

**PUBLIC WORKS DEPARTMENT MEMORANDUM
#26-2020**

DATE: August 10, 2020

TO: Honorable Mayor Meredith Leighty and City Council Members

THROUGH: Heather Geyer, City Manager *hmg*

FROM: Kent Kisselman, PE – Director of Public Works *KKK*

SUBJECT: CR-115 – Engineering Design Services for the Water Treatment Plant Solids Handling Improvements

PURPOSE

City Council is considering CR-115, a resolution to approve a contract for the engineering design services for the Water Treatment Plant (WTP) Solids Handling Improvements project.

BACKGROUND

The goal of the WTP Solids Handling Improvements project is to save water from the WTP. Staff is seeking approval for a contract with Hazen and Sawyer, the design consultant selected through RFP 2020-010, to provide engineering design services which will improve the solids handling processes at the WTP.

On February 24, 2020, the City issued RFP 2020-010 – Engineering Design Services for WTP Solids Handling Improvements. A mandatory pre-bid conference was held on March 17, 2020, and five proposals were received by the City Clerk on May 29, 2020.

Staff scored the proposals received and short-listed three consultants for follow-up interviews. After the interviews were conducted, the selection team determined that Hazen and Sawyer was the most-qualified firm and the best fit for the project.

Design services will be provided in two phases. This initial contract will provide for a Preliminary Engineering Report (PER) to study the available processes and dewatering technologies, and to select the best available technology for Northglenn's WTP. This phase will also include a detailed economic analysis which will quantify the dollar value of savings that Northglenn will realize with these improvements. After acceptance of this PER, staff will seek an amendment to this contact to generate construction plans for the improvements which will be bid for construction in 2021.

STAFF RECOMMENDATION

Attached to this memorandum is CR-115, a resolution that, if approved, would authorize the Mayor to execute an agreement between the City of Northglenn and Hazen and Sawyer for engineering design services for the WTP Solids Handling Improvements project in an amount not to exceed \$72,620.00. Staff recommends approval of CR-115.

BUDGET/TIME IMPLICATIONS

This project will be funded out of the Water Fund.

2020 Water Fund budget	\$300,000.00
WTP Solids Handling Improvements Project – Phase 1 Preliminary Engineering Report	(\$72,620.00)
Remaining amount for Phase 2 – Construction Drawings	\$227,380.00*

*The actual amount of this work will be proposed by the consultant at a later time and will be added to this contact by amendment at a later date.

Project timeline:

Contract Approval	August 10, 2020
Notice of Award	August 2020
Notice to Proceed	August 2020
Phase 1 Completion	October 2020
Phase 2 Completion	December 2020

STAFF REFERENCE

If Council members have any comments or questions they may contact Kent Kisselman, Director of Public Works, at 303.450.4005, kkisselman@northglenn.org.

ATTACHMENT

1. Bid summary

CR-115 – Engineering Design Services for WTP Solids Handling Improvements Project
Engineering Design Services WTP Solids Handling Improvements Project Contract



CITY OF NORTHGLENN
FORMAL BID SUMMARY

BID NUMBER: RFP 2020-010
 BID NAME: Engineering Design Services for WTP Solids Handling Improvements
 DEPARTMENT: Public Works

	Garver LLC	Hazen and Sawyer	JVA Incorporated	CDM Smith Incorporated	Plummer Associates Inc.
	BID RECEIVED	BID RECEIVED	BID RECEIVED	BID RECEIVED	BID RECEIVED
DATE DUE: 06/01/20	DATE: 6/1/20	DATE: 5/29/20	DATE: 5/29/20	DATE: 6/1/20	DATE: 6/1/20
TIME: 10:00 a.m. MST	TIME: 9:59 A	TIME: 12:37 P	TIME: 4:32 P	TIME: 8:45 A	TIME: 8:53 A
Addendum 1	Y	Y	Y	Y	Y
Addendum 2	Y	Y	Y	Y	Y
Addendum 3	Y	Y	Y	Y	Y
Addendum 4	Y	Y	Y	Y	Y
Addendum 5	Y	Y	Y	Y	Y
n/a					

Scott Nohel
Finance Department

Alegn
City's Clerk's Office

6/1/20
Date

SPONSORED BY: MAYOR LEIGHTY

COUNCILMAN'S RESOLUTION

RESOLUTION NO.

No. CR-115
Series of 2020

Series of 2020

A RESOLUTION APPROVING A PROFESSIONAL SERVICES AGREEMENT BETWEEN THE CITY OF NORTHGLENN AND HAZEN AND SAWYER FOR ENGINEERING DESIGN SERVICES FOR THE WATER TREATMENT PLANT SOLIDS HANDLING IMPROVEMENTS PROJECT

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF NORTHGLENN, COLORADO, THAT:

Section 1. The Professional Services Agreement between the City of Northglenn and Hazen and Sawyer, attached hereto, in an amount not to exceed \$72,620.00 for Engineering Design Services for the Water Treatment Plant Solids Handling Improvements Project is hereby approved and the Mayor is authorized to execute same on behalf of the City of Northglenn.

DATED, at Northglenn, Colorado, this _____ day of _____, 2020.

MEREDITH LEIGHTY
Mayor

ATTEST:

JOHANNA SMALL, CMC
City Clerk

APPROVED AS TO FORM:

COREY Y. HOFFMANN
City Attorney

AGREEMENT FOR PROFESSIONAL SERVICES

THIS AGREEMENT is made and entered into this _____ day of _____, 20____, by and between the City of Northglenn, State of Colorado (hereinafter referred to as the "City") and Hazen and Sawyer (hereinafter referred to as "Consultant").

RECITALS:

- A. The City requires professional services.
- B. Consultant has held itself out to the City as having the requisite expertise and experience to perform the required work for the Project.

NOW, THEREFORE, it is hereby agreed for the consideration hereinafter set forth, that Consultant shall provide to the City, professional consulting services for the Project.

I. SCOPE OF SERVICES

Consultant shall furnish all labor and materials to perform the work and services required for the complete and prompt execution and performance of all duties, obligations, and responsibilities for the Project which are described or reasonably implied from **Exhibit A** which is attached hereto and incorporated herein by this reference.

II. THE CITY'S OBLIGATIONS/CONFIDENTIALITY

The City shall provide Consultant with reports and such other data as may be available to the City and reasonably required by Consultant to perform hereunder. No project information shall be disclosed by Consultant to third parties without prior written consent of the City or pursuant to a lawful court order directing such disclosure. All documents provided by the City to Consultant shall be returned to the City. Consultant is authorized by the City to retain copies of such data and materials at Consultant's expense.

III. OWNERSHIP OF WORK PRODUCT

The City acknowledges that the Consultant's work product is an instrument of professional service. Nevertheless, the products prepared under this Agreement shall become the property of the City upon completion of the work.

IV. COMPENSATION

A. In consideration for the completion of the services specified herein by Consultant, the City shall pay Consultant an amount not to exceed seventy two thousand six hundred twenty dollars(\$72,620). Payment shall be made in accordance with the schedule of charges in Exhibit B which is attached hereto and incorporated herein by this reference. Invoices will be itemized and include hourly breakdown for all personnel and other charges. The maximum fee specified herein shall include all fees and expenses incurred by Consultant in performing all services hereunder.

B. Consultant may submit monthly or periodic statements requesting payment. Such request shall be based upon the amount and value of the work and services performed by Consultant under this Agreement except as otherwise supplemented or accompanied by such supporting data as may be required by the City.

1. All invoices, including Consultant's verified payment request, shall be submitted by Consultant to the City no later than the twenty-fourth (24th) day of each month for payment pursuant

to the terms of this Agreement. In the event Consultant fails to submit any invoice on or before the twenty-fourth (24th) day of any given month, Consultant defers its right to payment pursuant to said late invoice until the twenty-fourth (24th) day of the following month.

2. Progress payments may be claimed on a monthly basis for reimbursable costs actually incurred to date as supported by detailed statements, including hourly breakdowns for all personnel and other charges. The amounts of all such monthly payments shall be paid within thirty (30) days after the timely receipt of invoice as provided by this Agreement.

C. The City has the right to ask for clarification on any Consultant invoice after receipt of the invoice by the City.

D. In the event payment for services rendered has not been made within forty-five (45) days from the receipt of the invoice for any uncontested billing, interest will accrue at the legal rate of interest. In the event payment has not been made within ninety (90) days from the receipt of the invoice for any uncontested billing, Consultant may, after giving seven (7) days written notice and without penalty or liability of any nature, suspend all work on all authorized services specified herein. In the event payment in full is not received within thirty (30) days of giving the seven (7) days written notice, Consultant may terminate this Agreement. Upon receipt of payment in full for services rendered, Consultant will continue with all authorized services.

E. Final payment shall be made within sixty (60) calendar days after all data and reports (which are suitable for reproduction and distribution by the City) required by this Agreement have been turned over to and approved by the City and upon receipt by the City of Consultant's certification that services required herein by Consultant have been fully completed in accordance with this Agreement and all data and reports for the Project.

V. COMMENCEMENT AND COMPLETION OF WORK

Within seven (7) days of receipt from the City of a Notice to Proceed, Consultant shall commence work on all its obligations as set forth in the Scope of Services or that portion of such obligations as is specified in said Notice. Except as may be changed in writing by the City, the Project shall be complete and Consultant shall furnish the City the specified deliverables as provided in Exhibit A.

VI. CHANGES IN SCOPE OF SERVICES

A change in the Scope of Services shall constitute any material change or amendment of services or work which is different from or additional to the Scope of Services specified in Section I of this Agreement. No such change, including any additional compensation, shall be effective, or paid unless authorized by written amendment executed by the City. If Consultant proceeds without such written authorization, then Consultant shall be deemed to have waived any claim for additional compensation, including a claim based on the theory of unjust enrichment, quantum merit or implied contract. Except as expressly provided herein, no agent, employee, or representative of the City shall have the authority to enter into any changes or modifications, either directly or implied by a course of action, relating to the terms and scope of this Agreement.

VII. PROFESSIONAL RESPONSIBILITY

A. Consultant hereby warrants that it is qualified to assume the responsibilities and render the services described herein and has all requisite corporate authority and professional licenses in good standing, required by law.

B. The work performed by Consultant shall be in accordance with generally accepted professional practices and the level of competency presently maintained by other practicing professional firms in the same or similar type of work in the applicable community.

C. Consultant shall be responsible for the professional quality, technical accuracy, timely completion, and the coordination of all designs, drawings, specifications, reports, and other services furnished by Consultant under this Agreement. Consultant shall, without additional compensation, correct or resolve any errors or deficiencies in his designs, drawings, specifications, reports, and other services, which fall below the standard of professional practice, and reimburse the City for construction costs caused by errors and omissions which fall below the standard of professional practice.

D. Approval by the City of drawings, designs, specifications, reports, and incidental work or materials furnished hereunder shall not in any way relieve Consultant of responsibility for technical adequacy of the work. Neither the City's review, approval or acceptance of, nor payment for, any of the services shall be construed to operate as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement, and Consultant shall be and remain liable in accordance with applicable performance of any of the services furnished under this Agreement.

E. The rights and remedies of the City provided for under this Agreement are in addition to any other rights and remedies provided by law.

VIII. ILLEGAL ALIENS

A. Certification. By entering into this Agreement, Consultant hereby certifies that, at the time of this certification, it does not knowingly employ or contract with an illegal alien who will perform work under the Agreement and that Consultant will participate in either the E-Verify Program administered by the United States Department of Homeland Security and Social Security Administration or the Department Program administered by the Colorado Department of Labor and Employment in order to confirm the employment eligibility of all employees who are newly hired for employment to perform work under the Agreement.

B. Prohibited Acts. Consultant shall not:

1. Knowingly employ or contract with an illegal alien to perform work under this Agreement; or

2. Enter into a contract with a subcontractor that fails to certify to Consultant that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this Agreement.

C. Verification.

1. Consultant has confirmed the employment eligibility of all employees who are newly hired for employment to perform work under this Agreement through participation in either the E-Verify Program or the Department Program.

2. Consultant shall not use the E-Verify Program or the Department Program procedures to undertake pre-employment screening of job applicants while this Agreement is being performed.

3. If Consultant obtains actual knowledge that a subcontractor performing work under this Agreement knowingly employs or contracts with an illegal alien who is performing work under the Agreement, Consultant shall:

a. Notify the subcontractor and the City within three (3) days that Consultant has actual knowledge that the subcontractor is employing or contracting with an illegal alien who is performing work under the Agreement; and

b. Terminate the subcontract with the subcontractor if within three (3) days of receiving the notice required pursuant to subparagraph (a) hereof, the subcontractor does

not stop employing or contracting with the illegal alien who is performing work under the Agreement; except that Consultant shall not terminate the contract with the subcontractor if during such three (3) days the subcontractor provides information to establish that the subcontractor has not knowingly employed or contracted with an illegal alien who is performing work under the Agreement.

D. **Duty to Comply with Investigations.** Consultant shall comply with any reasonable request by the Colorado Department of Labor and Employment made in the course of an investigation conducted pursuant to C.R.S. § 8-17.5-102(5)(a) to ensure that Consultant is complying with the terms of this Agreement.

E. If Consultant does not currently employ any employees, Consultant shall sign the NO Employee Affidavit attached hereto.

F. If Consultant wishes to verify the lawful presence of newly hired employees who perform work under the Agreement via the Department Program, Consultant shall sign the Department Program Affidavit attached hereto.

IX. INDEMNIFICATION

A. **INDEMNIFICATION – GENERAL:** The City cannot and by this Agreement does not agree to indemnify, hold harmless, exonerate or assume the defense of the Consultant or any other person or entity whatsoever, for any purpose whatsoever. Provided that the claims, demands, suits, actions or proceedings of any kind are not the result of professional negligence, the Consultant, to the fullest extent permitted by law, shall defend, indemnify and hold harmless the City, its Council members, officials, officers, directors, agents and employees from any and all claims, demands, suits, actions or proceedings of any kind or nature whatsoever, including worker's compensation claims, in any way resulting from or arising from the services rendered by Consultant, its employees, agents or subconsultants, or others for whom the Consultant is legally liable, under this Agreement; provided, however, that the Consultant need not indemnify or save harmless the City, its Council members, its officers, agents and employees from damages resulting from the negligence of the Council members, officials, officers, directors, agents and employees.

B. **INDEMNIFICATION FOR PROFESSIONAL NEGLIGENCE:** The Consultant shall, to the fullest extent permitted by law, defend, indemnify and hold harmless the City, its Council members, and any of its officials, officers, directors, and employees from and against damages, liability, losses, costs and expenses, including reasonable attorneys fees, but only to the extent caused by or arising out of the negligent acts, errors or omissions of the Consultant, its employees, agents or subconsultants, or others for whom the Consultant is legally liable, in the performance of professional services under this Agreement. The Consultant is not obligated under this subparagraph IX.B. to indemnify the City for the negligent acts of the City, its Council members, or any of its officials, officers, directors, agents and employees.

C. **INDEMNIFICATION – COSTS:** Consultant shall, to the fullest extent permitted by law, defend, investigate, handle, respond to, and provide defense for and defend against, any such liability, claims or demands at the sole expense of Consultant or, at the option of the City, agrees to pay the City or reimburse the City for the defense costs incurred by the City in connection with any such liability, claims or demands. Consultant shall, to the fullest extent permitted by law, defend and bear all other costs and expenses related thereto, including court costs and attorney fees, whether or not any such liability, claims or demands alleged are groundless, false or fraudulent. If it is determined by the final judgment of a court of any competent jurisdiction that such injury, loss or damage was caused in whole or in part by the act, omission or other fault of the City, its Council members, officials, officers, directors, agents and employees, the City shall reimburse Consultant for the portion of the judgment attributable to such act, omission or other fault of the City, its Council members, officials, officers, directors, agents and employees.

D. To the extent this Agreement is subject to C.R.S. § 13-50.5-102(8), Contractor's liability under this provision shall be to the fullest extent of, but shall not exceed, that amount represented by the degree or

percentage of negligence or fault attributable to Contractor, any subcontractor of Contractor, or any officer, employee, representative, or agent of Contractor or of any subcontractor of Contractor. If Contractor is providing architectural, engineering, surveying or other design services under this Agreement, the extent of Contractor's obligation to defend, indemnify and hold harmless the City may be determined only after Contractor's liability or fault has been determined by adjudication, alternative dispute resolution or otherwise resolved by mutual agreement of the Parties, as provided by C.R.S. § 13-50.5-102(8)(c).

X. INSURANCE

A. Consultant agrees to procure and maintain, at its own cost, a policy or policies of insurance sufficient to insure against all liability, claims, demands, and other obligations assumed by Consultant pursuant to Section IX, above. Such insurance shall be in addition to any other insurance requirements imposed by this Agreement or by law. Consultant shall not be relieved of any liability, claims, demands, or other obligations assumed pursuant to Section IX, above, by reason of its failure to procure or maintain insurance, or by reason of its failure to procure or maintain insurance in sufficient amounts, durations, or types.

B. Consultant shall procure and maintain, and shall cause any subcontractor of Consultant to procure and maintain, the minimum insurance coverages listed below. Such coverages shall be procured and maintained with forms and insurers acceptable to the City. All coverages shall be continuously maintained to cover all liability, claims, demands, and other obligations assumed by Consultant pursuant to Section IX, above. In the case of any claims-made policy, the necessary retroactive dates and extended reporting periods shall be procured to maintain such continuous coverage.

1. Worker's Compensation Insurance to cover obligations imposed by applicable laws for any employee engaged in the performance of work under this Contract, and Employer's Liability Insurance with minimum limits of five hundred thousand dollars (\$500,000) each incident, five hundred thousand dollars (\$500,000) disease - policy limit, and five hundred thousand dollars (\$500,000) disease - each employee.

2. Commercial general liability insurance with minimum combined single limits of one million dollars (\$1,000,000) each occurrence and two million dollars (\$2,000,000) general aggregate. The policy shall be applicable to all premises and operations. The policy shall include coverage for bodily injury, broad form property damage (including completed operations), personal injury (including coverage for contractual and employee acts), blanket contractual, products, and completed operations. The policy shall contain a severability of interests provision.

3. Professional liability insurance with minimum limits of six hundred thousand dollars (\$600,000) each claim and one million dollars (\$1,000,000) general aggregate.

C. The policy required by paragraph 2. above shall be endorsed to include the City and the City's officers, employees, and consultants as additional insureds. Every policy required above shall be primary insurance, and any insurance carried by the City, its officers, its employees, or its consultants shall be excess and not contributory insurance to that provided by Consultant. No additional insured endorsement to the policy required by paragraph 1. above shall contain any exclusion for bodily injury or property damage arising from completed operations. Consultant shall be solely responsible for any deductible losses under any policy required above.

D. The certificate of insurance provided for the City shall be completed by Consultant's insurance agent as evidence that policies providing the required coverages, conditions, and minimum limits are in full force and effect, and shall be reviewed and approved by the City prior to commencement of the Agreement. No other form of certificate shall be used. If the City is named as an additional insured on any policy which does not allow for the automatic addition of additional insureds, the Consultant's insurance agent shall also provide a copy of all accompanying endorsements recognizing the City as an additional insured. The

certificate shall identify this Agreement and shall provide that the coverages afforded under the policies shall not be cancelled, terminated or materially changed until at least thirty (30) days prior written notice has been given to the City. The completed certificate of insurance shall be sent to:

City of Northglenn
Attn: Mike Roman, PE
11701 Community Center Drive
Northglenn, Colorado 80233-8061

E. Failure on the part of Consultant to procure or maintain policies providing the required coverages, conditions, and minimum limits shall constitute a material breach of agreement upon which the City may immediately terminate this Agreement, or at its discretion, the City may procure or renew any such policy or any extended reporting period thereto and may pay any and all premiums in connection therewith, and all monies so paid by the City shall be repaid by Consultant to the City upon demand, or the City may offset the cost of the premiums against any monies due to Consultant from the City.

F. The City reserves the right to request and receive a certified copy of any policy and any endorsement thereto.

G. The parties hereto understand and agree that the City, its officers, and its employees, are relying on, and do not waive or intend to waive by any provision of this Agreement, the monetary limitations (presently three hundred fifty thousand dollars (\$350,000) per person and nine hundred ninety thousand dollars (\$990,000) per occurrence) or any other rights, immunities, and protections provided by the Colorado Governmental Immunity Act, Colo. Rev. Stat., §§ 24-10-101, et seq., as from time to time amended, or otherwise available to the City, its officers, or its employees.

XI. NON-ASSIGNABILITY

Neither this Agreement, nor any of the rights or obligations of the parties hereto, shall be assigned by either party without the written consent of the other.

XII. TERMINATION

This Agreement shall terminate at such time as the work in Section I is completed and the requirements of this Agreement are satisfied, or upon the City's providing Consultant with seven (7) days advance written notice, whichever occurs first. In the event the Agreement is terminated by the City's issuance of said written notice of intent to terminate, the City shall pay Consultant for all work previously authorized and completed prior to the date of termination. If, however, Consultant has substantially or materially breached the standards and terms of this Agreement, the City shall have any remedy or right of set-off available at law and equity. If the Agreement is terminated for any reason other than cause prior to completion of the Project, any use of documents by the City thereafter shall be at the City's sole risk, unless otherwise consented to by Consultant.

XIII. CONFLICT OF INTEREST

The Consultant shall disclose any personal or private interest related to property or business within the City. Upon disclosure of any such personal or private interest, the City shall determine if the interest constitutes a conflict of interest. If the City determines that a conflict of interest exists, the City may treat such conflict of interest as a default and terminate this Agreement.

XIV. VENUE

This Agreement shall be governed by the laws of the State of Colorado, and any legal action concerning the provisions hereof shall be brought in the County of Adams, State of Colorado.

IN WITNESS WHEREOF, the parties hereto each herewith subscribe the same in duplicate.

CITY OF NORTHGLENN, COLORADO

By: _____

Meredith Leighty
Print Name

Mayor
Title Date

ATTEST:

Johanna Small, CMC Date
City Clerk

APPROVED AS TO FORM:

Corey Y. Hoffmann Date
City Attorney

CONSULTANT:

By:  _____

STEVEN DWIGHT PRICE
Print Name

Associate VIP 7/21/2020
Title Date

ATTEST:

By: Tracey Bowlds

TRACEY BOWLDS
Print Name

CITY OF NORTHGLENN

Admin Tech 7/21/2020
Title Date

XV. INDEPENDENT CONTRACTOR

Consultant is an independent contractor. Notwithstanding any provision appearing in this Agreement, all personnel assigned by Consultant to perform work under the terms of this Agreement shall be, and remain at all times, employees or agents of Consultant for all purposes. Consultant shall make no representation that it is the employee of the City for any purposes.

XVI. NO WAIVER

Delays in enforcement or the waiver of any one or more defaults or breaches of this Agreement by the City shall not constitute a waiver of any of the other terms or obligation of this Agreement.

XVII. ENTIRE AGREEMENT

This Agreement and the attached Exhibits A and B is the entire Agreement between Consultant and the City, superseding all prior oral or written communications. None of the provisions of this Agreement may be amended, modified, or changed, except as specified herein.

XVIII. SUBJECT TO ANNUAL APPROPRIATION

Consistent with Article X, Section 20 of the Colorado Constitution, any financial obligations of the City not to be performed during the current fiscal year are subject to annual appropriation, and thus any obligations of the City hereunder shall extend only to monies currently appropriated.

XIX. NOTICE

Any notice or communication between Consultant and the City which may be required, or which may be given, under the terms of this Agreement shall be in writing, and shall be deemed to have been sufficiently given when directly presented or sent pre-paid, first class United States Mail, addressed as follows:

The City: City of Northglenn
11701 Community Center Drive
Northglenn, Colorado 80233-8061

Consultant: Hazen and Sawyer
143 Union Boulevard, Suite 200
Lakewood, CO 80228

PROSPECTIVE CONSULTANT'S CERTIFICATE REGARDING EMPLOYING OR CONTRACTING WITH AN ILLEGAL ALIEN

FROM: HAZEN & SAWYER
(Prospective Consultant)

TO: City of Northglenn
11701 Community Center Drive
Northglenn, CO 80233

Project Name Solids Handling

Bid Number _____ Project No. _____

As a prospective Consultant for the above-identified bid, I (we) do hereby certify that, as of the date of this certification, I (we) do not knowingly employ or contract with an illegal alien who will perform work under the Agreement and that I (we) will confirm the employment eligibility of all employees who are newly hired for employment to perform work under the Agreement through participation in either the E-Verify Program administered by the United States Department of Homeland Security and Social Security Administration or the Department Program administered by the Colorado Department of Labor and Employment.

Executed this 21 day of JULY, 2020.

Prospective Consultant STEVEN DWIGHT PRICE

By: 

Title: Associate VIP

Exhibit A - Scope of Work

Phase 1 – Preliminary Engineering Report

Task 1 – Project Management and QA/QC

Hazen will manage the project schedule and budget and regularly inform City Project Manager of progress. Invoices and project status updates will be provided to the City at monthly intervals. Continuous quality assurance/quality control will be provided throughout the duration of the project delivery.

Deliverables:

- Monthly invoices and project status updates

Task 2 – Preliminary Engineering Report

Hazen will perform a high-level evaluation of feasible dewatering technologies to eventually identify up to two technologies that warrant further consideration. The following factors will be considered in the initial review of dewatering technologies:

- Equipment/facilities layout
- Estimated liquids/solids mass balances based on historical and future water demands, and seasonal water quality and chemical usage variability for the WTP
- Sludge dewaterability analysis (by vendors)
- Reasonably anticipated operational performance for different types of equipment
- Performance of dewatering equipment at other plants
- Ease of operations and maintenance
- Level of facility/equipment reliability and redundancy
- Capital and life-cycle cost comparisons
- Building upgrades required (e.g., structural modifications or building code upgrades that would be required by each technology)
- USA-made/local access to replacement parts
- Lead time on equipment procurement

Hazen

To accomplish this review, Hazen will summarize historical data provided by the City as it relates to the design and operations of the new solids dewatering facility. This will include influent solids loadings, quantity of solids sent to landfill, polymer dose, power used, landfill disposal costs, etc. From this data, and through conversations with the City, a basis of design will be established for the new system, including levels of redundancy and maximum number of hours and number of days of operation.

Manufacturers of the various types of dewatering equipment will be contacted to obtain recommended system configuration and budgetary cost information that will be used in this initial evaluation. To evaluate performance data, grab samples will be taken and sent to dewatering equipment manufacturers who will analyze the samples, develop recommendations for equipment selection, polymer type/dose, other required chemicals, and estimate performance of their dewatering equipment. This overall performance information will be used in a life cycle cost comparison of the different options.

A general comparison of advantages and disadvantages of the different dewatering technologies will be summarized in a table, along with a comparison of vendor submitted data, capital and life cycle cost comparison, and other factors. The supplementing economic analysis will include a detailed payback period accounting for wastewater treatment savings, water rights and additional costs the City deems relevant. These savings will be compared to existing conditions. This information will be presented in a workshop held with the City to develop a final list of potential dewatering technologies to be further considered (up to two). Working copies of spreadsheet calculations will be provided to the City upon project completion.

The short-listed option(s) will be further evaluated by making site visits to other utilities currently using the dewatering technolog(ies) to discuss the performance (including seasonal variations) and operation and maintenance requirements of the dewatering equipment.

Hazen will prepare an Alternatives Evaluation Technical Memorandum that summarizes the evaluations performed in this task and the resulting recommendations, including a preliminary opinion of construction cost of the recommended alternative. This technical memorandum will be submitted to the City in draft form and reviewed in a meeting. Comments from the City will be incorporated, and a final memorandum issued.

After the final Alternatives Evaluation Technical Memorandum is issued, Hazen will prepare a Preliminary Engineering Report (PER) that will include:

- Summary of existing solids handling process at the Northglenn WTP and discuss the planned increase to the solids train when filter to waste automation becomes active.
- Discuss which improvements were considered. Considers available technologies and pros and cons of each.
- Presents a final recommendation on which improvements are selected for detailed design.
- The PER shall include a detailed economic analysis of the proposed solids handling improvements. The City will provide a list of known costs of raw water and treatment costs at the WWTP.

Hazen

The PER will be submitted to the City in draft form and reviewed in a meeting. Comments from the City will be incorporated, and a final report issued. Hazen will also provide a cost estimate and contingency recommendation.

Deliverables:

- Alternatives Workshop Meeting Notes
- Draft and Final Alternatives Evaluation Technical Memorandum
- Draft and Final Preliminary Engineering Report
- Calculations in MS Excel format

Task 3 – Permitting

Hazen will assist the City in compiling required submittals for Colorado Department of Health and Environment (CDPHE). A web-based meeting will be held with CDPHE to introduce the project to their staff and understand any potential concerns they may have about the project and its ability to be approved once 60% design is reached.

Deliverables:

- Meeting Notes

Assumptions

- Hazen's PM will update the City on monthly project update phone calls.
- CDPHE meeting will be held virtually.
- Any additional pilot testing of technologies, if still required, are assumed to have a duration of two weeks to be coordinated by Hazen, but staffed by City and/or the manufacturers. Assume maximum of two manufacturers.
- Cost of vendor pilot units to be paid by the City or by the Manufacturer outside of this contract.
- Site visits to other utilities are within a days' driving distance (e.g., no hotel, airfare, etc.).
- Survey of site and geotechnical subsurface investigations are not required.
- A 20 year life-cycle costs will be used for the comparison analysis. This corresponds to the approximate age when dewatering equipment needs to be replaced.
- Class 4 estimates will be used in the process selection portion of the pre-design. Class 3 estimate will be developed for the selected process.

Hazen

- Basic use of discount and inflation rates. The City and Hazen will decide on these factors early in the project.
- City to provide labor, sewer, wastewater, water resource costs.
- City to provide daily chemical doses, raw water quality, and flows in an electronic format for at least the past 5 years.
- City to provide projected flow rates through the plant for the next 20 years.
- Hazen will evaluate the feasibility to capture the backwash waste and filter-to-waste separately.
- Hazen will evaluate the feasibility to use a gravity thickener in the process or to use existing basins.

Schedule

Hazen anticipates the following schedule for the project scope outlined herein:

- Notice to Proceed: No later than August 3, 2020
- Initial Operations and Evaluation of Alternatives Workshop with the City:
Week of August 24th
- Complete Site Visits: October 9, 2020
- Complete Draft Preliminary Engineering Report: October 30, 2020

Exhibit B
Northglenn Solids Handling Improvements
Fee for the Preliminary Engineering Phase

Task	Description	SPC	SA	SPE	AE	Tech	Total	Fee		
		\$ 270	\$ 230	\$ 165	\$ 120	\$ 110	Hrs	Labor	Exp	Total
1	PER Project Management and QA/QC	26	4	12	4	0	46	\$ 10,400	\$ 200	\$ 10,600
2	Preliminary Engineering Report	58	26	124	100	40	348	\$ 58,500	\$ 200	\$ 58,700
3	Permitting	4	4	8	0	0	16	\$ 3,320	\$ -	\$ 3,320
	Total	88	34	144	104	40	410	72,220	400	72,620

Labor Classifications	Rate
SPC - Sr Principal Consultant	\$ 270
SA - Senior Associate	\$ 230
A - Associate	\$ 190
SPE - Senior Principal Engineer	\$ 165
PE - Project Engineer	\$ 140
AE - Assistant Engineer	\$ 120
Tech - Technician / Designer / Admin	\$ 110

