CITY OF MARYSVILLE AGENDA BILL

EXECUTIVE SUMMARY FOR ACTION

CITY COUNCIL MEETING DATE: March 23, 2015

AGENDA ITEM: Sunnyside Well Treatment Facility Project — Supplemental Professional Services Agreement with Murray, Smith & Associates for Professional Engineering Services	
PREPARED BY: Patrick Gruenhagen, Project Manager DEPARTMENT: Engineering	DIRECTOR APPROVAL:
ATTACHMENTS: • Professional Services Agreement Supplement No. 4	
BUDGET CODE: 40220594.563000 W1302	AMOUNT: $210,529.00

SUMMARY:

The City contracted with Murray, Smith & Associates (MSA) in the spring of 2013 to assist with design and permitting for the Sunnyside Well Treatment Facility Project. Since that time, significant progress has been made, and the project is on track for construction to begin within a matter of weeks.

Given the technically complex nature of this project, staff recognizes the importance of maintaining active dialogue with the design consultant during the course of construction. Accordingly, Supplement No. 4 to the City's existing agreement with MSA, as attached, establishes the framework to allow for the consultant team's ongoing support and general assistance during the construction phase of the project. Specific elements of MSA's anticipated role during construction include assistance in responding to contractor requests for information ("RFI's"), review of technical submittals and shop drawings, and preparation of supporting materials (design/plan revisions, pricing information) for contract change orders.

RECOMMENDED ACTION: Staff recommends that Council Authorize the Mayor to sign and execute Professional Services Agreement Supplement No. 4 in the amount of $210,529.00 with Murray, Smith & Associates, Inc.

SUPPLEMENTAL AGREEMENT NO. 4
TO
PROFESSIONAL SERVICES AGREEMENT
BETWEEN CITY OF MARYSVILLE
AND
MURRAY, SMITH & ASSOCIATES, INC.

This Supplemental Agreement No. 4 is made and entered into on the ____ day of March, 2015, between the City of Marysville, hereinafter called the "City" and Murray, Smith & Associates, Inc., hereinafter called the "Consultant."

WITNESSETH THAT:

WHEREAS, the parties hereto have previously entered into an Agreement for the Sunnyside Well Filtration Project, hereinafter called the "Project," said Agreement being dated April 8, 2013; and

WHEREAS, both parties desire to supplement said Agreement, by expanding the Scope of Services to provide for **consultant support services during the construction phase of the City's Sunnyside Well Treatment Facility Project**, and to amend the total amount payable for this Agreement,

NOW THEREFORE, in consideration of the terms, conditions, covenants and performance contained herein or attached and incorporated, and made a part hereof, the parties hereto agree as follows:

Each and every provision of the Original Agreement for Professional Services dated April 8, 2013 shall remain in full force and effect, except as modified in the following sections:

1. Article II of the Original Agreement, "SCOPE OF SERVICES", shall be supplemented to include the Scope of Services as described in Exhibit A4, attached hereto and by this reference made part of this Supplemental Agreement No. 4.

2. Article IV of the Original Agreement, "OBLIGATIONS OF THE CITY", Paragraph IV.1 Payments, Section (a), the second sentence is amended to include the additional Consultant fee of $210,529.00 and shall read as follows: "....shall total payment under this agreement exceed $906,193.00."

The Total Amount payable to the Consultant is summarized as follows:

Original Agreement	$353,338.00
Supplemental Agreement No.1	$258,833.00
Supplemental Agreement No.2	$36,192.00
Supplemental Agreement No.3	$47,301.00
Supplemental Agreement No.4	$210,529.00
Grand Total	**$906,193.00**

3. Article III, Section III.3 of the Original Agreement, Term is amended to add that the parties agree to extend the term of the agreement to terminate at midnight July 14, 2016.

IN WITNESS WHEREOF, the parties hereto have executed this SUPPLEMENTAL AGREEMENT NO. 4 as of the day and year first above written.

CITY OF MARYSVILLE

By:_____
Jon Nehring, Mayor

MURRAY, SMITH & ASSOCIATES

By:_____ NATHAN HARDY
Its OFFICE MANAGER

ATTEST/AUTHENTICATED:

_____
City Clerk

APPROVED AS TO FORM:

_____
Jon Walker, City Attorney

MSA

EXHIBIT A-4
SCOPE OF WORK
ON-CALL ENGINEERING SERVICES DURING CONSTRUCTION
FOR
SUNNYSIDE WELLS TREATMENT FACILITIES PROJECT
CITY OF MARYSVILLE, WA

BACKGROUND

Murray, Smith & Associates, Inc. (MSA) has developed the following scope of work and accompanying fee estimate to provide on-call engineering services during construction of the City of Marysville Sunnyside Well Treatment Facility project to support the City in its role as the lead for all construction administration, management and inspection services. The services to be provided by MSA and the associated level of effort shown in the engineering fee estimate reflects a supporting role by MSA during construction of the project. Services will be provided on an as-needed basis as requested by the City. MSA's work includes the following tasks:

- Task 1 – On-call Services During Construction
- Task 2 – Short Circuit and Arc Flash Study

ASSUMPTIONS

- The City, in taking on the role as lead for all construction administration, management and inspection activities during construction of the project, will document all activities for every day of construction and, upon completion of the project, will prepare, sign and stamp the Department of Health Construction Completion Report form.
- The construction schedule, from contractor notice to proceed through substantial completion, is approximately twelve (12) months.

CITY RESPONSIBILITIES

- The City will take the lead for all construction administration, management and inspection services, including providing full-time onsite inspection, construction observation, and communicating with the construction contractor, as described in more detail below under MSA's tasks.
- The City will be the primary contact for the Contractor on all construction-related issues and tasks.
- The City will initiate all work of MSA and provide direction to MSA with respect to involvement in project meetings, submittal reviews, issuing clarifications, and all other work tasks identified below under MSA Responsibilities and associated tasks.

- The City will provide a single copy of complete and fully-coordinated construction markups (red-lines) and as-built data for production of record drawings.

MSA RESPONSIBILITIES

- MSA will provide part-time, on-call services during construction for the tasks described below at the request of the City.
- MSA will track and provide the City with regular updates as to the status of its budget as well as actual and forecasted "burn rate." MSA will provide advance notification to the City in writing or via e-mail if the level of effort required to respond to work requests by the City is expected to exceed the level of effort outlined in this scope of work and the engineering fee estimate. MSA will proactively coordinate with the City to explore means of mitigating for and avoiding potential budgetary shortfalls.

Task 1 – On-call Services During Construction

MSA will provide on-call engineering services on a time and expense basis to support the City during construction of the project. The amount of time and effort that may be required to fulfill the obligations of this scope of work is subject to factors beyond the control of MSA and the City. The projected level of effort contemplated herein and included in the engineering fee estimate therefore represents an "estimate" in the truest sense – based upon the collective past experience of the MSA and the City. MSA and design team subconsultants will assist the City during construction with the following services on an as-needed basis and as requested by the City:

1.1 – Correspondence and Communication with the City

MSA's Project Manager will serve as the primary consultant team point of contact and will be the City's main point of contact concerning work requests, project issues, schedule, and work products. Electronic records of project decisions will be maintained. The fee estimate for this subtask is based on four (4) hours per month on average throughout the estimated construction duration of twelve (12) months.

1.2 – Staff, Subconsultant, and Budget Management

MSA's Project Manager will manage project staff and subconsultants to ensure compliance with project schedule and budget as well as scheduled deliverables. This management work will involve updating the project work plan and establishing team resource allocation using MSA accounting and management software. Monthly invoicing and budget monitoring reports will be prepared under this subtask. MSA's Project Manager will also coordinate subconsultant activities and work products.

1.3 – *Conformed Drawings and Specifications*

Prepare conformed drawings and specifications based on any addenda issued during the bid phase. Provide the City one (1) electronic submittal of conformed drawings and specifications in AutoCAD and PDF format.

1.4 - *Preconstruction Conference Support*

MSA and subconsultant Casne Engineering will attend a preconstruction conference. The City will lead the preconstruction conference, MSA will prepare a written conference summary and City will distribute the summary to all conference attendees.

1.5 - *Application for Payments Assistance*

The City will be responsible for review and processing of all payment requests. At the City's request, MSA will review the contractor's monthly requests for progress payments and recommend the appropriate amount to the City for payment to the contractor. Payment recommendations, (approximately twelve (12) Pay Applications anticipated), will be based upon the City-approved breakdown of the contractor's lump sum contract amount and the percentage complete of unit price items.

1.6 - *Construction Meetings and Site Visits*

The City will take the lead planning and conducting construction meetings at the project site on a regular basis, approximately once per week. At the City's request, MSA will attend some of the construction meetings on the project site with the City staff and contractor. The fee estimate for this subtask is based on MSA attending up to three (3) meetings per month for three months and one (1) meeting per month for the remaining nine (9) months of construction (up to eighteen (18) meetings/visits total), subconsultant Casne Engineering attending meetings at key project milestones (up to four (4) meetings), and CG Engineering attending up to one (1) construction meeting. Meeting or site visit duration is estimated to not exceed two (2) hours of on-site time.

1.7 - *Submittal Review*

At the City's request, MSA will review construction submittals and shop drawings for conformance with project documents. The fee estimate for this subtask is based on MSA reviewing up to one hundred and fifty (150) total submittals, which may include technical submittals, administrative submittals and shop drawings. The City will be responsible for maintaining an up to date submittal log.

1.8 - *Clarifications and Changes*

At the City's request, MSA will assist with issuing clarifications to the construction contractor and producing design changes if necessary. The fee estimate for this subtask is based on MSA drafting up to fifty (50) total responses to requests for information/clarification for the City to review and distribute to the Contractor.

1.9 - *Change Order Requests*

The City will take the lead reviewing and processing all change order requests. At the City's request, MSA will provide services to assist the City with change orders. These services may include preparation of change order proposal description and justification documentation, assistance with negotiation of the change with the contractor, making recommendations to the City regarding any change orders, and processing the formal change order documents. The fee estimate for this subtask is based on MSA assisting the City with up to five (5) change order requests.

1.10 – *Structural Engineer Observations*

The City will coordinate and retain the services of an independent testing laboratory to perform the majority of special inspection services identified in the City Building and Land Use Disturbance permits. Some of the special inspections required by the City and code (IBC) will be required to be observed by the design structural engineer, CG Engineering. The fee estimate for this subtask is based on CG Engineering conducting up to four (4) on-site observations and preparing reports documenting their observations and recommendations.

1.11 – *Onsite Geotechnical Engineering Support*

Associated Earth Sciences, Inc. (AESI) will be available to conduct site visits to observe subsurface conditions and construction of the building and structure foundation systems on an as-needed basis. The fee estimate for this subtask is based on AESI conducting up to one (1) on-site observations and preparing reports documenting their observations and recommendations.

1.12 - *Testing, Startup, and Training*

The City will take the lead coordinating with the contractor and preparing for testing and startup of the facilities. At the City's request, MSA will observe and provide technical assistance during functional testing and startup of the water treatment plant facilities, assist the City during training sessions with factory representatives, and verify the spare parts inventory with City staff. The fee estimate for this subtask is based on MSA and Casne Engineering each involved in up to two (2) full-days of startup, testing and training support.

1.13 - *Substantial Completion/Punch List*

The City will take the lead preparing the "punch list" and issuing the notice of substantial completion. At the City's request, the MSA design team will assist the City with the walk-through of the completed project, assist with preparation of a "punch list" of work items remaining to achieve substantial completion, and assist with preparing the notice of substantial completion. The fee estimate for this subtask is based on the MSA design team participating in one (1) substantial completion milestone.

1.14 - *Final Completion*

The City will take the lead for all final completion tasks. At the City's request, MSA will participate in a final walk-through to assist the City in determining if the completed work of Contractor is acceptable so that the City may issue final payment to the Contractor.

The City will coordinate with the Contractor in order to provide all necessary project certifications, drawings, and any other required information to the Department of Ecology,

Department of Health, City and any other permitting authority regarding completion of the work in accordance with approved permits for the project.

1.15 - *Operation and Maintenance Manuals*

The City will take the lead coordinating with the Contractor and reviewing the operation and maintenance (O&M) manual prepared by the Contractor. At the City's request, MSA will review the completed O&M manual and provide comments. The manual should include the manufacturers' literature identifying installation, operation, maintenance, handling, storage, assembly and other pertinent equipment information for all equipment, systems, subsystems, appliances, materials, finishes and other material furnished and/or installed on the project.

At the City's request, MSA will prepare a brief narrative of the overall facility's operations and provide documentation of the basis of design and its parameters. The document will also define the operating conditions and general maintenance items associated with the station.

1.16 - *Record Drawings*

Prepare record drawings based on information provided by Contractor and City's Project Representative.

Deliverables:

1. Conformed Drawings and Specifications as follows:
   - 1 electronic copy of the drawings (PDF and AutoCAD)
   - 1 electronic copy of the specifications (PDF)
2. Responses to submittals, clarifications, changes as requested by the City in electronic format (PDF and/or AutoCAD).
3. Observation reports for site visits by MSA, Casne Engineering, or CG Engineering in electronic format (PDF).
4. Operation and maintenance manual review comments and submission of a draft and final operation and maintenance narrative prepared by MSA. Deliverables are as follows:
   - 1 electronic copy of the manuals (PDF)
5. Record Drawings as follows:
   - 1 electronic copy of the drawings (PDF)

Task 2 – Short Circuit and Arc Flash Study

MSA's subconsultant, Casne Engineering, will prepare a Short Circuit and Arch Flash Study for the Sunnyside Wells Treatment Facility, following construction.

2.1 – *Short Circuit and Arc Flash Study*

Casne Engineering will complete the following tasks:

1. Submittal review of all new electrical equipment and field investigation to collect information from existing breakers, cabling and electrical equipment.
2. Contact Utility Company for Transformer data, feeder sizes and lengths and short circuit data.

3. Utilize industry standard software to model the electrical system, perform a short circuit analysis, protective device evaluation, selective coordination and an Arc Flash Study. We will use the IEEE 1584 method of calculations.

City staff will provide the following:

1. Provide access to and open power panels, starters, junction boxes, etc

Deliverables:

1. Provide the results of the study for the treatment facility system one line model, equipment data, short circuit and Arc Flash results.
2. Provide laminated Arc Flash labels, a study report on a CD and one (1) comb-bound hard copy. Labels will be provided for the Service Entrance Switchboard, Generator Disconnect, ATS, both sections of MCC, Well 2 Main Distribution Panel, Well 2 Drive Panel, Well 2 208 V panel, Treatment plant 480 V panel and 208 V panels.

EXHIBIT B-4

ON-CALL ENGINEERING SERVICES DURING CONSTRUCTION

SUNNYSIDE WELLS TREATMENT FACILITIES

CITY OF MARYSVILLE, WA

FEE ESTIMATE

TASK	Princ. IV $206 TCL	Engr. VII $161 AS	Engr. VII $161 NPH	Engr. V $144 CEH	Tech IV $127 HCM	Admin I $77 BJR	Total Hours	ESTIMATED FEES: MSA Labor	Casne	CG Engineering	AESI	MSA Expenses	Total
Task 1 - On-call Services during Construction													
1.1 Correspondence and Communication with the City (4 hrs/mo x 12 mos)	4		48			6	58	$ 9,014				$ -	$ 9,014
1.2 Staff, Subconsultant, and Budget Management (12 mos)	4		18			12	34	$ 4,646				$ 12	$ 4,658
1.3 Conformed Drawings (Electronic submittal)			2	8	8	4	22	$ 2,798	$ 2,746	$ 1,100		$ 144	$ 6,788
1.4 Preconstruction Conference Support (MSA/Casne attend)			3	3		1	7	$ 992	$ 1,408			$ 10	$ 2,410
1.5 Applications for Payments Assistance (6 Pay Apps)			3	6			9	$ 1,347				$ -	$ 1,347
1.6 Construction Meetings and Site Visits (18 Mtgs/Visits - 3/mo x 3 mos, 1/mo x 9 mos)			18	54		3	75	$ 10,905	$ 7,094	$ 1,408		$ 240	$ 19,647
1.7 Submittal Review (150 Submittals)	5		50	150		75	280	$ 36,455	$ 15,206	$ 5,544		$ 150	$ 57,355
1.8 Clarifications and Changes (50 RFI's)	5		25	50	16	4	100	$ 14,595	$ 11,264	$ 6,732		$ 338	$ 32,929
1.9 Change Order Requests (5 C.O.'s)	1		10	20		2	33	$ 4,850	$ 3,379			$ -	$ 8,229
1.10 Structural Engineer Observations (4 site visits)				4			4	$ 576		$ 5,038		$ -	$ 5,614
1.11 Onsite Geotechnical Engineering Support (1 site visit/report)				1			1	$ 144			$ 1,200	$ -	$ 1,344
1.12 Startup, Testing, and Training (2 site visits)	2	8	16	24			50	$ 7,732	$ 9,856			$ 20	$ 17,608
1.13 Substantial Completion/Punch List (1 site visit)	1		8	16			25	$ 3,798	$ 2,253			$ 50	$ 6,101
1.14 Final Completion (1 site visit)	1		4	8			13	$ 2,002	$ 1,408			$ 50	$ 3,460
1.15 Operation and Maintenance Manuals (Electronic submittal)	1		8	24	2	8	43	$ 5,820	$ 3,379			$ 236	$ 9,435
1.16 Record Drawings (Electronic submittal)	1		4	16	32	4	57	$ 7,526	$ 6,547	$ 1,947		$ 776	$ 16,796
Task Subtotal	**25**	**8**	**217**	**384**	**58**	**119**	**811**	**$ 113,200**	**$ 64,540**	**$ 21,769**	**$ 1,200**	**$ 2,026**	**$ 202,735**
Task 2 - Short Circuit and Arch Flash Study													
2.1 Short Circuit and Arc Flash Study			4				4	$ 644	$ 7,150			$ -	$ 7,794
Task Subtotal	**0**	**0**	**4**	**0**	**0**	**0**	**4**	**$ 644**	**$ 7,150**	**$ -**	**$ -**	**$ -**	**$ 7,794**
Total	**25**	**8**	**221**	**384**	**58**	**119**	**815**	**$ 113,844**	**$ 71,690**	**$ 21,769**	**$ 1,200**	**$ 2,026**	**$ 210,529**