SECOND AMENDATORY AGREEMENT

THIS SECOND AMENDATORY AGREEMENT is made between the CITY AND COUNTY OF DENVER, a municipal corporation of the State of Colorado (the "City") and TOWN OF MORRISON, a Colorado municipal corporation whose address is 321 Colorado Hwy 8, Morrison, CO 80465 (the "Town" and, together with the City, the "Parties").

RECITALS

- **A.** The City and Town entered into an Intergovernmental Agreement dated June 14, 2016 as amended by that certain Amendatory Agreement dated October 10, 2017 (collectively, the "<u>Agreement</u>") for Contractor to undertake and perform certain engineering services related to the Town's wastewater system which collects wastewater from the City's Red Rocks Amphitheatre as set forth in the Agreement.
- **B.** The City and Town wish to amend the Agreement to extend the term of the Agreement, modify the Scope of Work to be performed by the Town, and increase the maximum compensation paid to the Town.

NOW, THEREFORE, the Parties hereby agree as follows:

- 1. Capitalized terms used herein and not otherwise defined shall have the meanings assigned to them in the Agreement.
- **2.** Section 4 of the Agreement, entitled "<u>Payment Procedures</u>," is hereby amended to read as follows:

"Payment Procedures and Term

- **a. Term**: The Agreement commenced on June 14, 2016 and will expire on June 30, 2019. The Town shall complete any work in progress as of the expiration date unless the work is earlier completed.
- **b. Payment Procedures**: The total cost for the Engineering Services shall not exceed \$554,900.00. The City is exclusively responsible for the Town's actual Engineering Services costs attributable to Red Rocks, including but not limited to the Town's oversight of the Engineering Services, as agreed upon by the Town and the City. Upon completion of the Engineering Services, the Town will provide copies of all of the deliverables produced by the Engineering Services, along with an invoice for the Town's actual costs for the same, not to exceed \$554,900.00. The City shall promptly pay to the Town the amounts described therein. The City's Prompt Payment Ordinance, §§ 20-107 to 20-118, D.R.M.C., applies to invoicing and payment under this Agreement."
- **3.** A new Exhibit A-2 is attached hereto and all references to "Exhibit A-1" shall be amended to read "Exhibit A-2"

4. Except as amended in this Amendatory Agreement, the Agreement is affirmed, and ratified in each and every particular.

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Contract Control Number:	
IN WITNESS WHEREOF, the parties Denver, Colorado as of	have set their hands and affixed their seals at
SEAL	CITY AND COUNTY OF DENVER
ATTEST:	By
APPROVED AS TO FORM:	REGISTERED AND COUNTERSIGNED
	By
By	
	By



Contract Control Number:

SEA SEA

THTRS-201628380-02

Contractor Name:

TOWN OF MORRISON

Title: Mayor
(please print)

ATTEST: [if required]

Title: Town Clerk (please print)

EXHIBIT A-2 SCOPE OF SERVICES

(Attached)

Introduction

In response to your email on February 15, 2018 and our meeting on April 18, please find below a scope of services, level of effort, and project schedule for the Red Rocks Amphitheatre (RRA) Improvements to directly discharge to the Town of Morrison's Water Reclamation Facility. We are pleased to assist the Town of Morrison with final design, bidding and construction management services.

Scope of Services

Task 1 – Project Initiation and Administration

- 1.1 Project Execution Plan (PXP): Prepare PXP including the following: Project goals and approach, project organization and contacts, communication plan, documentation plan, quality management plan, schedule and work breakdown structure, budget and financial tracking, change management plan, and risk management plan.
- 1.2 Progress Reports. Progress reports will be provided on a monthly basis. A total of 12 project reports will be prepared and will include progress narrative per task, change log, and monthly invoice.
- 1.3 Project Documentation. Consultant will retain and file project documents, meeting notes, site visit notes, workshop notes, and pertinent administrative files in electronic format using either ProjectWise.
- 1.4 Technical Memoranda (TM). TMs described herein will be submitted in draft and final format. Owner's comments on the draft will be incorporated into the final. All TMs will be provided in electronic PDF format.

Task 2 – Flow Monitoring and Sampling

- 2.1 Stantec will conduct a flow monitoring program to measure influent wastewater flow from Red Rocks Amphitheatre to the equalization (EQ) basin and in the Town's collection system. The program is estimated to be conducted for a period of three (3) months. Stantec will prepare a flow monitoring and sampling plan TM that will identify roles and responsibilities, equipment installation requirements, monitoring duration, sample schedule, and contact information.
 - 2.1.1 Flow monitoring program will measure flows continuously using an ISCO 2150 flow sensor that will be installed in a manhole along Main Street in the Town and Red Rocks parking lot in manhole before the EQ basin. A proposal by Ted D. Miller Associates Inc. to provide the services to install, program, remove and clean the flow monitors and equipment rental is provided as Attachment A.
- 2.2 Stantec will conduct a sampling program to measure the wastewater strength of the Red Rocks' discharge to the Town. The sampling monitoring program will collect an estimated 12 samples on a 24-hour period using a flow-weighted composite sampler that will be placed in the manhole near the school. All samples will be picked in the morning and delivered directly to the lab. A proposal by Ted D. Miller Associates Inc. to provide the services to install, program, collect samples, and equipment rental is provided as Attachment B. The proposed parameters for sampling are:

- 2.2.1 Biochemical oxygen demand (BOD₅) -uninhibited,
- 2.2.2 Chemical oxygen demand (COD)
- 2.2.3 Total suspended solids (TSS),
- 2.2.4 Total kjeldahl nitrogen (TKN),
- 2.2.5 Total phosphorus (TP),
- 2.2.6 Ammonia (NH3),
- 2.2.7 pH,
- 2.2.8 Alkalinity.
- 2.3 Meetings and Workshops. For each meeting and workshop, Consultant will prepare agenda, meeting material and meeting minutes. Workshop material will be submitted to Town.
 - 2.4.1 Flow Monitoring and Sampling Program Workshop Discuss results of flow monitoring and sampling program. Consultant shall conduct one three (3) hour workshop at the Town's Facilities with the Town's key staff and stakeholders. Workshop agenda will be distributed one week prior to this workshop. Consultant will have up to three (3) staff in attendance.
- 2.4 Stantec will prepare a technical memorandum (TM) outlining the purpose, intent, and summarize the data, findings, and conclusions. The TM will be provided as a draft for review and comment before the final version is released.

Task 3 - Final Design Services

- 3.1 Stantec will attend a site visit with electrical and process and instrumentation staff to confirm existing electrical and controls equipment and electrical and control requirements.
- 3.2 Stantec will coordinate with a subconsultant surveyor to survey the south parking lots along the proposed 30% 8-inch sewer alignment and sampling station location. The updated survey will be incorporated into the proposed grading plan and sewer profiles.
- 3.3 Stantec will coordinate with a subconsultant geotechnical engineer to take up to five bore samples at to be identified locations to confirm existing soil conditions for installation of proposed comminutor vault and bore of sanitary sewer under the Red Rocks Park Road.
- 3.4 Stantec will provide support to upgrade the Town's controls to receive direct discharge from Red Rocks. Stantec will coordinate with Sanitaire to review existing WRF process controls logic, provide submittal review and update the operation and maintenance manual to reflect the changes to control. The Town will contract directly with Sanitaire.
- 3.5 Stantec will prepare final design calculations as described herein:
 - 3.5.1 Sanitary Sewer Hydraulics: Calculate the hydraulics of the new sewer for typical maximum depth of flow determined by slope and d/D and min. velocity to determine cleansing velocity.
 - 3.5.2 Odor Control System Sizing: Calculate volume of air to be treated by carbon unit and size unit accordingly. Select appropriate exhaust fan and provide corresponding power requirements.

- 3.5.3 Electrical: Power load calculations for electrical services to power new comminutors, flow meter, gate actuators, composite sampler, and odor control unit.
- 3.6 Stantec will prepare 60%, and 90% design drawings: AutoCAD drawings will include the following sheets:

Tollowing a	ilects.
3.6.1	Cover
3.6.2	General Notes Sheet
3.6.3	Overall Site Plan and Survey
3.6.4	Demolition Plan
3.6.5	Grading and Erosion Control Plan
3.6.6	Plan and profile sheet 8-inch sanitary sewer to bypass the EQ basin
3.6.7	Plan and profile sheet 8-inch sanitary sewer to bypass the metering manhole
3.6.8	Plan and profile sheet 8-inch sanitary sewer to bypass the influent metering (near
	school)
3.6.9	Vault plan and section
3.6.10	Flow meter manhole plan and section
3.6.11	Civil Details
3.6.12	Carbon unit plan and detail sheet
3.6.13	Existing Power Plan Demo
3.6.14	General Electrical Sheets
3.6.15	Power Plan at EQ basin site
3.6.16	Power Plan at manhole
3.6.17	General Process and Instrumentation Sheets
3.6.18	Wire Diagram
3.6.19	Process Instrumentation and Diagram (P&ID) comminutors and slide gates
3.6.20	P&ID flow meter and composite sampler
3 6 21	P&ID level sensor in EO hasin

- 3.7 Stantec will prepare 90% specifications using Construction Specification Institute (CSI) (2014 format) include front end and technical specifications sections in conjunction with the design drawings.
- 3.8 Stantec will prepare a basis of design TM as a draft for review and comment before a final version is released. Controls narrative will be included as part of the final basis of design TM.

Task 4 – Bidding

3.6.22

3.6.23

Network

- 4.1 Stantec will complete Issue for Construction contract documents and assist the Town with a bid advertisement.
- 4.2 Pre-bid Meeting Stantec will attend a pre-bid meeting.

P&ID EQ basin discharge pump

4.3 Advisory Services During Bidding – The project team (Stantec & Town Staff) will address bidder inquires during the bid period. As necessary, the Project Team will compile data and issue Addendum(s) clarifying modifications to the bid document. It is anticipated that this would be over a four-week period from issuance of construction documents to bid opening.

4.4 Bid Evaluation and Award – Stantec will assist the Town with the evaluation of bidder submissions. Upon review and analysis of bids, Stantec will provide a letter of recommendation regarding award.

Task 5 – Construction Management

- 5.1 Pre-construction Meeting Stantec will attend a pre-bid meeting.
- 5.2 Construction Administration Stantec will provide construction management support. This support will be during construction which is anticipated to take place from November 2018 until February 2019. Stantec will provide shop drawing review, review and respond to contractor request for information (RFIs). Stantec will attend weekly Contractor progress meetings and provide onsite inspection in coordination with the meeting. Stantec will review and submit Contractor pay applications and change orders.
- 5.3 Record Drawings Stantec will provide the record drawing based on Contractor As-builts submitted at the end of the project. Stantec will provide two (2) full-size hard copy and electronic copy of the record drawings to the Town.

Assumptions

The scope, level of effort and schedule are based on the following assumptions:

- 1. Estimate assumes the Town will pay the laboratory tests directly and Stantec will review and analyze the results.
- 2. Estimate assumes a one-week review time.
- 3. Schedule assume delivery dates as provided by the manufacture.
- 4. Estimate assumes Stantec CAD standards to be used for the project.
- 5. Estimate assumes Stantec specifications (Division 01 through 46) will be used for the project.
- 6. Estimate assumes the use of the Town's Division 00 Contract Documents and will coordinate with technical sections.
- 7. Estimate assumes drawings will be 2D and in AutoCAD format.
- 8. Design assumes horizontal directional-drill (HDD) bore under Red Rocks Park Road.
- 9. Estimate assumes design-bid-build delivery.
- 10. Electrical demolition design scope includes relocation of existing comminutor, replacement of utility transformer and duct bank from transformer to panelboard.
- 11. General contractor will obtain all construction permits.
- 12. Estimate assumes the only load requiring power is the new comminutors, flow meter, actuators, and sampler. Based on the existing connected load, the existing panelboard is loaded and there are limited circuit breakers available.
- 13. Design programmable logic controller and components: Allen Bradley.
- 14. Construction schedule is based on manufacturer typical equipment lead times and is estimated at 17 weeks.
- 15. Estimate assumes 10 at 2-hour review RFI for budget purposes
- 16. Estimate assumes onsite attendance at 2-hr weekly contractor progress meetings for a total of
- 17. Estimate assumes 2-hr weekly onsite inspection after progress meeting.
- 18. Programming provided by others.
- 19. A radio study has been conducted by others has been conducted, reviewed and approved by the Town. The recommended equipment will be incorporated and coordinated into the final design.