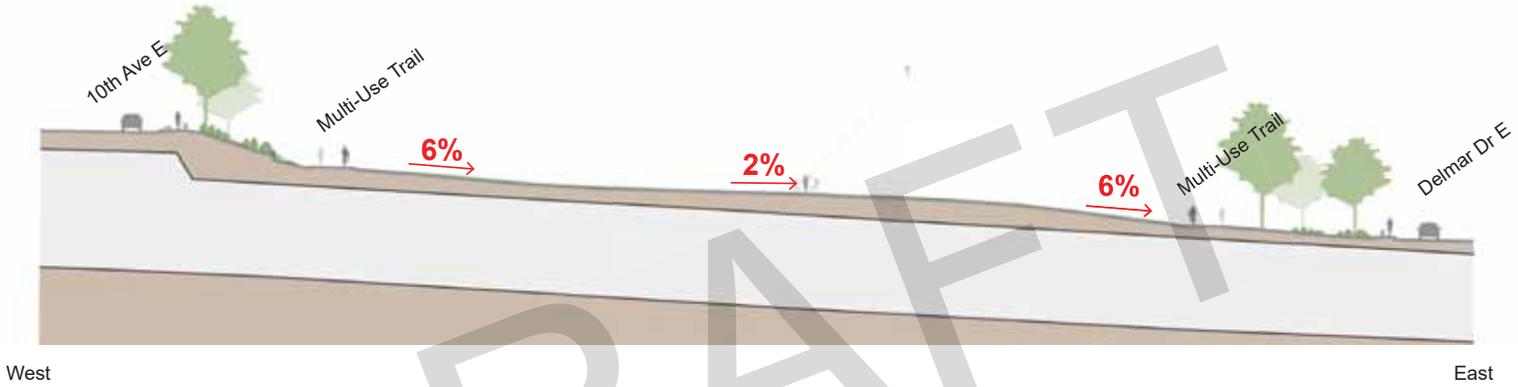
Community Table



Signage



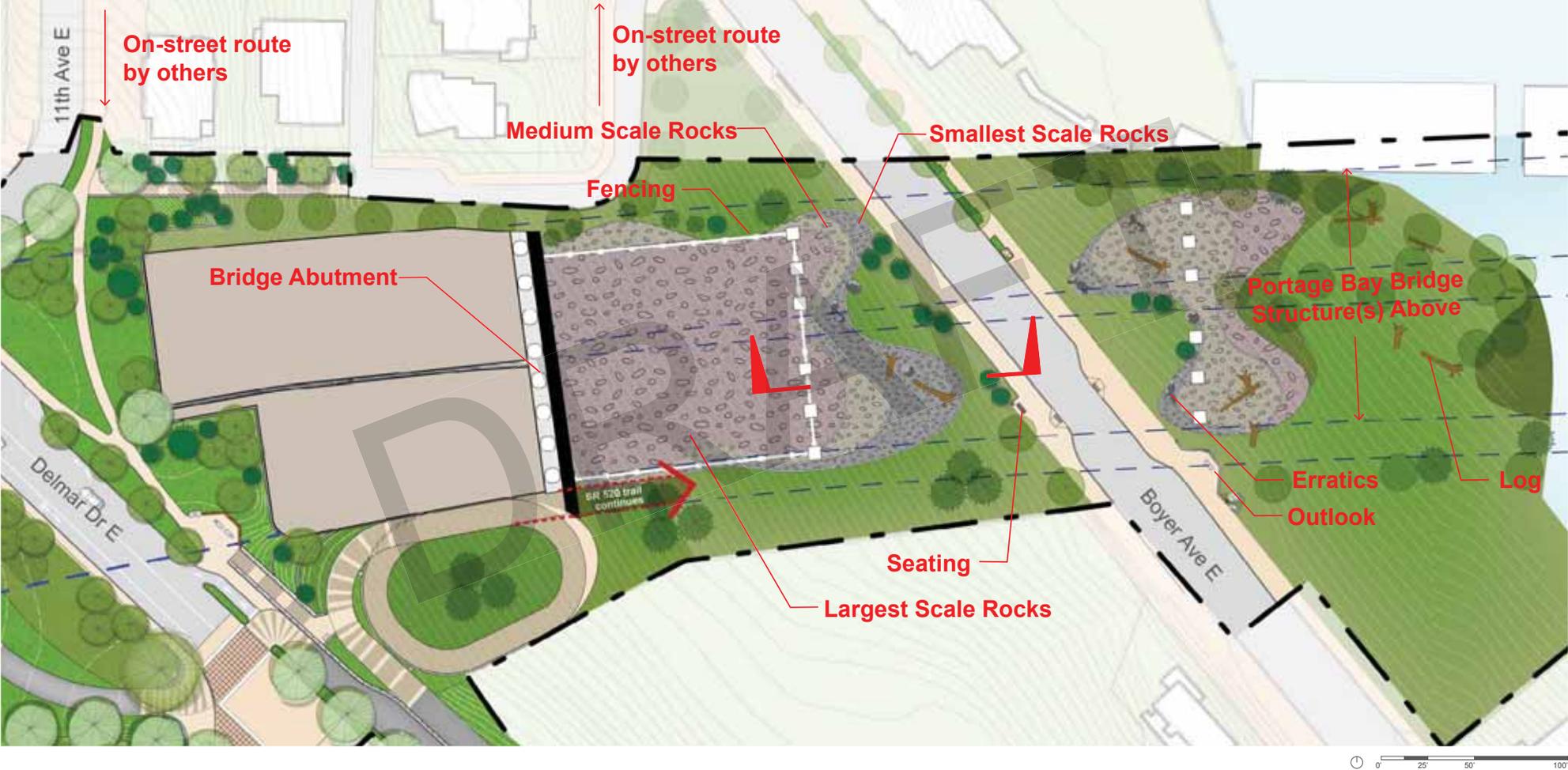
# Roanoke Lid: Neighborhood Open Space



# Roanoke Lid: Outlooks and Overlooks



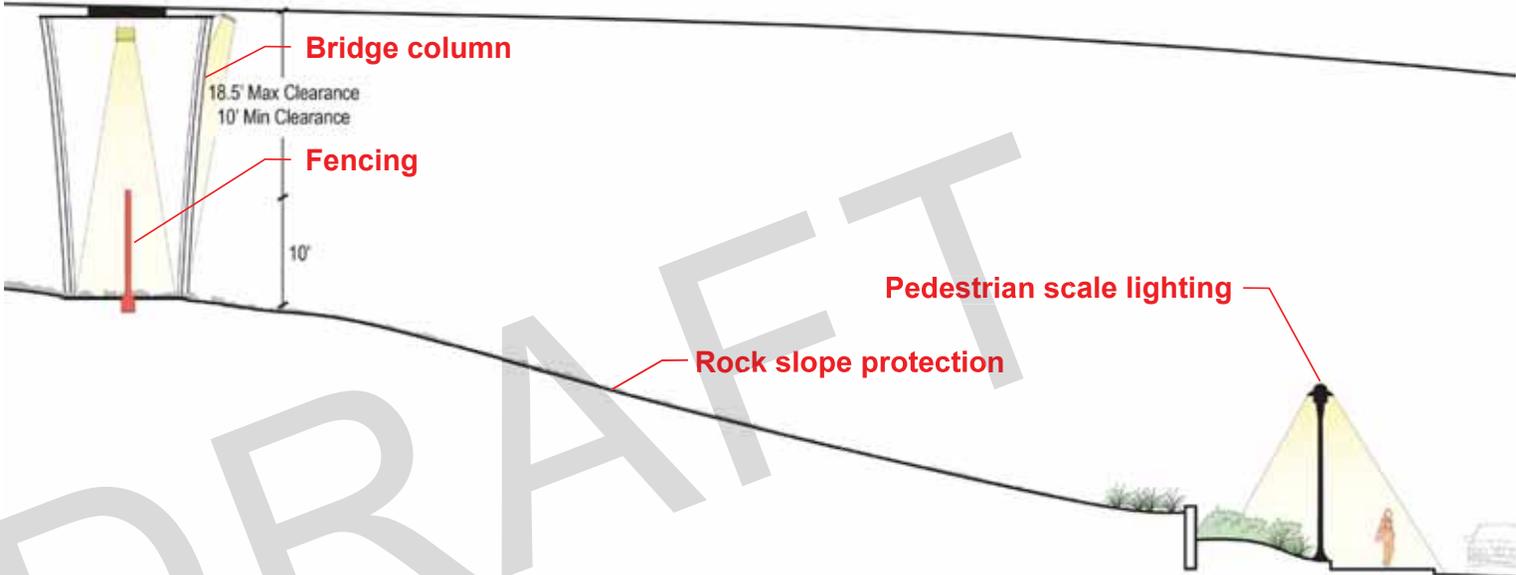
# Roanoke Lid Edges: Boyer Outlook and Underbridge Area



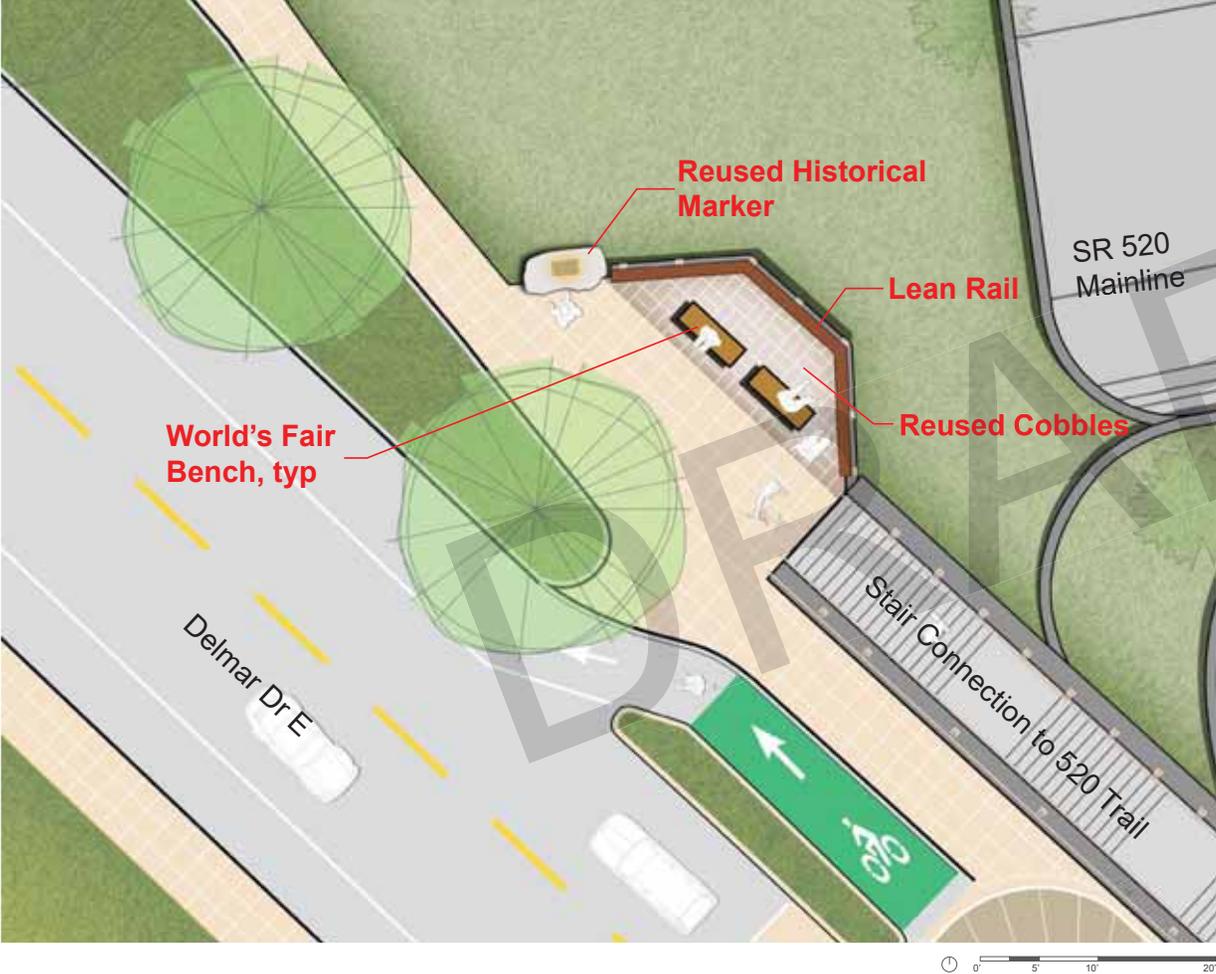
# Roanoke Lid Edge: Boyer Underbridge



Proposed fencing



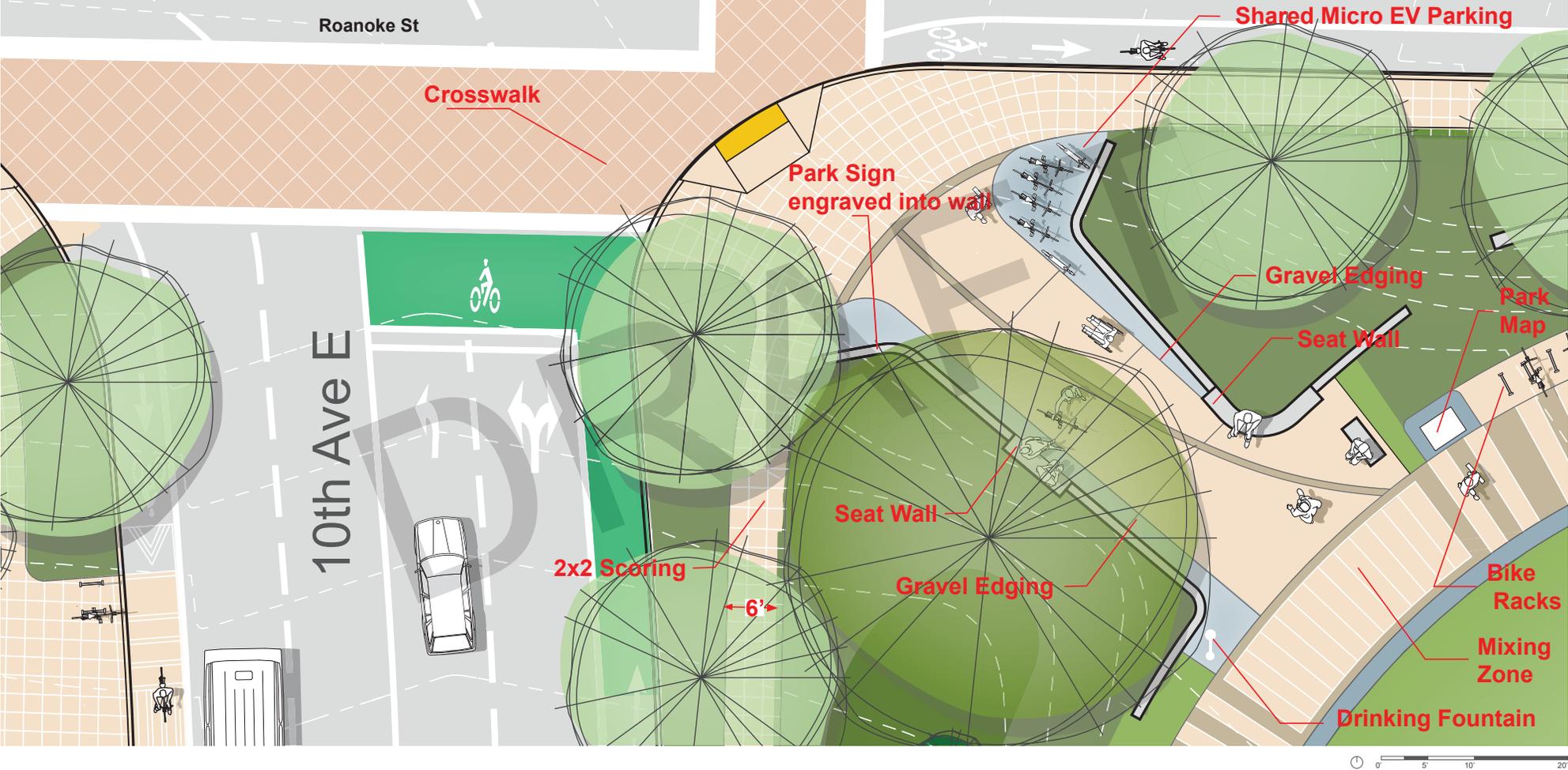
# Roanoke Lid: Bagley Viewpoint



# Roanoke Lid: Neighborhood Open Space Gateway



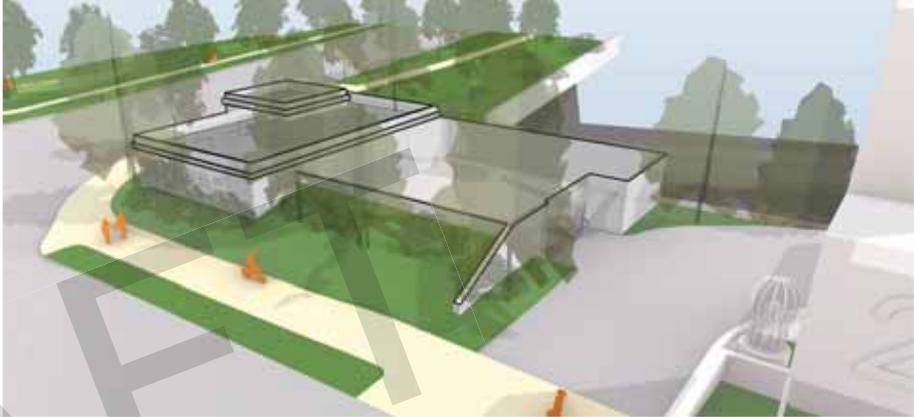
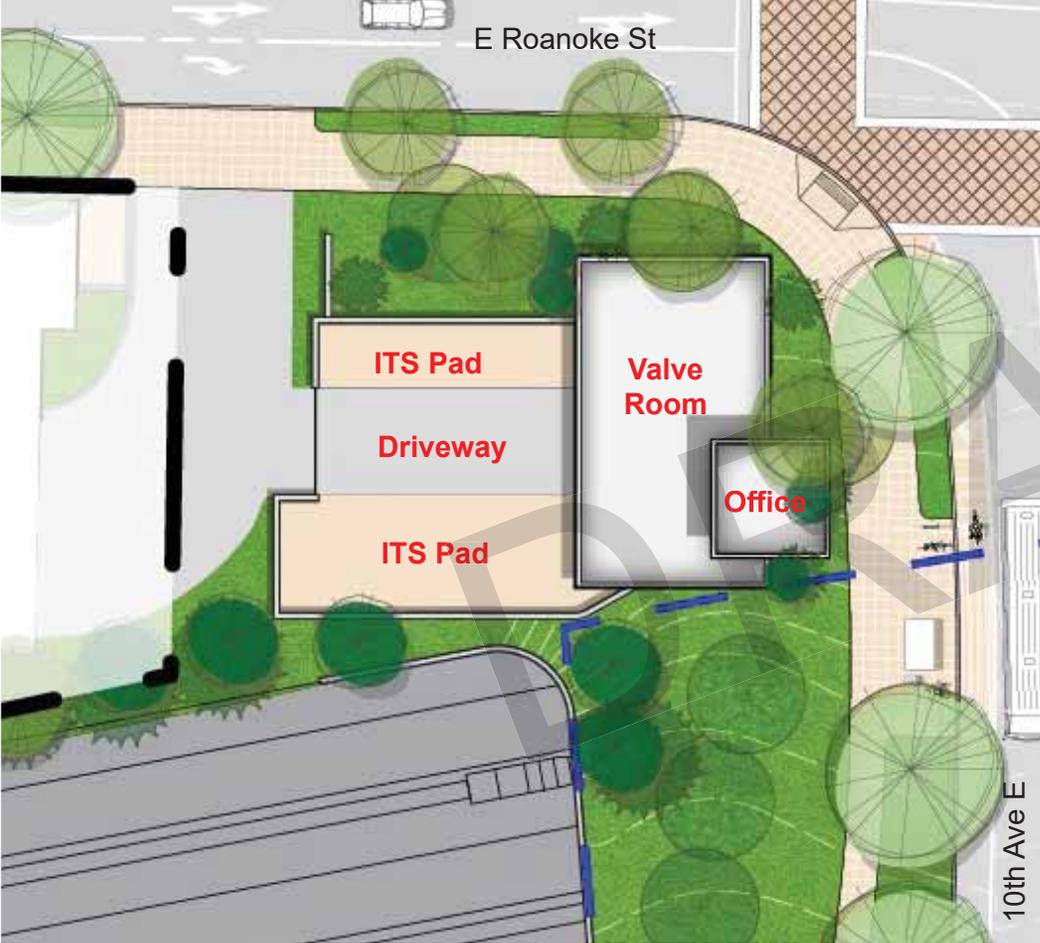
# Roanoke Lid: Neighborhood Open Space Gateway



# Roanoke Lid: Neighborhood Open Space Gateway



# Roanoke Lid: Utility and Valve Room Plan and Massing



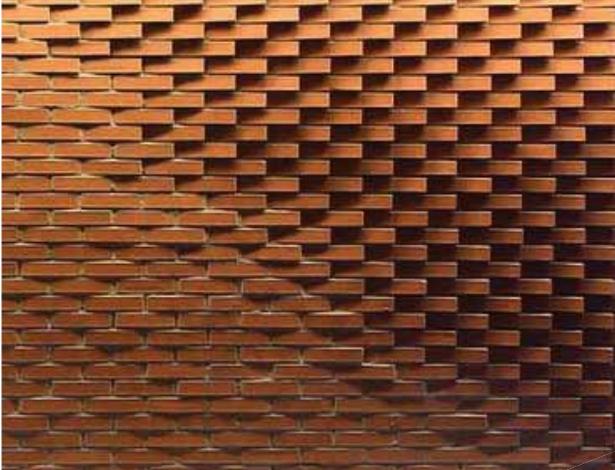
view looking east



view looking west

# Roanoke Lid: Utility and Valve Room Materials

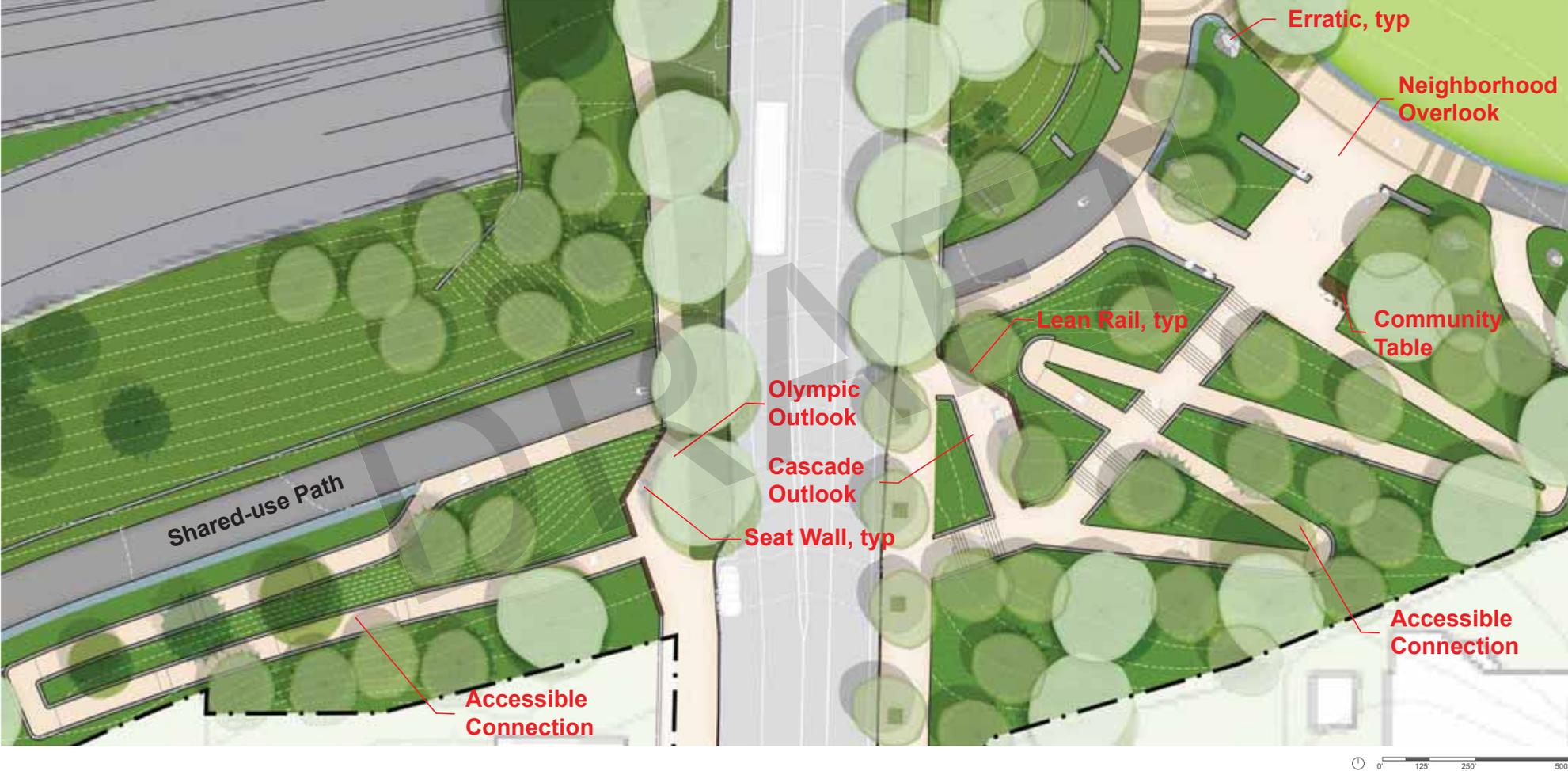
Masonry



Landscape Walls



# Roanoke Lid: 10th Ave Outlooks



# Roanoke Lid: 10th Ave Outlook Looking South West



# Roanoke Lid: 10th Ave Outlook Looking North East



**NOTE:** Render does not yet include planned accessible ramps displayed on site plan

# Roanoke Lid: Federal Overlook



# Roanoke Lid: Federal Ave Overlook Looking North West



# SR 520 Rest of the West



# SR 520 Rest of the West



# Roanoke Lid Area



# Bill Dawson Underbridge



# SR 520 Rest of the West



# SR 520 Rest of the West

