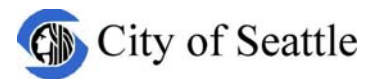




# Cheshiahud

## Lake Union Loop

Master Plan  
May 2009



prepared for:

Seattle Parks and Recreation  
Seattle Department of Transportation  
Seattle Parks Foundation

prepared by:

MacLeod Reckord Landscape Architects

May 2009



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## ACKNOWLEDGEMENTS



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*A connected system of parks and pathways is manifestly far more complete and useful than a series of isolated parks.*

**The Olmsted Brothers, 1903**



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City of Seattle

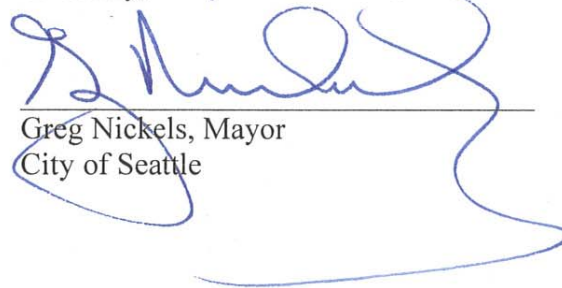
SEATTLE PARKS  
FOUNDATION

Our public spaces are essential to Seattle's overall health and vitality. We love our open spaces, and now we see the importance of *connection* – linking our parks and green spaces to one another, and to the places where we live, work, shop and go to school.

In 2007, Seattle Parks Foundation published "Bands of Green," a report which boldly proposed a system of linear parks, trails and other "green connections" across our city in the spirit of the Olmsted Brothers' 1903 Plan for Seattle's Park System. The Cheshiahud Lake Union Loop, one such proposal, is about connection. The Loop is a six-mile landscaped multi-use path around Lake Union that will complete a key piece of the Olmsted Brothers' Plan. It will create safe and attractive access to the lake – connecting Gas Works and Lake Union Parks, linking more than 35 pocket parks, street ends and waterways that ring the lake, and improving access from adjacent neighborhoods, downtown and the University of Washington. By connecting existing parks and improving access for all, the Loop will create a continuous network of open spaces for a range of activities – walking and cycling, launching small boats, family picnics and quiet contemplation.

In many ways, Lake Union is a lens through which we can see and understand Seattle's history – from the native communities that called it home, to its days as a bustling manufacturing and ship-building hub, to its emergence today as a center for new technologies and our maritime economy. Here in Seattle, we have a commitment to protect and expand access to parks, to natural areas and to our collective history. The Cheshiahud Lake Union Loop builds on this commitment, linking our past to our present and providing a unique setting to explore the beauty and history of Lake Union. Please join us in making this vision a reality.

Sincerely,



Greg Nickels, Mayor  
City of Seattle

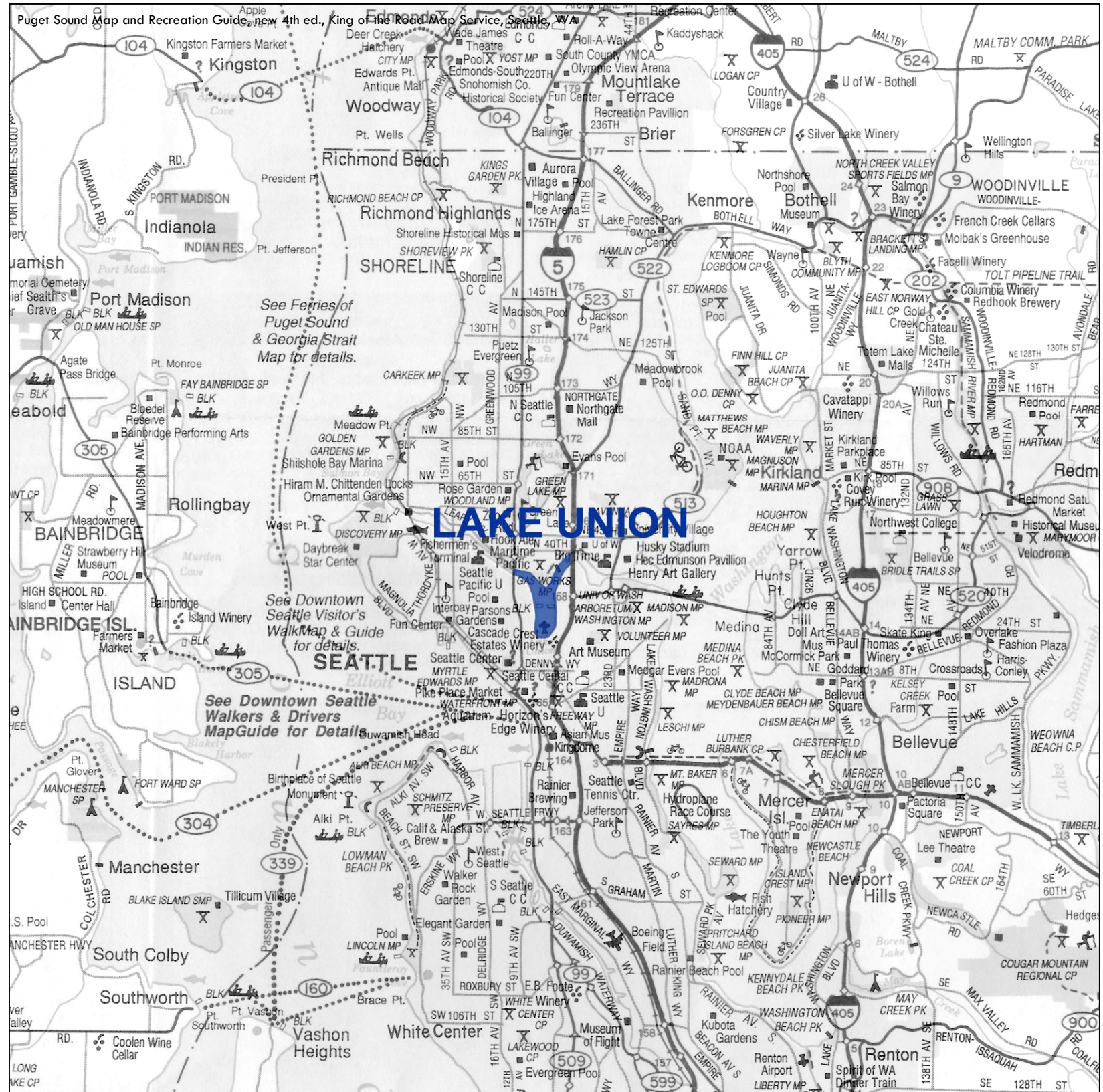


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**LAKE UNION, CITY OF SEATTLE**





## PREFACE

Much has been learned over the years of the value, to communities of all sizes, of communal open space and connections. Parks and green space have long been appreciated, but more recently there has been a growing awareness of the importance of connection—the ability to reasonably and comfortably access your neighbors, the places you live, work, shop, go to school and recreate, and the remaining natural places in our urban environments. The citizens of Seattle have expressed, in a variety of ways and forums, a clear and strong interest in protecting and expanding those connections and open spaces throughout the city.

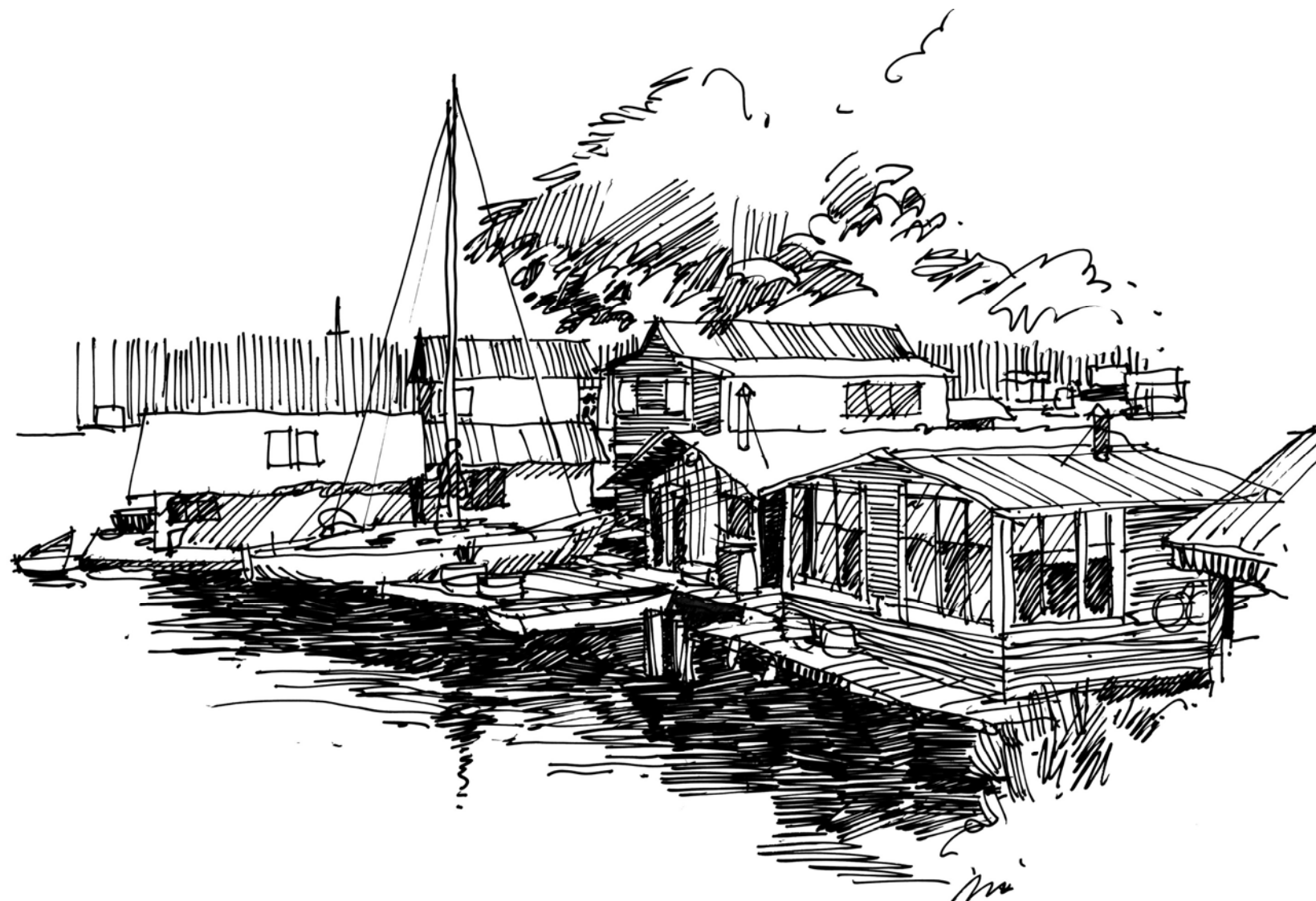
Lake Union, and the surrounding neighborhoods, have been the subject of considerable planning and community effort for many years. A pathway around the lake was first suggested as part of the Olmsted Brothers plan of 1903, and that suggestion was expanded in a 1990 study entitled *Bands of Green*. That study was in turn the basis for a refinement/update in 2007 undertaken by the Seattle Parks Foundation which focused additional attention on a path around Lake Union.

Neighborhood and community planning over the years, as well as recent city-wide efforts (*Seattle Bicycle Master Plan*, etc.) have all expressed the desirability of creating and enhancing such a pathway.

This plan, the Cheshiahud Lake Union Loop Master Plan, is intended to build upon those previous efforts, and to look more specifically at routing and design issues in order to set the stage for future corridor improvements.

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# 1. Introduction

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## INTRODUCTION

While the loop already exists to a greater or lesser degree in the form of public rights-of-way around the lake, the Cheshiahud Lake Union Loop Master Plan is intended to advance earlier thinking and previous related planning efforts regarding a loop around Lake Union, and will be the basis for corridor improvement development over the next several years.

### Genesis

A pathway around Lake Union was first suggested as part of the Olmsted Brothers Plan of 1903, and that suggestion was advanced again in a 1990 study entitled *Bands of Green*. Interest has been growing for several years in providing such a loop, and the Seattle Parks Foundation took another major step in 2007 by updating the earlier *Bands of Green* study and again focusing attention on Lake Union.

### Scope

The planning process is designed to review earlier and related planning efforts, establish a more pro-active and comprehensive public/stakeholder/outreach process, and to evaluate the physical corridor and to make planning level recommendations for improvements.

### Guiding Principles

The project team, in conjunction with an advisory committee (see page 30), established a set of guiding principles intended to guide both the planning process and the master plan itself. In designing the Cheshiahud Lake Union Loop, the team's intent was to:

1. **Create a safe corridor that accommodates a variety of uses and provides a high quality experience.**
2. **Be a good neighbor to all of the diverse users (and communities) around the lake.**
3. **Create an identity for the loop that reflects the cultural and natural history of Lake Union and reflects the unique qualities of each adjoining neighborhood and community.**
4. **Make physical connections that link neighborhoods, local resources and the lakefront.**
5. **Create opportunities for the larger community to engage in both the planning and long term stewardship of the loop.**



## Process

The planning process, managed by the Seattle Department of Parks and Recreation in conjunction with the city's Department of Transportation (SDOT) and the Seattle Parks Foundation, took place over a nine-month time frame and was a sequential, rational process that included the following steps:

### Initiation/Data Collection

Establishment of an advisory committee, review of previous plans and documentation, and development of the public/stakeholder outreach process.

### Design Standards

Development, based upon existing applicable standards, the guiding principles and the physical corridor, of a set of suggested loop design standards.

### Alternative Concepts

Recommendations, evaluation, and review of a series of alternatives for both routing and design within the loop corridor.

### Draft Master Plan

Draft documentation of the process and the plan recommendations.

### Final Master Plan

The final Cheshiahud Lake Union Loop Master Plan document, representing the final compilation of the process and planning recommendations. This document is then intended to be the basis, and guide, for loop implementation.

This document includes information gathered in the review, analysis, planning and outreach processes, and makes specific recommendations for the majority of the corridor as well as recommendations for further study of a few specific areas.

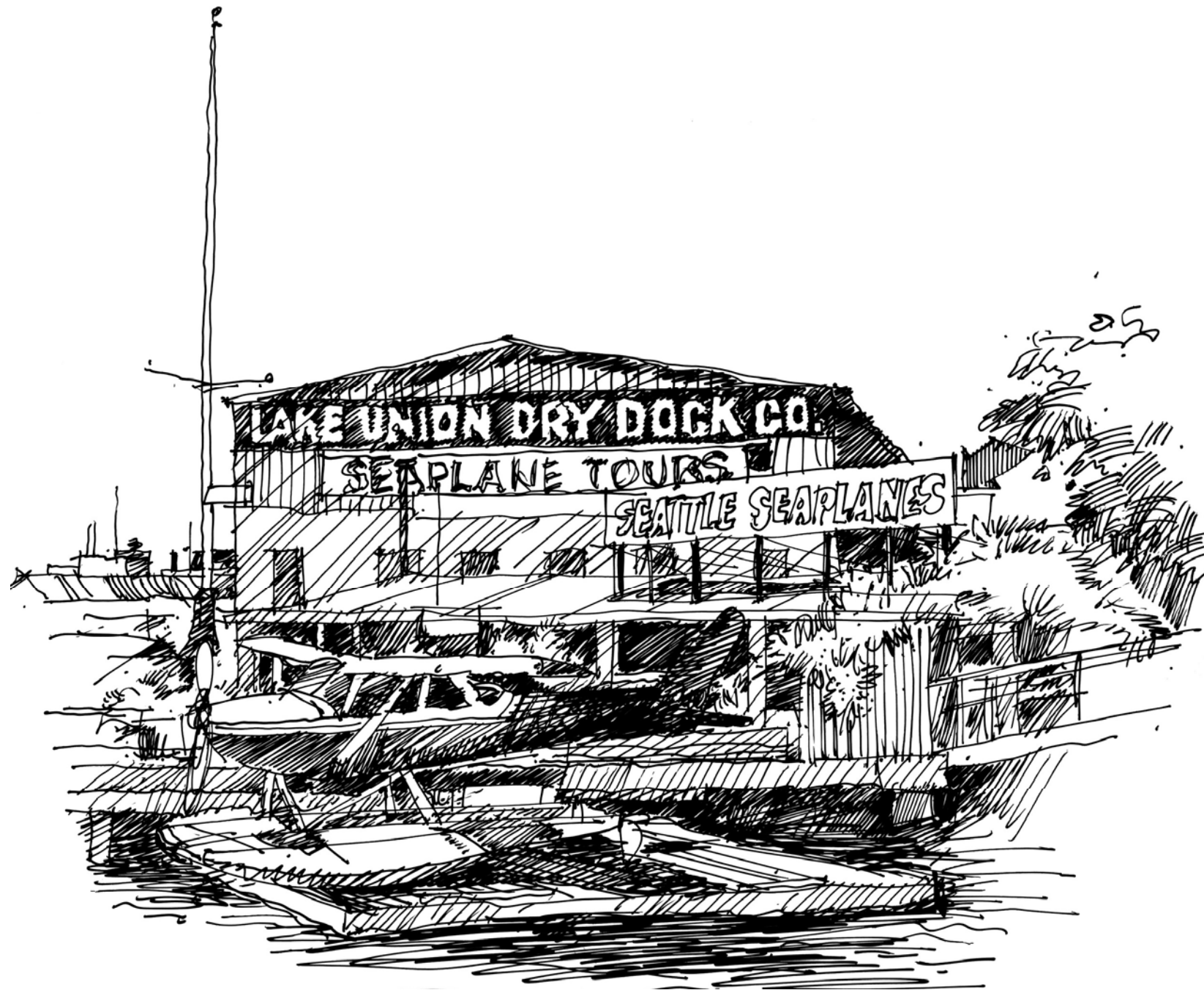
## How to Use this Plan

The public process helped to identify those areas of the corridor that are most important and those areas that need improvement to become safe and continuous. Based on public input and the assessment of the existing conditions, the city identified a series of projects to make further improvements around the lake. Parks and SDOT have \$1.6 million in their 2009/2010 Capital Improvement Projects



(CIP) budget to make improvements. At the end of this plan there is a list of prioritized projects. Beyond 2010, the city will continue to make improvements as funds become available and/or in conjunction with other CIP projects.





## 2. Background

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## LAKE UNION HISTORY

### Natural History

Carved by the retreat of the Vashon glacier about 12,000 to 14,000 years ago, “tenas chuck” or Little Water, as it was called in Chinook trade jargon, sat next to Lake Xacuabš” (Lushootseed for *great-amount-of-water*), now known as Lake Washington, and drained into Salmon Bay via a small creek. The creek’s tidal influence extended up to where the Fremont Bridge is now located. Fed by streams such as Arboretum Creek, the lake was ringed with wetlands and marshes and surrounded by forested hill-sides. The lacustrine system of lakes and streams supported a rich array of wildlife—spawning salmon and other fish, birds, waterfowl, muskrat, otter, beaver, deer, even bear and cougar.

### Cultural History

The Duwamish people lived in villages and longhouses along the lake’s southern and southwestern shores fishing and capturing waterfowl with nets. They navigated Lake Union and the resource rich Union Bay Marsh in their large Salish-style canoes, carved from single western red cedar logs. Lake Washington was accessed via a portage. With portageable canoes, the Duwamish were able to access many areas that were inaccessible to larger European-American vessels.



Duwamish Indians John (“Lake John”) and Madeline Cheshiahud were often called “the last Lake Union Indians.” Here, in 1904, they posed before their house on Portage Bay.

The chief of the Duwamish village on Lake Union was Cheshiahud, also known as Lake John, and he served as a travel guide for early white settlers around Lake Union. The Denny party claimed Lake Union in 1853,

and the Duwamish villages persisted along the lake for another 25 or so years. As late as 1909, Cheshiahud lived in a house at the foot of Shelby Street given to him by David Denny.



Lake John Cheshiahud and others in a canoe on Lake Union, c. 1885. Photo and description, Wikipedia, accessed 12-23-08.

The Duwamish people managed the landscape and shore-lines of Lake Union for their own benefit, using “every tool available to them, to shape their world—stone, fire, wood, weir, corral—within the respect for that world taught by their beliefs.”<sup>1</sup> On an entirely different scale, another of Seattle’s early pioneers, Thomas Mercer, envisioned a “tenas chuck” that connected to both Puget Sound and Lake Washington, and proposed a new name: Lake Union.

Early development around the lake included a streetcar line from downtown to the Ballard area along Westlake, and a railroad from South Lake Union to Pike Street. The railroad was built to carry coal mined in Newcastle, at the southeastern end of Lake Washington, to Seattle. The lake was incorporated into the City of Seattle in 1891.

Even without complete navigability, Lake Union was well on its way to become one of the greatest wooden boat-building centers in the world. In 1903 when the Olmsted Brothers were hired by the city to develop a park plan, John Charles Olmsted saw Lake Union as an industrial and commercial hub, and proposed parks at four locations around the lake: on the north, south, east, and west shores.

In 1916, Mercer’s vision came to fruition. The Lake Washington Ship Canal was completed with a cut through the natural dam between Lake Washington and Lake Union at Montlake. Lake Washington was lowered nine feet to meet

<sup>1</sup> Lorraine McConaghy, *Interpreting Lake Union: A Thematic Approach* (Seattle, Museum of History and Industry: 2007), 3.



Aerial of Lake Union, 1932. [www.lakeunionmail.com/history.html](http://www.lakeunionmail.com/history.html), accessed 1-14-08.

the level of Lake Union, and later the water level in Salmon Bay was raised to meet Lake Union with the completion of the locks in Ballard in 1917.

The opening of the locks boosted the establishment of light manufacturing along the lake's shores. Several notable developments occurred around this time. The Boeing Company was established in the Eastlake area, and made its first test flight in 1916, and the first international mail flight originated from Lake Union in 1919. The Lake Union Steam Plant was completed in 1917. The Gas Works at the north end of the lake began operation in 1906, supplied by the railroad line along Lake Washington and north Lake Union (now the Burke Gilman Trail). In addition to the boatbuilding industry, canneries, mills, a coal wharf, commercial laundries, building-materials suppliers, and automobile dealerships were also established. To support the new industry, the Cascade neighborhood, lying to the south of Lake Union, filled with immigrants from Scandinavia, Greece, Russia, and the Balkans, who lived on small farms, houseboats, and modest homes. Other neighborhoods were aptly named Westlake, Eastlake, Northlake, and were populated with single-family homes. The activity of industry attracted settlers to the lakes' shores, making Lake Union at hub of activity in the growing city.

In the late 1920s, nearby Denny Hill was sluiced using water drawn from Lake Union. The low hills that had separated Lake Union from the areas south were smoothed out and the excess soil from Denny Hill was used to fill in wet-

lands along the southern shore of the lake. The construction of Interstate 5 just to the east of the lake in the 1960s further reshaped the lake's surroundings. Many homes in the Cascade neighborhood were demolished, and the increase in traffic volumes along Mercer Street created a boundary between South Lake Union and downtown.

Today, Lake Union retains its industrial function and flavor, and while many of the historic industrial buildings have been converted for other uses, the waterfront remains a place of work, which adds vitality and interest. The following sections address the existing character and function of the individual neighborhoods.



## PREVIOUS PLANNING



A survey of previous planning efforts was conducted, looking at regional/city-wide plans, neighborhood plans and studies, and guidelines and standards pertaining to rights-of-way and the development of pedestrian and bicycle facilities.

The following plans were consulted:

### City-wide Plans

- *Bands of Green: A Plan for the continuing development of trail, boulevards and linear parks in Seattle*. 2007 (update to 1990 plan)
- *Seattle Bicycle Master Plan*, 2007

### Neighborhood Plans and Studies

- *Eastlake Neighborhood Plan*, 2004
- *Fairview at Galer intersection conceptual plan*, 2005
- *Fairview Avenue East Green Street Design Concept, Hamlin to Fuhrman*, 2001
- *Fairview Avenue East Green Street Design Concept, Newton to Roanoke Segment*, 2005
- *Fairview Avenue Green Street (through Wards Cove Development)*, 2005
- *Lake Union Neighborhood Plan*
- *Lake Union Park Plan*, 2005
- *Peace Park renovation project*, 2008
- *South Lake Union Transportation Study*, 2004
- *South Wallingford Amendment, South Wallingford Plan*, 2002

- *South Wallingford Corridor Study*, 2005
- *Terry Avenue North Street Design Guidelines*
- *Westlake sidewalk plan (Bridging the Gap Project, Group 1 of 2)*, 2008

As described in the preface, the development of this project is supported at the city-wide level through the *Bands of Green* report, which envisions a connected path around Lake Union.

Many smaller-scale planning documents, corridor studies, and neighborhood-scale design proposals for areas in and around the loop were consulted and evaluated as well. In particular, the *Bicycle Master Plan*, and the *Fairview Green Street Plan* had direct relevance to the master plan.

In addition, several guidelines and standards were consulted; these are addressed in the design standards section.

## CURRENT FUNCTIONS AND STREET CONDITIONS

A physical inventory of the loop corridor was conducted to determine the characteristics of existing public rights-of-way and existing non-motorized network. In addition, there was an effort to assess neighborhood character, amenities, destinations and connections, such as parks and neighborhood commercial areas to provide context and inform the identity of the loop. The inventory is described below and depicted on the accompanying maps.

### Streets Around the Loop and Designated Street Types

The city's Right-of-Way Improvement Manual (ROWIM) designates street types and indicates design criteria specific to each type to ensure access and mobility for all users of the street—vehicles, pedestrians, bicyclists, freight, etc. These designations are important to the master plan's use of existing public rights-of-way to provide pedestrian and bicycle access around the lake. The master plan works within the parameters of the ROWIM to balance the goals of the loop along with the other functions each of these streets provide. The streets around the loop fall into 4 categories, as follows:

#### *Regional connector:*

Westlake Avenue North  
Valley Street  
Fairview Avenue North  
Eastlake Avenue East  
North Pacific Street

#### *Commercial Connector:*

North Northlake Way

#### *Industrial Access:*

North Northlake Way  
North Pacific Street  
Fairview Avenue North

#### *Neighborhood Green Street:*

Fairview Avenue East

The Street Type Matrix on page 29, following the inventory map, describes the design elements and criteria for each street type.



### Neighborhoods

South Lake Union/Cascade  
Eastlake  
University District  
Wallingford/South Wallingford  
Fremont  
East Queen Anne  
Westlake

### Neighborhood Character

The **South Lake Union** neighborhood has shifted from being primarily residential to higher-rise commercial and mixed use. In addition the location of many significant biomedical research organizations—Fred Hutchinson Cancer Research Center, Seattle Biomedical Research Institute, Zyogenetics (occupying the former steam plant), Group Health Cooperation Administrative Center, and Children's Hospital and Regional Medical Center—have located to the south end of the lake. The recent construction of Lake Union Park, featuring The Center for Wooden Boats and the planned relocation of the Museum of History and Industry to the Naval Reserve Building, represent an evolution of the idea of the Seattle Commons, envisioned over 15 years ago as a large civic park surrounded by mixed use

development anchored around the biotechnology industry. The Center for Wooden Boats has been along the lake since 1981, and has helped connect people to the lake for recreational purposes.

A ribbon of industrial/commercial activity wraps around the shoreline of the remainder of the lake, backed by residential neighborhoods on the uplands.

**Westlake** remains industrial and commercial, with a collection of marine-oriented businesses, some retail, boat moorage, and a floating home community. The communities to the west, along Dexter and in Queen Anne, are physically separated from Lake Union by Westlake Avenue and steep slopes.

Like Westlake, **Northlake** is more industrial and commercial, and it is separated from the South Wallingford neighborhood by the raised railroad embankment on which the Burke Gilman Trail sits, and by North Pacific Street.

**Fremont's** retail/commercial area, Fremont Avenue, extends from the lakeshore north, and the residential area of the neighborhood, a mix of single and multi-family, fans out from this central spine along the lake to the east and west.

**Eastlake** is more residential, though with a sizable cluster of businesses, mostly at the south end of Fairview Avenue East: Lake Union Dry Dock, National Oceanic and Atmospheric Administration (NOAA), The Gates Foundation, and some biotechnology companies. Eastlake's residential character is more varied and eclectic, with a large community of floating homes along the lake's edge, and a mix of single family and multi-family residential to the east, peppered with neighborhood-scale businesses.

### **Existing Non-motorized/ Bicycle Facilities**

#### *Pedestrian pathways*

- Westlake Walkway and Fairview Walkway: along the northwest, south, and southeastern shores of the lake from Fremont Bridge to the end of Fairview Avenue North at the Fairview Bridge (near East Galer Street)

#### *Separated trail*

- Burke Gilman Trail: Fremont Bridge to University Bridge

#### *Bike lanes*

- University Bridge
- North 34th Street
- Dexter Avenue North (facility parallel to loop)

#### *Signed bike routes*

- Fairview Avenue East
- Dexter Avenue North (facility is parallel to loop)
- Westlake Avenue from Lake Union Park
- North Northlake Way, Stone Way to Fremont Bridge
- Fremont Bridge

#### *On-street routes commonly used by bikes*

- Fairview Avenue East
- Eastlake Avenue East (facility is parallel to the loop)

### **Shoreline Street Ends, Parks, and Waterways, including schools and playgrounds**

The location of these resources is shown in the accompanying maps. These recreation and open spaces are addressed more fully in the other elements section.

### **Neighborhood Connections**

#### *South Lake Union/Cascade Neighborhood:*

- To downtown via Terry Avenue North, Westlake Avenue North, Broad Street

#### *Eastlake:*

- To Colonnade Park and west Capitol Hill via East Blaine Street
- To Eastlake Avenue East commercial node via East Lynn Street
- To Rogers Playground and TOPS K-8 School (Seward School building) via East Roanoke Street
- To north Capitol Hill via Fuhrman Avenue East

#### *University District:*

- To University via NE 40th Street and Campus Parkway

#### *Wallingford/South Wallingford:*

- To John Stanford International Elementary School via Latona Avenue NE

- To 45th Street commercial node via Wallingford Avenue North
- To Greenlake via Stone Way North

*Fremont:*

- To Fremont Avenue commercial node via Fremont Avenue
- To Ship Canal Trail via North 34th Street and under north end of Fremont Bridge

*Westlake:*

- To Ship Canal Trail under south end of Fremont Bridge.

**Point of Interest**

The following sites are noted on the 2"x3" folded Cheshia-hud Lake Union Map (2008):

1. Fremont Rocket
2. Lenin Statue
3. "Waiting for the Interurban" public art piece
4. History House
5. Fremont Troll
6. Gas Works Park
7. Waterway 18
8. Waterway 15
9. Peace Park
10. "The Wall of Death" public art piece
11. Eastlake P-Patch
12. Eastlake Bouledrome
13. Lynn Street Mini Park
14. "Shear Draft" public art piece
15. Puget Sound Maritime Historical Society Museum
16. The Center for Wooden Boats
17. Lake Union Park
18. Crockett Street End
19. Garden with a Secret
20. Waterway 1

**Land Use and Zoning**

Today very little of Lake Union is zoned industrial (refer to zoning and land use map on page 28); only the north part of the lake and some smaller pockets around the lake remain in that designation. The primary land use and zoning around the lake is multi-family, along with pockets of residential/commercial along Westlake and Fairview Avenues North.

**Planning Issues**

The following plans and projects may influence traffic patterns, land use or other development issues around the loop.

*South Lake Union Transportation Plan*

- Transit enhancements, some non-motorized improvements
- Changes to Valley Street

*Mercer Corridor Project*

- Changes to Valley Street
- Opportunities for enhanced bike/pedestrian facilities along Valley Street, Fairview and Terry Avenues North
- Changes to traffic patterns on nearby streets
- Under-grounding of City Light transmission line along Fairview Avenue North

*Streetcar extension*

- Proposed extension along Eastlake Avenue East could affect overall traffic patterns, existing bicycle use along the corridor

*Bicycle Master Plan*

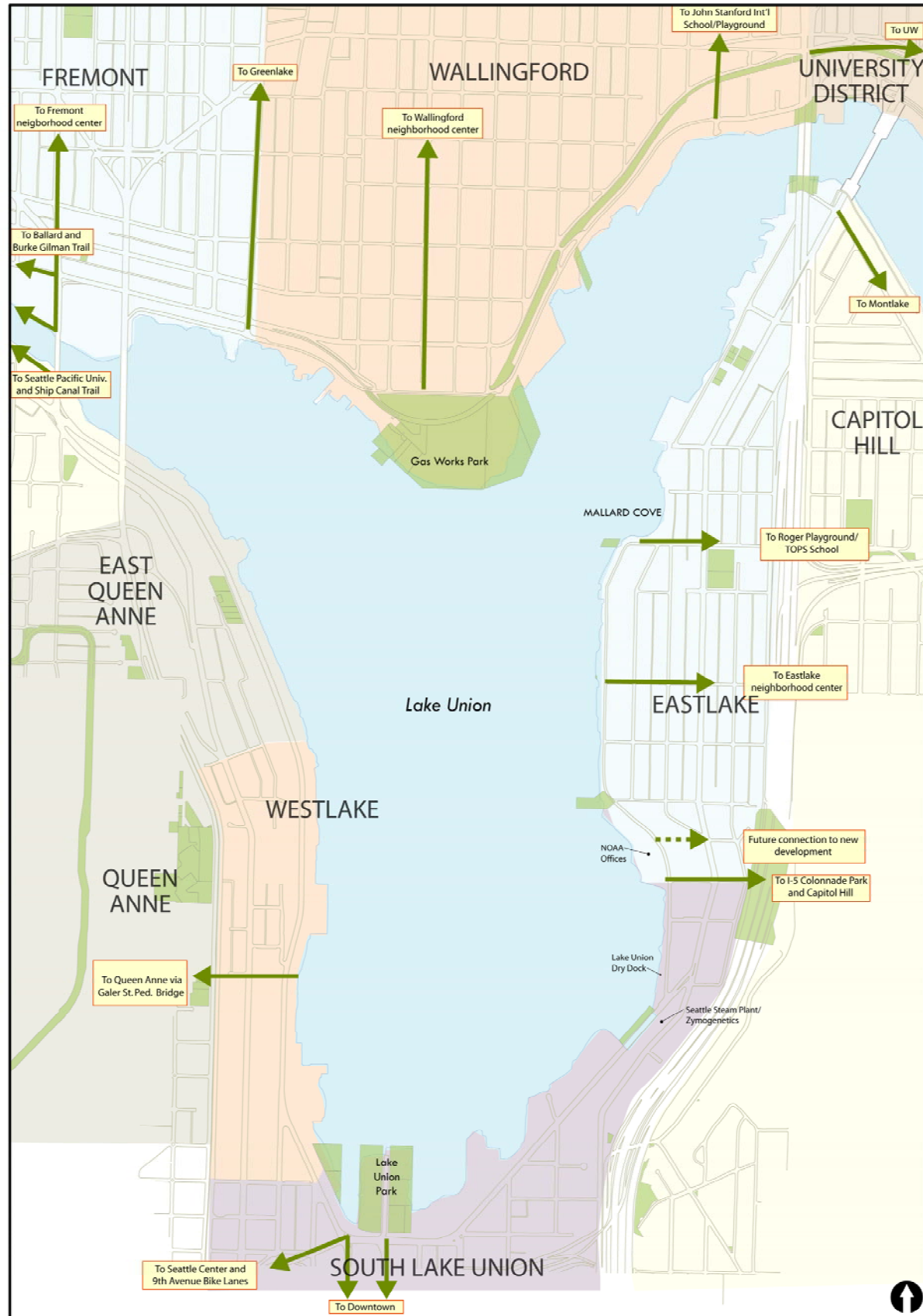
- Incremental enhancement of bicycle facilities on Eastlake Avenue East
- Bike lanes on North 34th Street/North Northlake Place between Fremont Avenue and Stone Way North
- Redesign of north end of University Bridge to resolve turning conflicts

*Pedestrian Master Plan*

*Street End Master Plan*

These plans are under development as of the completion of this master plan but will undoubtedly address issues all along the corridor.





# Cheshiahud Lake Union Loop

Master Plan  
May 2009

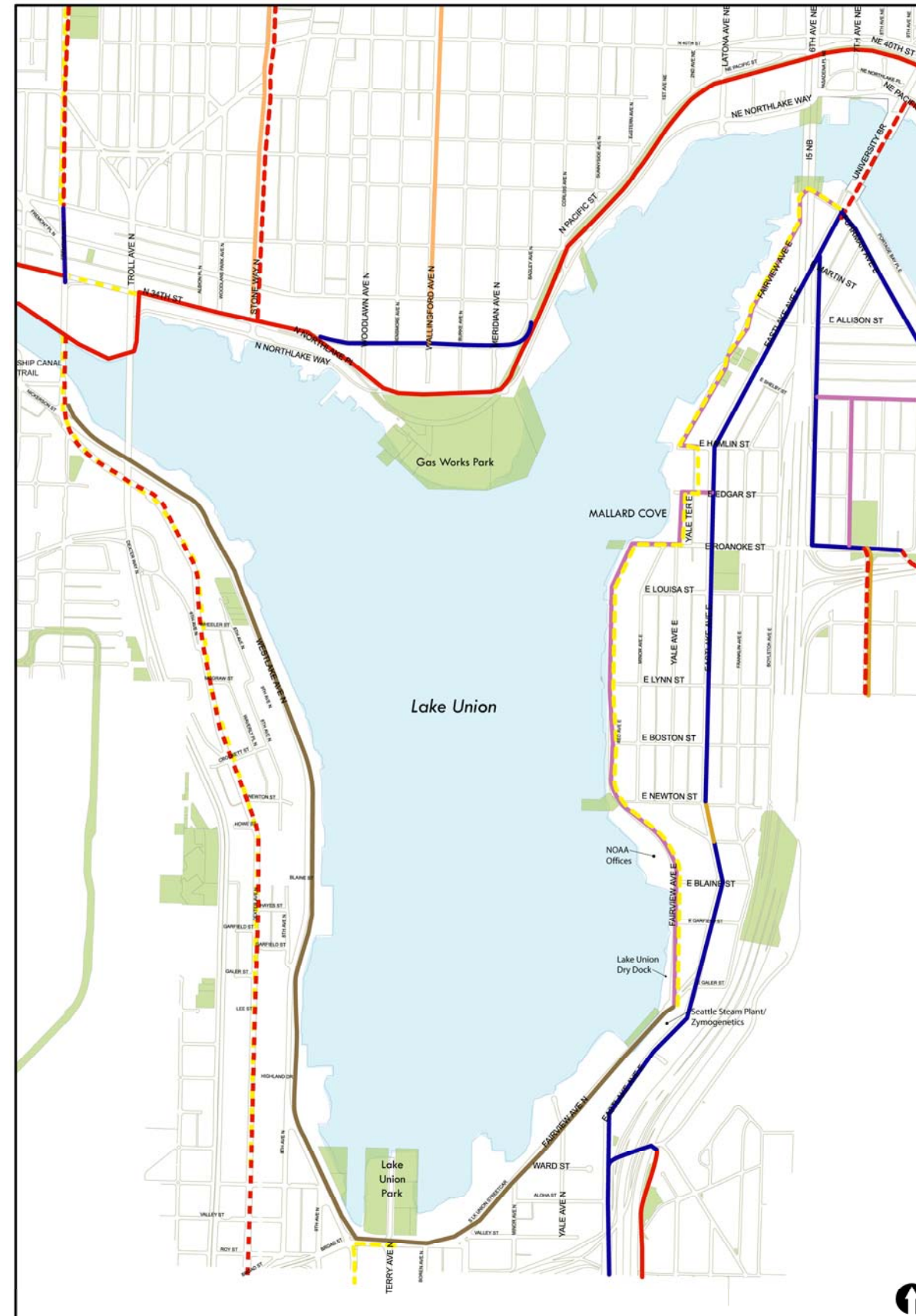
## INVENTORY: NEIGHBORHOODS AND CONNECTIONS



# Cheshiahud Lake Union Loop

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May 2009

## INVENTORY: EXISTING BICYCLE ROUTES



**LEGEND**

- Shared use trail
- Bicycle Lanes
- Sharrows
- Sharrows & Climbing lane
- Pedestrian pathway
- Signed bike route
- Arterial street commonly used by bicyclists
- Non-arterial street commonly used by bicyclists





# Cheshiahud Lake Union Loop

Master Plan  
May 2009

## INVENTORY: PARKS, STREET ENDS AND WATERWAYS

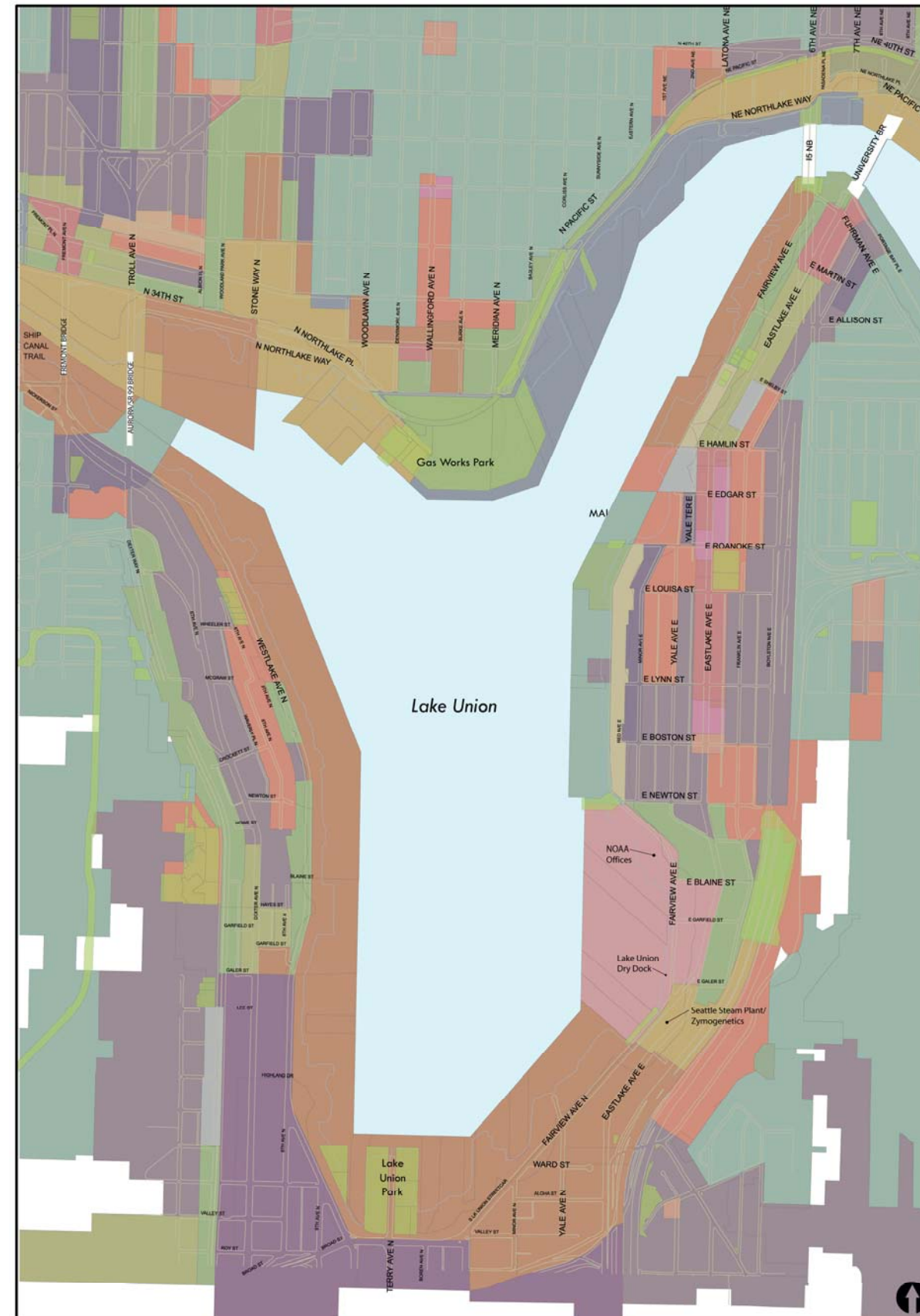
- LEGEND**
- Street End
  - ★ Waterway
  - ★✕ Hand-carried Boat Launch
  - ★M Motorized Boat Launch



# Cheshiahud Lake Union Loop

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May 2009

## INVENTORY: ZONING



**LEGEND**

	C1:	Commercial 1
	C2:	Commercial 2
	IB:	Industrial Buffer
	IC:	Industrial Commercial
	IG1:	General Industrial 1
	IG2:	General Industrial 2
	L1:	Residential, Multifamily, Lowrise 1
	L1/RC:	Residential, Multifamily, Lowrise 1, Residential-Commercial
	L2:	Residential, Multifamily, Lowrise 2
	L2/RC:	Residential, Multifamily, Lowrise 2, Residential-Commercial
	L3:	Residential, Multifamily, Lowrise 3
	L3/RC:	Residential, Multifamily, Lowrise 3, Residential-Commercial
	LDT:	Duplex/Triplex
	MI/O:	Major Institution Overlay
	MR:	Residential, Multifamily, Midrise
	MR/RC:	Residential, Multifamily, Midrise, Residential-Commercial
	NC1:	Neighborhood Commercial 1
	NC2:	Neighborhood Commercial 2
	NC3:	Neighborhood Commercial 3
	SF 5000:	Residential, Single-family 5,000
	SF 9600:	Residential, Single-family 9,600
	SM:	Seattle Mixed



**Cheshiahud Lake Union Loop**

**STREET TYPE MATRIX**

(adapted from ROWIM)

	<b>REGIONAL CONNECTOR</b>	<b>COMMERCIAL CONNECTOR</b>	<b>INDUSTRIAL ACCESS</b>	<b>NEIGHBORHOOD GREEN STREET</b>
<b>STREET TYPE and DESIGN ELEMENT</b>	Westlake Avenue North, Valley Street, Fairview Avenue North, Eastlake Avenue East, North Pacific Street	North Northlake Way (segment)	North Northlake Way, North Pacific Street (segments), Fairview Avenue North (segment)	Fairview Avenue North
Curb bulbs	May be appropriate	May be appropriate		Street may or may not have curbs
Bus bulbs		Appropriate in some locations		N/A
On-street parking		Appropriate, usually restricted by time or zone	Load zones for truck deliveries	May be appropriate but should be limited
Bicycle routes	Yes, if no feasible alternative route exists	Bicycle lanes where appropriate	Parallel facility recommended	Bicycles share the road
Truck routes signage	Encouraged	Appropriate	Encouraged	
Medians	Use on streets with >3 lanes	Use on streets with >3 lanes		
Crossing Islands	Use on streets with >3 lanes	Use on streets with >3 lanes		
Sidewalk width	As wide as possible	As wide as possible	Must meet minimums but may be wider	Wide sidewalks or walkways
Driveways	Minimize number of driveway crossing sidewalk	Minimize number of driveway crossing sidewalk		Not encouraged
Street trees and landscaping	Encouraged	Desirable; must compatible with transit operations	Low landscaping and high branching trees encouraged	Wide planting strip, double row of trees, landscaping encouraged
Street furniture	Bus shelters in transit zones. Wayfinding and other elements where right-of-way width allows	Appropriate		Encouraged. Consistent design encouraged
Pedestrian scaled lighting	Prioritize at important locations	Prioritize at important locations		Encouraged
Drainage				Natural drainage encouraged
Decorative elements	May be appropriate	May be appropriate		
Awnings or weather protection	Appropriate where ped. volumes is high	Appropriate where ped. volumes is high		

## PUBLIC OUTREACH AND STAKEHOLDER INPUT

### Summary of Public Outreach

The community involvement process for the master plan served an important role in developing the Cheshiahud Lake Union Loop Master Plan. The comments received at public meetings and by email correspondence are largely reflected in the guiding principles. Many of the concerns and suggestions were incorporated in the final master plan. The public outreach section in the appendix features a graphic that illustrates common themes reiterated by the public and explains how these issues were addressed in the final master plan document, as well as meeting dates, and a matrix of public comments.

### Initial Planning and Stakeholder Identification

The city reached out to surrounding community organizations, neighborhood groups, and businesses to identify key stakeholders for the project. After meeting with these groups, Seattle Parks and Recreation and the Seattle Parks Foundation, in conjunction with the Office of the Mayor, convened an eleven member citizen advisory panel that reflected the broad diversity of interests among stakeholders around Lake Union and in the larger Seattle community.

### Citizen Advisory Group

The advisory group met four times during the master planning process, providing comprehensive feedback on design standards, alternatives and proposed plans for the loop. Members of the group include representatives from the Eastlake Community Council; the Fremont Neighborhood Council; the Wallingford Community Council; the South Lake Union Friends and Neighbors Community Council (SLUFAN); and representatives from the Floating Homes Association; the Mallard Cove Home Owners Association; and a marine business representative. Additionally, the panel includes a representative from both city's Pedestrian and Bicycle Advisory Boards.

### Advisory Group Meetings & Milestones

Meeting #1, 5/07/08 – The committee established the framework for a set of guiding principles to help shape the design standards and outcome of the master plan.

Meeting #2, 6/10/2008 – The project team asked for feedback on design standards and engaged the committee in a discussion of key priorities and challenges.



Meeting #3, 9/04/08 – The design team requested comments from the group on design alternatives for key segments around the loop.

Meeting #4, 12/04/08 – Committee members provided a final round of input on recommended solutions, route alignment and new design elements to be incorporated in the master plan.

### Public Open Houses

In addition to the Advisory Committee meetings, the city held three public open houses to share plans for the loop with the community and to gain public feedback. Public open houses were advertised on the city's website, city maintained-list serves and local neighborhood publications; postcards were mailed to local residents and flyers were posted.

The first open house held June 17, 2008 served to share early information about the proposed master plan. Community members were invited to meet city staff members and the city's consultant team; learn about proposed plans for the loop and share observations with the design team. After gathering initial feedback and ideas, the design team further solidified the route alignment and design elements. A second public open house held September 11, 2008 sought input from the public on eight key segments around the lake and corresponding design alternatives. Comments collected were used to help narrow the design



alternatives and select recommended solutions to be incorporated in the draft master plan. The project team held its third and final open house December 11, 2008 to present design recommendations and gain one last round of feedback before finalizing the master plan.

At each open house, a brief presentation was held to share background information, explain the master planning process and highlight the opportunities to submit comments. Stations with display boards featured design elements and details on a proposed wayfinding system. Project team members were available for discussion and attendees were encouraged to speak directly with staff regarding specific issues and concerns. Citizens were also invited to submit comment forms, email messages, or note their preference directly on the boards.

#### **Presentations**

To supplement the public involvement efforts, the design team held three presentations before the Seattle Design Commission and three before the Park Board of Commissioners. Both groups were supportive of the master plan and offered further guidance for continued refinement of the plan.

#### **Summary of Public Comment**

Overall, public comments have been positive and have largely mirrored the project's guiding principles. However, some concerns were raised over the timing of the signage installation, the over-water (cable ferry) option at Mallard Cove and the route alignment between East Hamlin and

Louisa Streets. Seven key themes have emerged from public comments. These include concerns or comments about:

- Respecting and maintaining neighborhood character
- Improving safety and mobility
- Balancing public and private access
- Ensuring that final design elements promote direct access and connectivity with existing routes and resources surrounding the neighborhood
- Minimizing parking space losses in the final master plan.

#### **Number of Comments:**

112 people attended Open House #1, 6/17/08

29 comment forms were received.

71 people attended Open House #2, 9/11/08

7 comment forms were received.

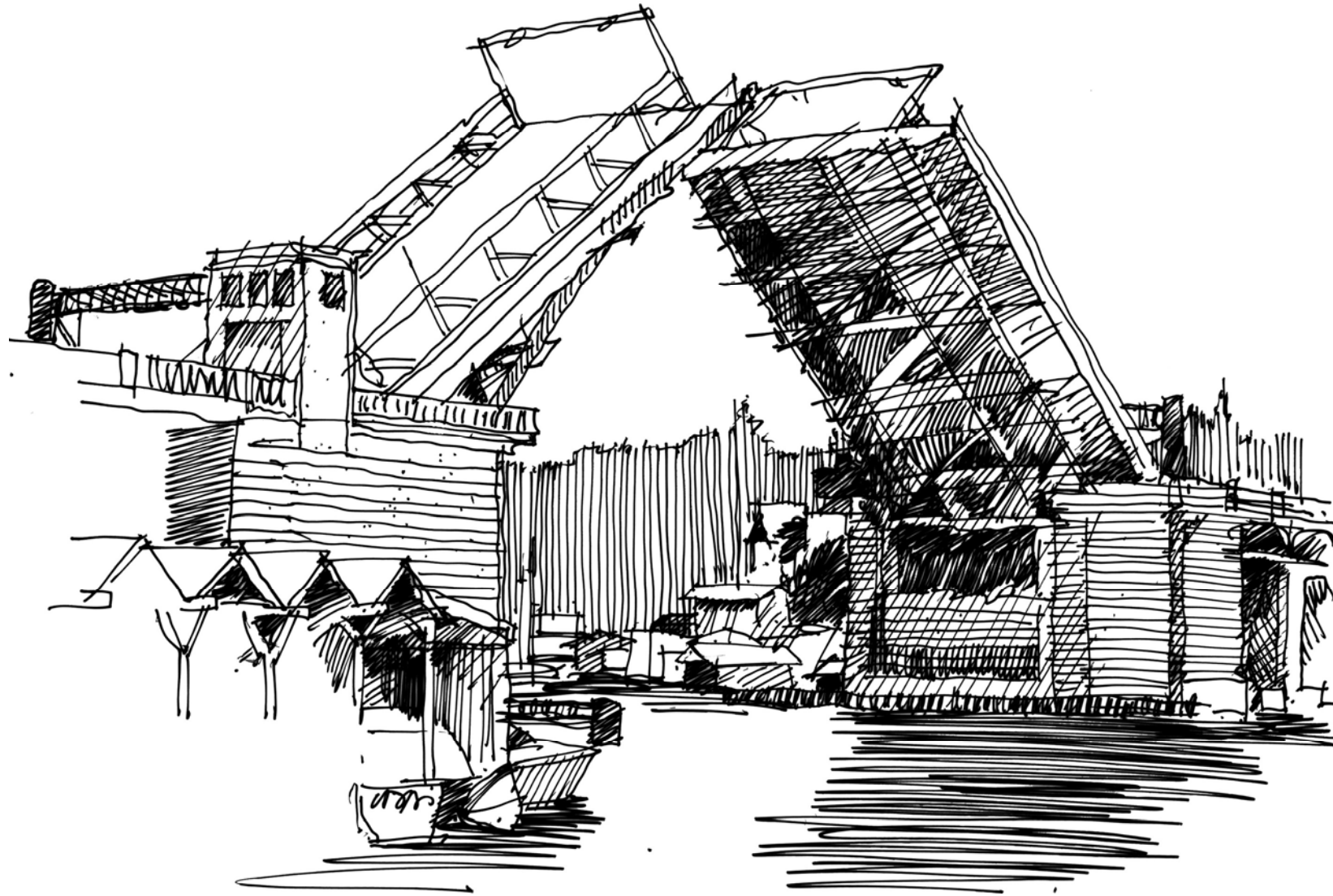
47 people attended Open House #3, 12/11/08

13 comment forms were received.

50 emails were received as of 12/17/2008

**Comment Sources:** Open Houses 1-3, Advisory Committee Meetings 1-4, Westlake Houseboat Resident Meeting, 1/29/08, Floating Homes Association Meeting, 12/12/07, Lake Union District Council Meeting, 2/4/08, continuous emails from residents around Lake Union and interested citizens throughout Seattle.

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### **3. Plan Recommendations**

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## DESIGN AND PLANNING

### Design Goals

The primary design goal in planning for the loop is to provide and improve connections and to maintain the unique character of the local neighborhoods through which it passes. As each neighborhood around the lake has its own unique conditions—the mix of land uses, available right-of-way, parking arrangements, availability of open space, and views for example—the design of the loop will thus respond to these factors. At the same time, the plan suggests element to tie the loop together, beginning with the development of a signing and wayfinding system, including interpretive signing and storytelling, that is consistent through the corridor. The opportunity also exists for design of other elements, such as handrails, markers, and some paving and stormwater treatment elements that contribute to creating a recognizable identity for the loop.

### Route Selection

The loop is intended to be a walking route, with bicycles allowed. As it exists today, the loop consists of a combination of sidewalks, walkways, pathways, stairways, trails, streets, bicycle lanes, bridges, and signed bicycle routes — some segments are accessible by foot and wheelchair and some are not, and some are more appropriate for pedestrians than for bicycles. In places the bicycle route will diverge from the main loop route, but both pedestrians and bicycles will have a continuous route to follow around the lake. To ensure the development of a comfortable, accessible, and continuous route, route choices and refinements were necessary.

A set of evaluation criteria were developed to help guide the selection of the route, and these criteria were vetted with the advisory group and the public. The design team then used the following criteria to help make decisions about the final route.

### Route Evaluation Criteria

- **SAFETY** *Is the route safe to use? Can families and children use it? All elements should be safe for the intended use/users.*
- **ACCESSIBILITY** *Is it easy to find and use? The route should serve all users.*
- **CONTINUITY** *Are there gaps? How much of the route is in place and readily useable?*
- **CONNECTIVITY** *Does the route connect to the desired destinations? The route(s) should go to the places people want to go to.*
- **CONCURRENCY/CONSISTENCY** *Is it consistent with other city and neighborhood planning? Consistency with other plans/processes is key to success.*
- **COMPATIBILITY** *Does it fit into the neighborhood? Route planning and design should reflect the positive attributes and character of the local neighborhoods.*
- **EXPERIENCE** *Is it enjoyable to use? Does it help users connect to and enjoy the lake?*
- **COST/CONSTRUCTABILITY** *Is it doable? Affordable? Are there regulatory or construction issues that make a particular route prohibitively expensive or difficult?*

### Design Standards

Development of a set of loop design standards is based upon a series of evolving and established applicable standards, as well as an interest in creating consistent unifying elements that establish a corridor design vernacular.

The loop route is on existing public right-of-way and park land, and subject to existing standards. As the design progresses to more specific corridor development projects, opportunities exist to refine the detailing and material selection in a way that begins to define the unique character of the loop. This plan does make more detailed design recommendations for signage and wayfinding, as well as some more functional but innovative stormwater treatment tools, that begin to establish character by the introduction

of vegetation, to slow flows and improve stormwater quality and rehabilitation of the lake's edges.

The following guidelines and standards were reviewed:

- *Seattle Right of Way Improvement Manual (ROWIM)*
- *Seattle Bicycle Master Plan, 2007.*
- *AASHTO Guidebook for the Planning, Design and Operation of Pedestrian Facilities, 2004.*
- *AASHTO Guidebook for the Development of Bicycle Facilities, 1999.*
- *Americans with Disabilities Act Accessibility Guidelines (ADAAG), 2002.*

The design guidelines matrix shown on the following pages proposes design standards for basic elements of the loop, including width, surfacing, wayfinding, street furnishing, etc., based on key guidelines.



## DESIGN GUIDELINES

GUIDELINE	Seattle Right-of-Way Improvements Manual	Guide for the Planning, Design, and Operation of Pedestrian Facilities (AASHTO, 2004)	Seattle Bicycle Master Plan (2007)	DRAFT Cheshiahud Lake Union Loop Guidelines
DESIGN CROSS SECTION TYPE AND ELEMENT	<i>Sidewalk or walkway (varies with street type)</i>	<i>Sidewalk or walkway</i>	<i>On-street Bicycle facilities</i>	<i>Walking path, bikes allowed</i>
<b>Width</b>	6' min (unobstructed linear travel way), as wide as possible	6-8' w. parking strip, 8-10' flush to curb, 10-15' w. high ped. volumes	Varies with conditions, 4' min. 5' preferred, more with on-street parking (see below)	6' preferred min. unobstructed. Wider if possible.
<b>Surfacing</b>	PCC. ACC acceptable in some locations.	PCC or ACC, crushed aggregate acceptable in some cases	PCC or ACC	PCC or ACC, pavers or crushed aggregate acceptable in some cases.
<b>Grading</b>	5% max, 2% max. cross-slope	5% max, 2% max. cross-slope	per AASHTO	5% max preferred, but dependent on ROW. 2% max. cross-slope per ADAAG.
<b>Drainage</b>	Natural drainage encouraged on green streets	Outside ped. travel way if possible, gutters at crossing should meet ADA requirements	On-street curb and gutter system should have bicycle-safe grates	Drain to one side; use natural drainage at green streets. Gutters/grates to meet ADAAG guidelines. See Section 10.
<b>Crosswalks</b>	See AASHTO	Marking encouraged, treatments vary	per AASHTO	Where warranted, use contrasting surfacing, warning bands, signage to mark as per ROWIM
<b>Driveways</b>	Minimize number, sidewalk has right-of-way over private crossings, driveways not encouraged on green streets.	Minimize number of driveway crossings, ensure ADA compliance	per AASHTO	
<b>Intersections</b>	See AASHTO; ensure visual clearance 30' from crossing	See cross walks	per AASHTO	as per ROWIM and AASHTO. Ensure visibility, safety. See Crosswalks.
<b>Clearance: vertical</b>	10'	8'	per AASHTO	as per ROWIM and AASHTO
<b>Clearances: horizontal (setback)</b>	2' min, 3' preferred; 5' on sidewalk	3' min. For objects such as signs, 4" from bldgs, between 27" and 7' above walking surface	per AASHTO	as per ROWIM and AASHTO. 2' preferred to walls, fences, obstacles. See AASHTO for signs.
<b>Buffers (from vehicular traffic)</b>	Widths vary; acceptable buffers include planting strip, street furniture, parked cars, bike lane	2-4' on local streets, 5-6' on arterials	per AASHTO	Encouraged, where appropriate. Widths vary. See ROWIM.
<b>Bicycle Facilities</b>	Allowed on some walkways, separate and parallel facilities encouraged	Separate and parallel if possible	On-street preferred	Allowed in some/ most cases. High speeds/ volumes separate and generally parallel where possible.
<b>On-street parking</b>	Encouraged, except on green streets	Encouraged	With adjacent bike lanes, adequate width is critical	Efficiency encouraged, except on green streets
<b>Medians, crossing Islands/ refuges</b>	Encouraged for safety and aesthetics; use on streets with > 3 lanes	Encouraged on high volume roads, 6' min. width, 8' preferred	N/A	Where appropriate, per AASHTO.
<b>Curb bulbs</b>	May be appropriate, with on-street parking and with higher ped. volumes	Appropriate	Bicycle facility continuity through intersections encouraged, treatments vary	Where appropriate and indicated.
<b>Street furniture, etc.</b>	Appropriate and encouraged, restrict to "landscape/ furniture zone"	Appropriate and encouraged, outside ped. travel way	N/A	Where appropriate, outside ped/bike travelway. See Clearance.
<b>Bus bulbs</b>	Appropriate in some locations, usually w. on-street parking	Appropriate	Bicycle facility continuity at bus bulbs intersections encouraged, treatments vary	Where appropriate
<b>Street lighting (pedestrian scale)</b>	Prioritize at important locations	At intersections and crossings min, continuous coverage in urban areas may be appropriate	per AASHTO	Where appropriate. Priority at important/ high volume locations.

(continued on following page)

**DESIGN GUIDELINES, continued**

<b>G U I D E L I N E</b>	<b>Seattle Right-of-Way Improvements Manual</b>	<b>Guide for the Planning, Design, and Operation of Pedestrian Facilities (AASHTO, 2004)</b>	<b>Seattle Bicycle Master Plan (2007)</b>	<b>DRAFT Cheshiahud Lake Union Loop Guidelines</b>
<b>DESIGN CROSS SECTION TYPE AND ELEMENT</b>	<b><i>Sidewalk or walkway (varies with street type)</i></b>	<b><i>Sidewalk or walkway</i></b>	<b><i>On-street Bicycle facilities</i></b>	<b><i>Walking path, bikes allowed</i></b>
<b>Awnings or weather protection</b>	Appropriate where ped. volumes are high	Appropriate where ped. volumes are high	N/A	Where appropriate and reasonable, typically only in urban conditions.
<b>Street trees and landscaping</b>	Desirable and encouraged (esp. on green streets) but must be compatible with other street operations, such as transit	Desirable and encouraged, tree branches no lower than 7'; for lower vegetation, 3' max height for visibility	per AASHTO	Desirable; use native and drought tolerant species to extent possible. See ROWIM. Variable at parks, street ends.
<b>Signage/Wayfinding</b>	Sign and/or strip to designate bicycle/walking facilities	Signage per MUTCD standards	Sign and/or strip to designate bicycle facilities per AASHTO; use of new "sharrows" markings and green bike lanes	Sign and/or stripe for identity, wayfinding. Bicycles per SBMP. See Section Appendix G for detail.
<b>Furnishings</b>	May be appropriate	Encouraged, outside ped. travel way	N/A	Where appropriate. Develop to establish identity, continuity. Consistent with established standards, operational requirements.
<b>Art</b>		N/A		Per established programs (DOPAR, SDOT, Art Commission, etc.)

**ACRONYMS**

AASHTO	American Association of State Highway and Transportation Officials
ACC	Asphalt Cement Concrete
ADAAG	Americans with Disabilities Act Accessibility Guidelines
DOPAR	Seattle Department of Parks and Recreation
MUTCD	Manual of Uniform Traffic Control Devices
PCC	Portland Cement Concrete
ROW	Right-of-Way
ROWIM	Seattle Right-of-Way Improvement Manual
SBMP	Seattle Bicycle Master Plan

## THE ROUTE

In addition to the main route, in some areas there are alternative routes to meet accessibility guidelines, to accommodate “fast” cyclists, or to provide an alternate trail experience. Described below are the segments of the loop where there are alternatives to the main route, beginning at Lake Union Park and proceeding in a counter-clockwise direction. The entire loop is described in greater detail in the inventory section that follows, and shown in the accompanying route map.

### Distinctions between Main and Alternative Routes

The descriptions begin at Lake Union Park and proceeding counter-clockwise around the lake.

#### Lake Union Park, Fairview Avenue North

*Main Route:* The loop route follows the shoreline path from Lake Union Park to the Yale Shoreline Street End. There is a short segment on the sidewalk along Fairview North from Yale Avenue to the Fairview Walkway, adjacent to the historic Seattle Steam Plant (now Zymogenetics). There are stairs at a number of places along the shoreline route.

*Bicycle Route:* The shoreline path north of the waterfront businesses, and some of it is boardwalk, and therefore not appropriate for bicycle use. The bicycle route through this segment of the loop is separate, as an on-street facility along Fairview Avenue North, and a short segment on the sidewalk at the corner of Valley Street.

#### Fairview Avenue East, south of Mallard Cove

*Main Route:* Where Fairview Avenue North becomes Fairview East, the loop route will be on-street. North of Lake Union Dry Dock, the loop follows a separated path along the top of the bank and through the parking lot at the NOAA offices. At East Newton Street/Terry Pettus Park, the loop route will transition to a shared space street. Pedestrians, cyclists, and vehicles will share the space, which

LEFT: Fairview Avenue North | RIGHT: Fairview Avenue East



will be redesigned to calm traffic and increase comfort among all users. See the special recommendations section on page 44 for more discussion.

#### Mallard Cove

*Main Route:* The main loop route will proceed on-street up East Roanoke Street to Yale Avenue East, up East Edgar Street to Yale Terrace East and back down to Fairview Avenue East. A secondary route proceeds all the way up East Roanoke Street to Eastlake Avenue East and then back down East Hamlin Street back to Fairview Avenue East. Both routes involve considerable hill climbs.

*Bicycle Route:* Fairview Avenue East is a signed bicycle route that exists as an alternative to Eastlake Avenue East, despite the steep hills around Mallard Cove. Eastlake Avenue is commonly used by “fast” cyclists.

*Future Route:* Both land and over-water solutions have been proposed to resolve the “missing link” between the two segments of Fairview Avenue East, along the submerged Fairview Avenue East right-of-way between East Roanoke and East Hamlin Streets. These are addressed in great detail in both the inventory and project pages.

#### Fairview Avenue East, north of Mallard Cove

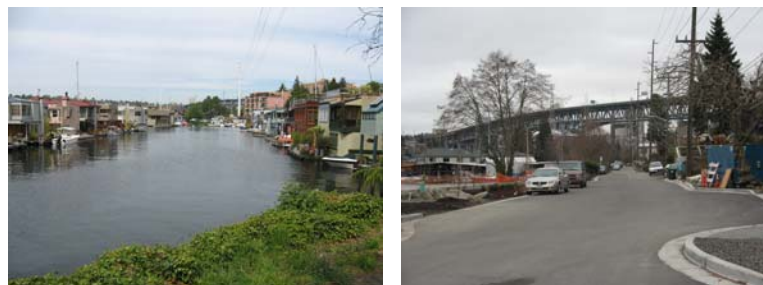
*Main Route:* The loop route follows Fairview Avenue. North of Fairview Park, the loop transitions to a dedicated pedestrian path on the west/lake side of the street.

#### University Bridge/Peace Park

*Main Route:* At the north end of the University Bridge, loop users have the option of heading west along NE 40th Street along the new sidewalk along Peace Park, or looping around to the east, descending the stairs, and heading to NE Northlake Way under the bridge right-of-way (future route).

*Bicycle Route:* Bicycles coming off the northbound bike

LEFT: Mallard Cove | RIGHT: Fairview Avenue East







# Cheshiahud Lake Union Loop

Master Plan  
May 2009

## ROUTE MAP



**LEGEND**

- Main Route
- Future Route
- Over-water Route
- Neighborhood/Park Connection



UPPER LEFT: University Bridge | UPPER RIGHT: NE Northlake Way.  
LOWER LEFT: North Northlake Way/Burke Gilman Trail | LOWER.  
RIGHT: Gas Works Park.

lanes on the bridge can loop around to the east and connect with NE 40th Street under the bridge.

NE Northlake Way/Burke Gilman Trail

*Main Route:* West of the University Bridge, the current route for all loop users is along the Burke Gilman Trail. At Latona Avenue NE, pedestrians can exit the trail and connect to North Northlake Way.

*Future Main Route:* The loop route will proceed to NE Northlake Way from the west side of the University Bridge. Pedestrians will have a dedicated path on the south/lake side of North Northlake Way to Gas Works Park.

*Bicycle Route:* Bicycles will continue to use the Burke Gilman Trail.

Gas Works Park

*Main Bicycle Route:* Pedestrians and bicycles will continue to use the Burke Gilman Trail.

*Future Main Route:* Pedestrians will continue from the path along Northlake directly into Gas Works Park.

North Northlake Way

*Accessible and Main Route:* West of Stone Way North, the route proceeds west on North 34th Street to the Fremont Bridge.



UPPER LEFT: North Northlake Way | UPPER RIGHT: Fremont Bridge.  
LOWER LEFT and RIGHT: Westlake Avenue North.

*Future Main Route:* West of Gas Works Park, the loop will continue along Northlake Way on a dedicated pedestrian path adjacent to the lake, and on the south side of the parking lot west of Stone Way North. The loop heads south along Troll Avenue North (under the Aurora Bridge) and proceeds west along the existing pathway to the Fremont Bridge.

Fremont Bridge

*Accessible and Main Route:* From North 34th Street, loop users proceed through intersection of North 34th Street and Fremont Avenue North to the bridge.

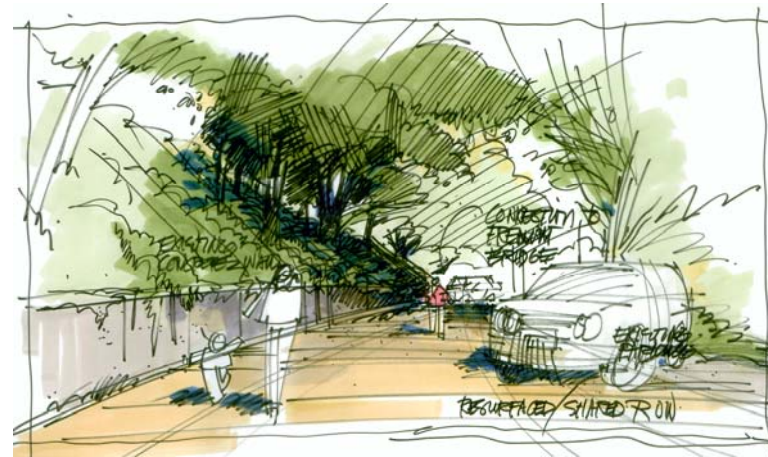
*Future Route:* From the existing pathway along west of the Aurora Bridge, loop users can use the existing stairs or a lift, to be installed long-term, to reach the bridge deck.

Westlake Avenue North

*Main Route:* From the Fremont Bridge, loop users can proceed south on the new sidewalk along Westlake to connect with the existing Westlake pathway. An alternate is to reach the shoreline path, via stairs, that stretches between the Ship Canal Trail and the end of the existing Westlake path.

*Bicycle Route:* “Fast” cyclists are encouraged to the bike lanes on Dexter Avenue North, to the west.





**Design Recommendations**

The loop route will be continuous, but as neighborhood character and existing conditions demand, design treatments along the loop will change from neighborhood to neighborhood. The resulting varied loop “cross-section” is a response to a number of factors, including access needs, surrounding land uses, type and mix of users, right-of-way constraints, environmental factors, the ability to separate less compatible uses and the right-of-way’s function in the overall street network.

The master plan identifies 37 different segments along the 6.2 mile loop route where conditions dictate a different cross-section or design treatment. The following inventory pages describe each of these segments. Key issues are identified, the extents to which existing facilities can be used “as is” are noted, and general design recommendations for additional elements or alterations are described with maps, text and sketches. Roughly half of the segments require major improvements and the proposals for these segments are identified in more detail in a separate section of project sheets in section 4, the implementation strategy.

For some segments, the design recommendations are considered to be long-term due to environmental documentation, permitting, or funding issues. The implementation matrix at the end of this plan identifies those projects that will be undertaken in the near term. Other long range projects are pending resolution of adjacent projects, the need for further study, etc. In such cases, interim solutions are also proposed.



Following the inventory section are discussions of the elements that will create and maintain identity of the loop: open spaces, wayfinding and signage, art opportunities, natural drainage treatments, materials and detailing. Many of these elements are proposed to be consistent throughout the 37 segments.

# INVENTORY

## LOOP DESIGN SEGMENT INVENTORY (Counter clock-wise, beginning at Lake Union Park)

	<i>Cross-section and number</i>	<i>Origin and destination</i>	<i>Page</i>
<b>SOUTH</b>			
1	Lake Union Park		44
2-5	Fairview Walkway	Waterway 4 to Waterway 5 (Boren to Fairview) Waterway 5 to Waterway 6 (Fairview to Minor) Waterway 6 to Yale Street End (Minor to Yale)	45-46
6	Fairview Avenue North Walkway	Yale Street End to floating bridge (Waterway 6 to 8)	47
<b>EAST</b>			
7	Fairview Floating Bridge	Waterway 8	48
8	Fairview and Fairview	Adjacent to Lake Union Dry Dock	49
9	Fairview Avenue East	from Lake Union Dry Dock to East Blaine Street	50
10	Fairview Avenue East	East Blaine Street to East Newton Street/Terry Pettus Park	51
11	Fairview Avenue East	East Newton Street/Terry Pettus Park to East Lynn Street	52
12	Fairview Avenue East	East Lynn Street to East Louisa Street	52
13	Fairview Avenue East	Houseboat Entries	53
14	Fairview Avenue East	East Louisa Street to East Roanoke Street /Mallard Cove	54
15	Mallard Cove	East Roanoke Street to East Hamlin Street	55
16	Fairview Avenue East	East Hamlin Street to Fairview Park/Waterway 11	56
17	Fairview Avenue East	Fairview Park/Waterway 11 to East Allison Street	57
18	Fairview Avenue East	to East Allison Street to South Passage Point Park	58
19	Fuhrman Avenue East	Fairview to Eastlake Avenues East	59
<b>NORTH</b>			
20	University Bridge	Fuhrman Avenue East to NE Pacific Street	60
21	Peace Park	NE 40th Street from University Bridge to 7th Ave NE	61
22	7th Avenue NE and NE 40th Street		62
23	Burke Gilman Trail	University Bridge to Latona Avenue NE	63
24	NE Northlake Way	University Bridge to Latona Avenue NE	64
25	NE Northlake Way and 6th Ave NE		65
26	North Northlake Way	Latona Avenue NE to Gasworks Park	66
27	Gasworks Park		67
28	North Northlake Way	Gasworks Park to Stone Way North	68
29	North Northlake Way	Stone Way North to Aurora /Troll Avenue North	69
30	North Northlake Way/ North 34th Street	Aurora /Troll Avenue North to Fremont Bridge	70
31	Fremont Bridge		71
<b>WEST</b>			
32	Westlake Avenue North	Fremont Bridge to Shoreline Walkway	72
33-37	Westlake Avenue North	Shoreline Walkway to Lake Union Park	73-75



## Cheshiahud Lake Union Loop

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# INVENTORY

## 1 LAKE UNION PARK

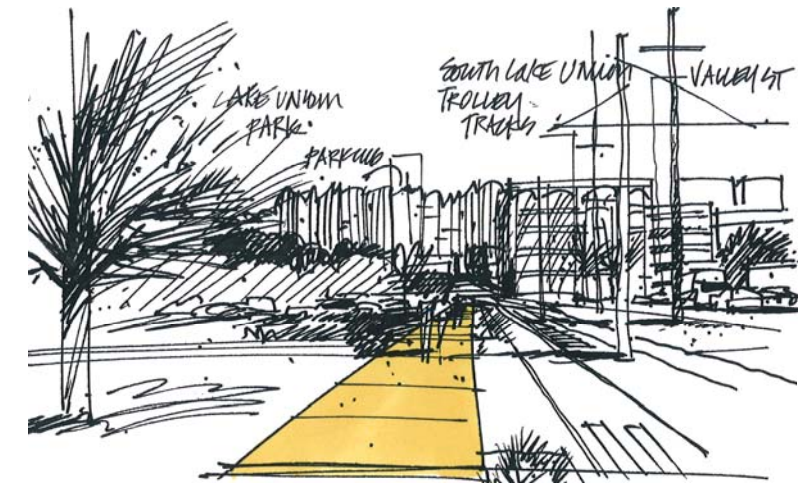
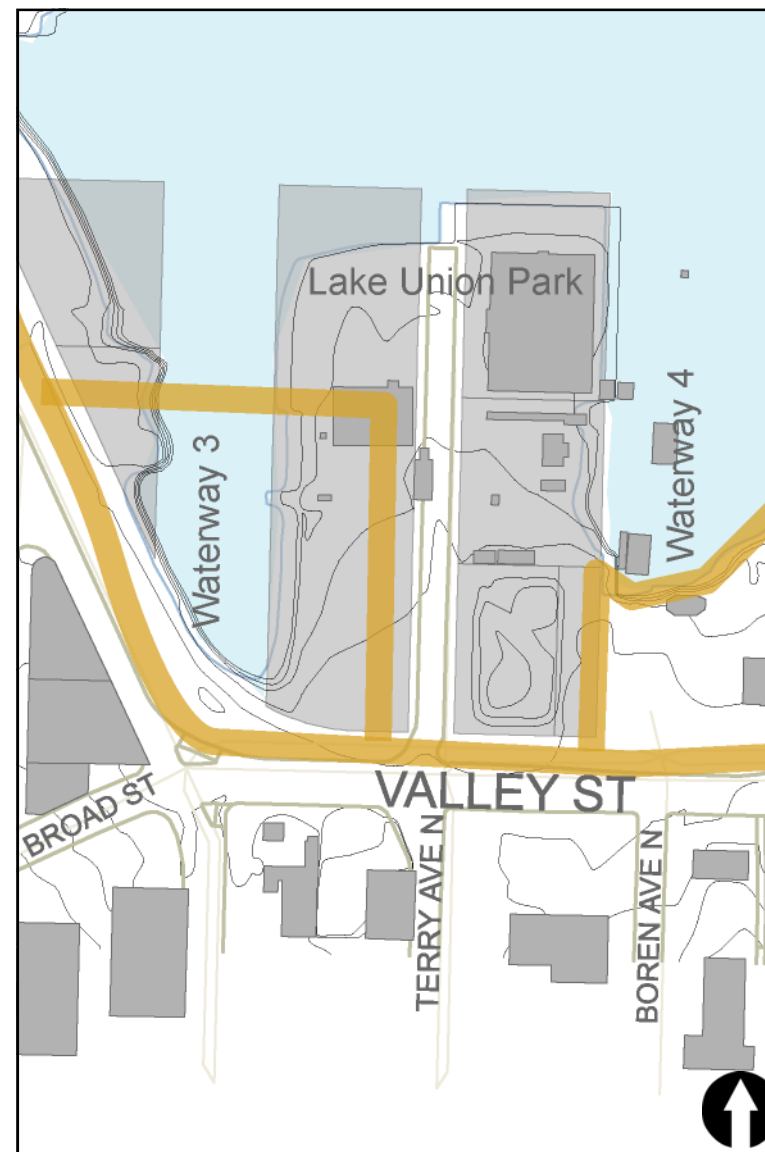


### KEY ISSUES

- Park will serve as a main portal to the loop.
- Wayfinding between park and loop need to be optimized.
- Connection to South Lake Union Streetcar creates opportunity for multi-modal connection.



ABOVE and BELOW: Valley Street trail from intersection with Broad Street.



### GENERAL RECOMMENDATIONS

Utilize existing facilities with the following additions or alterations:

- Use landmark-type sign, in addition to new wayfinding signs, to designate the portal to the loop, and to enhance wayfinding into park, and connections with the streetcar.
- Signage should direct users into the park as well as to loop connections on the east and west sides of the park.
- Take full advantage of on-going planning in the larger transportation corridors to maximize the loop connections into the park and the South Lake Union community; utilize the improved pedestrian corridor along Valley Street which will be built as part of Mercer Corridor Project.



# INVENTORY

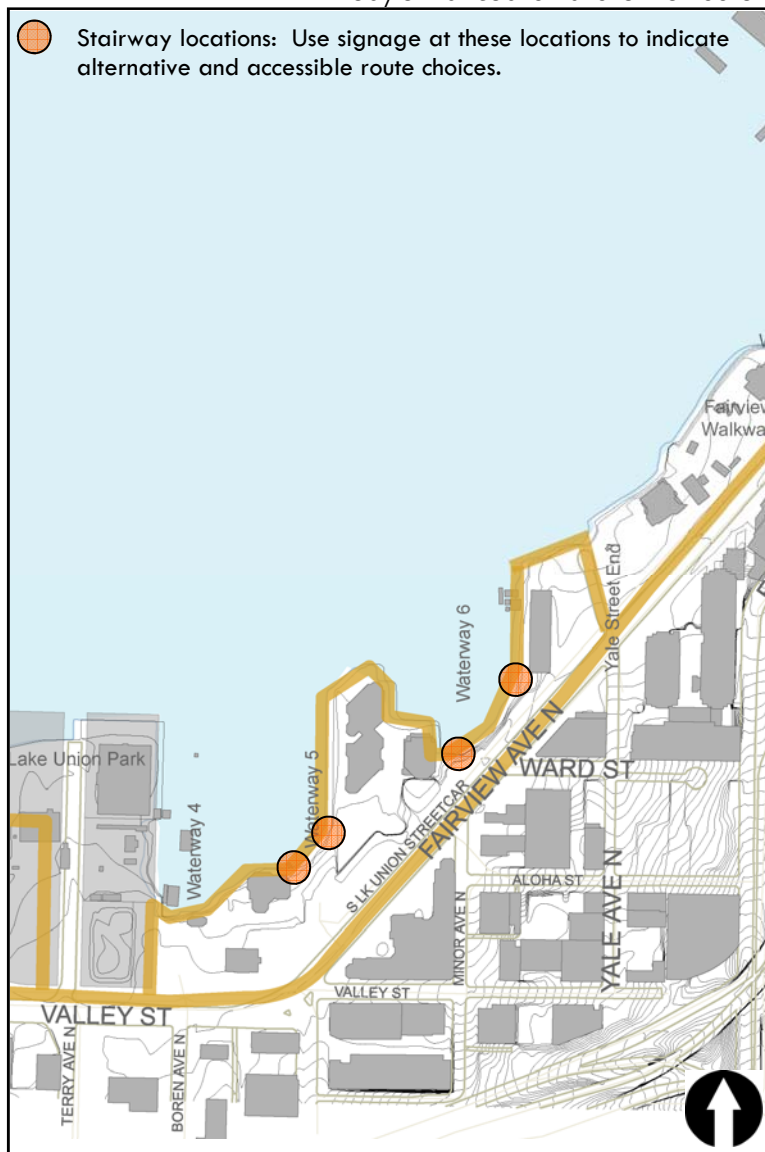
## 2-5 FAIRVIEW WALKWAY (continued on next page)

Waterway 4 to Waterway 5 (Boren to Fairview Avenue North)  
 Waterway 5 to Waterway 6 (Fairview to Minor Avenue North)  
 Waterway 6 to Yale Street End



### KEY ISSUES

- Portions of the existing walkway are not universally accessible.
- Existing shoreline pathway is not appropriate for bicycles.
- Bicycles and pedestrians share narrow sidewalk along Fairview Avenue North in one segment.
- Visibility, continuity and wayfinding of loop route need to be optimized/enhanced on shoreline route.



ABOVE and BELOW: Fairview Walkway adjacent to Chandler's Cove.



### KEY ISSUES, continued

- Connection to South Lake Union Streetcar needs strengthening/clarification.

### GENERAL RECOMMENDATIONS

Utilize existing facilities with the following additions or alterations:

- Use additional wayfinding signage to clarify alternative routes for loop segments that aren't accessible (see red dots on map at left) and to direct trail users destined for the streetcar to the stops on Valley Street and Fairview Avenue North.
- Refer to project sheet (page 98) for discussion of possible separated multi-use path along the Seattle City Light right-of-way along Fairview Avenue North.
- Note plentiful seating opportunities.



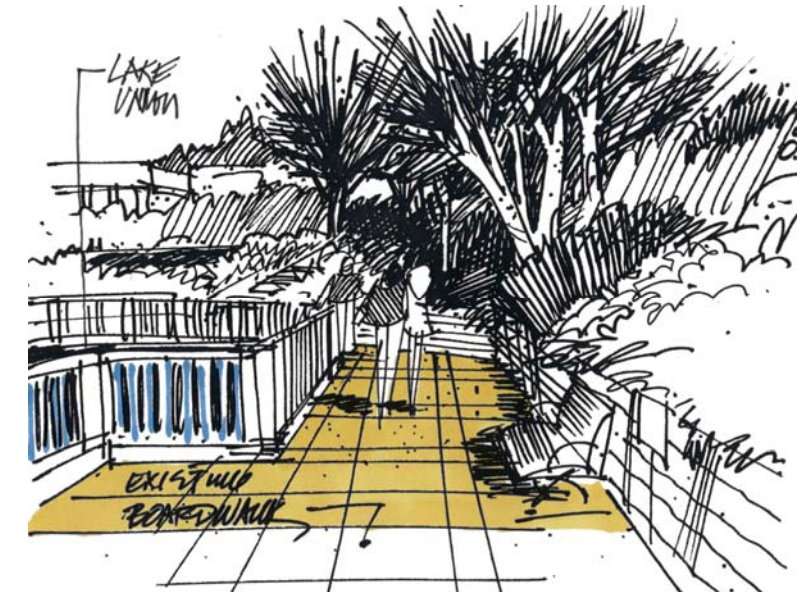
# INVENTORY

## FAIRVIEW WALKWAY (continued)

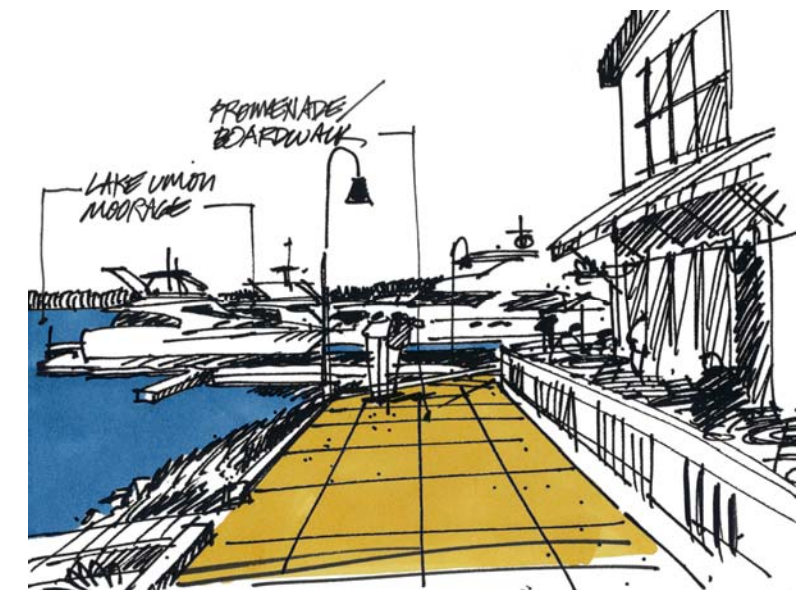
Waterway 4 to Waterway 5 (Boren to Fairview Avenue North)

Waterway 5 to Waterway 6 (Fairview to Minor Avenue North)

Waterway 6 to Yale Street End



LEFT and RIGHT: Fairview Walkway between Waterways 4 & 5.



LEFT and RIGHT: Fairview Walkway between Waterways 5 & 6.



LEFT and RIGHT: Fairview Walkway between Waterway 6 and Yale Street end.



# INVENTORY

## 6

### FAIRVIEW AVENUE NORTH WALKWAY

Yale Street End to Floating Bridge (between Waterways 6 and 8)

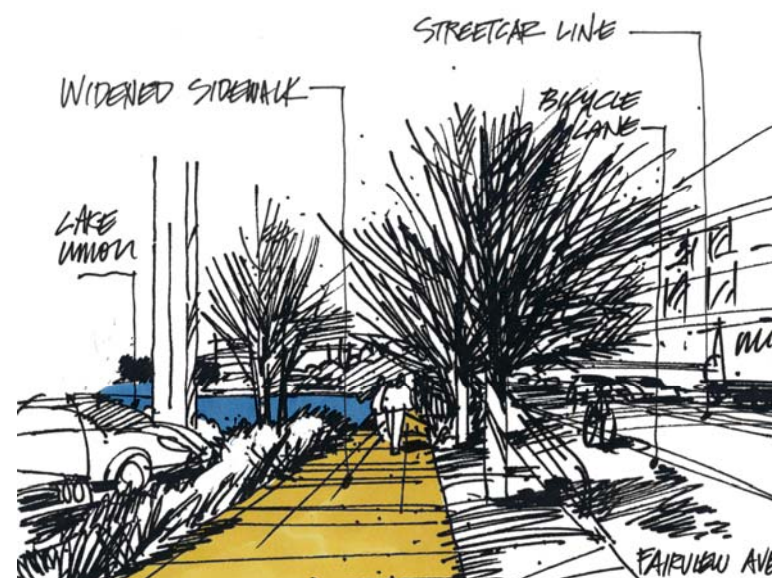


#### KEY ISSUES

- Continuous shoreline path and public access are interrupted by private ownership current sidewalk is narrow.
- Visibility, continuity and wayfinding need to be enhanced.
- Large parking lots and entry drives interrupt route and mix foot and car traffic.
- Connection to South Lake Union Streetcar at Fairview Ave North needs strengthening.



ABOVE and BELOW: Fairview Avenue North south of Fairview bridge.



#### GENERAL RECOMMENDATIONS

- Route the loop from Chandler's Cove back to Fairview Ave North at Yale Street end. Utilize the existing sidewalk and connect to the sidewalk along Fairview Ave North.
- Expand/enhance the sidewalk/walkway on Fairview Avenue North and the connection to the streetcar stop.
- Use signage to enhance wayfinding through the Yale corridor to Fairview Avenue North.
- Refer to project sheet (page 98) for discussion of a possible separated multi-use path along the Seattle City Light right-of-way along Fairview Avenue North.
- Coordinate with Fairview bridge rehabilitation and streetcar planning for opportunities to widen sidewalk and provide separate bicycle facilities (e.g. bike lanes) adjacent to at-grade sidewalk. Streetcar extension may impact right-of-way allocation.



# INVENTORY

## 7 FAIRVIEW FLOATING BRIDGE Waterway 8

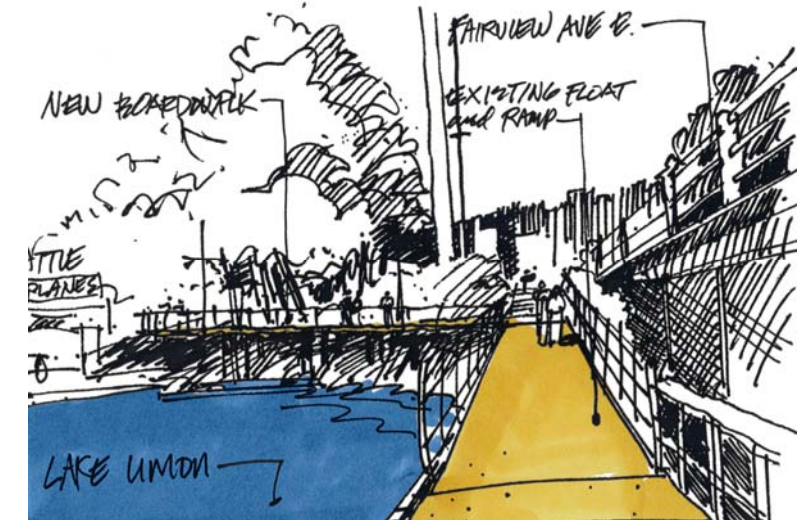


### KEY ISSUES

- Pedestrian bridge is not universally accessible due to stairs at north end and is not appropriate for bicycles.
- Water/shore access is not clear.
- There is potential for better public access to the lake edge.



ABOVE and BELOW: Floating bridge from Waterway 8.



### GENERAL RECOMMENDATIONS

Utilize existing facilities with the following additions or alterations:

- Connect floating bridge to loop route with an accessible ramp at north end.
- Use signage to enhance wayfinding and clarify connections.
- Enhance relationship with lake edge at waterway; note seating opportunities, take advantage of opportunity for interpretive signing of cultural and natural history of lake.
- Coordinate with Fairview bridge rehabilitation and streetcar planning for opportunities to provide sidewalk at street level and ensure continuous bicycle facilities on the bridge. Maintain water level access and boat launch for pedestrians if feasible.



# INVENTORY

8

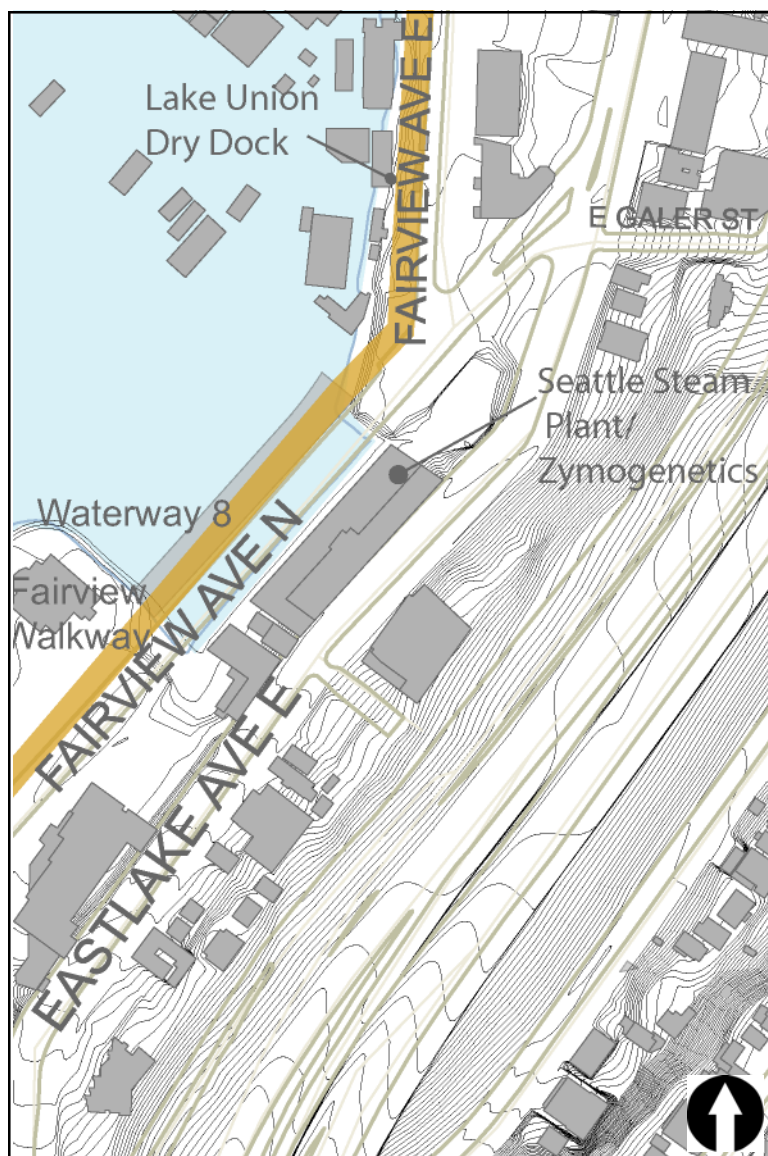
## FAIRVIEW and FAIRVIEW

Fairview Avenue North and Fairview Ave East, adjacent to Lake Union Dry Dock



### KEY ISSUES

- No designated pedestrian path exists; pedestrian passage is undefined.
- Existing intersection configuration favors vehicular travel over pedestrians and bicycles.
- Commercial parking takes place on right-of-way.
- King County Metro bus layovers and turning patterns impede pedestrian passage.



Lake Union shoreline near Lake Union Dry Dock.



Intersection of Fairview and Fairview from Fairview bridge.



Fairview Avenue East from Lake Union Dry Dock.

### GENERAL RECOMMENDATIONS

Initiate future process with stakeholders and local community to further explore intersection redesign to facilitate comfortable and convenient pedestrian and bicycle passage.

SEE PROJECT SHEET, PAGE 99.



# INVENTORY

## 9 FAIRVIEW AVENUE EAST Lake Union Dry Dock to East Blaine Street



### KEY ISSUES

- Existing narrow pedestrian pathway has some encroachment by vegetation and parking.
- Gravel surface is poor and uneven.
- Street ends have potential for enhancement for public use.



ABOVE and BELOW: Shoreline pathway near East Garfield Street.



### GENERAL RECOMMENDATIONS

Utilize existing facilities with the following additions or alterations:

- Move and eliminate obstacles in walkway.
- Enhance walkway by widening, 6' minimum, trimming vegetation, and adding new granular surfacing material.
- Enhance walkway endpoints and connections to street by removing obstacles, trimming vegetation, preventing physical or visual encroachments.
- Install additional wheel stops to provide more room for pedestrians and prevent cars from blocking the path.

SEE PROJECT SHEET, PAGE 100.

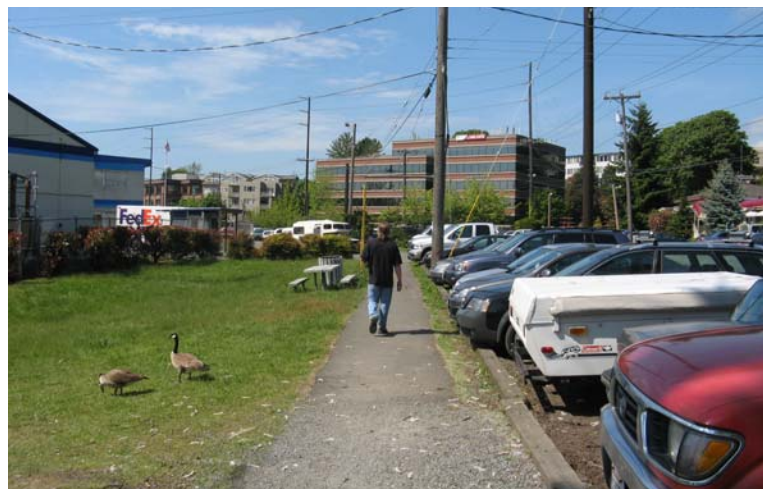
# INVENTORY

## 10 FAIRVIEW AVENUE EAST East Blaine Street to Terry Pettus Park (East Newton Street)

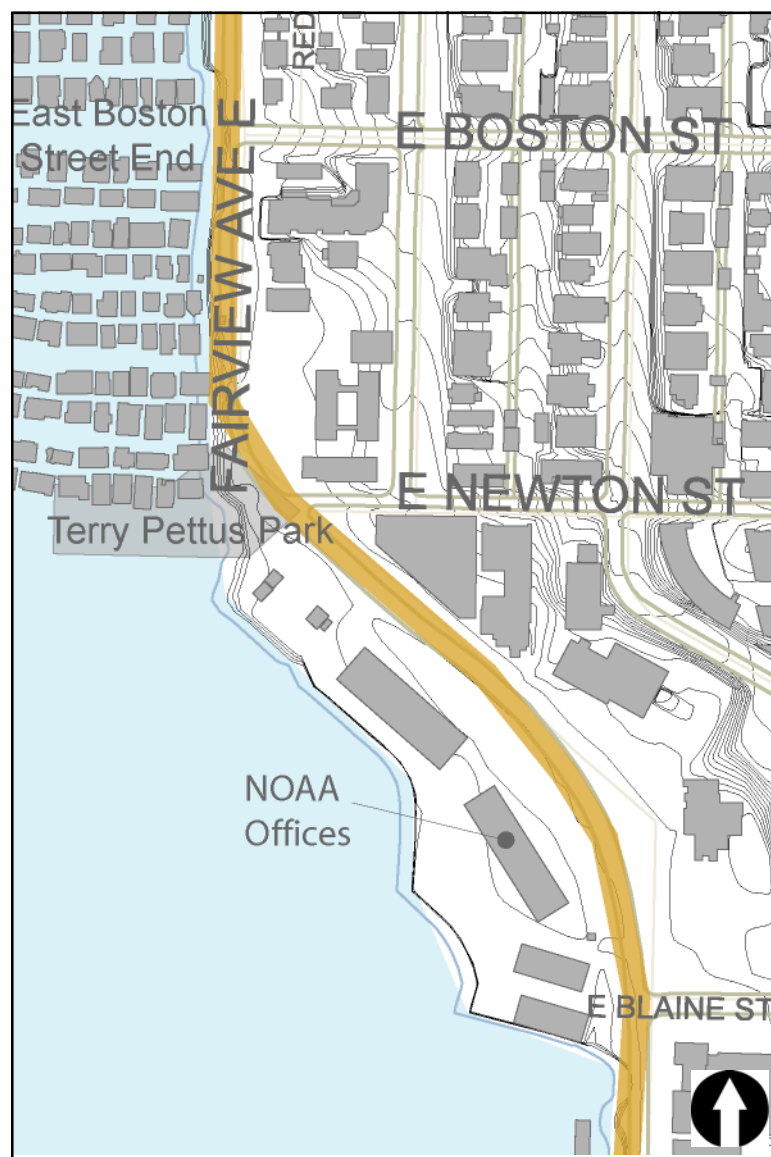


### KEY ISSUES

- Street is a popular walking and biking route.
- On-street parking for floating homes and businesses is highly valued.
- Street character transitions from business to residential in this area.
- Street narrows at corner of East Newton.
- Terry Pettus Park is not universally accessible.



ABOVE and BELOW: Pedestrian walkway south of NOAA building.



### GENERAL RECOMMENDATIONS

Utilize existing facilities with the following additions or alterations:

- Create a wider pedestrian walkway with uniform grading and special paving on the west side of Fairview.
- Enhance path/driveway crossings to enhance visibility and awareness.
- Prune and/or enhance vegetation to provide visual interest along pathway and visibility of path from street.



# INVENTORY

## 11-12

### FAIRVIEW AVENUE EAST

Terry Pettus Park/East Newton Street to East Louisa Street End



#### KEY ISSUES

- Street is a popular walking and biking route.
- On-street parking is important for floating homes and businesses.
- Character of street is unique and valued.
- Street is a designated green street.
- Standing water collects in street during rain events.
- Street ends have greater potential for public use.



Fairview Avenue East.



Floating home entry on Fairview Avenue East.



Fairview Avenue East near East Louisa Street Mini-Park.

#### GENERAL RECOMMENDATIONS

Create a “shared space” corridor while preserving local character.

SEE PROJECT SHEET, PAGE 101.

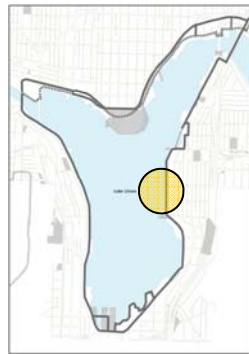


# INVENTORY

## 13

### FAIRVIEW AVENUE FLOATING HOME ENTRIES

Fairview Avenue East

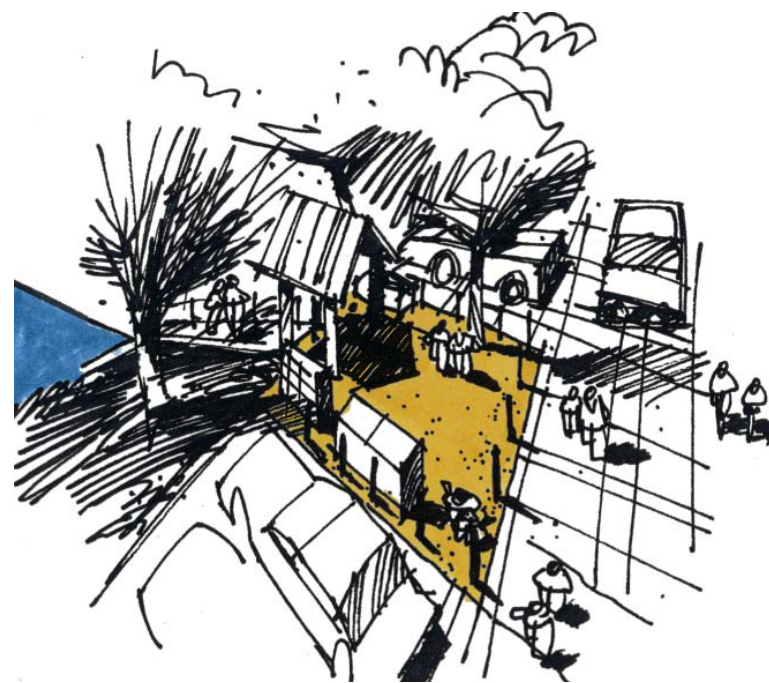
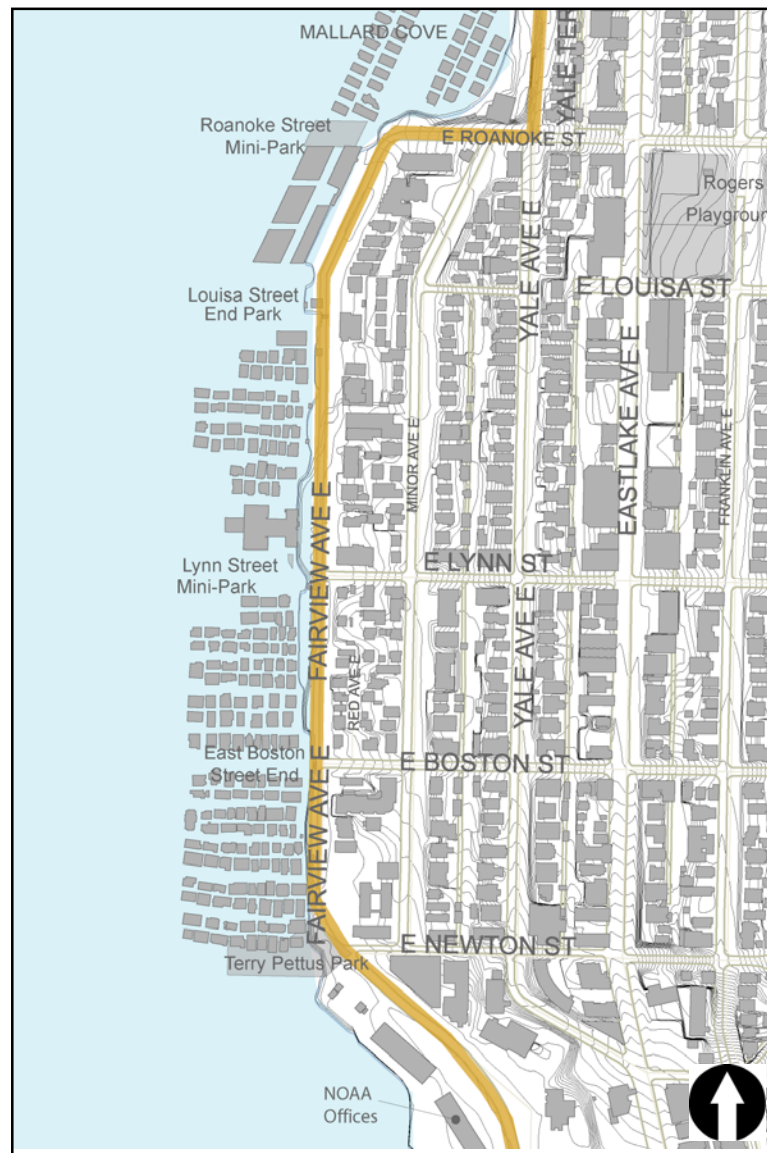


#### KEY ISSUES

- Individual entries have a strong positive and unique character.
- Placement of dumpsters is haphazard and intrusive.
- Parked cars occasionally intrude and disrupt access to floating homes.
- Public/private uses blend together resulting in a lack of clarity.



ABOVE and BELOW: Floating home entry.



#### GENERAL RECOMMENDATIONS

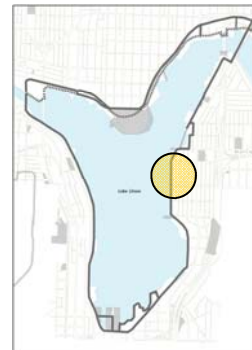
Consolidate and coordinate trash collection, mailboxes, drop-off, storage, etc. to define and protect entries.

SEE PROJECT SHEET, PAGE 102.



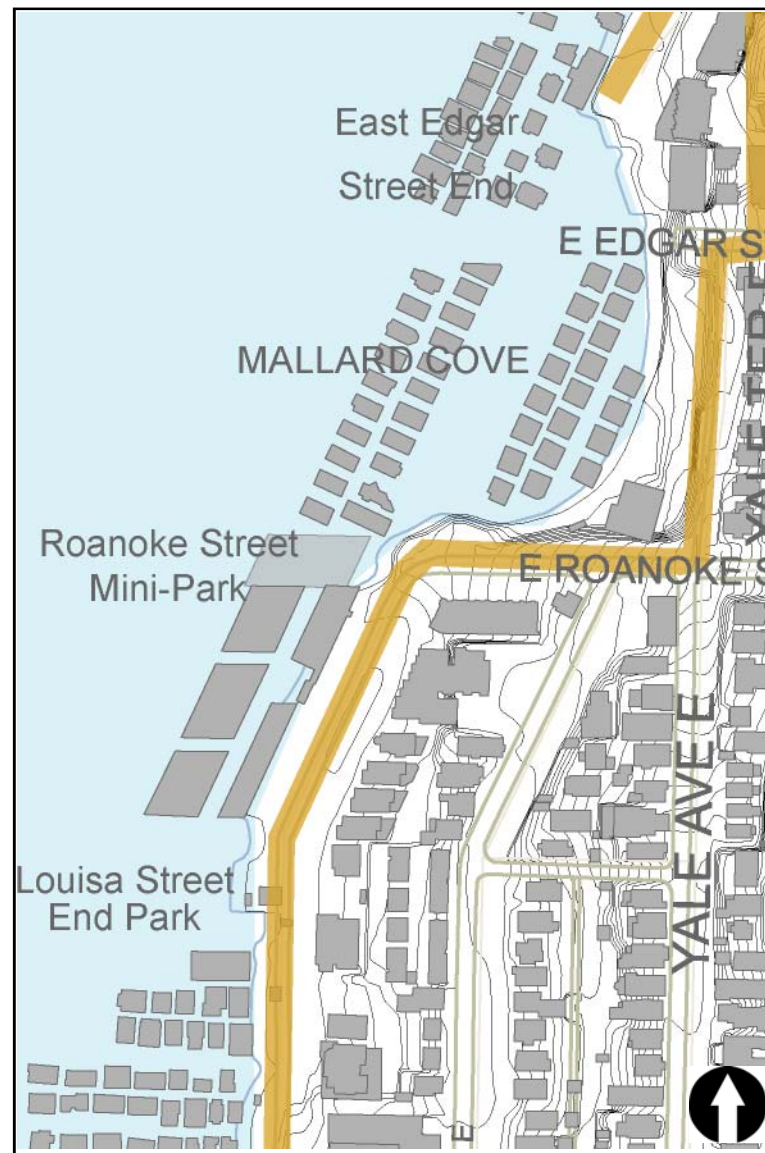
# INVENTORY

## 14 FAIRVIEW AVENUE EAST East Louisa Street to East Roanoke Street



### KEY ISSUES

- Street is a popular walking and biking route.
- On-street parking is important for businesses.
- Connections to Eastlake at East Roanoke are steep.
- Street is a designated green street.
- Mix of business and residential creates parking and access conflicts.
- Standing water collects on street during rain events.



Intersection of Fairview Avenue East and East Roanoke.



Fairview Avenue East at East Louisa Street Mini-park.



Fairview Avenue East south of East Roanoke Street end.

### GENERAL RECOMMENDATIONS

Create a “shared space” corridor while preserving local character and business parking.

SEE PROJECT SHEET, PAGE 101.



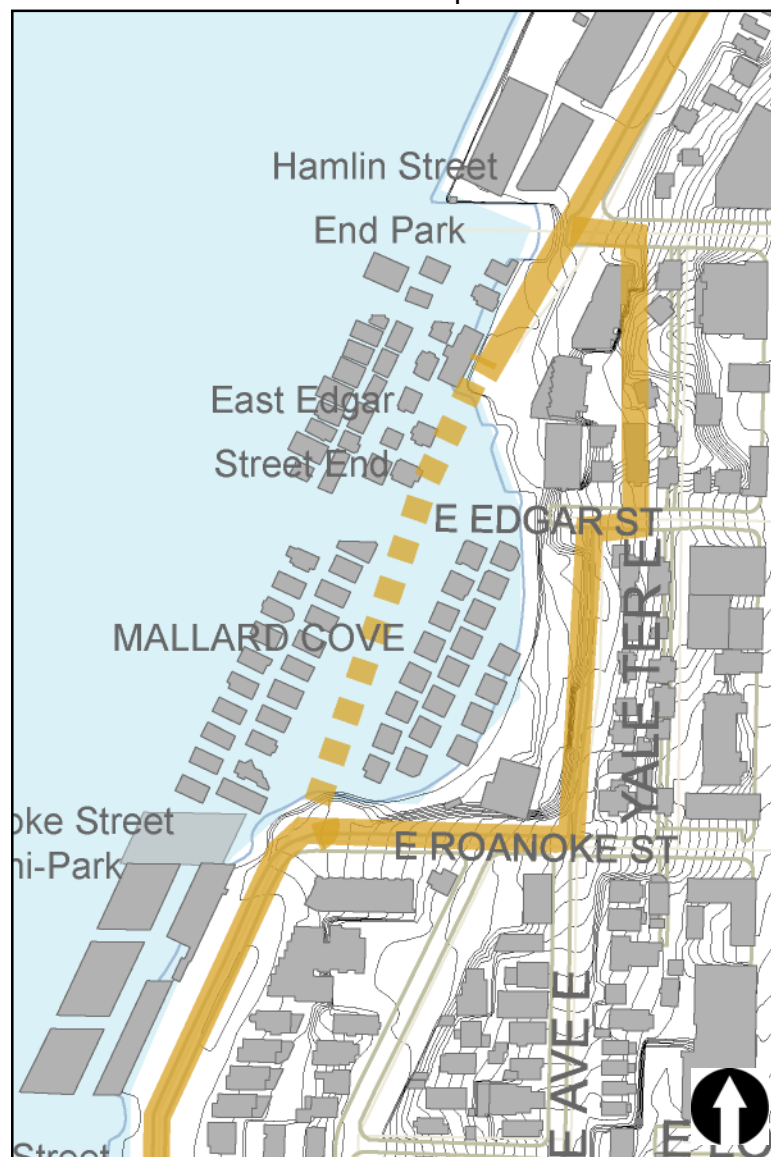
# INVENTORY

## 15 MALLARD COVE East Roanoke Street to East Hamlin Street



### KEY ISSUES

- Community has a strong interest in over-water connection between two segments of Fairview Avenue East across public right-of-way.
- There is also concern over impacts to local floating home communities and residences.
- Steep grades on upland routes make access difficult on public rights-of-way.
- Connections to Eastlake, business district are steep.



Fairview Avenue East right-of-way from the Roanoke Street End.



East Edgar Street end.



Steep slopes on Yale Terrace East, north of East Edgar Street.

### GENERAL RECOMMENDATIONS

Initiate future process with stakeholders, local community to further explore both upland and over-water options.

SEE PROJECT SHEET, PAGE 103.

# INVENTORY

## 16 FAIRVIEW AVENUE EAST

Water's edge/East Hamlin Street to Fairview Park / Waterway 11



### KEY ISSUES

- Right-of-way is perceived as a parking lot, not public space.
- Connections to Eastlake and business district are steep.
- Grade differential on Fairview right-of-way north makes circulation awkward.
- Street is a designated green street.



Fairview Avenue East right-of-way south of Hamlin Avenue East street end.



Proposed pedestrian path of Fairview Avenue East right-of-way.

### GENERAL RECOMMENDATIONS

- Redesign parking area/right-of-way to create a pedestrian walkway, 6' minimum, with uniform paving and bollards to limit vehicular access and restrict parking.
- Utilize sidewalk along west edge of Fairview at Hamlin street end and along Ward's Cove development to tie proposed walkway into existing Fairview Avenue green street treatment.



# INVENTORY

## 17 FAIRVIEW AVENUE EAST Fairview Park / Waterway 11 to East Allison Street



### KEY ISSUES

- Southern segment was recently developed as a green street south of Fairview Park.
- Area is a mix of commercial, residential uses and park; parking patterns vary on west side of street.
- No clear pedestrian route exists from Fairview Park to East Allison Street.



Fairview Avenue East north of Fairview Park.



Proposed pedestrian path on Fairview Avenue East.

### GENERAL RECOMMENDATIONS

Expand/enhance as a pedestrian corridor in way consistent with the current green street designation and guidelines

SEE PROJECT SHEET, PAGE 104.



# INVENTORY

## 18 FAIRVIEW AVENUE EAST East Allison Street to Fuhrman Avenue East/ South Passage Point Park

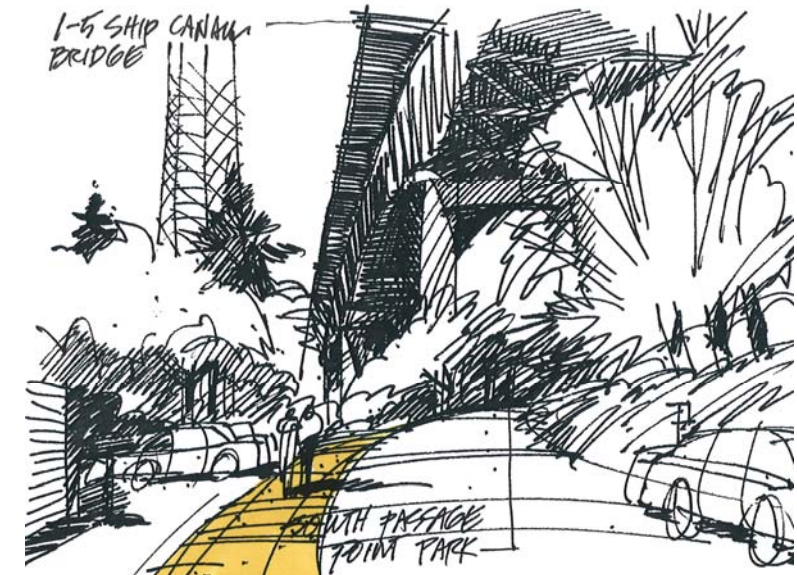


### KEY ISSUES

- Mix of business and residential creates parking and access conflicts; commercial development on west side is expanding.
- Street is a popular walking and biking route; sidewalk along park ends at corner.
- Wider street width encourages higher vehicular speeds.
- Blind corner at Fuhrman Avenue East makes for an uncomfortable route.



Fairview Avenue East at intersection with Fuhrman Avenue East.



Fairview Avenue East with proposed pedestrian path.

### GENERAL RECOMMENDATIONS

Enhance the pedestrian corridor on the west side of Fairview Avenue East, and the connection into South Passage Point Park via the sidewalk along the north side of Fuhrman Avenue East.

SEE PROJECT SHEET, PAGE 104.



# INVENTORY

## 19 FUHRMAN AVENUE EAST

Fairview to Eastlake Avenues East/South Passage Point Park

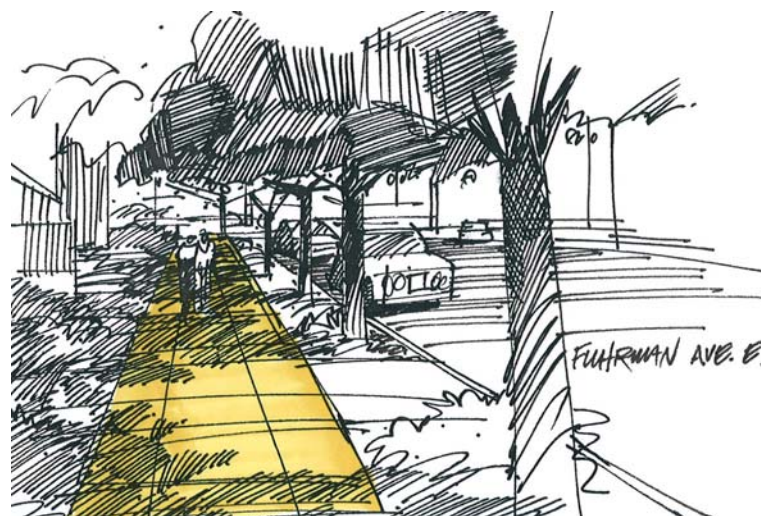


### KEY ISSUES

- Current configuration of street does not encourage residential street speeds.
- Pedestrian traffic crosses Fuhrman between parking lot and Pocock Rowing Center.
- Blind corner, wider street, and presence of commercial traffic make crossing uncomfortable for pedestrians.



ABOVE and BELOW: Sidewalk along Fuhrman Avenue East.



### GENERAL RECOMMENDATIONS

Utilize existing facilities with the following additions or alterations:

- Loop route is to follow sidewalk on north side of Fuhrman; use signage to direct users to spur through South Passage Point Park and to service road heading east under University Bridge for Red Robin/Montlake access.
- Consider measures to make distinction between arterial character of Eastlake and local character of Fuhrman, consistent with community plan and green street designation.
- Where feasible, make parking more efficient by reconfiguring to create space for pedestrians.



# INVENTORY

## 20 UNIVERSITY BRIDGE Fuhrman Avenue East to NE Pacific Street

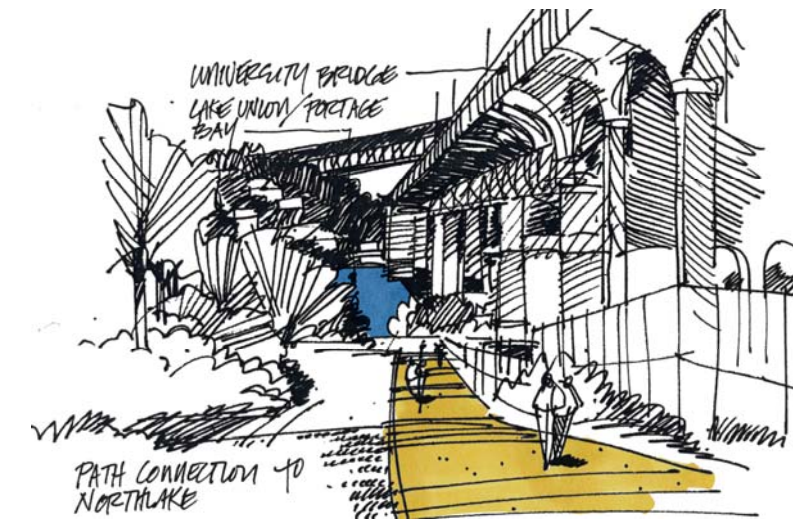


### KEY ISSUES

- Bridge is not universally accessible due to missing curb ramps on the SW end at Eastlake and Fuhrman Avenues East.
- Topography makes connections from bridge to waterfront difficult.
- Traffic volumes on bridge and Eastlake are high.
- Route from bridge to water is not defined and multiple options exist.



ABOVE and BELOW: East side of University Bridge.



### GENERAL RECOMMENDATIONS

- Pedestrian routes and bicycle routes differ because of topography; use signage should clarify route choices.
- Route bicycles and pedestrians from north end of University Bridge to Burke Gilman Trail or along new sidewalk on NE 40th adjacent to Peace Park.
- In the long term, the loop is to be routed down the eastern side of the bridge (using stairs) along Eastlake Avenue NE to NE Pacific Street/NE Northlake Way.
- Make the route universally accessible to the extent possible.

SEE PROJECT SHEET, PAGE 105.



# INVENTORY

## 21

### PEACE PARK

NE 40th Street from University Bridge to 7th Avenue NE



#### KEY ISSUES

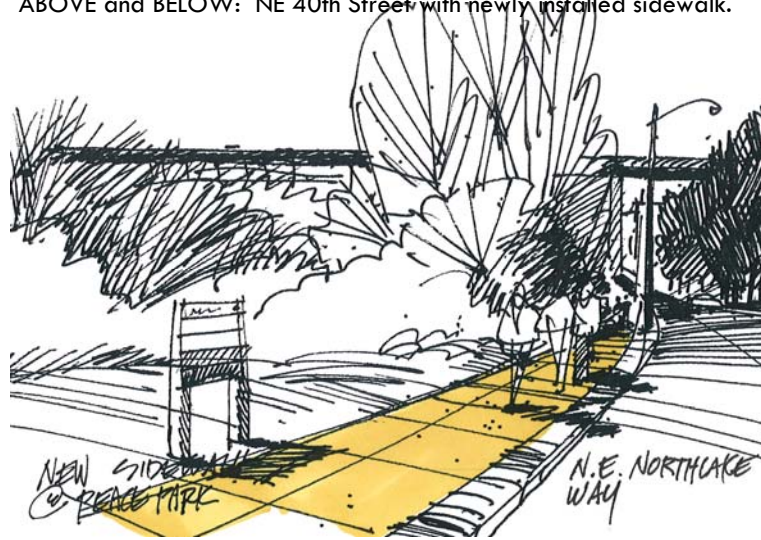
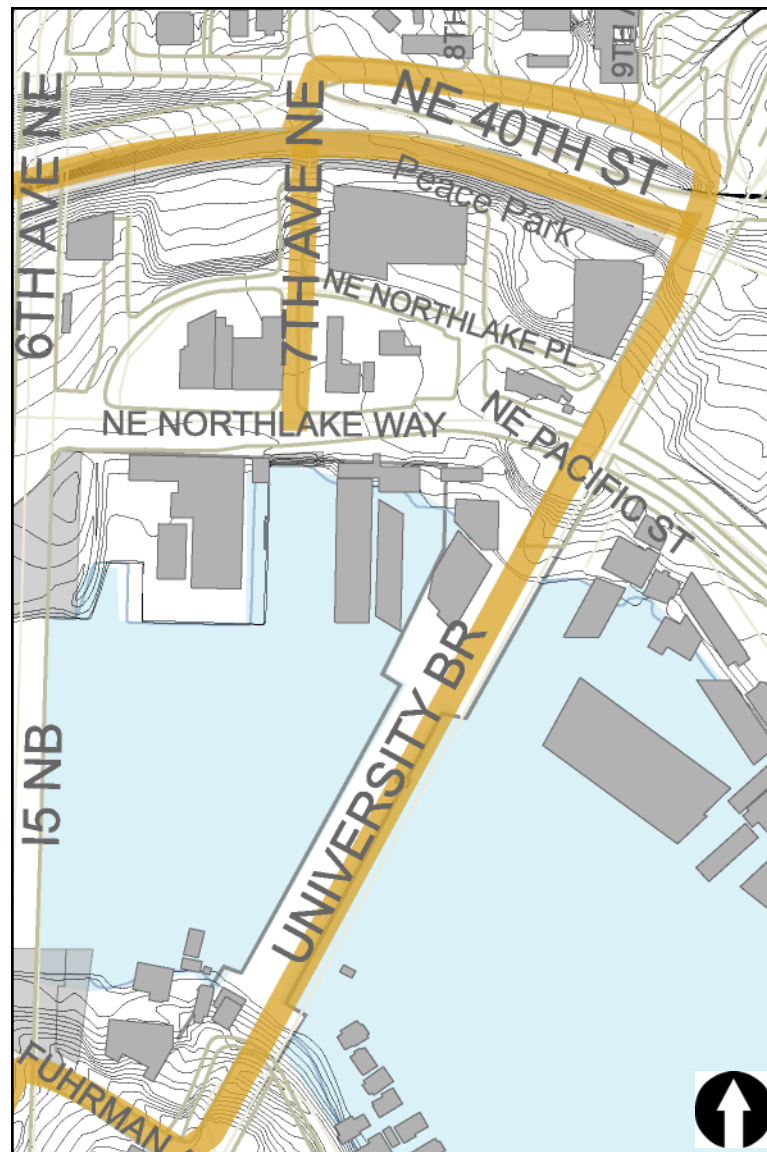
- Previous lack of sidewalk to south side of street limited pedestrian access to park and west side of University Bridge. Park/street right-of-way has historically been used for parking.
- Area has heavy pedestrian use due to transit stops, proximity to University of Washington and Burke Gilman Trail.



Former view of NE 40th Street alongside Peace Park.



ABOVE and BELOW: NE 40th Street with newly installed sidewalk.



#### GENERAL RECOMMENDATIONS

- Recently installed sidewalk improves pedestrian and bicycle connectivity to park and bridge and replaces head-in parking adjacent to Peace Park.
- Add/expand loop wayfinding to clarify route choices.



# INVENTORY

## 22 7th AVENUE NE and NE 40th STREET



### KEY ISSUES

- Area has high pedestrian use due to transit stops, proximity to University of Washington campus and the Burke Gilman Trail.
- Existing pedestrian facilities lack clarity; pedestrian island/refuge is not universally accessible.



7th Avenue NE from Burke Gilman Trail.



Connection with Burke Gilman Trail from NE 40th Street.



Burke Gilman Trail and NE 40th from 7th Avenue NE.



### GENERAL RECOMMENDATIONS

- Reconstruct/reconfigure pedestrian refuge island to better connect with Burke Gilman Trail and new sidewalk on NE 40th Street.
- Add/expand loop wayfinding to clarify route choices.

SEE PROJECT SHEET, PAGE 106.



# INVENTORY

## 23 BURKE GILMAN TRAIL University Bridge to Latona Avenue NE

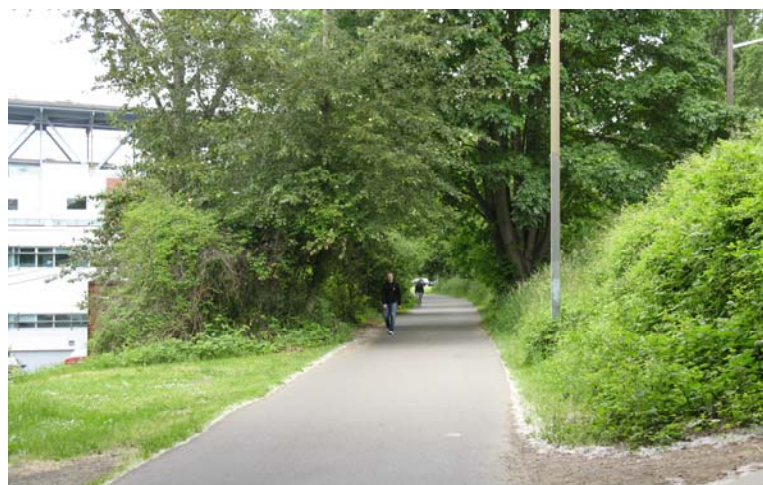
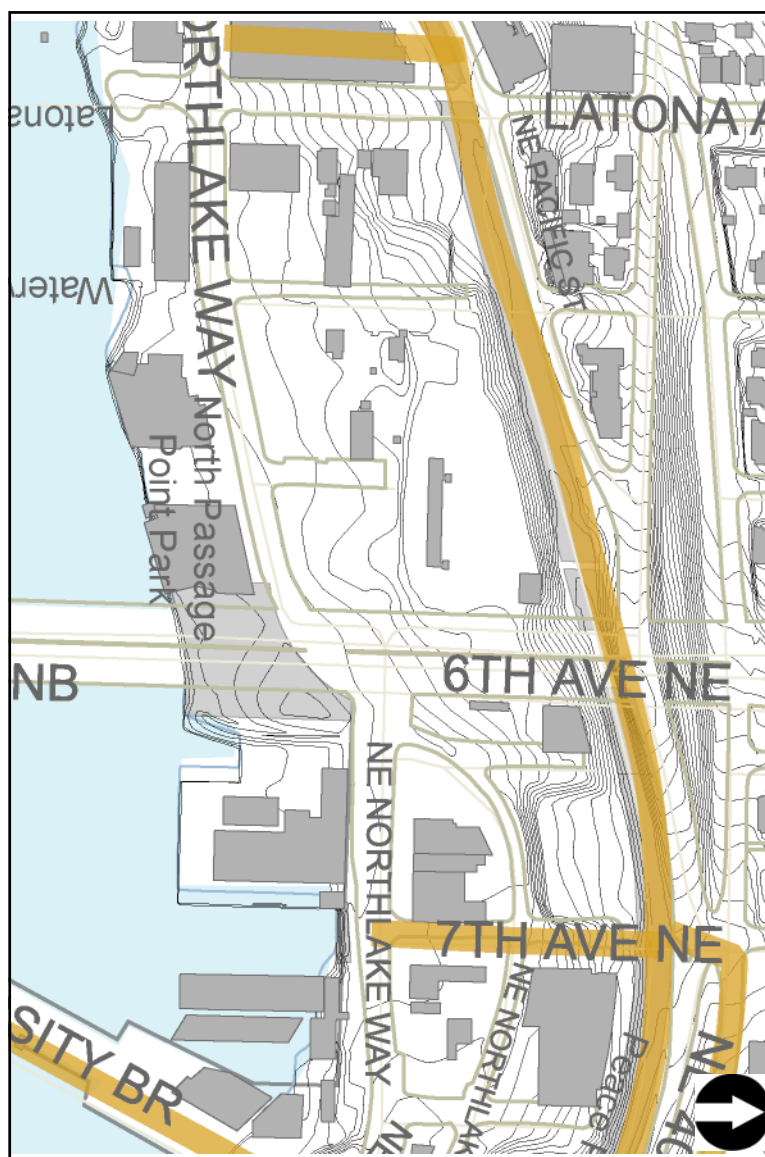


### KEY ISSUES

- Fast-moving bicycles and higher bicycle volumes create potential for discomfort and conflicts between pedestrians and bicycles on trail.
- Trail shoulder is not wide enough to provide a comfortable refuge area for pedestrians.



Burke Gilman Trail and NE 40th from University Bridge.



Burke Gilman Trail.

### GENERAL RECOMMENDATIONS

- Expand/enhance Burke Gilman Trail between University Bridge and Latona Avenue NE to add pedestrian space (consistent with future Burke Gilman redevelopment).

SEE PROJECT SHEET, PAGE 107.

# INVENTORY

## 24 NE Northlake Way University Bridge to Latona Avenue NE

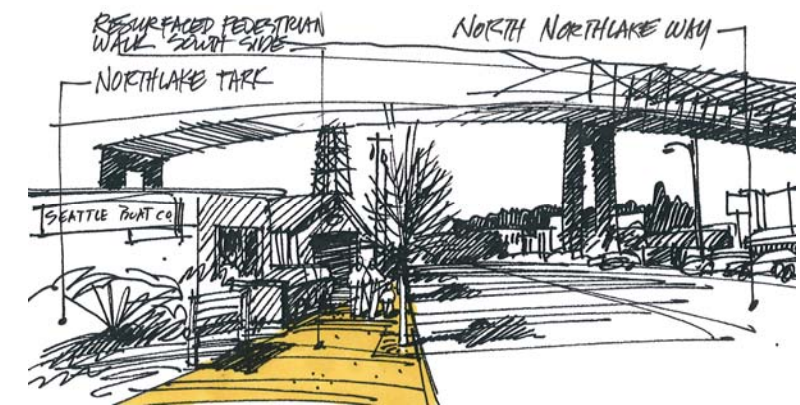
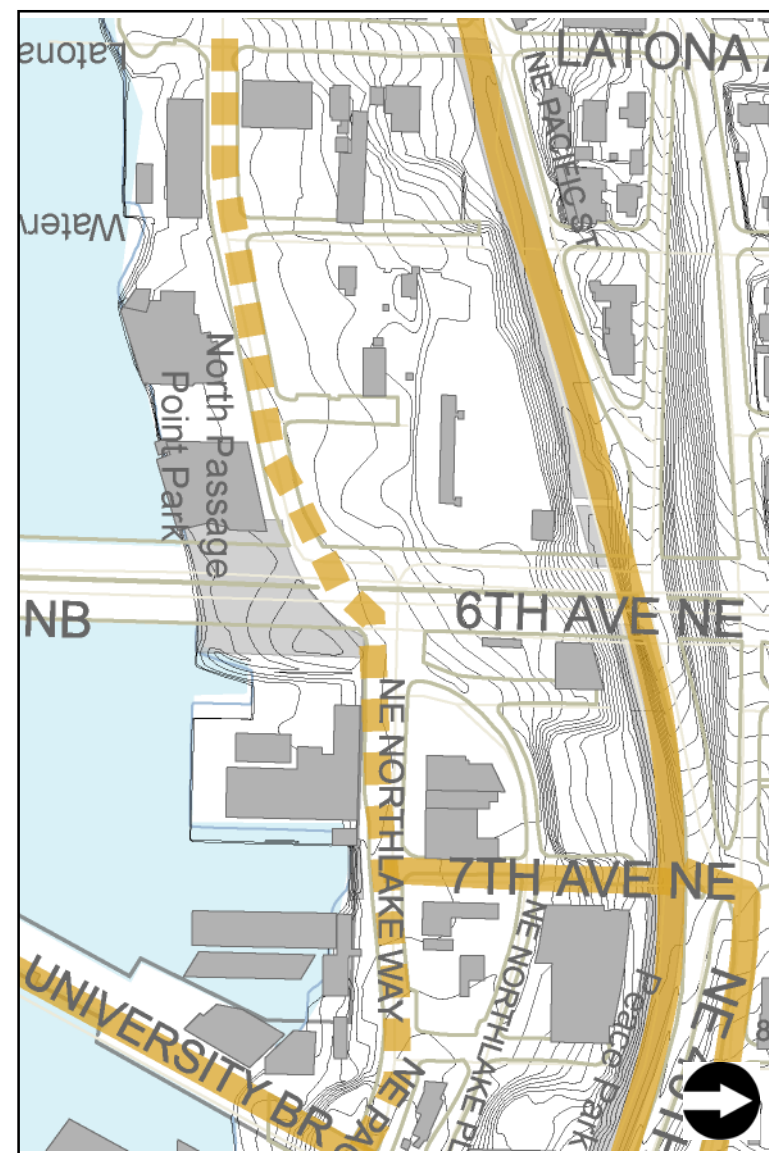


### KEY ISSUES

- Sidewalk along shoreline on south side of street is not continuous.
- Street lacks strong connections to street ends and waterways.
- Long-term parking on right-of-way impedes pedestrian flow.
- Connections with South Wallingford and North Pacific Street are difficult.



ABOVE and BELOW: NE Northlake Way, adjacent to Northlake Park.



### GENERAL RECOMMENDATIONS

- Enhance pedestrian corridor on south side of NE Northlake Way.

SEE PROJECT SHEET, PAGE 108.



# INVENTORY

## 25 NE Northlake Way and 6th Avenue NE



### KEY ISSUES

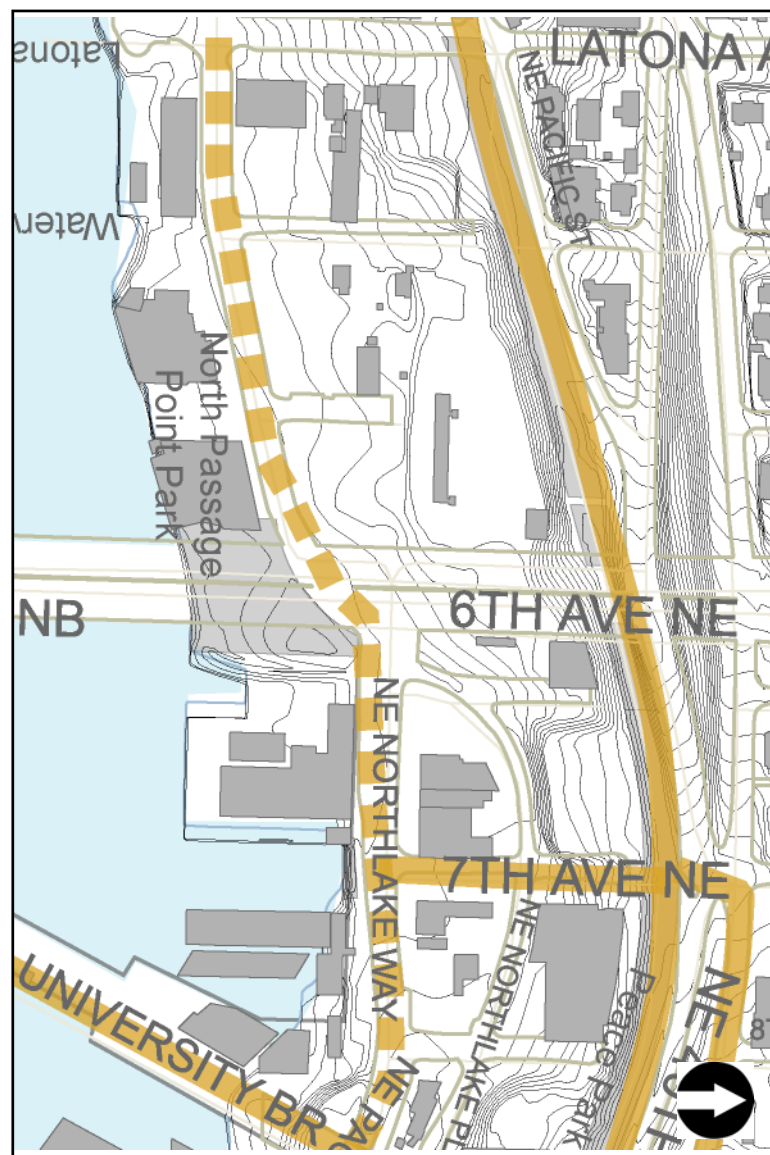
- Intersection lacks pedestrian continuity, universal accessibility.
- Curb ramps are missing on some crossing legs.
- Connection to North Passage Point Park are poor.



ABOVE and BELOW: 6th Avenue NE from North Passage Point Park.



ABOVE, LEFT and RIGHT: NE Northlake Way and intersection with 6th Avenue NE.



### GENERAL RECOMMENDATIONS

- Enhance pedestrian connections through intersection.
- Improve/expand loop route to connect east-west and into park.

SEE PROJECT SHEET, PAGE 109.



# INVENTORY

## 26 NORTH NORTHLAKE WAY Latona Avenue NE to Gas Works Park

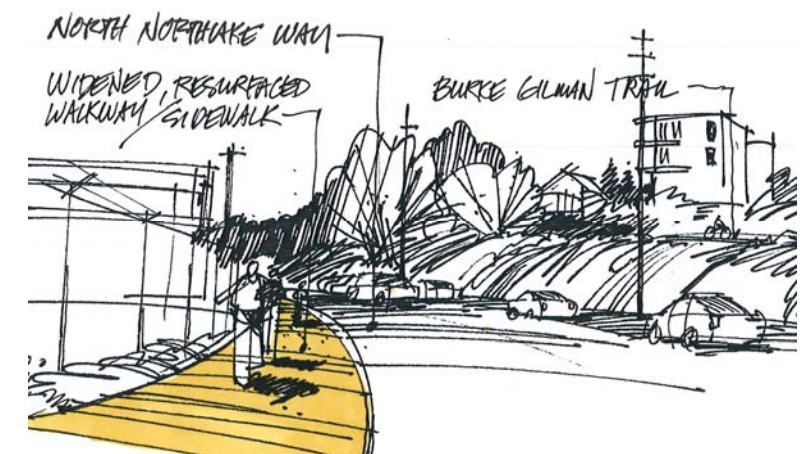


### KEY ISSUES

- Street lacks continuous dedicated pedestrian path along shoreline.
- Street has high traffic volumes, including commercial traffic.
- Street width is narrow, and pedestrian connection into Gas Works Park is awkward.
- Burke Gilman Trail does not provide access to Lake Union shoreline.



North Northlake Way looking west.



North Northlake way with proposed sidewalk.

### GENERAL RECOMMENDATIONS

- Modify the street corridor to enhance pedestrian passage on the south side.

SEE PROJECT SHEET, PAGE 110.



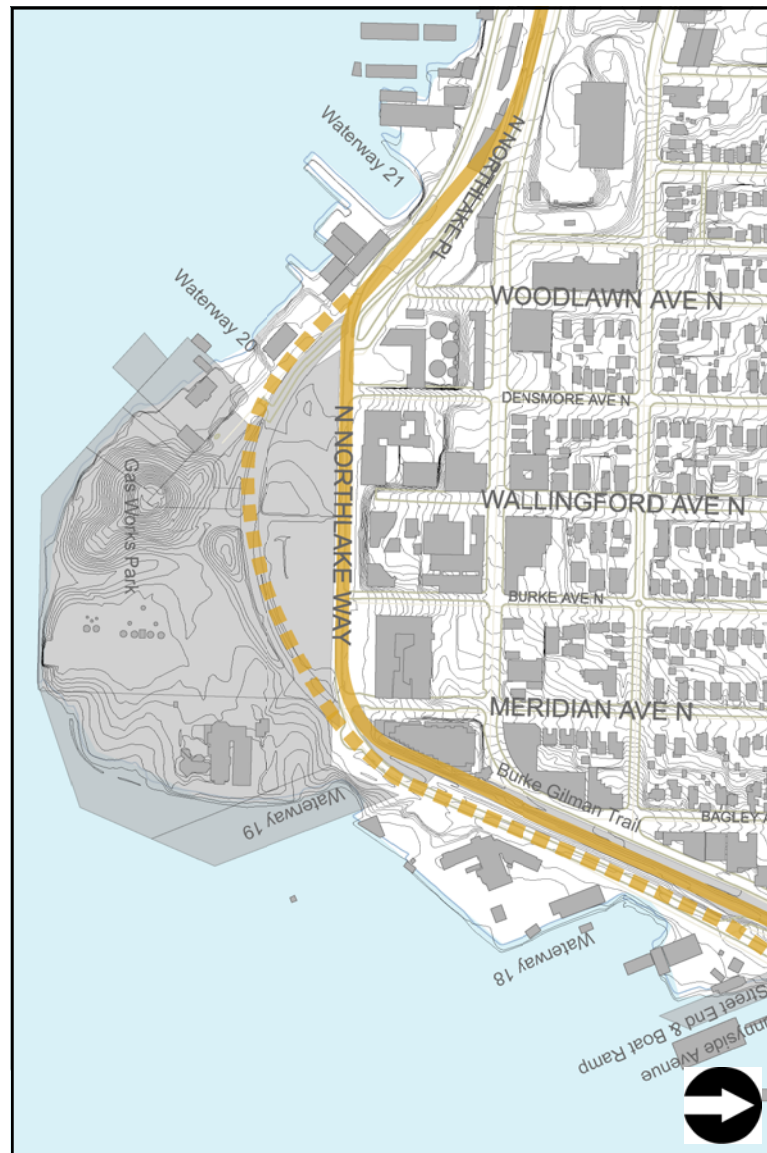
# INVENTORY

## 27 GAS WORKS PARK



### KEY ISSUES

- East and west entries to park from North Northlake Way and the Burke Gilman Trail (BGT) are problematic for bikes and pedestrians due to the crossing angle of Northlake, sight distance limitations, old tracks, and potential for user conflicts.
- Diverting BGT trail users away from park entry is a missed opportunity.
- The primary pedestrian entry to the park lacks definition and clarity.



Path along former railroad right-of-way at central entry into Gas Works Park.



Proposed improved pathway through Gas Works Park.

### GENERAL RECOMMENDATIONS

- Enhance east entry at Meridian Avenue North and west entry at Burke Avenue North into Gas Works Park.
- Modify the planned NW corner park improvements to provide a loop connection.
- Route the loop through the park on the existing former railroad route.

SEE PROJECT SHEET, PAGE 111.

# INVENTORY

## 28 NORTH NORTHLAKE WAY Gasworks Park to Stone Way North

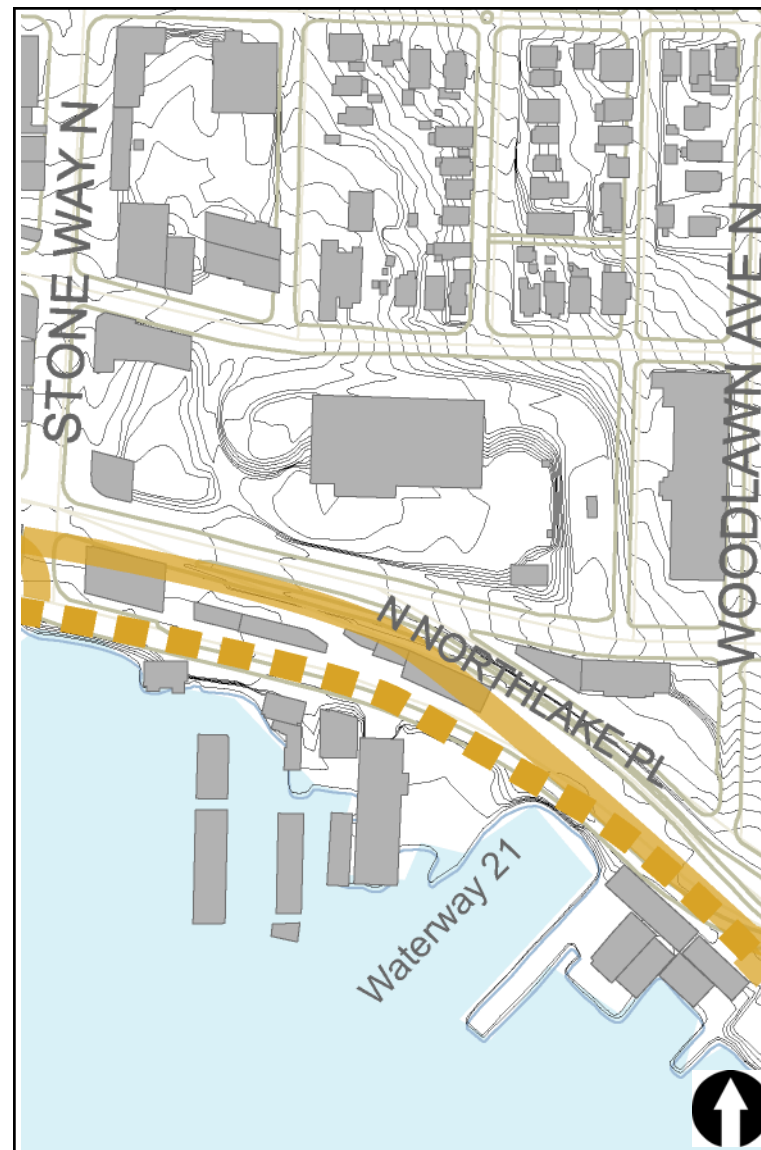


### KEY ISSUES

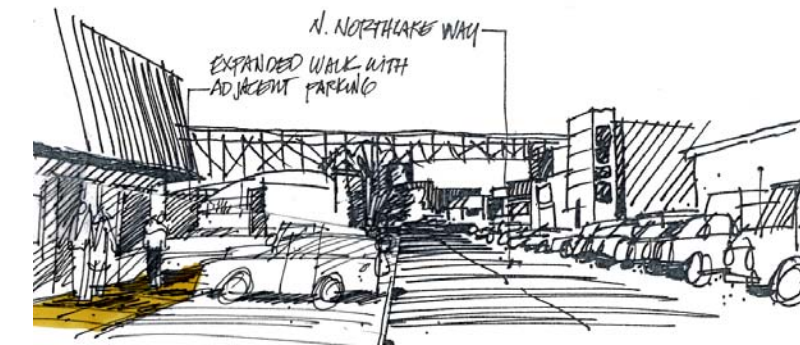
- Street has high traffic volumes, including commercial traffic, especially at intersection with Stone Way North.
- Street lacks a continuous dedicated pedestrian path along shoreline.
- Paved width is narrow.
- Burke Gilman Trail does not connect to Lake Union shoreline.



LEFT: North Northlake Way west of Gas Works Park.  
RIGHT: North Northlake Way west of Stone Way North.



ABOVE and BELOW: Proposed walkway along south side of North Northlake Way.



### GENERAL RECOMMENDATIONS

- Create a continuous sidewalk/pathway along the south side of Northlake Way, connecting to street ends and waterways.

SEE PROJECT SHEET, PAGE 110.



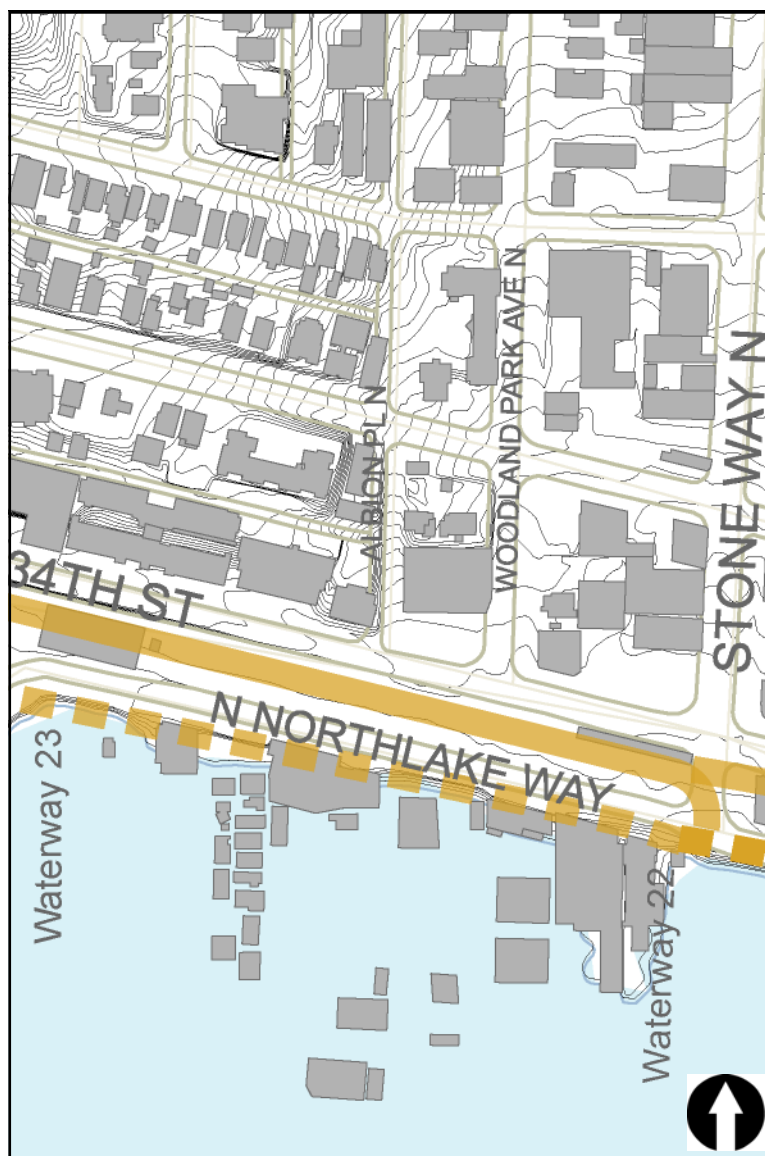
# INVENTORY

## 29 NORTH NORTHLAKE WAY Stone Way North to Aurora/Troll Avenue North

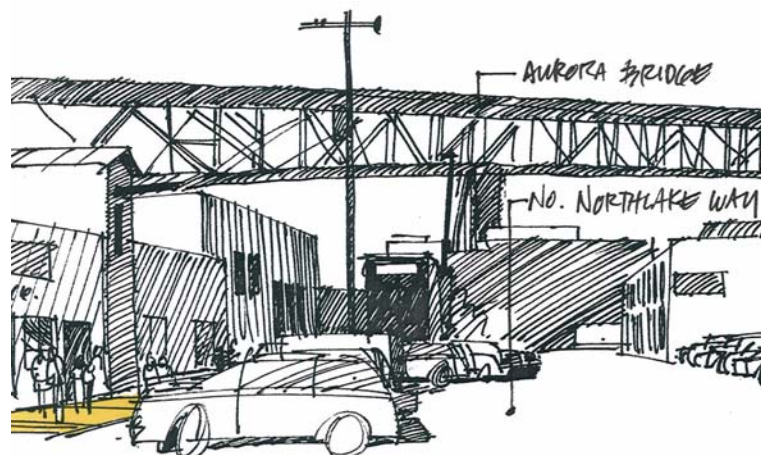


### KEY ISSUES

- Street lacks continuous dedicated pedestrian path near lake; area closest to shoreline is commercial area with large parking lots.
- The only public lake edge access is at the Lake Washington Rowing Club facility at Waterway 23.
- The accessible route to Fremont Bridge is to the east on North 34<sup>th</sup> Street rather than along the shoreline.



North Northlake Way west of Stone Way North.



Proposed pathway along west side.

### KEY ISSUES continued

- This stretch of the Burke Gilman Trail between Stone Way and the Aurora Bridge is constricted and runs along a wall, making the route uncomfortable for pedestrians.

### GENERAL RECOMMENDATIONS

- Expand/enhance pedestrian corridor on south side of Northlake Way and route pedestrians along this route.
- Clarify accessible loop route choices with additional wayfinding.

SEE PROJECT SHEET, PAGE 110.

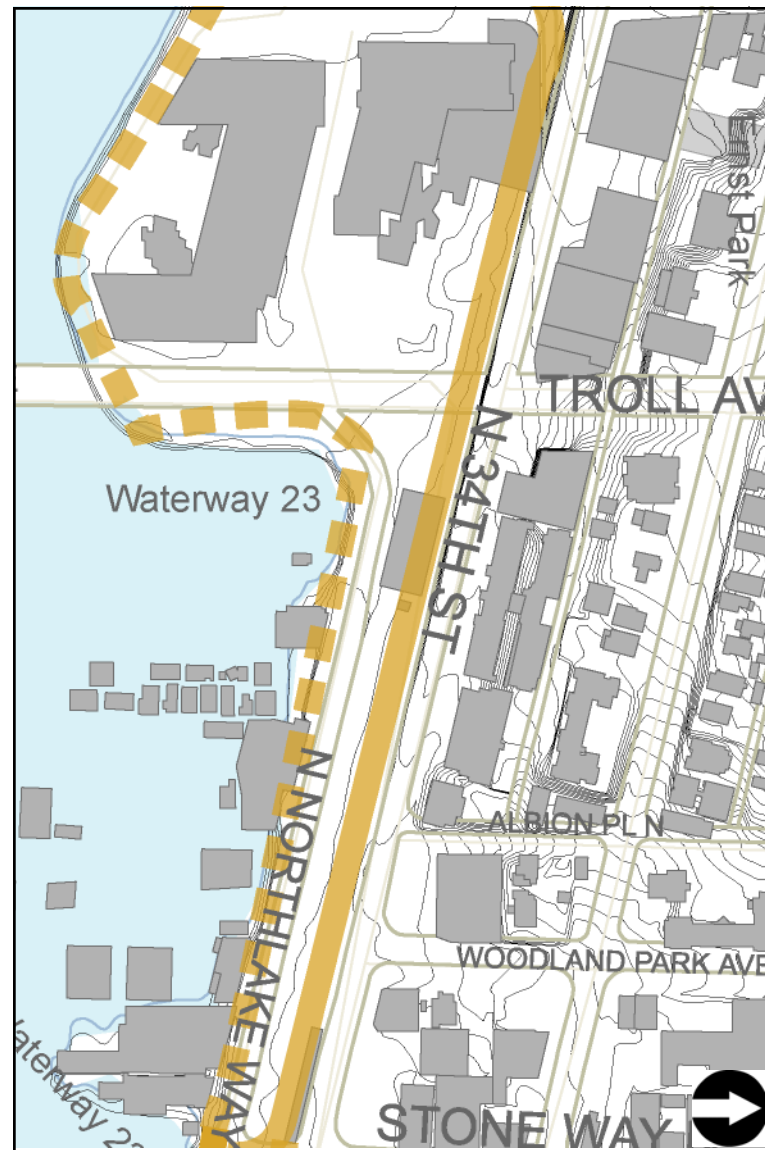
# INVENTORY

## 30 NORTH NORTHLAKE WAY/NORTH 34th STREET Aurora/Troll Avenue North to Fremont Bridge

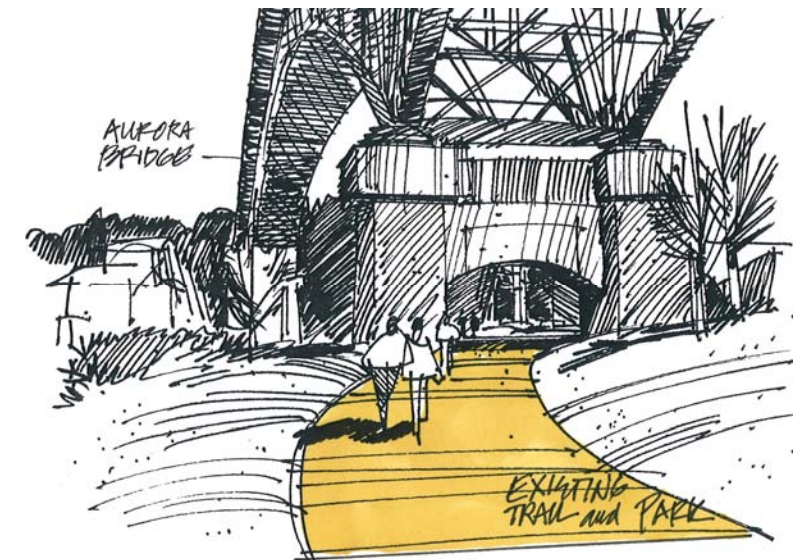
### KEY ISSUES



- Accessible route to Fremont Bridge is on 34th Avenue North, which has a narrow sidewalk and lacks separation from traffic.
- Scenic route near shoreline providing access to public park and connection north to Ship Canal Trail is not universally accessible and lacks wayfinding. Accessible connection from east is circuitous and unclear, and decision point lacks wayfinding.



ABOVE and BELOW: Path under Aurora Bridge.



### GENERAL RECOMMENDATIONS

Utilize existing facilities along shoreline and under Aurora with the following additions or alterations:

- Use signage to make decision points for accessible route clear.
- Enhance connections to public shorelines and Ship Canal Trail in both directions.
- Take advantage of historic/interpretive opportunities.

SEE PROJECT SHEET, PAGE 112.



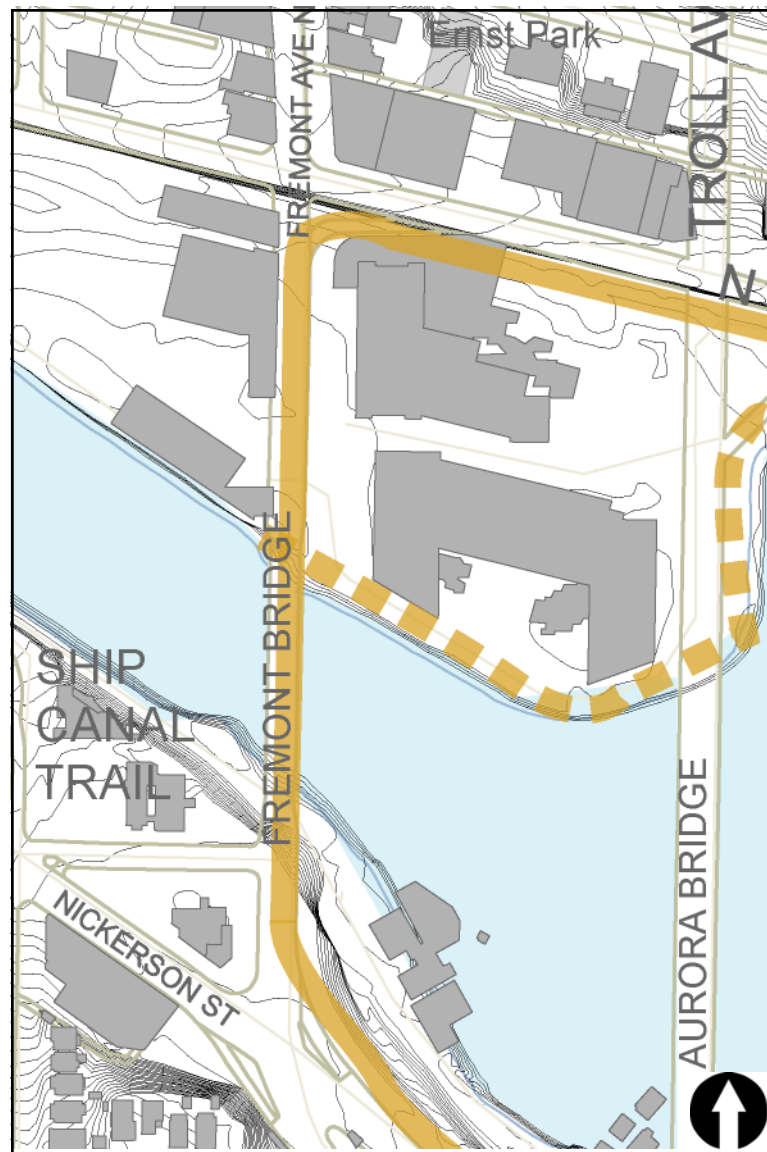
# INVENTORY

## 31 FREMONT BRIDGE



### KEY ISSUES

- Connection between the loop and the bridge are not universally accessible from every approach.
- Bicycle and pedestrian traffic must mix along path on eastern side of bridge.
- Decision points for accessible routes are some distance away from the bridge.



Existing stairway from shoreline pathway to bridge deck.

### GENERAL RECOMMENDATIONS

- Provide universally accessible connections to Fremont Bridge.
- Provide wayfinding to clarify route choices, connections.

SEE PROJECT SHEET, PAGE 113.



# INVENTORY

## 32

### WESTLAKE AVENUE

Fremont Bridge to beginning of Westlake shoreline walkway



#### KEY ISSUES

- New sidewalk on Westlake provides on-street connection between Fremont Bridge and Westlake commercial area, but there is no continuous path along shoreline under the bridge to connect westward to the Ship Canal Trail.
- Commercial and residential parking in right-of-way under the Fremont Bridge and to the south prevents comfortable pedestrian passage.



LEFT: Shoreline right-of-way extending from under Fremont Bridge south to end of new sidewalk on Westlake.  
RIGHT: New sidewalk on Westlake Avenue, south of Fremont Bridge.



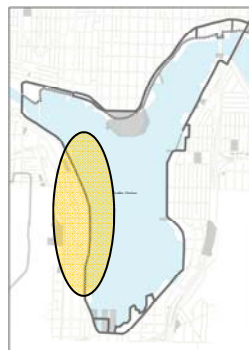
Proposed enhancements to shoreline right-of-way.

#### GENERAL RECOMMENDATIONS

- Clarify accessible route on new Westlake Avenue sidewalk.
- Use signage/wayfinding to make route alternatives more clear.
- Improve/enhance the pedestrian walking route on the old railroad embankment from the bridge to Westlake commercial area. Create a continuous pathway by resurfacing or creating pathway. Use elements such as bollards and signs to minimize parking intrusion.
- Seattle Parks Foundation/SDOT will collaborate to provide stewardship and maintain vegetated edge on Westlake Avenue.
- Take advantage of historical/interpretive opportunities in this area.

# INVENTORY

## 33-37 WESTLAKE AVENUE (continued on next page) Beginning of shoreline walkway to Lake Union Park

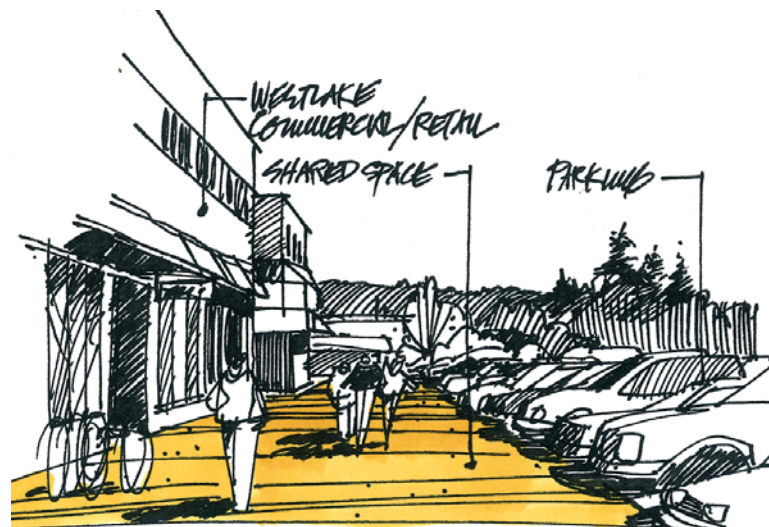


### KEY ISSUES

- Mix of pedestrians, bicycles, and vehicular business access on pathway make travel for trail users uncomfortable.
- Encroachments (displays, signing, parking) on public right of way by business hinder safe pedestrian passage.
- Visibility is limited in some place by mature vegetation, parking and driveway layout.



33. ABOVE and BELOW: Shoreline pathway at 2700 block of Westlake Avenue North (Diamond Marina).



### GENERAL RECOMMENDATIONS

- Reconfigure existing sidewalks and loading zone/ frontage lane/parking area into a “shared space” corridor for multiple users.
- Provide wayfinding/signing to clarify uses, routing.
- Maintain/enhance localized amenities, floating home connections, street ends, etc.
- Make spot improvements to increase loop awareness, visibility.
- Improve and maintain vegetation at 4 street end/ shoreline viewpoints/public art locations.

SEE PROJECT SHEET, PAGE 114.



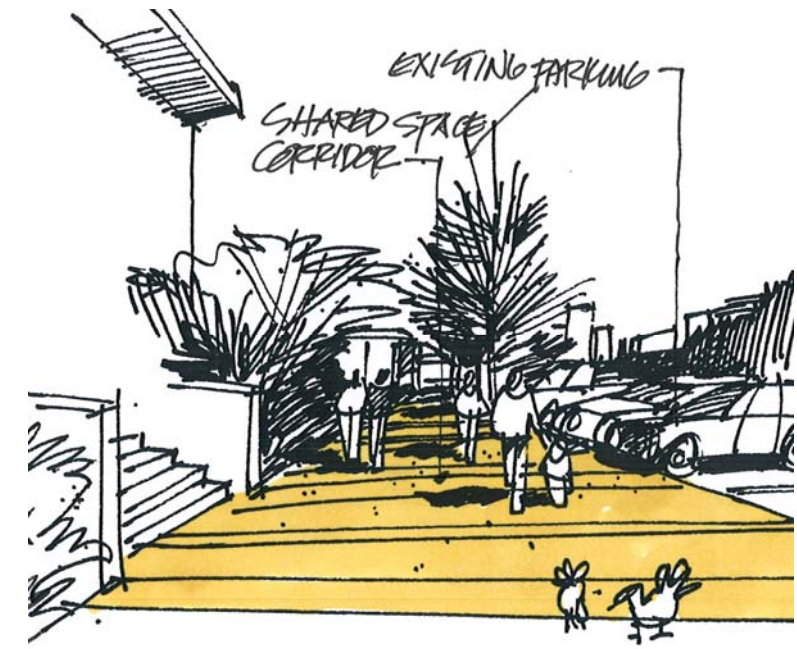
# INVENTORY



34. ABOVE and BELOW: 2500 block of Westlake Avenue North.



35. ABOVE and BELOW: 2000 block of Westlake Avenue North (at China Harbor Restaurant).





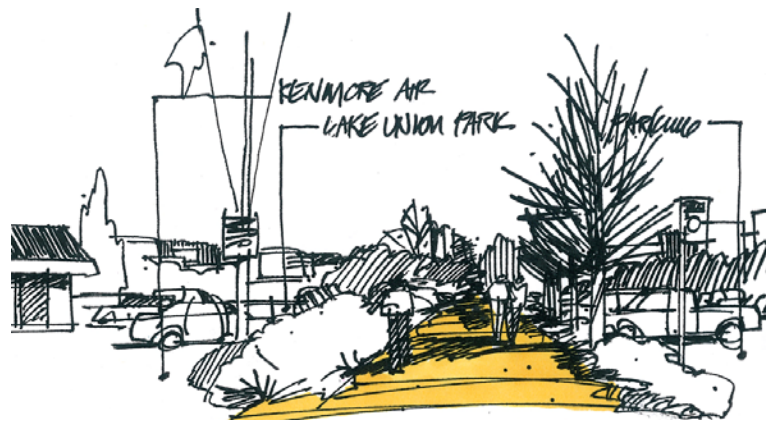
# INVENTORY



36. ABOVE: 1800 block of Westlake Avenue North (at Safe 'n Sound Swimming).  
BELOW: Proposed shared space in converted loading zone/frontage lane.



37. ABOVE: 1000 block of Westlake Avenue North (at Kenmore Air).  
BELOW: Enhanced shared use path.



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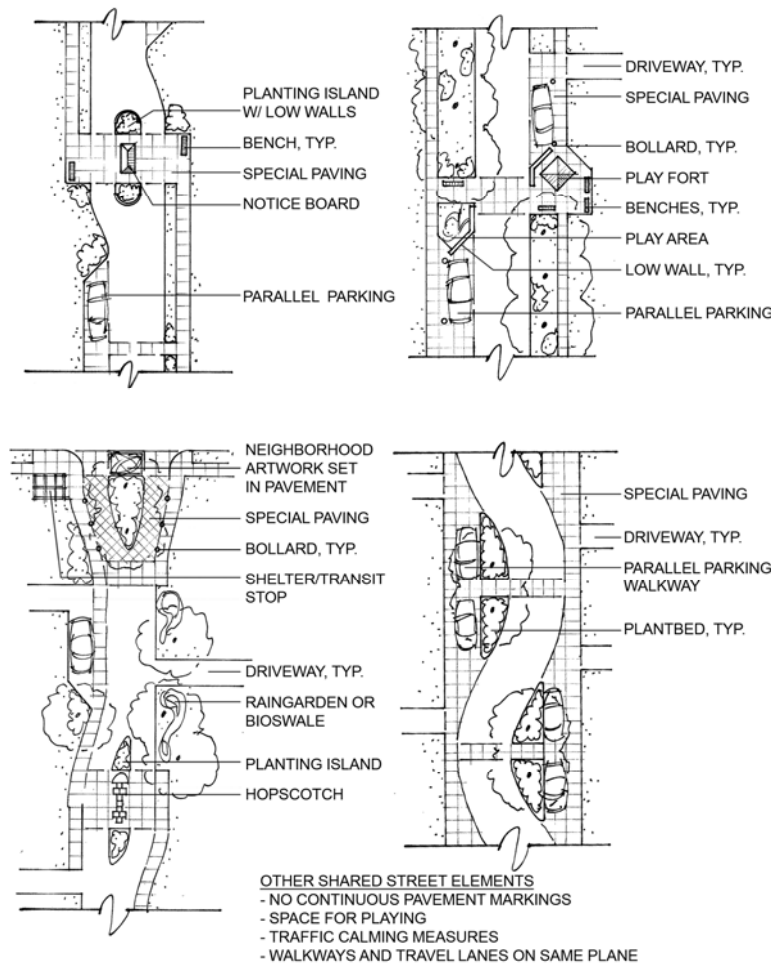
## SPECIAL RECOMMENDATIONS

Several segments of the loop segments proposed challenging conditions that required “out of the box” thinking to generate a design that would provide comfort, connectivity, and a good fit with the surroundings. The shared space concept, described below, is one such concept, and is proposed for segments of both Fairview Avenue East and Westlake Avenue North.

Shared space, in which traditional traffic control devices and separation between vehicles, pedestrians, bicyclists and other users are removed, creates a communal public space where all users of the street are forced to proceed with caution and with regard for one another. The concept was pioneered by the Dutch traffic engineer Hans Monderman, and is being successfully implemented in Europe and the U.S.



Shared space street in Amsterdam  
 Accessed from flickr.com/photos/22516083@NOO/755254658. Flickr user Joel Mann.



Plan view examples of shared space street designs. MacLeod Reckord, 2009.

The shared space concept distinguishes between the “fine-mesh” slow street network—appropriate for residential and some business streets—as places for human activity and interaction, and “large-mesh” fast network—major arterial, highways and freeways—which allow vehicles to travel quickly to reach their destinations. The shared space street concept is considered appropriate for Fairview Avenue East because with Eastlake as the parallel arterial, vehicles have the option to choose a faster route.

The idea behind removing the traffic control devices and curbs is to create an environment where all users of the street must communicate with one another and not simply rely on signs or other fixed physical cues to tell them how to act. The uncertainty created by removing these devices, it is believed, promotes caution and slower speeds, and therefore safety. The shared space concept uses urban design interventions rather than traditional small-scale traffic calming tools to reframe the concept of the street as a public space for use and enjoyment, as well as mobility for all modes.

In the absence of curbs to define the street space, elements such as bollards, trees, street furniture, landscaped areas, and planters are used to delineate the space and denote certain functions, such as appropriate places for cars to park (see plan view examples to the left). The shared space concept would complement the green street design guidelines, as natural drainage elements such as perme-



Local examples of shared use streets:  
Occidental Square and Pike Place Market

able paving, swales, and rain gardens could easily be incorporated.

#### **Fairview Avenue East as Shared Space Street**

From a functional standpoint, Fairview Avenue East is a unique street that serves as a spine and a foothold for a large floating home community, in addition to serving various industrial and commercial uses. Many of the functions that would ordinarily take place on private property on a typical street with “landed” housing happen in the public right-of-way of Fairview Avenue East: primary access and parking, garbage collection and mail delivery. In addition, the street is a signed bicycle route and has many shoreline street ends, providing recreational access, opportunities for boat launching, fishing, and viewpoints. In short, numerous functions and activities occur in a constrained public right-of-way.

Over time the street has developed a unique and strong neighborhood character and identity, which draws more than just local traffic, owing to its scenic qualities and self-described “funky” character. The street has been designated a neighborhood green street, and the neighborhood and community council have sought to make the street more comfortable for all users under the green street design guidelines, while at the same time keeping the character intact.

During the master plan process, it quickly became clear that in order to create a safe and convenient path for pe-



European examples of shared space streets  
Google Images, Wikipedia/commons/5/55, Flickr user Dylan Passmore

destrians separate from traffic, the limited width of the right-of-way meant that on-street parking would have to be sacrificed. Both residents and business owners were very vocal about the importance of on-street parking, and expressed a strong desire to retain as much parking as possible. With the option of a separated path eliminated, the concept of an integrated approach designed to accommodate all the functions of the street, maintain the elements that are critical and work well today and to enhance the livability, led to the proposal for a shared space treatment.

In essence, the street currently functions as a shared space, with a mix of users already operating in a shared corridor. However, with standard rules-of-the-road in place, vehicles are the dominant force, to the detriment of pedestrians’ and cyclists’ comfort.

Because this treatment would affect vehicular traffic patterns, and the public identified traffic issues as a major factor affecting Fairview Avenue East, the master plan included a study of traffic patterns in the area. The study’s findings, which can be found in the appendix, show that north of East Lynn Street, directional distribution of traffic and the overall level of traffic demand do not indicate either cut-through traffic or significant traffic generators that would result in residential traffic management issues. South of East Lynn Street, moderate to high levels of cut-through traffic occur during peak travel times. The study





Fairview Avenue East.

suggests that a diverter at East Newton Street may help reduce cut-through traffic and also serve as an entry point to the shared space treatment.

More information about the application of the shared space concept to Fairview Avenue can be found in the projects section.

#### **Westlake Avenue North as Shared Space Street**

Like Fairview Avenue, Westlake Avenue is a corridor that supports many functions, including floating home access and associated postal service and garbage collection facilities; retail and commercial development; developed street ends and waterways; recreational access and extensive surface parking. The recent development of the corridor segregates the physical roadway from parking, but mixes open space access, bicycle and pedestrian travel, and business access along the shoreline walkway. This mix sometimes results in conflicts between bicycles and pedestrians, and business access with recreational use of the walkway. In addition, encroachments in the right-of-way (parking, advertising sandwich boards, boat trailers, etc.) narrow the shoreline walkway.

Like Fairview Avenue East, a parallel bicycle facility exists nearby (bike lanes on Dexter Avenue North), but the steep topography and distance from Westlake make the route inconvenient or unfeasible for some cyclists. Cyclists who chose to travel along Westlake use either the parking lot



Westlake Avenue North.

or the shoreline walkway, depending on their comfort level. Both routes can feel uncomfortable.

While conversion of the entire corridor to shared space street is impractical, the loading zone/frontage lane that runs parallel to the shoreline walkway (almost but not quite its entire length) presents an opportunity to create a more generous, intrusion-free space to accommodate pedestrians, bicyclist, and parking.

More information about the application of the shared space concept to Eastlake and Westlake Avenues can be found in the projects section.

## OTHER ELEMENTS



Waterway 15.

### Parks, Waterways, and Street Ends

Lake Union features over 39 distinct open spaces in the form of parks, waterways and shoreline street ends. Lake Union Park at the south end and Gas Works Park at the north end, at 12 acres and 19.1 acres respectively, are significant open spaces serving the whole city (and also provide restroom facilities along the loop). There are also numerous opportunities all along the loop for neighbors and citizens alike to access the shoreline, launch small watercraft, enjoy the views, and appreciate shoreline habitat via the lake's many shoreline street ends and waterways. All the waterways and street ends are open for public access and nearly all have maintenance and improvement needs.

Beginning in the early 1970s, many street ends were converted to mini-parks, creating open space out of unused city street rights-of-way. The 1990s saw the redevelopment of some of these parks, and the development of new ones, especially in the Eastlake neighborhood. The waterways are under the purview and stewardship of the State Department of Natural Resources, whose objective it is to restore and preserve shoreline habitat.

An inventory of each of these open spaces was conducted, in which existing features conditions were documented and possible program elements identified, including opportunities for storm drainage features. This inventory can be found in the appendix.



Aurora Street end.



Good Turn Park/East Martin Street end.



East Louisa Street Mini-Park/Bouledrome.





# Cheshiahud Lake Union Loop

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## INVENTORY: PARKS, WATERWAY AND STREET ENDS

### LEGEND

- Street End
- ★ Waterway
- ✱ Hand-carried Boat Launch
- M✱ Motorized Boat Launch

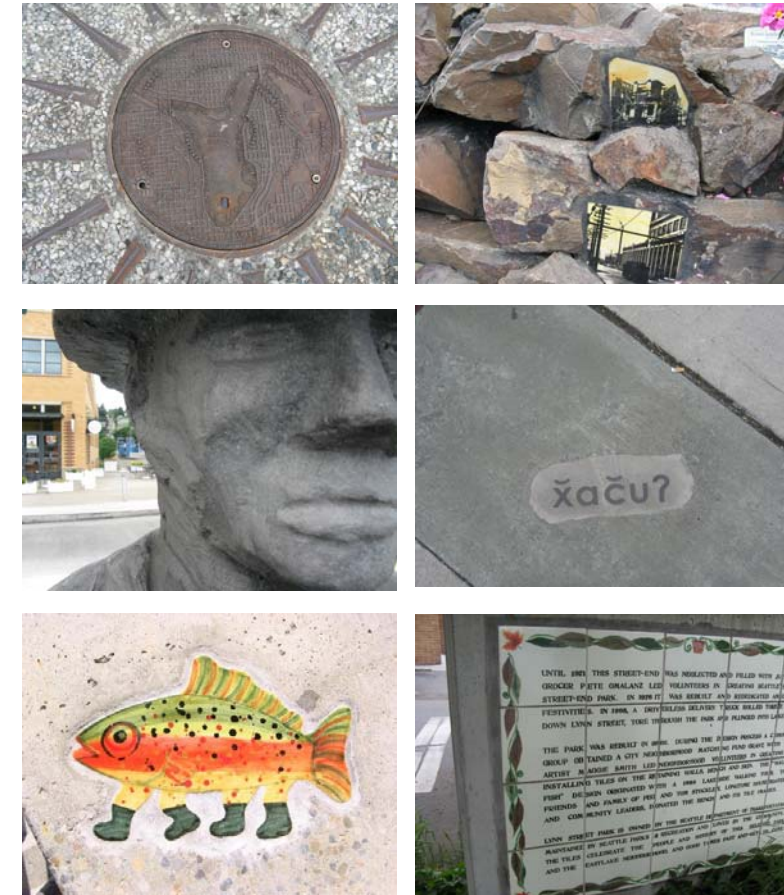
### Art Opportunities

Development of the loop corridor presents an excellent opportunity for the incorporation of public art, in addition and in complement to the proposed wayfinding signage and cultural/historical interpretation, described in the following section.

All around the lake, small scale art elements have been incorporated into shoreline streets ends, parks, and waterways as an expression of historical and neighborhood themes, adding richness and texture to the public spaces. The development of the loop as corridor, however, presents a unique opportunity to develop larger themes that can be carried out at both large and small scale: 6.2 miles along which to tell a story, or many stories, or create events that would compel loop users to keep going further and further. An art program for the loop could be used to strengthen and unify the identity of the whole corridor as a whole.

Some ideas generated to date (thanks to Dick Wagner):

- Mark the original shoreline with red bricks made from Queen Anne clay. The original shoreline could be marked at points along the loop route, with bricks and or other markers, seen from the route.
- Designate street ends and waterways as satellite parks of the loop. Use Native American names for the sites and have historic interpretive information at the parks.
- Create a series of community boats, made and funded by each community, located at all the parks for free public use. Each community picks its color. The program could be managed by The Center for Wooden Boats. Program could be web-based with GPS monitors & text messaging.
- Create a pedestrian ferry system that can land at all Lake Union communities.
- Create a moveable island belonging to all Lake Union neighborhoods. Some ideas include a “seafood island” sponsored by Ivar’s, serving the neighborhoods. Or the Lightship, with ‘SEAFOOD’ written in large (removable) white letters on the side, majestically cruising around the lake.





## SIGNAGE AND WAYFINDING

### Introduction

Signage for the Cheshiahud Lake Union Loop will visually express the unique regional and history of Lake Union. Signage elements include the logo, symbols, colors, materials, images, graphics, sign types, maps, stories, arrows, medallions, sketches; all contributing to the identity of the Loop.

### Existing Signage

Wayfinding signage was installed at the initiation of the master plan project. The “flag” type system is consistent with pedestrian signage standards and center city system to create a connection between downtown and the lake. The existing pedestrian signage is also intended to guide bicyclists following the route. Additionally, bike signs, per City of Seattle standards, will be put in place where bicycle routes intersect, such as at the intersection of Valley and Roy Streets, as per the *Bicycle Master Plan*.

The signage system developed for the master plan has been generated specifically for this project and as such provides more opportunities for expressing the unique character and history of the loop. It is meant to complement the existing wayfinding signs. It is recommended that signage be used to further distinguish route choices for “fast bike” and “slow bikes,” using signage similar to standard city bike route signage.



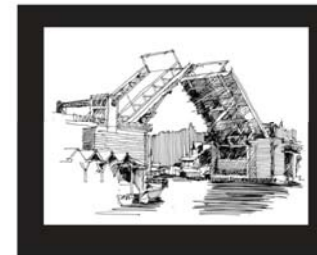
A. Cheshiahud Medallion



B. Diagrammatic Map Medallion



C. Font: Futura Book



E. Interpretive Sketches



D. Arrows

### Branding Elements

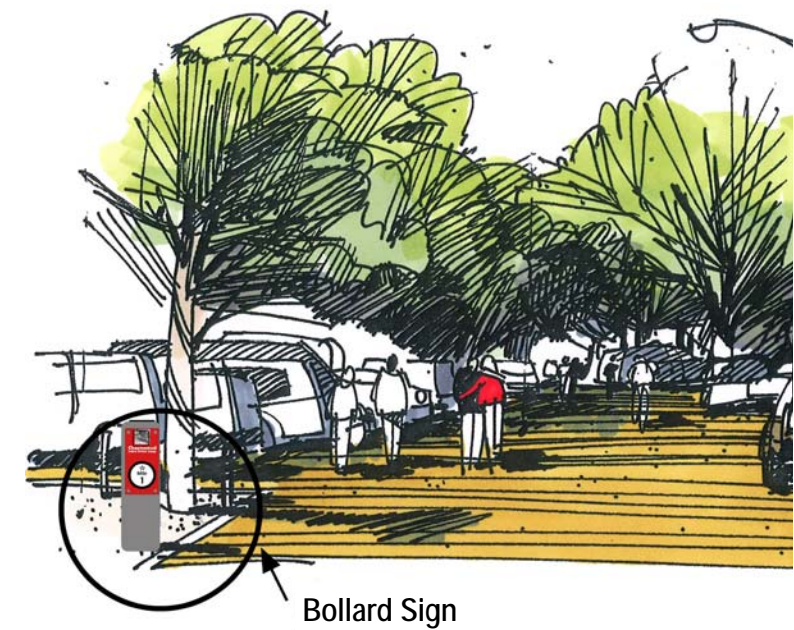
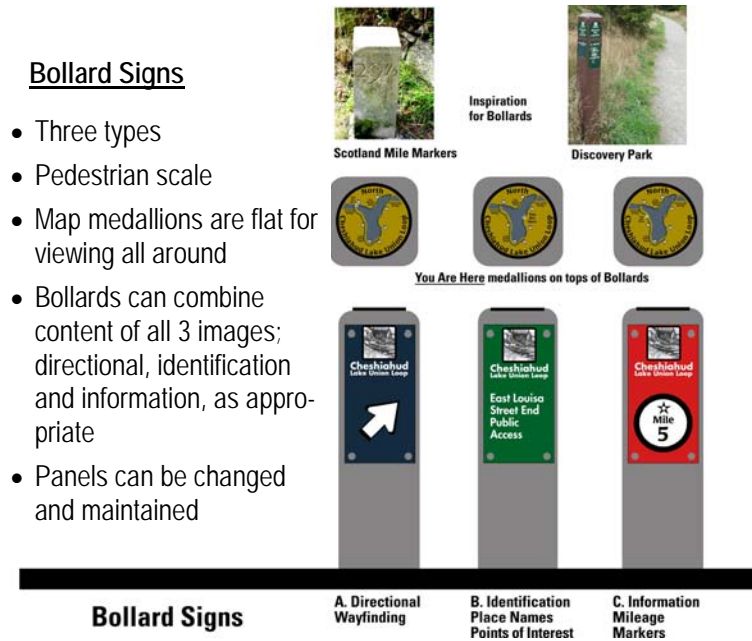
#### Branding Elements

1. The loop logo includes an historic photo of Chief Cheshiahud/Lake John with his canoe in front of his house. The name of the loop appears below.
2. Map medallions could be cast bronze, with stars showing “You Are Here” locations. They could be mounted on top of square bollards, seen from the top, always oriented to north, to help with wayfinding.
3. Arrows could accompany directional signs. Arrows would be standard *Manual of Uniform Traffic Control Devices* (MUTCD) type.
4. Font is Futura.
5. Sketches of places could accompany interpretive stories to capture the timeless character of places and landmarks around the loop.

## SIGN TYPES

### Bollard Signs

- Three types
- Pedestrian scale
- Map medallions are flat for viewing all around
- Bollards can combine content of all 3 images; directional, identification and information, as appropriate
- Panels can be changed and maintained

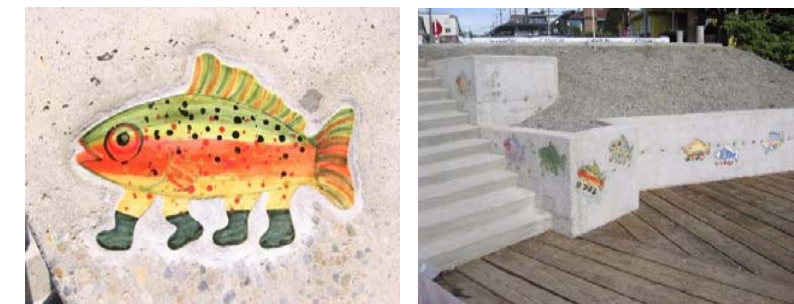


### Sign Types

1. The landmark signs could be placed at the trail-head, mile zero, at Lake Union Park, as well as at Gas Works Park. Prominent and iconic, it could have the main logo, a large map, and a brief history of the loop project and Lake Union.
2. Bollard signs, directional, identification and information could be located on public property along the loop path. Bollards are low and scaled to pedestrians.
3. Interpretive signs could be located at places with historical significance (see interpretive sign locations, following). These signs could be at pedestrian scale, for easy reading.

### Signage Assumptions

1. The loop is primarily pedestrian. Parts of it also serves bicycle riders as a regional connector.
2. The mileage markers start at Lake Union Park and go counter-clockwise around the lake.
3. Sign elements are vandal resistant, locally produced and easily maintained.



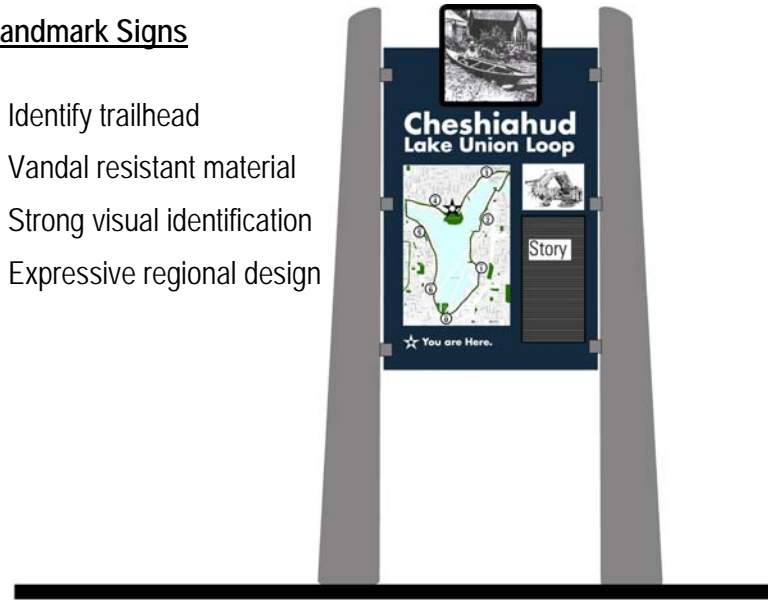
Examples of “walking fish” tiles are used in street ends along Eastlake Avenue East; such elements could be incorporated into bollards as an expression of neighborhood identity, as described in the previous section on Art Opportunities.



## SIGN TYPES

### Landmark Signs

- Identify trailhead
- Vandal resistant material
- Strong visual identification
- Expressive regional design

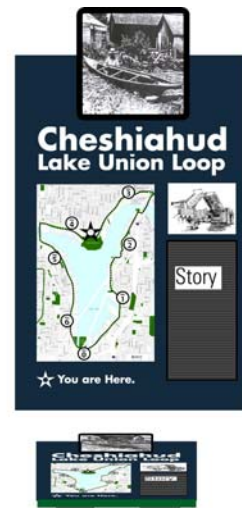


Landmark Sign

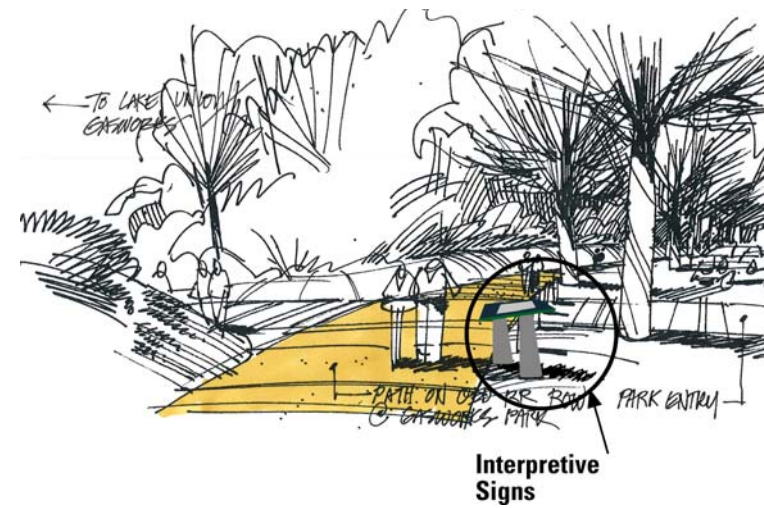


### Interpretive Signs

- Location along loop at places with stories
- Vandal resistant material
- Incorporate text and sketches and give history and context
- Expressive regional design
- Point to neighborhoods adjacent to the loop and points of interest



Interpretive Signs



### Interpretive Sign Locations

Some of the points of interest noted on the 2"x3" folded Cheshiahud Lake Union Map (refer to the list on page 24) have potential as interpretive sign locations, in addition to the following sites:

#### Lake Union Park

Within the 12 acres of Lake Union Park, the interpretive Lake Union Park History Trail will guide people through the environmental, recreational, transportation, Native American, industrial, and residential history of Lake Union. Through interactive elements, timelines, medallions and other features, the Lake Union History Trail will draw people into Lake Union Park and the story of the entire lake.

In addition, the idea of the interpretive elements along the loop are to extend this story around the lake, so there is a direct tie-in.

#### *Other possible interpretive themes:*

- Native American settlement on shores
- Naval Reserve
- Center for Wooden Boats
- History of industry

#### Terry Pettus Park

##### *Possible interpretive themes:*

- History of park and neighborhood

#### Roanoke Street Mini-Park

##### *Possible interpretive themes:*

- Boeing manufacturing on site

#### Fairview Park

- Olmsted legacy

#### University Bridge, south end; North Passage Point Park

##### *Possible interpretive themes:*

- Native American history
- Adjacent neighborhoods and points of interest



#### Gas Works Park

##### *Possible interpretive themes:*

- History of Gas Works, railroad, Burke Gilman Trail

#### Waterway 21; Waterway 23; Fremont Bridge, south end; Waterway 1; Blaine Street End; Waterway 2

##### *Possible interpretive themes:*

- History
- Adjacent neighborhoods and points of interest.





# Cheshiahud Lake Union Loop

Master Plan  
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## CONCEPTUAL SIGN LOCATIONS

### LEGEND

- T Trailhead/Landmark Sign
- B Bollards Signs
- i Interpretive Signs



**DRAINAGE BASIN CLEANSING OPPORTUNITIES**



Drainage basin cleansing on Fairview Avenue East, near Ward's Cove.

**Drainage Basin Cleansing Opportunities**

The Cheshiahud Loop provides opportunities to cleanse the drainage basins encountered along its path. There are 24 stormwater outfalls to Lake Union that can be improved through the proper management of the surface runoff and piped stormwater conveyances as they intersect the Cheshiahud Loop. The matrix of Parks, waterways, and street Ends, found in the appendix, lists specifically where some the tools described below could be applied.

This concept below of the cleansing of one of the outfalls along the alignment was previously developed for the Waterway 18 renovation which is one of the 39 parks,



Northlake Beach at Waterway 18

007-08K 2/07

Waterway 18 concept, Windrose Landscape Architects and Magnusson Klemencic Associates.



Outfall of the Cascade Creek.



waterways, and street-ends connected by the loop. This concept promotes the daylighting of the existing conveyance pipes, cleansing of the runoff through natural drainage systems, and converting the existing piped outfall to the lake to an open channel outfall.

Daylighting Drainage

Daylighting of existing conveyance pipes provides opportunities to aesthetically display the stormwater as well as functionally aerate and settle particles before discharging to the lake.



Drainage basin cleansing on Fairview Avenue East, near Ward's Cove.



Daylighting of stormwater can look similar to Cascade Creek within Cascade Park.

### Natural Drainage Swales

Natural drainage swales also cleanse the stormwater and reduce the volume of the stormwater discharge through harvesting of the water by the plants and infiltration into the ground.

### Open Channel Outfalls

An open channel outfall, in lieu of a piped outfall, dissipates the energy of this discharge into the lake and creates a great opportunity to express the runoff at the lake edge.

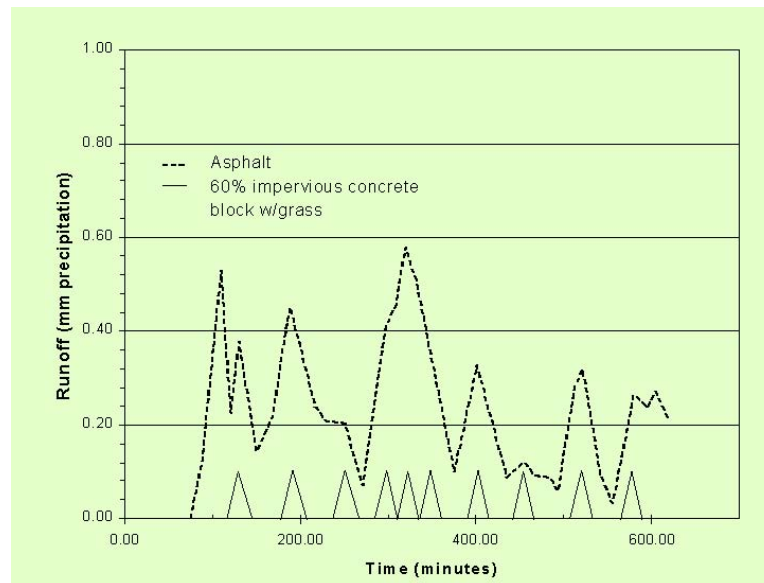
### Permeable Pavements

The use of permeable pavements has been studied and implemented in many locations throughout the City of Seattle, King County, and in the NW region.

*What are permeable, pervious, and porous paving systems?*

Permeable pavement, pervious pavement, and porous pavement are all terms that refer to surface systems that allow water to filter down through them as opposed to impervious systems that restrict water flow to the surface. There are three main types of permeable paving systems currently being successfully installed and managed:

1. Pervious Asphalt
2. Pervious Concrete
3. Permeable Pavers



Each system has differing subsurface requirements and traffic limits, although they all achieve the same objective – to reduce the amount of stormwater runoff.

1. Cross section of pervious asphalt, source: EPA document – EPA-600/2-80-135 – August 1980
2. Grasspave rings – filled and unfilled, source: Invisible Structures – [www.invisiblestructures.com](http://www.invisiblestructures.com)
3. Cross section of gravelpave rings and subgrade, source: Invisible Structures – [www.invisiblestructures.com](http://www.invisiblestructures.com)
4. Pervious concrete, source: Southeast Cement Association, [www.secement.com](http://www.secement.com)
5. Ecostone Installation, source: Uni-group USA, [www.uni-groupusa.org](http://www.uni-groupusa.org)
6. A single ecostone paver, source: Uni-group USA, [www.uni-groupusa.org](http://www.uni-groupusa.org)
7. Traditional asphalt (left) vs. porous asphalt, Source: [www.betterroads.com](http://www.betterroads.com)

A field evaluation of permeable pavements for stormwater management was conducted by the Center for Urban Water Resource Management and recognized by the Environmental Protection Agency in 2000. The study showed that the use of permeable pavements dramatically reduced the volume of surface runoff as well as attenuated the peak discharges.

- In addition to reducing the volume and intensity of storm runoff, permeable paving also can help to:
- Reduce localized erosion and flooding
  - Filter contaminants (suspended solids, metals, chemicals, Nitrogen, Phosphorus, etc)
  - Reduce runoff temperatures
  - Facilitate groundwater recharge and aquifer recharge
  - Reduce the heat island effect
  - Support nearby trees & planting beds via better air & water circulation

Improve trail surface conditions by eliminating ponding and hydroplaning  
Improve trail aesthetics and boundary definitions.

Maintenance

Regardless of the type of permeable paving system, the major maintenance issue is clogging. Over time the pores in pervious pavements and the gaps between pavers become filled with debris, dust and small particles. The presence of these particles reduces the permeability of the uppermost layer and thus compromises the ability of water to filter down through to the subbase. The majority of pervious pavement systems call for annual to semi-annual sweeping, pressure washing, or vacuuming. With proper maintenance, most permeable paving systems should last 20-25 years.





# Cheshiahud Lake Union Loop

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## OUTFALL LOCATIONS



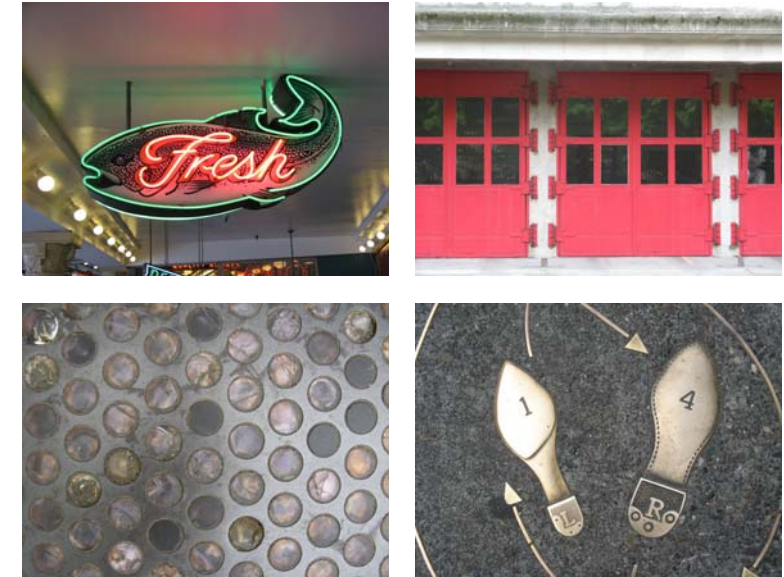
## MATERIALS AND DETAILING

Improvement to the loop will be implemented over time, and specific design material and detail choices will, for the most part, be made as individual improvement projects are more fully designed. Generally, as stated elsewhere, the goal is to identify some common, unifying design elements for use throughout the corridor while respecting the unique character of the local neighborhoods.

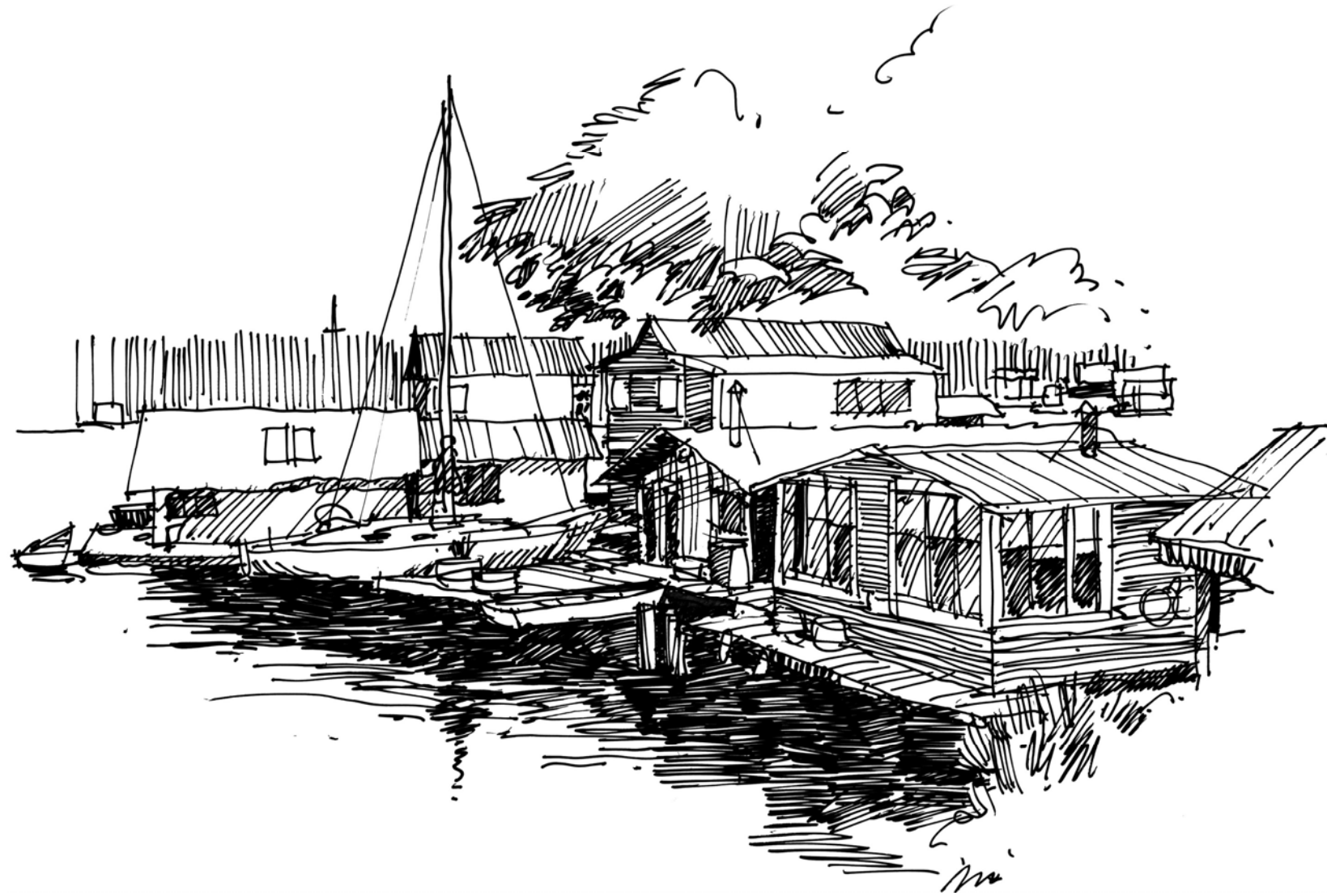
The images on this page represent how materials choices and site details—all from Seattle locales—can come to be part of a place's identity, and become iconic symbols of the place.

Some opportunities for such expression along the loop include:

- Paving patterns for the shared space treatments on Westlake Avenue North and Fairview Avenue East (see also art opportunities section)
- Paving materials at houseboat entries
- Bollards at pathway/road crossings
- Bollards to demarcate parking areas, such as along Fairview Avenue East
- Benches—style, material, color
- Railings—style, material, color
- Viewpoint treatments—style, material, color
- Edging on soft-surface pathways, such as along Fairview Avenue East north of East Galer Street.







## **4. Implementation Strategy**

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## PHASING AND PRIORITIES

The Cheshiahud Loop already exists to the extent that the route is on already existing public rights-of-way. Some initial local and trail-wide improvements have already been implemented, including new sidewalks on Westlake Avenue North and NE 40th Street (adjacent to Peace Park) and an initial signing/wayfinding system that marks the current route.

The ultimate loop will include some new elements that are more significant, and will require a more complex design and permitting process as well as additional funding. City staff and the design team have identified a range of projects that will add substantially to the path experience and that thus comprise a list of suggested priority projects.

### Project Sheets

The following projects sheets provide more detail about some of the recommended improvements. The inventory sheets in section 3 (pages 43-76) are meant to be a companion to the project sheets; they feature context maps, key issues and other background information relevant to each project. Note that project numbers imply the sequence of the projects around the loop, not the project ranking. Projects are ordered in a counter clock-wise direction beginning at Lake Union Park.

### Design Development

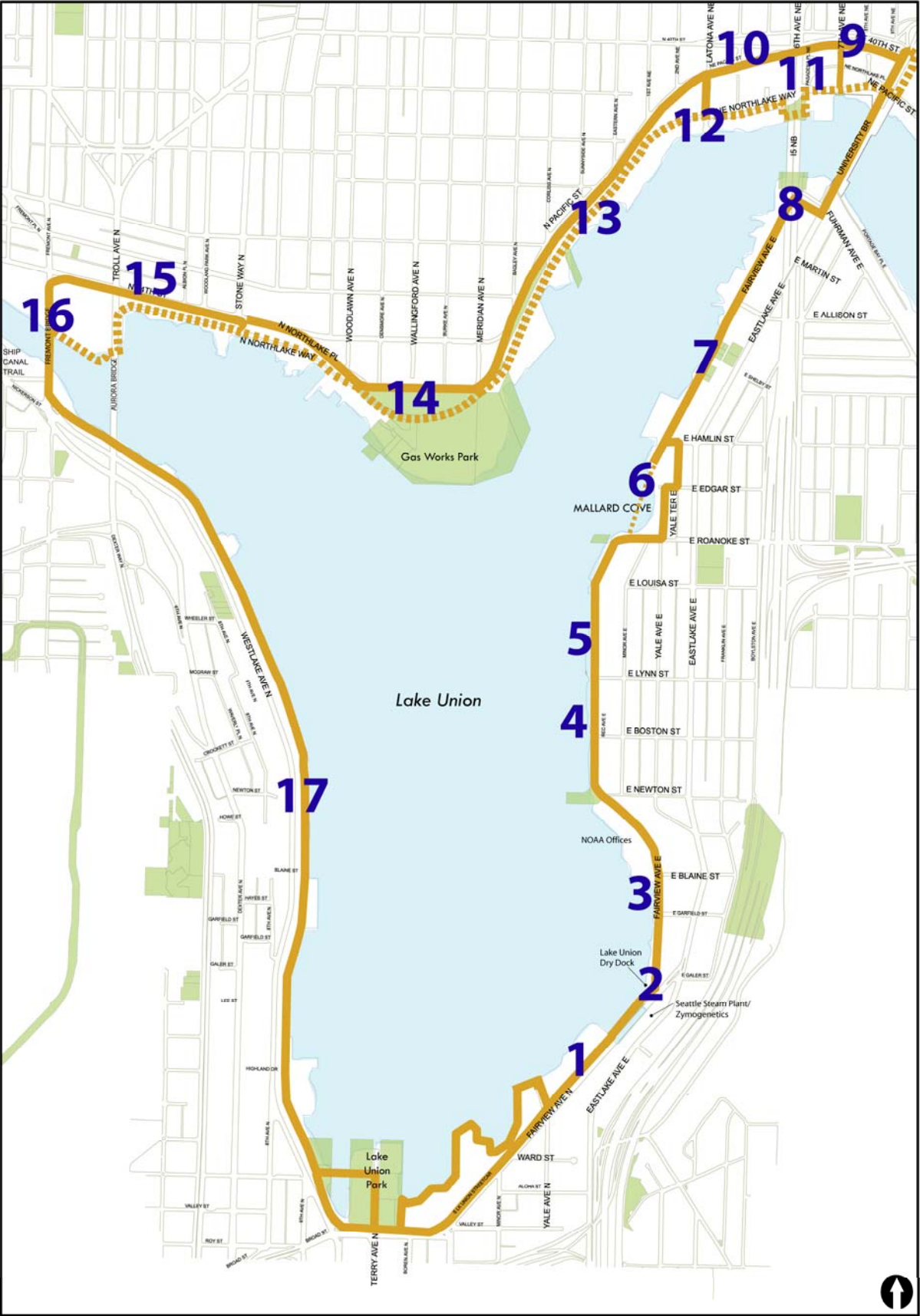
At the master plan level, certain assumptions were made about existing conditions, including right-of-way widths, location of utilities, etc. It is recommended that at the design level, each project be reassessed to determine the appropriateness of the proposed improvements, and to determine existing conditions, available right-of-way, etc.



New sidewalk at Peace Park/NE 40th Street.



New sidewalk along Westlake Avenue North.



**Lake Union Loop**

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May 2009

**PROJECT LOCATIONS**

Numbers imply sequence, not project ranking.



# PROJECT

The following project sheets are listed in counter-clockwise order, with Lake Union Park as the starting place, in accordance with the inventory sheets. Numbers imply sequence, **NOT** project ranking.

PROJECTS	NOTES
1 Fairview Avenue North Path	See project sheet, page 98
2 Fairview and Fairview Intersection Improvements	See project sheet, page 99
3 Fairview Avenue East Path Improvements (south of E. Blaine)	See project sheet, page 100
4 Fairview Avenue East Shared Space	See project sheet, page 101
5 Fairview Floating Home Entries	See project sheet, page 102
6 Mallard Cove Missing Link	See project sheet, page 103
7 Fairview Avenue East Path (E. Allison to Fuhrman)	See project sheet, page 104
8 University Bridge and Fuhrman Avenue East Curb Ramps	See project sheet, page 105
9 7th Ave NE and NE 40th Street Intersection Improvements	See project sheet, page 106
10 Burke Gilman Trail Improvements	See project sheet, page 107
11 NE Northlake Way Sidewalk	See project sheet, page 108
12 NE Northlake Way and 6th Ave NE Intersection Improvements	See project sheet, page 109
13 North Northlake Way Sidewalk	See project sheet, page 110
14 Gasworks Park Connections— East and West Entries	See project sheet, page 111
15 North 34th Street Sidewalk Improvements	See project sheet, page 112
16 Fremont Bridge Accessibility Project	See project sheet, page 113
17 Westlake Avenue Shared Space and Spot Improvements	See project sheet, page 114

## CORRIDOR-WIDE PROJECTS

Street Ends and Waterways— Enhanced Public Access Around Loop	No project sheet; refer to discussion in other elements section of master plan
Wayfinding and Interpretive Signage	No project sheet; refer to discussion in other element” section of master plan

# PROJECT

1

## FAIRVIEW AVENUE NORTH PATH

Terry Avenue North to Waterway 8/Floating Bridge

**PROJECT LENGTH:** 0.5 miles

**NEIGHBORHOOD:** South Lake Union/Eastlake

**TYPE OF IMPROVEMENT:** New pathway/widened sidewalk on utility right-of-way

**INVENTORY SHEET/MAP:** Page 47

### RECOMMENDED ACTIONS:

- If City Light transmission line is under-grounded, utilize space gained to create a 10-12' wide separated path parallel to Fairview Avenue, moving or eliminating parking nearest to street as necessary and removing/converting existing sidewalk as necessary to create required 5' of separation between street and path.
- Improve and widen ramp connection between bicycle lane and new widened sidewalk.
- Tie into improved Valley Street sidewalk/pedestrian improvements that will be part of Mercer Corridor project.
- Provide street level sidewalk and bike lane across the Fairview Avenue bridge structure when it is rebuilt.
- In the interim, extend c-curb of bike path to the south to provide a protected lane to curb ramp.



Fairview Avenue North south of Fairview bridge.



Fairview Avenue North and Fairview Avenue East.



Cross-section of new widened path along City Light right-of-way on Fairview Avenue North.



**FAIRVIEW and FAIRVIEW INTERSECTION IMPROVEMENTS**

**PROJECT LENGTH:** 0.12 miles

**NEIGHBORHOOD:** South Lake Union/Eastlake

**TYPE OF IMPROVEMENT:** New pathway

**INVENTORY SHEET/MAP:** Page 48

**RECOMMENDED ACTIONS: INTERIM**

- Consolidate storage, outbuildings and refuse on west side of upland right-of-way to maximum opportunities for parking adjacent to Lake Union Dry Dock as well as for pedestrian passage.
- Clarify public access and on-street walking/cycling routes using striping. Modify street cross section to create and delineate a walkway, minimum 8' wide, on west side of street, immediately adjacent to travel lane. See Figure A. The majority of parking in the area is long-term parking for Lake Union Dry Dock employees so turnover is primarily only at shift changes.
- Create a stakeholder group including the City, surrounding marine businesses and the Eastlake Community Council in 2009 to explore possible reconfiguration of the intersection to clarify vehicle movement and enhance bicycle and pedestrian safety. An example of such an effort, developed by SDOT and stakeholders in 2005, is included in the appendix. Refer also to the traffic study conducted for this area in the appendix.

**RECOMMENDED ACTIONS: LONG TERM**

Options to explore in stakeholder studies:

1. Design a new intersection; improvements could include a pedestrian pathway, a new curb ramp at south end of the Fairview bridge and a widened two-way bicycle lane.
2. Develop a boardwalk pathway along slope, from Waterway 8 past Lake Union Dry Dock property, away from parking. See Figures B and C. Boardwalk would bypass stairs at north end of Fairview Floating Bridge at Waterway 8 thus providing accessible route. Environmental documentation could add to project schedule and cost.
3. Develop an upland loop connection away from traffic along east side of Fairview.



Figure A. Proposed walkway along west side of Fairview Avenue

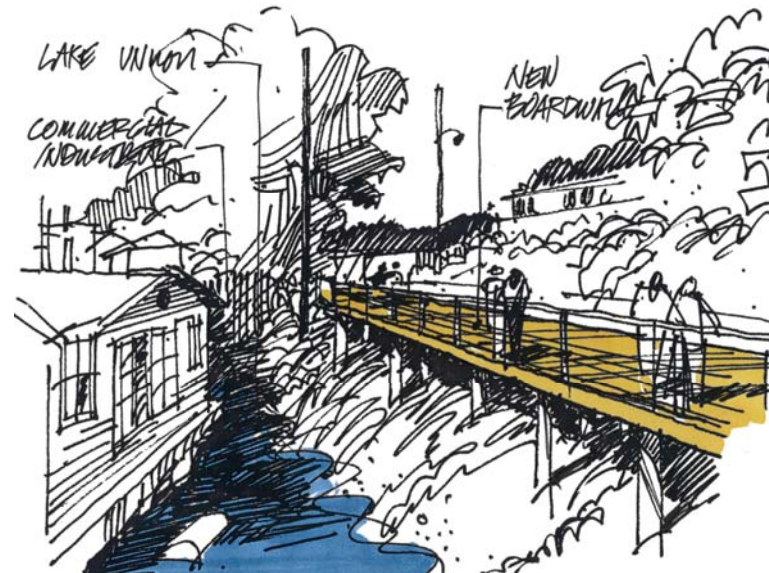


Figure B. Proposed boardwalk along shoreline adjacent to Lake Union Dry Dock.

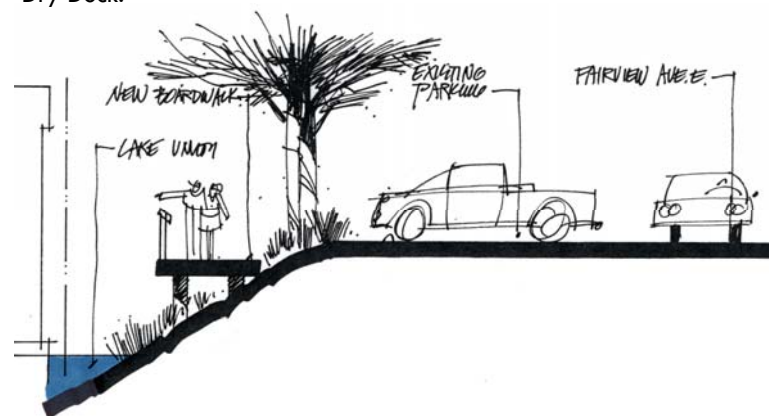


Figure C. Cross-section of proposed boardwalk along shoreline.

## FAIRVIEW AVENUE EAST PATH IMPROVEMENTS

Lake Union Dry Dock to East Blaine Street

**PROJECT LENGTH:** 0.13 miles

**NEIGHBORHOOD:** Eastlake

**TYPE OF IMPROVEMENT:** Widened and resurfaced pathway

**INVENTORY SHEET/MAP:** Page 50

**RECOMMENDED ACTIONS:**

- Move, eliminate obstacles in walkway.
- Enhance walkway by widening to a width of 6', trimming vegetation, and adding new granular surfacing material. Shift parking, if necessary, to accommodate widened walkway.
- Enhance walkway endpoints and connections to street by removing obstacles, trimming vegetation, preventing physical or visibility encroachments.
- Short term, install additional wheel stops to provide more room for pedestrians and prevent cars from blocking the path.



ABOVE and BELOW: Fairview Avenue East south of East Galer Street.



Cross-section of proposed widened pathway.



## FAIRVIEW AVENUE EAST SHARED SPACE

Terry Pettus Park (East Newton Street) to East to East Roanoke Street (Mallard Cove)

**PROJECT LENGTH:** 0.45 miles East Newton to East Roanoke

**NEIGHBORHOOD:** Eastlake

**TYPE OF IMPROVEMENT:** Shared space street

**INVENTORY SHEET/MAP:** Page 52

**RECOMMENDED ACTIONS:**

Develop a *shared space street* or *woonerf* to allow and encourage pedestrians, bicycles, and vehicles to share the entire street plane, using the following techniques to promote slower speeds, more social interaction, and caution (see discussion of shared space beginning on page 77):

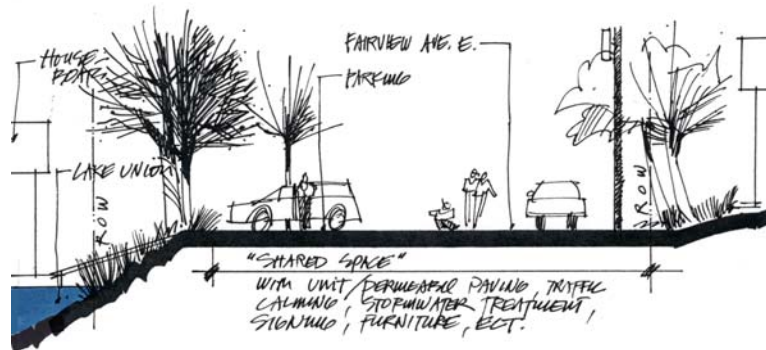
- Reconstruct entire street right-of-way, to the degree possible, with uniform paving, using permeable materials such as unit pavers, and other natural drainage features as feasible and appropriate per the green street recommendations, and neighborhood plans.
- Use elements such as bollards, trees, planters and signs to delineate parking and minimize parking intrusion of open spaces; maintain the existing parking supply to the degree possible.
- Where angled parking exists, such as between East Louisa and East Roanoke Street, include first row of angled parking in shared space treatment (to trees and planted median separating two rows of parking).
- Install shared space signs that communicate how the street is to be used.
- Use houseboat entries as chicanes or events to interrupt the linear character of the street and calm traffic (see traffic study in appendix). Delineate them with bollards, trees, landscaping, and special paving (see floating home entries the following project page).
- Maintain, upgrade and improve street ends/ waterways as public open spaces for viewpoint, shoreline access and other passive recreation.



Fairview Avenue East.



Fairview Avenue East proposed shared space.



Cross-section of proposed shared space along Fairview Avenue East.

**FAIRVIEW FLOATING HOME ENTRIES**

Fairview Avenue East

**PROJECT LENGTH:** 0.35 miles**NEIGHBORHOOD:** Eastlake**TYPE OF IMPROVEMENT:** Paving, landscaping, street furniture**INVENTORY SHEET/MAP:** Page 53**RECOMMENDED ACTIONS:**

The entries for the floating home communities are an important part of the Eastlake neighborhood's character. With their portal entries, signs, mailboxes, and other functional accoutrements, each has a unique layout and detailing. Taken together, the entries have the effect of creating "events" as one moves down the street. That said, the myriad ways of collecting trash, mailboxes, bollard placement and other elements at each entry creates some confusion and inefficient use of valued street space.

As part of the recommended shared space treatment described in the Fairview Avenue East project sheet (previous page), the following changes are recommended:

- Consolidate and organize entry elements—mailboxes, trash collection, etc.—to eliminate confusion, clarify access.
- Install signing, devices to eliminate parking intrusion.
- Enhance and celebrate unique individual entry "gates"/portals.
- Install bollards, trees, landscaping, and contrasting paving to better define the space around the entries minimize intrusion by parked cars.
- Use solar-powered compacting dumpsters, or more frequent collection to minimize the garbage "footprint".

These goal of the recommended improvements is to clarify access, and provide additional space for street parking while maintaining the character of these entries. Such improvements could further enhance and celebrate the entries as special nodes along a linear open space. An additional benefit of such space defining measures is that the entries would function as chicanes, projecting out into the street and calming the flow of traffic.



Floating home entry, mailboxes and dumpsters on Fairview Avenue East.



Floating home entry with proposed improvements.



## MALLARD COVE MISSING LINK

Fairview Ave East right-of-way between East Roanoke and East Hamlin Streets

**PROJECT LENGTH:** 0.14 miles

**NEIGHBORHOOD:** Eastlake

**TYPE OF IMPROVEMENT:** New pathway and or viewpoint

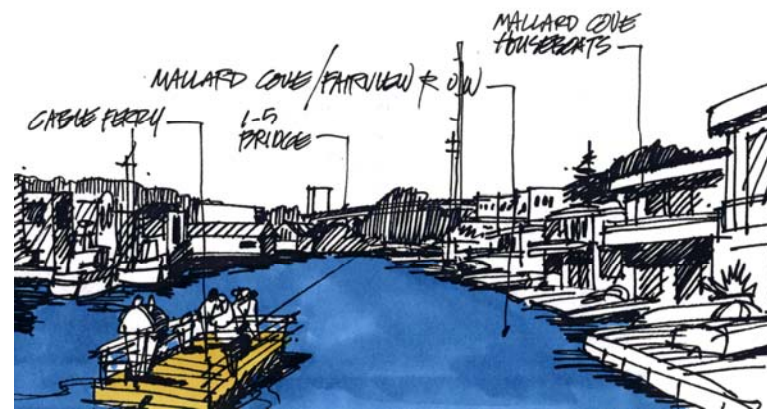
**INVENTORY SHEET/MAP:** Page 55

**RECOMMENDED ACTIONS:**

- Recognize Eastlake as primary bike route and Yale Avenue/Terrace East as secondary route for pedestrians and slow bikes (consistent with *Seattle Bicycle Master Plan*).
- Consistent with Eastlake neighborhood plans, explore the feasibility of an over-water connection. Create a stakeholder group including the city, surrounding residents and Eastlake Community Council. Undertake planning process to reach consensus on the preferred alternative; current options include:
  - A viewpoint and/or connection between East Edgar Street and the north end of the submerged Fairview Avenue East right-of-way. See diagram at lower right.
  - Redevelopment of parking on Fairview right-of-way at end of Hamlin Street to provide pedestrian path continuation (6' minimum) in the event of an over-water connection by "redimensioning" or eliminating some parking on the lower parking area within the right-of-way.
  - An over-water route utilizing a water funicular/cable ferry in the Fairview right-of-way (see discussion of cable ferry in appendix), or a bridge structure. See sketch.



Looking north across Mallard Cove from East Roanoke Street end.



Proposed cable ferry.

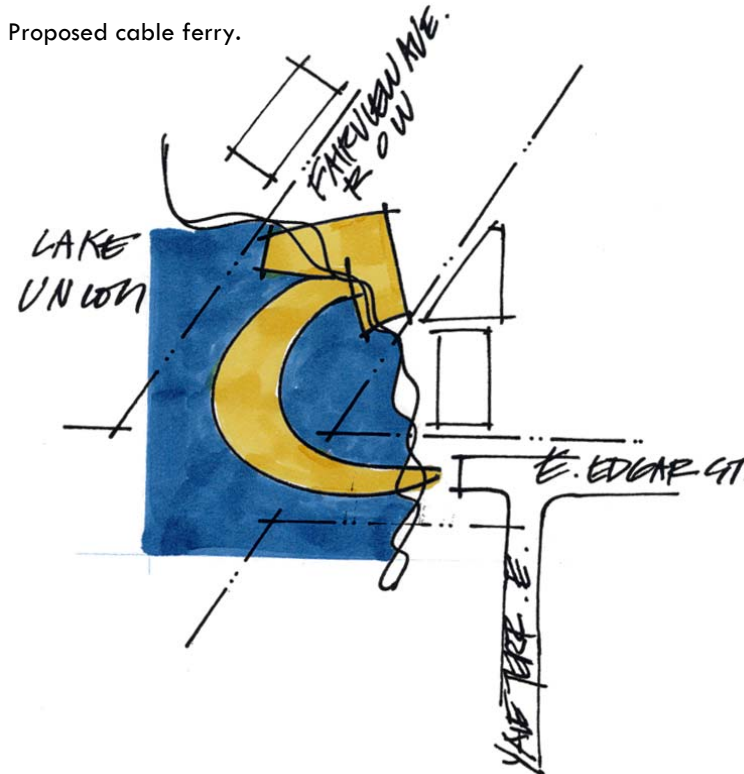


Diagram showing possible viewpoint or over-water connection between East Edgar Street end and Fairview Ave East right-of-way.

# PROJECT

7

## FAIRVIEW AVENUE EAST PATH

East Allison Street to Fuhrman Avenue East

**PROJECT LENGTH:** 0.21 miles

**NEIGHBORHOOD:** Eastlake

**TYPE OF IMPROVEMENT:** New pathway

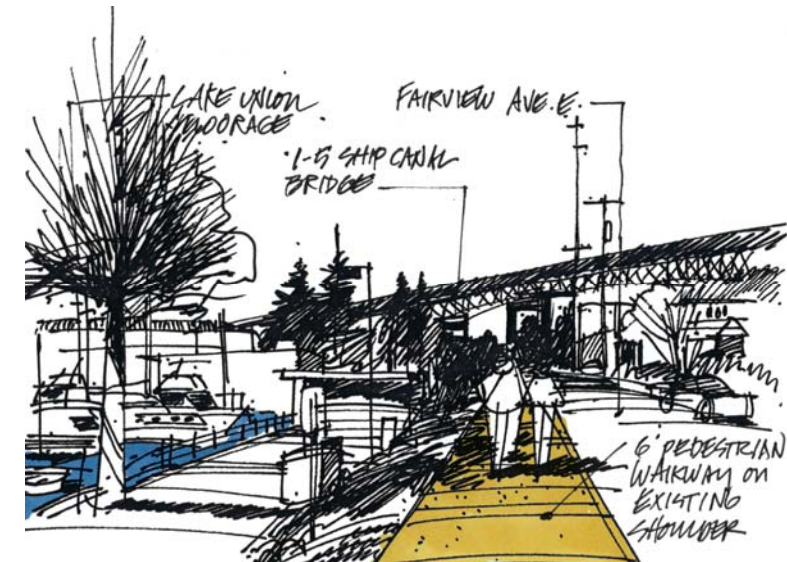
**INVENTORY SHEET/MAP:** Pages 57-58

### RECOMMENDED ACTIONS:

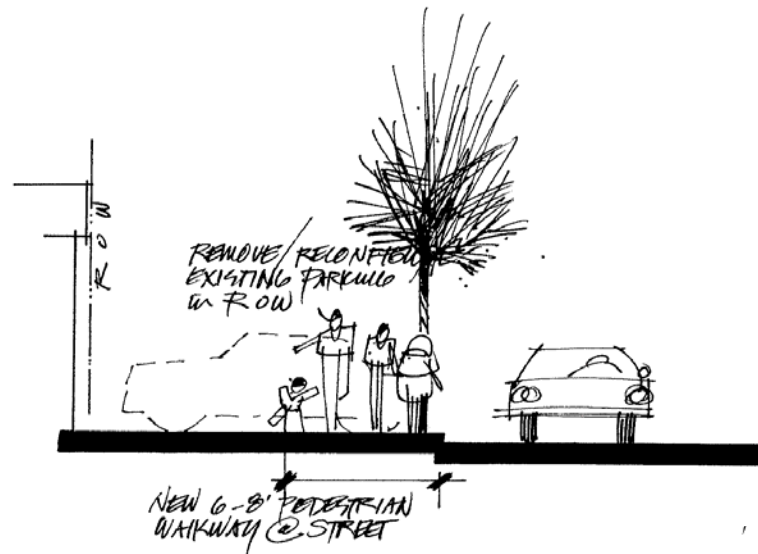
- At south end, create a 6' minimum pathway on the west side of the street. Where head-in parking conflicts with pathway, consider conversion to parallel parking.
- Pave pathway with a material that contrasts with asphalt roadway, such as concrete or colored concrete, tying into edge treatment at Ward's Cove development.
- At north end, widen existing sidewalk adjacent to building faces by moving head-in parking eastward (toward street), connecting to sidewalk in front of businesses at north end of Fairview.



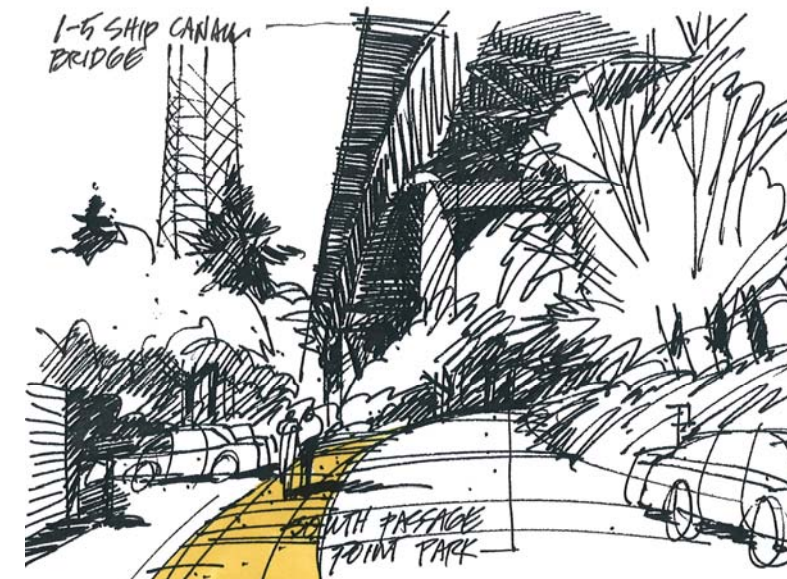
LEFT: Fairview Avenue East north of Fairview Park.  
RIGHT: Fairview Avenue East south of South Point Passage Park.



Proposed pathway on west side of Fairview Avenue East.



Cross-section of proposed widened walkway on Fairview Avenue East, south of Fuhrman Avenue East.



Proposed pathway on west side of Fairview Avenue East.



## UNIVERSITY BRIDGE and FUHRMAN AVE EAST CURB RAMPS

**PROJECT LENGTH:** N/A

**NEIGHBORHOOD:** Eastlake/Capitol Hill, University District

**TYPE OF IMPROVEMENT:** Curb ramps

**INVENTORY SHEET/MAP:** Pages 59-60

**RECOMMENDED ACTIONS:**

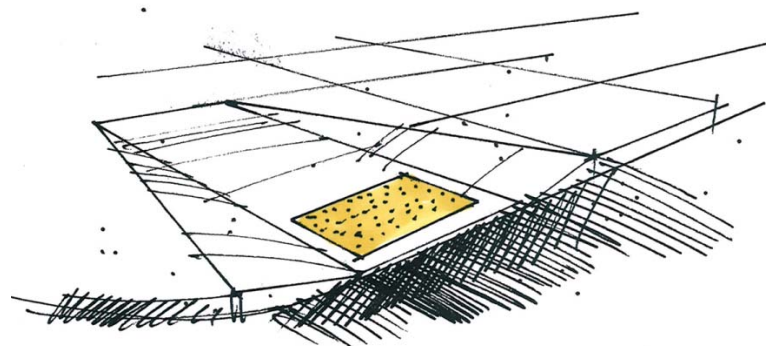
- Install missing curb ramp on the southwest corner of the bridge for the east/west crosswalk across Eastlake/University Bridge.



South end of University Bridge from Fuhrman Avenue East.



Intersection of Fuhrman and Eastlake Avenues East, south of University Bridge.



## 7th AVENUE NE and NE 40th STREET INTERSECTION IMPROVEMENTS

**PROJECT LENGTH:** N/A

**NEIGHBORHOOD:** University District

**TYPE OF IMPROVEMENT:** Intersection improvements

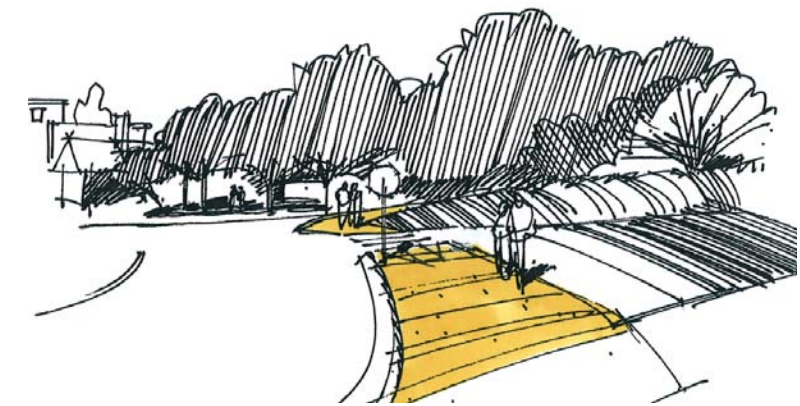
**INVENTORY SHEET/MAP:** Page 62

### RECOMMENDED ACTIONS:

- Improvement to intersection of 7th Avenue NE and NE Pacific/40th Streets to improve pedestrian and vehicular circulation and connection to Burke Gilman Trail.
- Reconstruct pedestrian pathway across pedestrian refuge on east side of 7th Ave NE from Burke Gilman Trail to NE 40th Street, improving surfacing and curb ramps, to connect with new sidewalk along Peace Park at NE corner of 7th Ave NE and NE 40th Street.
- Enhance 4th and 7th Avenues NE as pedestrian connectors to Wallingford neighborhood, John Stanford International School and playground, etc. with pedestrian amenities such as signage, curb ramps, etc. as appropriate.



LEFT: 7th Ave NE at NE 40th Street from Burke Gilman Trail.  
RIGHT: 7th Ave NE as it meets Burke Gilman Trail from NE 40th.



Proposed intersection improvements.

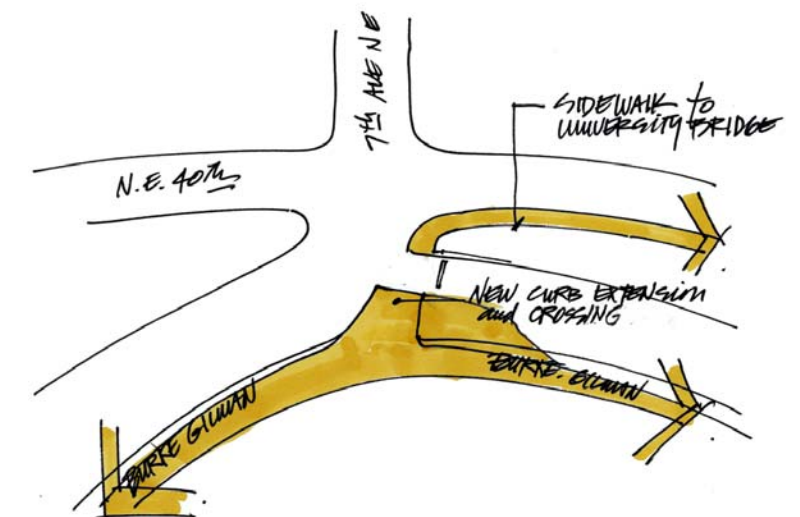


Diagram of proposed intersection improvements.



## BURKE GILMAN TRAIL IMPROVEMENTS

University Bridge to Latona Avenue NE

**PROJECT LENGTH:** 0.35 miles

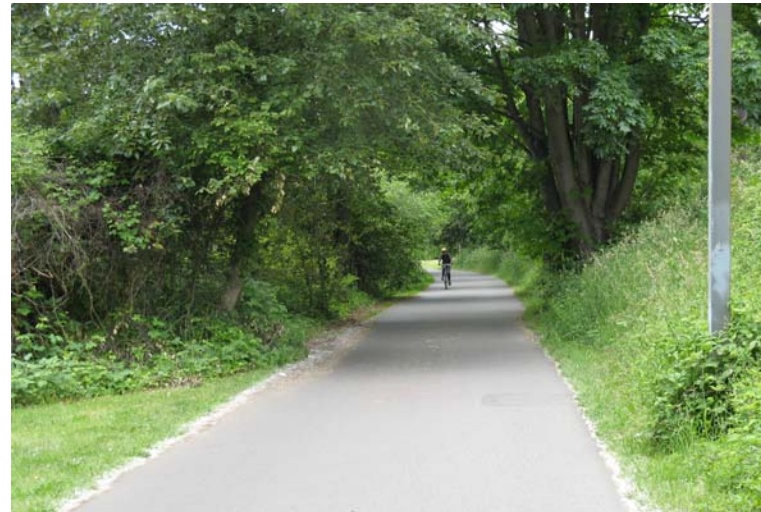
**NEIGHBORHOOD:** University District, Wallingford

**TYPE OF IMPROVEMENT:** Trail widening

**INVENTORY SHEET/MAP:** Page 63

**RECOMMENDED ACTIONS:**

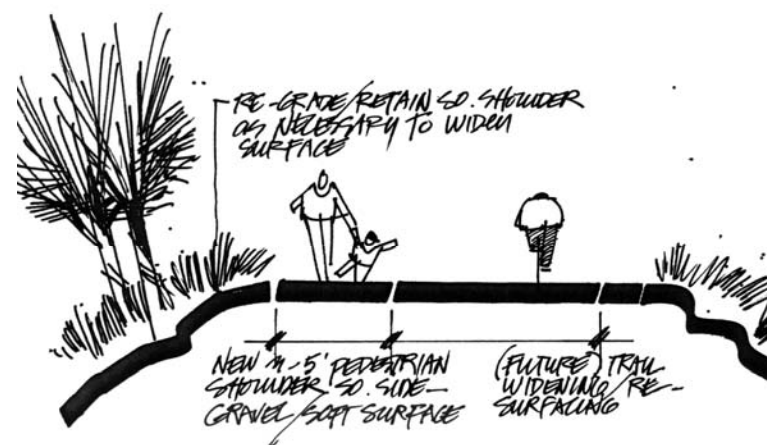
- Clear overgrown vegetation from trail shoulders to create an improved corridor approximately 18' wide.
- Where possible and appropriate, provide a gravel pedestrian path parallel to trail by widening and resurfacing shoulder on south side of trail to 3-5' by regrading or retaining south edge as necessary. Resurface trail surface with asphalt trail to a width of 12', and provide additional shoulder on north side as width allows.



Burke Gilman Trail, looking north.



Proposed widened trail.



Cross-section of proposed widening.

## NE NORTHLAKE WAY SIDEWALK

University Bridge/Eastlake Avenue NE to Latona Avenue NE

**PROJECT LENGTH:** 0.34 miles

**NEIGHBORHOOD:** University District/Wallingford

**TYPE OF IMPROVEMENT:** New sidewalks/pathway

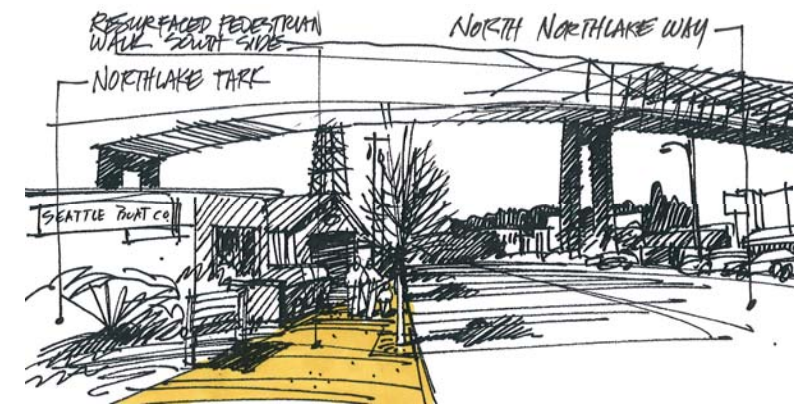
**INVENTORY SHEET/MAP:** Page 64

**RECOMMENDED ACTIONS:**

- Create a pedestrian crossing of NE Northlake Way/ Pacific Street under west side of University Bridge (at Eastlake Avenue NE), and create a pedestrian refuge by cutting through existing planted median.
- Extend existing sidewalk on south side of NE Northlake Way westward to 6th Avenue NE, 6' wide minimum
- Evaluate revision of parking in front of businesses to accommodate a new or widened sidewalk by converting to parallel parking within the existing public right-of-way.
- Extend sidewalk through North Point Passage Park, regrading to make accessible route through park and installing curb ramps at corners.



NE Northlake Way at Northlake Park.



Proposed sidewalk on south side of NE Northlake Way.

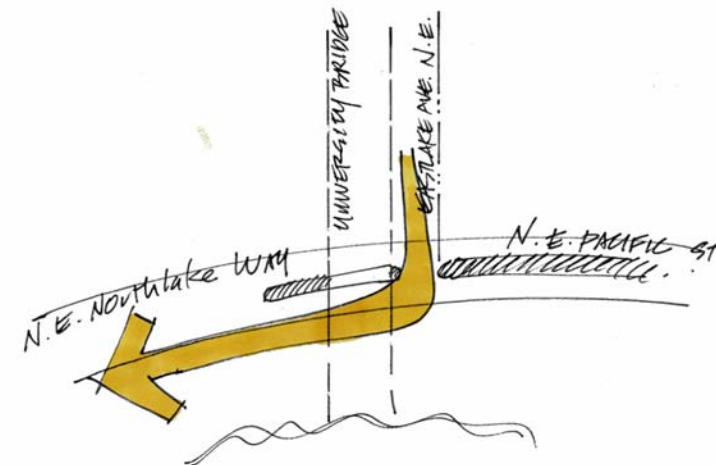
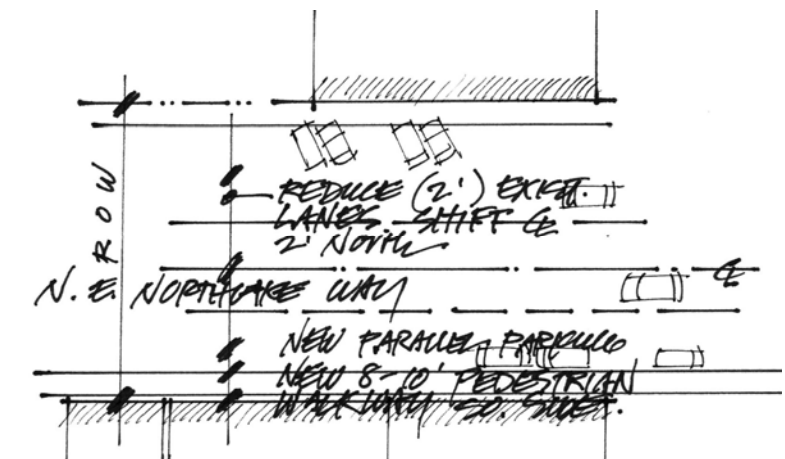


Diagram showing route from University Bridge to NE Northlake Way.



Proposed shifted parking and sidewalk on south side of NE Northlake Way.



**NE NORTHLAKE WAY and 6th AVENUE NE INTERSECTION IMPROVEMENTS**

**PROJECT LENGTH:** N/A

**NEIGHBORHOOD:** Wallingford

**TYPE OF IMPROVEMENT:** Intersection improvements

**INVENTORY SHEET/MAP:** Page 65

**RECOMMENDED ACTIONS:**

Create a continuous sidewalk and add curb ramps on south side of NE Northlake Way adjacent to North Passage Park to support and provide connections with the loop. Additional improvements in this area would facilitate pedestrian movement.

Redesign intersection to enhance pedestrian comfort and experience including the following elements:

- Install curb ramps where the crosswalks exist on north and east legs.
- Replace two crossing islands on east leg with ADA compliant landings.
- Add curb ramps for the existing sidewalk on the NE corner of intersection.



ABOVE AND BELOW: 6th Avenue NE from south side of NE Northlake (under I-5 Ship Canal Bridge).



NE Northlake Way from 6th Avenue NE.

## NORTH NORTHLAKE WAY SIDEWALK

Latona Avenue NE to Troll Avenue. Note parallel route along North 34th Street between Stone Way North and Fremont Bridge.

**PROJECT LENGTH:** 1.07 miles

**NEIGHBORHOOD:** Wallingford

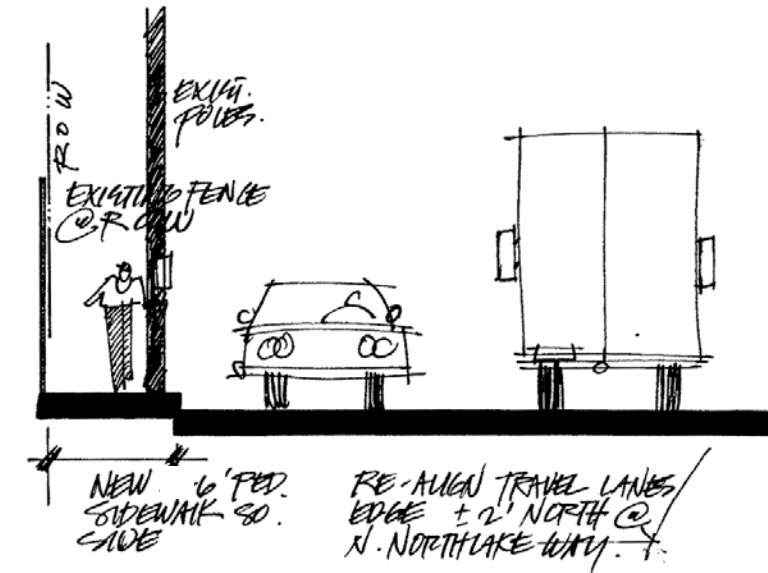
**TYPE OF IMPROVEMENT:** New pathway

**INVENTORY SHEET/MAP:** Page 66

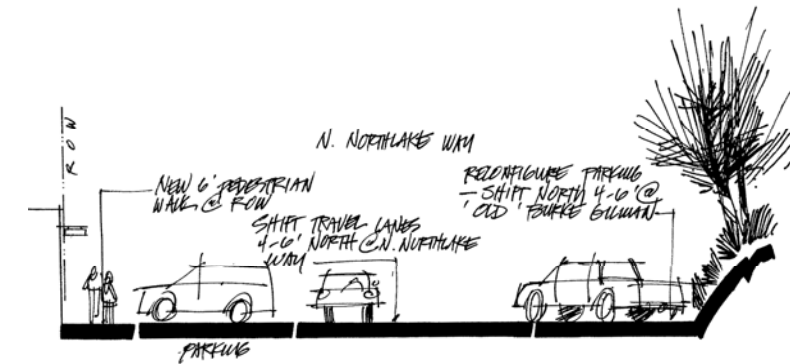
### RECOMMENDED ACTIONS:

Widen existing sidewalk and create a new sidewalk, 6' min. wide, on the south side of Northlake. Additional width for sidewalk can be gained through the following means, depending on roadway cross-section.

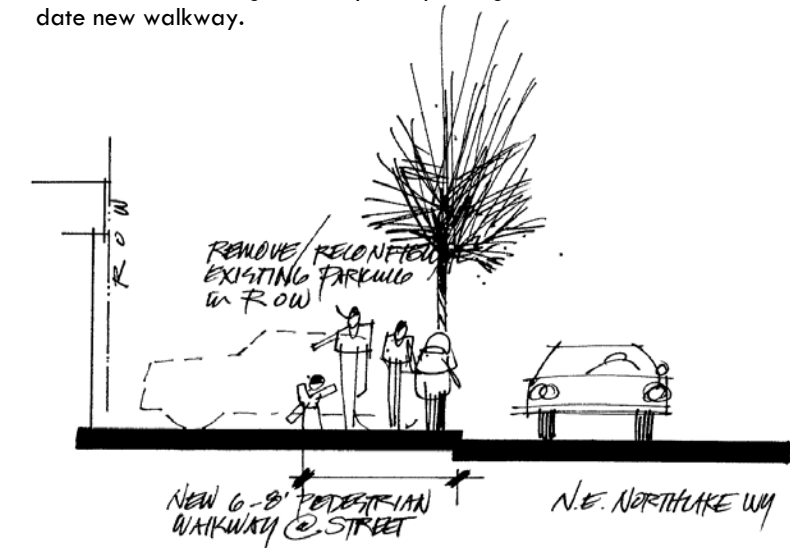
- **Narrow lanes** from 12' to 11' and/or shift parking eastward to gain 1'-2' additional width required to widen existing sidewalk. Remove obstacles in right-of-way (adjacent to Ivar's and Dunn Lumber, east of Latona Avenue NE).
- **Reconfigure roadway** by shifting traffic lanes and head-in and angled parking eastward to toe of slope (over former Burke Gilman Trail) and use additional right-of-way width on the west side to create a sidewalk, 6 min. wide (west of 2nd Avenue NE and adjacent to fenced boat storage facility).
- **Reclaim right-of-way** in front of buildings for sidewalk; convert head-in parking to parallel parking if needed to prevent vehicular crossing of new sidewalk (Waterway 18 to Waterway 17).
- **Widen existing sidewalk/walkway** using available width, no change to parking or lane width (Waterway 18 to Waterway 19).
- **Relocate power line** on west side of roadway, as appropriate and feasible, to accommodate new or widened sidewalk.



Cross-section showing narrowed lanes, shifted parking along North Northlake Way.



Cross-section showing roadway and parking shifted north to accommodate new walkway.



Cross-section showing public right-of-way reclaimed for pedestrian walkway.



**GAS WORKS PARK CONNECTIONS —EAST AND WEST ENTRIES** Meridian and Woodlawn Avenues North

**PROJECT LENGTH:** 0.25 miles

**NEIGHBORHOOD:** Wallingford

**TYPE OF IMPROVEMENT:** Intersection improvements; trail widening and resurfacing

**INVENTORY SHEET/MAP:** Page 67

**RECOMMENDED ACTIONS:**

Route “through” bicycle traffic on Burke Gilman Trail and route pedestrians through the park on the pre-existing railroad right-of-way/gravel path by revising the park’s east and west entries as follows:

East Entry (Figure B)

- Create an accessible landing at the NE corner of Meridian Avenue North by eliminating bark-dust island at NE corner and another landing at the Gas Works entry.
- Improve pedestrian crossing of Northlake Way to Gas Works Park.
- Eliminate pull-out at Waterway 19.

West Entry (Figure C)

- Extend new sidewalk on North Northlake Way eastward along North Northlake Place, and connect to park entry.

In the park (Figure A)

- Design spot improvements to existing Gas Works crescent trail including a central gathering place at trail intersection with main entry path into the park.

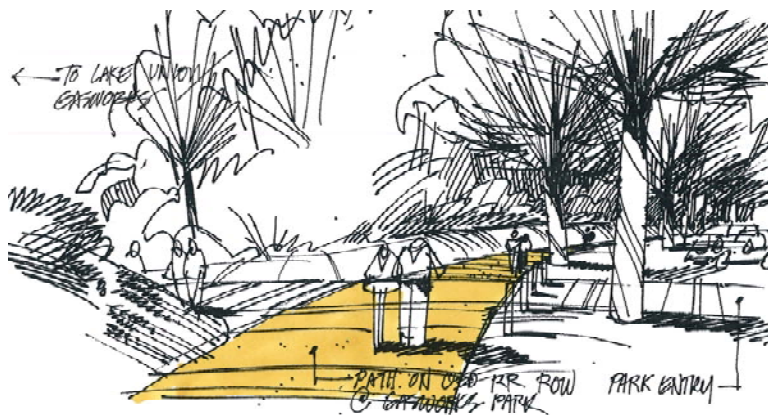


Figure A. Proposed path on old railroad right-of-way through park.



LEFT: East entry, Meridian Ave North and North Northlake Way. RIGHT: West entry, Woodlawn Ave North and North Northlake Way.

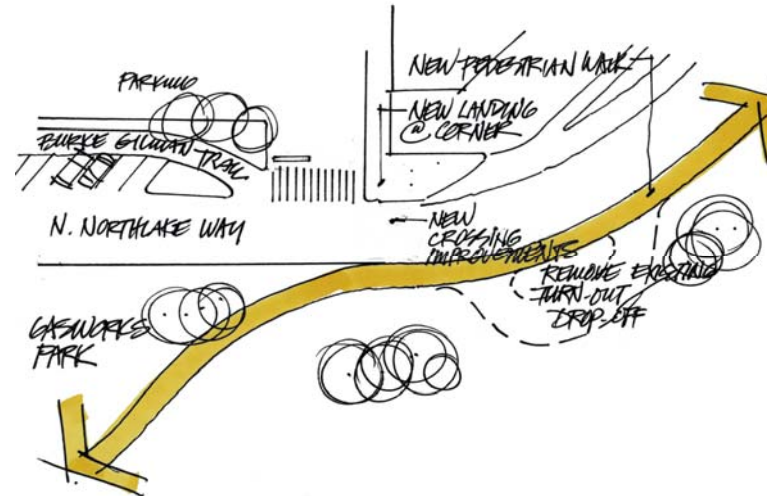


Figure B. Proposed east entry revisions.

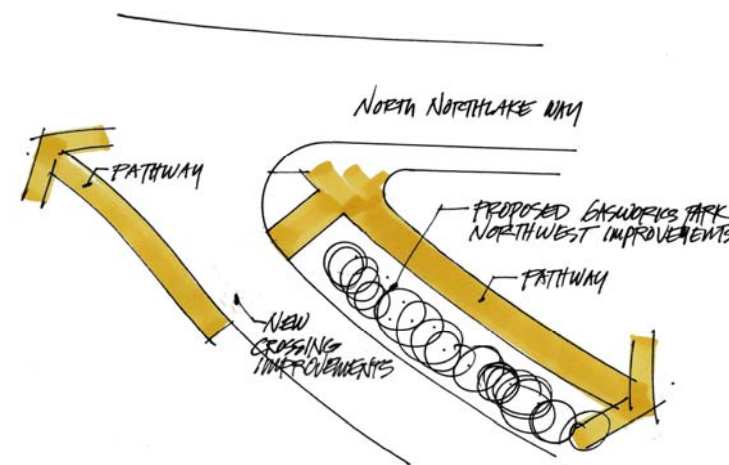


Figure C. Proposed west entry revisions.

## NORTH 34th STREET SIDEWALK IMPROVEMENTS

Stone Way North to Aurora/Troll Avenue North

**PROJECT LENGTH:** 0.11 miles

**NEIGHBORHOOD:** Fremont

**TYPE OF IMPROVEMENT:** Sidewalk widening

**INVENTORY SHEET/MAP:** Page 70

**RECOMMENDED ACTIONS:**

Widen existing sidewalk along south side of 34th Avenue North through the following means:

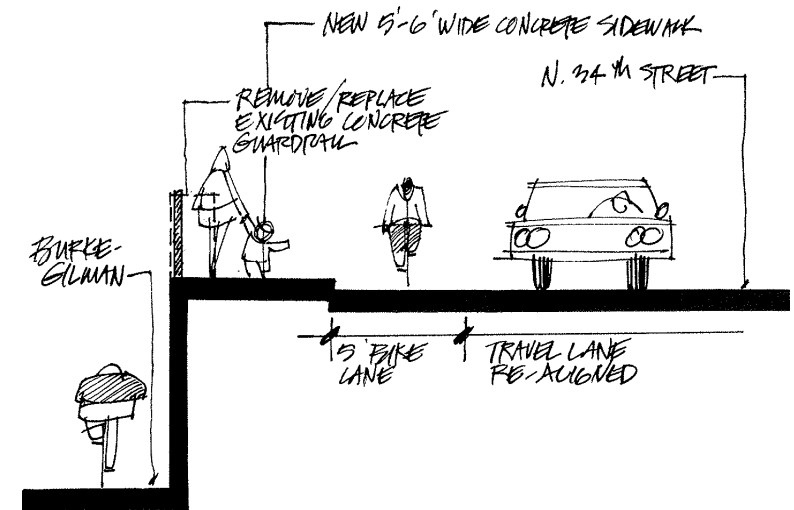
- Remove and replace wide existing with a narrow guardrail.
- Reconfigure lanes: convert 9' and 12' lanes to two 11' lanes to gain 1-2' of additional width.



Sidewalk and bike lanes on North 34th Street.



Proposed widened sidewalk on North 34th Street.



Cross-section of proposed widened sidewalk on North 34th Street.



## FREMONT BRIDGE ACCESSIBILITY PROJECT

**PROJECT LENGTH:** N/A

**NEIGHBORHOOD:** Fremont

**TYPE OF IMPROVEMENT:** Lift

**INVENTORY SHEET/MAP:** Page 70

**RECOMMENDED ACTIONS:**

- Install a lift adjacent to the stairs at the NE end of the Fremont Bridge to make shoreline route accessible.



Existing stair at NE corner of Fremont Bridge from Ship Canal Trail.

## WESTLAKE AVENUE SHARED SPACE AND SPOT IMPROVEMENTS

Beginning of walkway at north end to Lake Union Park

**PROJECT LENGTH:** 1.25 miles

**NEIGHBORHOOD:** Westlake

**TYPE OF IMPROVEMENT:** Restriping, repaving, new signage, vegetation trimming

**INVENTORY SHEET/MAP:** Pages 73-75

### RECOMMENDED ACTIONS:

Develop a combination of shared space treatment and spot improvements to better accommodate interface between business access, pathway use and bicycle traffic. The recommended design treatments are based on the two typical existing cross-sections along Westlake: a loading/fire lane adjacent to walkway and a wide sidewalk with- out parallel vehicular lane adjacent.

#### Loading zone/frontage lane

1200 block (Kenmore Air to Waterway 2)

1500 block (Galer Street end north)

South end of 1700 block to 2000 block (Blaine street end north)

Where loading zone/frontage lane is present, convert to a *shared space street* or *woonerf* to allow and encourage pedestrians, bicycles, and vehicles to share the space using the following techniques to promote uncertainty and therefore caution (see discussion of shared space on page 77):

- Remove curbs and create a uniform paved surface, using striping or bollards to demarcate parking limits of parallel parking.
- Relocate parallel parking to the west side of the shared space to facilitate better pedestrian access to and from businesses.

#### Areas without loading zone/frontage lane

1200 block (Waterway 2 to Galer Street End)

North end of 1700 block to Crockett Street end

2040 to 2144 Westlake

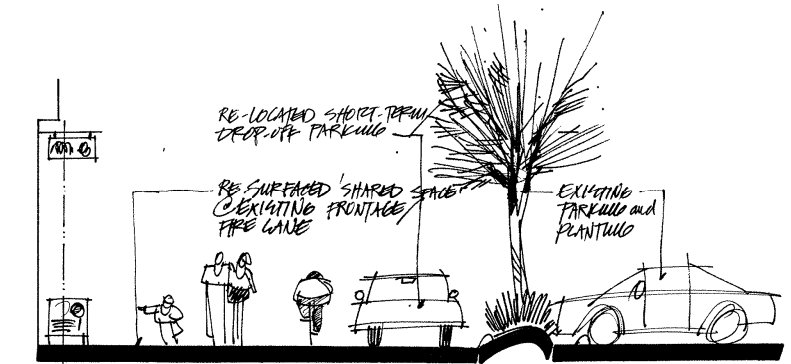
2400 to 2460 Westlake

2470 Westlake to end of 2700 block

- Where extra width is available, widen existing sidewalk as feasible by reducing drive lane widths.



Loading zone/ frontage lane along Westlake Ave North.



Proposed shared space in converted loading zone/ frontage lane.

- Use signage and/or pavement markings to inform users of narrower shared space (typical sidewalk widths are 10-12' feet vs. up to 24' feet in proposed shared space in converted loading zone/frontage lane).

#### General Spot Improvements

- Improve pedestrian crossings at drives and entries.
- Relocate signs, lights, and other obstacles in path.

#### Specific Spot Improvements

- Eliminate encroachments (signs) and parking on right-of-way where vehicles must cross sidewalk (2046 Westlake).
- Eliminate parking at street ends to open up viewpoints (Crockett Street End).
- Use tree grates and remove obstacles in sidewalk to maximize space (at 2000 block adjacent to China Harbor).
- Restrict intrusion on right-of-way from parking, boat trailers, etc. (2400 block, 2700 block).
- Maintain planting to enhance visibility (2400 block, 1200 block).





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## **APPENDICES**

1. SEPA Checklist, Determination of Non-Significance
2. Public Outreach Documents and Summary of Comments
3. Eastlake/Fairview Avenue East Traffic Analysis
4. Shoreline Street Ends, Parks, and Waterways Matrix
5. Cable Ferry Discussion
6. Fairview and Fairview Intersection Improvement Plan, 2005