### MASTER AGREEMENT FOR ENGINEERING SERVICES

## **EXHIBIT A.1**

## **CHANGE ORDER No. 1**

Pursuant to the terms and conditions of the Master Agreement for Engineering Services executed and made effective as of February 23, 2022, by and between the City of Hagerstown, MD ("Owner") and Black & Veatch Corporation ("Engineer"), Owner requests Engineer to perform the following additional services:

#### **Background/Purpose**

This agreement is the continuation of Exhibit A signed on February 23, 2022. The Owner has requested the Engineer to provide additional engineering services to review the Dust Hazard Analysis (DHA) and Safety Analysis, develop additional Options listed in task 3, and develop procurement documents, including RFP for the contract operations of the Pelletizer Facility. The City approved the Scope of Services; the work is currently in progress. This change order accounts for the additional hours required to complete the work.

#### **Scope of Services:**

Tasks 1 through 7 were included in Exhibit A. Additional Project Management time has been included in this Exhibit A.1 as defined in Task 6 below.

### Task 3 – Development of Conceptual Solutions

This is an amendment to Task 3 provided in Exhibit A. The base scope listed developing three (3) preferred solutions; however, following the pelletizer operations observation workshop, it was decided to develop all of the preliminary concepts, develop preliminary design criteria, identify advantages and disadvantages, and generate a Technical Memorandum (TM) to provide recommendations on a prioritized list of potential options for near-term implementation. In addition, the Engineer will coordinate with a chemical supplier to validate the use of ferric at the plant. Based on the results from the audit conducted by the chemical supplier, the Engineer will recommend the location for chemical feed and potentially pilot the alternative chemical.

The Engineer will also develop the digestion alternative at a conceptual level for long-term capital planning.

In addition to Conceptual Solutions, the Engineer will coordinate and collect PS/WAS samples from Leesburg, City of Cumberland, and Hagerstown to test for fiber content. The results from the sampling will be captured in the final report.

**Deliverable:** A TM detailing the preliminary concepts identified for improving the Pelletizer Facility operations and product quality, preliminary design criteria, perceived advantages and disadvantages for each concept, and preliminary recommendations on a prioritized list of options. The preliminary concepts will be reviewed with the Owner during a bi-weekly progress call.

### Task 7 – <u>Dust Hazard Analysis</u>

During the Operations Observation workshop, the Owner asked the Engineer to provide an overview of the regulatory framework for thermal drying of biosolids and review the safety considerations for the City's Pelletizer Facility based on industry best practices. The Dust Hazard Analysis (DHA) performed by a third-party firm for the current contract operator shall be reviewed to identify any open items not addressed as part of the 2019 facility upgrade or that would be required to bring the Pelletizer Facility to comply with the current NFPA codes. The Engineer shall review the drawings and specifications from the Hagerstown WWTP Phase 2: Dryer Rehabilitation Project, conduct a site walk and meet with the contract operator's safety team to review the updates implemented per the DHA findings. The Engineer shall provide a TM comparing the existing safety provisions in the pelletizer facility, prescriptive requirements from NFPA codes for new facilities, and typical practice at other biosolids drying facilities to place the existing safety provisions of the Pelletizer Facility in the context of current industry practices.

*Electrical Review* – The Engineer shall visit the Pelletizer Facility to meet with Synagro, and review the existing DHA to get a better understanding of the upgrades. The Engineer shall compare the installation with NFPA code requirements and provide a write-up discussing the findings and potential upgrades to resolve any code issues.

**Deliverable:** A TM summarizing the findings of the DHA review, including identification of prescriptive code requirements and typical practice at other biosolids drying facilities. The engineer will purchase NFPA 652 and NFPA 654 for the Owner's use and create snippets from it to include in the draft report. Electrical Review shall be included in the Options memo as potential upgrades that need to be completed.

## Pelletizer Facility Contract Operations Assistance

## Task 8 – <u>Define Contract Services Scope</u>

The Engineer will schedule a 90-minute workshop with the Owner's Evaluation Team. The purpose of the workshop will be to kick-off the project, define the specific nature, and scope of services that the selected proponent will be expected to perform during the duration of the contract operations services for the Pelletizer Facility, and summarize the previous discissions related to Contract Operations.

The discussions will focus on the functional areas that the contract services operator will be responsible for and potential areas the Owner may choose to continue to operate and manage. In addition, the team will collaboratively discuss potential scope of services including the day-to-day operations of the Pelletizer Facility, routine maintenance, repair and rehabilitation of Pelletizer Facility assets, longer term asset management planning and capital investments, operational efficiency initiatives at the Pelletizer Facility, and technical and management reporting. The team will also discuss aspects such as the City's resource capacity to have effective oversight of the contract operations and the overall oversight strategy.

**Deliverable:** Meeting minutes from the workshop defining the contract operator technical scope of services.

## Task 9 – Develop Pelletizer Facility Technical and Management Requirements

The technical and management requirements for the Pelletizer Facility that we develop in collaboration with the Owner's team will encompass operations & maintenance, regulatory compliance, performance efficiency, asset management, capital investments for the Pelletizer Facility, and business requirements. Key activities include:

- Develop the Pelletizer Facility operations & maintenance technical requirements that the City desires from the contract operations services.
- Develop a summary of the Pelletizer Facility capital infrastructure improvement requirements anticipated during the duration of the contract services based on other work the Engineer is reviewing at the WWTP and Pelletizer Facility.
- Develop a list of the financial and management requirements including the City's desired fee structure for contract services operations, cost minimization efforts, revenue generation opportunities, asset management, communications, regulatory and management reporting.

**Deliverable:** Summary of the Technical and Management Requirements. Summary will be reviewed with the City during a two-hour workshop with the City's Evaluation Team and management to discuss and finalize all of the Pelletizer Facility technical and management requirements.

## Task 10 – Prepare Contract Operations Request for Proposal (RFP)

The Engineer will work with the City team to prepare a comprehensive RFP and develop the proposal scoring and evaluation criteria. Key activities include:

- Background and Scope of Services Sections: Prepare the sections of the RFP including background, objectives, detailed scope of services requirements, qualifications and experience requirements, the detailed proposal format and submittal requirements including any associated provision of Pelletizer Facility related data/information and other forms in the appendices.
- Other Sections of the RFP: Prepare the other sections of the RFP including Evaluation Criteria, contact information, bidder communication requirements, timeline, overview of the proposal review and interview process, general terms and conditions and other requirements including any associated appendices.
- Technical and Financial Proposal Evaluation and Scoring Criteria: Assist in developing the proposal evaluation parameters and the scoring criteria to enable an objective review and scoring of the technical and financial proposals that are received

- **Develop Sample Agreement:** Work with the City's finance department to develop sample agreement, including Terms and Conditions.
- The Engineer will hire Kash Srinivasan Group LLC to provide technical advisory assistance for the development of the RFP and the sample agreement. Mr. Srinivasan served as Commissioner of Public Works for city of Wilmington, DE. As the commissioner, he oversaw multiple contract negotiations, renewals, and selection of contract operations firm(s) for the operations of the City's large 105 mgd wastewater treatment facility including its Renewable Energy Biosolids Facility (REBF) He also assisted in developing RFP and sample agreement for the ongoing procurement of contract operator for the City of Baton Rouge/East Baton Rouge Parish, LA.

**Deliverable**: Draft and Final Contract Operations Services RFP and Sample Agreement. The Draft RFP and Sample Agreement will be review with the City in a workshop.

## Task 11 – Facilitate Pre-Proposal Bidder Meetings and RFP Addendum

In this task, the Engineer will assist the City with activities pertaining to facilitating a preproposal bidder meeting, develop responses to questions pertinent to the RFP that the bidders may submit, and assist with the preparation of addendums to the RFP, as may be necessary. Key subtasks include the following:

- Participate in a 60-minute pre-bid meeting with the bidders and assist the City team in facilitating discussions during that meeting.
- Assist the City in developing appropriate responses to the questions, pertinent to the RFP that the bidders submit prior to the pre-bid meeting and prior to proposal submission.
- Based on questions that potential bidders are likely to submit, the City anticipates that addendums to the RFP may be necessary. Therefore, if the City desires, the Black & Veatch team will assist the City in preparing up to two RFP addendums to be issued to the bidders.

Deliverable: RFP Addenda, if any.

### Task 12- Review Proposals and Affirm Bidder Evaluation Strategy

This task involves the development of a well-defined strategy for bidder evaluation and bidder selection. Specific subtasks include the following:

- **Response Summaries:** On receipt of the proposals, the Black & Veatch team will review the proposal packages and prepare summary information for each bidder's response.
- Evaluation Strategy: The Black & Veatch team will facilitate a two-hour evaluation strategy session. The purpose of this strategy session will be to discuss and affirm the scoring process for the Technical and Financial sections of the proposals and the scoring process for the bidder interviews. The scoring criteria will be consistent with the evaluation criteria defined in the RFP and developed in Task 10.

Proposal Reviews and Scoring: On receipt of the proposals, the Black & Veatch team will
review the proposals and facilitate a four hour evaluation session with the City's Evaluation
Team. Using the scoring criteria defined in this task, the Black & Veatch team will facilitate
discussions to evaluate and help score each proposal and shortlist up to three bidders for
onsite interviews.

**Deliverable:** Proposals scoring matrix, City Team's proposal Scores, and Shortlist of Bidders for interviews

## Task 13- Facilitate Interviews/Presentations

If requested by the Owner, the Engineer will participate as observers in the vendor interviews. We assume that the role of the Engineer would be to review the draft of the interview questions the City team prepares, observe the vendor presentations, assist the City with providing additional questions and/or suggest areas where the City may seek clarifications from the vendor, and assist with responding to any vendor questions, as appropriate, during the interview discussions.

## Task 14– Bidder Selection Work Session

On completion of the bidder interviews/presentations, the Engineer will participate in one fourhour onsite debrief and bidder selection meeting. The Engineer will facilitate the deliberations during this meeting using the evaluation strategy guidelines developed in task 12 and submit a summary of keynotes and decisions from this selection meeting. The Engineer team's role will be to facilitate the deliberations, document concerns and rationale, provide relevant insights and help focus the deliberations to select the "best-fit" bidder that can effectively help the City meet its multiple goals and objectives at the best possible value.

**DELIVERABLE:** Final Proposal Scores (after interviews) and the selected proposer recommendation.

# Task 15 – <u>Contract Negotiations</u>

The Engineer will assist the Owner with Contract negotiations with the selected firm. Total of 40 hours have been allocated for assistance.

## Task 6 – <u>Project Management</u>

The Engineer will perform management and administrative duties associated with the project, including project set-up, resource management, progress monitoring, scheduling, trend/change management, general correspondence, project administration, and invoicing. The Engineer will:

- Oversee and coordinate all work activities;
- Review all project deliverables for quality;
- Maintain project schedule and submit monthly as an attachment to the invoice;

• Monitor budget and expenditures.

## **B.** Compensation:

The Engineer agrees that the total payment for all Owner approved tasks described under this Scope of Services shall not exceed \$369,510. The Engineer agrees that it shall complete all work as specified in the Scope of Services of this task order for no more than the total amount specified in this section unless modified as provided in the subsequent changes to the Scope of Services. The study amount includes direct, indirect, and subcontracted costs (as applicable). This is a time and materials task order based on the rates provided in the Agreement Exhibit B.1. Level of effort for this study is included in the Agreement Exhibit C.1. Materials necessary to complete a request will be reimbursed at cost with a valid receipt.

## C. Schedule:

The City approved the scope, and the work is currently in progress. This change order accounts for the additional hours required to complete the work. It is anticipated that Tasks 3 & 7 will not change base schedule.

The anticipated schedule for the project is:

- Development of RFP documents by mid-October 2022
- RFP submission to Mayor and Council Late October 2022
- Pre-Proposal meeting Mid November 2022
- Proposal Due Late December 2022
- Contractor Interview January/February 2023
- Bidder Selection March 2023

The Engineer will develop a detailed schedule following the issue of the Notice to Proceed for Contract Operations Assistance.

### **D.** Additional Owner's Responsibilities:

The owner shall provide the following:

- Record drawings and specifications for previous upgrades
- Current and Proposed Synagro Contracts
- Plant operation data as required

## E. Assumptions

- 1. It is assumed that the City's procurement staff will provide all the General Terms & Conditions, related Forms, and other general requirements that need to be included in the RFP, consistent with City's procurement protocols for contract services.
- 2. It is assumed that only the City's Project Team members will perform the proposal scoring. While Black & Veatch specialists will facilitate the deliberations and document the scoring, Black & Veatch facilitators will not score the proposals or shortlist proposals for interviews.

- 3. The City's project team will develop the initial scoring based on the proposals submitted and then validate the initial scores during the bidder interview sessions and modify the scores, if appropriate, based on the bidder interviews.
- 4. It is assumed that the bidder interviews/presentations will be held over two-consecutive days. Up to three professionals from the Engineer's team will participate in the interviews along with the City's Project Team.
- 5. The Engineer will review total of four proposals from potential bidders.
- 6. It is assumed that only the City Project Team members will perform the final proposal and interview presentation scoring. While Black & Veatch specialists will facilitate the deliberations and document the scoring, Black & Veatch facilitators will not score the final proposals and/or the bidder presentations.
- 7. Coordination for Strain Press piloting is not included.

## F. Additional Terms Specific to this Request for Services:

Not included in this scope.

This Request for Services and the above-referenced Agreement constitute the complete understanding of the Parties for the Services specified herein.

**IN WITNESS WHEREOF**, the Parties have executed this Request for Services, intending to be legally bound.

## **CITY OF HAGERSTOWN, MD**

# **BLACK & VEATCH CORPORATION**

By:	By:
Printed Name:	Printed Name: Kent A. Lackey, PE
	Title: Senior Vice President
Title:	
Date:	Date:



#### EXHIBIT B.I HOURLY BILLING RATE SCHEDULE

Compensation for the Services shall be as set forth in the applicable Request for Services and based on the Hourly Billing Rates stated in the schedule below.

#### HOURLY BILLING RATE SCHEDULE

Position Classification	Bill Rate
Principal	\$450
Client Director	\$300
Project Manager	\$230
Engineering Manager	\$225
Senior Technical Specialist	\$320
Process Specialist	\$265
Senior Process Engineer	\$200
Electrical Engineer	\$200
Senior Engineer	\$180
Project/Process Engineer	\$155
Cost Estimator	\$190
Project Controls	\$130
Finance	\$140
Administration	\$110
CADD Technician	\$135

CITY OF HAGERSTOWN, MD PELLETIZER FACILITY STUDY CHANGE ORDER 1 EXHIBIT C.1																			
No.	TASK / Position	PRINCIPAL	CLIENT DIRECTOR	PROJECT MANAGER	PROCESS SPECIALIST	SENIOR TECHNICAL SPECIALIST (QA/QC)	SENIOR TECHNICAL SPECIALIST (DHA)	55 PROCESS ENGINEER		Electrical Engineer	COST ESTIMATOR		PROJECT CONTROLS	FINANCE	ADMIN	HOURS PER TASK	SUBTOTAL	DIRECT EXPENSES/ ALLOWANCES	TOTAL COSTS
	RATE Cash 6 - Project Management	\$450	\$300	\$230	\$265	\$320	\$320	\$155	\$155	\$200	\$190	<b>Ş320</b>	<b>\$130</b>	\$140	\$110				
	A. Additional meetings/coordination	2	2	4	4				4				24	24		64	\$10,580		\$10,580
	B. General PM		_	24	-				-							24	\$5,520		\$5,520
	C. Biweekly Meetings			6	6				6							18	\$3,900		\$3,900
	ask 3 - Development of Conceptual Solutions																		
	A. Report Development		3	4	80		4	10	10							111	\$27,400		\$27,400
	B. QA/QC C. Submission to the City	_	2	2		4			2						6	8 10	\$2,340 \$1,430		\$2,340 \$1,430
	D. Address city's comments			3	10				2						1	10	\$1,430		\$3,760
	E. Development of additional concepts (Ferric, bar screens, and digestion								-	1					-		<i>23,700</i>		<i>ç</i> 3,730
	options)		2	32	32	3		24	49	40	20					202	\$40,515		\$40,515
	F. Sample Analysis write-up			1					6							7	\$1,160	\$3,000.00	\$4,160
	G. Review of Pelletizer Facility Electrical	-		12	4				8	70						94	\$19,060		\$19,060
	ask 7 - Dust Hazard Study       A. Review of existing documents and Report Development		3	10	78	2	58		4							155	\$43,690		\$43,690
	Meeting with Synagro		3	10	2	2	2		4							4	\$43,690 \$1,170		\$43,690
	B. QA/QC and address comments		3	2		4	-									9	\$2,640		\$2,640
	C. Submission to Hagerstown														2	2	\$220		\$220
	D. Address city's comments			4	6		10									20	\$5,710		\$5,710
	E. Purchase of NFPA 652 and 654	_							2							2	\$310	\$250.00	\$560
	ask 8 - Define Contract Scope of Services		6	10	10				11			12				40	¢42.205	ć500.00	640 70F
	A. Kickoff Meeting Task 9 - Develop Pelletizer Facility Techincal and Mangement Requirements	-	6	10	10				11			12				49	\$12,295	\$500.00	\$12,795
	A. Develop Technical Requirements	-		12	32				24			4				72	\$16,240		\$16,240
	B. Develop CAPEX Requirements			4	20				16			4				44	\$9,980		\$9,980
	C. Management Requirements			4	20				16							40	\$8,700		\$8,700
	D. QA/QC and address comments				4							6				10	\$2,980		\$2,980
	E Submission to the city								2						6	8	\$970		\$970
	F. Workshop with the City	_		6	7		_		10							23	\$4,785		\$4,785
	ask 10 - Prepare Contract Operations RFP           A. Develop Technical & Management sections of Scope of Services		2	2	30				8			2				44	\$10,890		\$10,890
	B. Develop Evaluation and Scoring Matrix		2	8	30				。 16			2				62	\$10,890		\$10,890
	C. Develop Sample Agreement			10	30				4			4				48	\$12,150		\$12,150
	D. QA/QC and Address comments		4	6	4				2			6				22	\$5,870		\$5,870
	E. Submission to the City								2						6	8	\$970		\$970
	F. Workshop with City		4	10	7				10			8				39	\$9,465	-	\$9,715
	G. Finalize RFP and Sample Agreement				6				4							10	\$2,210		\$2,210
$\vdash$	ask 11 - Pre-Proposal Meetings and RFP Addendum			8	8				12			4				32	\$7,100		\$7,100
$\vdash$	B. Review and respond to Bidder Questions (Addenda development)		4	4	8 16				12			4			2	38	\$7,100 \$8,440		\$8,440
	C. Coordinate Bidder Plant Tours			2	2				4	1						8	\$1,610		\$1,610
	D. Participate in the tours			16	16											32	\$7,920		\$8,320
	ask 12 - Proposal Review and Bidder Evaluation Strategy																		
	A. Review Proposals and Develop summaries		4	8	8				16			6			3	45	\$9,890		\$9,890
	B. RFP Review Meeting	_	4	10	8				4							26	\$6,240		\$6,490
	C. Finalize Scoring and Summary			4	3											7	\$1,715		\$1,715
	ask 13 - Facilitate Interviews/Presentations       A. Attend Interviews		8	8	8											24	\$6,360	\$250.00	\$6,610
	ask 13 - Bidder Selection		0	0	°											24	Ş0,30U	₹230.00	\$0,010
	A. Bidder Selection Workshop		4	8	7				4			8				31	\$8,075	\$250.00	\$8,325
	B. Finalize Bidder Selection		2	4	2				4			-				12	\$2,670	-	\$2,670
	Fask 14 - Contract Negotiations																		. , -
	Contract Negotiations Allowance		40													40	\$12,000		\$12,000
$\square$	ub-Contract with Kash Srinivasan Group LLC																		\$10,600
$\square$		_																	
$\vdash$	OTAL	2	97	250	500	13	74	34	274	110	20	72	24	24	26	1,520	\$353,760	\$5,150.00	\$369,510.00
		4	31	230	500	13	/4	4ر.	2/4	110	20	12	24	24	20	1,520	,/0U	,150.00	00.01C,COC¢