

# Heavy Civil GC/CM Services for Mouth of Duwamish Combined Sewer Overflow (MDCSO)

## Wet Weather Treatment Station

May 22, 2025



**King County**

Department of  
Natural Resources and Parks  
**Wastewater Treatment  
Division**



WTD Capital Delivery

**FACILITY PROGRAMS**



# Agenda

- Program Overview
- Project Background
- GC/CM Qualification
  - Meets Applicable Criteria
  - Management Plan
- Public Benefits
- Summary



# King County Wastewater Treatment Division

## Mission

We protect public health and the environment by collecting and cleaning wastewater while recovering valuable resources for a healthy and thriving Puget Sound Region.

## Service

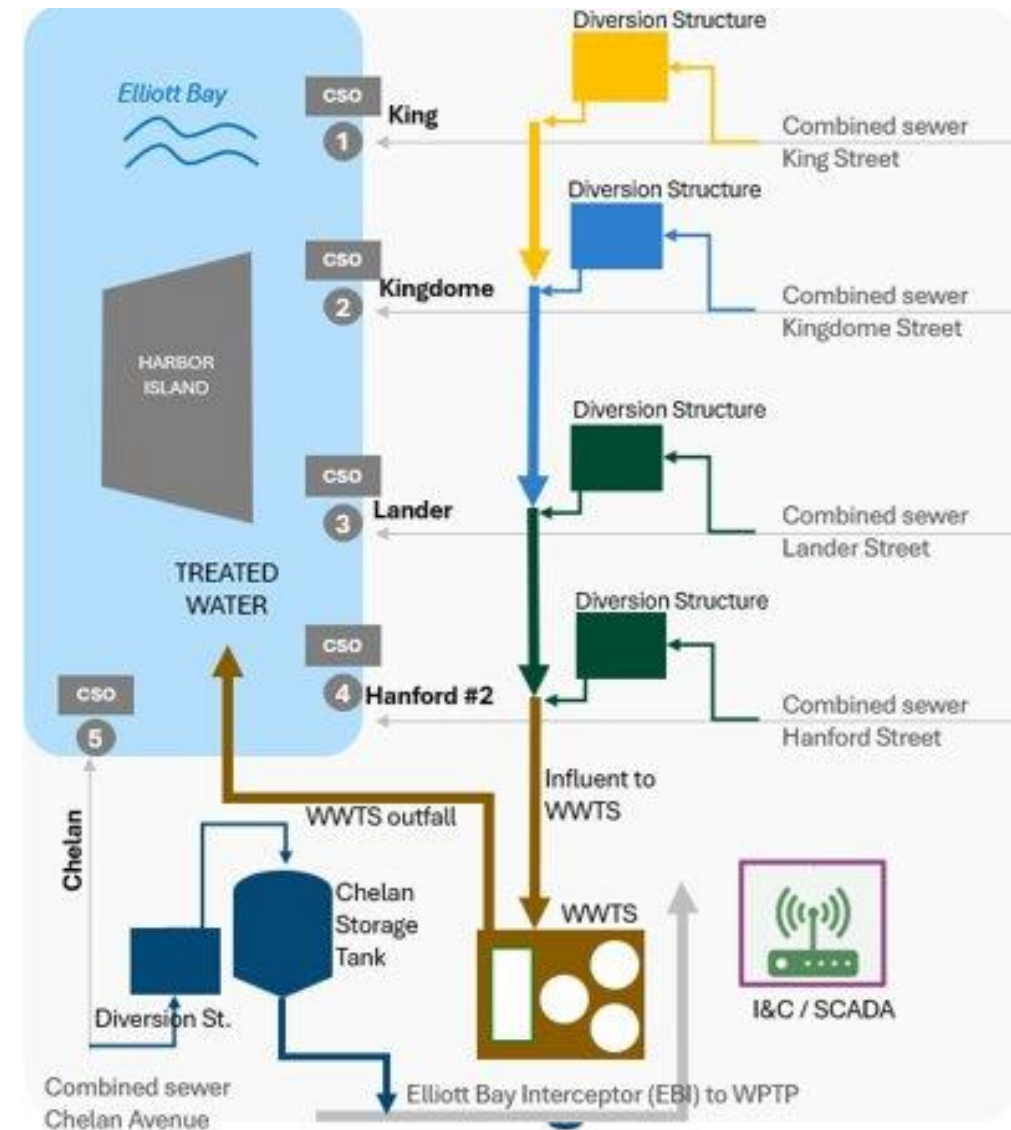
24/7/365 essential wastewater service to almost 2 million people and businesses in King County, plus portions of Pierce and Snohomish counties.



King County Wastewater Treatment Division Service Area

# Program Overview

- Deliver facilities to **control sewer overflows** during wet weather in the Duwamish River.
- Governed by a **consent decree** between King County, the EPA, and Ecology that set specific project requirements and deadlines of substantial completion in 2034 for this program.
- Achieve **regulatory compliance** per RCW 90.48 and WAC 173-245.
- Manage **multiple projects in a coordinated way**, with benefits that could not occur if the projects were handled separately.





# MDCSO Packages



## Wet Weather Treatment Station

- Pumping
- Screening
- Sedimentation
- EQ
- UV Disinfection
- Solids Storage
- Electrical Systems



## Effluent Conveyance & Outfall

- Effluent Conveyance to the WWTS Outfall (open cut & trenchless)
- WWTS Effluent Outfall and Diffuser



## Influent Conveyance

- EBI to WWTS Conveyance
- Hanford to WWTS Conveyance
- Improvements for each HLKK Regulator Station
- EBI Diversion Structure
- Lander and Hanford Diversion Structures



## Chelan CSO

- Chelan Storage Tank
- Chelan Conveyance
- Chelan Diversion Structure
- Chelan Regulator Station Improvements



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# Project Background



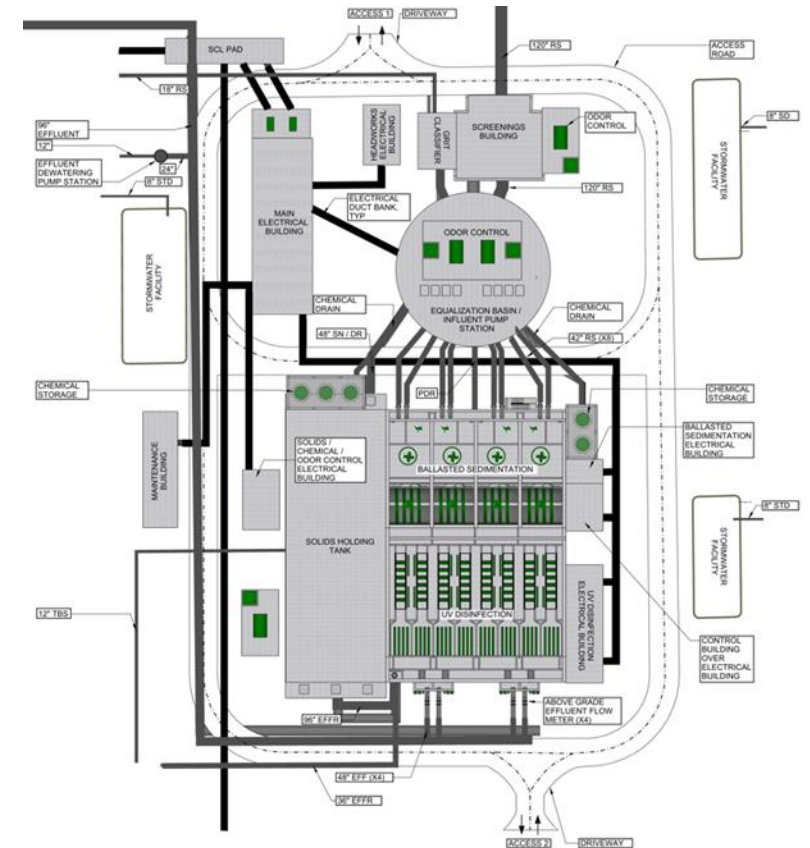
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# Project Overview

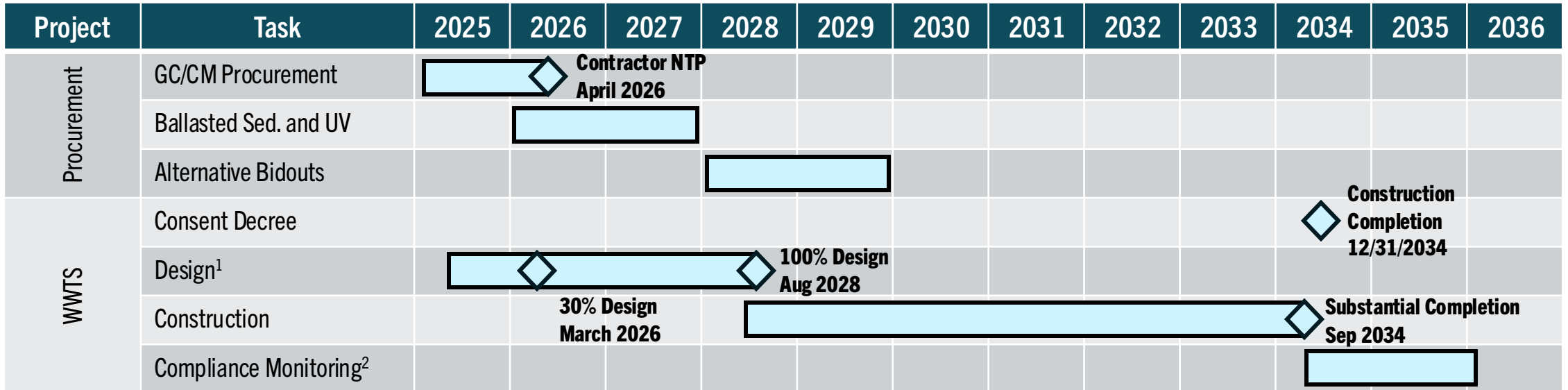
The MDCSO-WWTS is a project to construct a new 240 MGD capacity wet weather treatment station by 12/31/2034. The facility will operate intermittently, providing physical treatment steps (screening, solids removal, and disinfection) during heavy storms, to prevent untreated overflows into the east waterway at the mouth of the Duwamish River.

- Demolition of existing structures and foundations
- Shoring and excavation work (including contaminated soil)
- Ballasted sedimentation, UV disinfection, solids handling, and odor control systems
- Key constructability considerations include 125-foot depth secant pile shoring or diaphragm slurry wall



Site Plan – Wet Weather Treatment Station

# Key Schedule Milestones



<sup>1</sup> Design duration is 30% Design through Final Design.

<sup>2</sup> Compliance monitoring to occur over two wet weather seasons; end date subject to change.

RFP Advertisement Date is scheduled for September 2025.

Legend:

◆ = Milestone

[Bar] = Task activity



# GC/CM Qualification

Meets Applicable Criteria



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# Qualifying Criteria

- ✓ Complex scheduling, phasing, and coordination
- ✓ GC/CM involvement during design is critical
- ✓ Complex technical work environment
- ✓ Heavy Civil

X Historical Significance – N/A



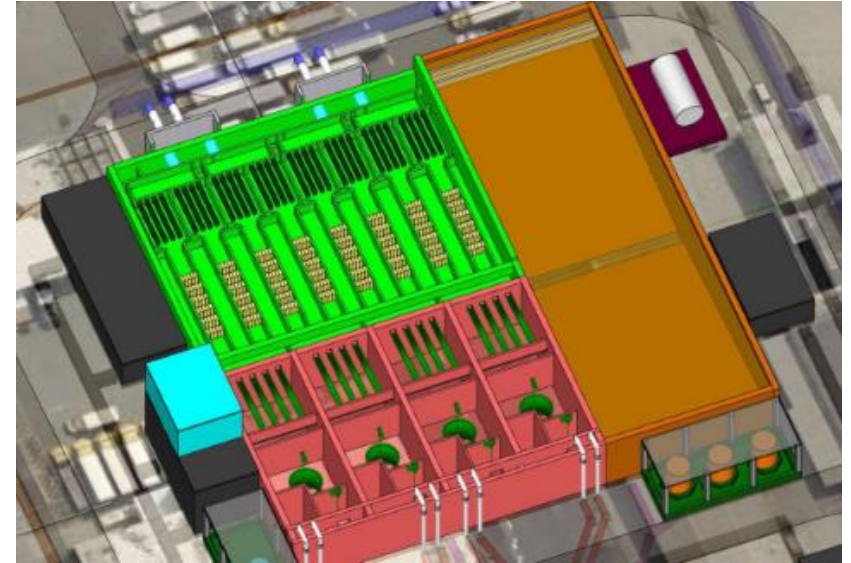
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# 1. Complex Scheduling/Phasing

Accelerated schedule is critical to meet Consent Decree milestones

- Critical path for program delivery, must be operational for downstream packages to function
- Connections / integration with conveyance must be completed during dry season
- Complex environmental permitting requirements, including the relationship between design and permitting across multiple packages

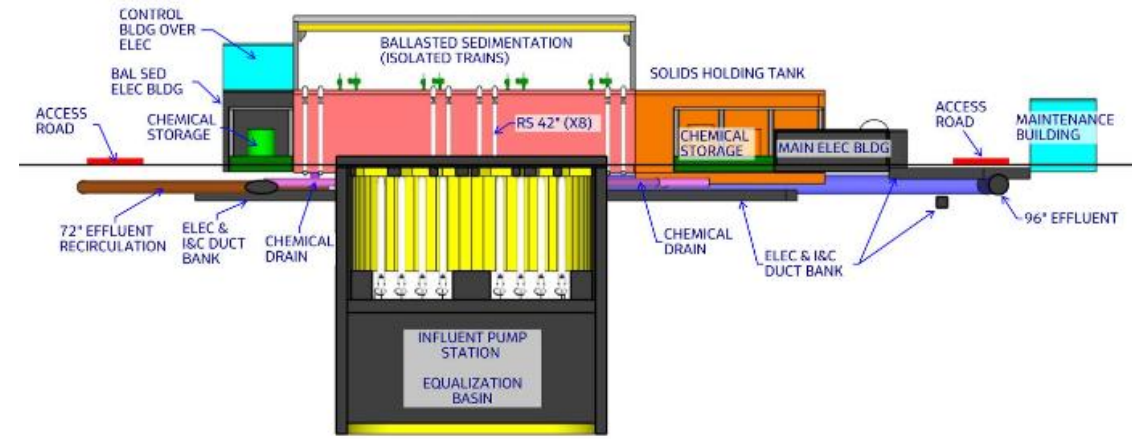


Northeast View of WWTS, Detail



## 2. GC/CM Involvement is Critical

- Develop and refine sequencing of the work to meet consent decree schedule requirements
- Initiate critical early work
- Value engineering and constructability reviews
- Improved cost estimating
- Collaborative risk management
- Engage local contracting community through subcontracting

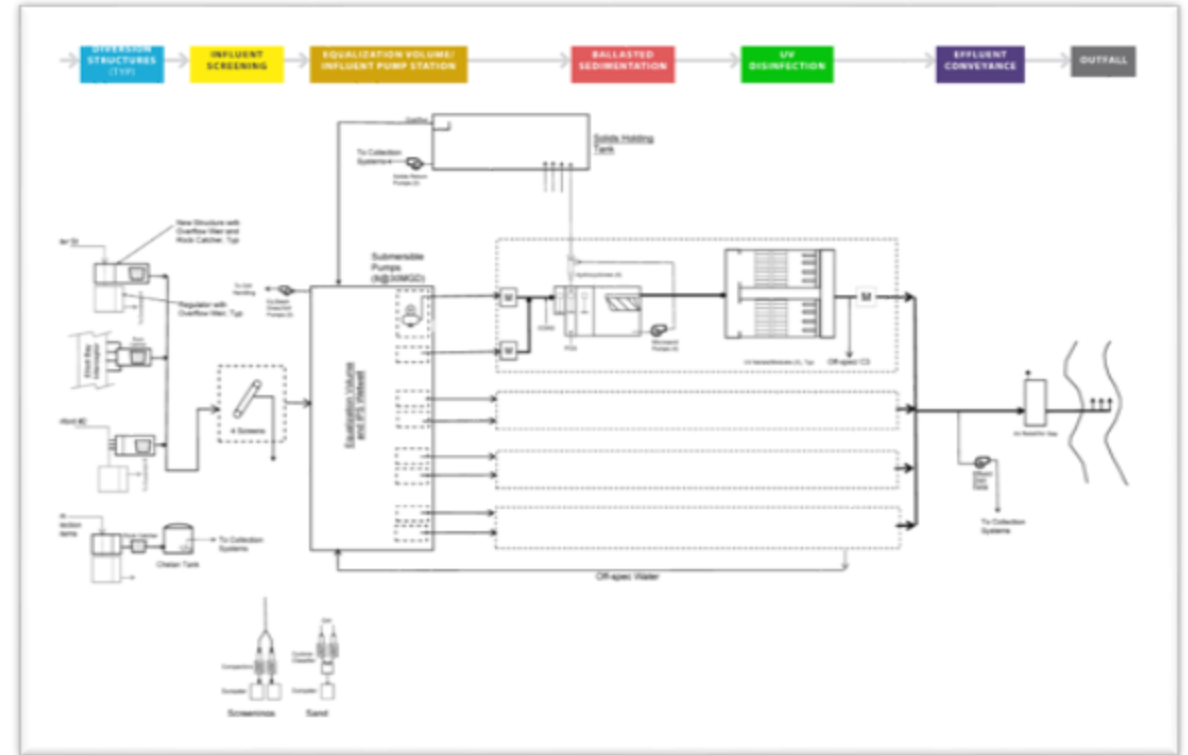


Proposed WWTS South Facing Section



# 3. Complex & Technical Environment

- Contamination exists in a portion of the proposed site, extent and nature of mitigation is unknown
- Site location is close to the Duwamish waterway, potential for seismically induced lateral spread and liquified soil
- Site borders multiple rail lines requiring complex permitting
- Tight urban site with constrained access and phased laydown/staging



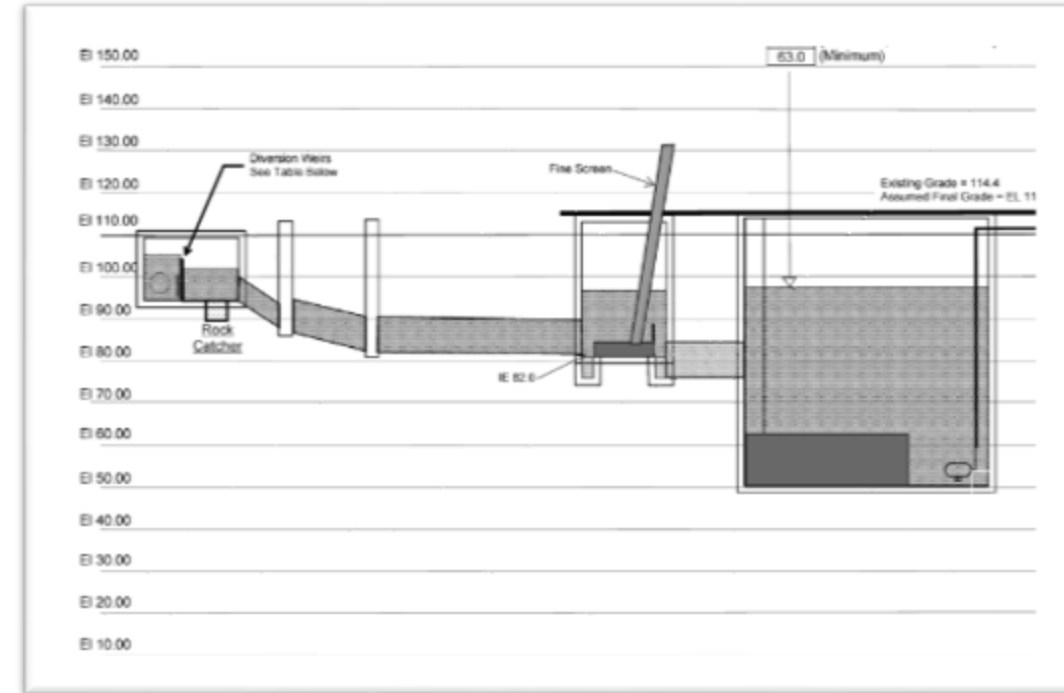
Proposed WWTS Process Flow Diagram



## 4. Heavy Civil

- Work is primarily infrastructure
- GC/CM control of critical path (early work packages, procurements, etc.)
- Increased self performance threshold improves schedule certainty
- Technical complexity and Consent Decree deadline require flexible and responsive delivery

*Supportive contractor feedback through industry outreach including tactical RFIs*



WWTS Hydraulic Grade Line (Partial)

# GC/CM Qualification

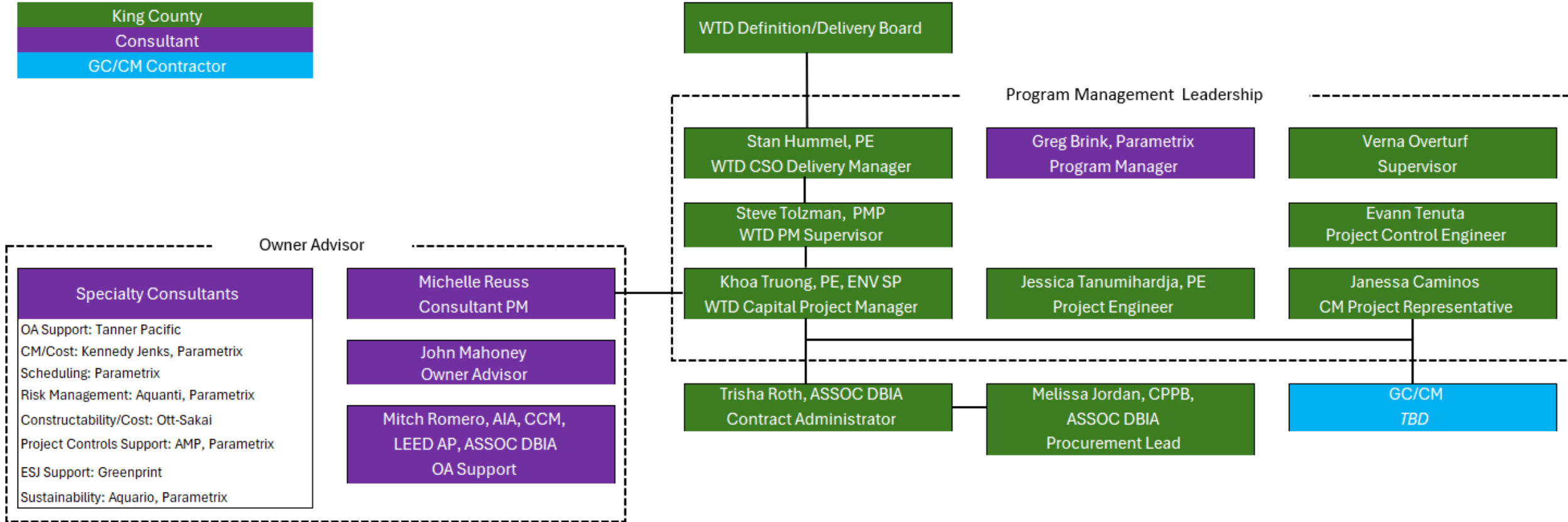
Management Plan



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# Org Chart



# Qualified Team

## King County Key Staff

- Stan Hummel (CSO Delivery Manager) – 33 yrs, 3 GC/CM projects
- Steve Tolzman (Program Manager) – 20+ yrs project management
- Khoa Truong (Project Manager) – 18 yrs, 2 GC/CM projects
- Jessica Tanumihardja (Project Engineer) – 10 yrs, Elliott West CSO Facility GC/CM
- Janessa Caminos (Construction Manager) – 10 yrs, 2 GC/CM projects
- Melissa Jordan (Procurement Lead) – 17 yrs public procurement experience, 4 GC/CM projects
- Trisha Roth (Contract Administrator) – 20 yrs, 2 GC/CM projects

## Consultant Key Staff

- Greg Brink (Program Manager) – 20 yrs, 5 GC/CM projects
- Michelle Reuss (Consultant Project Manager) – 25 yrs, 2 GC/CM projects
- John Mahoney (Owner Advisor) – 25 yrs, 2 GC/CM projects
- Mitch Romero (Owner Advisor Support) – 30 yrs, 13 GC/CM projects
- Anne Timmermans (Construction Manager) – 21 yrs, 7 GC/CM projects
- Nicki Pozos (Program Equity Manager) – 20 yrs, 5 GC/CM projects



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# Budget & Funding

- Current Proposed Budget \$2.01B
- Total GC/CM Budget \$1.17B
  - Includes preconstruction services and sales tax
- Project will be funded by King County Wastewater utility rates

MDCSO-WWTS: AACE Class V Cost Estimate	
Construction Costs	\$1,283.2M
Non-Construction Costs	\$238.5M
Right-of-Way	\$68.4M
Contingency	\$405.6M
Initiatives	\$15.4M
<b>Total <sup>1, 2</sup></b>	<b>\$2.01B</b>

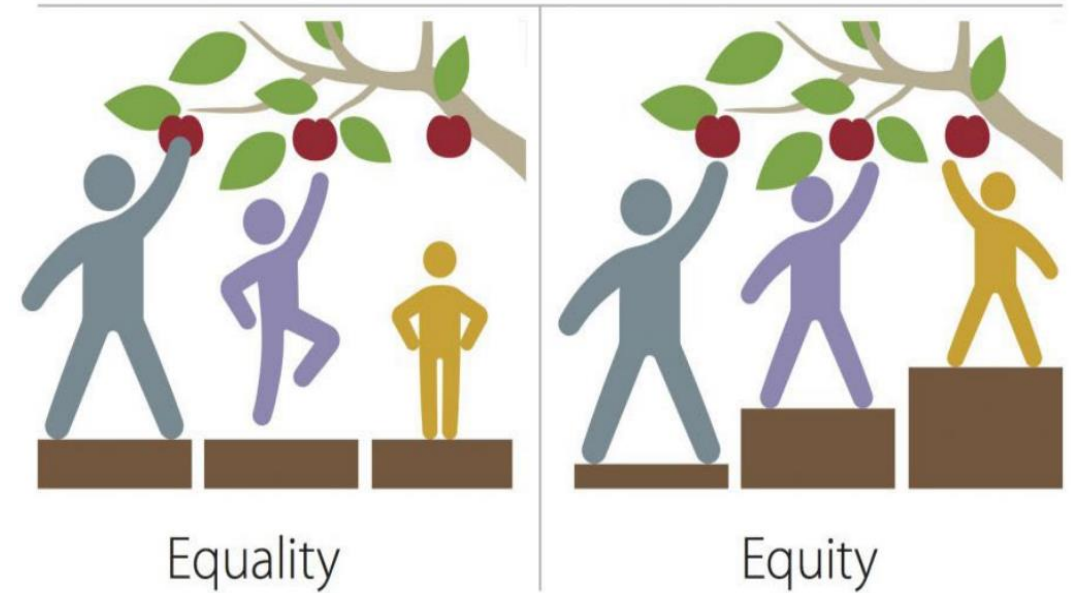
<sup>1</sup> Includes escalation

<sup>2</sup> Estimate based on ~15% Design



# Equity & Social Justice

- Pro-Equity Contracting Goals
- Expand opportunities and maximizing participation for Certified DBE, MBE and WBE firms throughout design and construction
- Mentor Protégé program
- Good Faith Efforts will be monitored throughout the project
- ESJ Coordinator/Manager will be required
- Compliance monitoring in King County's Diversity Compliance Management System



*"I want to open the doors of opportunity to every single person in King County, Washington. That's why I issued an executive order strengthening pro-equity contracting, so that our minority-and women-owned businesses can substantially increase their participation in County contracts."*

- Former King County Executive Dow Constantine

# Diverse Business & Utilization

Project Name	Contract Value	Commitment	Achievement	Contract Status
<b>Wastewater Treatment Division Projects</b>				
Georgetown Wet Weather Treatment Station (GWWTS)	\$107,543,926	MBE – 4.7% WBE – 1.4%	MBE – 6.7% WBE – 3.0%	100% complete
GWWTS – Conveyance	\$22,362,090	MBE – 10% WBE – 6%	MBE – 17.4% WBE – 7.5%	100% complete
Eastside Interceptor Section 2 Rehab Phase II	\$20,536,847	SCS – 8%	SCS – 11.8%	100% complete
WPTP Primary Sedimentation Area Roof Structure	\$23,006,376	DBE – 0% SCS – 20%	DBE – 3.4% SCS – 19.6%	100% complete
<b>Other King County Projects</b>				
RapidRide H Line Bus Rapid Transit Improvements	\$27,765,898	SCS – 15%	SCS – 29%	95% complete
Children and Family Justice Center	\$188,595,995	SCS – 17% MBE – 10% WBE – 6%	SCS – 16% MBE – 0.023% *SCS/MBE – 4% WBE – 2.26%	97% complete
Harborview Medical Center Maleng Single Patient Rooms PDB	\$63,682,724	MBE – 20% WBE – 5%	MBE – 21% WBE – 5.7%	100% complete

# Master Community Workforce Agreement

## Priority Hire

Addresses construction workforce shortage, diversifies the construction workforce, and provides disadvantaged communities access to opportunities

Prioritizes individuals living in economically distressed King County areas (Priority Hire zip codes)

Provisions in King County Code (KCC 12.18A) and Contract Specifications including all terms and conditions of the Master Community Workforce Agreement (MCWA)

## Workforce Requirements

**Apprenticeship:** Apprentices must work a minimum of 15% of the total labor hours.

**Priority Hire Apprenticeship:** Priority Hire Apprentices shall work 27% of all apprenticeship labor hours.

**Priority Hire Journey Workers:** Priority Hire Journey Workers shall work 18% of all journey labor hours.

**Preferred Entry:** 20%



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# Public Benefits



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# Public Benefits

## GC/CM

- Schedule
- Risk management
- Enhanced cost control
- Maintaining level of service

## Heavy Civil

- More delivery control
- Improved flexibility in planning and sequencing work
- Improved market attractiveness per industry feedback
- Self perform work increases schedule predictability



# Alternative Subcontracting

## Benefits

- Secure continued involvement of key staff
- Engagement in planning for constructability
- Early procurement of long lead materials
- Specialized skill requirements
- Supports price and schedule certainty

## Proposed Alt. Subcontracts

- Mechanical
- Electrical
- Structures
- Specialized Equipment

*Supportive contractor feedback through industry outreach including tactical RFIs*

# Summary



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# Summary

## Meets Qualifying Criteria

- ✓ Complex Schedule
- ✓ Technically Complex
- ✓ GC/CM Involvement During Design is Critical
- ✓ Seeking Heavy Civil Approval
- ✓ Public Benefits: Risk Management, Time, Cost

## Alternative Subcontracting

- ✓ Public Benefit: Electrical, Mechanical, Specialty Equipment, and Structures

