



May 23, 2024

BCC Agenda Date/Item: _____

Board of County Commissioners
 Acting as the governing body of Water Environment Services
 Clackamas County

Approval of Amendment #1 to a Contract with Jacobs Engineering Group, Inc. for Sanitary Sewer Master Plan consulting to add the Richardson Creek Basin and the Country Village area in Oregon City to the Sanitary Sewer Master Plan. Amendment Value is \$173,125, contract value is now increased to \$472,761. Funding through WES Sanitary Sewer Operating Funds. No County General Funds are involved.

Previous Board Action/Review	<ul style="list-style-type: none"> Contract 6837 approved – August 11, 2022. Presented at Issues – May 21, 2024. 		
Performance Clackamas	<ol style="list-style-type: none"> This project supports the WES Strategic Plan to provide Enterprise Resiliency, infrastructure Strategy and Performance and Operational Optimization. This project supports the County’s Strategic Plan of building a strong infrastructure that delivers services to customers and honors, utilizes, promotes and invest in our natural resources. 		
Counsel Review	Yes	Procurement Review	Yes
Contact Person	Jeff Stallard	Contact Phone	503-278-2311

EXECUTIVE SUMMARY: In 2019, Water Environment Services completed a Sanitary Sewer System Master Plan assisted by the Jacobs Engineering Group, Inc. Jacobs is currently contracted to provide hydraulic modeling support and sanitary sewer capital program review on an annual basis. The contract for hydraulic modeling is now being amended to include an update to the sewer master plan to incorporate the Richardson Creek Basin near Damascus and the Country Village area in Oregon City. The consultant will update applicable sections of the sewer master plan, including sections describing the new analysis, assumptions, and impacts to the system and capital program. The addendum will focus on service concepts to these expanded areas, capital project priorities both locally and downstream, and a conceptual design of proposed improvements.

The analysis and associated sewer master plan update is the first step necessary to evaluate the Richardson Creek and Country Village areas for future improvements to support development. The work is anticipated to be completed over the next 18 months.

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RECOMMENDATION: Staff recommends that the Board of County Commissioners of Clackamas County, acting as the governing body of Water Environment Services, approve Amendment #1 with Jacobs Engineering Group, Inc. to add scope of services to Contract 6837 to incorporate the Richardson Creek Basin and the Country Village area in Oregon City to the Sanitary Sewer Master Plan.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Greg L Geist", with a long horizontal flourish extending to the right.

Greg Geist
Director, WES

Attachment: Amendment #1 for Contract 6837

**AMENDMENT #1
TO THE CONTRACT DOCUMENTS WITH JACOBS ENGINEERING GROUP, INC. FOR
HYDRAULIC MODEL UPDATE
Contract #6837**

This Amendment #1 is entered into between **Jacobs Engineering Group, Inc.** (“Contractor”) and Water Environment Services (“District”) and shall become part of the Contract documents entered into between both parties on **August 11, 2022** (“Contract”).

The Purpose of this Amendment #1 is to make the following changes to the Contract:

1. ARTICLE I, Section 2. **Scope of Work** is hereby amended as follows:
District has authorized an increase to the Scope of Work to support the incorporation of the Richardson Creek Basin and reevaluation of the development of the Country Village area in Oregon City. The additional Scope of Work is included as Exhibit “A” to this Amendment #1 and is hereby attached and included by reference.

2. ARTICLE I, Section 3. **Consideration** is hereby amended as follows:
In consideration for Contractor performing the additional work described in Exhibit A, District agrees to increase compensation to Contractor by an amount not to exceed \$173,125.00. Consideration rates are on a time and materials basis in accordance with the rates and costs specified in Exhibit A. The total Contract compensation shall next exceed \$472,761.00.

ORIGINAL CONTRACT	\$ 299,636.00
<u>AMENDMENT #1</u>	<u>\$ 173,125.00</u>
TOTAL AMENDEED CONTRACT	\$ 472,761.00

Except as expressly amended above, all other terms and conditions of the Contract shall remain in full force and effect. By signature below, the parties agree to this Amendment #1, effective upon the date of the last signature below.

Jacobs Engineering Group, Inc.

Patrick M. Van Duser
Digitally signed by Patrick M. Van Duser
 DN: cn=Patrick M. Van Duser, o=US, ou=Jacobs Solutions Inc., email=Pat.VanDuser@jacobs.com
 Date: 2024.05.10 11:18:11 -0700

Authorized Signature _____ Date _____


Patrick Van Duser, Designated Manager
 Printed Name

Water Environment Services

Chair _____ Date _____

Recording Secretary _____

Approved as to Form:



 County Counsel 5/13/2024
Date

Exhibit A
Scope of Work Increase

EXHIBIT A
PERSONAL SERVICES CONTRACT FOR
1st AMENDMENT TO ENGINEERING SERVICES FOR
HYDRAULIC MODEL UPDATES AND ANNUAL SANITARY SEWER CAPITAL PROGRAM
REVIEW (CLACKAMAS WES SANITARY SEWER MASTER PLAN ADDENDUM)

SCOPE OF WORK

BACKGROUND

In 2019, Water Environment Services (District) completed a Sanitary Sewer System Master Plan (SSMP) assisted by Jacobs (Consultant). Currently Jacobs is contracted to provide hydraulic modeling support and sanitary sewer capital program review on an annual basis. The contract for hydraulic modeling is now being amended to include an addendum to the SSMP.

The District is amending the 2019 SSMP to incorporate the Richardson Creek Basin and reevaluate development of the Country Village area in Oregon City. The SSMP Addendum will focus on service concepts to these expanded areas, capital project priorities both locally and downstream, and a conceptual design of proposed improvements.

SCOPE OF SERVICES

TASK 1 – Project Management (Existing Task Amended)

Objectives: Provide management and communication required to prepare and deliver the SSMP Addendum. Consultant will complete the following:

- Conduct project kick-off meeting for the SSMP Amendment Work.
- Additional project management for increased scope.
- Oversee, coordinate, and provide direction to the Project team to meet schedule requirements.
- Monitor staff availability and workload and adjust as necessary to assure availability.
- Track and forecast Project costs to remain within the budget. Track out of scope work requests.
- Prepare monthly progress reports and invoices (single invoice for contract).
- Participate in regular coordination meetings with District Project Manager (single coordination meeting monthly for contract).
- Coordinate quality assurance and quality control (QA/QC) activities.

Deliverables: Monthly invoices and progress reports (up to 18 months, single invoice for contract) and project schedule.

Assumptions: One coordination meeting per month (up to 18 virtual meetings of one-hour duration, single coordination for contract). One in-person or virtual kick-off meeting, per District preference. Level of effort has been limited acknowledging that invoicing and project coordination meetings will be combined for the entire contract including the amended tasks documented in this scope of work.

TASK 6 – Planning and Capacity Assessment

Objectives: Update planning assumptions and understanding of system capacity implications of expanded service area (Richardson Creek and Country Village). Consultant will complete the following:

- Update Study Area Boundary – Request a map markup from the District and Clackamas County showing the extents of the expanded service area.
- Update population, employment and equivalent dwelling unit projections based on expanded study area utilizing Metro zoning, Portland State University population projections, and other sources available from the District.
- Update flow loading in the sanitary sewer collection system model for expanded study area using calibrated unit flow factors from the SSMP and wet weather assumptions consistent with the SSMP.
- Update system deficiency mapping with and without planned improvements at 5-year increments with expanded study using the District design storm. Planned improvements include Clackamas Interceptor, Intertie 2 Pump Station Phase 1, Intertie 2 Pump Station Phase 2, Rock Creek Extension, and updated infiltration and inflow (I&I) reduction targets based on recent model calibration and I&I review)
- Identify downstream capacity limitations based on expanded study area and planned improvement projects.
- Coordinate and communicate impact on downstream system with on-going projects.
- If downstream capacity deficiencies are severe in the Clackamas Interceptor and Intertie 2 Pump Station, document downstream improvement and timing to Jennifer Main Diversion. Consider one additional alternative for system capacity improvements based on discussions with District staff.

Assumptions: Conduct up to three (3) virtual meetings to discuss planning assumptions and system capacity impacts.

Deliverable: Technical memorandum in electronic format (draft and final) with combined content from Tasks 6, 7, and 8.

TASK 7 – Richardson Creek and Country Village Service Alternatives

Objectives: Develop and evaluate sanitary sewer planning alternatives for new growth areas. The local alternatives will primarily focus on Richardson Creek due to size of area and number of potential options for phasing service. The Richardson Creek alternatives will build on historic service concepts. Country Village growth will focus on opportunities to connect into the downstream trunk system based on range of elevations within the growth area. Consultant will complete the following:

- Review septic to sewer vs redevelopment potential and sewer with redevelopment within expanded study area.
- Meet with Ron Weigel of Century West to discuss historic concepts for service in Richardson Creek.
- Perform desktop analysis to understand other infrastructure planning in the area including roadways, water system piping, gas, electric, cable, and storm sewer.

- Perform desktop analysis to understand potential trenchless or pumping requirements related to stream crossing or other environmental protection areas. Review available on-line soils data for infrastructure routing.
- Identify up to 3 service concepts and downstream discharge points for the Richardson Creek area and 2 potential discharge points for Country Village.
- Develop capital and life cycle cost comparison for service concepts (Class 5 estimates).
- Develop matrix of non-cost factors such as environmental impacts, construction risk, and flexibility for phasing.
- Coordinate discussion and workshops to select preferred service concept.

Assumptions: Conduct up to three (3) virtual meetings to discuss service concepts and select preferred concept. One of the virtual meetings will be a longer duration workshop to select the preferred service concept.

Deliverable: Technical memorandum in electronic format (draft and final) with combined content from Tasks 6, 7, and 8.

TASK 8 – Richardson Creek Concept Design

Objectives: Develop a concept design based on the preferred/selected concept to serve the Richardson Creek service area from Task 7. Consultant will complete the following:

- Evaluate the following for the preferred service concept for the Richardson Creek Service Area.
 - Document preliminary plan and profile for trunk sewers and force mains.
 - Identify preferred locations for pump station siting based on topography. Identify potential flood plain siting issues and land ownership.
 - Develop preliminary pump, force main, and pipeline sizing.
 - Evaluate and recommend project phasing based on development potential.
 - Identify creek and railway crossing for potential trenchless construction vs open cut construction. Summarize preliminary constructability issues and operational considerations.
 - Identify utility coordination requirements (where applicable).
 - Identify land acquisition requirements, outside of public right-of-way.
 - Review potential environmental mitigation or permitting requirements.
 - Update project cost estimates to Class 4.
- Develop an alternatives and concept design technical memorandum documenting alternatives and concept design and assumptions from Tasks 6, 7, and 8 (draft and final).

Assumptions: Conduct up to three (3) virtual meetings to discuss and refine concept design.

Deliverable: Technical memorandum in electronic format (draft and final) with combined content from Tasks 6, 7, and 8.

TASK 9 – Master Plan Addendum

Objectives: Update applicable sections of the master plan with information from Tasks 6, 7, and 8. Consultant will update the following sections.

- Executive Summary
- Section 4 – New Population/Employment and Capacity Assessment
- Section 8 – New Alternatives
- Section 9 – Capital Plan Update including cost escalation to 2025 dollars. Costs will also be converted to future dollars at proposed time of implementation.
- Appendices – Technical memorandum from Task 8 for reference.

The updates will include new sections describing the new analysis, assumptions, and impacts to the system and capital program. In most cases, the original content will not be modified but new information will be added at the beginning of each section with updates. The updated sections will be provided to District staff in draft form for review and Consultant will respond to District comments and provide final updates. Documentation will be delivered in electronic format.

Assumptions: Conduct up to three (3) virtual meetings to discuss, refine, and review master plan addendum content.

Deliverable: Updated Master Plan document in electronic format (draft and final) with edits to sections listed above.

EXHIBIT B – BUDGET - DETAIL

		Project Manager, Technical Lead	Conveyance Engineer/ Modeling	Conveyance Engineer/ Documentation	Total Labor Hours 2024	Total Labor Hours 2025	Total Labor \$ All Years	Subcontractor Century West	Total Fee (Labor + Subcontractor + Expense) \$	
		2024 Rate--> 2025 Rate-->	Shad Roundy \$260.00 \$260.00	Sven MacAller \$177.19 \$182.50	Kelli Barton \$177.19 \$182.50					
1	1	Task/Subtask	Notes	Hours						
1	1	Task 1 - Project Management								
1	1	Project Kick-off		2	2				\$874	
1	1	Project Management, Coordination, Staffing, Invoices	18 invoices, 18 coordination meetings	12	8				\$4,559	
1	1	QA/QC Management		8		2.7	5.3		\$2,080	
6	6	Task 6 - Planning and Capacity Assessment								
6	6	Request Data and Review		2	8	10.0	0.0		\$1,938	
6	6	Update Study Area Boundary		2	8	10.0	0.0		\$1,938	
6	6	Update population/employment		2	16	18.0	0.0		\$3,355	
6	6	Update flow loading		2	16	18.0	0.0		\$3,355	
6	6	Update deficiency mapping (no improvements)		2	8	10.0	0.0		\$1,938	
6	6	Update deficiency mapping (with improvements)		2	16	18.0	0.0		\$3,355	
6	6	Identify downstream capacity limitations		4	8	12.0	0.0		\$2,458	
6	6	Coordinate with other projects		16		16.0	0.0		\$4,160	
6	6	Downstream capacity assessment/alternatives		16	24	40.0	0.0		\$8,413	
6	6	Unit cost update		2	8	10.0	0.0		\$1,938	
6	6	Prepare for and conduct three virtual meetings		8	8	16.0	0.0		\$3,498	
7	7	Task 7 - Richardson Creek and Country Village Service Alternatives								
7	7	Review septic to sewer		2	4	6.0	0.0		\$1,229	
7	7	Coordinate with Century West		8	8	16.0	0.0	\$15,000	\$18,498	
7	7	Desktop (infrastructure and roadways)		2		14.0	0.0		\$2,646	
7	7	Desktop (routing, trenchless, construction, environmental, soils)		2		14.0	0.0		\$2,646	
7	7	Develop three service concepts, mapping (Richardson Creek)		4	16	28.0	0.0		\$5,293	
7	7	Develop two service concepts, mapping (Country Village)		2	8	10.0	0.0		\$1,938	
7	7	Capital and life cycle cost estimates		4	16	20.0	0.0		\$3,875	
7	7	Prepare for and conduct three virtual meetings		8	8	16.0	0.0		\$3,498	
8	8	Task 8 - Richardson Creek Concept Design								
8	8	Preliminary plan and profile (trunks)		2	24	26.0	0.0		\$4,773	
8	8	Pump station siting		2		10.0	0.0		\$1,938	
8	8	Pump sizing, force main sizing, pipe sizing		8	24	32.0	0.0		\$6,333	
8	8	Project phasing options		8		8.0	8.0		\$3,519	
8	8	Constructability (crossings), Operations		2		5.0	5.0		\$1,959	
8	8	Utility coordination		2		5.0	5.0		\$1,959	
8	8	Land acquisition & ROW		2		0.0	14.0		\$2,710	
8	8	Environmental/permitting		2		0.0	14.0		\$2,710	
8	8	Update costs		4		0.0	12.0		\$2,500	
8	8	Draft tech memo Tasks 6, 7, and 8		16	60	0.0	92.0		\$18,030	
8	8	Final tech memo Tasks 6, 7, and 8		8	16	0.0	28.0		\$5,730	
8	8	Prepare for and conduct three virtual meetings (including workshop)		12	12	8.0	16.0		\$5,289	
9	9	Task 9 - Master Plan Addendum								
9	9	Executive Summary		4	4	0.0	16.0		\$3,230	
9	9	Section 4 - New Planning and Capacity		4	4	0.0	28.0		\$5,420	
9	9	Section 8 - New Alternatives		4	4	0.0	28.0		\$5,420	
9	9	Section 9 - Capital Plan, Cost Updates		4	4	0.0	32.0		\$6,150	
9	9	Appendix - From Task 8		2		0.0	6.0		\$1,250	
9	9	Comment response/revisions		8	4	0.0	36.0		\$7,190	
9	9	Prepare for and conduct three virtual meetings		8		0.0	16.0		\$3,540	
		Total Hours or Cost		214	346	413	371	\$158,125	\$15,000	\$173,125

EXHIBIT B – BUDGET - SUMMARY

		Project Manager, Technical Lead	Conveyance Engineer/ Modeling	Conveyance Engineer/ Documentation	Total Labor Hours 2024	Total Labor Hours 2025	Total Labor \$ All Years	Subcontractor Century West	Total Fee (Labor + Subcontractor + Expense) \$
	2024 Rate-->	Shad Roundy \$260.00	Sven MacAller \$177.19	Kelli Barton \$177.19					
	2025 Rate-->	\$260.00	\$182.50	\$182.50					
Task Summary		Hours							
Task 1 - Project Management		22	10	0	16.7	15.3	\$7,513	\$0	\$7,513
Task 6 - Planning and Capacity Assessment		58	120	0	178.0	0.0	\$36,343	\$0	\$36,343
Task 7 - Richardson Creek and Country Village Service Alternatives		32	60	32	124.0	0.0	\$24,621	\$15,000	\$39,621
Task 8 - Richardson Creek Concept Design		68	136	84	94.0	194.0	\$57,448	\$0	\$57,448
Task 9 - Master Plan Addendum		34	20	108	0.0	162.0	\$32,200	\$0	\$32,200
Total Hours or Cost		214	346	224	413	371	\$158,125	\$15,000	\$173,125

EXHIBIT C – PRELIMINARY SCHEDULE – DETAIL

				April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September
		Total Hours	Formal Meetings/ Workshops	2024	2024	2024	2024	2024	2024	2024	2024	2024	2025	2025	2025	2025	2025	2025	2025	2025	2025
Task 1 - Project Management																					
1	1	Project Kick-off	4.0	0																	
1	1	Project Management, Coordination, Staffing, Invo	20.0	0																	
1	1	QA/QC Management	8.0	0																	
Task 6 - Planning and Capacity Assessment																					
6	6	Request Data and Review	10.0	0																	
6	6	Update Study Area Boundary	10.0	0																	
6	6	Update population/employment	18.0	0																	
6	6	Update flow loading	18.0	0																	
6	6	Update deficiency mapping (no improvements)	10.0	0																	
6	6	Update deficiency mapping (with improvements)	18.0	0																	
6	6	Identify downstream capacity limitations	12.0	0																	
6	6	Coordinate with other projects	16.0	0																	
6	6	Downstream capacity assessment/alternatives	40.0	0																	
6	6	Unit cost update	10.0	0																	
6	6	Prepare for and conduct three virtual meetings	16.0	3																	
Task 7 - Richardson Creek and Country Village Service Alternatives																					
7	7	Review septic to sewer	6.0	0																	
7	7	Coordinate with Century West	16.0	0																	
7	7	Desktop (infrastructure and roadways)	14.0	0																	
7	7	Desktop (routing, trenchless, construction, environ)	14.0	0																	
7	7	Develop three service concepts, mapping (Richards	28.0	0																	
7	7	Develop two service concepts, mapping (Country V	10.0	0																	
7	7	Capital and life cycle cost estimates	20.0	0																	
7	7	Prepare for and conduct three virtual meetings	16.0	3																	
Task 8 - Richardson Creek Concept Design																					
8	8	Preliminary plan and profile (trunks)	26.0	0																	
8	8	Pump station siting	10.0	0																	
8	8	Pump sizing, force main sizing, pipe sizing	32.0	0																	
8	8	Project phasing options	16.0	0																	
8	8	Constructability (crossings), Operations	10.0	0																	
8	8	Utility coordination	10.0	0																	
8	8	Right-of-way, ownership	14.0	0																	
8	8	Environmental/permitting	14.0	0																	
8	8	Update costs	12.0	0																	
8	8	Draft tech memo	92.0	0																	
8	8	Final tech memo	28.0	0																	
8	8	Prepare for and conduct three virtual meetings	24.0	3																	
Task 9 - Master Plan Addendum																					
9	9	Executive Summary	16.0	0																	
9	9	Section 4 - New Planning and Capacity	28.0	0																	
9	9	Section 8 - New Alternatives	28.0	0																	
9	9	Section 9 - Capital Plan, Cost Updates	32.0	0																	
9	9	Appendix - From Task 8	6.0	0																	
9	9	Comment response/revisions	36.0	0																	
9	9	Prepare for and conduct three virtual meetings	16.0	3																	

EXHIBIT C – PRELIMINARY SCHEDULE – SUMMARY

					April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September				
					2024	2024	2024	2024	2024	2024	2024	2024	2024	2025	2025	2025	2025	2025	2025	2025	2025	2025				
Task Summary					Total Hours	Formal Meetings/ Workshops																				
1		Task 1 - Project Management	32	0																						
6		Task 6 - Planning and Capacity Assessment	178	3																						
7		Task 7 - Richardson Creek and Country Village Service Alternatives	124	3																						
8		Task 8 - Richardson Creek Concept Design	288	3																						
9		Task 9 - Master Plan Addendum	162	3																						