FINAL CONSTRUCTION WORK AUTHORIZATION ("FCWA")

RIALTO BIOSOLIDS HANDLING UPGRADE PROJECT

The City of Rialto and Rialto Utility Authority hereby authorizes work to commence on the upgrade of solids handling equipment at the Rialto Wastewater Treatment Plant (the "Project"), pursuant to the attached Guaranteed Maximum Price (GMP) and associated package.

Scope of Work

The existing biosolids handling equipment is over 30 years old and well beyond its useful life. The scope of the Project includes:

- Replacing the existing two gravity belt thickeners with new rotary drum thickeners
- Replacing the existing belt filter presses with new centrifuges
- Replacing the existing digester covers with new inflatable covers
- Performing associated site work, including mechanical, plumbing, electrical, pump, and piping improvements

The Project aims to achieve redundancy in the sludge and biosolids processing equipment to improve operational reliability, enhance digester gas production, and potentially reduce sludge hauling costs by producing a drier cake. The newly installed equipment will be integrated with SCADA to provide additional operational and control data, enabling future use of AI and other digital tools for process and energy optimization.

The scope of work for the Project is to execute the upgrades to biosolids handling equipment as detailed in the GMP package attached hereto.

Project History

1. The need for the biosolids handling equipment upgrades was identified in 2012 and included in the Facilities Improvement Plan (FIP) portfolio of projects under Project S1 at the start of the Concession Agreement. It was subsequently eliminated from the S1 project based on priority.
2. In November 2020, after Rialto City Council ("City Council") approval of a 2019 Feasibility Study, Veolia competitively solicited price proposals from multiple design-build firms and selected AECOM-WM Lyles as the preferred bidder. In February 2021, the City approved the progressive design-build delivery by AECOM-WM Lyles.
3. In March 2022, the City authorized the Rialto Biosolids Upgrade Study to evaluate existing thickening, digesters, sludge storage, and the dewatering system to further define the full scope of the required upgrades. The study focused on identifying improvements to the digester system, controls, and gas storage optimization. In addition, thickening equipment, dewatering equipment, and transfer pumping/piping were assessed. A technical memorandum and condition assessment were completed and accepted by the City in November 2022.
4. In February 2023, the City authorized continuation of the progressive design-build project delivery through 30% design and GMP preparation.

5. In February 2024, AECOM-WM Lyles submitted the 30% design and cost estimate for review and approval. Subsequent to the page-turn review and City approval in April 2024, AECOM-WM Lyles was authorized to proceed with the 60% design, GMP development, and procurement of shop drawings for long-lead equipment.
6. The 60% design and GMP were submitted to the City in October 2024, and the GMP was re-validated in December 2024.
7. Arup, the Independent Engineer for the RWS bondholders, conducted a full review of the 60% design and GMP and issued a memorandum of findings in January 2025.
8. After April 7, 2025, the GMP was refreshed after detailed discussions among City staff, the City's consultant, and RWS.
9. The GMP validity period was extended to August 27, 2025 to provide the City time to engage Jacobs Engineering for further review.

Current Status

At this time, only one belt filter press remains operational (installed in the 1970s). The second belt press is undersized and has been non-operational for approximately 10 years. As of January 2025, there is only one gravity belt thickener in operation, as the second thickener – installed in the 1980s – has failed and cannot be repaired due to equipment obsolescence and lack of available parts.

This FCWA will be presented to the Water Sub Committee on July 24, 2025, and subsequently to Rialto City Council for approval on August 12, 2025 before the GMP expires on August 27, 2025.

Cost Estimate

See Attachment 1 – Final Cost Sheet with total cost of and breakdown costs. Requested approval amount is **$35,598,387,** which is in addition to the previously approved amounts outlined in Attachment 1. The costs quoted herein are valid until August 27, 2025.

See Attachment 1 for GMP Details– Final FCWA Cost amount **$35,598,387.**

Total Project Cost is **$36,799,987** and includes design fees incurred in the development of this FCWA.

Schedule

Veolia will execute a subcontract with the subcontractor immediately upon receipt of a signed FCWA from the City of Rialto. This project is expected to be completed by Q3 of 2027. A Baseline Schedule will be developed and submitted after project approval.

Insurance and Bonding Requirement

See Attachment _4 – Will be provided upon award of contract by subcontractor.

Major Assumptions

See Exhibit 1B – Project Price Clarifications.

Employment Impact

30-40 construction jobs throughout the course of the project are anticipated.

FINAL CONSTRUCTION WORK AUTHORIZATION

Project Title:

Rialto Biosolids Handling Upgrades Project

Approved By Rialto City Council/Rialto Utility Authority:

Date:_____ Tab Item No. _____

Amended By Rialto City Council/Rialto Utility Authority:

N/A

Amendment Issued on Behalf of Rialto Utility Authority by:

By: _____

Name & Title: _____

Date: _____

Received by:

Rialto Water Services, LLC

By: _____

Name & Title: _____

Date: _____

ATTACHMENT 1 – Cost Breakdown Sheet

COST BREAKDOWN SHEET - CONSTRUCTION

Sr.	Description	Amount ($)
1	Sitework	$521,696
2	Site Piping	$441,619
3	Primary Sludge Screening	$1,511,235
4	Thickening Process Area	$2,426,537
5	Dewatering Process Area	$4,533,946
6	Anaerobic Digester No. 2 Upgrade	$630,987
7	Anaerobic Digester No. 1 Upgrade	$647,763
8	Retrofit existing Sludge Storage Tank	$3,377,632
9	Electrical & Instrumentation	$5,905,919
10	Permits and Procurement Cost	$125,000
11	Construction Phase Services, Commissioning, Acceptance Test, Warranty, As-Builts, Closeout	$1,711,950
12	General conditions	$2,025,114
13	Cost Escalation	$699,096
14	Contractor Contingency (4.2% of Construction)	$1,273,398
15	Design Builder Fee (11.95% of Construction)	$3,576,555
16	Indirect Costs - Bonds & Insurance (1.75% of Construction)	$526,388
17	Final Engineering	$816,385
18	Engineering Services during Construction	$863,688
Total Construction Cost		**$31,614,908**
Veolia Insurance Cost (1.2%)		**$379,379**
Veolia Soft Costs (11.4%)		**$3,604,100**
Total FCWA Amount		**$35,598,387**

Optional Page for staff consideration:

RECONCILIATION OF PREVIOUS FCWA'S

Sr.	Description	Amount ($)
1	**Biosolids FCWA July 2025**	**$35,598,387**
5	Unused Related Scope Authorizations previously approved (See table below)	($1,835,953)
Net FCWA Adjusted		**$33,762,434**

Unused FCWA Amounts Previously Approved

Sr.	Description	Amount ($)
1	(Offset) Previously approved amounts for early Procurement of Long Lead Equipment approved via FCWA in February 2023 and work scope added to Biosolids Upgrades project. The project line items in the FCWA approved in February 2023 will be billed in full when the procurement POs are issued for Centrifuge and RDTs	($632,000)
2	(Offset) For Digester 1 Rehabilitation Project previously authorized via FCWA in May 2022, and work scope added to Biosolids Upgrades project This project line item in the FCWA approved in May 2023 will be billed in full when the procurement POs are issued for Digester Covers	($1,503,953)
3	(Add - Allowance) Pump sludge from Digesters 1 & 2 to headworks, Clean Digesters 1 & 2	$300,000
Total Authorizations previously approved - Scope transferred to Biosolids Upgrades Project		**($1,835,953)**

ATTACHMENT 2 – Risk Register

City of Rialto Risk Log
1-Jun-25

Description	Prob. of Occur.	Cost Impact ($000)			Schedule Impact (Wk)			Basis of Cost or Schedule Impact	Mitigation & Comments	Probability x Impact
		Min	Prob.	Max	Min	Prob	Max			
Permitting & Approvals										
Delay in Owner approvals and/or many questions/comments to address	30%	$50	$200	$300	4	8	12	Owner approvals are running slow or additional comments not contemplated during original	Clearly defined scope of work for Veolia	$60
Delay or more burdensome requirement by the City	25%	$50	$100	$200	4	6	8	City requires additional scope not needed or anticipated		$25
Third-party delay	5%	$80	$120	$160				CO from Owner	Negotiate risk allocation in contract	$6
Unanticipated permits/licenses	10%	$20	$40	$60						$4
Technical - Design Related										
Design cost/schedule overrun	20%	$100	$200	$300	2	4	8			$40
Design development/scope growth (creep)	20%	$400	$550	$1,100	2	4	8		Continue high degree of collaboration with client	$110
Design Error or Omission	25%	$160	$300	$470	2	4	8		Experienced team. Adequate resources. QA/QC. Const. team reviews	$75
I&C change due to new information	20%	$50	$150	$300				Currently assuming a high level of reuse		$30
Electrical level of using existing assets	20%	$50	$200	$400				Currently assuming a high level of reuse		$40
Process equipment redesign	20%	$100	$200	$300				Assume potential up to 10% of equipment cost	Process design and sizing review has already advanced	$40
										$0
Equipment Procurement and finalization										
Instrumentation coordination challenges	15%	$80	$120	$160	2	4	8	CO from Owner	Negotiate risk allocation in contract	$18
Gap liability due to design development	25%	$150	$300	$450	8	10	12	CO from Owner and/or assume low productivity	Negotiate risk allocation in contract	$78
Shop drawing delays	25%	$50	$100	$200	4	8	12	Current pricing assumes use of some existing piping	CO from Owner is assumption is not feasible	$25
Construction										
Construction productivity due to existing site conditions	30%	$150	$300	$400	2	4	12	Up to 1% of construction	Investigations and surveys of existing conditions, review of as-builts	$90
Working around existing Conveyor	30%	$100	$300	$400	2	4	6	Delays	Development of construction plan , Communications with operators Contingency plan for high impact events	$90
I&C (SCADA) Integration and performance	20%	$80	$150	$230	2	4	6	Prepare detailed estimate, delays	Focused coordination and QA/QC. Use of shop mock-up.	$30
Weather, Force Majeure Delays or other Construction delays	20%	$80	$150	$350	2	4	12	Up to 1 month delay	Schedule contingency (1 mo.), Force majeure clause in contract.' Contingency allowance., Preparation of various contingency plans to mitigate delays, impacts and costs	$30
Site work production rate challenges due to subsurface utility density	20%	$100	$200	$300	2	4	6	production delays/hand digging		$40
Subcontractor/Vendor performance/delay	20%	$200	$400	$800				up to 3% of subs & vendors	Use of known and prequalified subcontractors.. Implementation of a construction QA/QC program.. On-site superintendence, including weekly meetings. Step-in rights on all subcontracts. Subcontractor bonding	$80
Worker Injury, site safety	10%	$40	$200	$400				One wk per injury or accident + ins. deductible	EH&S Management w/Safety Manager. Flowdown to subs. Insurance H&S training. Prequalification of subcontractors.	$20
Staff market rates	20%	$10	$100	$40						$20
Startup, Commissioning & Acceptance Testing										
Electrical startup problems	20%	$100	$300	$400				delays and retesting	Focused coordination and QA/QC. Use of shop testing	$60

Description	Prob. of Occur.	Cost Impact ($000)			Schedule Impact (Wk)			Basis of Cost or Schedule Impact	Mitigation & Comments	Probability x Impact
		Min	Prob.	Max	Min	Prob	Max			
I&C Integration problems	20%	$100	$300	$400				delays and retesting		$60
	0%	$100	$200	$400				delays and retesting		$0
Equipment performance issues	10%	$100	$160	$230				delays and retesting	Choose quality equipment	$16
Performance Testing issues	15%	$100	$160	$400	4	6	8	delays and retesting		$24
Commissioning Issues	20%	$100	$160	$400	4	6	8			$32
Warranty & O&M Performance Period										
JV warranty costs beyond bid	5%	$40	$200	$400				up to 3% of installed equip.	Flowdown	$10
Vendor/subcontractor underperformance	10%	$80	$160	$230				up to 1% of equip & subs	Flowdown	$16
Additional training	5%	$40	$80	$200				Up to 8 weeks in field	Get early buy in on startup and training plan.	$4
Cost Estimate & Financial										
Accuracy of quantities/completeness of est.	20%	$100	$250	$400						$50
Scope Gap between Bid Packages	20%	$100	$250	$400					Procurement & design diligence. Constructability reviews. Scope Reviews. Discipline Coordination	$50
Insurance coverage	20%	$100	$250	$400					Procurement & design diligence. Constructability reviews. Scope Reviews. Discipline Coordination	$50
									Total	**$1,273**

ATTACHMENT 3 – 60% Design Drawings & Specifications

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[Your Name]
[Title, if applicable]
[Company Name, if applicable]