

**Attachment A.1
Form of Work Order**

Merrick Project No.: 65420492-04
Work Order No.: **004**
Date of Work Order: November 14, 2023

Work Order Title: Engineering Investigation and Data Collection

Scope of Services:

We are pleased to present this proposal for engineering investigation and data collection services for the Town of Fraser. We understand that the Town of Fraser is interested in completing the design for waterline improvements to the Elk Ranch Road PRV area and Quail Drive area, this investigation and data collection will allow Merrick to complete the design under a separate work order. The Town will take the project to bid for construction.

Scope of Services

The proposed scope of services for completing the work order is presented below.

Task 1 – Quail Drive Engineering Investigation and Data Collection

The future design near Quail Drive includes installing a new waterline and appurtenances to improve the ability to operate and maintain the waterline and to improve water quality. This investigation and data collection will provide information to complete the engineering design in the future.

1.1 SUE and Geotechnical Investigations and Topographical Survey

SUE Quality Level A (QLA) is required in this area since there appear to be many conflicting utilities and unknown location of waterlines. Test holes will be performed where conflicts with new infrastructure will be installed. The surveyor will pick up locations of test holes from the SUE investigation, street right-of-way, property lines, edge of asphalt, and concrete flatwork. SUE QLB underground and above ground utilities will be updated on the drawing set.

One geotechnical soil boring will be completed. A pavement design will be completed for disturbed pavement at each location.

Task 2 – Pressure Reducing Valve (PRV) Engineering Investigation and Data Collection

The future design for one new PRV vault will be designed in the vicinity of the intersection of Elk Ranch Rd. and Oxbow Court. The purpose of the PRV is to isolate the North System from the South System to conform to water rights stipulations. This investigation and data collection will provide information to complete the future engineering design.

2.1 SUE and Geotechnical Investigations and Topographical Survey

SUE Quality Level A (QLA) is required in this area to confirm the locations of existing and new. Test holes will be performed where conflicts with new infrastructure will be installed. The surveyor will pick up locations of test holes from the SUE investigation, street right-of-way, property lines, edge of asphalt, and concrete flatwork. SUE QLB underground and above ground utilities will be updated on the drawing set.

One geotechnical soil boring will be completed. A pavement design will be completed for disturbed pavement at each location.

Deliverables will include:

- Merrick will provide SUE Report, Survey Data and Geotechnical report to the Town of Fraser.

We appreciate this opportunity to be of service to the Town of Fraser and look forward to working with you on this work order. If you have any questions or comments regarding our Work Order, do not hesitate to contact us.



Fee:

Our proposed budget for the Task No. 1 outlined above is a Not-to-Exceed Budget = \$25,100.00.

Our proposed budget for the Task No.2 outlined above is a Not-to-Exceed Budget = \$21,450.00:

Our proposed total budget for items outlined above is a Not-to-Exceed Budget = \$46,550.00

Town of Fraser

By: _____

Name: _____

Date: _____

Merrick & Company

By:  _____

Jody Allen

Name: _____

11/14/2023

Date: _____

2024 CIP DATA COLLECTION COST
Opinion of Fee Estimate for Field Data

MAJOR PROJECT CATEGORY (Water/Wastewater):	Water
PROJECT:	Quail Drive
COST ESTIMATOR:	Merrick
DATE OF ESTIMATE:	11/2/2023

Item	Description	Units	Quantity	Unit Cost	Extended Cost
1	Quail Drive PRV SUE	LS	1	\$ 6,196	\$ 6,196
2	Allowance for Additional Level A SUE Potholes - Invoiced only if required	EA	5	\$ 750	\$ 3,750
3	Quail Drive PRV Survey	LS	1	\$ 6,424	\$ 6,424
4	Quail Drive Geotechnical	LS	1	\$ 2,750	\$ 2,750
5	SUE Observation/Recordation	HR	12	\$ 200	\$ 2,400
6	Hotel, Mileage and Per Diem	EA	2	\$ 300	\$ 600
	TOTAL DIRECT COST SUB-TOTAL				\$ 22,120
7	TOWN CONTINGENCY		10%		\$ 2,212
8	MERRICK SUB-CONSULTANT ADMINISTRATION MARKUP		5%		\$ 769
	TOTAL ANTICIPATED DATA COLLECTION COST				\$ 25,101

Notes:

- 1) This is just for the data collection and observation/recordation for the 2024 CIP. 2024 CIP plan updates, specifications and bid preparation is not included.
- 2) SUE Observation/Recordation, Hotel, Mileage and Per Diem by Merrick are estimates. These items will be charged on a T&M basis.

2024 CIP DATA COLLECTION COST Opinion of Fee Estimate for Field Data					
MAJOR PROJECT CATEGORY (Water/Wastewater):			Water		
PROJECT:			Pressure Reducing Valve Vault @ Elk Ranch Road		
COST ESTIMATOR:			Merrick		
DATE OF ESTIMATE:			11/2/2023		
Item	Description	Units	Quantity	Unit Cost	Extended Cost
1	Elk Ranch Road PRV SUE	LS	1	\$ 4,582	\$ 4,582
2	Allowance for Additional Level A SUE Potholes - Invoiced only if required	EA	7	\$ 750	\$ 5,250
3	Elk Ranch Road PRV Survey	LS	1	\$ 3,712	\$ 3,712
4	Elk Ranch Road Geotechnical	LS	1	\$ 2,750	\$ 2,750
5	SUE Observation/Recordation	HR	12	\$ 200	\$ 2,400
6	Hotel, Mileage and Per Diem	EA	1	\$ 300	\$ 300
TOTAL DIRECT COST SUB-TOTAL					\$ 18,994
7	TOWN CONTINGENCY		10%		\$ 1,899
8	MERRICK SUB-CONSULTANT ADMINISTRATION MARKUP		5%		\$ 552
TOTAL ANTICIPATED DATA COLLECTION COST					\$ 21,446

Notes:

- 1) This is just for the data collection and observation/recordation for the 2024 CIP. 2024 CIP plan updates, specifications and bid preparation is not included.
- 2) SUE Observation/Recordation, Hotel, Mileage and Per Diem by Merrick are estimates. These items will be charged on a T&M basis.