



RESOLUTION NO. U-11435

1 A RESOLUTION related to Tacoma Public Utilities, Tacoma Water; approving
2 participation in the City of Tacoma, Department of Public Works, Street
Initiative Package Number 35 Project, to replace water mains.

3 WHEREAS Tacoma Water requests authorization to enter into an
4 agreement with Department of Public Works ("PW"), Street Initiative Package
5 Number 35 Project ("Project"), and
6

7 WHEREAS Tacoma Water is partnering with PW to reconstruct the
8 existing roadway and replace approximately 2,000 feet of existing water main,
9 constructed circa 1948, and

10 WHEREAS the Project will reconstruct/replace 8-inch and 6-inch water
11 mains along N. 48th Street, between N. Mullen and N. Gove Street,
12 N. Cheyenne Street, between N. Gove Street and N. 46th Street, and N. Gove
13 Street, between N. 46th Street and N. 48th Street, and
14

15 WHEREAS the overall project will upgrade the existing roadway,
16 upgrade underground facilities, and bring ramps into ADA compliance, and

17 WHEREAS the total cost for the Project is \$632,758.83, plus a 15
18 percent contingency, for a cumulative total of \$727,672.65, plus applicable
19 taxes, and
20

21 WHEREAS Tacoma Water believes it is in the best interests of the utility
22 to include the replacement work in PW's Project contract because it will improve
23 overall project coordination, minimize traffic impacts through consolidation of
24 the work under a single project, and reduce overall project costs, and Now,
25 Therefore,
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BE IT RESOLVED BY THE PUBLIC UTILITY BOARD OF THE CITY OF TACOMA:

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That Tacoma Water is authorized to execute an agreement with the Department of Public Works for the reconstruction/replacement of water main for the Street Package Number 35 Project, in the amount of \$632,758.83, plus a 15 percent contingency, for a cumulative total of \$727,672.65, plus applicable taxes, and the proper officers of the City are authorized to execute an agreement in a form as approved by the City Attorney's Office.

Approved as to form: _____
Chair

_____/s/_____
Chief Deputy City Attorney Secretary

Clerk Adopted _____



Board Action Memorandum

DS
JF

TO: Jackie Flowers, Director of Utilities

COPY: Charleen Jacobs, Executive Assistant, Director of Utilities/Public Utility Board
 Jodi Collins, Asst Division Mgr of Water Utilities, Tacoma Water
 Jessica Knickerbocker, Division Mgr of Planning & Engineering, Tacoma Water
FROM: Scott Dewhirst, Utilities Dir Dep. Water Superintendent, Tacoma Water
 Troy Saghafi, Professional Engineer, Planning & Engineering, Tacoma Water

MEETING DATE: January 24, 2024

DATE: January 10, 2024

STRATEGIC DIRECTIVE ALIGNMENT (select as many that apply):

Please indicate which of the Public Utility Board's Strategic Directives is supported by this action.

- SD1 – Equity & Inclusion
- SD2 – Financial Sustainability
- SD3 – Rates
- SD4 – Stakeholder Engagement
- SD5 – Environmental Leadership
- SD6 – Innovation
- SD7 – Reliability & Resiliency
- SD8 – Telecom
- SD9 – Economic Development
- SD10 – Government Relations
- SD11 – Decarbonization/Electric Vehicles
- SD12 – Employee Relations
- SD13 – Customer Service
- SD14 – Resource Planning

SUMMARY:

Authorize Tacoma Water to participate in the City of Tacoma, Department of Public Works, Street Initiative Package Number 35 Project. Tacoma Water proposes to replace approximately 2,000 feet of 8-inch and 6-inch water main along N. 48th St., between N. Mullen St. and N. Gove St., N. Cheyenne St., between N. Gove St. and N. 46th St., and N. Gove St., between N. 46th St. and N. 48th St.

Total project cost is \$632,758.83 plus a 15 percent contingency, for a cumulative total of \$727,672.65 plus applicable taxes.

Tacoma Water believes it is in the best interest of the utility and its customers to include the water main work in the Public Works project. This project partnership will improve project delivery, reduce project costs, improve system reliability, and consolidate construction disturbance to residents and businesses.

BACKGROUND:

Tacoma Water is partnering with the Public Works Department to reconstruct the existing roadway and replace approximately 2,000 feet of existing water main, constructed circa 1948.

The overall project will upgrade the existing roadway into a non-motorized shared-use path, upgrade underground utilities, and bring ramps into ADA compliance.



Board Action Memorandum

Project partner contributions are summarized in the attachment "Secondary Agreement for Joint Project Public Works - Tacoma Water".

ISSUE: The existing water main in this area is approximately 75 years old, with sections near the end of its operational life.

ALTERNATIVES: Rehabilitating the existing water main is cost prohibitive. It is more cost effective to mitigate the risk of future water main breaks under a new roadway and path by replacing the water main now.

ARE THE EXPENDITURES AND REVENUES PLANNED AND BUDGETED? Yes

IF THE ACTION REQUESTED IS APPROVAL OF A CONTRACT, INCLUDE LANGUAGE IN RESOLUTION AUTHORIZING \$200,000 INCREASE IN ADMINISTRATIVE AUTHORITY TO DIRECTOR? Yes.

ATTACHMENTS: Project Map
Contract and Award Letter
Secondary Agreement for Joint Project Public Works - Tacoma Water

CONTACT: Troy Saghafi, Professional Engineer, 253-502-8746
Ali Poldas, Principal Engineer, 206-687-8602



Legend

- Cathodic Protection
 - T Test Station
 - R Rectifier
 - A Anode
- Sample Stations
 - S Sample Stand
 - Chart Box
 - Sample Stand/Chart Box
- Manways
- Pumps
- System Valves
 - Open
 - Closed
 - Unknown
- Control Valves
 - Air Control
 - Check
 - Pressure Reducing
 - Pressure Relief
 - All Other Control Valves
- Hydrants
 - Blue Hydrants
 - Design (Not Constructed)
 - In-Service
- Process Valves
 - Blowoff

Notes

PROJECT LIMITS

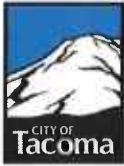
1: 7,467



1,244.5 0 622.26 1,244.5 Feet

WGS_1984_Web_Mercator_Auxiliary_Sphere
Tacoma Water Maps

This map is a user-generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.
THIS MAP IS NOT TO BE USED FOR NAVIGATION



City of Tacoma

Resolution No.: _____

Meeting Date: _____

**Contract and Award Letter
Purchase Resolution —Exhibit "A"**

TO: Board of Contracts and Awards
FROM: Ramiro A. Chavez, P.E. PgMP Public Works Director/City Engineer
Michael P. Slevin III, P.E. , Environmental Services Director
Josh Lauer, Engineering Project Manager, Public Works Engineering
COPY: City Council, City Manager, City Clerk, EIC Coordinator, LEAP Coordinator, and
Carly Fowler, Senior Buyer, Finance/Purchasing.
Jessica Knickerbocker, P.E., Planning & Engineering Manager
SUBJECT: Streets Initiative Package #24 & #35
RFB Specification No. PW23-0241F, Contract No. CW2262431 – January
24, 2024 City Council
DATE: December 27, 2023

RECOMMENDATION SUMMARY:

The Public Works Department recommends a contract be awarded to R.L. Alia Company, Renton, WA, in the amount of \$6,208,025.75, plus a 15 percent contingency, for a cumulative total of \$7,139,229.61, plus applicable taxes, budgeted from the Streets Initiative 1085, LID 3970, LID 8663, LID 8667, 4300 ES Wastewater Fund, 4301 ES Stormwater Fund, TW System Development Charge Fund 4600-SDC, and the 1060 Capital Fund.

STRATEGIC POLICY PRIORITY:

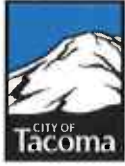
- Strengthen and support a safe city with healthy residents.
- Ensure all Tacoma residents are valued and have access to resources to meet their needs.
- Assure outstanding stewardship of the natural and built environment.

BACKGROUND:

The voters of Tacoma approved the Street Initiatives (Proposition A and Proposition No. 3) in November 2015, approving funding to repair and improve City streets. The 2015 Voted Street Initiative Fund 1085 was created and approved by the City Council under Ordinance No. 28344 on February 9, 2016. This fund provides for arterial street improvements, non-motorized improvements, and residential street repairs.

ISSUE: The project's construction includes new roadway sections where existing road section failure exists, asphalt grind and overlay to maintain roadway surfaces, and curb/gutter. The project also includes the construction of storm sewer, wastewater, and freshwater infrastructure improvements and upgrades. Curb ramp improvements, and sidewalk repair will be completed to meet ADA standards.

ALTERNATIVES: The alternative to performing the street restoration and improvements is to complete only minor repairs, which would not meet the intent of the voter-approved initiative.



COMPETITIVE SOLICITATION:

RFB Specification No. PW23-0241F was opened November 28, 2023. Three companies were invited to bid in addition to normal advertising of the project. Six submittals were received.

R.L. Alia Company submitted a bid that resulted in the lowest evaluated submittal after consideration of EIC participation goals. The table below reflects the amount of the total award.

<u>Respondent</u>	<u>Location</u> <i>(city and state)</i>	<u>Submittal</u> <u>Amount</u>
R.L. Alia Company	Renton, WA	\$6,208,025.75
Tucci & Sons, Inc.		\$6,490,442.50
Miles Resources, LLC		\$6,732,204.45
Northwest Cascade, Inc.		\$6,798,968
Reed Trucking & Excavating, Inc.		\$6,999,923
Active Construction, Inc.		\$8,976,005

Pre-bid Estimate: \$7,773,297

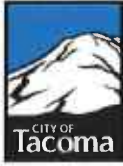
The recommended award is 20.1 percent below the pre-bid estimate.

CONTRACT HISTORY: New Contract.

SUSTAINABILITY: The project will improve the City's infrastructure and safety of residents by providing a new driving surface for motorized and non-motorized travel. ADA-compliant curb ramps will also be installed as part of the contract addressing social equity factors, including mobility, as well as ergonomic and human health impacts. Utility installation, upgrades, and maintenance will ensure utilities are operating at current and future demands.

EQUITY IN CONTRACTING (EIC) COMPLIANCE: The recommended contractor is in compliance with the EIC requirements per memorandum dated October 10, 2023. The EIC requirements for this project are 8% MBE, 5% WBE and 11% SBE. The EIC utilization levels of the recommended contractor, R.L. Alia Company are 8.05% MBE, 8.13% WBE, and 11.11% SBE.

LOCAL EMPLOYMENT AND APPRENTICESHIP TRAINING PROGRAM (LEAP) COMPLIANCE: The LEAP requirements for this project are 15 percent of the project labor hours must be worked by Local Employees and an additional 15 percent of the labor hours must be worked by Apprentices, per TMC 1.90.040.



FISCAL IMPACT:

EXPENDITURES:

FUND NUMBER & FUND NAME *	COST OBJECT (CC/WBS/ORDER)	COST ELEMENT	TOTAL AMOUNT
Street Initiative 1085 Fund	PWK-00434-24-03	5330100	\$1,889,460.28
Street Initiative 1085 Fund	PWK-00434-35-03	5330100	\$399,768.53
1060 LID Fund	LID-8663R-05	5330100	\$419,824.54
1060 LID Fund	LID-8667R-06	5330100	\$274,766.57
4300 ES Wastewater Fund	LID-3970W-04 (Property Owners)	5330100	\$91,551.78
4300 ES Wastewater Fund	LID-3970W-04 (ES Cost)	5330100	\$393,297.72
4301 ES Stormwater Fund	ENV-03032-08-04	5330100	\$1,008,560.80
4300 ES Wastewater Fund	ENV-04024-08-04	5330100	\$2,006,291.93
TW System Development Charge Fund 4600-SDC	WTR-00478-27	5330100	\$564,742.46
1060 Capital Fund	PWK-00806-02	5330100	\$90,965.00
TOTAL			Up to (\$)7,139,229.61

REVENUES:

FUNDING SOURCE	COST OBJECT (CC/WBS/ORDER)	COST ELEMENT	TOTAL AMOUNT
Street Initiative Revenues	663020	Various	\$2,289,228.81
4300 ES Wastewater Fund	524700	6310010	\$2,491,141.43
4301 ES Stormwater Fund	529700	6310010	\$1,008,560.80
TW System Development Charge Fund 4600-SDC	587600	6311185	\$564,742.46
LID-8663R	662010	6398645	\$419,824.54
LID-8667R	662010	6398645	\$274,766.57
1060 Capital Fund	PWK-00806-FS-24-02	6311101	\$90,965.00
TOTAL			Up to (\$)7,139,229.61

FISCAL IMPACT TO CURRENT BIENNIAL BUDGET: \$7,139,229.61

ARE THE EXPENDITURES AND REVENUES PLANNED AND BUDGETED? Yes

IF EXPENSE IS NOT BUDGETED, PLEASE EXPLAIN HOW THEY ARE TO BE COVERED. N/A



TO: Jack Niehuser, P.E., Division Manager, Public Works Engineering Division
Terry Forslund, P.E., Assistant Division Manager, Planning & Engineering, Tacoma Water

FROM: Josh Lauer, P.E. Project Manager, Public Works Division
Troy Saghafi, P.E., Planning & Engineering, Tacoma Water

SUBJECT: Secondary Agreement for Joint Project PW-TW for Street Initiative Package No. 35, PW23-0241F/MRP 2016-39

DATE: January 9, 2024

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Tacoma Public Works, Engineering Division and Tacoma Water, Planning & Engineering Division are collaborating to add water related infrastructure to the Street Initiative Package No. 35 Project.

The following summarizes the construction cost allocations for the project and other commitments.

1. The project is located along N. 48th St., between N. Mullen St. and N. Gove St., N. Cheyenne St., between N. Gove St. and N. 46th St., and N. Gove St., between N. 46th St. and N. 48th St.

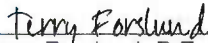
Water infrastructure improvements include installing new 8-inch and 6-inch water main and associated appurtenances along the said streets.

2. The project has been combined into a single construction contract administered by Public Works. Public Works has the responsibility to lead and coordinate the compilation of contract plans & specifications and advertise & award the construction contract. The project was advertised, and bids opened on 11/28/2023, R.L. Alia Co. is the low bidder.
3. Tacoma Water will be responsible for the cost of water distribution main work, valves, hydrants, trench excavation, trench backfill and compaction to subgrade elevation, mobilization, traffic control, and other appurtenant items directly related to the installation of new water main. Costs for these items are in "Schedule C" of the contract bid proposal. The estimated cost of "Schedule C", including force account is \$461,868.00 plus taxes.
4. Tacoma Water will be responsible for its utility's LRI Disposal Fees associated with this project. A Waste Disposal Authorization (WDA) number will be provided from Public Works to the contractor, which is based on the soil tonnages of the project and the total contaminated soil quantities of the Bid Proposal. Tacoma Water's estimated contaminated soil disposal costs for this project is \$128,146.03. This amount will be adjusted based on actual construction costs and transferred to the Department of Public Works via journal entry at the completion of the project.
5. Tacoma Water will be responsible for selected roadway improvement bid items in Schedule A, as noted in the Project Breakdown Estimate worksheet (see exhibit A). The total shared cost of Tacoma Water's responsibility from Schedule A is \$29,212.42. The quantities on the Project Breakdown Estimate worksheet are contractor bid prices, the Departmental actual bid quantities and costs will be separated by the same percentage as the per bid item estimate reflected on the Project Breakdown Estimate worksheet.



- 6. The Department of Public Works will administer the construction contract and provide construction management (contract administration and construction inspection assistance). Tacoma Water will pay the Public Works Department contract administration fees associated with Tacoma Water's scope of work. Tacoma Water will compensate the Public Works Department in the amount of 3% of the combined costs noted in paragraphs 3 and 5 above less Schedule's C force account of \$40,000 $((\$491,080.42 - \$40,000) \times .03)$. The estimated cost for the Tacoma Water portion of contract administration is \$13,532.41. This amount will be adjusted based on actual construction costs and transferred to the Department of Public Works via journal entry at the completion of the project. This method is consistent with how construction management and overhead costs were addressed on previous projects.
- 7. Tacoma Water will be responsible for the daily inspection, surveying, and project redline drawings of the water main construction. Use of Force Account items in Schedule C will be as agreed to by Tacoma Water. Tacoma Water, Public Works and Environmental Services inspections will be a cooperative and coordinated effort.
- 8. Tacoma Water has provided the following WBSE for charging these construction costs:
 - o WTR-00478-27-02 Construction Payments
- 9. Project participation is subject to Public Utility Board Approval. Presentations to the Public Utility Board are anticipated in January 2024.

We look forward to continuing our spirit of coordination and cooperation to accomplish this and future projects of mutual benefit to the citizens of Tacoma, the Department of Public Works, and Tacoma Water. Tacoma Water's water-related project construction costs is \$491,080.42, a contract administration cost of \$13,532.41, and the waste disposal fee cost of \$128,146.00 for a cumulative total of \$632,758.83 plus applicable taxes and contingencies. Payment by Tacoma Water will be made for the actual quantities and costs incurred during project closeout. By signature, please indicate your approval to proceed with this joint project.

DocuSigned by:

 Terry Forslund, P.E., PMP
 Planning & Engineering Assistant Division Manager
 Tacoma Water

01/11/2024

 Date

DocuSigned by:

 Jack Nicholson, P.E.
 Division Manager
 Public Works

01/10/2024

 Date

Attachment: Exhibit-A Project Breakdown Estimate

Cc: Geff Yotter, Construction Inspector Manager, Planning & Engineering, Tacoma Water
 Phill Ringrose, Construction Manager, Planning & Engineering, Tacoma Water
 Michael Washington, Project Delivery Manager, Tacoma Water
 Andrew Zaremba, Water Budget and Financial Analysis, Tacoma Water

EXHIBIT A

PROJECT BREAKDOWN ESTIMATE

Description: Streets Initiative Package #24 & #35
 Specification No.: PW23-0241F
 Bid Opening: 11/28/23

				ENGINEER'S ESTIMATE		Low Bidder R.L. Alia Company					
Item	Spec #	Description	Unit	Quantity	Unit Price	Amount	Unit Price	Amount	QTY.	%	Amount
Schedule A: Roadway Bid Items R1 - R83											
R1	1-05	Roadway Surveying	LS	1	\$135,000.00	\$135,000.00	\$54,000.00	\$54,000.00		0.00831660	449.10
R2	1-05	Project Redline Drawings	LS	1	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00		0.00831660	8.32
R3	1-07	SPCC Plan	LS	1	\$2,000.00	\$2,000.00	\$500.00	\$500.00		0.00831660	4.16
R4	1-09	Mobilization	LS	1	\$347,000.00	\$347,000.00	\$250,000.00	\$250,000.00		0.00831660	2,079.15
R5	1-10	Pedestrian Traffic Control	LS	1	\$74,000.00	\$74,000.00	\$20,000.00	\$20,000.00		0.00831660	166.33
R6	1-10	Project Temporary Traffic Control	LS	1	\$296,000.00	\$296,000.00	\$120,000.00	\$120,000.00		0.00831660	997.99
R7	2-01	Clearing and Grubbing	LS	1	\$55,000.00	\$55,000.00	\$18,000.00	\$18,000.00		0.00831660	149.70
R8	2-01	Certified Arborist	LS	1	\$12,000.00	\$12,000.00	\$4,000.00	\$4,000.00		0.00831660	33.27
R9	2-01	Certified Arborist Assessment Report Compliance	FA	1	\$7,500.00	\$7,500.00	\$7,500.00	\$7,500.00		0.00831660	62.37
R10	2-02	Test Hole	LF	150	\$160.00	\$24,000.00	\$300.00	\$45,000.00		0.00000000	0.00
R11	2-02	Existing Irrigation Systems	FA	1	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00		0.00831660	20.79
R12	2-03	Roadway Excavation Incl. Haul	CY	2,154	\$35.00	\$75,390.00	\$56.00	\$120,624.00		0.00000000	0.00
R13	2-03	Roadway Excavation of Contaminated Material, Incl. Haul	CY	3,414	\$100.00	\$341,400.00	\$56.00	\$191,184.00		0.00101185	193.45
R14	2-03	Embankment Compaction	CY	50	\$10.00	\$500.00	\$50.00	\$2,500.00		1.00000000	2,500.00
R15	2-03	Gravel Borrow Incl. Haul	CY	114	\$35.00	\$3,990.00	\$60.00	\$6,840.00		0.00000000	0.00
R16	2-06	Subgrade Maintenance and Protection	LS	1	\$7,500.00	\$7,500.00	\$25,000.00	\$25,000.00		0.00831660	207.92
R17	2-09	Structure Excavation Class B	CY	2,233	\$25.00	\$55,825.00	\$43.00	\$96,019.00		0.00000000	0.00
R18	2-09	Shoring or Extra Excavation Class B	SF	16,093	\$4.00	\$64,372.00	\$0.25	\$4,023.25		0.00000000	0.00
R19	2-14	Remove Existing Pavement, Type I, Class A2	SY	12,523	\$5.00	\$62,615.00	\$8.00	\$100,184.00		0.00000000	0.00
R20	2-14	Remove Existing Pavement, Type I, Class A4	SY	5,009	\$15.00	\$75,135.00	\$10.00	\$50,090.00		0.00000000	0.00
R21	2-14	Remove Existing Pavement, Type I, Class C6	SY	1,638	\$20.00	\$32,760.00	\$13.00	\$21,294.00		0.00000000	0.00
R22	2-14	Remove Existing Pavement, Type I, Class CA	SY	250	\$35.00	\$8,750.00	\$40.00	\$10,000.00		0.00000000	0.00
R23	2-15	Remove Curb	LF	564	\$10.00	\$5,640.00	\$6.00	\$3,384.00		0.04728132	160.00
R24	2-16	Remove Catch Basin	EA	18	\$400.00	\$7,200.00	\$750.00	\$13,500.00		0.00000000	0.00
R25	2-16	Remove Manhole	EA	3	\$1,000.00	\$3,000.00	\$1,000.00	\$3,000.00		0.00000000	0.00
R26	2-17	Site Health and Safety Plan	LS	1	\$1,500.00	\$1,500.00	\$3,000.00	\$3,000.00		0.00831660	24.95
R27	2-17	Site Health and Safety Officer	LS	1	\$3,500.00	\$3,500.00	\$10,000.00	\$10,000.00		0.00831660	83.17
R28	2-17	Soil Management Plan	LS	1	\$1,000.00	\$1,000.00	\$2,000.00	\$2,000.00		0.00831660	16.63
R29	4-04	Crushed Surfacing Top Course	TN	1,410	\$50.00	\$70,500.00	\$47.00	\$66,270.00		0.00532624	352.97
R30	4-04	Crushed Surfacing Base Course	TN	5,617	\$50.00	\$280,850.00	\$47.00	\$263,999.00		0.00000000	0.00
R31	4-04	Gravel Path	TN	12	\$65.00	\$780.00	\$200.00	\$2,400.00		0.00000000	0.00
R32	5-04	Planing Bituminous Pavement	SY	2,539	\$5.00	\$12,695.00	\$7.00	\$17,773.00		0.35897204	6,380.01
R33	5-04	HMA CL 1/2" PG 58H-22, per ton	TN	3,895	\$125.00	\$486,875.00	\$118.00	\$459,610.00		0.02591240	11,909.60
R34	5-04	HMA for Approach CL 3/8" PG 58H-22	SY	1,013	\$80.00	\$81,040.00	\$30.00	\$30,390.00		0.00703146	213.69
R35	5-04	Temporary Pavement Patch	TN	257	\$225.00	\$57,825.00	\$60.00	\$15,420.00		0.01945525	300.00
R36	7-05	Adjust Area Drain to Grade	EA	2	\$1,000.00	\$2,000.00	\$700.00	\$1,400.00		0.00000000	0.00
R37	7-05	Adjust Existing Catch Basin	EA	8	\$800.00	\$6,400.00	\$1,000.00	\$8,000.00		0.00000000	0.00
R38	7-05	Adjust Existing Manhole	EA	25	\$1,200.00	\$30,000.00	\$1,100.00	\$27,500.00		0.02666667	733.33
R39	7-05	Adjust Existing Valve Chamber to Grade	EA	39	\$700.00	\$27,300.00	\$800.00	\$31,200.00		0.00000000	0.00
R40	7-05	Catch Basin Type 1	EA	38	\$2,000.00	\$76,000.00	\$2,100.00	\$79,800.00		0.00000000	0.00
R41	7-05	Catch Basin Type 2, 48 In. Diam.	EA	1	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00		0.00000000	0.00
R42	7-05	Manhole 48 In. Diam. Type 1	EA	9	\$6,000.00	\$54,000.00	\$5,000.00	\$45,000.00		0.00000000	0.00
R43	7-05	Manhole Additional Height 48 In. Diam. Type 1	LF	4	\$200.00	\$800.00	\$200.00	\$800.00		0.00000000	0.00
R44	7-05	Reconnect Existing Sewer Pipe, 8-In. Diam., to New Structure	EA	5	\$1,500.00	\$7,500.00	\$3,000.00	\$15,000.00		0.00000000	0.00
R45	7-05	Reconnect Existing Sewer Pipe, 6-In. Diam., to New Structure	EA	1	\$1,500.00	\$1,500.00	\$3,000.00	\$3,000.00		0.00000000	0.00
R46	7-05	Reconnect Existing Sewer Pipe, 12-In. Diam., to New Structure	EA	2	\$1,500.00	\$3,000.00	\$3,000.00	\$6,000.00		0.00000000	0.00

EXHIBIT A

PROJECT BREAKDOWN ESTIMATE

Description: Streets Initiative Package #24 & #35
 Specification No.: PW23-0241F
 Bid Opening: 11/28/23

Item	Spec #	Description	Unit	Quantity	ENGINEER'S ESTIMATE		Low Bidder R.L. Alia Company		QTY.	%	Amount
					Unit Price	Amount	Unit Price	Amount			
R47	7-05	Reconnect Existing Sewer Pipe, 10-In. Diam., to New Structure	EA	4	\$1,500.00	\$6,000.00	\$3,000.00	\$12,000.00		0.00000000	0.00
R48	7-05	Connect New Sewer Pipe, 12-In Diam., to Existing Structure	EA	7	\$1,500.00	\$10,500.00	\$2,200.00	\$15,400.00		0.00000000	0.00
R49	7-05	Contech StormFilter Manhole 60-In. Diam., with 4 StormFilter Cartridges	EA	2	\$35,000.00	\$70,000.00	\$38,000.00	\$76,000.00		0.00000000	0.00
R50	7-08	CDF for Pipe Abandonment	CY	7	\$550.00	\$3,850.00	\$500.00	\$3,500.00		0.00000000	0.00
R51	7-08	Temporary Storm Sewer Bypass	LS	1	\$8,500.00	\$8,500.00	\$500.00	\$500.00		0.00831660	4.16
R52	7-08	Temporary Storm Sewer Bypass plan	LS	1	\$1,500.00	\$1,500.00	\$1,500.00	\$1,500.00		0.00831660	12.47
R53	7-17	Removal and Replacement of Unsuitable Material Incl. Haul	CY	1,273	\$70.00	\$89,110.00	\$29.00	\$36,917.00		0.00000000	0.00
R54	7-17	Removal and Replacement of Unsuitable Contaminated Material, Incl. Haul	CY	387	\$115.00	\$44,505.00	\$29.00	\$11,223.00		0.00000000	0.00
R55	7-17	Pipe Zone Contaminated Material Haul and Disposal	CY	187	\$100.00	\$18,700.00	\$29.00	\$5,423.00		0.00000000	0.00
R56	7-17	Ductile Iron Sewer Pipe 6 In. Diam.	LF	58	\$150.00	\$8,700.00	\$100.00	\$5,800.00		0.00000000	0.00
R57	7-17	Ductile Iron Sewer Pipe 12 In. Diam.	LF	453	\$175.00	\$79,275.00	\$175.00	\$79,275.00		0.00000000	0.00
R58	7-17	PVC Storm Sewer Pipe 12 In. Diam.	LF	2,360	\$115.00	\$271,400.00	\$100.00	\$236,000.00		0.00000000	0.00
R59	7-17	Testing Sewer Pipe	LF	2,871	\$5.00	\$14,355.00	\$7.00	\$20,097.00		0.00000000	0.00
R60	7-20	Residential Storm Drain Through Curb	LF	85	\$45.00	\$3,825.00	\$90.00	\$7,650.00		0.00000000	0.00
R61	8-01	Erosion/Water Pollution Control	LS	1	\$11,000.00	\$11,000.00	\$35,000.00	\$35,000.00		0.00831660	291.08
R62	8-01	Stormwater Pollution Prevention Plan (SWPPP)	LS	1	\$1,500.00	\$1,500.00	\$1,000.00	\$1,000.00		0.00831660	8.32
R63	8-01	NPDES Construction Stormwater General Permit	LS	1	\$1,500.00	\$1,500.00	\$1,000.00	\$1,000.00		0.00831660	8.32
R64	8-02	Site Restoration	LS	1	\$55,000.00	\$55,000.00	\$50,000.00	\$50,000.00		0.00831660	415.83
R65	8-02	Topsoil Type A	CY	581	\$75.00	\$43,575.00	\$90.00	\$52,290.00		0.00000000	0.00
R66	8-02	Seeded Lawn Installation	SY	3,410	\$5.00	\$17,050.00	\$3.00	\$10,230.00		0.00000000	0.00
R67	8-02	Quarry Spalls for Slope Restoration	TN	405	\$50.00	\$20,250.00	\$75.00	\$30,375.00		0.00000000	0.00
R68	8-04	Cement Conc. Traffic Curb and Gutter	LF	5,792	\$35.00	\$202,720.00	\$31.00	\$179,552.00		0.00459945	825.84
R69	8-04	Mountable Cement Conc. Curb and Gutter, Type D	LF	45	\$50.00	\$2,250.00	\$31.00	\$1,395.00		0.00000000	0.00
R70	8-04	Pedestrian Curb	LF	15	\$25.00	\$375.00	\$40.00	\$600.00		0.00000000	0.00
R71	8-06	Cement Conc. Driveway Entrance	SY	1,117	\$100.00	\$111,700.00	\$70.00	\$78,190.00		0.00000000	0.00
R72	8-11	Removing and Resetting Beam Guardrail	LF	60	\$50.00	\$3,000.00	\$100.00	\$6,000.00		0.00000000	0.00
R73	8-13	Poured Monument	EA	7	\$1,000.00	\$7,000.00	\$700.00	\$4,900.00		0.07142857	350.00
R74	8-14	Cement Conc. Sidewalk	SY	637	\$100.00	\$63,700.00	\$60.00	\$38,220.00		0.00000000	0.00
R75	8-14	Cement Conc. Sidewalk with Score Pattern	SY	40	\$120.00	\$4,800.00	\$100.00	\$4,000.00		0.00000000	0.00
R76	8-14	Cement Conc. Curb Ramp	EA	88	\$2,500.00	\$220,000.00	\$2,100.00	\$184,800.00		0.00000000	0.00
R77	8-14	Detectable Warning Surface	SF	20	\$75.00	\$1,500.00	\$50.00	\$1,000.00		0.00000000	0.00
R78	8-18	Mailbox Support	EA	15	\$300.00	\$4,500.00	\$400.00	\$6,000.00		0.00000000	0.00
R79	8-21	Permanent Roadway Terminus	EA	1	\$400.00	\$400.00	\$2,500.00	\$2,500.00		0.00000000	0.00
R80	8-21	Permanent Signing	LS	1	\$25,000.00	\$25,000.00	\$30,000.00	\$30,000.00		0.00831660	249.50
R81	8-22	Plastic Line	LF	1,700	\$5.00	\$8,500.00	\$6.00	\$10,200.00		0.00	0.00
R82	8-32	Concrete Border	LF	25	\$35.00	\$875.00	\$60.00	\$1,500.00		0.00	0.00
R83	8-32	Artificial Turf	SY	44	\$400.00	\$17,600.00	\$200.00	\$8,800.00		0.00	0.00
Roadway Base Bid Total (Bid Items R1 - R83)						\$4,364,157.00		\$3,512,541.25			29,212.42
Schedule B: Wastewater Bid Items WW1 - WW32											
WW1	1-05	Roadway Surveying	LS	1	\$78,000.00	\$78,000.00	\$5,000.00	\$5,000.00			
WW2	1-05	Project Redline Drawings	LS	1	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00			
WW3	1-07	SPCC Plan	LS	1	\$1,500.00	\$1,500.00	\$500.00	\$500.00			
WW4	1-09	Mobilization	LS	1	\$230,000.00	\$230,000.00	\$150,000.00	\$150,000.00			
WW5	1-10	Pedestrian Traffic Control	LS	1	\$35,000.00	\$35,000.00	\$20,000.00	\$20,000.00			
WW6	1-10	Project Temporary Traffic Control	LS	1	\$195,000.00	\$195,000.00	\$120,000.00	\$120,000.00			

EXHIBIT A

PROJECT BREAKDOWN ESTIMATE

Description: Streets Initiative Package #24 & #35
 Specification No.: PW23-0241F
 Bid Opening: 11/28/23

				ENGINEER'S ESTIMATE		Low Bidder R.L. Alla Company		ESTIMATE TOTAL			
Item	Spec #	Description	Unit	Quantity	Unit Price	Amount	Unit Price	Amount	QTY.	%	Amount
WW7	2-01	Clearing and Grubbing	LS	1	\$60,000.00	\$60,000.00	\$8,000.00	\$8,000.00			
WW8	2-01	Certified Arborist	LS	1	\$5,800.00	\$5,800.00	\$2,500.00	\$2,500.00			
WW9	2-02	Removal of Structures and Obstructions	LS	1	\$5,800.00	\$5,800.00	\$20,000.00	\$20,000.00			
WW10	2-09	Structure Excavation Class B	CY	6,619	\$25.00	\$165,475.00	\$43.00	\$284,617.00			
WW11	2-09	Shoring or Extra Excavation Class B	SF	54,507	\$4.00	\$218,028.00	\$0.50	\$27,253.50			
WW12	2-16	Remove Manhole	EA	9	\$1,000.00	\$9,000.00	\$1,000.00	\$9,000.00			
WW13	5-04	Temporary Pavement Patch	TN	590	\$225.00	\$132,750.00	\$60.00	\$35,400.00			
WW14	7-05	Manhole 48 In. Diam. Type 1	EA	21	\$6,000.00	\$126,000.00	\$8,000.00	\$168,000.00			
WW15	7-05	Manhole Additional Height 48 In. Diam. Type 1	LF	35	\$200.00	\$7,000.00	\$200.00	\$7,000.00			
WW16	7-05	Reconnect Existing Sewer Pipe, 10-In. Diam., to New Structure	EA	3	\$1,500.00	\$4,500.00	\$3,000.00	\$9,000.00			
WW17	7-05	Connect New Sewer Pipe, 10-In Diam., to Existing Structure	EA	7	\$1,500.00	\$10,500.00	\$2,200.00	\$15,400.00			
WW18	7-05	Connect New Sewer Pipe, 8-In Diam., to Existing Structure	EA	1	\$1,500.00	\$1,500.00	\$2,200.00	\$2,200.00			
WW19	7-08	CDF for Pipe Abandonment	CY	2	\$550.00	\$1,100.00	\$1,000.00	\$2,000.00			
WW20	7-08	Temporary Sanitary Sewer Bypass	LS	1	\$7,500.00	\$7,500.00	\$40,000.00	\$40,000.00			
WW21	7-08	Temporary Sanitary Sewer Bypass plan	LS	1	\$1,000.00	\$1,000.00	\$2,500.00	\$2,500.00			
WW22	7-17	Removal and Replacement of Unsuitable Material Incl. Haul	CY	3,648	\$70.00	\$255,360.00	\$29.00	\$105,792.00			
WW23	7-17	Removal and Replacement of Unsuitable Contaminated Material, Incl. Haul	CY	2,114	\$115.00	\$243,110.00	\$29.00	\$61,306.00			
WW24	7-17	Pipe Zone Contaminated Material Haul and Disposal	CY	60	\$100.00	\$6,000.00	\$29.00	\$1,740.00			
WW25	7-17	PVC Sanitary Sewer Pipe 10 In. Diam.	LF	3,313	\$115.00	\$380,995.00	\$156.00	\$516,828.00			
WW26	7-17	PVC Sanitary Sewer Pipe 8 In. Diam.	LF	911	\$115.00	\$104,765.00	\$156.00	\$142,116.00			
WW27	7-17	PVC Sanitary Sewer Pipe 6 In. Diam.	LF	964	\$115.00	\$110,860.00	\$175.00	\$168,700.00			
WW28	7-17	PVC Sanitary Sewer Pipe C900 6 In. Diam.	LF	434	\$150.00	\$65,100.00	\$200.00	\$86,800.00			
WW29	7-17	Testing Sewer Pipe	LF	5,152	\$5.00	\$25,760.00	\$7.00	\$36,064.00			
WW30	7-19	Sewer Cleanout	EA	76	\$800.00	\$60,800.00	\$800.00	\$60,800.00			
WW31	8-01	Erosion/Water Pollution Control	LS	1	\$11,000.00	\$11,000.00	\$20,000.00	\$20,000.00			
WW32	8-02	Site Restoration	LS	1	\$58,000.00	\$58,000.00	\$25,000.00	\$25,000.00			
Wastewater Base Bid Total (Bid Items WW1 - WW32)						\$2,618,203.00		\$2,154,516.50			
Schedule C: Water Bid Items W1 - W38											
W1		Mobilization (1-09.7)	LS	1	\$46,000.00	\$46,000.00	\$35,000.00	\$35,000.00		100.00%	\$35,000.00
W2		Project Temporary Traffic Control (1-10)	LS	1	\$25,000.00	\$25,000.00	\$10,000.00	\$10,000.00		100.00%	\$10,000.00
W3		Removal/Disposal of existing asphalt, concrete sidewalk/curbing & concrete pavement. Includes all thicknesses and combinations (2-02.3(3))	SY	739	\$25.00	\$18,475.00	\$12.00	\$8,868.00		100.00%	\$8,868.00
W4		Temporary HMA Class ½" PG58-22, 2-inch minimum depth, installed & removed (5-04 & 9-03.8)	SY	706	\$35.00	\$24,710.00	\$6.00	\$4,236.00		100.00%	\$4,236.00
W5		HMA CI ½" PG58-22 pavement for permanent trench patch (5-04 & 9-03.8)-6" in Depth	TN	10	\$200.00	\$2,000.00	\$300.00	\$3,000.00		100.00%	\$3,000.00
W6		Crushed Surfacing Top Course for trench backfill (7-09.5 & 9-03.9(3))	TN	1,576	\$25.00	\$39,400.00	\$33.00	\$52,008.00		100.00%	\$52,008.00
W7		Storm, Sanitary, Side Sewer Restoration (7-04.7-09.5, 7-17, & 7-19)	EA	8	\$500.00	\$4,000.00	\$300.00	\$2,400.00		100.00%	\$2,400.00
W8		Trench Excavation & Disposal of Contaminated Material, Incl. Haul to LRI (2-17 & 7-09.4)	CY	617	\$175.00	\$107,975.00	\$48.00	\$29,616.00		100.00%	\$29,616.00
W9		Trench Excavation & Disposal (7-09.3(7) & 7-09.5)	CY	347	\$25.00	\$8,675.00	\$35.00	\$12,145.00		100.00%	\$12,145.00
W10		Trench Shoring (7-09.3(7) & 7-09.5)	LF	2,017	\$1.00	\$2,017.00	\$10.00	\$20,170.00		100.00%	\$20,170.00

EXHIBIT A

PROJECT BREAKDOWN ESTIMATE

Description: Streets Initiative Package #24 & #35
 Specification No.: PW23-0241F
 Bid Opening: 11/28/23

				ENGINEER'S ESTIMATE		Low Bidder R.L. Alia Company					
Item	Spec #	Description	Unit	Quantity	Unit Price	Amount	Unit Price	Amount	QTY.	%	Amount
W11		8-inch Ductile Iron Pipe, Push-On Joint, ANSI/AWWA, C151, Special Class Thickness No. 52, to furnish, lay and test. (7-09.3(15)A, 7-09.5 & 9-30.1(1))	LF	235	\$60.00	\$14,100.00	\$76.00	\$17,860.00		100.00%	\$17,860.00
W12		6-inch Ductile Iron Pipe, Push-On Joint, ANSI/AWWA, C151, Special Class Thickness No. 52, to furnish, lay and test. (7-09.3(15)A, 7-09.5 & 9-30.1(1))	LF	1,960	\$50.00	\$98,000.00	\$70.00	\$137,200.00		100.00%	\$137,200.00
W13		8-inch x 6-inch Ductile Iron Reducer, 2-B, M.J., w/ anchor, installed (7-05.9 & 9-30.2(1))	EA	1	\$375.00	\$375.00	\$300.00	\$300.00		100.00%	\$300.00
W14		8-inch x 6-inch Ductile Iron Tee, 3-B, M.J., installed (9-30.2(1))	EA	1	\$425.00	\$425.00	\$350.00	\$350.00		100.00%	\$350.00
W15		6-inch Ductile Iron Tee, 3-B, M.J., installed (9-30.2(1))	EA	3	\$335.00	\$1,005.00	\$400.00	\$1,200.00		100.00%	\$1,200.00
W16		8-inch Ductile Iron Ell, M.J., 45°, installed. (7-09. & 9-30.2(1))	EA	2	\$275.00	\$550.00	\$600.00	\$1,200.00		100.00%	\$1,200.00
W17		6-inch Ductile Iron Ell, M.J., 45°, installed. (7-09. & 9-30.2(1))	EA	12	\$195.00	\$2,340.00	\$200.00	\$2,400.00		100.00%	\$2,400.00
W18		6-inch Ductile Iron Ell, M.J., 22-1/2°, installed. (7-09. & 9-	EA	4	\$175.00	\$700.00	\$275.00	\$1,100.00		100.00%	\$1,100.00
W19		6-inch Ductile Iron Ell, M.J., 11-1/4°, installed. (7-09. & 9-	EA	1	\$180.00	\$180.00	\$220.00	\$220.00		100.00%	\$220.00
W20		6-inch Vertical Ductile Iron Ell, M.J., 22-1/2°, installed. (7-09. & 9-30.2(1))	EA	2	\$500.00	\$1,000.00	\$400.00	\$800.00		100.00%	\$800.00
W21		8-inch Transition Coupling with 7-inch center ring, epoxy coating, and stainless steel bolts, C.I. to D.I., installed (7-09.3(19)A, 7-09.5 & 9-30.2(7))	EA	1	\$1,100.00	\$1,100.00	\$650.00	\$650.00		100.00%	\$650.00
W22		6-inch Transition Coupling with 7-inch center ring, epoxy coating, and stainless steel bolts, C.I. to D.I., installed (7-09.3(19)A, 7-09.5 & 9-30.2(7))	EA	3	\$750.00	\$2,250.00	\$550.00	\$1,650.00		100.00%	\$1,650.00
W23		8-inch Ductile Iron Cap, M.J., tapped 2", installed and removed (9-30.2(1) & 7-09.5)	EA	1	\$245.00	\$245.00	\$300.00	\$300.00		100.00%	\$300.00
W24		6-inch Ductile Iron Cap, M.J., tapped 2", installed and removed (9-30.2(1) & 7-09.5)	EA	4	\$175.00	\$700.00	\$300.00	\$1,200.00		100.00%	\$1,200.00
W25		Temporary 2-inch Blow-Off Assembly, installed and removed (Dwg. 17-56-1) (7-09.3(22) & 7-09.5)	EA	5	\$750.00	\$3,750.00	\$300.00	\$1,500.00		100.00%	\$1,500.00
W26		8-inch Mechanical Joint Restraining Glands (7-14, 7-09.5 & 9-30.2(6))	EA	6	\$60.00	\$360.00	\$120.00	\$720.00		100.00%	\$720.00
W27		6-inch Mechanical Joint Restraining Glands (7-14, 7-09.5 & 9-30.2(6))	EA	8	\$60.00	\$480.00	\$100.00	\$800.00		100.00%	\$800.00
W28		Concrete Thrust Anchor, installed. (7-09.3(21) & 7-09.5)	EA	21	\$500.00	\$10,500.00	\$200.00	\$4,200.00		100.00%	\$4,200.00
W29		Temporary Concrete Thrust Anchor, installed and removed (7-09.3(21) & 7-09.5)	EA	5	\$300.00	\$1,500.00	\$100.00	\$500.00		100.00%	\$500.00
W30		insulating casing spacers and end seals for 6-inch DI pipe (7-10)	LF	311	\$150.00	\$46,650.00	\$75.00	\$23,325.00		100.00%	\$23,325.00
W31		Trench Compaction Test (as directed by the Inspector) (7-09.3(11) & 7-09.5)	EA	40	\$150.00	\$6,000.00	\$80.00	\$3,200.00		100.00%	\$3,200.00
W32		Test Holes (7-09.3(6) & 7-09.5)	LS	1	\$5,000.00	\$5,000.00	\$2,000.00	\$2,000.00		100.00%	\$2,000.00
W33		8-inch Gate Valve, M.J., ANSI/AWWA, C509/515, with C.I. Valve Box (7-12 & 9.30.3)	EA	1	\$1,600.00	\$1,600.00	\$3,000.00	\$3,000.00		100.00%	\$3,000.00
W34		6-inch Gate Valve, M.J., ANSI/AWWA, C509/515, with C.I. Valve Box (7-12 & 9.30.3)	EA	10	\$1,200.00	\$12,000.00	\$2,000.00	\$20,000.00		100.00%	\$20,000.00
W35		6-inch Hydrant, M.J., 5.0-ft bury, with 4-inch Tacoma Standard Threads & 5-inch Quick Coupling (7-14 & 9-30.5(2))	EA	2	\$4,500.00	\$9,000.00	\$5,500.00	\$11,000.00		100.00%	\$11,000.00
W36		Street cleaning with Self-propelled Pickup and Vacuum Street Sweeper Equipment. (8-01.3(8))	HR	25	\$175.00	\$4,375.00	\$150.00	\$3,750.00		100.00%	\$3,750.00

EXHIBIT A

PROJECT BREAKDOWN ESTIMATE

Description: Streets Initiative Package #24 & #35
 Specification No.: PW23-0241F
 Bid Opening: 11/28/23

				ENGINEER'S ESTIMATE		Low Bidder R.L. Alia Company					
Item	Spec #	Description	Unit	Quantity	Unit Price	Amount	Unit Price	Amount	QTY.	%	Amount
W37		Traffic Lane Markings (8-22)	LS	1	\$1,000.00	\$1,000.00	\$4,000.00	\$4,000.00		100.00%	\$4,000.00
W38		Force Account (1-09.6)	EST	1	\$40,000.00	\$40,000.00	\$40,000.00	\$40,000.00		100.00%	\$40,000.00
Water Base Bid Total (Bid Items W1 - W38)						\$543,437.00		\$461,868.00			\$461,868.00
Schedule D: Guardrail Repair Bid Items G1 - G11											
G1		Mobilization	LS	1	\$25,000.00	\$25,000.00	\$2,500.00	\$2,500.00			
G2		Pedestrian Traffic Control	LS	1	\$7,500.00	\$7,500.00	\$500.00	\$500.00			
G3		Project Temporary Traffic Control	LS	1	\$25,000.00	\$25,000.00	\$8,000.00	\$8,000.00			
G4		Clearing and Grubbing	LS	1	\$2,500.00	\$2,500.00	\$1,000.00	\$1,000.00			
G5		Erosion/Water Pollution Control	LS	1	\$2,500.00	\$2,500.00	\$1,000.00	\$1,000.00			
G6		Stormwater Pollution Prevention Plan (SWPPP)	LS	1	\$1,500.00	\$1,500.00	\$100.00	\$100.00			
G7		Site Restoration	LS	1	\$2,500.00	\$2,500.00	\$1,000.00	\$1,000.00			
G8		Remove Crash Cushion	EA	1	\$3,000.00	\$3,000.00	\$2,000.00	\$2,000.00			
G9		Valtir Quadguard M10 (TL-2)	EA	1	\$30,000.00	\$30,000.00	\$33,000.00	\$33,000.00			
G10		Removing Guardrail Anchor	EA	4	\$7,000.00	\$28,000.00	\$500.00	\$2,000.00			
G11		Beam Guardrail Type 31 Non-Flared Terminal	EA	4	\$30,000.00	\$120,000.00	\$7,000.00	\$28,000.00			
Guardrail Base Bid Total (Bid Items G1 - G11)						\$247,500.00		\$79,100.00			
TOTAL BASE BID (Not Including Sales Tax)						\$7,773,297.00		\$6,208,025.75			
TOTAL BASE BID + FA - SALES TAX						\$7,773,297.00		\$6,208,025.75			
EIC = Less FA & Sales Tax						\$7,763,297.00		\$6,198,025.75			

Tacoma Water Cost Share Summary

Item	Description	Amount
A	Water Schedule C Items (Without Tax)	\$461,868.00
B	Shared Cost Items (Without Tax)	\$29,212.42
C	Waste Disposal Fee Cost for Contaminated Items (Disposal fee of \$207.69 per CY-\$207.69 x 617 CY)	\$128,146.00
D	Total Construction Cost (Without Tax) (A + B + C)	\$619,226.42
E	Total Construction Costs with 15% Contingency (C&A Document Water Total) (A + B) x 1.15	\$564,742.46
F	Admin Costs (3% excluding FA) (A + B - \$Force Account) x 3%	\$13,532.41
G	Cumulative Total (less tax, less contingency) (D + F)	\$632,758.83