

#### **Murray CSO Control Project**



## **Pre-Construction Public Meeting**

November 6, 2013

#### **Presentation Overview**

- Project team introductions
- King County mission and role
- Why is this project necessary?
- Facility design
- Construction techniques
- Schedule
- What to expect during construction
- How to stay informed
- Question time



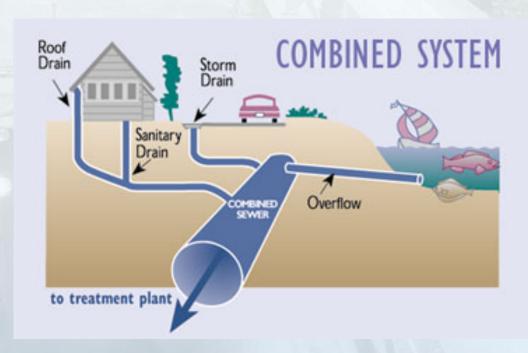
#### **Murray CSO Control Project**



Why is the project necessary?

## Combined Sewer Overflows (CSOs)

- In most of Seattle, one pipe transports sewage and polluted stormwater for cleaning and discharge
  - Common to older systems
- During storms, excess flows go directly to Seattle water bodies
  - Called Combined Sewer Overflows (CSOs)
- Important safety valves
  - Prevent sewer backups in our homes and streets
  - Harmful to the environment and public health



## Murray CSO Control Facility requirements

## **Basin Description and Requirements**

- 992 acres
- Murray CSOs
  - Average 5 events per year
  - Average 5 million gallons per year
- Control requirements
  - 1,000,000 gallons of storage
- Other required elements
  - Odor control
  - Stand-by generator



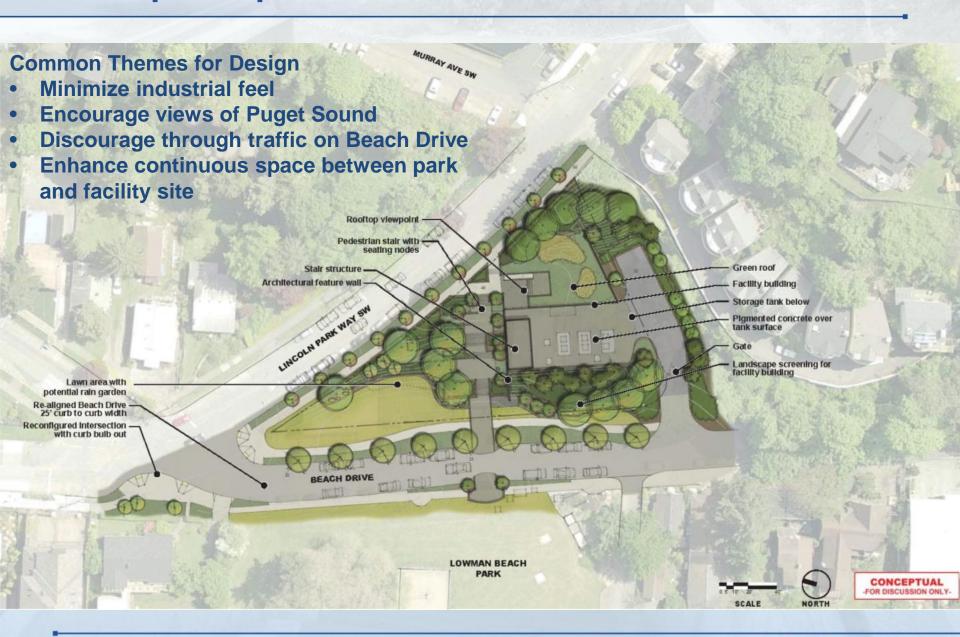


#### **Murray CSO Control Project**



## **Facility Design**

## New open space, more trees, wider sidewalks

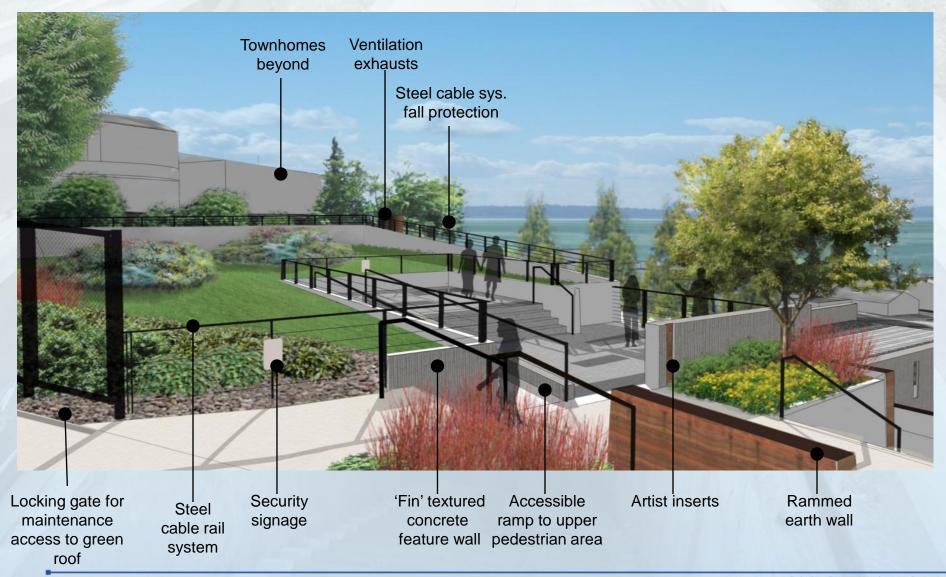


#### View from Lowman Beach Park

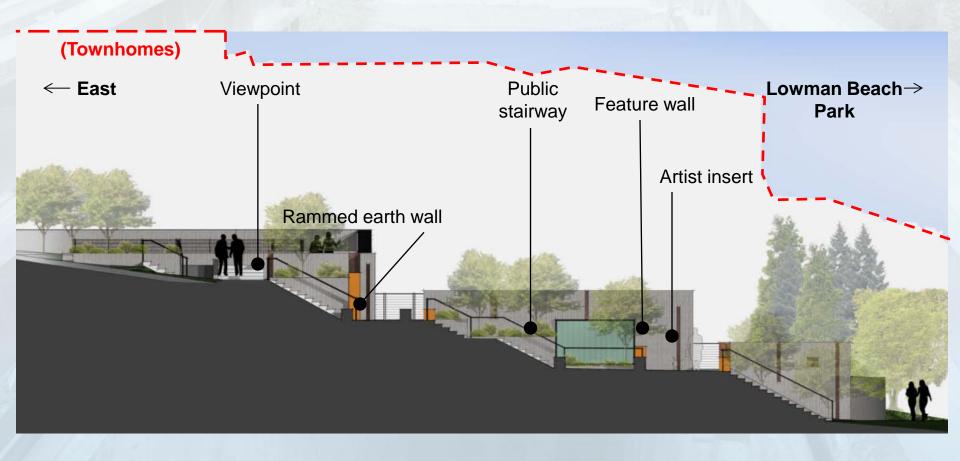


3-5 Year Plan View; Tree growth will screen facility over time

## Facility green roof depicts alpine meadow



## New public space, art installations along stairs



Vegetation screened back for clarity

#### Improved pedestrian access to Lowman Beach Park





#### **Murray CSO Control Project**



How will the facility be built?

## King County construction team roles

- King County Project Representative Ukwenga Oleru
  - Works directly with contractor, ensures project is completed on time and on budget
- Project Consultant Engineer Eric Bergstrom
  - Chief engineer on facility design
  - Addresses engineering questions that arise during construction
- Project Inspectors Mario Serra, Fred Tervet
  - On site daily to work with the contractor to ensure job quality, safety and permit compliance
- Contractor Shimmick Construction
  - Performs the work to complete the contract scope. Oversees any subcontractors necessary to complete the job
- King County Community Relations Lead Doug Marsano
  - Works directly with the community to identify and address community concerns related to the project

#### Site conditions

- Relatively small site
  - Residential/ recreational location
- Below developed hills
- High ground water
- Diverse soils
  - A mix of clay, peat and sand



#### Soil nail walls to support eastern hillside by Lincoln Park Way

- Steel rods inserted
- Screens attached
- Reinforced with concrete
- Adds stability
- Controls erosion



## Secant piles shore the tank site during excavation

- Interlocking concrete cylinders
- Drill removes soil, replaces with concrete
- Cylinders create a watertight ring
  - Safeguard against settlement
  - Reduced dewatering
- Ring dimensions
  - Nearly 100 feet across
  - 80 feet deep
  - Enough excavated materials to fill Colman
     Pool twice



#### **Concrete Foundation and Tank Interior**

- High groundwater at the site
- 20 foot thick concrete slab installed below tank prevents "floating"
- Crews will form and pour tank above slab
  - Walls, columns
  - View deck
  - Roof



## Large utilities beneath Beach Drive Southwest

 Power, HVAC, water line, overflow pipes connect tank to Murray Pump Station in Lowman Beach Park

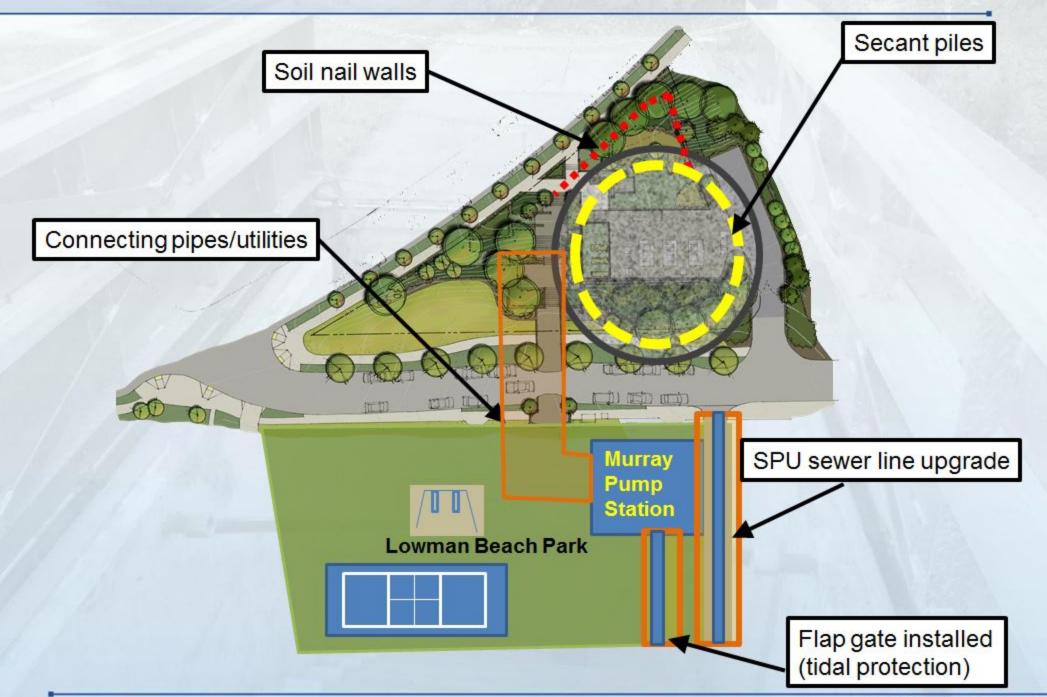




#### Temporary steel plates allow Beach Drive to remain open



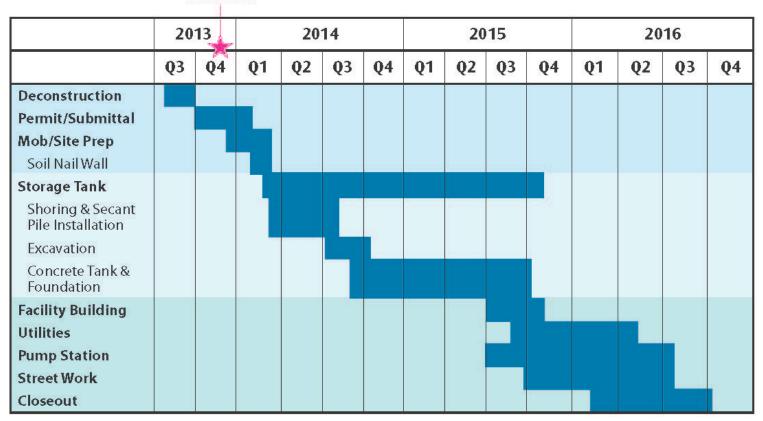
## **Construction Methods**



#### **Construction Schedule**

### **Construction Schedule Overview**

WE ARE HERE



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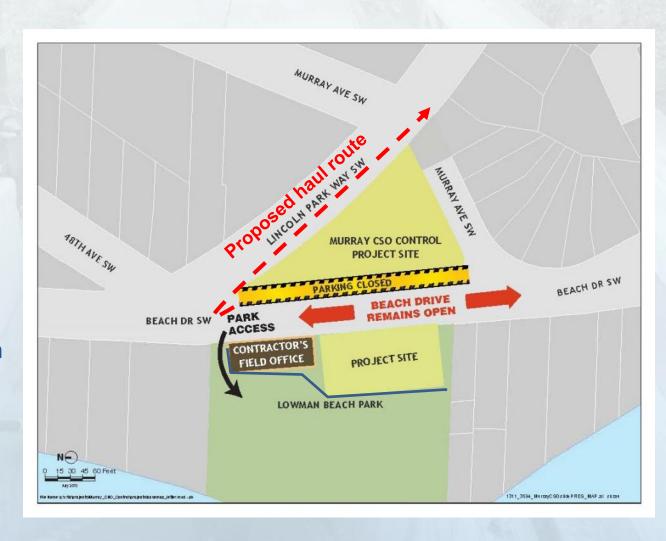
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## **What To Expect**

## What to expect during construction

- Heavy equipment, truck traffic, and noise
- Work hours typically 7 a.m. - 6 p.m. weekdays
- Access to Beach
   Drive Southwest
   maintained
- No parking on eastern side of Beach Drive Southwest for duration of project
- Access to Lowman
   Beach Park facilities,
   beach maintained
- No Surprises!



## How will King County share information?

- Project site signs and flyer box
- Progress updates
  - Email, flyer (Regular mail upon request)
- 48-hours notice (minimum) for intense activities
  - Email, flyer and phone
- Periodic mailings
- Other project information resources:
  - West Seattle blogs and newspapers
  - Lowman Beach Park community board
  - Some local West Seattle businesses



## How can you contact the project?

- Every project inquiry gets individual attention
- Staff available to answer questions 24 hours a day
  - Call project hotline: 206-205-9186
  - Send email: doug.marsano@kingcounty.gov
  - Submit online comments at project web page:
    - Search for "Murray CSO" at <u>www.kingcounty.gov</u>

# Stay Safe!

- Avoid the work area!
  - Don't engage workers
- Alert King County to any potential hazards
  - Project hotline: 206-205-9186
- Use identified pedestrian/bicycle pathways
- Follow detours
- Obey traffic signs, no park zones and traffic control personnel as necessary
- Drive slowly through site





# **THANK YOU!**

Questions?