

# LOWER DUWAMISH RIVER Habitat Restoration Program Site 1

May 3, 2012

Seattle Design Commission

Scott Lockert – Vice President

Bill Granger – Sr. Project Manager



Who are we?

What do we do?

# Bluefield Holdings, Inc.

- Private Sector Eco Developer – similar to a wetlands mitigation bank
- Seattle Based
- Master lease from City of Seattle
- Credits sold to fulfill Natural Resource Damages liability

# Public Benefits

- City will get habitat developed as a contribution to WRIA 9 salmon recovery at no cost to taxpayers.
- City departments will receive lease payments for now-unused property for a ten year period as well as a fund for long term maintenance

# Public Benefits

- The projects will help Duwamish businesses resolve claims for natural resources damages
- Without Bluefield's investment, the City would not be able to fund the habitat for many years due to budget constraints
- On SDOT Parcels, Bluefield's projects help to fulfill the goals of the Street Ends Work Plan

# Duwamish Restoration Program



# Duwamish Restoration Program

## Master Lease

- Partnership for three years
- Collaboration with Mayor's Office and City Council
- City Council Ordinance 122729

ORDINANCE 122729

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AN ORDINANCE authorizing a Master Lease Agreement with Bluefield Holdings, Inc. for development and enhancement of habitat on City property along the Duwamish River, including tax parcel numbers: 7666703295, 7666703000, 7666701030, 7666701160, 2136200666, 0423049130, 7327902355, 5367202410, 5367202510, 5367202518, 5624200992, 766670156, and 7666703051; and authorizing a term Street Use Permit for development and enhancement of habitat on portions of the following street ends and right-of-way areas: 2nd Ave. S., 8th Ave S. (Georgetown Side of Duwamish River), 10th Ave. S.W., S.W. Spokane Street, S.W. Klickitat Way, and S. Orchard St.

WHEREAS, the Duwamish River is a vital economic and natural resource to the City and its citizens; and

WHEREAS, the Duwamish River is habitat for threatened and endangered species, including salmon, and other species of environmental, economic, and cultural importance; and

WHEREAS, the Duwamish River is an important natural and cultural resource for Tribal Nations; and

WHEREAS, the lower Duwamish River is a federal Superfund site and is being assessed by Tribal Nations and state and federal resource trustees for damages to natural resources; and

WHEREAS, resolving claims for natural resource damages by creating and enhancing habitat will increase certainty for continued commerce and economic activity along the Duwamish, benefit species, and potentially enhance public access to the Lower Duwamish River; NOW, THEREFORE,

**BE IT ORDAINED BY THE CITY OF SEATTLE AS FOLLOWS:**

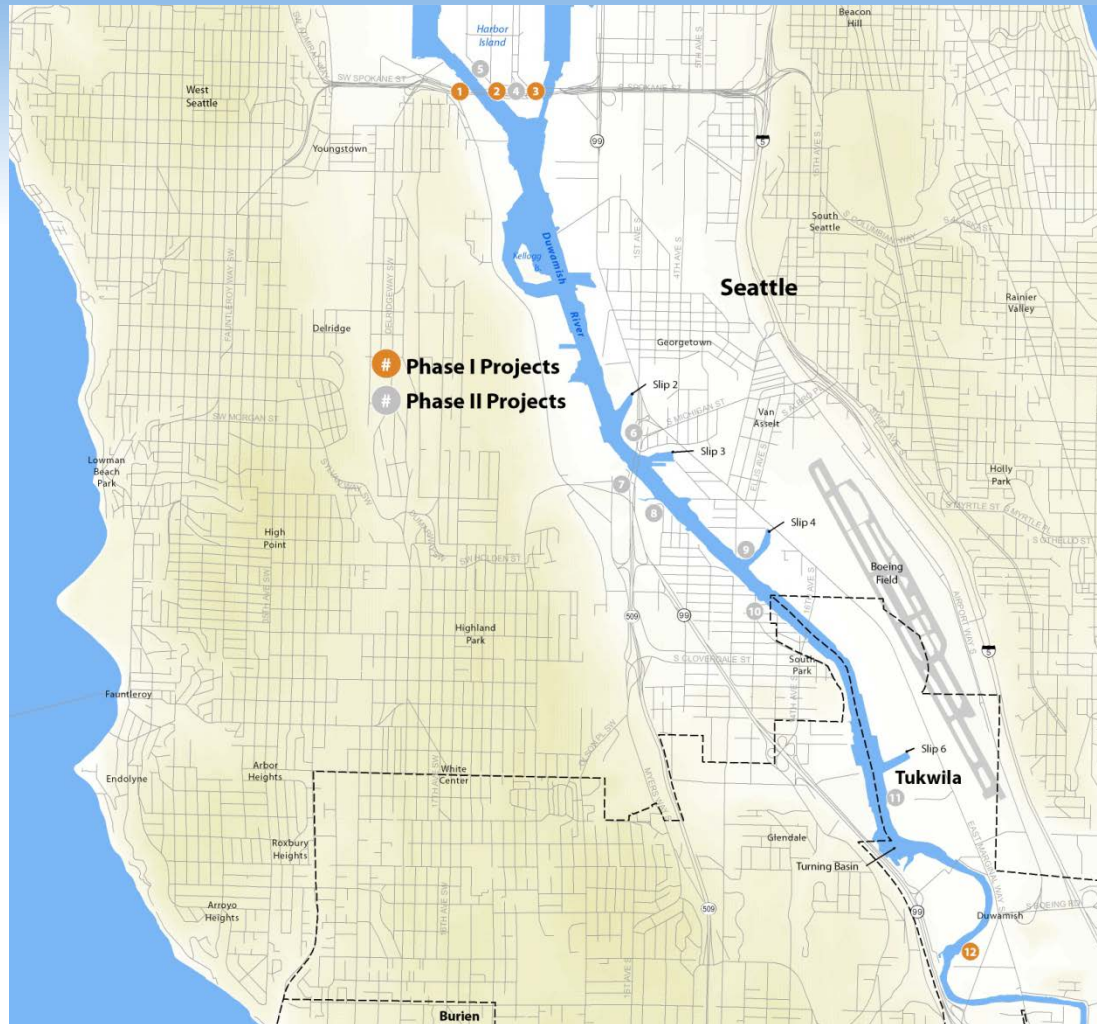
Section 1. The Mayor or his designee is authorized to execute a Master Lease Agreement, substantially in the form attached to this ordinance, with Bluefield Holdings, Inc. (hereafter "Bluefield") for the properties whose legal descriptions are listed in Exhibit A to the Master Lease.

Section 2. The Mayor or his designee is also authorized to execute a Street Use Permit for a term of years, substantially in the form attached to this ordinance, with Bluefield for the





# Duwamish Restoration Sites



# Eco Credit Process

...as it relates to design

# Eco Credit Process

## Three Steps:

1. **Statement of Work Approval (Trustees)**
2. **Conceptual Design Approval (City)**
3. **Financial Assurance**

# Eco Credit Process

## 1. Statement of Work Approval (Trustees)

- Sets the stage for the habitat design
  - Acreage of each habitat type
  - Channel length and design
  - Substrate types
  - Plant palate
- Establishes credit value of project

# Eco Credit Process

## 2. Conceptual Design Approval (City)

- Based on approved SOW design
- 30% Design level (SIP)
  - Utilities
  - Geotechnical
  - Structural
- Establishes Long-term O&M fund
- Establishes lease payments

# Eco Credit Process

## 3. Financial Assurance

- Based on construction cost est. at 30%

# Bluefield Holdings, Inc.

## Site 1

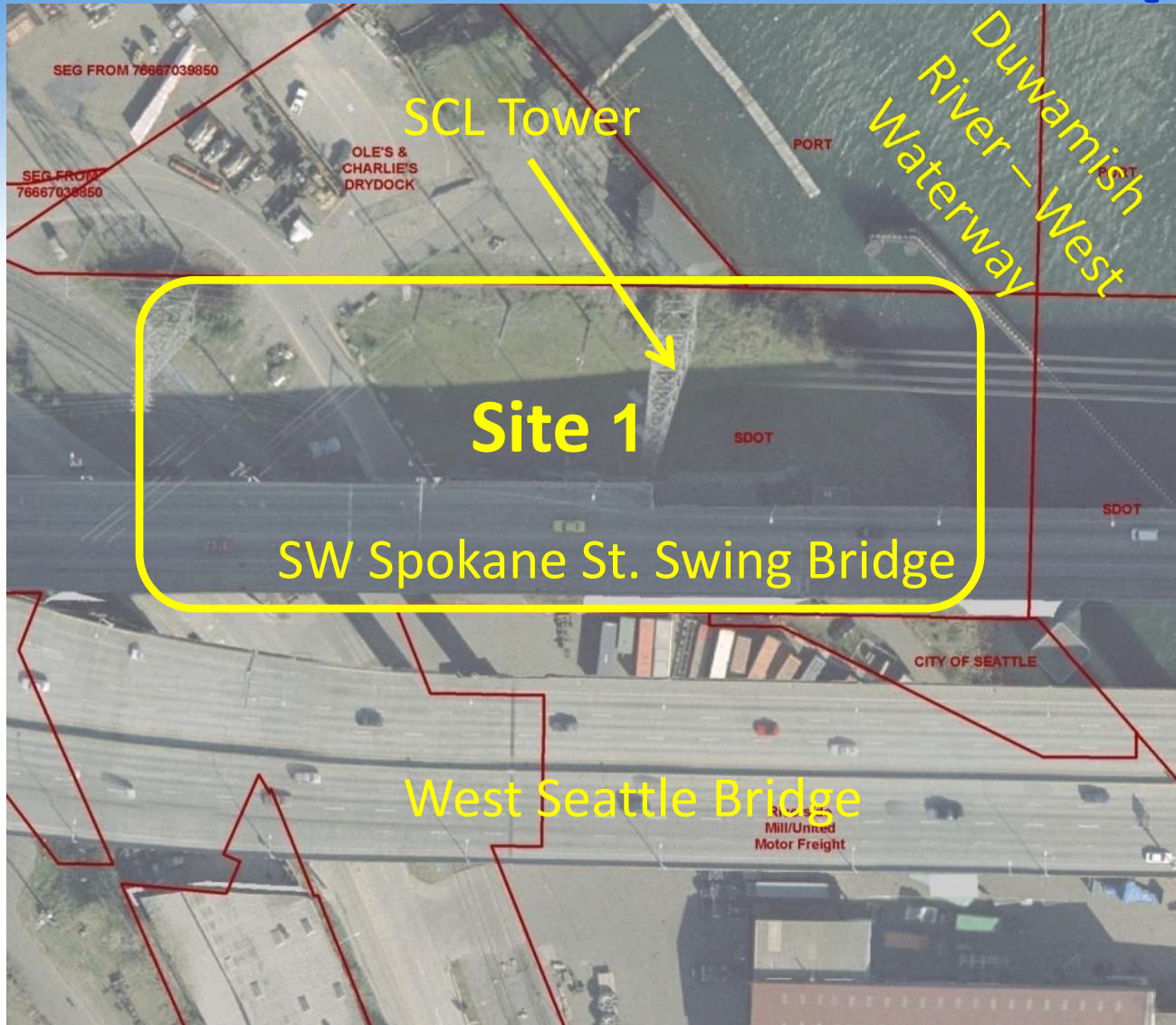
West Side West Waterway

(or)



(we are building a shoreline restoration)

# Location and Ownership





# Site Conditions



# Site Conditions



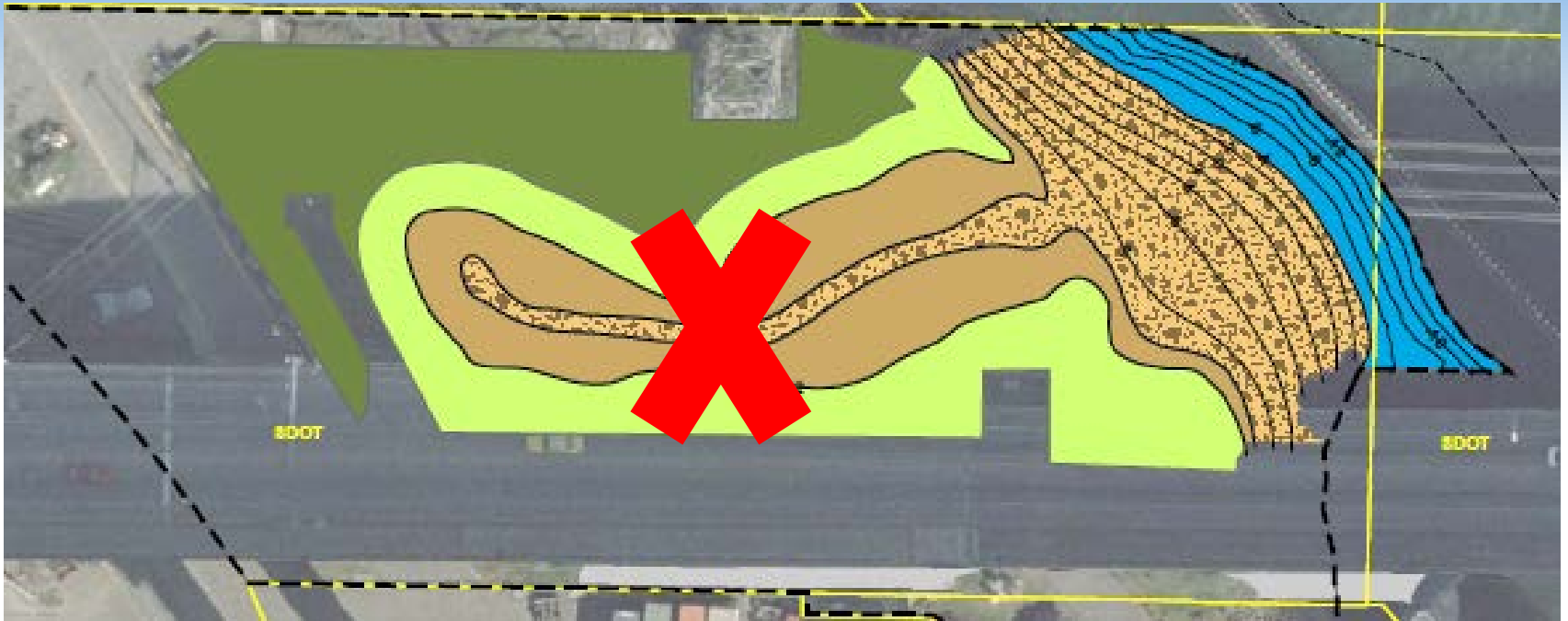
# Site Conditions



# Site Conditions

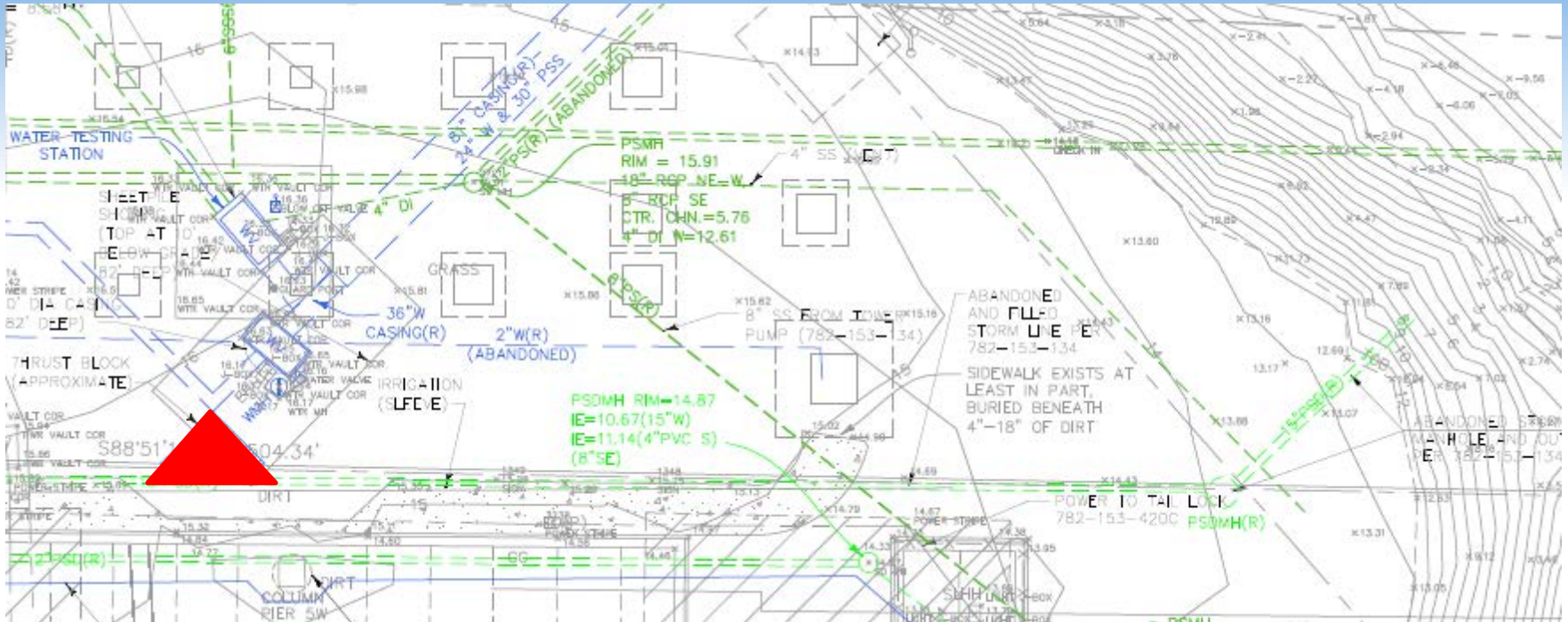


# Initial Design



Approx. 250 feet of channel  
Until we get the engineers on board...

# Initial Design



# Initial Design

## SDOT 0 – 15% Design Review:

- Utilities (SDOT, SCL, SPU)
- Structures (SDOT Bridge, Port Ramp)
- Access (SDOT, SCL)
- Parking

# Initial Design

## SDOT 0 – 15% Design Review:

- Condor 170 Access





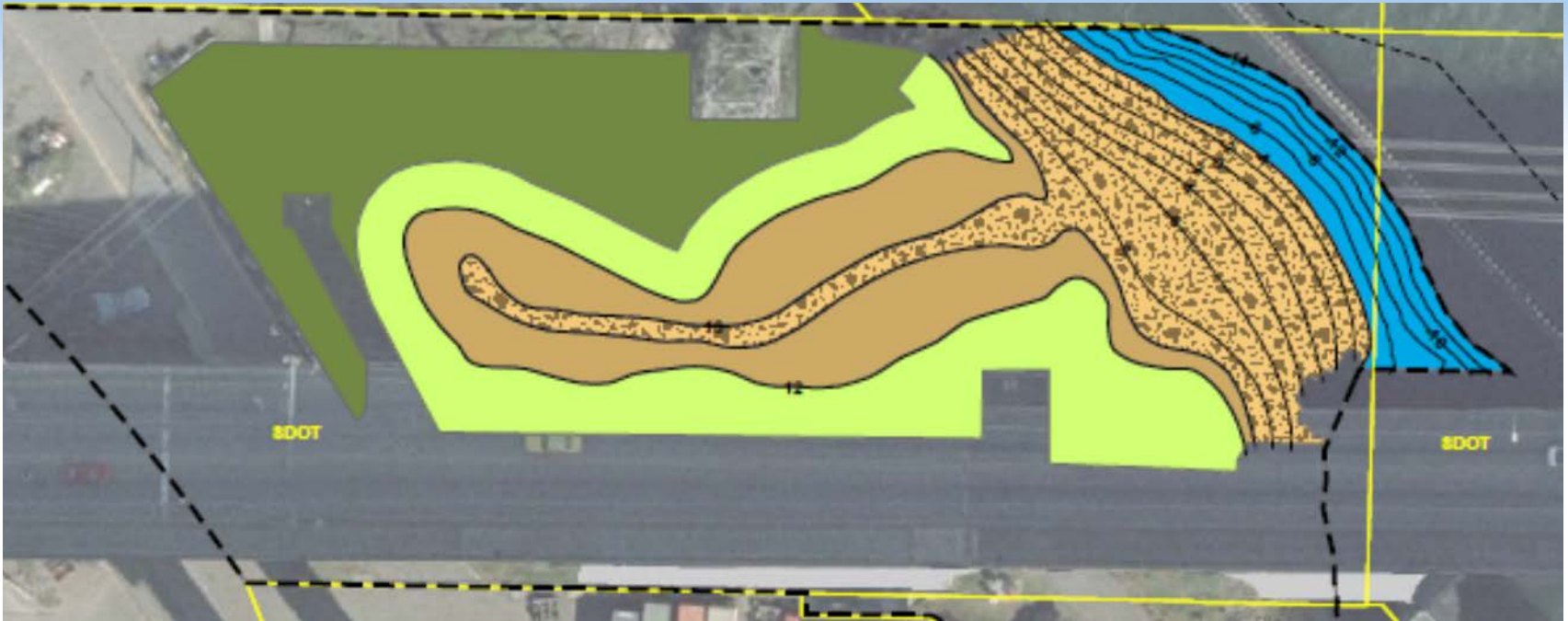


# Initial Design

Trustees pre SOW input:

- Focus on “off-channel” habitat
- Project must be 50 meters perpendicular to the river

# Design Development



# Design Development



This became the design for the SOW and 30% SIP

**Statement of Work  
Duwamish River Habitat Restoration Program  
West Side West Waterway - Site 01  
Seattle, Washington**

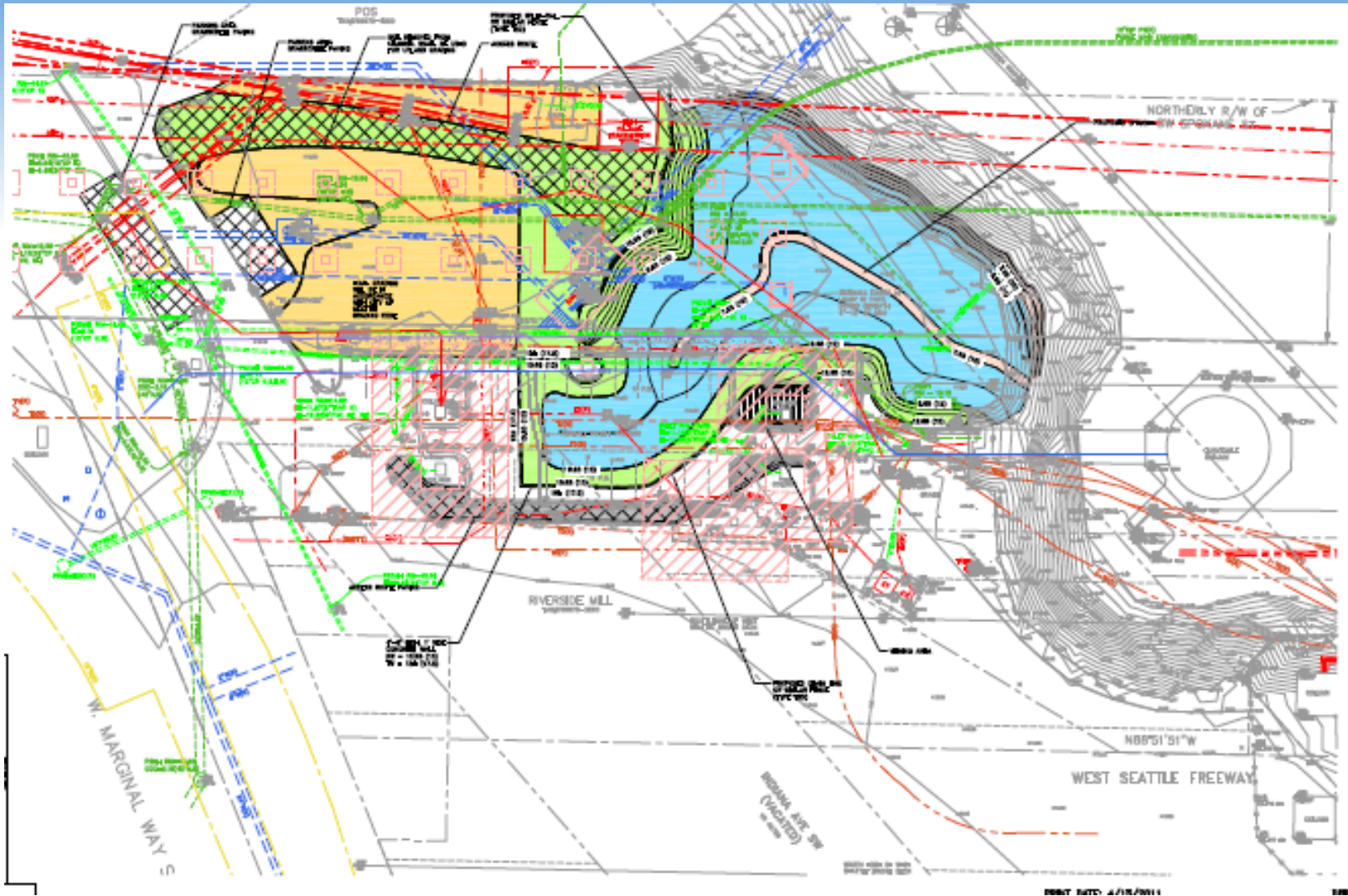


Prepared by:  
Bluefield Holdings, Inc.  
2505 Second Avenue, Suite 602  
Seattle, WA 98121

March 24, 2011



# Design Development



DATE: 4/18/2011

# 30% Design

## SDOT 30% Design Review:

- Structural tolerances of bridge pilings
- Public access
- Fiber optic line needs to be re-routed
  - The line that operates the swing bridge



# 30% Design

## Trustees Clarification:

- The habitat must contain a channel that is at least 50 meters long (not 50 meters perpendicular to the river)

# 30% Design



# 60% Design



This has become the 60% Design

# Not Included (but considered)

- Soil Testing and Chemical Analysis
- Sediment Testing and Chemical Analysis
- Utility Re-location Engineering
- Truck/Condor turning movements
- Soil Bioengineering
- The plan to shut down the swing bridge (!)

# Design Commission Input

## Public Viewing Areas

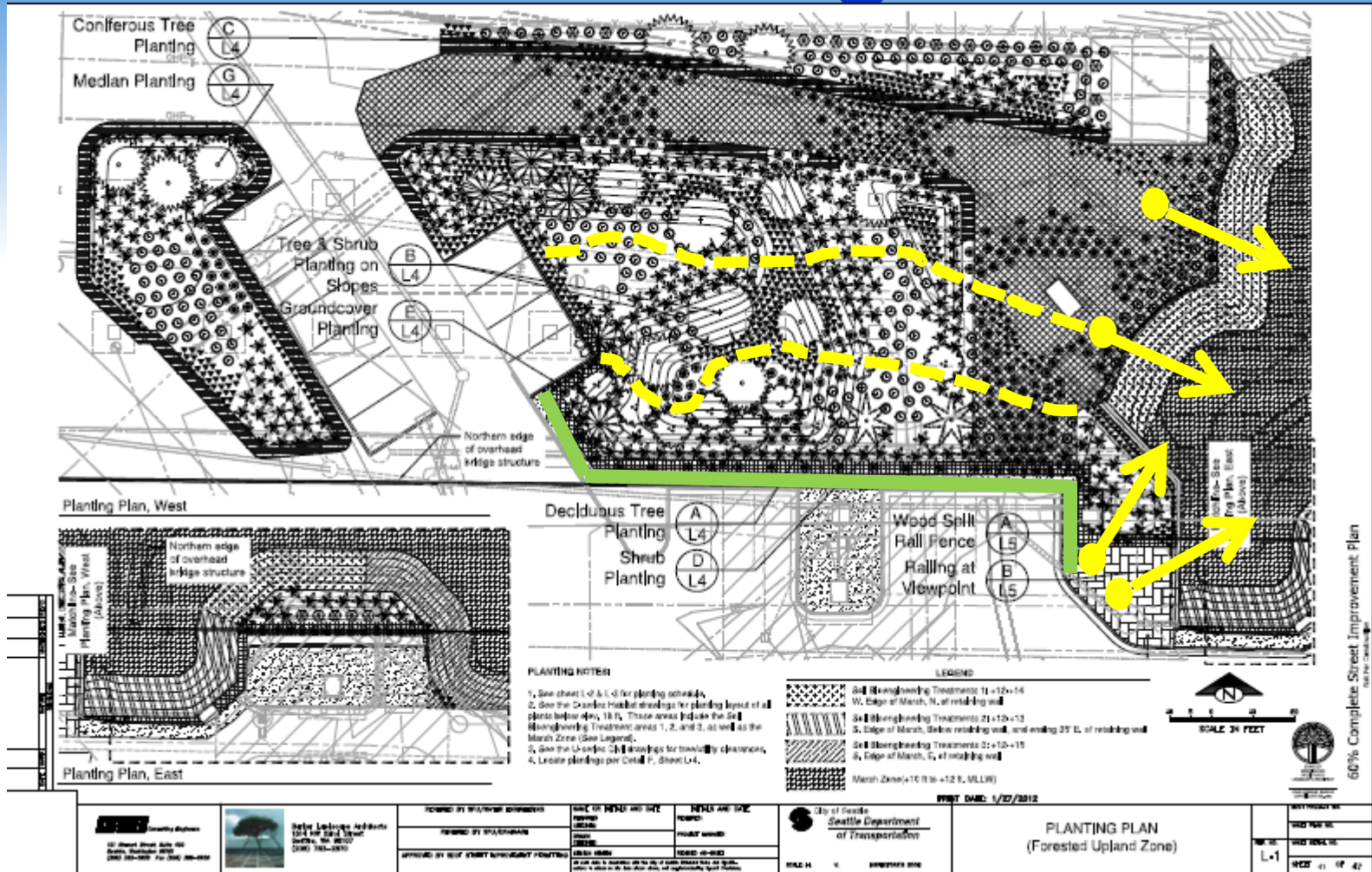
# Design Commission Input

## Public Viewing Areas

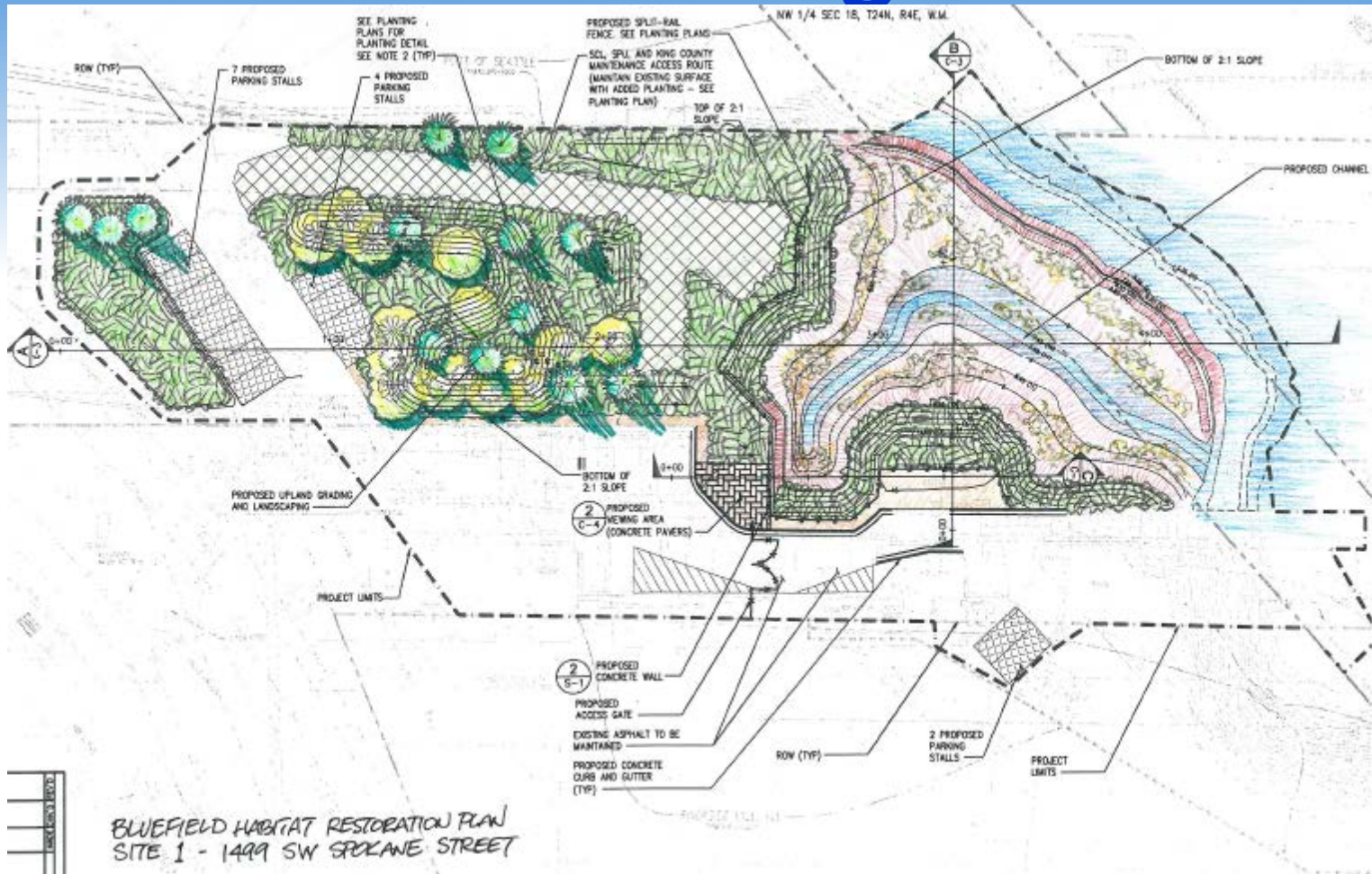
### Seattle PD on CPTED:

- Don't make it easy for people to loiter
- No wooden benches
- Liked all parking visible from the street
- Existing lights under bridge are sufficient

# Public Viewing Areas

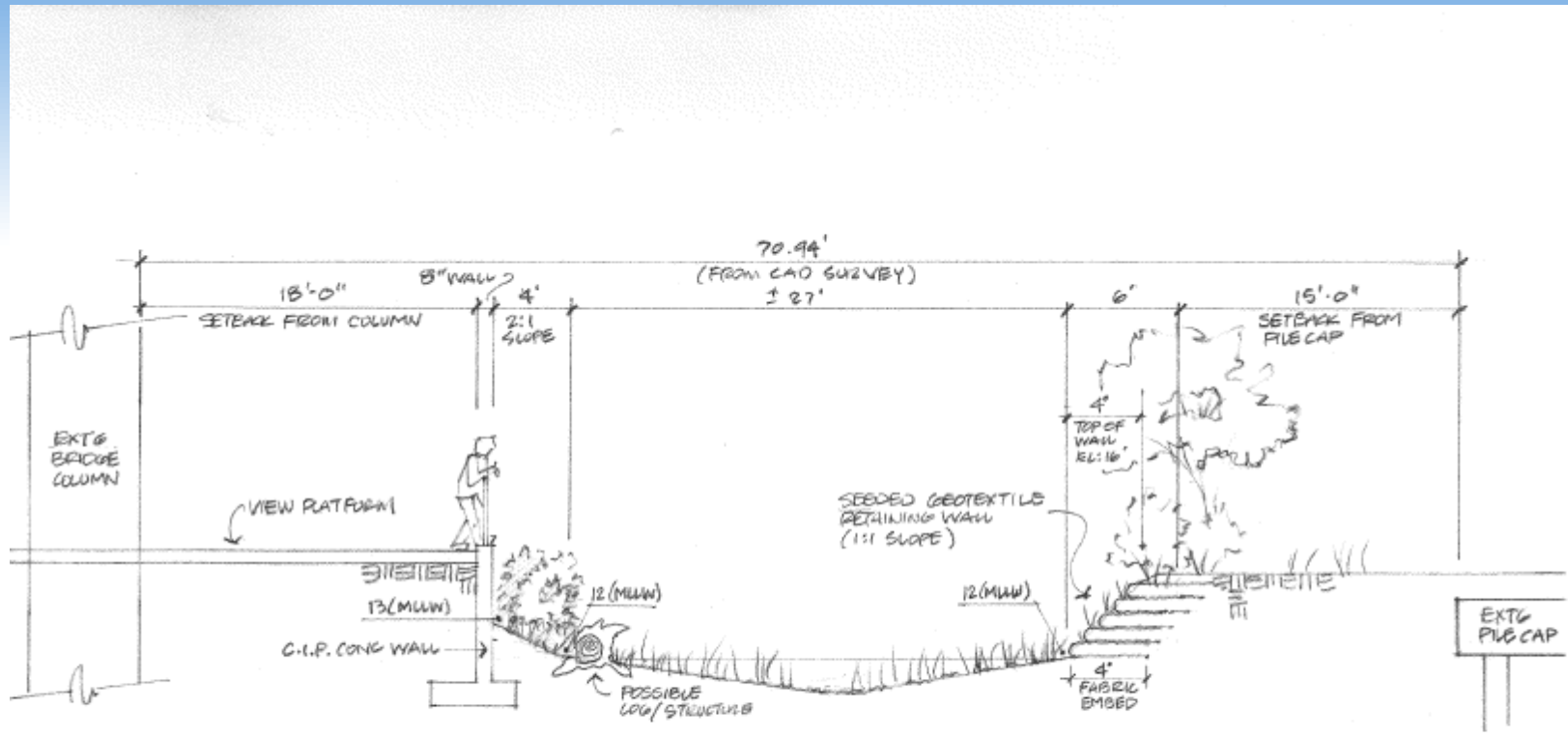


# Public Viewing Areas





# Public Viewing Areas

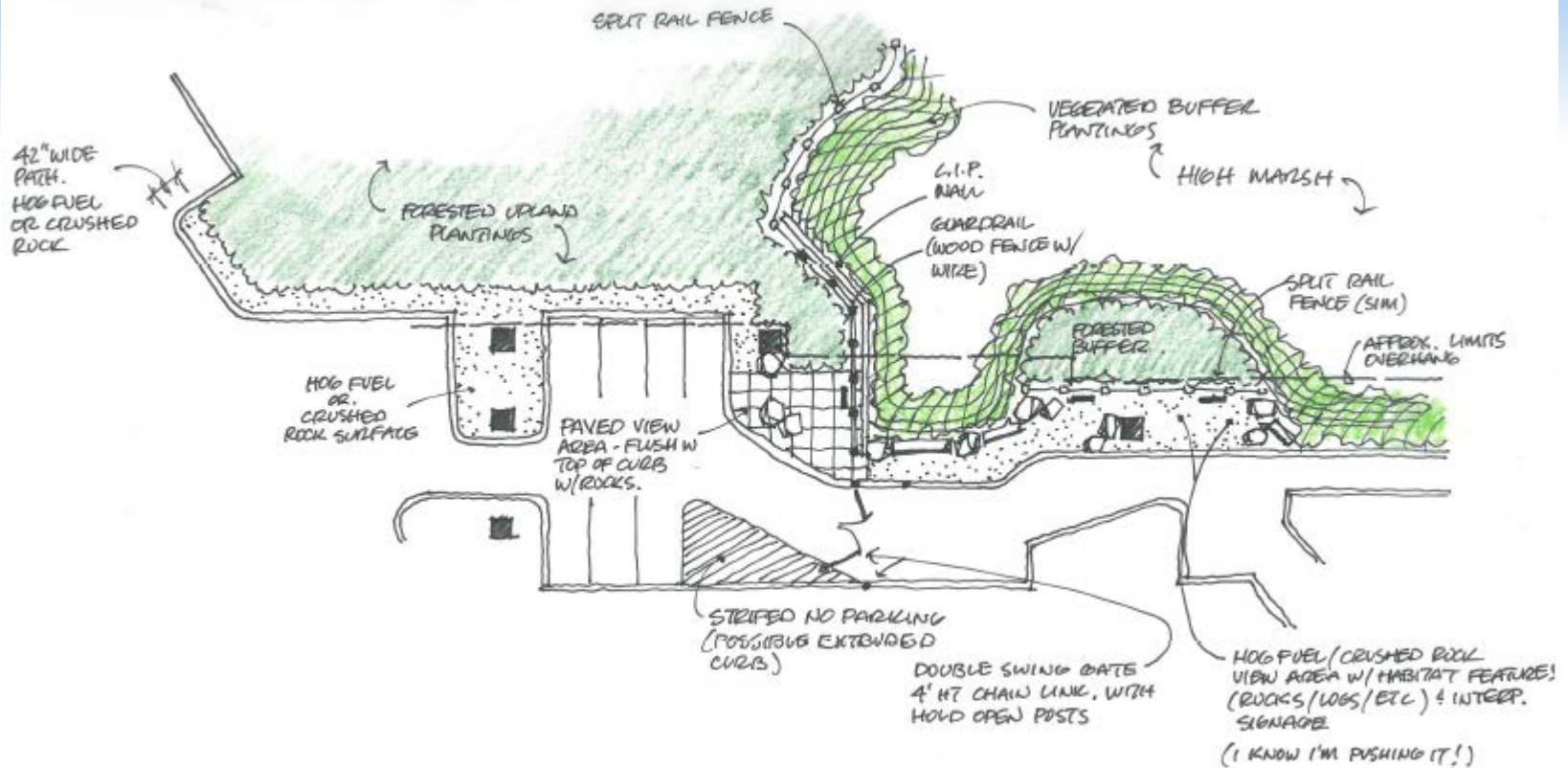


SITE 1 / "THUMB" STUDY SECTION A: C.I.P. WALL AND GEOTEXTILE REINFORCED SLOPE

1"=5'

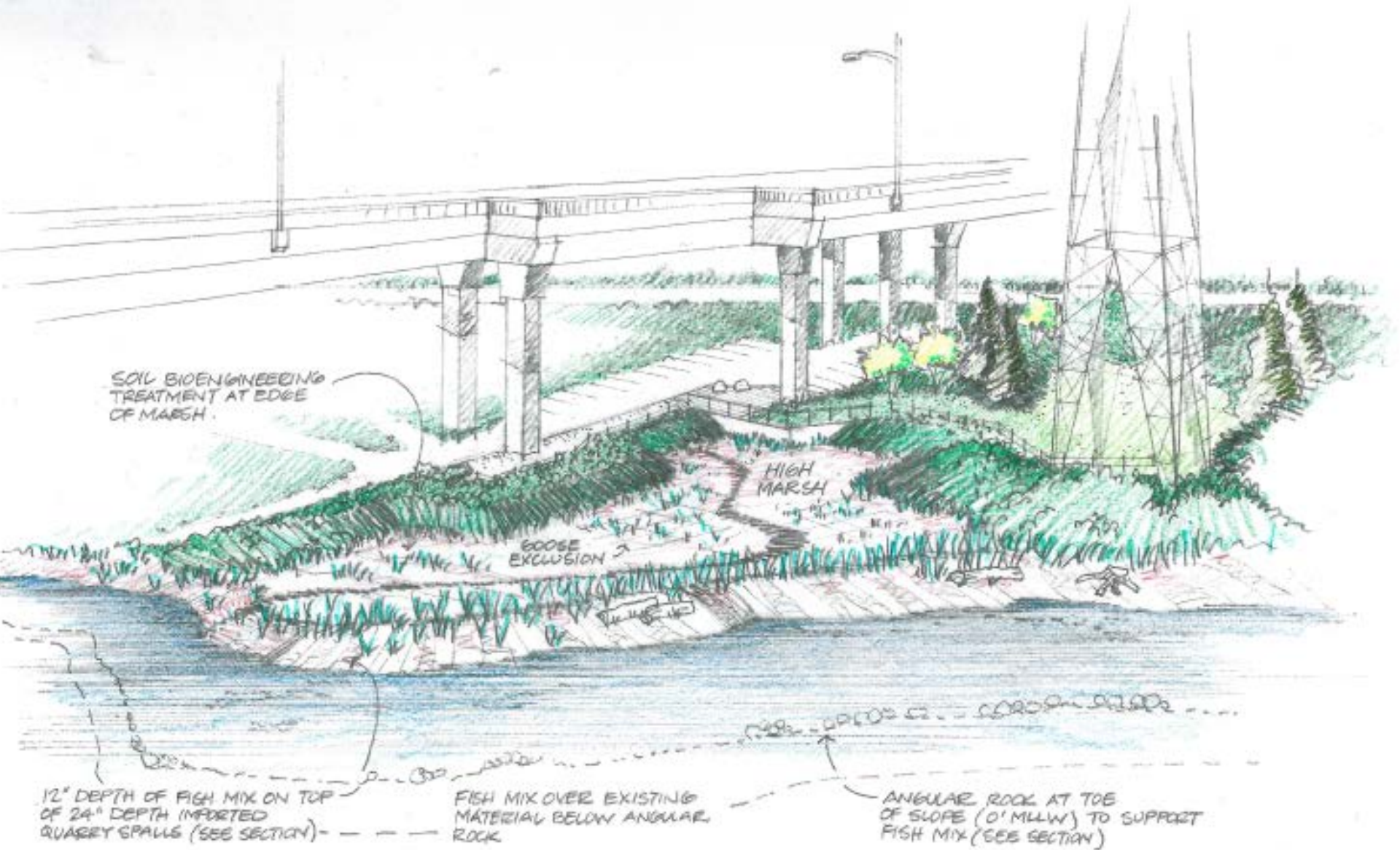
12-16-11

# Public Viewing Areas



SITE 1 / VIEW AREA DESIGN STUDY  
 BLUEFIELD HOLDINGS 1.21.12

NOT TO SCALE



SOIL BIOENGINEERING  
TREATMENT AT EDGE  
OF MARSH.

HIGH  
MARSH

GOOSE  
EXCLUSION

12" DEPTH OF FISH MIX ON TOP  
OF 24" DEPTH IMPORTED  
QUARRY SPALLS (SEE SECTION)

FISH MIX OVER EXISTING  
MATERIAL BELOW ANGULAR  
ROCK

ANGULAR ROCK AT TOE  
OF SLOPE (0' MLLW) TO SUPPORT  
FISH MIX (SEE SECTION)

**Thank You!**

