SR 520 Montlake to Lake Washington I/C | July 18, 2019

Seattle Design Commission Project Overview and Update

Washington State Department of Transportation GRAHAM TY LIN INTERNATIONAL MIG

Presentation Overview

PART 1:

- Team Introduction
- Background/Purpose
- Update: Pedestrian Land Bridge and Approach Areas
- *Comments/ Discussion*

BREAK

PART 2:

- Montlake Lid to 24th Avenue E
- *Comments/ Discussion*

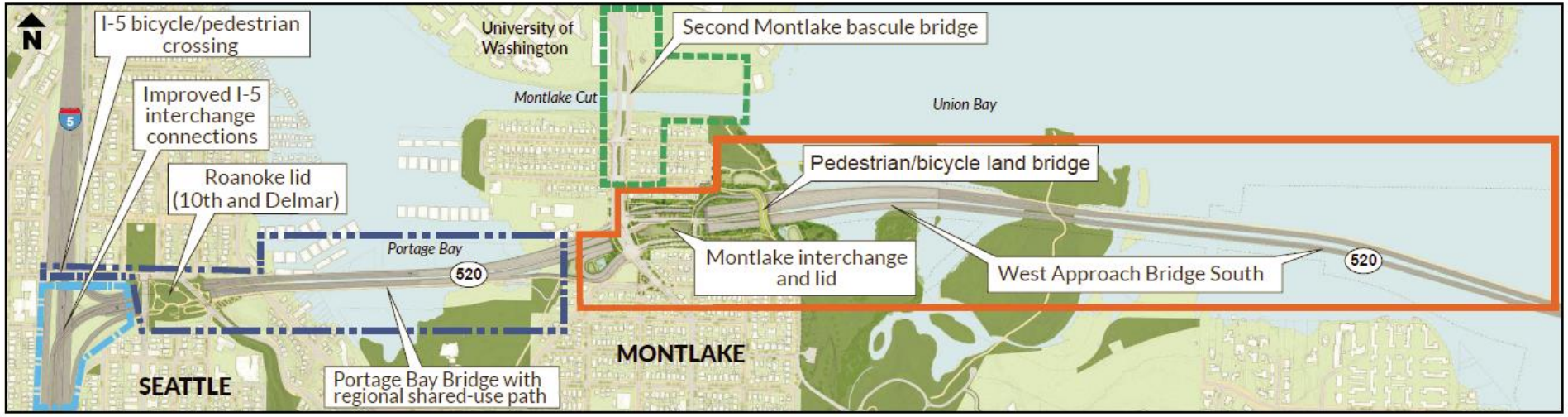
FOLLOW UP/SUMMARY

- Proposed Timeline for SDC Formal Review
- Next

SR 520 Montlake to Lake Washington Project Overview

- **WSDOT / City of Seattle**
  - Community Engagement (2012 – 2018)
  - City Departments and SDC engagement with RFP
  - Section 106 Concurring Parties
- **RFP – Design Build**
  - Process
  - Graham Awarded Design/Build Contract – December 2018
- **Status**
  - Implementation Design In Progress
  - Task Force Meetings
  - Construction start
  - Sequencing

Building the "Rest of the West" in Seattle

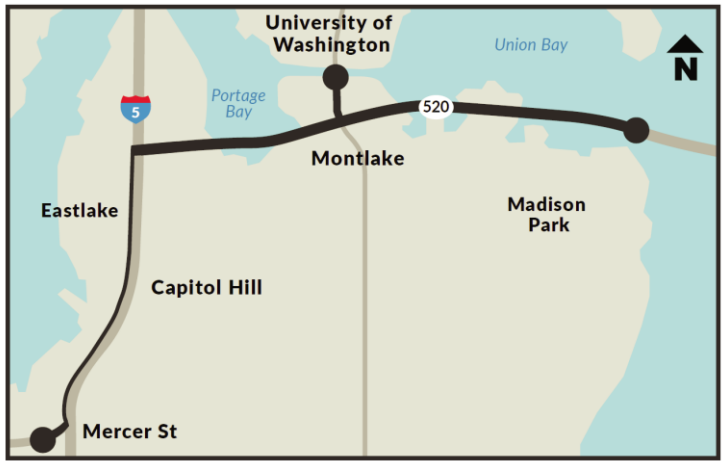


SR 520/I-5 Express Lanes Connection Project
Construction estimated start: 2020
Estimated duration: 3 years

Portage Bay Bridge and Roanoke Lid Project
Construction estimated start: 2023
Estimated duration: 6 years

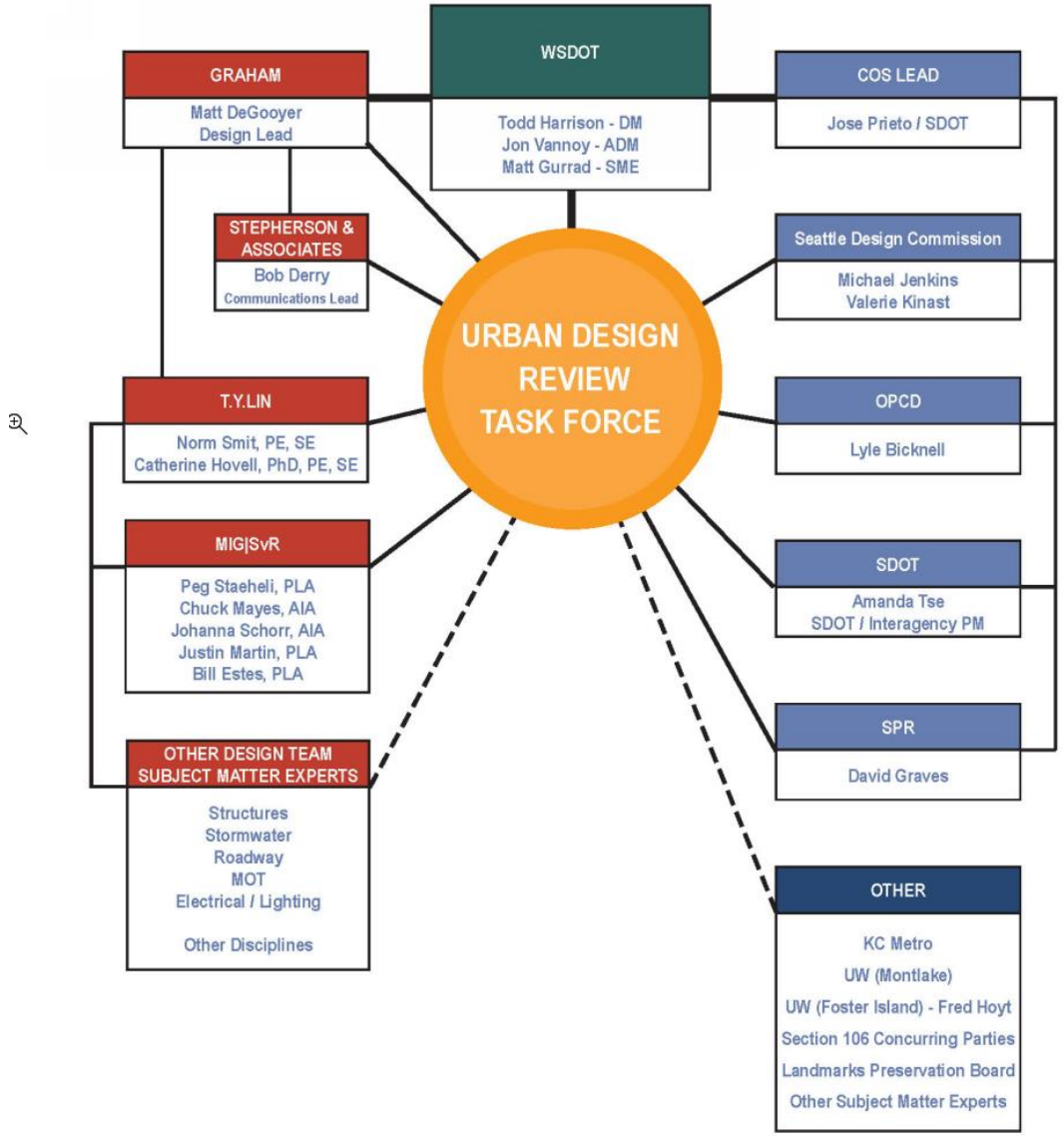
Montlake Cut Bascule Bridge Project
WSDOT will begin additional coordination in 2020 with community stakeholders and agency partners regarding project scope

Montlake Project
Construction start: 2019
Estimated duration: 4-5 years

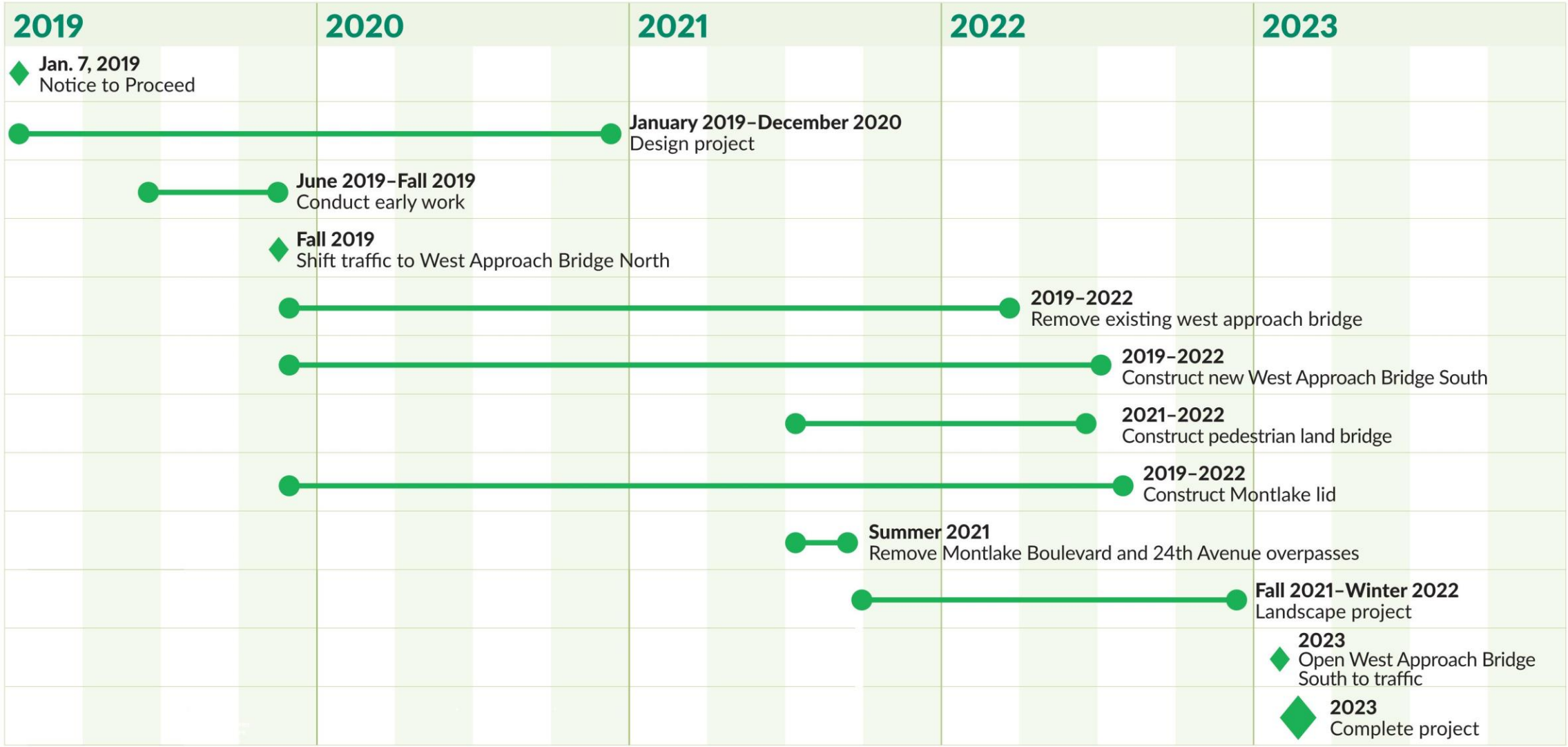


Note: project dates are estimated and subject to change

Team Introduction



SR 520 Montlake to Lake Washington Schedule

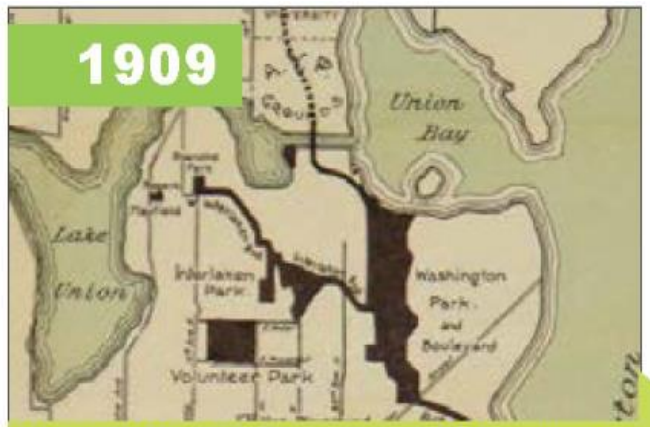


Background/Purpose

Seattle Design Commission Engagement

- SDC 2010 - 2018
- SDC Design/Build Review #1 – February 21, 2019
  - Contract Overview and Comparisons of Design
  - Prescriptive Requirements: Materials and Elements
- **SDC Design/Build Review #2 – July 18, 2019**
  - **Design/Build Overview**
  - **Pedestrian Land Bridge Update**
  - **Lid and Neighborhood Open Space**
- SDC Design/Build Review #3 – Fall, 2019
  - Eastern Area including Foster Island
  - Pedestrian Land Bridge and Mobility Connections
  - East Montlake Park

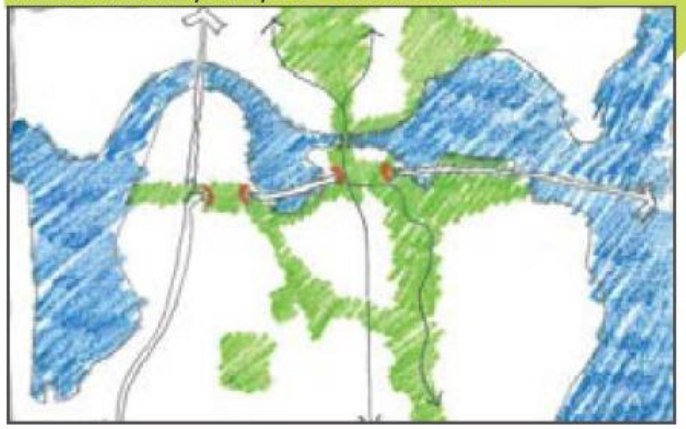
Nature Meets the City (Seattle Segment Community Vision)



Olmsted Parks, Boulevards and Playgrounds Plan *Seattle Board of Park Commissioners*

Bands of Green Plan
Seattle Parks Foundation

The next 100 years: *project-proposed green network and open space enhancements*



Nature Meets the City (2012 Montlake Community Concept)

Project Site – Montlake Area

SR 520 Montlake to Lake Washington Project Overview

Major Urban Design Elements

- Neighborhood Open Space
- Pedestrian Land Bridge
- Transit Plaza
- Outlooks and Views
- Nodes
- Pedestrian/Bicycle Paths
- Neighborhood Route of Travel
- Tree Canopy and Planting

2018 WSDOT RFP Plan

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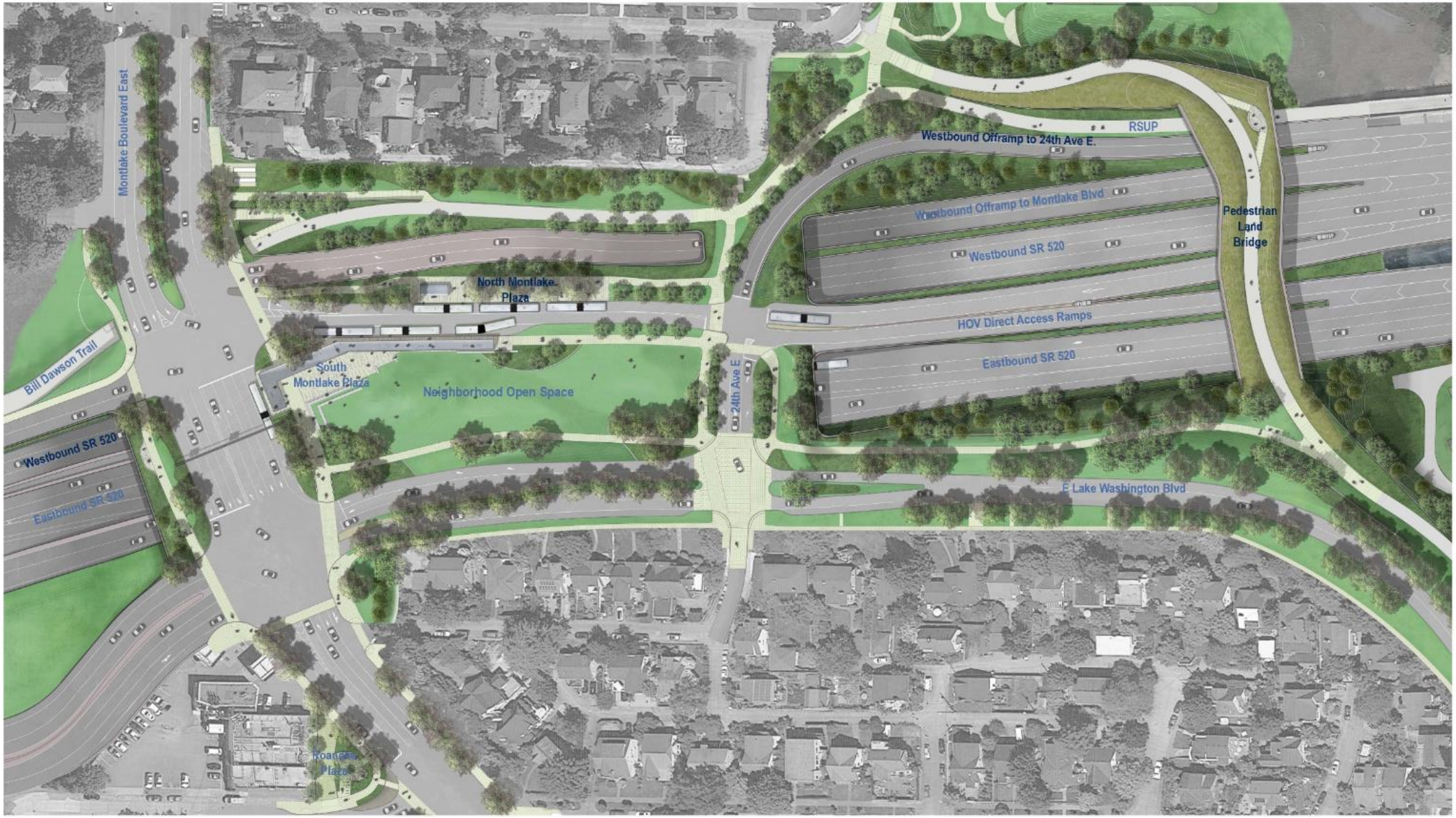
Response to RFP Plan (11/2018)



Refined Plan (07/2019)

SR 520 Montlake to Lake Washington Project Overview

- **Fall 2019: Lid including the area from 24th Ave. E to Montlake Boulevard**
- **Winter 2020: Eastern Area including the Pedestrian Land Bridge**

*Urban design construction document packages (not construction phasing)

Update: Pedestrian Land Bridge and Approach Areas

Pedestrian Land Bridge and Approaches Update

- **Pedestrian Land Bridge**
  - Layout, Context, Planting
  - Structure and Form
  - Architectural Elements
  - Outlook

Project Site – Montlake Area

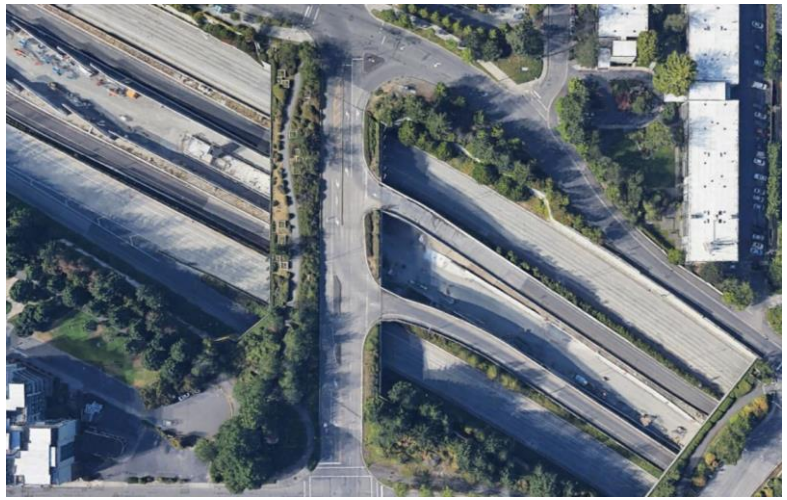
Pedestrian Land Bridge

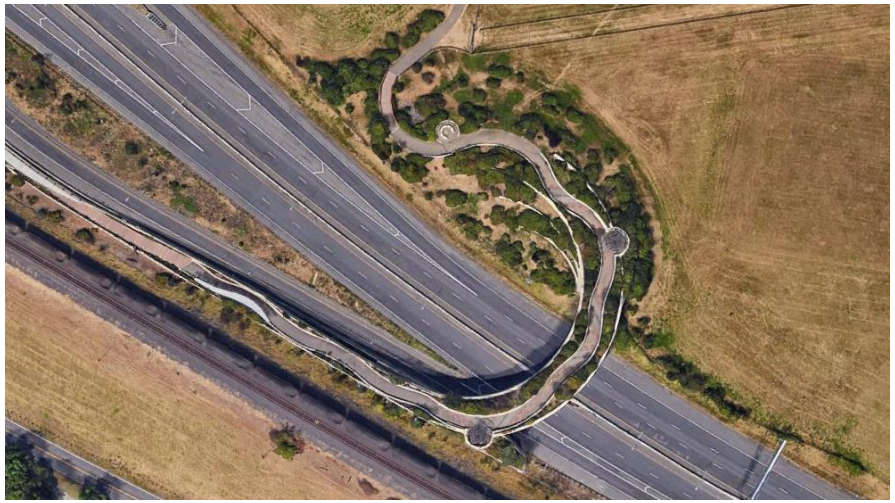
Land Bridge Precedent Images

SR 520, Redmond

Landbridge Trailhead, Ocala

Vancouver, WA Land Bridge





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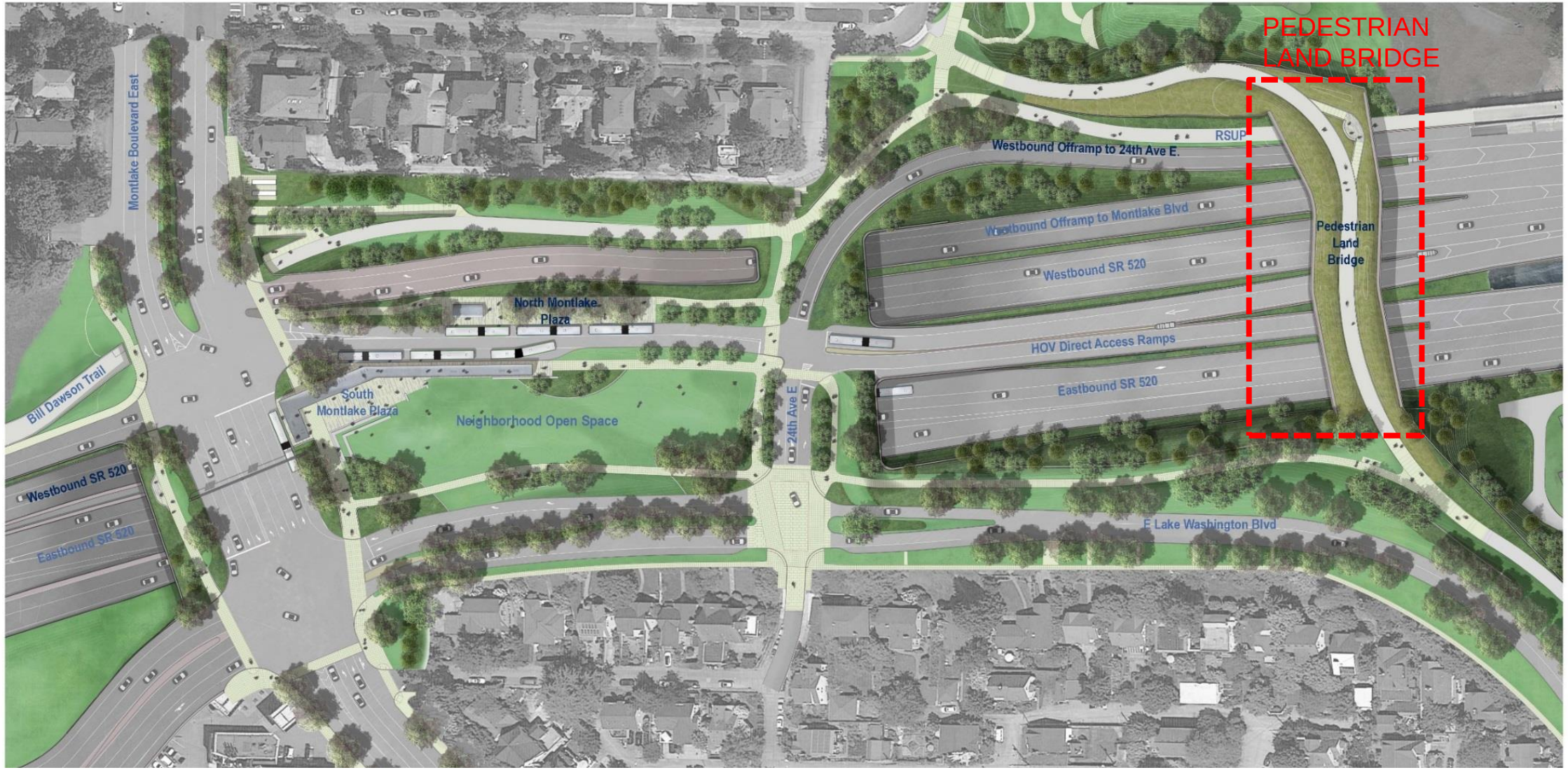


Pedestrian Land Bridge

SDC #1 Feedback During Design-Build Phase

SDC's action recommendations / summary comments regarding PLB from 2/21/2019 full SDC meeting for SR 520 Montlake phase update:

- Achieve the **gracefulness** envisioned in the original concept design for the pedestrian land bridge.
- Consider **realigning the pathway or relocating the view point** if it can result in a better design.
- Continue to seek opportunities to **improve** upon the RFP design.
- Provide **elevation drawings and perspective renderings** that show the pedestrian land bridge as a gateway.

SDC Subcommittee feedback on updated PLB design, June 2019:

- Appreciated progress since RFP response, supported the **effective use of layout**, detailing to work towards the **vision of a graceful structure that ties into landform**, within the precast structural approach.
- Suggested changes to **reinforce appearance of landform floating above highway**, including coloring bent caps in addition to girders; emphasize shadow line of nosing as it continues off of bridge into approach areas.

Today's goals for Pedestrian Land Bridge:

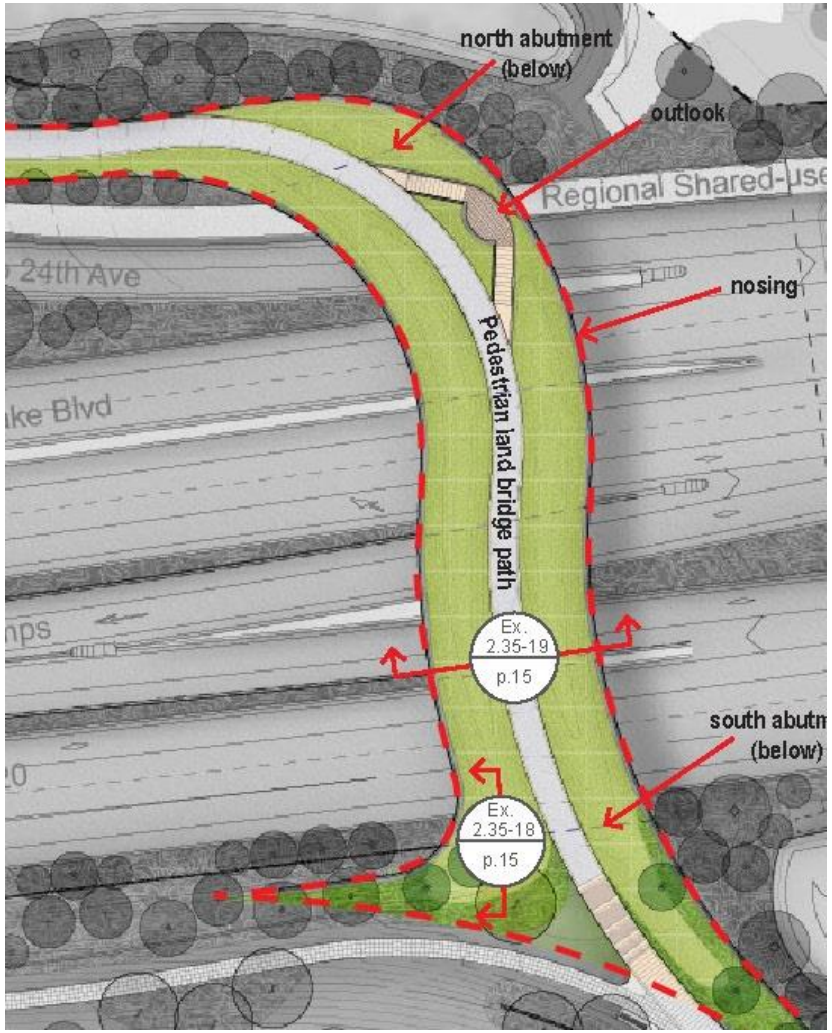
- **Provide updates on Pedestrian Land Bridge design**
- **Gather feedback for final design updates and SDC review in Fall 2019**

Pedestrian Land Bridge

Concept Evolution

Key Plan

2018 WSDOT RFP Plan



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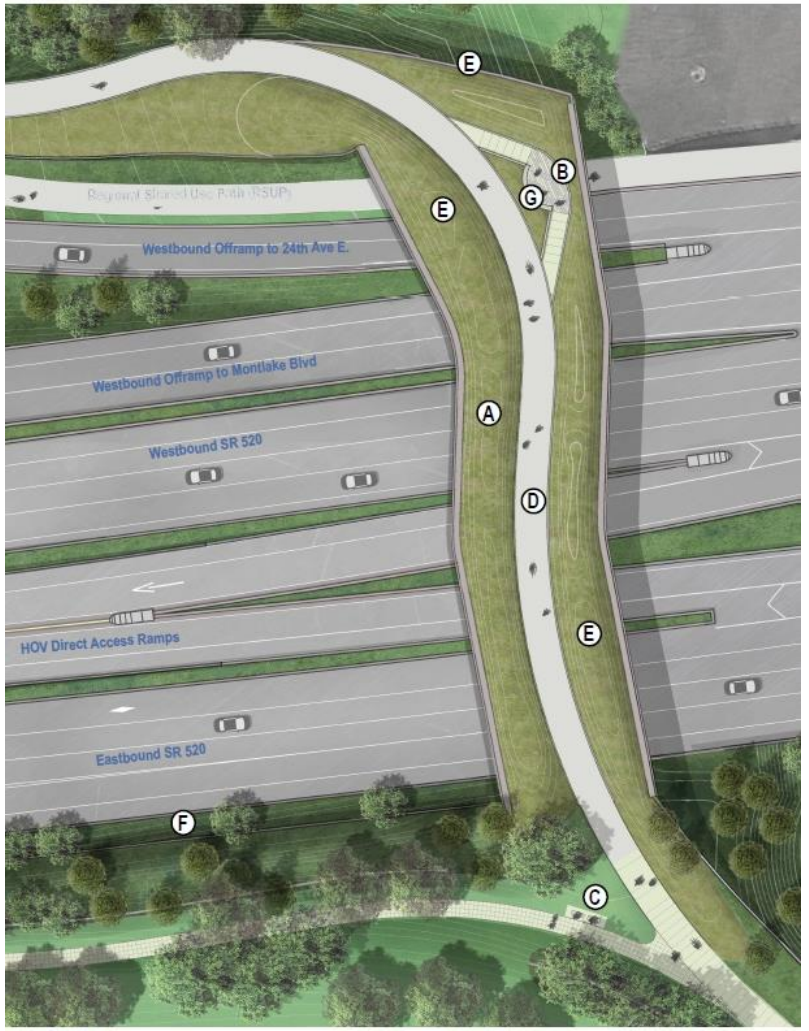
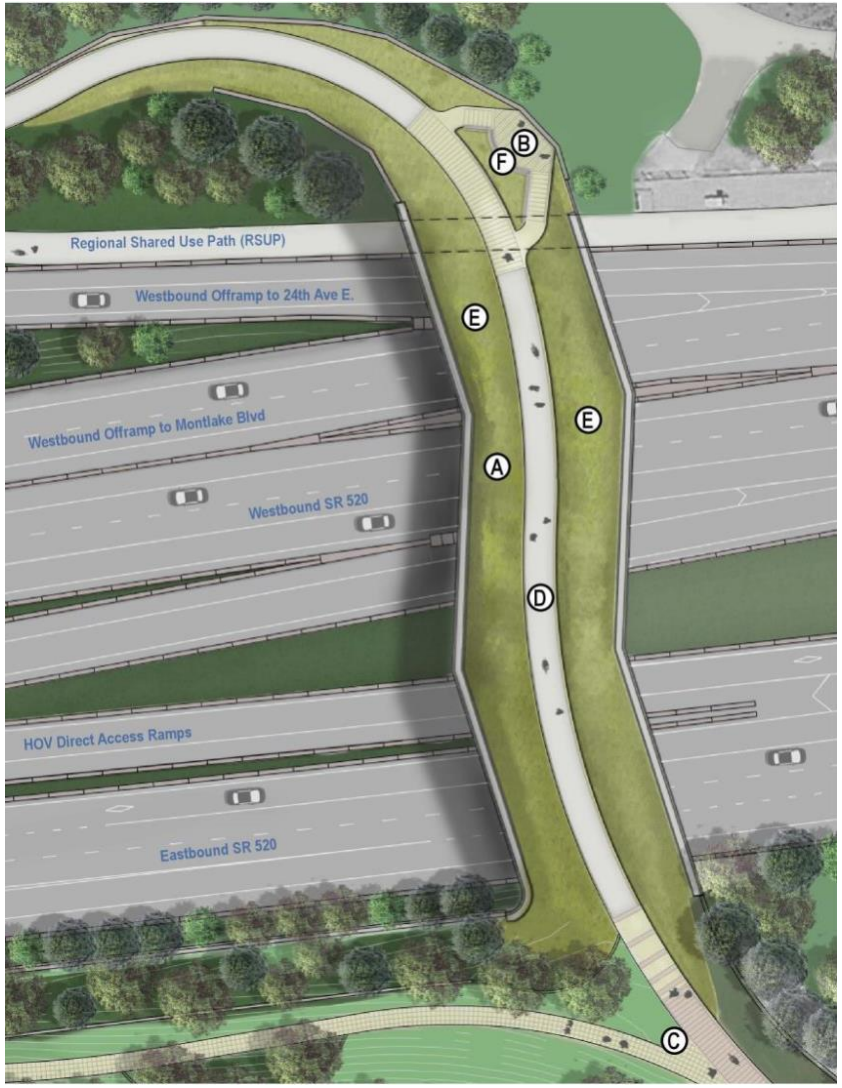


Current Plan (7/2019)



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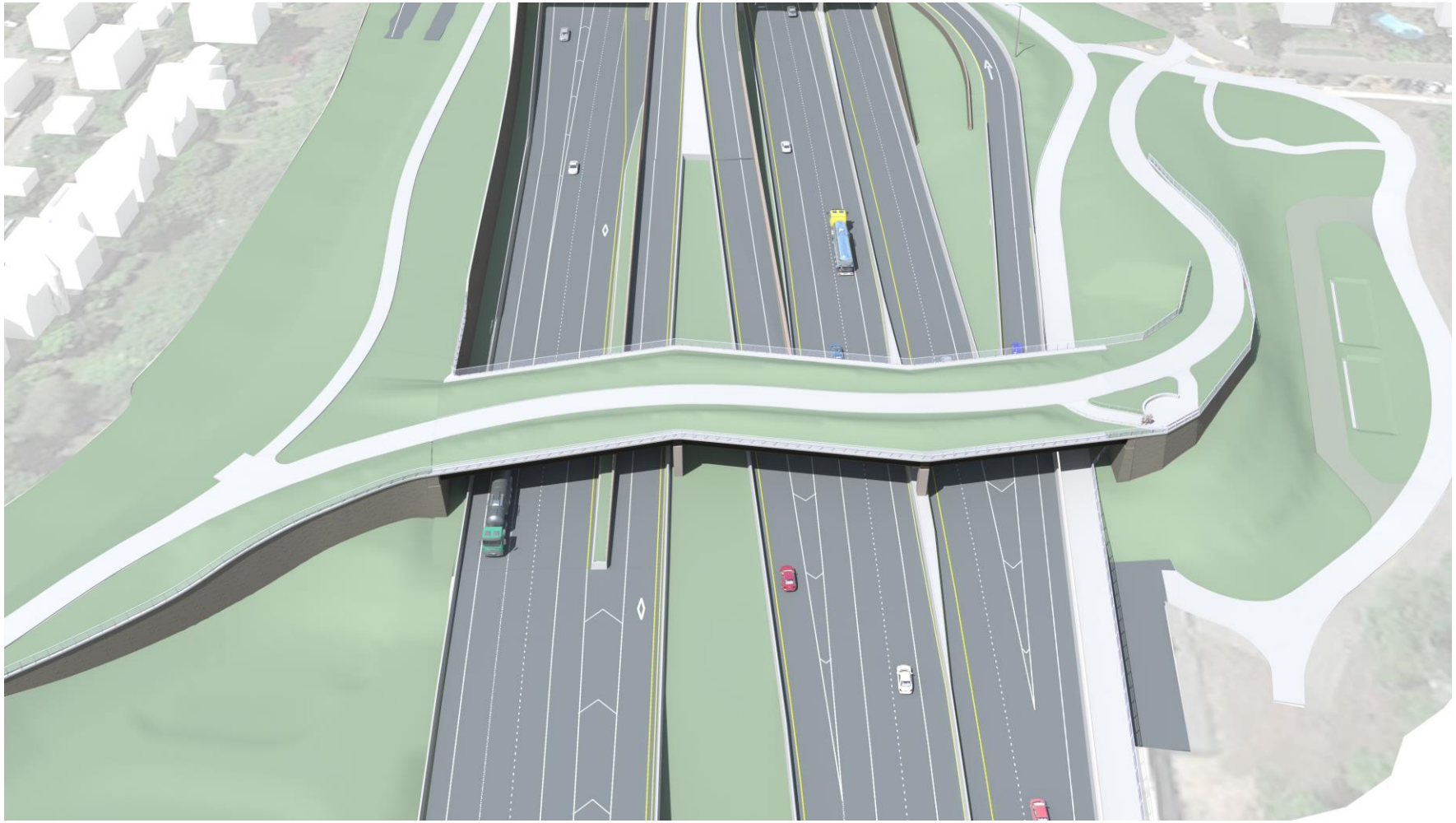
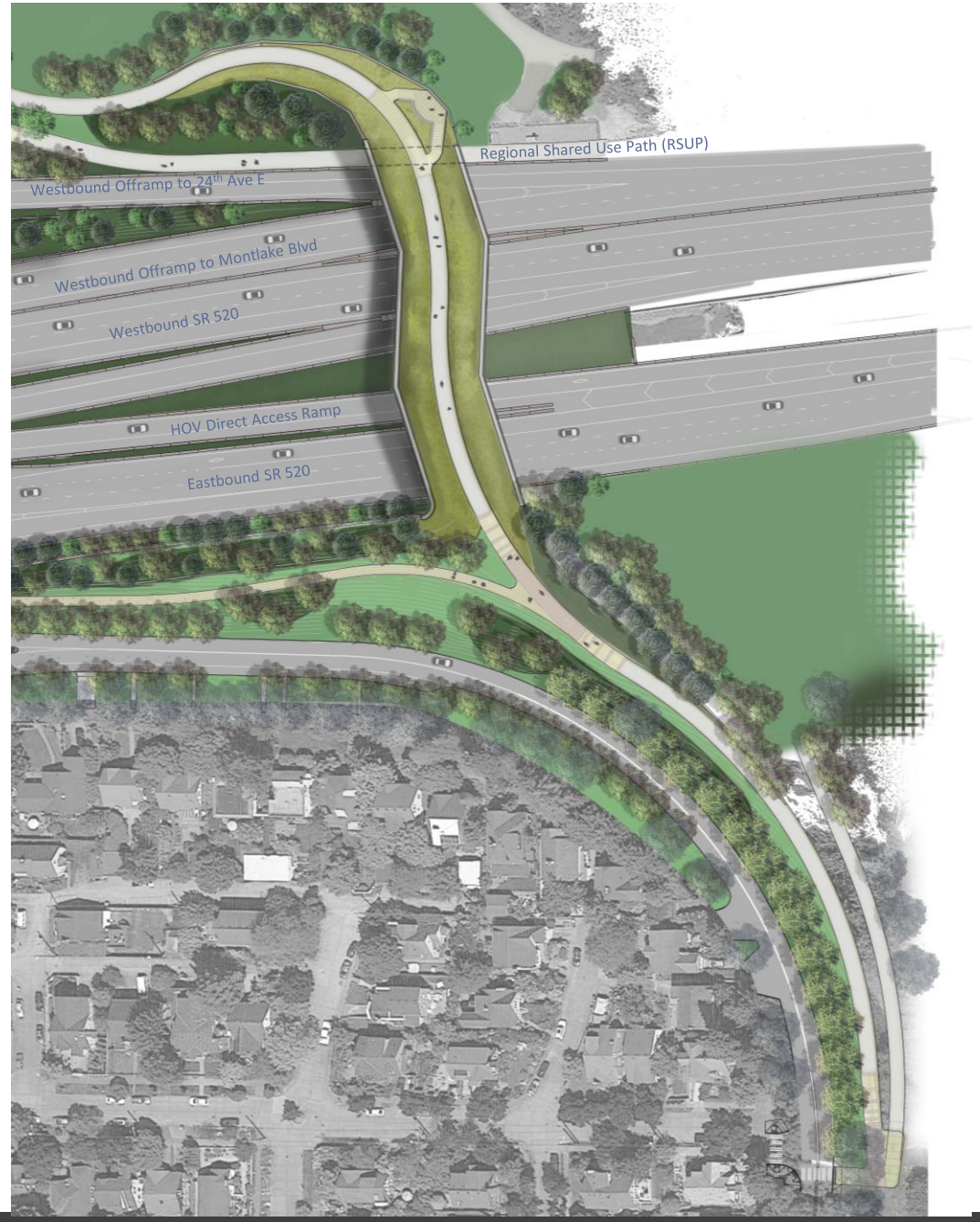
Pedestrian Land Bridge

Working Model View – Connections, Landform



Pedestrian Land Bridge

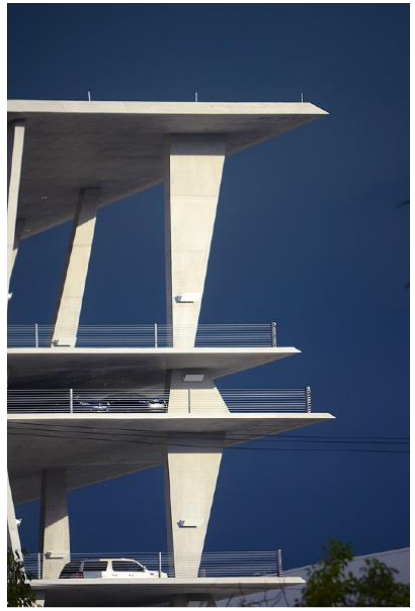
Plan - Layout and Context



Pedestrian Land Bridge

Column Precedent Images






Pedestrian Land Bridge

Girder Precedent Images

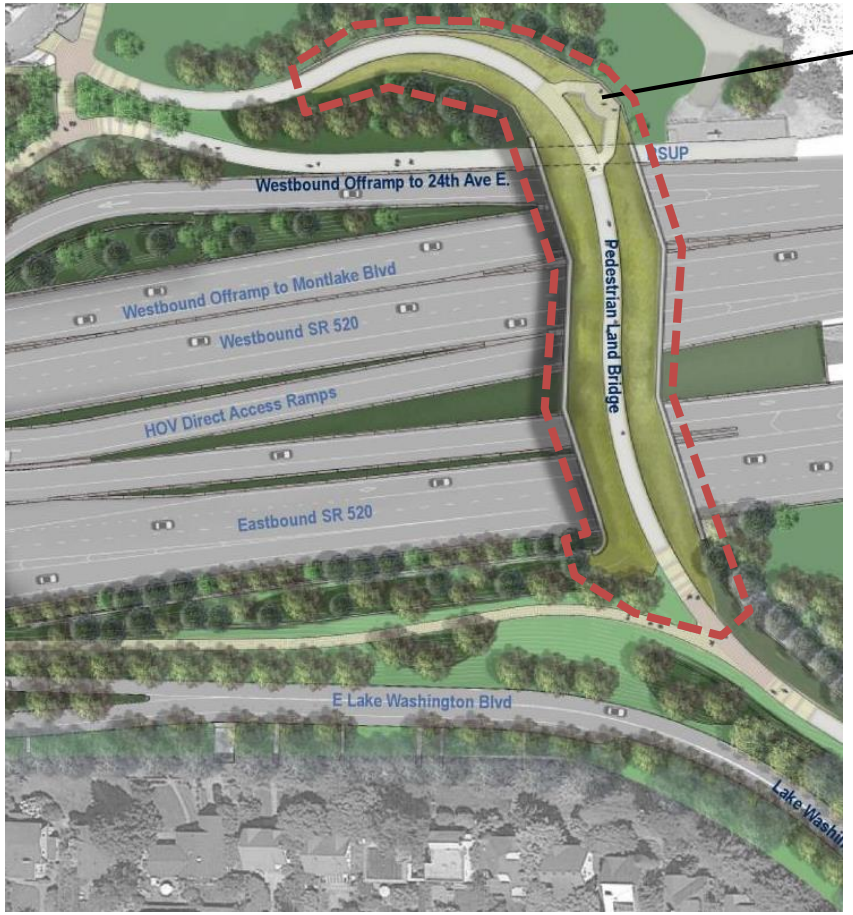


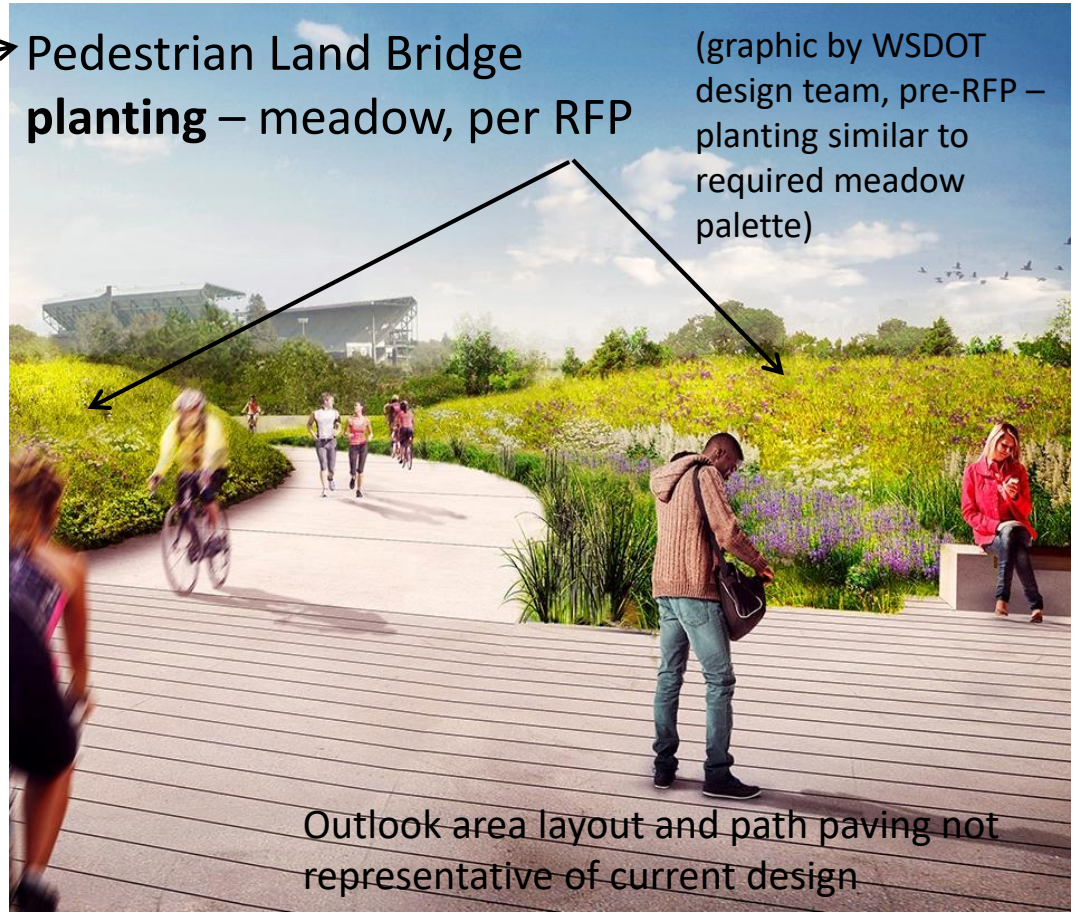





Pedestrian Land Bridge

Plantings - Meadow





Meadow plant list in technical requirements:

Yarrow *Achillea spp.*
Bluebunch Wheatgrass *Agropyron spicatum*
Nodding Onion *Allium cernuum*
Godetia *Clarkia amoena*
Lance-leaf Coreopsis *Coreopsis lanceolata*
Tufted Hairgrass *Deschampsia caespitosa*
Idaho Fescue *Festuca roemeri var. idahoensis*
Fed Fescue *Festuca rubra*
Prairie Strawberry *Fragaria vesca*
Broadleaf Lupine *Lupinus latifolius*
Wild Bergamont *Monarda fistulosa*
Hall's Aster *Symphyotrichum hallii*
Douglas Aster *Symphyotrichum subspicatum*

Pedestrian Land Bridge **planting** – meadow, per RFP

Pedestrian Land Bridge

Elevation

Replace images

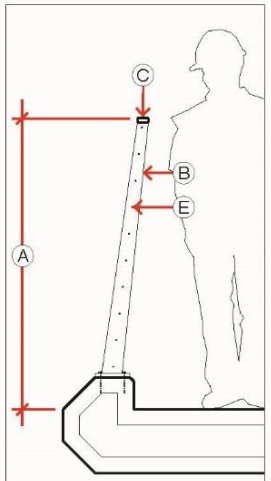
Pedestrian Land Bridge

Elevation

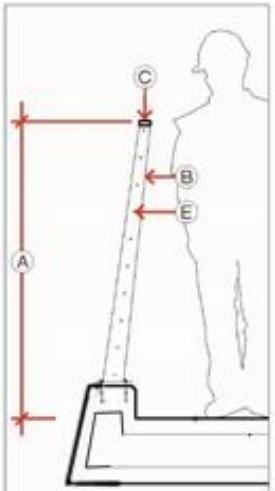
Washington Grey	Mt. St. Helens Gray	Mt. Baker Gray

Pedestrian Land Bridge

Architectural Elements



RFP nosing



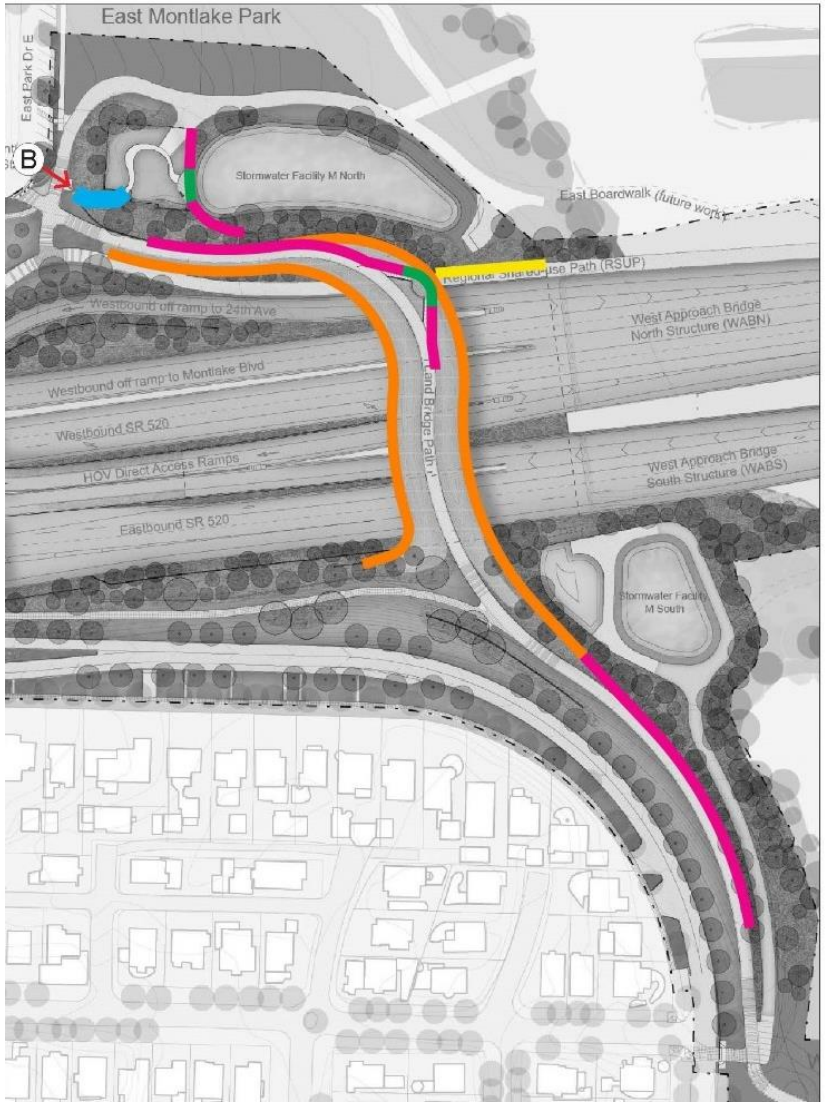
Current concept

Pedestrian Land Bridge

Architectural Elements

Pedestrian Land Bridge

Railings



Railings key map from 2018 RFP

- Pedestrian Railing Type 1
- Pedestrian Railing Type 2
- Pedestrian Railing Type 3
- Pedestrian Railing Type 4
- WABN railing

Pedestrian Land Bridge

Architectural Elements

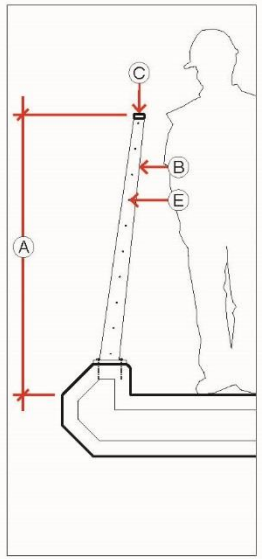


Exhibit 2.35-100: Pedestrian railing type 1 typical section

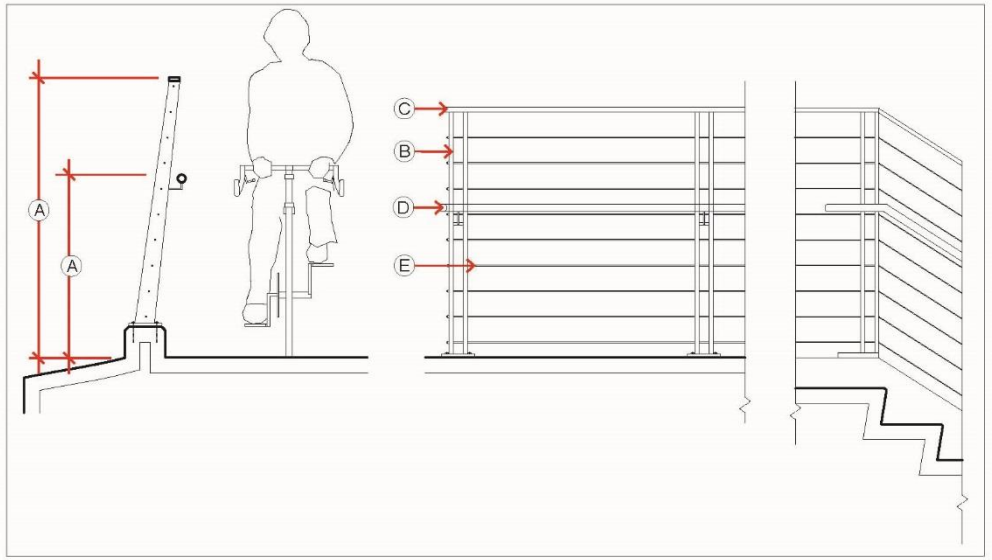


Exhibit 2.35-101: Pedestrian railing type 2 typical section and elevations

SECTION AND ELEVATION CALLOUTS

- (A) Pedestrian railing and hand rail heights per WSDOT Design Manual, typ
- (B) Galvanized steel bar stanchions, typ
- (C) Galvanized steel top member, typ
- (D) SST hand rail, typ
- (E) SST cables, typ
- (F) Wood lean rail

Lean Rail top to be Forest Stewardship Council certified weather resistant hardwood

- Ipe
- Cumaru
- Teak

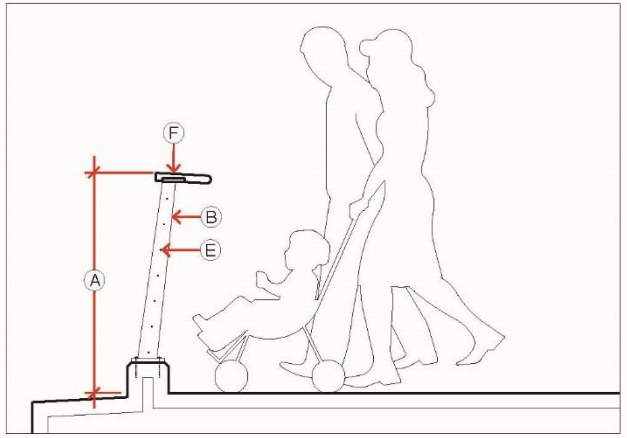


Exhibit 2.35-102: Pedestrian railing type 3 typical section

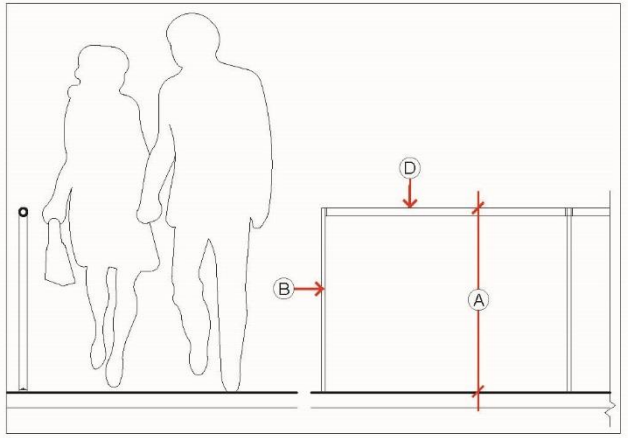
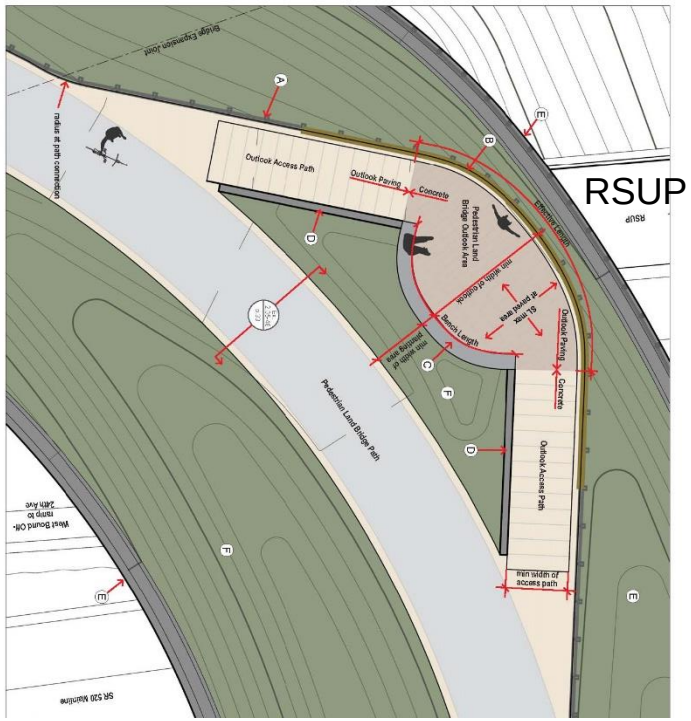


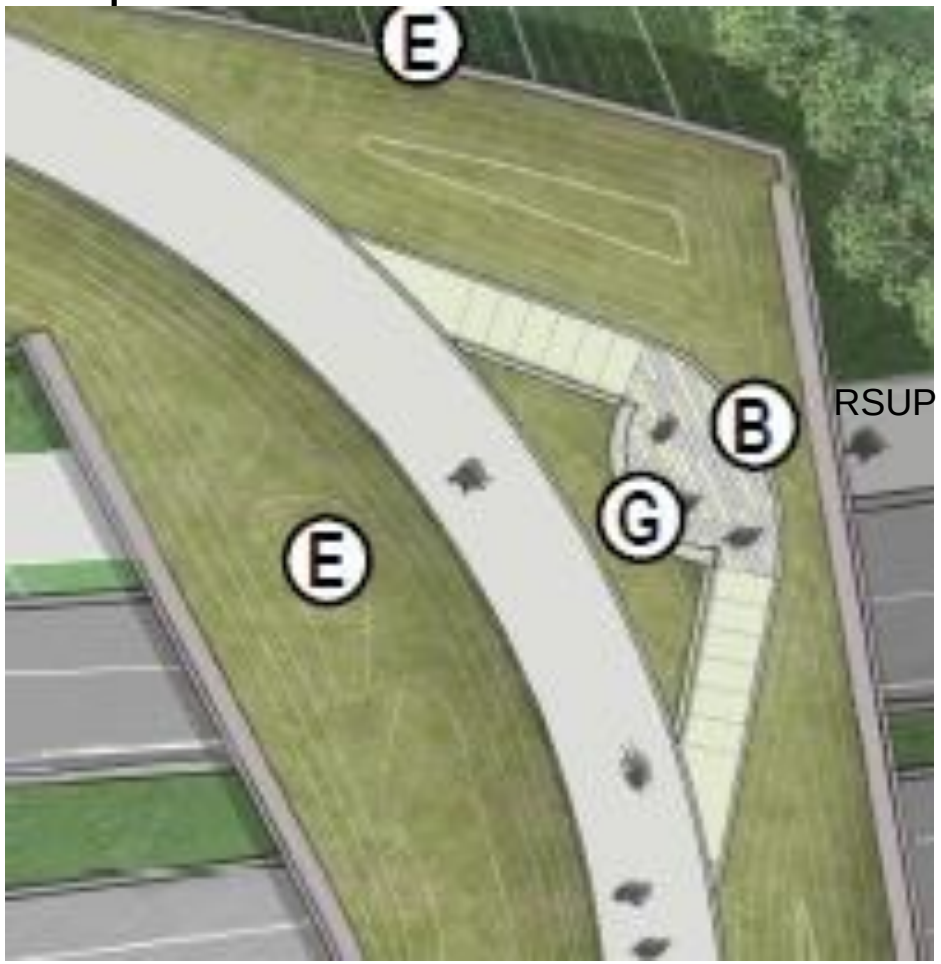
Exhibit 2.35-103: Pedestrian railing type 4 typical section and elevation

Pedestrian Land Bridge

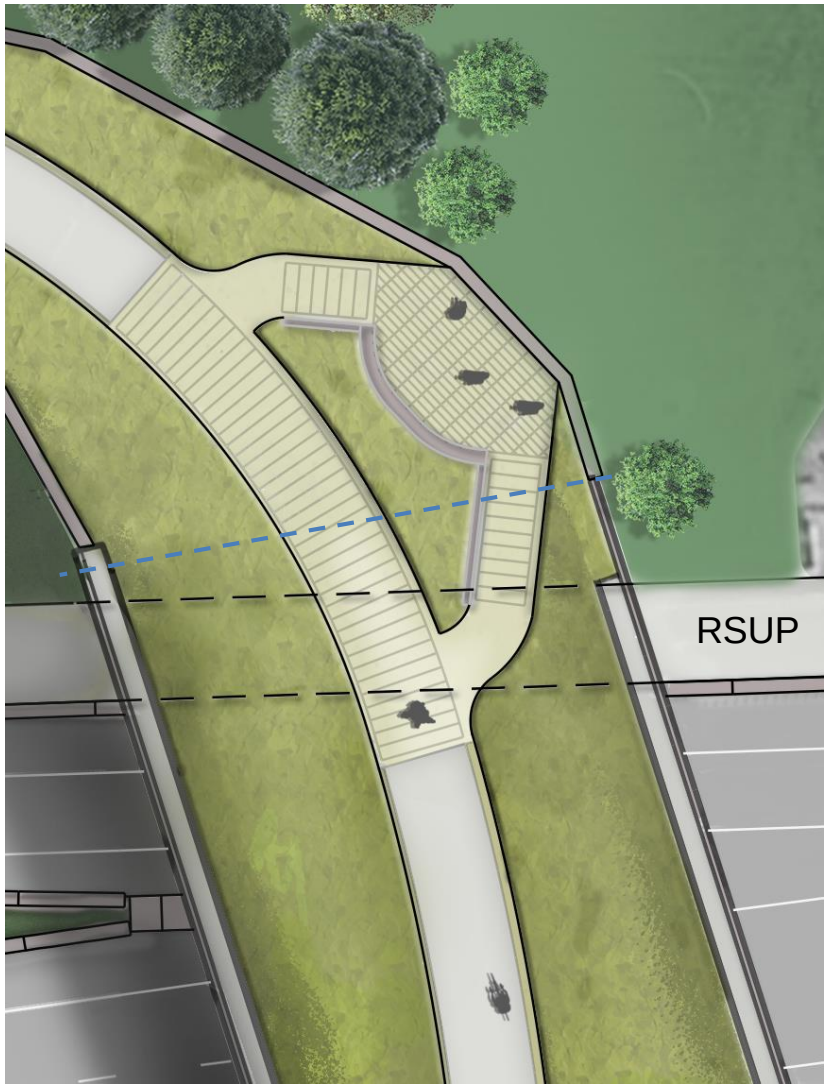
Outlook – Geometry Development



PLB Outlook - RFP



Response to RFP Plan (11/2018)



Current Plan via team design & UDTF feedback

Pedestrian Land Bridge

Outlook - Views

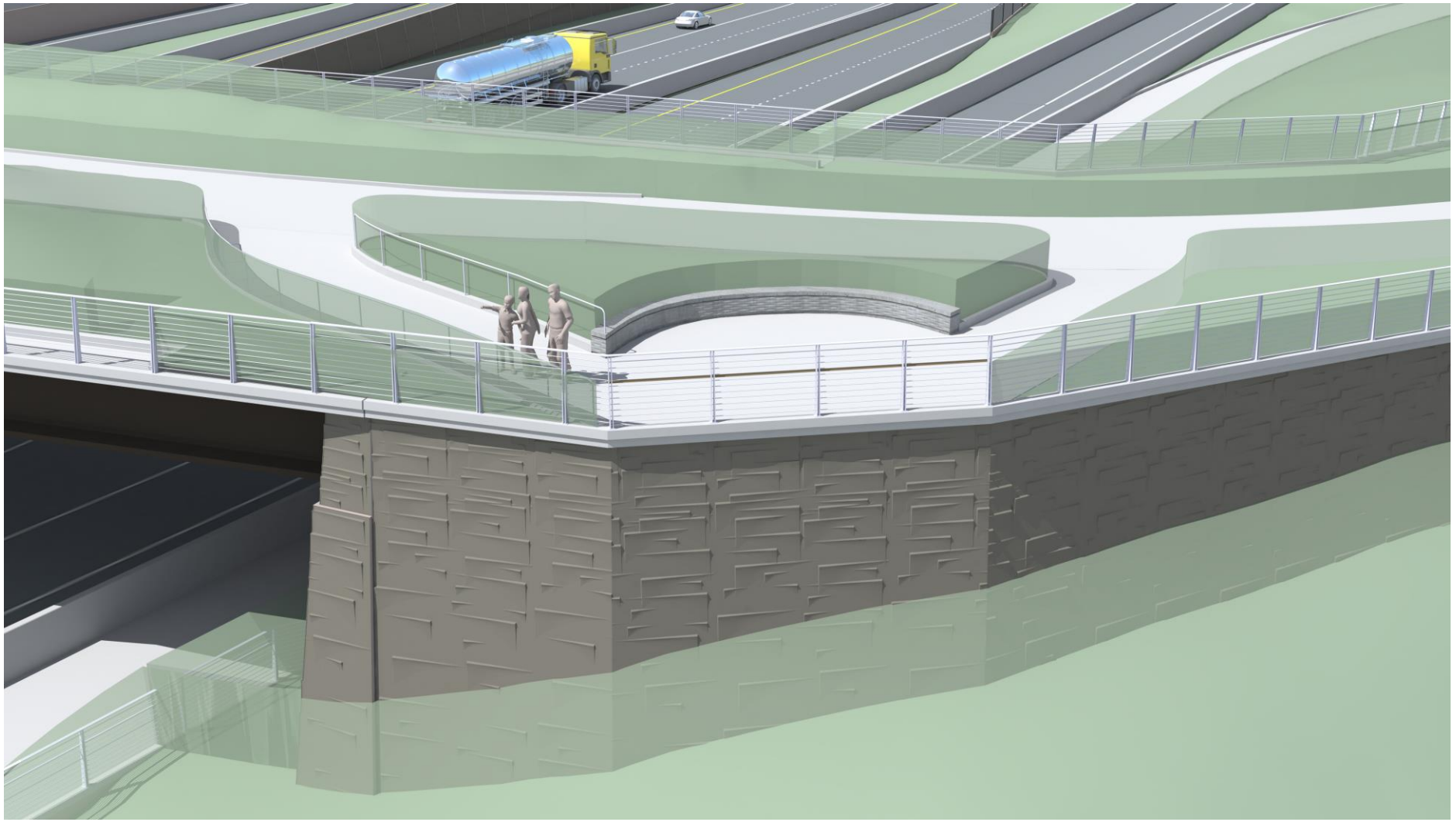
Outlook example from floating bridge

Approximate view angle from PLB Outlook as currently located (further north, off of PLB)

SR 520 Montlake to Lake Washington

Walls Precedent Images

Pedestrian Land Bridge
Outlook

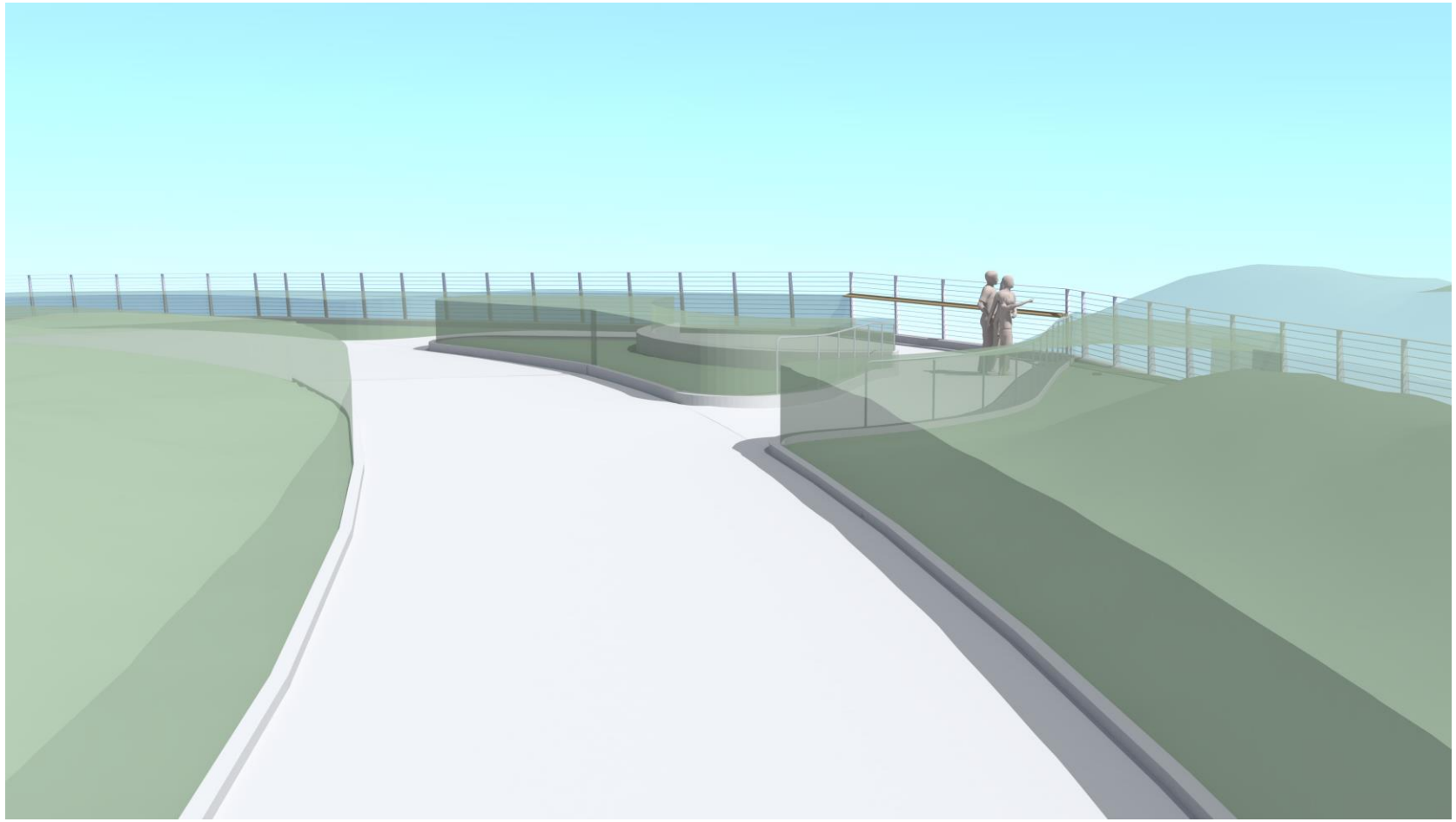


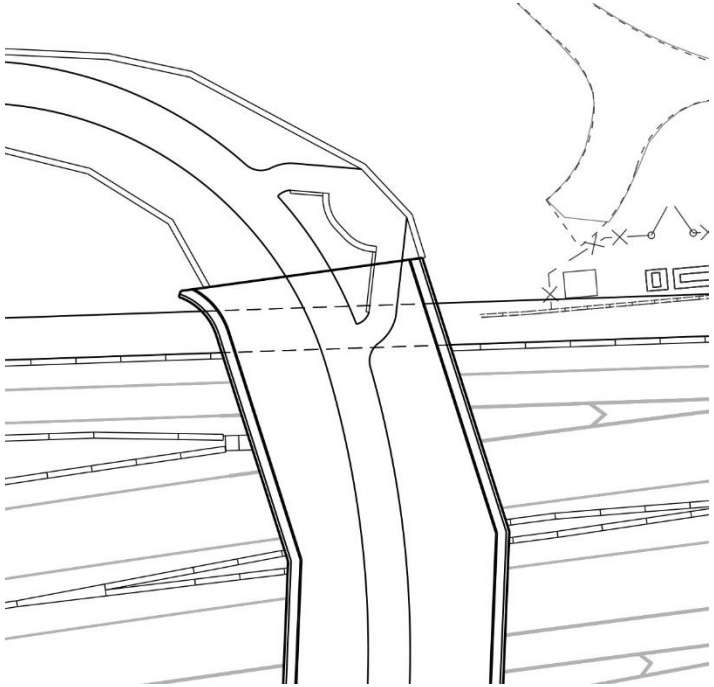
Pedestrian Land Bridge

Outlook

Pedestrian Land Bridge

Outlook

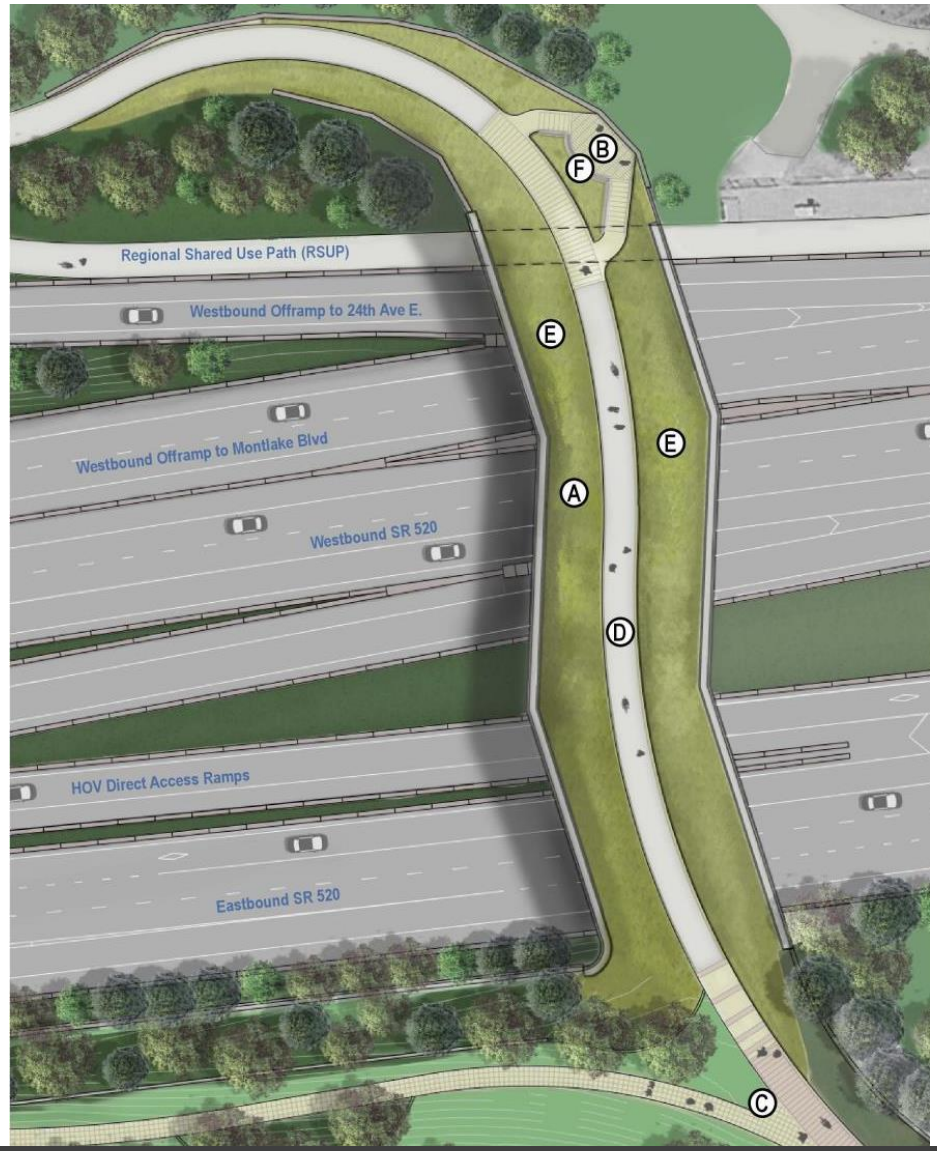




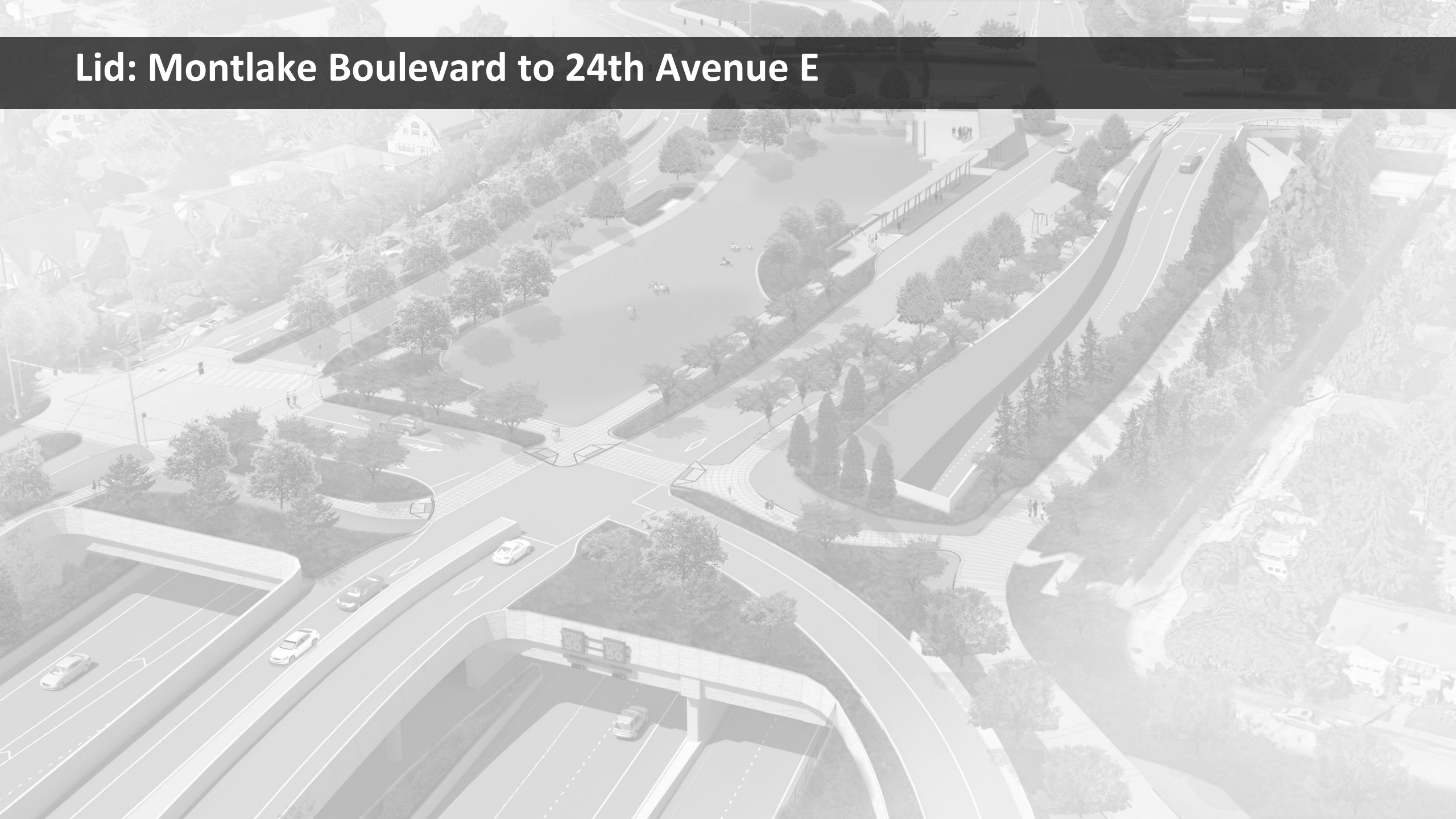
Discussion – Part 1 (15 minutes)

Pedestrian Land Bridge

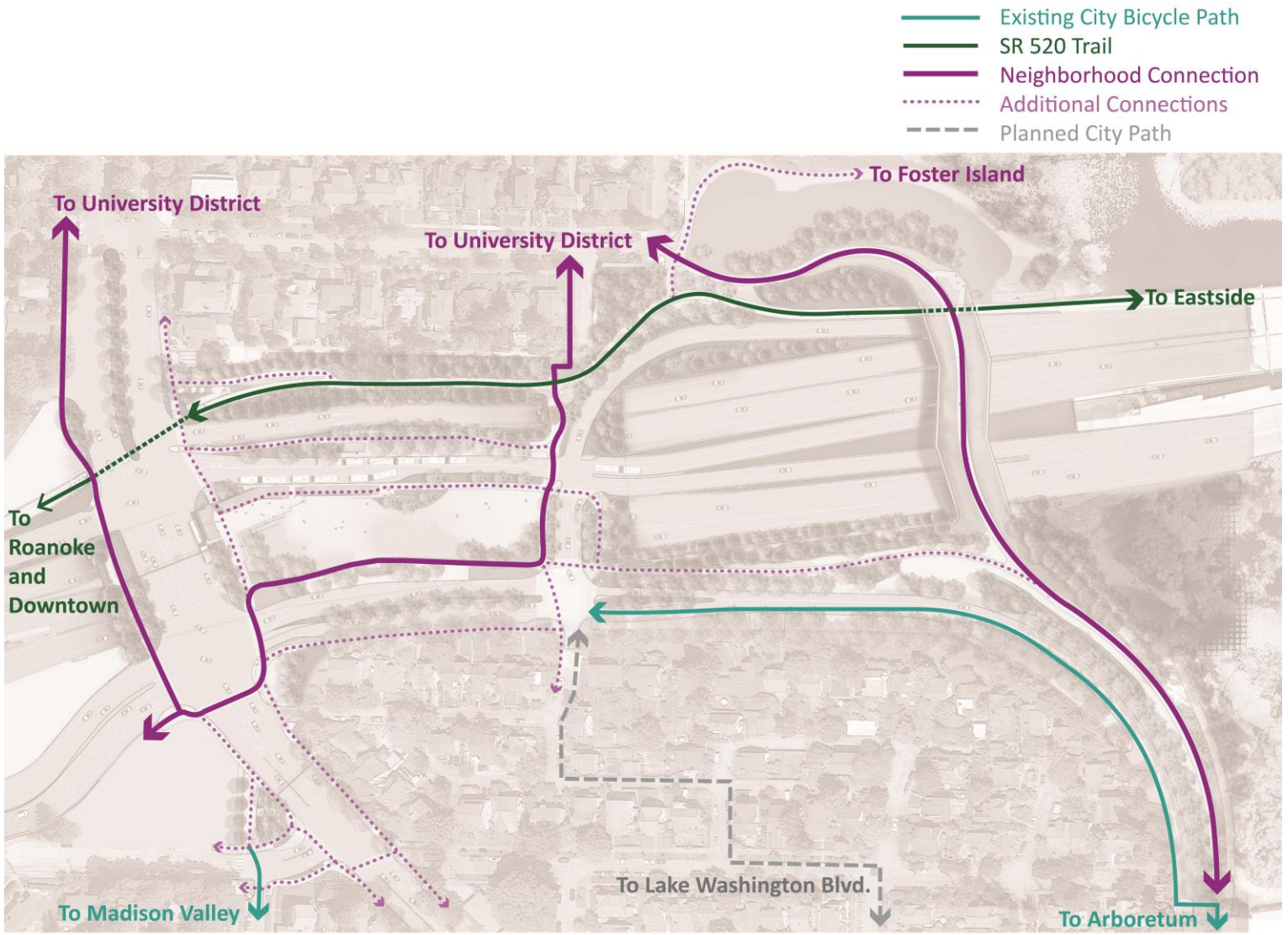
- **Abutment ends – Cheek wall or not**
- **Dark girder or standard gray coating**
- **Dark bent caps or column extending ribbon**



Lid: Montlake Boulevard to 24th Avenue E



Pedestrian and Bicycle Connectivity



Tree Plan

TREE WIDTHS AND CELL NUMBER		
BOTANICAL NAME	**MATURE WIDTH**	**WSDOT CELL**
PINUS THUNBERGII	20-35	TREE 19
QUERCUS PHELLOS	30-40	TREE 7
AMELANCHIER GRANDIFLORA 'AUTUMN BRILLIANCE'	20-25	TREE 13
YOSHINO CHERRY	20-40	TREE 18
CORNUS KOUSA	15-25	TREE 3
ZELKOVA SERRATA	50-75	TREE 1
QUERCUS COCCINEA	40-50	TREE 10
TILIA AMERICANA	30-60	TREE 12
NYSSA SYLVATICA	20-30	TREE 20
CALOCEDRUS DECURRENS		TREE 2
QUERCUS RUBRA		TREE 10
ACER SACCHARUM 'GREEN MOUNTAIN'	30	TREE 15
ULMUS 'HOMESTEAD'		
CHAMAECYPARIS NOOTKATENSIS		
PSEUDOTSUGA MENZIESII		
CORNUS KOUSA X NUTALLI		
ACER CIRCINATUM		
THUJA PLICATA 'HOGAN'		
LIRIODENDRON TULIPIFERA 'JFS-Oz'		
CEDRUS ATLANTICA 'GLAUCA'		
PICEA SITCHENSIS		
ULMUS PARVIFOLIA 'EMER I'		
MAGNOLIA GRANDIFLORA 'VICTORIA' MAGNOLIA DENUDATA		
CORNUS X EDDIES WHITE WONDER		
TILIA CORDATA 'GREENSPIRE'		

Seating


Benches (6 feet)
Transit Benches
Seatwalls (+/- 5 long)
Landscape Walls under 3 feet
Node
Cut stone marker with integrated bench

Lid Overview

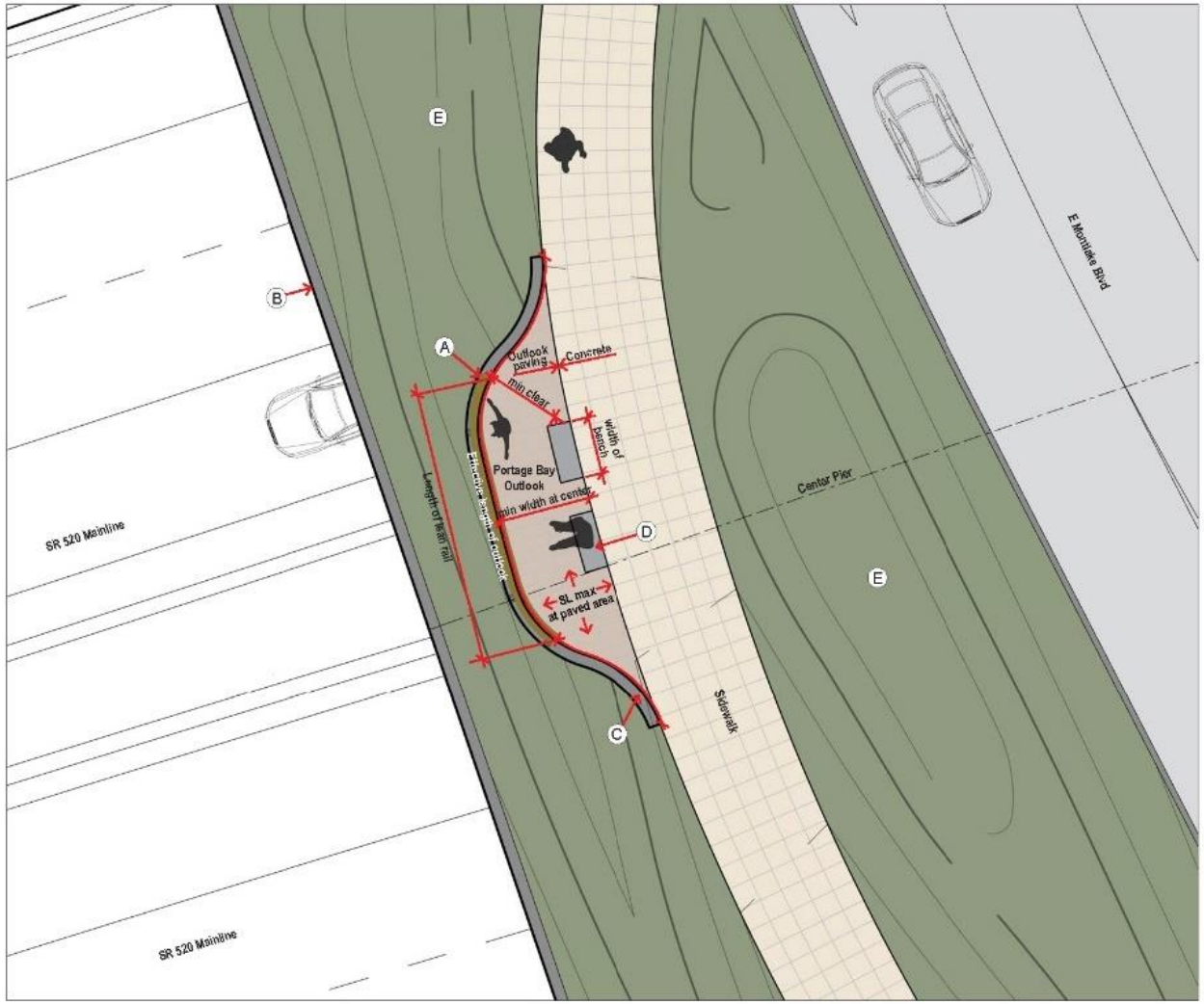
Current Plan

Lid Overview

Neighborhood Open Space

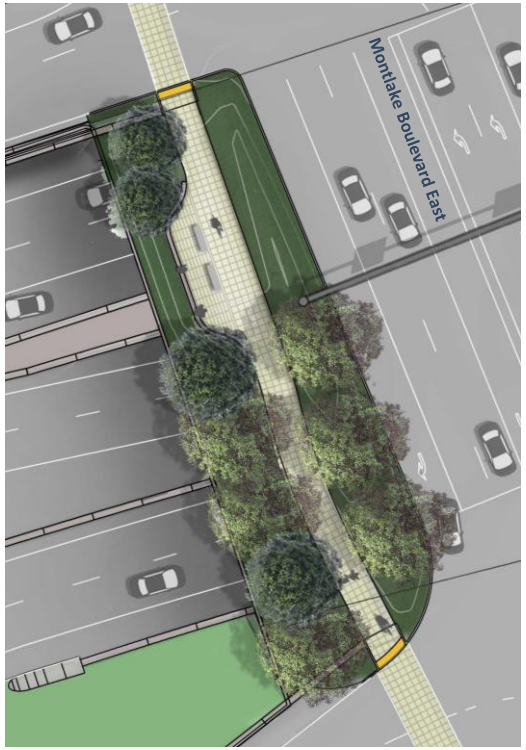
Montlake Boulevard

Portage Bay Outlook (2018 RFP)



PLAN CALLOUTS

- (A) Pedestrian railing type 3, see Exhibit 2.35-102
- (B) Portal wall, see Exhibits 2.35-7, 2.35-8, 2.35-9, 2.35-10, 2.35-11, 2.35-12, 2.35-13
- (C) Landscape wall type 1, 2' height max, see Exhibit 2.35-24
- (D) Seat wall type 1, see Exhibits 2.35-26, 2.35-28
- (E) Planting and Grading, see Exhibits 2.35-58, 2.35-59, 2.35-82, 2.35-83

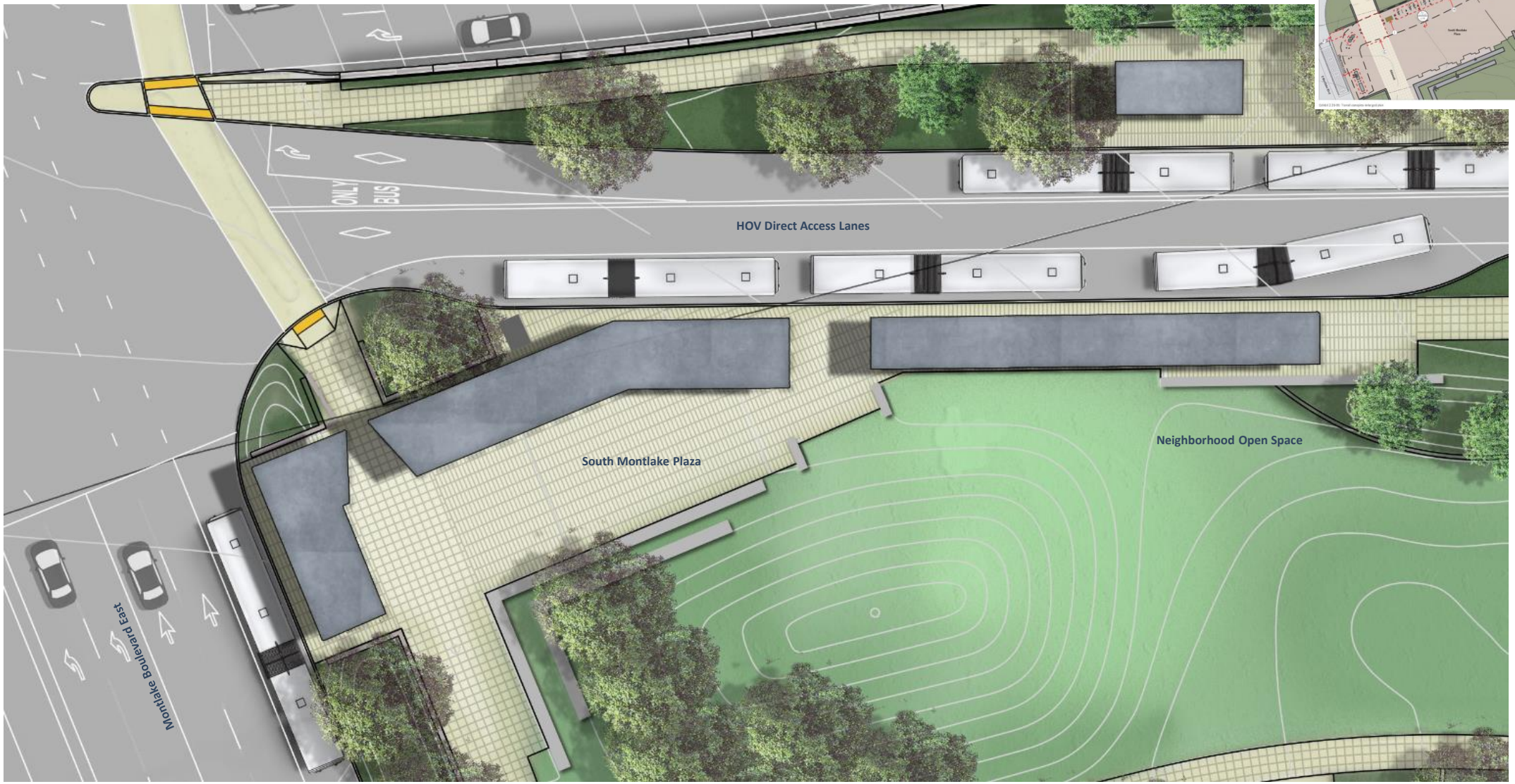


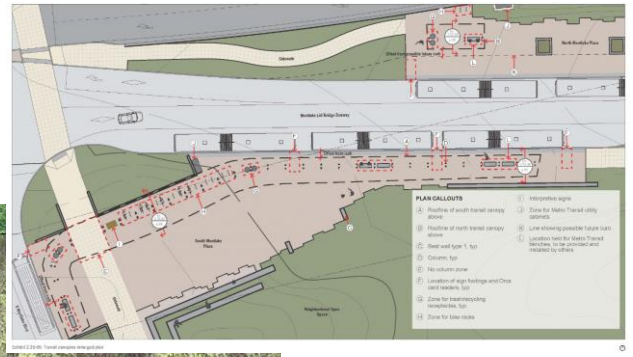
Montlake Boulevard

Portage Bay Outlook

Transit Shelters and Canopies

Current Plan





Transit Shelters

Metro Standards

Transit Shelters and Canopies (2018 RFP)

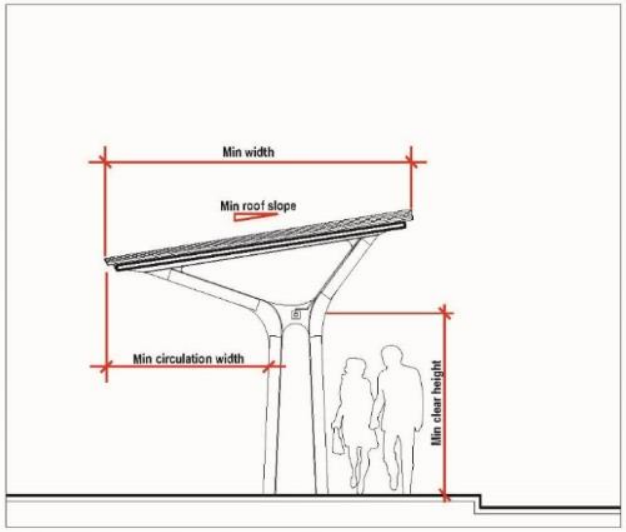


Exhibit 2.35-96: South transit canopy narrowest section

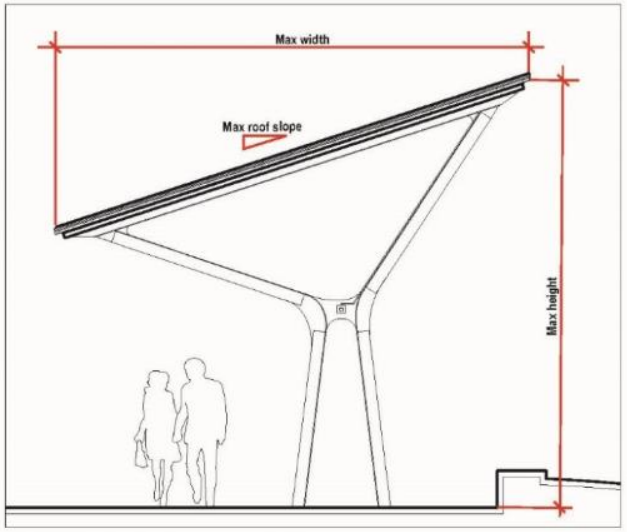


Exhibit 2.35-97: South transit canopy widest section

SECTION CALLOUTS

- (A) Standing seam metal roof with neutral light gray finish, fascia to match, typ
- (B) SST gutter and downspout where occurs, typ
- (C) Up/down light fixture at each column, typ
- (D) Columns composed of built up steel members with "Montlake Black" finish, typ
- (E) Structural wood decking with clear finish, typ

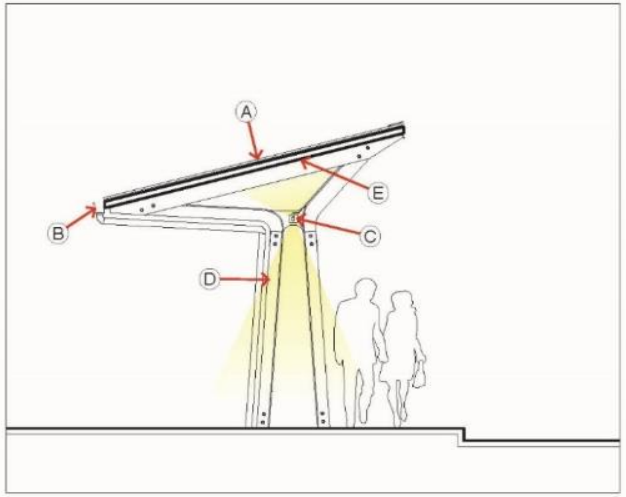


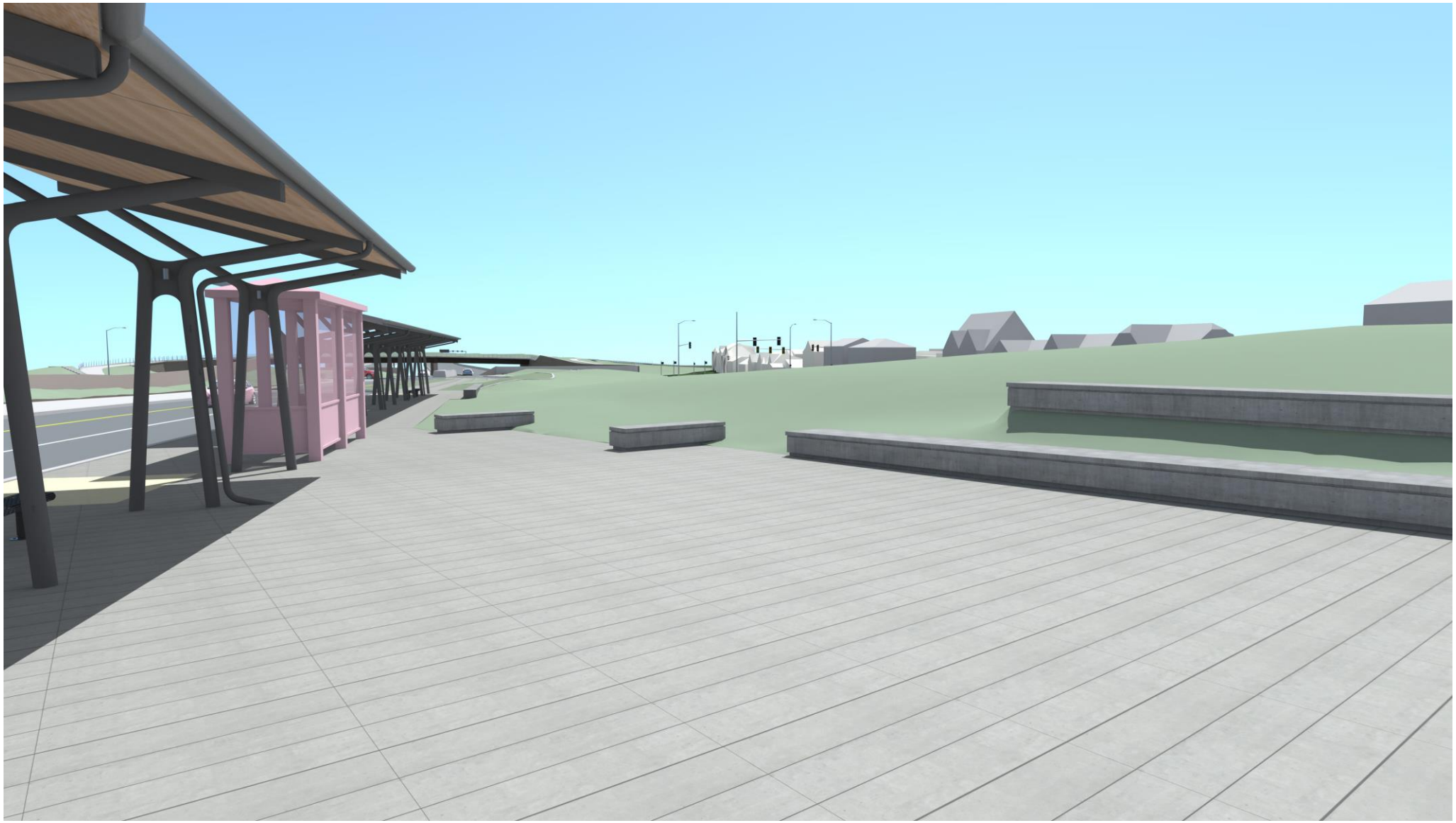
Exhibit 2.35-98: Transit canopies typical section and North Transit Canopy section

Transit canopy materials per RFP Technical Requirements:

- Canopy decking & framing, structural decking – wood
- Roof – standing seam metal, light gray finish
- Columns – steel with black finish

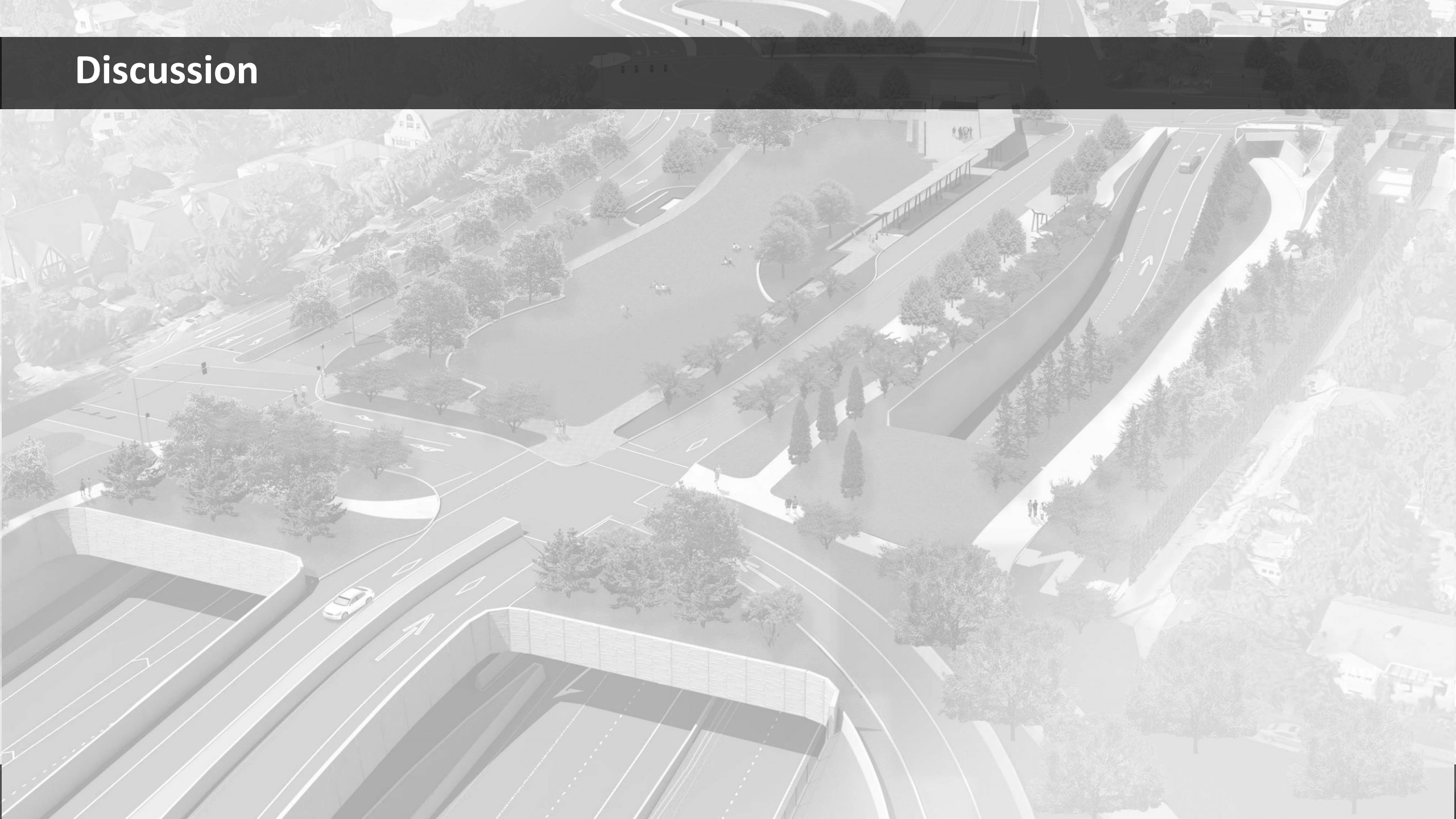
Transit Shelters and Canopies

Transit Shelters and Canopies



Lid and Neighborhood Open Space

Discussion



Proposed Timeline for SDC Formal Review

- SDC Review #1 – February 21
- *Topical Meetings/OTS Reviews with Subject Matter Experts*
- SDC Review #2 – July 2019
  - Pedestrian Land Bridge Update
  - Neighborhood Open Space (Lid) Design Package 1
- **SDC Review #3 – Fall 2019**
  - **Pedestrian Land Bridge Design Package 2**
  - **Open Space Restoration**
  - **Trails**
  - **Interpretive and Wayfinding**

Next…

- Topical Meetings/Over-the-shoulder Reviews with Subject Matter Experts
- Nature Meets City Refinement
  - Pedestrian Land Bridge
  - Neighborhood Open Space (Lid)
  - Regional Shared Use Path (RSUP)
  - Freeway Corridor Landscape and Wall Treatments
  - Neighborhood Connections
- Stormwater Facilities and their Relationship to Shoreline and Open Space
- Seattle Design Commission Meeting in Fall