Northgate Pedestrian and Bicycle Bridge Design Meeting 2

North Seattle College
October 21, 2014
Design Meeting Goals

- **Objective:** Opportunity for NSC to assess, evaluate and provide feedback to the design team on the west approach options.
- **Goal:** Identify the preferred west approach option.
Design Meeting 2

Today’s Agenda

• Introductions  **SDOT**
• Level II Screening Summary  **LMN**
• Level III West Approach Options  **SWIFT**
• Opportunities for NSC Community Engagement  **SDOT**
• Conclusions and next steps...
Bridge Components

- **Primary Span**: +17.5’ clear height beneath
- **West Approach**: +35’ elevation gain
- **East Approach**: +45’ elevation gain
- **Connection to Sound Transit Station**: @ ~20’ above grade
Design Update

Level II Screening Criteria:

• Connectivity/Geometry
• Safety
• Visual Impact/Presence
• Environmental Impact
• Constructability
• Cost
Design Alternatives for Screening:

APPROACH NODES + SPAN DESIGN
Bridge Components: **Primary Span**

- Cable Stay
- Tied Arch
- Tube / Truss
Primary Span Types: **Tied Arch**
Preliminary Design Concept: Tied Arch
Preliminary Design Concept: Tied Arch

VIEW FROM NORTHEAST
Primary Span Types: **Tube / Truss**
Preliminary Design Concept: Tube / Truss
Preliminary Design Concept: Tube / Truss

VIEW FROM NORTHEAST
Span Type Screening

CABLE STAY

TIED ARCH

TUBE / TRUSS

<table>
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Bridge Components: **Pathway Elements**

- **Walkway**
- **Bike Lanes**

15’ – 20’ Wide
Existing Conditions: **East Approach**
East Approach
East Approach
East Approach
East Approach
## East Approach Summary

<table>
<thead>
<tr>
<th>Screen Criteria</th>
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<th>E2 Mid Pkg Lot</th>
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Existing Conditions: **West Approach**
Existing Conditions: West Approach
## West Approach Summary

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Preferred Alignment
CPTED: Crime Prevention Through Environmental Design

Natural Surveillance
- Deny private places “See and be Seen”

Access Control
- Distinct points of entry/exit

Territoriality
- Clearly defined public ownership of the space

Maintenance
- Easy Upkeep (Broken Window Theory)
NORTHGATE PEDESTRIAN – BICYCLE BRIDGE

SITE RECOMMENDATIONS AND OBSERVATIONS

- Protect history of previous site use
- Protect tree grove as wetland and sanctuary buffer
- Consider increasing extent of mown clearing to increase site safety

KEY
- Existing mown clearing
- Significant trees and forest
- Wetland
- Proposed connection
- Proposed clearing
- Interstate
- Approximate callbox location

100TH ST
Bartonwood Natural Area
+ Pedestrian / Bicycle Bridge

Issues / Objectives:
• Develop a safe identifiable welcoming access to the bridge.
• Provide for ADA access with slopes under 5%
• Minimize impact on the existing site character, condition and ecological function.
• Amplify positive site characteristics and ecological function.
• Reference history of site.
Observations:

- Diverse habitats - wetland to forest, blackberry and mown clearings.
- Extensive bird life.
- Sense of a natural place in the city.
- Spatial organization = two large clearings wrapped by forest with ascending topography = clarity of wayfinding.
- Limited removal of blackberry to increase generous mown paths could increase the identity and safety.
Selection criteria:

• Avoid impact on 'heart' of natural area - keep bridge access towards south

• Limit impact to site and encourage use of bridge

• Optimize design for pedestrian safety and visibility
NOTES

1. Approximate extent of forest, mown clearings and blackberry are shown along with wetlands, contours and significant trees to illustrate site characteristics.

2. The combination of landform, forest, trees and mown clearings create distinct site character and areas. The quality of the experience creates the sense of being in a natural environment separate from the city. The lack of city and freeway views coupled with bird sounds contributes to this characteristic. Discrete open clearings in the forested landscape create a memorable and distinct sense of place.

3. The structural diversity and mix of species provides a variety of habitat opportunities.

4. Site topography defines edges and clearings supporting the sense of place. The topography can provide for ease of pedestrian access.
NOTES

1. Assume top of bridge structure is 28.5' above freeway at western edge of freeway.
2. Assume maximum of 4.8% slope for approach structure.
3. Assume location of approach access/egress approximately midpoint along approach length via stair or ramp to adjoining grade.
4. Assume existing path and clearing system to remain. Assume approach does not impact free use of existing path system.
5. Assume significant trees and forest to remain.
6. Assume limited grading and clearing to allow for access, visibility and increased defensible space/safety.
7. Clearance requirements over existing paths to be confirmed.
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Level III Screening Criteria:

• Safety
• Environmental Impact
• Cost
Opportunities for NSC community engagement
Conclusion

• Preferred west approach option
• Action Items
• Preferred west approach option

Action Items