

# Thornton Creek Confluence

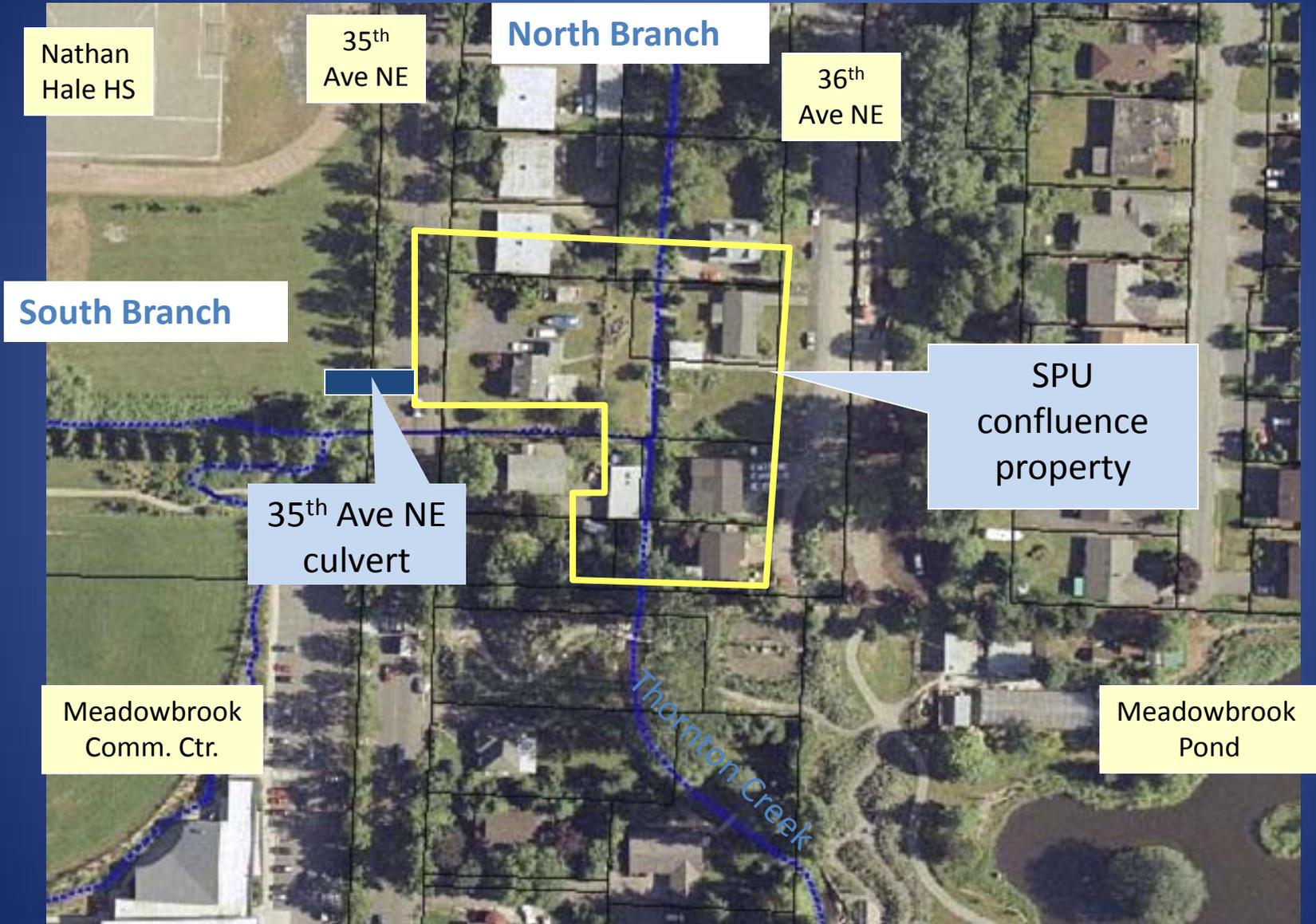


Public Meeting November 14, 2012

# Agenda

- Welcome and Introductions
- Project Objectives/Schedule
- Assessment of Design Comments
- Analysis and Decisions on Design Changes
- Questions and Answers

# Project Site



There are a number of problems  
throughout the Thornton Creek Basin

Such as...

# Property Flooding



# Street Flooding/Closures



↑  
36<sup>th</sup> Ave NE

35<sup>th</sup> Ave NE



# Utilities and road infrastructure at risk due to flooding



# Stormwater Capacity is Exceeded



# Landslides and Erosion



# Many areas with little habitat value





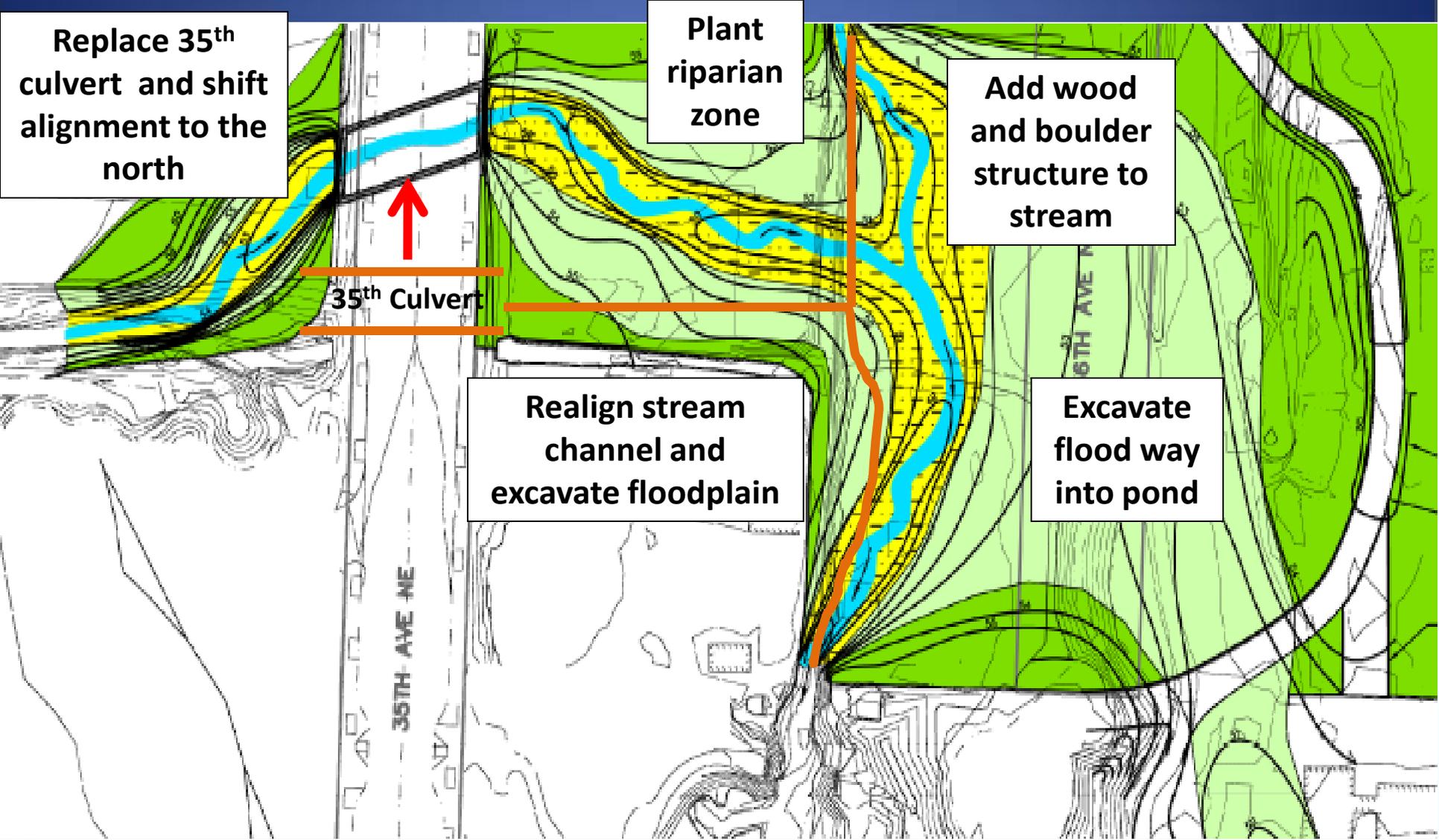
# Confluence Project Objectives

- Meet drainage service levels for 35<sup>th</sup> Ave NE. (new 35<sup>th</sup> culvert)
- Remove flow choke point to address upstream flooding. (new 35<sup>th</sup> culvert)
- Reduce downstream peak flow velocities. (new 35<sup>th</sup> culvert, new stream channels and floodplain)
- Improve instream spawning and rearing habitat. (new stream channels)



Project Task	Schedule
Design and permitting	1Q 2011 - 3Q 2013
Construction Contract Preparation	4Q 2013 - 1Q 2014
Construction	2Q-3Q 2014 <b>delayed</b>

# Overview – Confluence Project



Replace 35<sup>th</sup> culvert and shift alignment to the north

Plant riparian zone

Add wood and boulder structure to stream

35<sup>th</sup> Culvert

Realign stream channel and excavate floodplain

Excavate flood way into pond

35TH AVE NE

6TH AVE NE

# Evaluating Design Suggestions

## 1- Project Goals

Project Goals	Information Examined
<i>No flooding of 35th Ave NE with 25 year storm</i>	<i>No changes proposed</i>
<i>Remove flow choke point at 35th</i>	<i>No changes proposed</i>
Reduce downstream peak flow velocities	Flood storage volume and delay in peak flows
Improve habitat	Stream length/area, instream wood, riparian/vegetated areas, continuity
Improve worker safety	Safety while accessing site or performing maintenance.
<i>Improve water quality</i>	<i>No changes proposed</i>
Construction costs	Cost of the proposed change
Maintenance needs	Increased or decreased maintenance

# Evaluating Design Suggestions

## 2- Additional Concerns

Additional Concerns	Information Examined
Maintaining trees/other plants	Number of trees/size of vegetated area
Public safety and security	Conditions that promote/deter illicit behaviors and other security concerns
Aesthetics of site	Visual appeal, enjoyment of area
Passive recreation opportunities	Passive uses like walking, wildlife viewing, etc.
Schedule Impacts	Schedule delays

# West of 35<sup>th</sup> Ave NE

## Original 60% Design Plan





# East of 35<sup>th</sup> Ave NE

## Original 60% Design Plan

Path or  
Overlook?

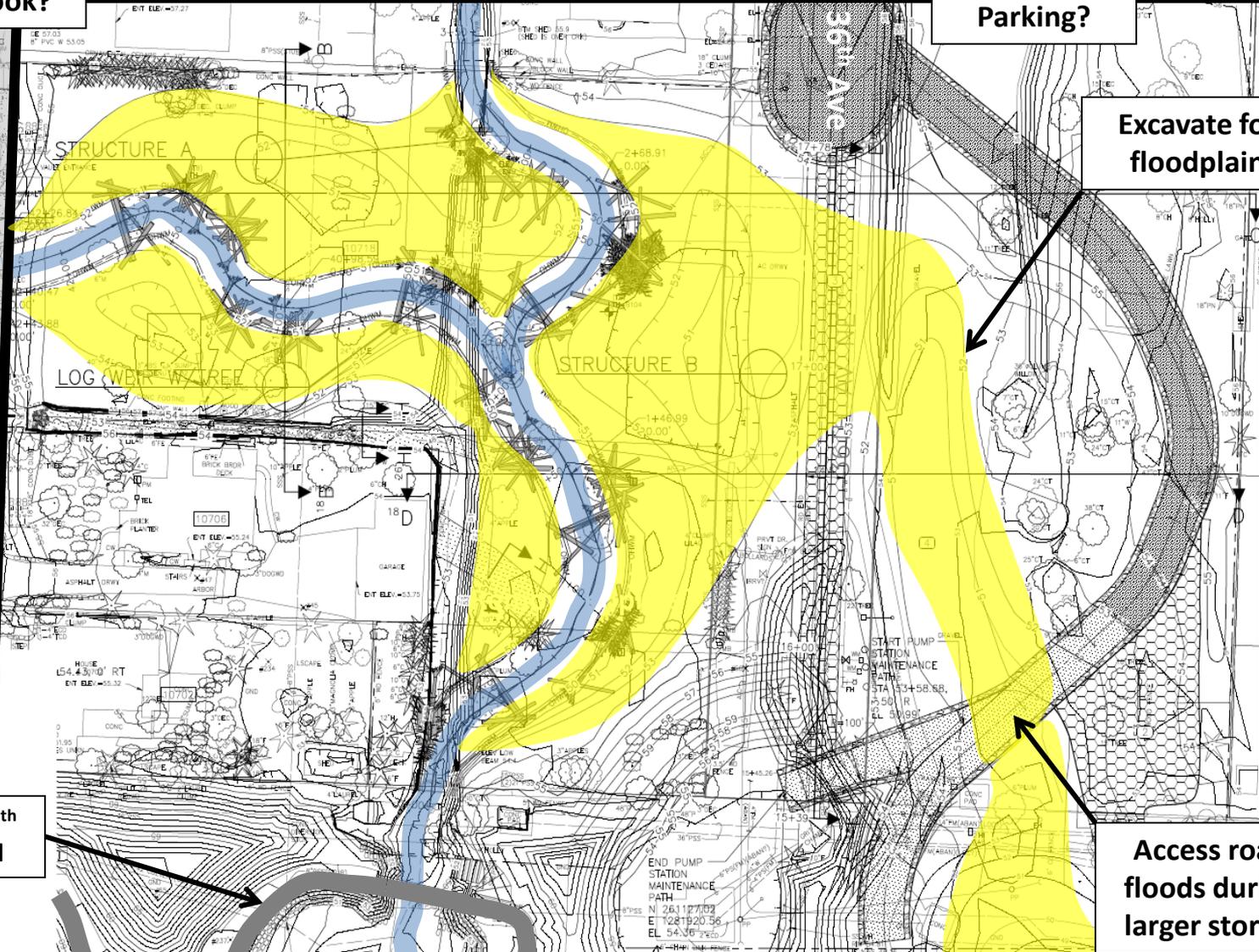
Parking?

Excavate for  
floodplain

35<sup>th</sup> Ave NE

Path from 35<sup>th</sup>  
Ave to pond

Access road  
floods during  
larger storms



# East of 35<sup>th</sup> Ave NE

## Revised Design Plan

Overlook

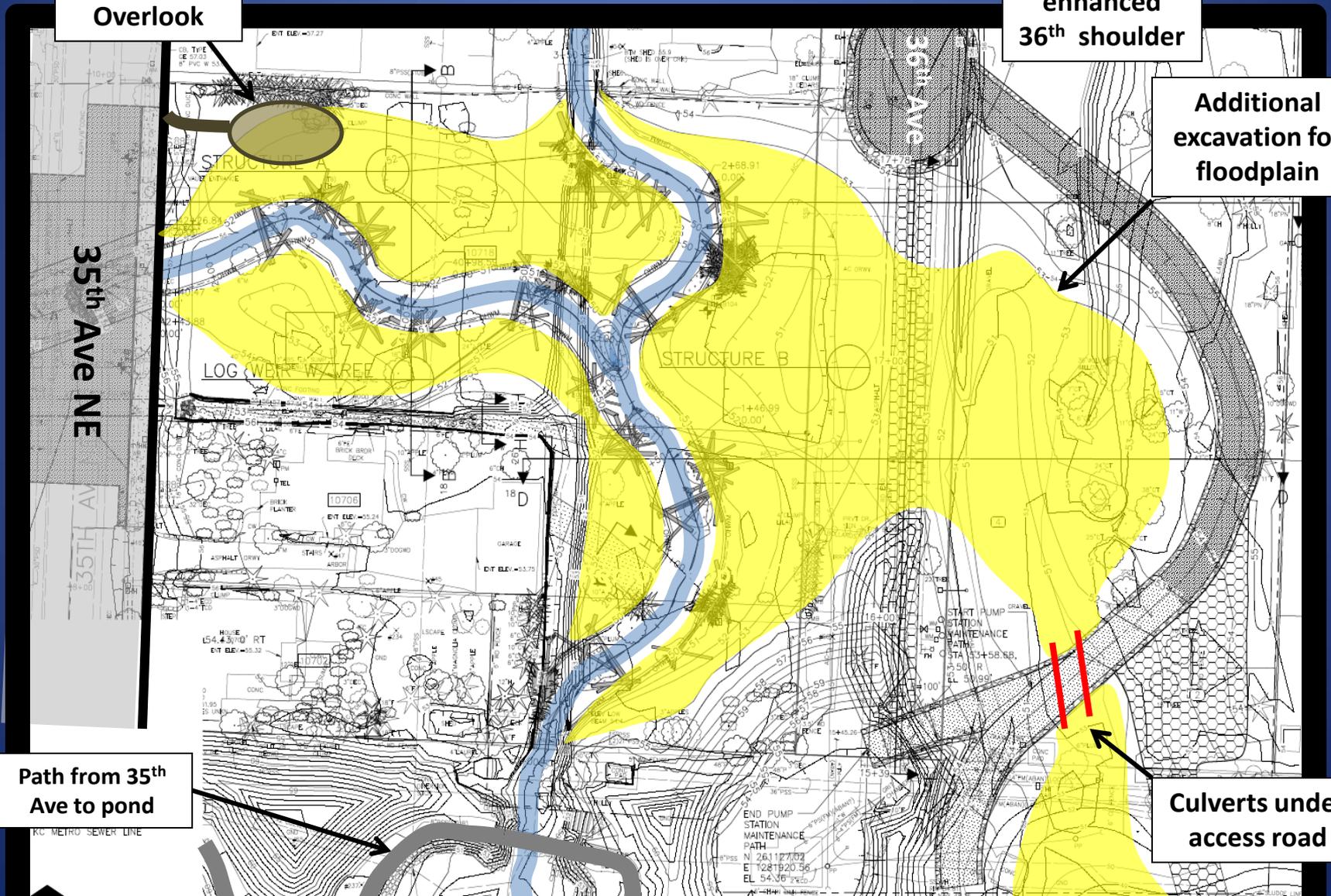
Parking on enhanced 36<sup>th</sup> shoulder

Additional excavation for floodplain

35<sup>th</sup> Ave NE

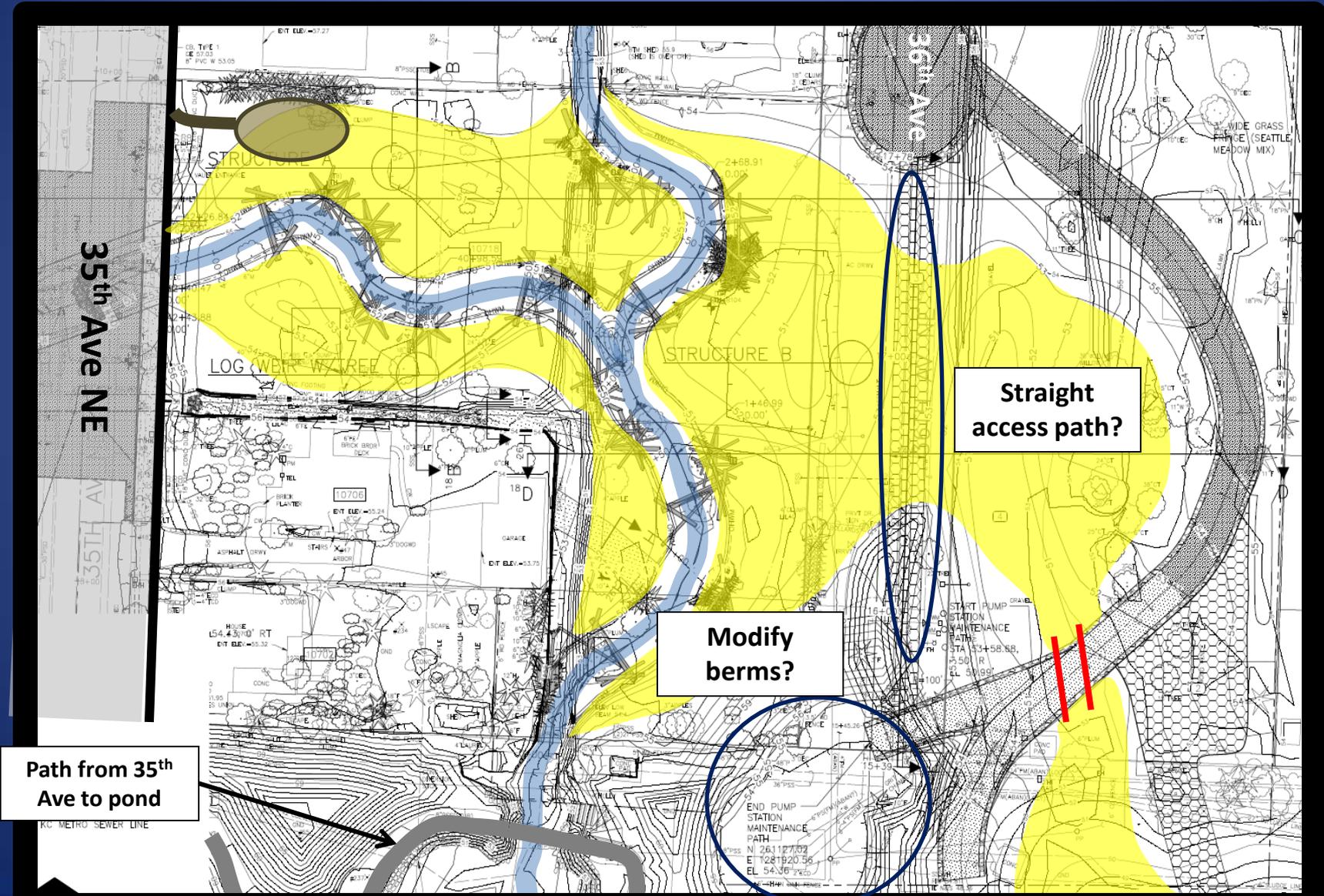
Path from 35<sup>th</sup> Ave to pond

Culverts under access road



# East of 35<sup>th</sup> Ave NE

## Other Ideas Considered



# Meadowbrook Pond Other Ideas Considered

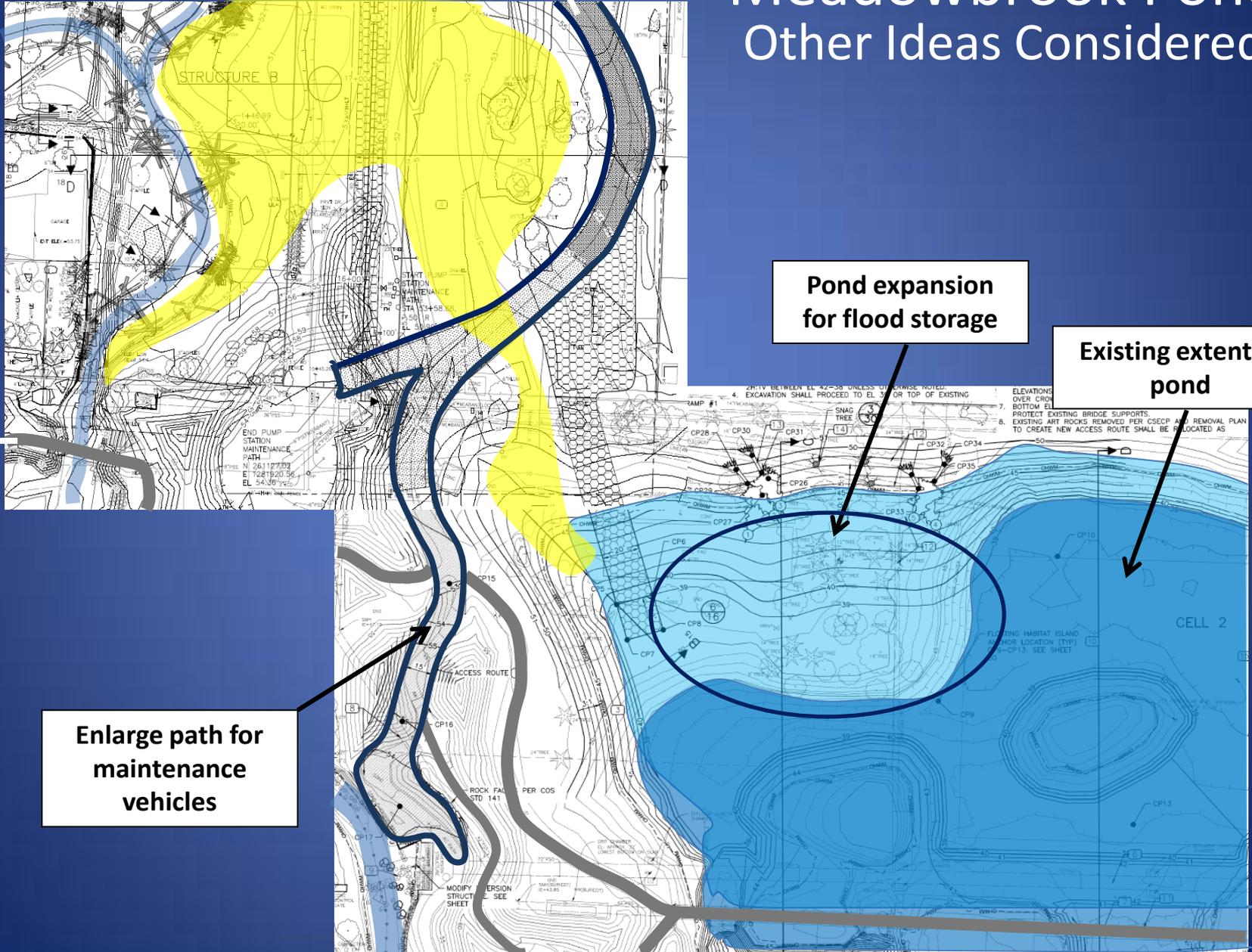
To 36<sup>th</sup>  
Ave

Pond expansion  
for flood storage

Existing extent of  
pond

Enlarge path for  
maintenance  
vehicles

To 35<sup>th</sup>  
Ave



# Thank you!

[www.seattle.gov/util/meadowbrook](http://www.seattle.gov/util/meadowbrook)

Sign up for the project mailing list:

[www.seattle.gov/lists/meadowbrook.htm](http://www.seattle.gov/lists/meadowbrook.htm)