AMENDMENT NO. 8

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AGREEMENT FOR ENGINEERING SERVICES

between

CITY OF MISSOULA, MONTANA

and

HDR ENGINEERING, INC. FOR PROFESSIONAL SERVICES

THIS AMENDMENT NO. 8 is made for this ______ day of ______, 2015, between The City of Missoula ("OWNER"), and HDR ENGINEERING, INC., ("ENGINEER") a Nebraska corporation, with principal offices at 8404 Indian Hills Drive, Omaha, Nebraska, 68114 for services in connection with the project known as "West Reserve Interceptor Project."

WHEREAS, OWNER has engaged ENGINEER to provide professional engineering consulting services ("SERVICES") in connection with the Project; and

WHEREAS, the OWNER and the Engineer have entered into a contract for professional services on August 31, 2001 for providing engineering services for West Reserve Interceptor Project, herein referred to as the "Project"; and

WHEREAS, the agreement contains provisions in Section VII for the OWNER to authorize extra services in connection with this project; and

WHEREAS, the OWNER and the Engineer have amended the contract by Amendment No.8, and

WHEREAS, the OWNER has agreed to have the Engineer provide the extra services as described in Exhibit A – West Reserve Interceptor Project, Amendment 8, Old Highway 93 Sewer Interceptor Project, Scope of Work; and

NOW, THEREFORE, OWNER and ENGINEER in consideration of the mutual covenants contained herein, agree to amend their AGREEMENT as follows:

SECTION 1. SCOPE OF SERVICES

ENGINEER will provide Services for the Project, which consist of the Scope of Services as outlined on the attached "Exhibit A – West Reserve Interceptor Project, Amendment 8, Old Highway 93 Sewer Interceptor Project, Scope of Work".

SECTION II. TERMS AND CONDITIONS OF ENGINEERING SERVICES

This Amendment does not modify the terms and conditions of the original Agreement.

SECTION III. RESPONSIBLITIES OF OWNER

This Amendment does not modify the requirements of the original Agreement.

SECTION IV. COMPENSATION

This Amendment modifies the Compensation for ENGINEER's services under the original Agreement as described in greater detail on Exhibit B of Amendment No. 8 and as follows:

	Amount				
Amendment No. 8	Old Hwy 93 Sewer Interceptor	\$89,265.00			
	Project				

SECTION V. PERIOD OF SERVICE

This Amendment modifies the requirements of Section VI of the original Agreement. The project services performed as described below:

Preliminary design: September 1, 2015 – October 1, 2015

Final Design: October 1, 2015 – January 1, 2016 Bid Services: February 1, 2016 – March 1, 2016

Construction Services: March 1, 2016 – May 1, 2016

IN WITNESS WHEREOF, the parties hereto have executed this Amendment No. 8 as of the day and year first written above.

City of Missoula "OWNER"

By: ___

Name: John Engen Title: Mayor

Address: Missoula City Hall

Missoula, Montana 59802

HDR ENGINEERING, INC. "ENGINEER"

By:

Name: Amanda McInnis
Title: Department Manager
Address: 1715 South Reserve Street

Suite C

Missoula, Montana 59801-4708

Exhibit A Old Hwy 93 Sewer Interceptor Project Scope of Work

TASKS	TASK DESCRIPTION							
100	Project Management							
200	Preliminary Design							
300	Final Design							
500	Bidding Assistance							
600	Construction Services							

TASK 100. PROJECT MANAGEMENT

Objectives:

Manage and control the professional services contract to provide efficient completion of the project. Prepare and implement a project management plan to meet City of Missoula's project needs.

HDR Subtasks:

- **Coordination Meetings/Workshops.** Conduct three (3) meetings with the City of Missoula to review project progress, schedule and budget. Identify information needs and make decisions regarding any changes in the scope of the project, the design and the construction management efforts.
 - 102 Progress Reports. Provide a progress report (typically with each monthly invoice). The progress report will summarize the work progress to-date, the budget expenditures to-date, and identify any information requirements or decisions that need to be made by the City of Missoula. The reports will help maintain frequent communications with the City and will be presented in a simple format that can be used for distribution to City council and concerned citizens.
 - **103 Sub-consultant Management**. Provide management of sub-consultant services including handling of invoicing, schedule, and coordination with staff.
 - 104 Quality Control. HDR will utilize the services of senior design personnel to conduct a detailed review of the preliminary design and final design documents. This review will focus on opportunities for cost savings, added value, improved operation and constructability, and overall quality of the work.

Deliverables:

- Meeting agendas and minutes
- Progress reports and invoices

TASK 200. PRFI IMINARY DESIGN

Objectives:

Determine the most cost effective and beneficial alternative based on the South Missoula Sewer Evaluation, recent work and development in the area, and cost analysis. Analyze alternate routes of a forcemain or gravity sewer based on available right-of-way and/or easements and to optimize connection availability to developable property. Evaluate impact to the existing Lower Miller Creek Road Lift Station.

HDR Subtasks:

- Evaluate Alternatives and Decide Optimum Design. Alternatives analysis will include utilization of existing Highway 93 and Old Hwy 93 right-of-way in combination with an easement crossing private property to connect the existing sewer crossing Hwy 93 to Old Hwy 93. The evaluation will also examine the benefit and cost of constructing gravity sewer in Old Hwy 93 instead of a pressure forcemain. The evaluation will consider future sewer connection of the Blue Mountain area. The impact to the existing Lower Miller Creek Road Lift Station will be evaluated under each alternative. The City will provide documentation of final sizing, equipment data and as-recorded information for the existing forcemains and Lower Miller Creek Road Lift Station. A meeting will be held with City staff to present findings on alternatives and select the preferred alternative.
- **Preliminary Cost Estimates/Valuations.** Preliminary cost estimates for each of the alternatives discussed in Subtask 201 will be developed.
- **Right-of-way Assistance.** Preliminary right-of-way investigation will be performed for each of the alternatives selected in Task 201 to assist in evaluating and selecting the preferred alternative. It is expected that a single easement will need to be acquired, if possible, for right-of-way of the selected alternative. Routing of sewer mains will be adjusted as required where easements are not available.

Deliverables:

- Administration of meeting to present alternative evaluation and select preferred alternative including agenda and meeting minutes.
- Preliminary cost estimates of alternatives evaluated.
- Right-of-way documentation.

TASK 300. FINAL DESIGN

Objective:

Complete project design and development of a design report to meet the requirements of the State of Montana DEQ circular WQB-2 for design and construction of public wastewater facilities and City of Missoula standards. Prepare project construction documents for bidding and construction of the project improvements. Prepare technical specifications and contract documents necessary for project implementation.

HDR Subtasks:

- **Sewer Base Drawing Development.** Develop 22 IN x 34 IN plan and profile sheets (1" = 60') to be used as base design sheets for the sewer extension. The base maps will be prepared using the digital photography and contour maps available from the City, using post flight surveys as required for horizontal and vertical control. Drawings will be developed in electronic format compatible with AutoCAD, Release 2014. The number of base drawings is estimated to be 4.
- **Surveying.** Complete site topographic, utility, and right-of-way survey necessary for completion of the detailed final design for system pipelines for the selected alternative.
- **Geotechnical/Testing Services.** Geotechnical investigation has been completed for the Reserve Street Pumping Station, Reserve Street Crossing, and Missoula to Lolo Trail projects. No additional geotechnical investigation is planned for this project.
- **Sewer Main Design.** HDR will prepare detailed plans and specifications for the recommended forcemain and/or gravity sewer facilities. All drawings will be prepared in digital format on AutoCAD, Release 2014. Specifications will be prepared using the Montana Public Works Standard Specifications and City of Missoula amendments. Where necessary the sixteen-division format of the Construction Specifications Institute (CSI) and HDR's standard master technical specifications will be used. The City's design standards will be incorporated into the detailed plans and specifications. The total quantity of piping required is estimated at 4,000 lineal feet.
- **Design Report.** Prepare a design report incorporating the results of the technical memoranda outlined above. The report shall satisfy the Montana Department of Environmental Quality submittal requirements as identified in Circular WQB-2.
- **Submittals and Document Finalization.** Submit draft plans and specifications in accordance with City of Missoula Development Services Subdivision and Infrastructure Design Guide and the Infrastructure Approval Process for Stage 3 Preliminary Construction Plan Review and Stage 4 Release for Construction (RFC). Address review comments and produce final documents for final project execution.
- **307** Contract Documents. HDR will provide for printing of contract documents for use in bidding the construction contract. Actual numbers of document sets may vary dependent upon project requirements. HDR will invoice the City for actual charges incurred for printing less an amount charged to planholders. HDR will provide the City with the camera-ready originals of the project specifications and drawings following the project bid.
- **308** Cost Estimates. HDR will update the cost estimates presented in the preliminary design at the 90 percent design point.
- **309 Scoping Meeting.** Conduct a meeting with City Personnel to finalize the project construction plan and confirm project direction. Construction phasing and sequencing issues shall be discussed and procedures agreed upon.

Deliverables:

- > 3 sets of plans and specifications for City review at the 50%, 90% and 100% design points.
- ➤ 3 sets of plans and specifications at 100% design for agency review
- > Estimates of probable cost at 90% design point
- Administration of scoping meeting including agenda and meeting minutes

TASK 500. BIDDING ASSISTANCE

Objective:

Provide assistance to the City in project bidding and bid evaluation. Assist the City in award of construction contract.

HDR Subtasks:

- **Bid Advertisement**. Assist the City in advertising and obtaining bids for materials, equipment and services to be performed by contractor(s). The advertisements will conform to the requirements of the City of Missoula, State of Montana and applicable funding agencies including "good faith efforts" to encourage minority and disadvantaged business participation.
- **Bid Assistance**. Receive and respond to contractor questions during the bid phase of the contract. HDR will assemble addenda as appropriate to interpret, clarify or expand the Contract Documents and distribute to planholders. Prepare an agenda and participate in pre-bid conference to be attended by the City of Missoula, interested Contractors, and HDR. Provide presentation and a tour of the project site for the pre-bid conference.
- **Bid Opening and Tabulation.** Attend project bid opening, prepare bid tabulation sheets, assist the City in evaluating bids, and in assembling and awarding contracts for construction, materials, equipment and services.

Deliverables:

- Bid advertisement
- Bid Addenda
- Pre-bid conference administration including agenda and meeting minutes
- Bid tabulation and recommendation for award

TASK 600. CONSTRUCTION SERVICES

Objective:

Assist the City in administering the construction of the Old Hwy 93 Sewer Extension Project. Provide construction engineering and observation throughout the construction period and assist the City with project closeout.

HDR Subtasks:

- **Pre-construction Assistance.** Assist the City with final review of the bid and assist in the contract award process. Finalize MBE/WBE certification, assist with protests and assist with notice to proceed. Review schedules; conduct pre-construction meeting and review pre-construction submittals. Provide initial line and grade staking for use by the general contractor.
- **Construction Administration.** During construction, provide general field observation of construction, construction staking and contract administration per Stage 5 of the City of Missoula Development Services Subdivision and Infrastructure Design Guide and the Infrastructure Approval Process. For budgeting purposes it is assumed that 120 hours of resident project representative time will be needed on site during construction. Provide review and comment on shop drawings, material data, material

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samples, test results and other data the contractor submits. Review monthly progress payment requests, submit payment recommendations and prepare change orders. Conduct monthly construction meetings and conduct final inspection of project(s). Provide certification of construction completion in accordance with Montana DEQ requirements.

- **Quality Assurance Testing.** Sampling and testing to assure specification conformance shall be performed by the Contractor through a qualified testing agency. Quality assurance testing shall be performed in accordance with the standards in the technical specifications for concrete, paving and surfacing and earthwork and City of Missoula Engineering/Utility Section Administrative Rule No. 661. HDR will review and monitor quality assurance testing performed by the Contractor for conformance to the project specifications.
- **Project Closeout/Certification.** Provide the City with a list of construction deficiencies for the construction contract. Provide inspection of the correction of these deficiencies, review final payment applications and make recommendation to the City or final payments. Complete contract closeout paperwork and provide written one-year certification of project completion as required by the Montana Department of Environmental Quality and Stage 6 and 7 of the City of Missoula Development Services Subdivision and Infrastructure Design Guide and the Infrastructure Approval Process. Provide as-recorded drawings in hard copy and digital format.

Deliverables:

- Notice to Proceed
- Administration of pre-construction conference including agenda and meeting minutes
- Copies of reviewed shop drawings
- Progress payment recommendations
- Copies of change orders
- Administration of monthly construction meetings including agenda and meeting minutes
- Certification of construction completion
- Copies of test results.
- Project closeout/certification
- As-recorded drawings

Exhibit B

Project Budget

			1 - Project Principal Engineer - Craig Caprara	2 - Project Manager Engineer Sr - Dan Harmon	3 - Project Manager Engineer - Rickey Schultz	4 - Admin Asst Word Processor - Devie Bessette	5 - Area Controller - Katie Ward	6 - CADDTechnician General 1 - Heather Fancher	7 - CADDTechnician General 2 - Ryan Parke	8 - Resident Project Rep 1 - Thomas Hanou	9 - Engineer Electrical - Lance Kirmeyer	HDR						Other Direct Costs		Total Budget	Task Fraction of Tota
Task	Task Description	Status	PJM32	PJM21	PJM13	ADM02	ACT07	CGE01	CGE02	CPR10	EEL20	TOTAL HOURS	LABOR	R COSTS	% of Hrs to Escalate	% Esc.	LABOR INCL. ESCALATION	SUBCONTRACT OR	EXPENSES	TOTAL COST	
Task 1	100 - Project Management																	1			
1.1	101 Coordination Meetings/Workshops		8		8					6		22	\$	3,147	0%	\$ -	\$ 3,147	4	\$ 131	\$ 3,278	49
1.2	102 Progress Reports				8		6					14	\$	1,324	0%		\$ 1,324		\$ 57		29
1.3	103 Subconsultant Management				2							2	\$	198	0%	\$ -	\$ 198	4	\$ 62		09
1.4	104 Quality Control			4	2		4	2	2	2		16	\$	1,944	0%	\$ -	\$ 1,944	4	\$ 84	\$ 2,028	
	Subtotal (including optional)		8	4	20	0	10	2	2	8	0	54	\$	6,612			\$ 6,612	\$ -	\$ 335	\$ 6,947	89
Task 2	200 - Preliminary Design																				
2.1	201 Evaluate Alternatives and Decide Optimum [16		24					16	4	60	\$	8,172	0%	\$ -	\$ 8,172	4	\$ 272	\$ 8,444	9
2.2	202 Preliminary Cost Estmates/Valuations	•	10		4					8	4	13	\$	1,556	0%		\$ 1,556		\$ 48		
2.3	203 Right-of-way Assistance	•								16		16	\$	1,910	0%	•	\$ 1,910	4	\$ 59		
2.0	Subtotal (including optional)		17	0	28	0	0	0	0	40	4	89	\$	11,638	370	<u> </u>	\$ 11,638		\$ 379		13
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Task 3	300 - Final Design																				
3.1	301 Sewer Base Drawing Development				8			4	36		4	52	\$	4,055	0%		\$ 4,055		\$ 242		5'
3.2	302 Surveying				2			2	16	16		36	\$	3,308	0%	т.	\$ 3,308				8'
3.3	303 Geotechnical/Testing Services				2	0.4			00		40	2	\$	198 19,431	0%		\$ 198 \$ 19,431	•		\$ 206 \$ 20,275	0'
3.4 3.5	304 Sewer Main Design				100 24	24		8	80		16 4	228 28	\$	2,989	0% 0%		\$ 19,431 \$ 2,989		\$ 844 \$ 129		
3.6	305 Design Report 306 Submittals and Document Finalization	•			4	4					4	8	\$	608	0%		\$ 608		\$ 230		19
3.7	307 Contract Documents	•			8	8						16	\$	1,215	0%		\$ 1,215		\$ 559		2
3.8	308 Cost Estmates		1		1					4		6	\$	781	0%		\$ 781		\$ 22		
3.9	309 Scoping Meetings		2		2					2		6	\$	846	0%		\$ 846		\$ 47		1
0.0	Subtotal (including optional)		3	0	151	36	0	14	132	22	24	382	\$	33,431	070	<u> </u>	\$ 33,431				
Tools 4																					
Task 4	400 - Bidding Assistance														100-1	0 00	Φ			0 155	
4.1	401 Bid Advertisement				1	4				4	0	1 24	\$	99	100%	\$ 2.98 \$ 69.29	\$ 102 \$ 2,379		\$ 4 \$ 89	\$ 106	
4.2	402 Bid Assistnace 403 Bid Opening and Tabulation	•			12	4			2	4	2	6	\$	2,310 676	100%					\$ 2,468 \$ 793	
4.3	Subtotal (including optional)		0	0	15	4	0	0	2	8	2	31	\$	3,085	100%	Φ 20.21	\$ 3,177		\$ 190		
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Task 5	500 - Construction Services				4				0	0		20	•	4.000	4000/	ф <u>ББ 00</u>	. 4.040	. 4.000	. 0.4	.	
5.1	501 Preconstruction Assistance		1		40		-		8	8	4	20	\$	1,860	100%	\$ 55.80 \$ 566.93					23
5.2 5.3	502 Construction Administration 503 Quality Assurance Testing	•			2		-			120 2	4	164 4	\$	18,898 437	100% 100%	\$ 566.93 \$ 13.11			\$ 1,407 \$ 15		
5.4	504 Project Closeout/Certification	•	2		8		 		12	8		30	\$	2,920	100%	\$ 87.61		4	\$ 146		
5.4	Subtotal (including optional)		2	0	54	0	0	0	20	138	4	218	\$	24,115	100 /0	Ψ 07.01	\$ 24,838	\$ 1,200			1
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