



CITY OF KIRKLAND

Department of Public Works

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www.ci.kirkland.wa.us

MEMORANDUM

To: David Ramsay, City Manager

From: Daryl Grigsby, Public Works Director
Gina M. Hortillosa, Project Engineer

Date: January 25, 2010

Subject: Park Lane Pedestrian Corridor Enhancements - Project Update

Recommendation:

It is recommended that the City Council provide input and feedback on the Park Lane project.

Background and Discussion:

The Park Lane Pedestrian Corridor Enhancement Study was funded beginning in 2008 as a part of the 2008-2013 Capital Improvement Program. The Study was the first step in developing an overall strategy for addressing various issues along Park Lane. The Study's primary objective was to explore and develop a corridor concept for enhancements along Park Lane between Lake Street and Third Street, and a second objective was to identify various funding alternatives to accomplish the enhancements.

Primary drivers of the Study were failing sidewalks between Main Street and Lake Street where significant mature tree roots are impacting sidewalks, infrastructure is aging and deteriorating (pavement, surface water conveyance systems, and lighting), and a number of redevelopment opportunities exist along the eastern end of the corridor including the Kirkland Transit Center and King County's replacement of the existing sanitary sewer pump station at Third Street and Park Lane.

Study Chronology

Summer 2008

Due in part to their experience implementing low impact development in projects in the Northwest, the City hired SvR Design Company to work with adjacent property owners, businesses, and interested citizens in creating a community vision for the future of Park Lane.

August 2008

A survey was mailed to all property and business owners along Park Lane and to other key stakeholders to obtain baseline information regarding attitudes and perceptions of Park Lane as it looks and feels today and their aspirations of where it could be in the future.

September 2008

Stakeholders convened to discuss opportunities presented with the new Downtown Transit Center and to create a shared vision for the corridor. Stakeholders participated in a design charrette to learn how Park Lane was first created through a Local Improvement District in 1974, and then to develop concepts that could then be circulated for public comment. Three design concepts emerged from the stakeholder's long term vision for Park Lane and over the next weeks, staff and their consultants developed the concepts further. Concurrent with the development of the design concepts, Gilles Consulting (arborist) prepared a detailed tree inventory of all trees along Park Lane from Lake Street to Third Street.

October/November 2008

The three design concepts were presented to the public in a number of public meetings and venues including online information and comment forms. Over one hundred comments regarding the concepts were collected from the public.

February 2009

The City Council reviewed and endorsed the Stakeholder's recommendation of what emerged as the preferred design option: the Festival Street concept (Attachment A).

July 2009

Gilles Consulting, the City's Urban Forester, SVR Consulting, and staff met at Park Lane to re-assess trees and refine the Festival Street concept.

October 2009

Tree 'report cards' were prepared and attached to 41 trees along Park Lane (see sample as Attachment E). The report cards were part of the ongoing community outreach plan to inform and engage stakeholders and other Park Lane users about the City's design process. The report cards included a "grade" and tree specific information such as: its species, diameter, comments on vigor, structure, health, and long term viability. On October 27th, Stakeholder's were invited to tour Park Lane with the City's Urban Forester, Gilles Consulting, SVR and other City Staff. During the tour, the tree report cards were explained, trees were compared among each other for purposes of educating the Stakeholders on tree health/structure/vigor. Potential impacts to trees as a result of construction and root pruning were also discussed. Trees with diseases such as *verticillium wilt* were identified and signs of the disease were explained in detail by the City's Urban Forester and Brian Gilles (Gilles Consulting).

The tour also offered the opportunity to discuss and explain the process of sidewalk buckling due to tree roots. Further, the proposed locations for surface water run-off collection and treatment using a new product known as Silva Cell (Attachment D) were shown on the tour. At the conclusion of the tour, Stakeholders, consultants and staff reconvened at Zeek's Pizza to review the preferred design option and discuss the proposed Phase 1 implementation plan (Attachments B, C and D). The Park Lane tour and the following meeting at Zeek's were also videotaped as a part of the community outreach process, and the video will be made available in the project's webpage by January for the general public to view.

Study Recommendations

The 2009-2014 CIP (revised) includes an allocation of \$119,000 for Phase 1 of the Park Lane Pedestrian Corridor Enhancement Project; these funds are proposed to be combined with a portion of

the funding from the annual sidewalk replacement programs of 2009 and 2010. Phase 2, unfunded at this time, is also included in the CIP. Phase 1 of the Park Lane improvements consists of:

- A) Installation of Terrewalk panels (made out of recycled rubber and plastic) at approximately twenty critical locations along the corridor where the sidewalk is buckling as a result of root uplifting impacting approximately 4,000 SF of sidewalk repair. In these locations, tree roots will be carefully pruned concurrent with the new sidewalk panels.
- B) Removal and replacement of one tree. This tree, a nearly 14 inch diameter sweetgum, is located in front of the Lakeshore Gallery (Attachment B). It received a D- grade and is causing severe sidewalk buckling. Staff is recommending the use of a Silva Cell unit at this location in order to prevent future sidewalk buckling as the replacement tree roots grow. Silva Cell units are stacked one, two or three frames high depending on space, budget and site needs. The unit acts as "suspended pavement" and requires less soil compaction than conventional tree wells. This pilot use of the Silva Cell technology will be monitored for its application in other Kirkland locations.

The Phase 1 immediate objectives are to address the most severe potential tripping hazards along the corridor consistent with the overall development of the Festival Street concept. Additionally, the tree information that will be learned by exposing and pruning roots during the panel replacement will enable more appropriate solutions as to how to incorporate as many existing trees as possible into the overall project. Staff and consultants will be able to visually assess the location and condition of the roots and better gauge how the trees will respond to the installation of the Festival Street concept using standard concrete sidewalk (in future Phase 2 improvements). Once funding is secured and construction is undertaken on future improvements, the Terrewalk panels can either be incorporated into the project or removed and reused in other locations.

Concurrent with the implementation of Phase 1 this winter, SVR Consulting is proceeding with the complete Festival Street storm drainage design of Park Lane and the street frontage adjacent to the King County Pump Station; reconstruction of this portion of Park Lane will be performed by King County during the completion of the Pump Station and the associated utilities. The design of the remaining portions of the Park Lane Corridor will be advanced to 30% (preliminary) design and will be performed at a later time once additional funding is secured.

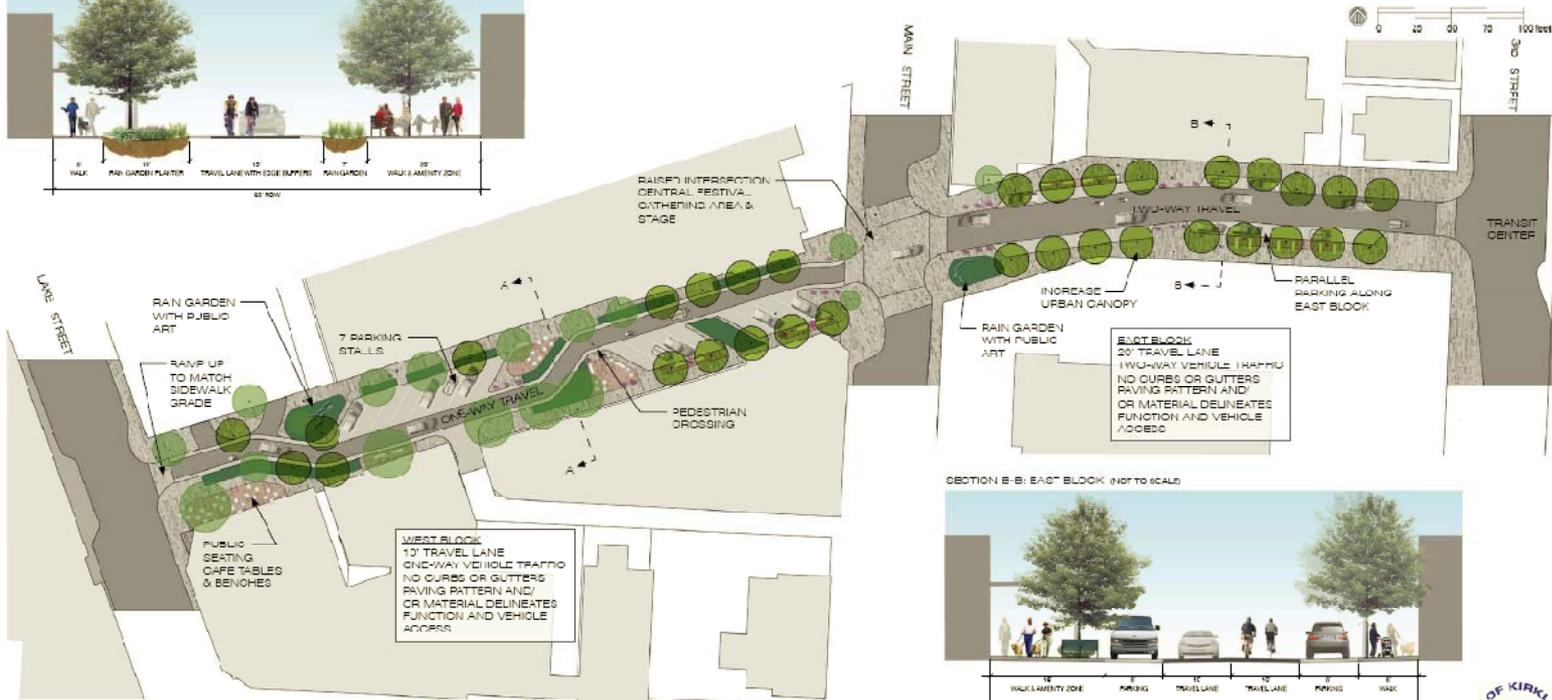
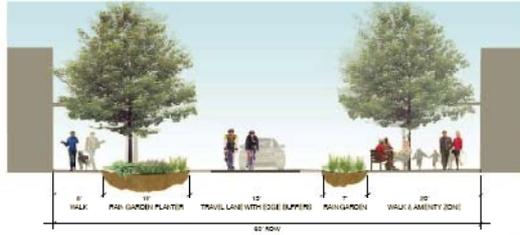
A complete funding strategy is being recommended and has been outlined in this memo (Attachment F). Grants, CIP, and private funding potentially through a local improvement district approach or development frontage improvements are all potential funding sources at this time.

Attachment: (6)

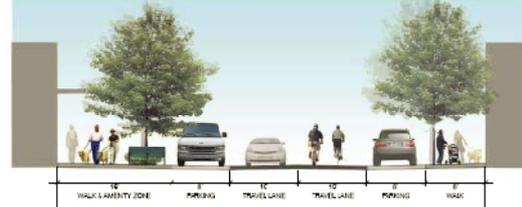
Flexible Festival Street Concept

PREFERRED CONCEPT | FLEXIBLE FESTIVAL STREET | PLAN AND SECTIONS

SECTION A-A: WEST BLOCK (NOT TO SCALE)



SECTION B-B: EAST BLOCK (NOT TO SCALE)





Phase 1 – Terrewalk Rubber Walkway Panels



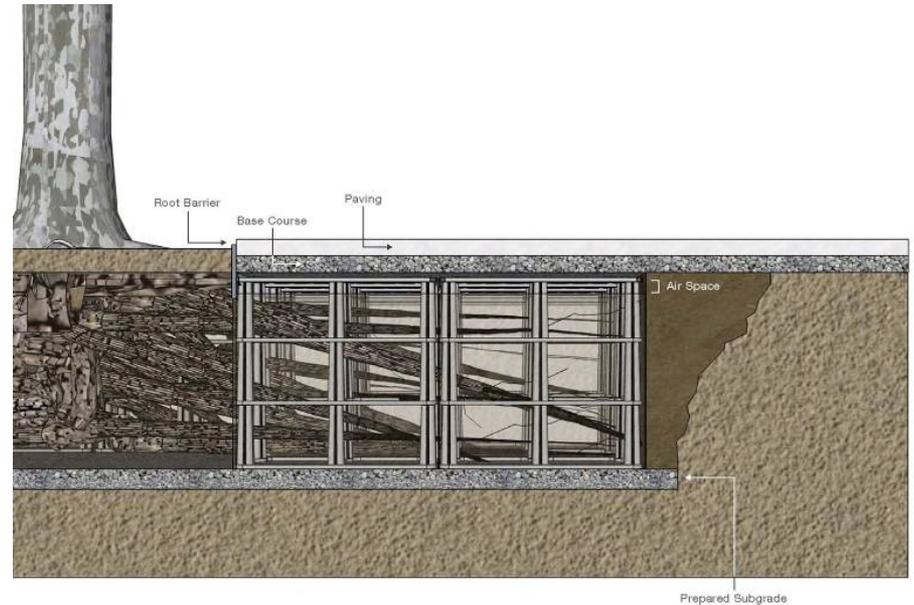
Issaquah, WA 2009



Spokane, WA 2008

- Easy interlocking
- Made out of recycled rubber and plastic
- Panels can be removed and reused at other locations
- Storm water can percolate to tree at panel edges

Phase 1 – Silva Cell Units



Silva cell units act as “suspended pavement”. The soil within the units requires less compaction. Hence, they provide more void space for roots to grow.

PARK LANE TREE INVENTORY

TREE REPORT CARD

Tree Number: 427
Species: Armstrong Red Maple
Diameter: 8.4"

A

Grade Definition:

A(Retain) B(Retain/Monitor) C(Monitor) F(Remove/Replace)

Tree Criteria:

- Vigor: Good
- Structure: Good
- Health : Very Good
- Impact on other trees/infrastructure: sidewalk/curb
- Long term viability: Very Good
- Notes: 4x4 cutout

Working to restore, enhance and protect the City of Kirkland's Tree Assets

Tour of Park Lane Trees with City Urban Forester

Tuesday October 27th (8:30 am – 9:15 am); Meet at Park Lane and Lake Street

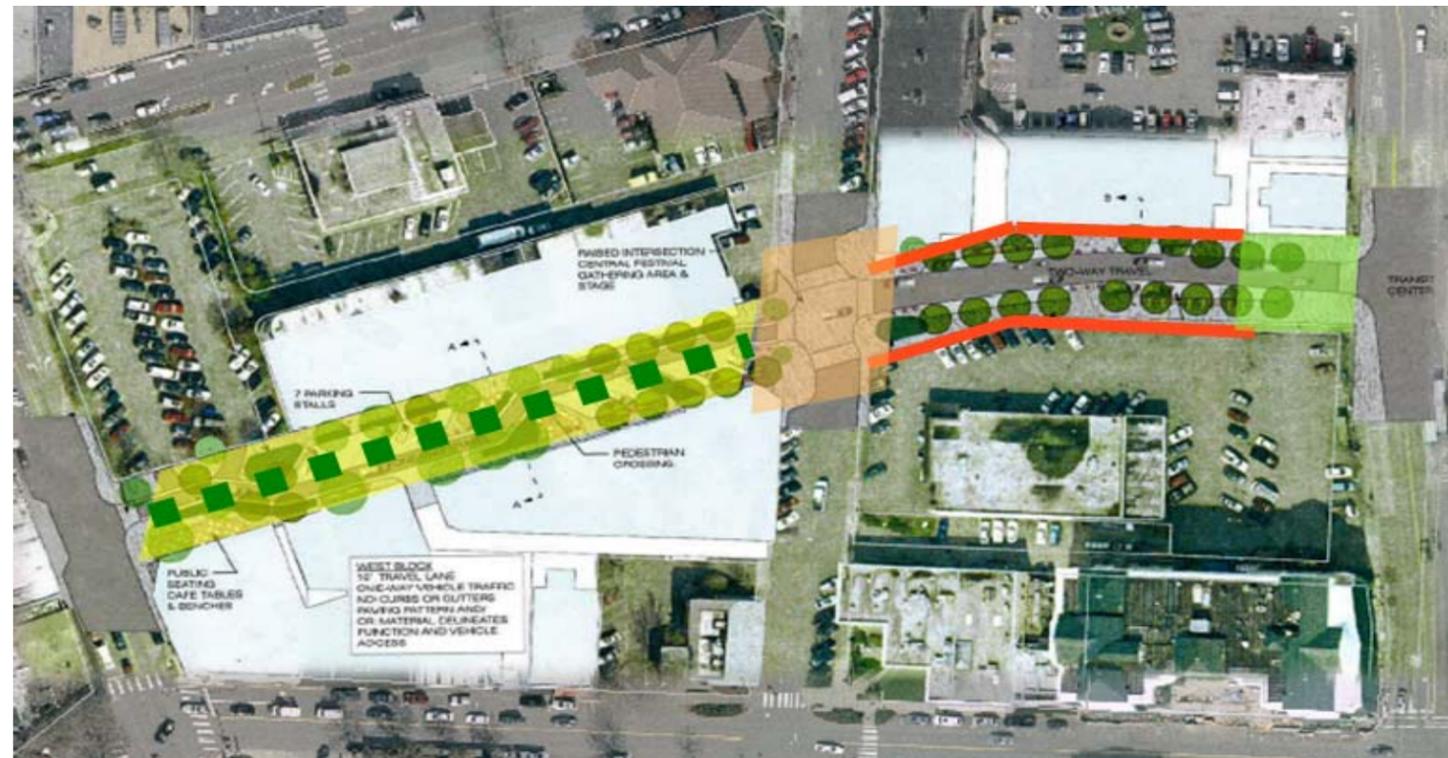
Phase I Implementation Plan

9:15 am – 10:15 am; Zeek's Pizza (124 Park Lane)

For more information, contact Kari Page 425-587-3011 kpage@ci.kirkland.wa.us

Proposed Park Lane Pedestrian Corridor Funding Strategy

PHASE	DESCRIPTION	Frontage (linear feet)	Design fees	Construction Estimate (*)	Total Estimate (2009)	Design (**)	Construction	Funding source	Secured Funds	Shortfall
1	Replacement of damaged infrastructure (Terwalk rubber walkway panels, Silva Cell units, root pruning, conduit)	various	\$ 5,000	\$ 114,000	\$ 119,000	2009	2010	\$100K from 2009 Sidewalk Program, \$58K from Surface Water, \$61K from Reserve -- Project identified in the 2009-2014 CIP (revised)	\$119,000	\$0
2	King County DNR pump station street frontage Improvements	150	\$ 17,300	\$ 110,700	\$ 128,000	2009	2010	Design funding is included in Phase 1. Construction will be completed by KCDNR; Park Lane crosswalk along west side of Third Street will be constructed with Downtown Transit Center.	\$128,000	\$0
3	Festival Street Implementation: Installation of porous concrete sidewalks, new roadway, street furniture, patterned concrete, storm drainage and rain gardens.	800	\$ 128,600	\$ 590,400	\$ 719,000	2010	TBD	\$200K from 2010 Sidewalk Program, \$164K from Surface Water Program, \$20K from Centennial Program, \$16K donated benches. Project is identified in the 2009-2014 CIP (revised)	\$400,000	\$319,000
4	Festival Street Implementation: Raised intersection at Main Street and Park Lane.	100	\$ 16,200	\$ 73,800	\$ 90,000	TBD	TBD	Staff will be applying for grants: 2010 TIB sidewalk, 2010 TIB UCP, 2011 Countywide Non Motorized and LID grants	\$0	\$90,000
5 S	Antique Mall Redevelopment right of way improvements per Festival Street Concept	275	\$ 44,050	\$ 202,950	\$ 247,000	TBD	TBD	Private development	\$0	\$247,000
5 N	Kirkland Square Redevelopment right of way improvements per Festival Street Concept	275	\$ 44,050	\$ 202,950	\$ 247,000	TBD	TBD	Private development	\$0	\$247,000
TOTAL		1600	\$ 255,200	\$ 1,294,800	\$ 1,550,000				\$647,000	\$903,000



(*) Does not include water, sewer nor art improvements

(**) 2009/2010 design will include:

- 1) Phase 1 Terwalk rubber walkway panels and one Silva Cell unit
- 2) Phase 2 100% design for King County Pump Station street frontage
- 3) 100% Storm Drainage for Park Lane (Lake Street to 3rd Street)
- 4) 30% street design for Park Lane (Lake Street to west end of KC improvements)