

Northgate Pedestrian Bridge

Edward B. Murray
Mayor

Diane Sugimura
Director, DPD

Shannon Loew, Chair

Ellen Sollod, Vice Chair

Brodie Bain

Lee Copeland

Thaddeus Egging

Rachel Gleeson

Theo Lim

Martin Regge

John Savo

Ross Tilghman

Michael Jenkins
Director

Valerie Kinast
Coordinator

Aaron Hursey
Planner

Joan Nieman
Administrative Staff

**Department of Planning
and Development**
700 5th Avenue, Suite 2000
PO Box 34019
Seattle, WA 98124-4019

TEL 206-615-1349
FAX 206-233-7883
seattle.gov/dpd

Commissioners Present

Shannon Loew, Chair
Ellen Sollod, Vice Chair
Lee Copeland
Thaddeus Egging (excused after 10:30)
Theo Lim
Martin Regge
John Savo
Ross Tilghman

Project Description

Seattle Department of Transportation (SDOT) is proposing to design and construct a pedestrian and bicycle bridge across I-5 that will connect North Seattle College, the Licton Springs neighborhood, and communities west of the freeway with Northgate Mall, the future Sound Transit light rail station, and the eastern portion of the Northgate Urban Center.

The west end of the bridge would be located on the North Seattle Campus near N 100th St. The east end of the bridge would land adjacent to the future light rail station along NE 100th St. and include a spur linking directly to the mezzanine level of the light rail station.

The project team has studied several alignments and connection points and has decided to use a truss structure for bridge. A truss structure is the preferred option as it is easy to construct and install given its location over I-5. SDOT and Sound Transit have each committed \$5 million while Washington State Department of Transportation (WSDOT) has committed \$10 Million. Because the project did not receive federal TIGER grant[1] funding, the project will potentially receive funding through the Move Seattle Levy to cover the remaining project costs. Construction would begin during the first quarter of 2017.

Meeting Summary

This was the Seattle Design Commission's (SDC) second review of the Northgate Pedestrian Bridge project. At the commission's August 7, 2014 meeting, the SDC unanimously approved the applicant's pre design study. Today, the commission reviewed the concept design phase of the project. Following the presentation, public comment and SDC review, the SDC voted 7-0 in favor of the concept design, with recommendations.

Recusals and Disclosures

Commissioner Egging recused himself

¹TIGER is an acronym for the U.S. Department of Transportation's Transportation Investment Generating Economic Recovery competitive grant program.

September 17, 2015

10:30 - 12:30pm

Type

CIP

Phase

Schematic Phase

Previous Reviews[8/07/14](#)**Presenters****Barbara Lee**
SDOT**Stephen Van Dyck**
LMN Architects**Barbara Swift**
Swift Company**Steve Durrant**
Alta Planning + Design**Attendees****Rodger Benson**
Mortenson Construction**Scott Crawford**
LMN Architects**Jason Huff**
Office of Arts & Culture**Sandy Lau**
S&A Communications**Mark La Venture**
LMN Architects**Emily Mannetti**
SDOT**David McMullen**
KPFF**Grayson Morris**
Swift Company**Anna O'Connell**
Swift Company**Robin Randels**
Cascade Bicycle Club**Wilbert Santos**
Sound Transit**Sally Turner**
KC Transit**Tom Whiteman**
KPFF**Fred Wilhelm**
Sound Transit**Summary of Presentation**

The Northgate Pedestrian Bridge project was presented by Stephen Van Dyck of LMN Architects and Barbara Swift of Swift Company. They briefly described the project boundary, site context, and surrounding projects (see figure 1). The project team then focused on addressing three themes throughout the presentation:

- Bridge Alignment & Access
- Bridge Structure
- Surrounding Environment

Bridge Alignment & Access

The alignment of the pedestrian bridge along the western and eastern approaches has changed since the design team last met with the Commission. The previous alignment along the western edge of the site, near North Seattle College, conflicted with existing grade elevation. After surveying the site, it was recommended extending the ramp further west along N 100 St. in order to meet grade level without changing the current slope of the ramp. Because this would place the bridge's point of access further west than desired, the design team proposed realigning the bridge further south, towards North Seattle College, as shown in figure 2. Mr. Van Dyck stated that the new alignment would not only increase the exposure of the bridge within a highly populated area, but will also increase the safety for pedestrians and cyclists using the

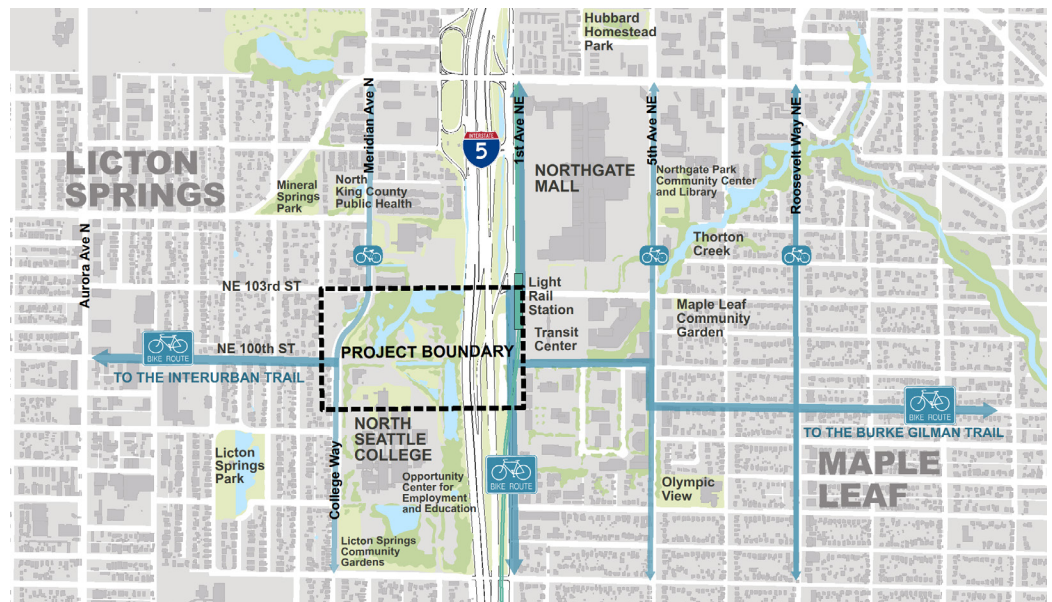


Figure 1. Site context map



Figure 2. Bridge re-alignment

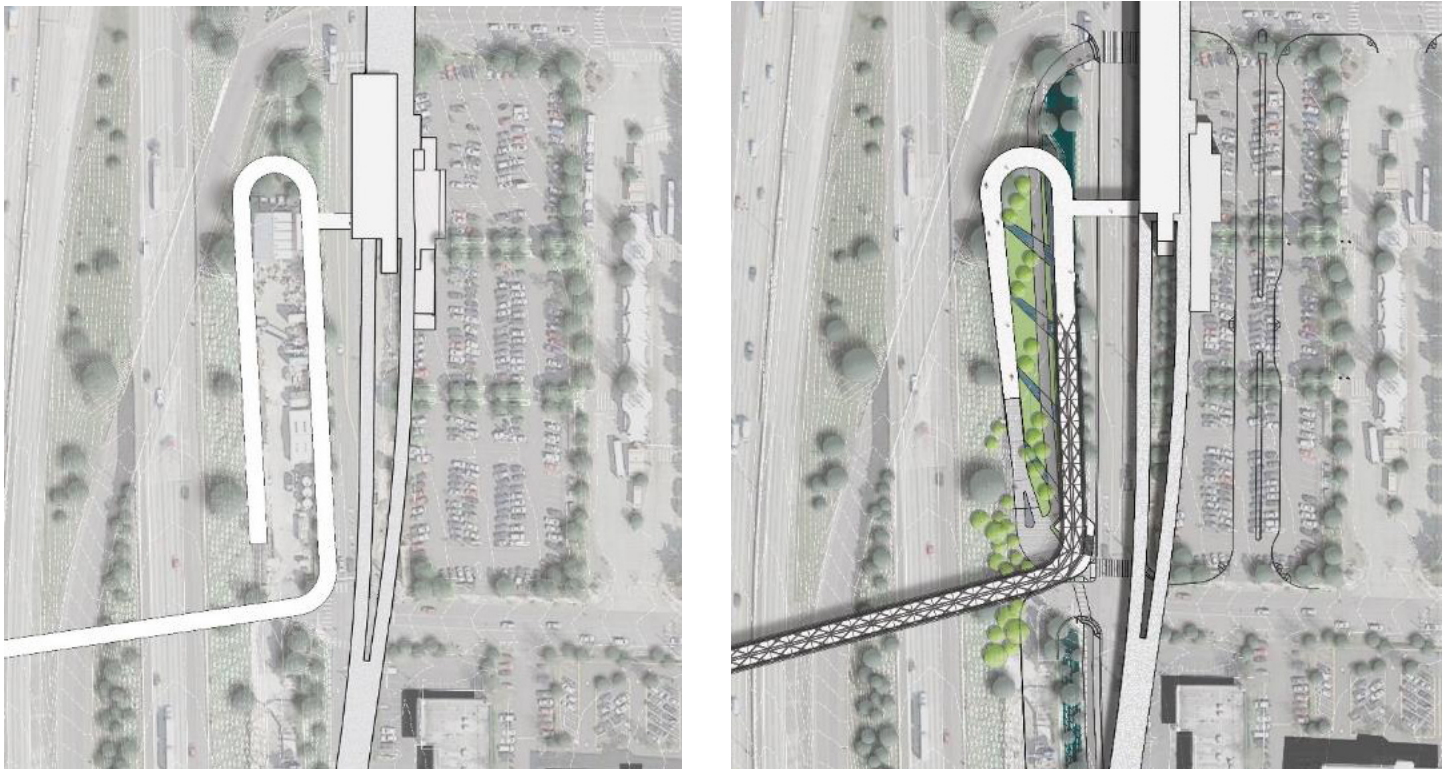


Figure 3. Previous (left) and proposed (right) ramp realignment along eastern approach

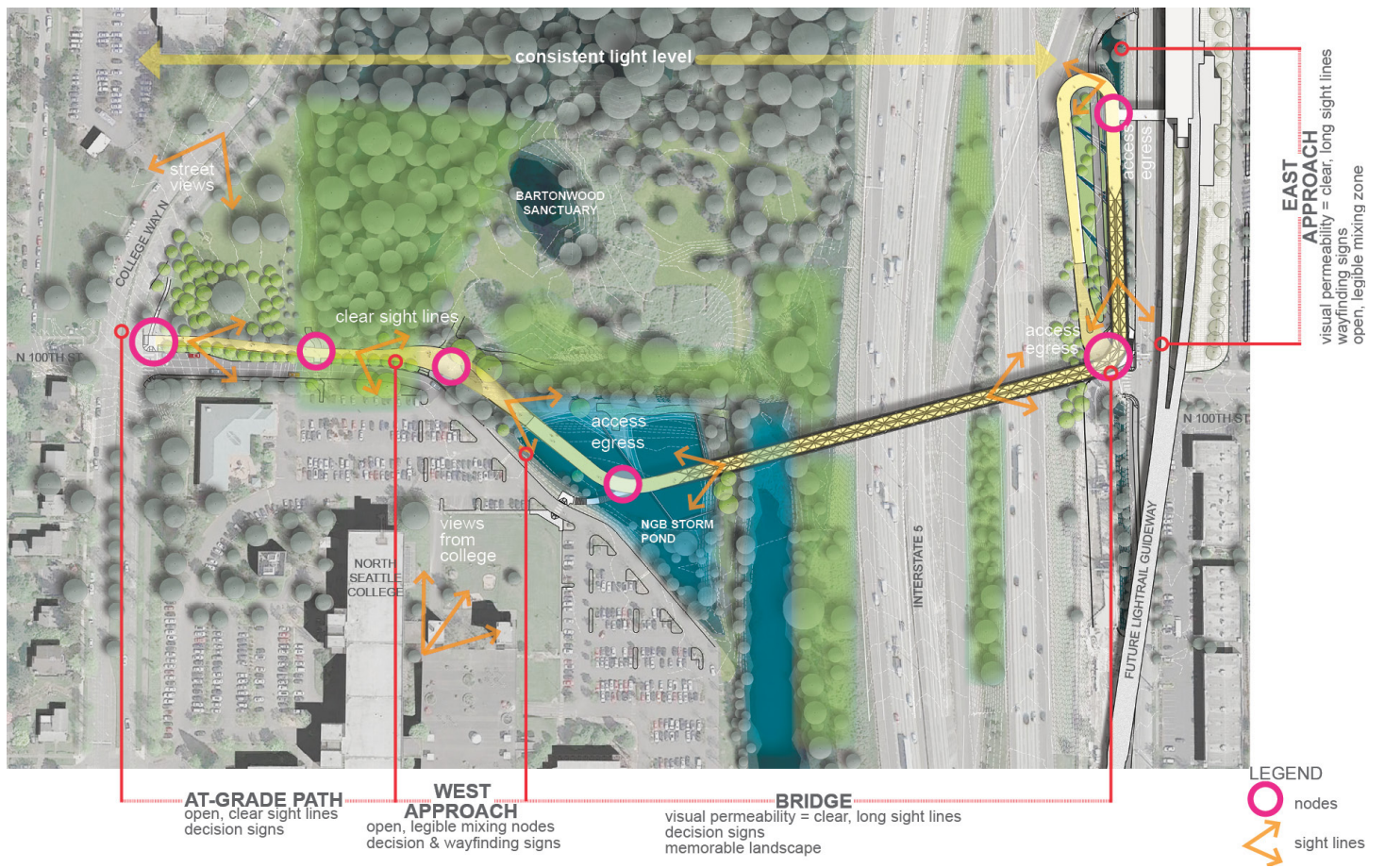


Figure 4. Proposed access points



Figure 5. Proposed bridge structure

bridge to cross I-5. Along with adjusting the bridge alignment, the design team has considered including stairway access onto the bridge, which will provide direct access to North Seattle College.

The previous design also includes a ramp that wraps around a WSDOT park – and – ride lot along the eastern section of the site. At the recommendation of SDOT, the design team has realigned the ramp to cross over a portion of the park – and – ride lot. The realignment along the eastern approach would create a tighter turn for pedestrian and cyclists as well as increasing safety for bridge users(see figure 3). This eastern alignment is dependent on securing a change of use of the P&R lot from the WSDOT.

The bridge design is investigating five possible access points for both pedestrians and cyclists (see figure 4). Access points are located in the following areas: western ramp entrance, North Seattle College staircase, N 100 St. staircase, Northgate Light Rail mezzanine level entrance, and eastern ramp entrance along N 100 St. The design team has referred to these points as “mixing zones”, where pedestrians and cyclist paths will cross while entering and exiting the bridge. One possible solution Mr. Van Dyck mentioned was the use of different paving patterns within mixing zones to alert users of a change in the environment. The team projects 3,600 pedestrians and cyclist will use the bridge after construction is complete, which is projected to increase to 7,000 once the Lynnwood light rail station is complete and transit service is in operation.

Bridge Structure

The bridge will be constructed using a combination of concrete girders, a transitional truss system, and structural tube, as shown in figure 5. On both the western and eastern approach, the bridge will transition from an at grade pathway to concrete girders as the bridge begins to rise in elevation.



Figure 6. Rendering of structural tube

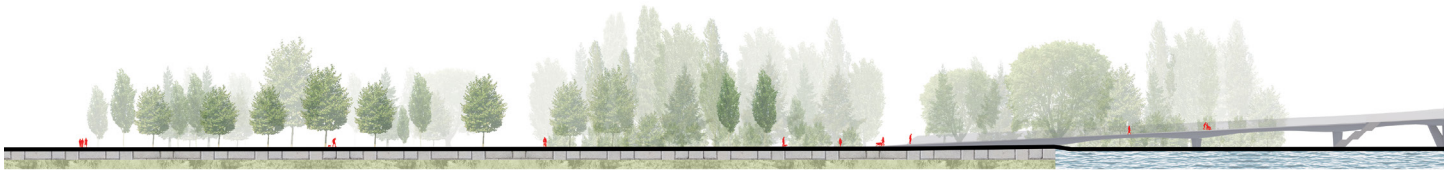
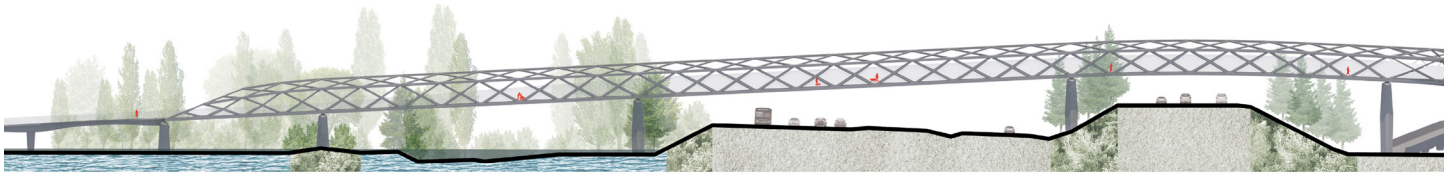
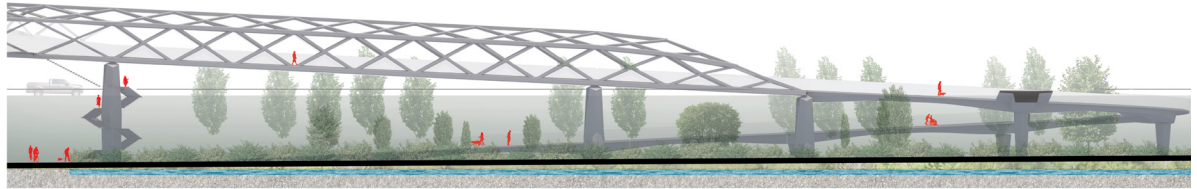


Figure 7. Rendering of cable mesh throw barrier



Figure 8. Proposed lighting plan

Figure 9. section rendering of proposed landscape plan



Each bridge approach will include a zone consisting of rising trusses that will eventually transition into a steel tube and truss system that will span directly over I-5. The tube system spanning I-5 will include a stainless steel cable mesh throw barrier (see figures 6 & 7) that is at minimum 10 feet in height, as required by WSDOT, which will eventually taper into a guardrail as the bridge descends on both sides of I-5. The bridge will include lighting underneath the handrail as well as integrating a gutter for drainage along the base of the path, as shown in figure 8.

Surrounding Environment

Ms. Swift stated that the bridge connects the areas west of I-5 (see figure 9), which are less dense and include large amounts of mature vegetation, ponds, open space, and residential areas, with urbanized uses located to the east of I-5. Ms. Swift stressed the importance of enhancing the environmental characteristics that already exist on site and within the surrounding context, given its location near and through both natural elements and impervious surfaces like parking lots. The design will include a series of vegetated swales along the eastern section of the project site that will collect water run-off from the bridge and surrounding impervious pavement. The western section will include a combination of ponds and grasses to enhance the environmental function of the existing landscape beneath the bridge.

Agency Comments

None

Public Comments

Robin Randels, from Cascade Bicycle Club, expressed interest in making sure bicycles coming down the ramp are separated from pedestrians. Ms. Randels appreciates having stairway connections and would like to have 24 hours access to the light rail station's mezzanine level entrance.

Summary of Discussion

The commission organized its discussion into three major categories – bridge alignment, bridge design, and landscape design.

Bridge Alignment

The commission appreciated the design team's resolution of the bridge alignment. Although the alignment had improved from the previous design, the commission was concerned with equitable access among users. The design team proposed ADA accessible ramps at a 4.8% slope and a bridge spur connecting to the light rail station at the east. Commissioners discussed the merits of providing elevators at each approach to provide the shortest possible

route for those needing ADA access. Under the current proposal, using the ramps for ADA access would result in the farthest route to travel for those who need such access. The commission has encouraged the design team to place more thought into designing a shorter, more accessible route from North Seattle College to the light rail station.

Bridge Design

Overall, the commission was very enthusiastic about the concept design for the bridge. While the Commissioners commended the design team for integration of the various materials and the transition points from tube to uncovered bridge deck, they also expressed concern about how the transition between design elements would occur. Commissioners highlighted the importance of blending the various materials, forms, and elements into a cohesive design to achieve the intended results. Transitions, from bridge deck to the steel superstructure, as well as between bridge segments and individual parts, would be of great importance. The commission encouraged the design team to consider the role of the bridge as a gateway to the Northgate and Maple Leaf neighborhoods as they further designed the eastern terminus.

Landscape Design

The Commission appreciated the team's sensitivity to the existing landscape and surrounding environment. They especially thanked the team for the careful work that had gone into the alignment and design of a transition into the neighborhood at the west end. Commissioners again emphasized the importance of the Park & Ride lot near the Sound Transit station in realizing the design for the east approach. The Commission would need to weigh in on design changes if this were to happen.

Action

The Commissioners thanked the project team for presenting the Northgate Pedestrian Bridge concept design. The commissioners expressed enthusiasm for the urban design focused, integrated design process and resulting exceptional bridge concept. It applauded the efforts to convert the WSDOT owned Park & Ride lot east of I-5 into a more generous terminus for the bridge.

The SDC approves the schematic design for the Northgate Pedestrian Bridge, 7-0, with the following recommendations:

1. Work with North Seattle College to resolve pedestrian and bicycle access from the bridge to the college
2. Resolve whether it is feasible to include an elevator on the western approach next to the proposed staircase
3. Engage with the project artist during the remaining design process
4. Explore creating a neighborhood gateway along the east terminus of the bridge where the staircase and ramp path intersect
5. Gradually transition from the concrete girder to steel tube and truss system in order to create a visually cohesive design
6. Continue exploring the design of the lighting system as it transitions from the railing into the landscape on both the east and west side of bridge.