



King County

Department of Natural
Resources & Parks
Wastewater Treatment
Division

M Street Trunk Rehabilitation Project

Project Review Committee Presentation

Progressive Design Build Application

January 26, 2023

**King County WTD
Definition/Delivery Board**
Governing Board


Meredith Redmon, PMP
King County Capital
Project Manager

Alternate Delivery Committee
Committee

King County Project Team
Bob Isaac
Lining Program Manager
Diane Navarro, Assoc. DBIA
Contract Administration
Arthur Leavitt, P.E.
Project Engineer
Trisha Roth, Assoc. DBIA
PDB Procurement Specialist

**Progressive Design Builder
(TBD)**


Brown and Caldwell
Owner Advisor
Pat Tangora
Owner Advisor, SME
Patrick Weber, P.E. PMP, DBIA
Owner Advisor Project Manager

**Specialty Lining Contractor
(TBD)**

Specialty Consultants
CM: KBA
Risk: Aquanti
Permitting: ESA
Public Outreach: EnviroIssues
OA/Cost: Tanner Pacific
Scheduling/Constructability: Ott-Sakai
Easements: Contract Land Staffing

Specialty Support Functions
Legal
Procurement
Laura Preftes
Contract Specialist
Joe Baca
CWA Administrator

 **Presenter**

Agenda

- 1 Introductions
- 2 Project Overview
- 3 Benefit of PDB
- 5 Owner Team Qualifications
- 6 Equity and Social Justice
- 7 RCW 39.10 Compliance
- 8 PRC Questions
- 9 Closing

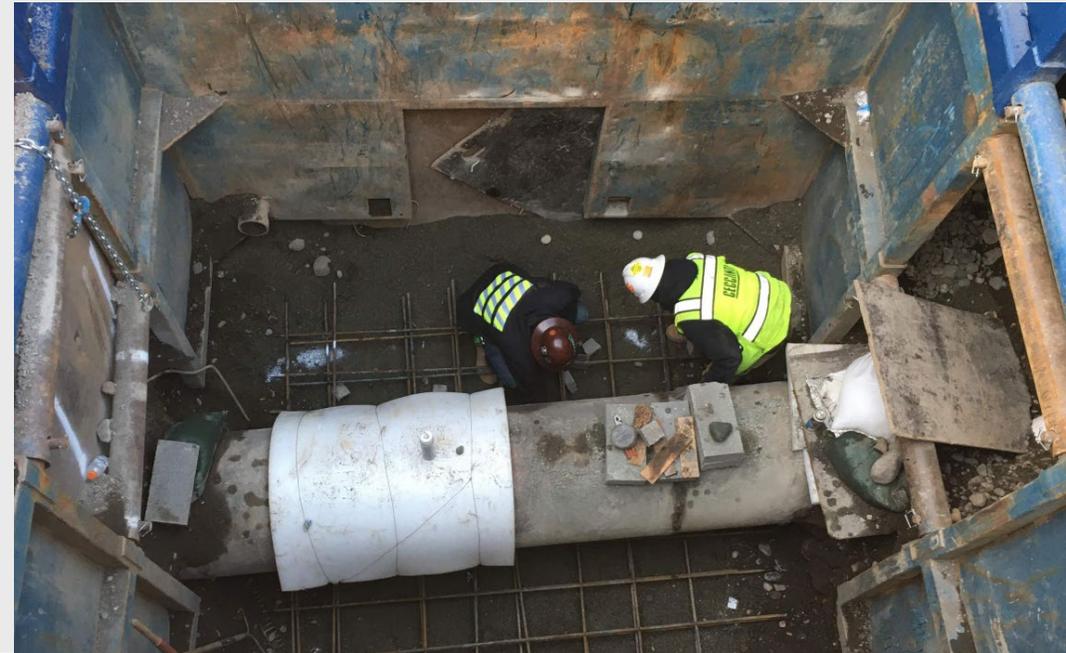
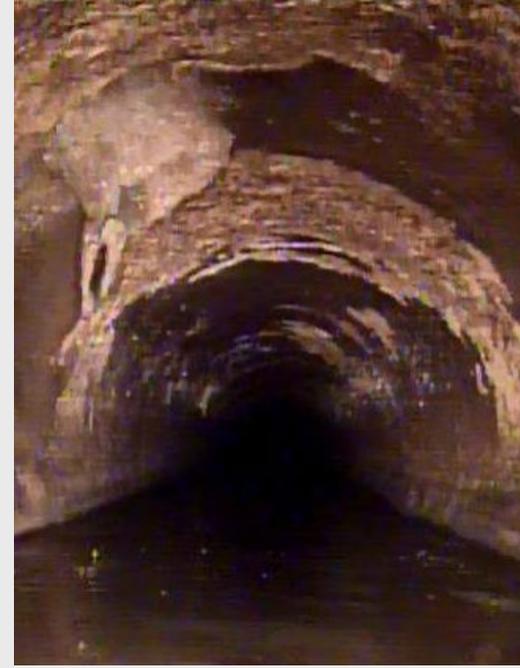


Project Overview

M Street Trunk Rehabilitation

M Street Trunk Rehabilitation Project

- Repair of 13,800 LF of severely deteriorated sewer trunk line (18, 24, 30, and 36-inch)
- Repair of 45 maintenance holes
- Sewer diversion with temporary above ground pumping, piping, and odor control



M Street Trunk Rehabilitation Project

- Heavily constrained work area
- Work will cross major arterials, an airport runway, school zones, transit zones, and private residences
- Dry weather work window (June to September)
- Coordination with the City of Auburn's planned roadway improvement projects



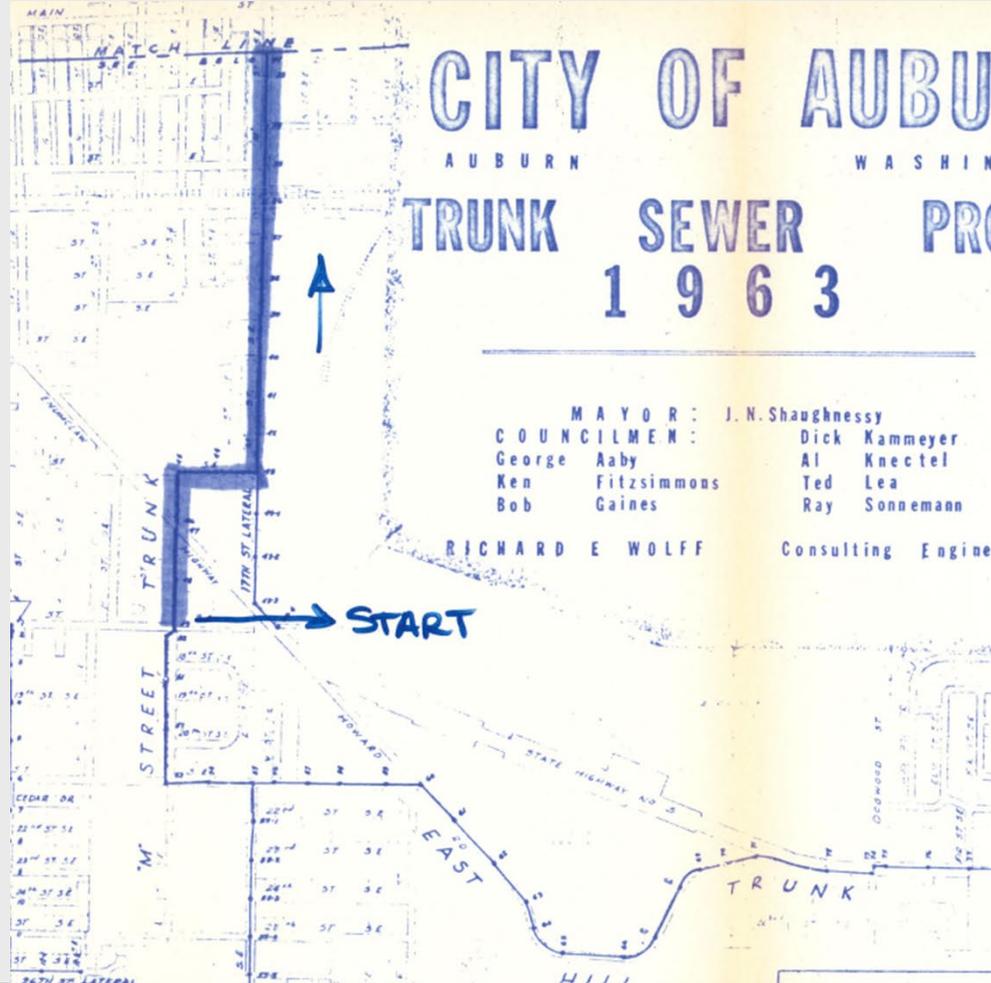
Benefits of Progressive Design Build

M Street Trunk Rehabilitation

Benefits of Progressive Design Build

CPARB PRC Evaluation Criteria A

Severe deterioration of the M Street Trunk and recent urgent repairs require a compressed schedule and coordination between the designer and builder to rehabilitate the pipeline.



INDEX		
SHT NO	LOCATION	STATION FROM-TO
1	Index & Verify Map	
"M" STREET TRUNK		
2	Along "M" St. From 2nd St. NE. To 3rd St. SE.	0+00 15+00
3	3rd St. SE. 4th St. SE.	15+00 30+00
4	4th St. SE. 12th St. SE.	30+00 44+00
5	Along 12th St. SE. To State Hwy. No. 5	44+00 59+00
6	Along "K" St. SE. State Hwy. No. 5. 19th St. SE.	59+00 74+00
7	20th St. SE. 21st St. SE. 21st St. SE. "M" St. SE.	74+00 87+00
8	Along "M" St. From 21st St. SE. To 25th St. SE.	87+00 100+00
9	25th St. SE. 29th St. SE.	100+00 113+00
10	29th St. SE. 32nd St. SE.	113+00 124+00
11	17th St. Lateral	0+00 14+00
EAST HILL TRUNK		
12	Along 21st St. SE. "M" St. SE. Howard Rd.	0+00 14+15



King County

M Street Trunk Rehabilitation Project

Benefits of Progressive Design Build

CPARB PRC Evaluation Criteria B

Specialized Construction Activities (*Criteria B.1*)



Selection of the optimal trenchless lining technology.

Integration of the selected lining technology and corresponding diversion pumping strategies for each segment

Innovation and Efficiencies between the Designer and the Builder (*Criteria B.2*)

Early PDB coordination with local jurisdiction to help address construction sequencing and permitting challenges

Industry knowledge of latest techniques, innovations, and efficiencies for lining projects.

Significant Savings in Project Delivery timeline (*Criteria B.3*)

Optimize procurement timeline by avoiding separate contracts for design and construction

Reduce risk of time delays from design errors and omissions that could impact the dry season construction schedule (June 1 – September 30)



Owner Team Qualifications

M Street Trunk Rehabilitation

Owner Team Experience

Project	Type	King County			Brown and Caldwell		Tanner Pacific
		Bob Isaac	Arthur Leavitt, P.E.	Trisha Roth, DBIA (Procurement)	Pat Tangora	Patrick Weber P.E., DBIA	Adam Wirthlin, P.E.
Biosolids Dewatering PDB, City of San José, CA	PDB				X		
Brightwater Marine Outfall	DB	X					
Brightwater Treatment Plant	GC/CM, DB, DBB				X		
Murray Force Main Rehabilitation – trenchless rehabilitation of large diameter concrete force main.	DB		X				
Coyote Pumping Plant Electrical Upgrades, Valley Water, CA	PDB					X	
CSO Storage Basin Project, Middletown, OH	PDB					X	
Harbor Maleng Single Patient Rooms Project	DB			X			
Pier 50 Float Replacement	DB			X			
Interim Base Electricication	DB			X			
Jefferson and Hood Street Surface Water Interceptor PDB, City of Tacoma, WA	PDB				X	X	
Lakeside Redirect Conveyance Improvements, Middletown, OH	PDB					X	
Little Miami WWTP Solids and Odor Improvements, Metropolitan Sewer District of Greater Cincinnati, OH	PDB					X	
Mill Creek WWTP Diversion Chamber, Metropolitan Sewer District of Greater Cincinnati, OH	PDB					X	
Positive Train Control for Commuter Rail Fleet, Tri-County Metropolitan District of Oregon	DB		X				
Pure Water Soquel Program Soquel Creek Water District, CA	PDB, OMAR					X	
Santa Fe Buckman Direct Diversion	DB				X		
Silicon Valley Clean Water - Front of Plant: Stage 1 & 2	PDB				X		X
Silicon Valley Clean Water – Gravity Pipeline: Stage 1 & 2	PDB						X
Silicon Valley Clean Water -Pump Station Improvements: Stage 1 & 2	PDB						X
Soquel Creek Water District – Pure Water Soquel Pipeline	PDB						X
Sound Transit – Federal Way Link Extension	D-B						X
Sound Transit – Northgate Extension N140/150 Contract	GC/CM						X
Tacoma Central Treatment Plant Expansion	DB				X		
Water Treatment Plant PDB, City of Lewiston, ID	PDB				X		

M Street Trunk Rehabilitation Project

Owner Team Experience

CPARB PRC Evaluation Criteria C

Documented DB Processes C.1

WTD established an Alternate Delivery Pilot Program in 2021

- Staff have participated in WTD's DBIA Certified Training Program
- Utilizing DBIA Templates for PDB Agreement and Terms and Conditions with modifications

To assist in implementation of these processes WTD selected Brown and Caldwell as an OA.

Contract Administration C.2

WTD Construction Management

- Extensive experience in contract administration on construction contracts

WTD Project Planning/Delivery

- Experience supporting procurement on capital project and leading procurement on multiple PDB projects.
- Experience leading procurement on capital projects, for both A/E and Construction contracts
- Experience with contract administration on A/E design and Services During Implementation contracts.

King County Procurement

- Experience leading procurement on all contracting methods, including PDB contracts, for multiple King County Divisions

King County WTD Project Management C.3

Extensive experience delivering large complex high risk capital projects from design through construction

- WTD has a clear and well-established governance structure
- Proven standards, guidelines, and processes, including change and risk management, for successfully delivering capital projects



**Budget and Funding
Approved by King
County Council
CPARB PRC Evaluation
Criteria C.4 and C.6**

Funding for the project has been approved and appropriated for this project by the King County Council.

This cost estimate was prepared in accordance with the King County Estimating Guidelines and is considered a Class 5 estimate under AACE recommended practices.

Budget	
Costs for Professional Services (A/E, legal, etc.)	\$2.8 M
Estimated project construction costs (including contingency)	\$14.9M
Equipment and furnishing costs	NA
Contract Administration Costs (Owner, CM, etc.)	\$5.8M
Contingencies (Owner)	\$8.3M
Other related project costs (permitting, sustainability, escalation)	\$3.8M
Sales Tax	\$1.8M
Total	\$36.7M



Anticipated Project Design and Construction Schedule CPARB PRC Evaluation Criteria C.4

Phase 1: Request for Qualifications

- Submit statement of qualifications based on published evaluation criteria
- 3 highest ranked firms will be invited to submit Proposals

Phase 2: Request for Proposals

- Firms shortlisted and invited to submit proposals will be eligible for honorarium
- Interactive Proprietary Meeting with each firm
- Acquire pricing to bring design to agreed to target by the Project Team prior to contract execution

Description	Start	Finish
PDB RFQ/Shortlisting (<i>pending PRC approval</i>)	February 2023	May 2023
PDB RFP/Proposal Eval and Selection	April 2023	September 2023
Preconstruction Phase (<i>pending DB input</i>)		
Design through development of GMP	September 2023	July 2024
Construction (<i>pending DB input</i>)		
Final Design/Permitting/Construction	July 2024	December 2025
Closeout Phase	January 2026	June 2026



Owner Team Experience

CPARB PRC Evaluation Criteria C.5

Meredith Redmon (KC)

- Project manager with King County's Wastewater Treatment Division (WTD) and has over 18 years of project management experience

Arthur Leavitt (KC)

- Project Engineer with over 19 years of experience in public works engineering

Bob Isaac (KC)

- SME with over 35 years of experience at WTD in inspection, maintenance, and rehabilitation work.

Gary Casad (KC)

- Project Representative with 30 years of construction experience

Trisha Roth (KC)

- Contract Specialist with an Associate DBIA and 20 years of experience in both public and private sector contract administration

Diana Navarro (KC)

- Contract Specialist with an Associate DBIA and over 10 years in both public and private sector contract administration

Pat Tangora (Brown and Caldwell)

- 30 years of experience serving as an OA on a range of alternate delivery methods

Patrick Weber (Brown and Caldwell)

- Patrick has over 16 years of engineering experience and has provided OA services for more than 10 PDB projects



Equity and Social Justice

M Street Trunk Rehabilitation

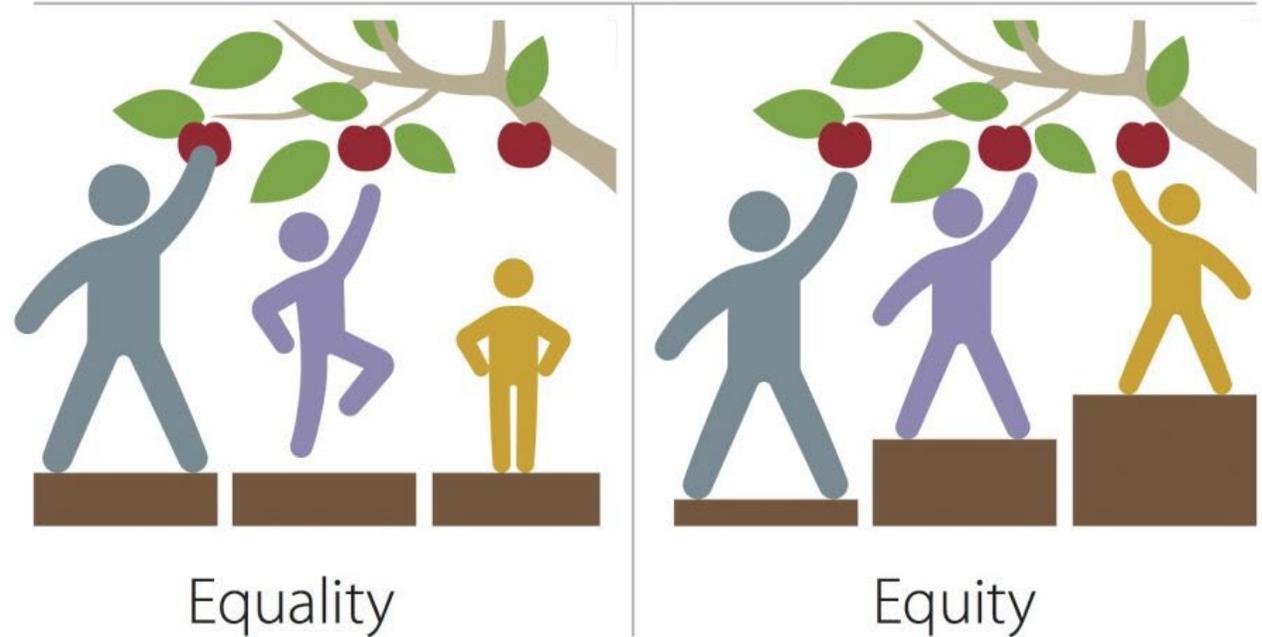
Equity & Social Justice

Required Submission of an ESJ Innovation Plan

Expand opportunities for Certified DBE, MBE and WBE firms throughout design and construction

Voluntary MWBE goals will be established prior to issuance of the RFQ

Good Faith Efforts will be required



King County

M Street Trunk Rehabilitation Project

Master Community Workforce Agreement

Priority Hire

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

Prioritizes Individuals living in economically distressed areas ([Priority Hire ZIP codes](#)) of King County

Provisions in Priority Hire Ordinance (K.C.C. 12.18A) and Contract Specifications including all terms and conditions of the [Master Community Workforce Agreement \(MCWA\)](#)

Workforce Requirements

For Apprenticeship:

Apprentices must work TBD% of the total labor hours.

Priority Hire Apprenticeship:

Priority Hire Apprentices shall work TBD% of all apprenticeship labor hours.

Priority Hire Journey Workers:

Priority Hire Journey Workers shall work TBD% of all Journey worker hours.



Project Meets RCW 39.10

M Street Trunk Rehabilitation

Satisfies RCW 39.10.280

- Substantial fiscal benefit
 - Reduced project schedule
 - Reduced risk of delays and additional, costly emergency repairs
 - DBB not practical to meet required project schedule
 - PDB provides greater assurance of quality due to single point of responsibility
- Meets the requirements of RCW 39.10.300 (see following slides)



RCW 39.10.280 (cont.)

- Well qualified project team
 - Strong WTD CM organization, and project CM experienced in administering construction contracts
 - Project delivery knowledge supplemented by strong OA
 - Project organizational structure and management plans
 - Necessary funding and team to carry out the project
 - Dedicated, full-time PM through all phases
 - Sufficient and approved budget through construction
- Personnel and consultants knowledgeable in DB process
- WTD has had no prior audit findings.



Satisfies RCW 39.10.300

- 1) Project cost greater than \$2M
- 1a) Highly specialized activities/construction methodology
 - Difficult lining and diversion sequencing that involves multiple stakeholders (schools, roads, airport, etc.)
- 1b) Opportunity for innovation/efficiencies
 - Sequencing lining and diversion activities to minimize permitting timeline and impacts to the public
- 1c) Significant schedule savings
 - Avoid a second procurement for DBB or GC/CM contractor
 - Integrated team reduces risk of delays,
 - Manage risk and cost of additional emergency repairs



RCW 30.10.330

Looking Ahead to Implementation

- Budget contingency exceeds 5%
- Staff and consultants with DB expertise selected and assigned
- Alternative dispute resolution is being include in contract docs
- Contract docs will require DB, subs and suppliers to submit required project information to support County in its submittal to CPARB
- Contract docs will require DB plans for inclusion of under-utilized subs and suppliers
- County is considering incentive provisions such as shared savings



Responses to PRC Questions

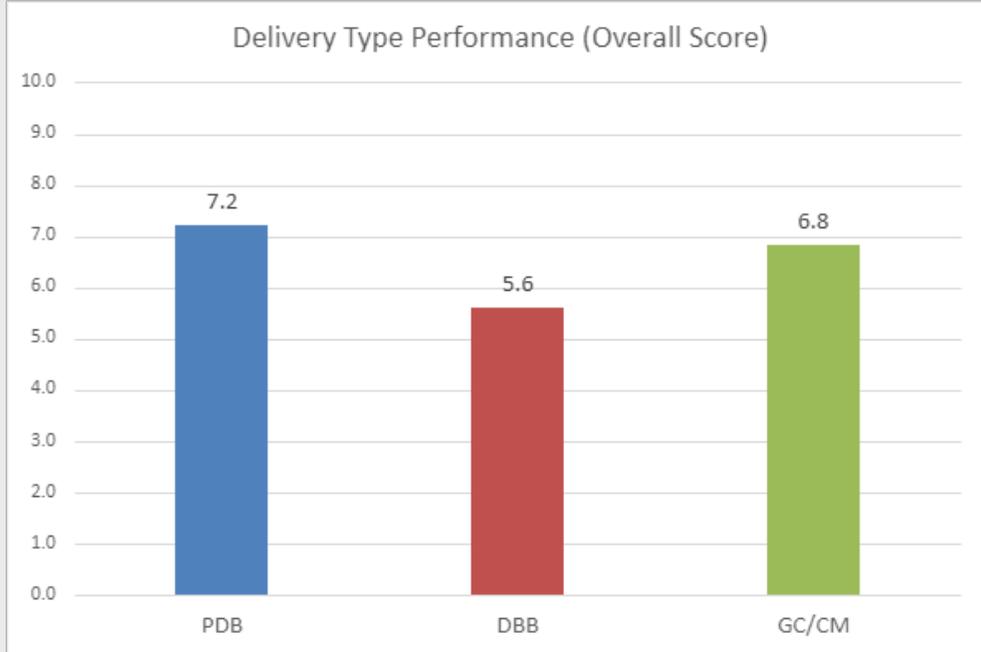
M Street Trunk Rehabilitation

PRC Question #1.

Design-Bid-Build was considered as part of King County’s delivery method selection process and the evaluation criteria supported the selection of Progressive-Design-Build.

Type Selection Evaluation Criteria

	Weighting	Average Group Rating		
		PDB	DBB	GC/CM
Level of Oversight and Control	18%	1.1	1.3	1.2
Project Risk	17%	1.2	0.7	1.2
Level of Design	12%	0.9	0.7	0.9
Project Delivery Schedule	21%	1.7	1.0	1.4
Project Cost	8%	0.6	0.4	0.5
Staff Experience & Availability	11%	0.7	0.7	0.6
Project Complexity / Innovation	13%	0.9	0.7	0.9
		7.2	5.6	6.8



Questions ?

M Street Trunk Rehabilitation



King County

M Street Trunk Rehabilitation Project

Thank you



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Meredith Redmon
Capital Project Manager
Wastewater Treatment Division

206-477-5488
Meredith.Redmon@kingcounty.gov