### Land Use Code Amendments

Design and Mitigation for East Link Light Rail

City Council Study Session December 10, 2012

## **Tonight**

- Where we are in the process
- Focus tonight on Council input regarding certain design and mitigation topics:
  - Traction Power Substations (TPSS)
  - Elevated Alignment
  - Park and Ride
- Next Steps

#### **Process Context**

2012 2013-2014 2013-2014 Starting 2014 2007-2008 Design/ **Land Use** Mitigation **Policy** Alignment **Technical** Code Development **Approval** Review **Approval Development** Land Use Building, Fire, **Best Practices** Council Permits Utility, and Comp Plan Light Rail Overlay Transportation Permits

### **Upcoming Code Review Steps**

#### Time scheduled on upcoming Council agendas:

All January Study Sessions

#### January Design and Mitigation Topic Blocks

- Concrete and Masonry Structures tunnel portal, noise walls
- Other Alignment Elements Fences, Lights, OCS, Signals, Vents
- Stations and Station Design Process
- Bel-Red (including the Operations and Maintenance Base)
- Overall Process (CUP/DA/Admin Modifications) and Wrap-up

#### Council Input from December 3

- Focus on Linear Alignment Landscaping
  - At-Grade
  - Trenched
  - Lidded
- TPSS Landscaping/Screening Touched Upon
- Preliminary Council feedback on Landscaping:
  - Street frontage where Light Rail adjacent to ROW
  - Buffer/screening where Light Rail adjacent to private property
  - Flexibility necessary to provide context sensitive landscape solutions

### Council Input Needed

#### Design and Mitigation Feedback:

- Setbacks and Landscaping for TPSS
  - Landscape Type
  - Setback code required, or as necessary to accommodate required landscape/screening
  - Context sensitive enclosures as an alternative option
- Landscape treatment for elevated segments
- Park and Ride
  - Landscape Screening
  - Other issues light/glare, parking, technical feasibility

# Comparison of Landscape Types

Landscape Type	Width	Purpose/Characteristics	Typical Application
Туре І	15 feet	<ul> <li>Very dense sight barrier to significantly separate uses and land use districts.</li> <li>Two rows of evergreen trees (6 ft high / 20 ft on center)</li> <li>Shrubs (3.5 ft high) to cover ground within 3 years</li> <li>Backed with sight obscuring fence</li> <li>Can house in building as an alternative</li> </ul>	<ul> <li>Electrical Substations</li> <li>Sewage pumping stations</li> <li>Water distribution Facility</li> <li>Equipment and vehicle storage yards in transition areas or visible from ROW</li> </ul>
Type II	10 feet	Visual separation between uses and land use districts.  • Evergreen and deciduous trees  • deciduous limited to 30%  • 6 ft high / 20 feet on center  • Shrubs (3.5 ft high) to cover ground within 3 years	<ul> <li>Churches</li> <li>Public Parking Lots</li> <li>Solid Waste Disposal Facility</li> <li>Government Service Building</li> </ul>
Type III/IV	10 feet	Soften appearance of streets, parking areas, and building elevations.  • Evergreen and deciduous trees  • deciduous limited to 50%  • 6 ft high / 30 feet on center  • Shrubs (3.5 ft high) to cover ground within 3 years	Parking areas and buildings  R-10 through R-30  NB, PO, O OLB  LI, GC, CB
Type V	n/a	<u>Visual relief and shade</u> in parking areas.	Parking lots
Transition Area	20 feet	Very dense buffer to significantly separate uses of lesser intensity.  • Evergreen and deciduous buffer (10 ft high)  • Deciduous limited to 40%  • 5 trees/1,000 sf  • Shrubs (3.5 ft high / 3 ft on center)  • Retention of Significant Trees required w/i 15 ft of prop line	Areas receiving transition from higher intensity uses     Single Family     Multifamily

# Landscape Screen / Buffer Example





# Street Frontage Landscaping Example



# **TPSS**

#### Screened



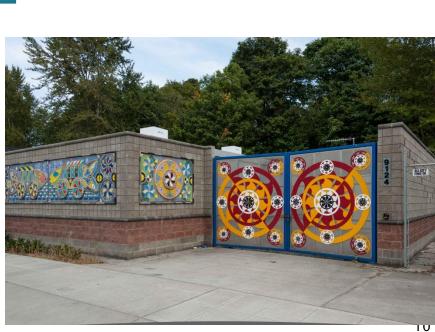




#### Unscreened







# TPSS - Sweyolocken (Existing)

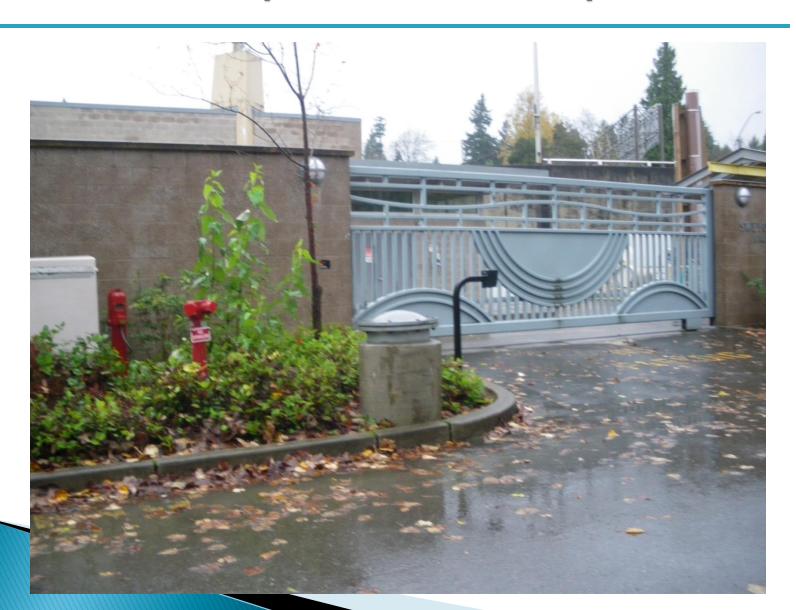




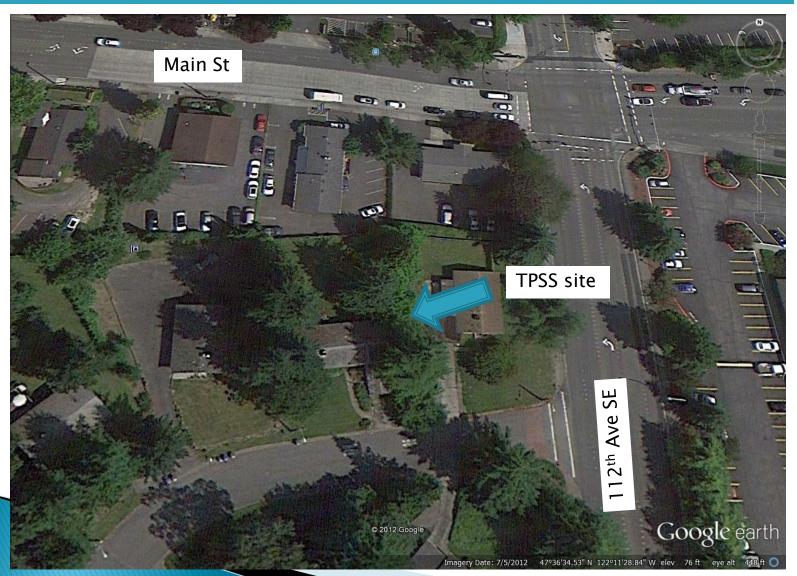
# TPSS - Sweyolocken (Existing)



# **Current Sweyolocken Pump Station**



#### TPSS - East Main Station (Existing)





North

### TPSS - East Main Station (Existing)



# TPSS - 120th Ave NE (Existing)



North

# TPSS – 120<sup>th</sup> Ave NE (Existing)

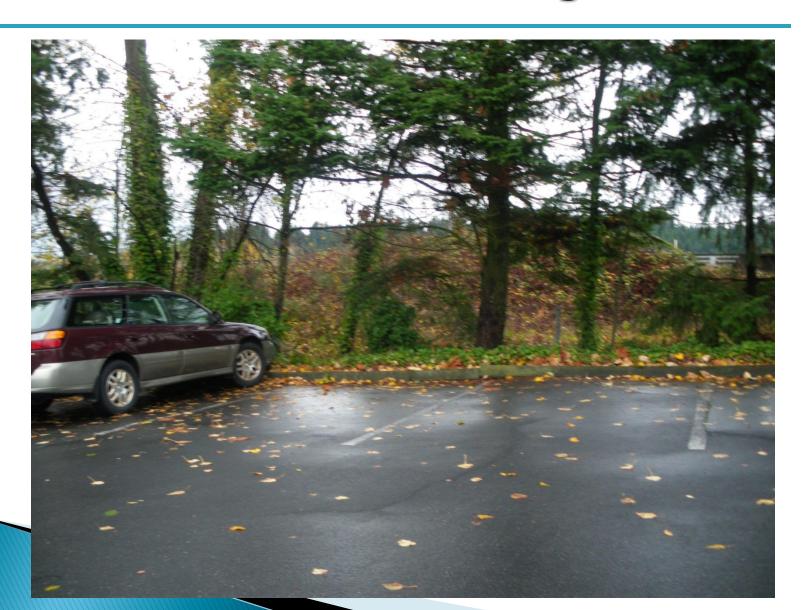


# TPSS - NE 24th St (Existing)





# TPSS - NE 24<sup>th</sup> St (Existing)



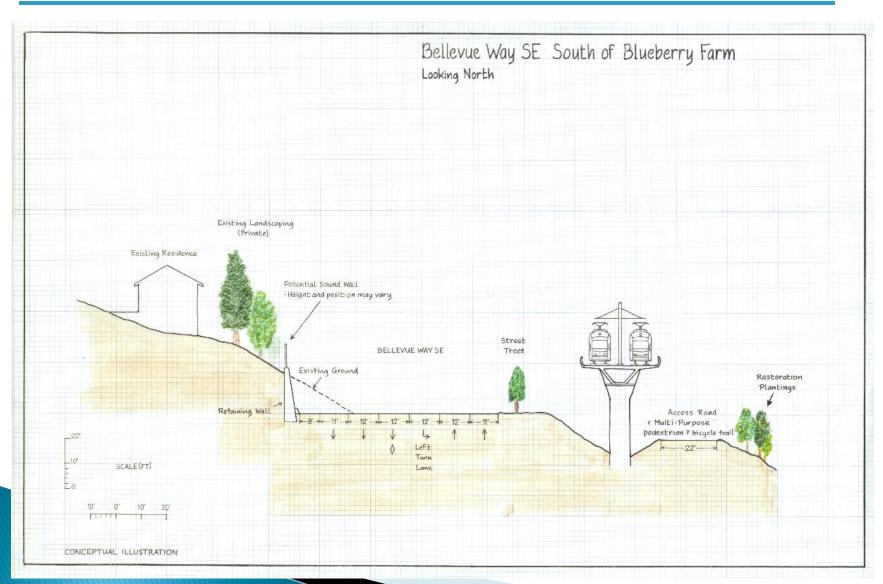
# Elevated Segment Near Blueberry Farm





North

## Elevated Segment Near Blueberry Farm



#### Proposed Overlay - Critical Areas

- Proposed overlay incorporates critical areas overlay (Part 20.25H) by reference (See 20.25M.010.D);
- Critical areas land use permit decision criteria also incorporated (See 20.25M.030.C.3.g)
- Shorelines overlay and permitting requirements apply

#### Critical Area Decision Criteria: Comparison

An application may be approved if the proposal:			
20.30P.140:	Proposed 20.25M.030.C.3:		
A. obtains all other permits required by the LUC; and	N/A (other than shorelines, all permits merged into overlay's design and mitigation permit)		
B. utilizes to the maximum extent possible the best available construction, design and development techniques which result in the least impact on the critical area and the critical area buffer; and	20.25M.030.C.3.g.i: utilizes to the maximum extent possible the best available construction, design and development techniques which result in the least impact on the critical area and the critical area buffer; and		
C. incorporates the performance standards of Part 20.25H LUC to the maximum extent applicable; and	20.25M.030.C.3.g.ii: incorporates the performance standards of Part 20.25H.LUC to the maximum extent applicable; and		
D. will be served by adequate public facilities including streets, fire protection, and utilities; and	20.25M.030.C.3.e. will be served by adequate public facilities including streets, fire protection, and utilities; and		
E. includes a mitigation or restoration plan consistent with the requirements of LUC 20.25H.210; except that a proposal to modify or remove vegetation pursuant to an approved Vegetation Management Plan under LUC 20.25H.055.C.3.i shall not require a mitigation or restoration plan; and	20.25M.030.C.3.g.iii: includes a mitigation or restoration plan consistent with the requirements of LUC 20.25H.210; except that a proposal to modify or remove vegetation pursuant to an approved Begetation Management Plan under LUC 20.25H.055.C.3.i shall not require a mitigation or restoration plan; and		
F. complies with all other applicable requirements of this code.	20.25M.030.C.3.b: complies with the applicable requirements of this Light Rail Overlay District.*		
	*Council direction previously received to expand compliance to all applicable City codes		

#### Relevant Policies - Park and Ride Facilities

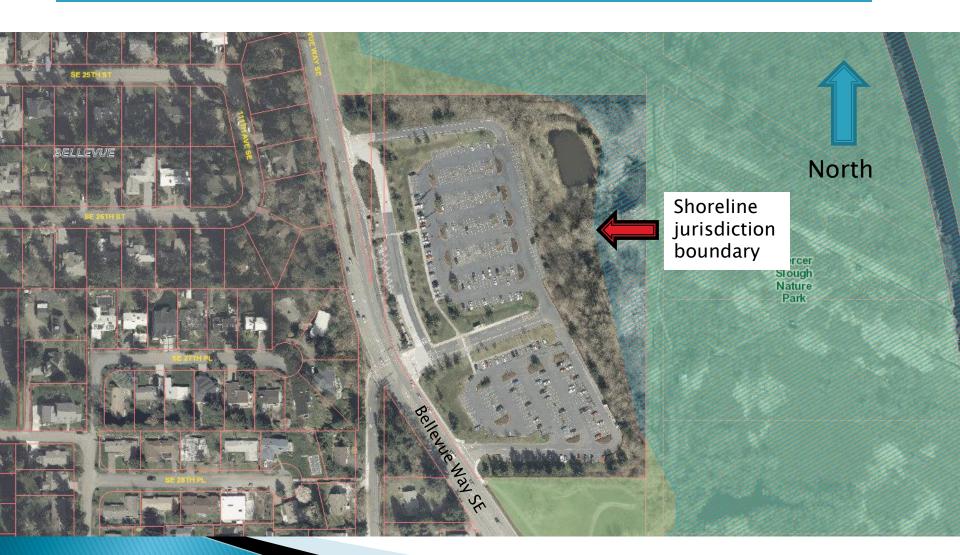
- Park and ride facilities should be located where they can provide convenient access to light rail for Bellevue neighborhoods not directly served by light rail, and they should be *integrated contextually with the surrounding environment*. (Best Practices Final Report, p. 34)
- New or expanded park and ride facilities should be consistent with the Comprehensive Plan vision for each specific location. (Final Report, p. 36)
- Design park and ride lots to be consistent with the land use vision and community context of each unique location. (Final Report, p. 38)
- Consider rider safety in design of park and ride lots (summary of Final Report discussion, pp. 75-78

#### Relevant Code - Park and Ride Facilities

Proposed Overlay includes design standards (20.25M.040.D):

- Requirements for landscaping consistent with 20.20.520 (10 feet of Type II landscaping on frontage; 10 feet of Type III landscaping on perimeter; and interior parking lot landscaping)
- Requirements that exterior lighting fixtures use cutoff shields and other appropriate measures to conceal the light source from adjoining uses and rights-of-way
- Design lights to avoid spillover glare beyond site boundaries;
- Interior lighting in parking garages shall prevent spillover upon adjacent uses and ROW

## Park and Ride - Shoreline Jurisdiction



## Park and Ride Illustrations



#### Park and Ride Illustrations



South Kirkland Park and Ride (under construction)

### Park and Ride Illustrations



South Kirkland Park and Ride (under construction)

### **Next Steps**

- January study sessions complete design & mitigation discussion; confirm procedural approach
- Late January/early February 2013 Code amendment redraft, SEPA Threshold Determination

For more information, see East Link Project website at: <a href="http://www.bellevuewa.gov/light-rail-overlay.htm">http://www.bellevuewa.gov/light-rail-overlay.htm</a>