

CITY OF CORPUS CHRISTI CONTRACT FOR PROFESSIONAL SERVICES

The City of Corpus Christi, a Texas home rule municipal corporation, P.O. Box 9277, Corpus Christi, Nueces County, Texas 78469-9277 (City) acting through its duly authorized City Manager or Designee (Director of Engineering Services) and **Hazen and Sawyer**, a New York corporation with a Corpus Christi office, 5262 S. Staples Street, Corpus Christi, Nueces County, Texas 78411, (**Consultant**), hereby agree as follows:

1. SCOPE OF PROJECT

City of Corpus Christi Water System Assessment and Optimization (Project No. E16332) - This project involves detailed evaluations and analyses of the water treatment processes and the distribution system operations. This includes a thorough assessment of the O.N. Stevens Water Treatment Plant (ONSWTP) operations, including a water quality analysis of raw water sources, unit treatment process performance, chemical addition effectiveness, water quality monitoring and analysis, instrumentation and controls, and all other pertinent operations. The project also involves a detailed assessment of the distribution system, including a review of the water quality data that is collected throughout the City, monitoring and sampling plans, the City's Nitrification Action Plan, and the operation of all water storage facilities, and provide recommendations to minimize water quality issues throughout the distribution system. This project also allows the Consultant to supplement the City's staff with personnel and resources to assist with any technical, operational, maintenance, diagnostic and design concerns related to water treatment processes and/or distribution system.

2. SCOPE OF SERVICES

The Consultant hereby agrees to perform services to complete the Project, as detailed in **Exhibit "A"**. In addition, Consultant will provide monthly status updates (project progress or delays presented with monthly invoices) and provide contract administration services, as described in **Exhibit "A"**, to complete the Project. Work will not begin on Additional Services until requested by the Consultant (provide breakdown of costs, schedules), **and** written authorization is provided by the Director of Engineering Services.

3. ORDER OF SERVICES

The Consultant agrees to begin work on those authorized Basic Services for this contract upon receipt of the Notice to Proceed from the Director of Engineering Services. Work will not begin on any phase or any Additional Services until requested in writing by the Consultant and written authorization is provided by the Director of Engineering Services. The anticipated schedule of the preliminary phase, design phase, bid phase, and construction phase is shown on **Exhibit "A"**. This schedule is not to be inclusive of all additional time that may be required for review by the City staff and may be amended by or with the concurrence of the Director of Engineering Services.

The Director of Engineering Services may direct the Consultant to undertake additional services or tasks provided that no increase in fee is required. Services or tasks requiring an increase of fee will be mutually agreed and evidenced in writing as an amendment to

this contract. Consultant shall notify the City of Corpus Christi within three (3) days of notice if tasks requested requires an additional fee.

4. FEE

The City will pay the Consultant a fee as described in **Exhibit "A"** for providing services authorized, a total fee not to exceed **\$500,000.00**. Monthly invoices will be submitted in accordance with **Exhibit "B"**.

5. INDEMNITY

Consultant shall fully indemnify and hold harmless the City of Corpus Christi and its officials, officers, agents, employees, or other entity, excluding the engineer or architect or that person's agent, employee or subconsultant, over which the City exercises control ("Indemnitee") from and against any and all claims, damages, liabilities or costs, including reasonable attorney fees and court costs, to the extent that the damage is caused by or results from an act of negligence, intentional tort, intellectual property infringement or failure to pay a subcontractor or supplier committed by Consultant or its agent, Consultant under contract or another entity over which Consultant exercises control while in the exercise of rights or performance of the duties under this agreement. This indemnification does not apply to any liability resulting from the negligent acts or omissions of the City or its employees, to the extent of such negligence.

Consultant shall defend Indemnitee, with counsel satisfactory to the City Attorney, from and against any and all claims, damages, liabilities or costs, including reasonable attorney fees and court costs, if the claim is not based wholly or partly on the negligence of, fault of or breach of contract by Indemnitee. If a claim is based wholly or partly on the negligence of, fault of or breach of contract by Indemnitee, the Consultant shall reimburse the City's reasonable attorney's fees in proportion to the Consultant's liability.

Consultant must advise City in writing within 24 hours of any claim or demand against City or Consultant known to Consultant related to or arising out of Consultant's activities under this Agreement.

6. INSURANCE

Consultant agrees to comply with the insurance requirements in **Exhibit "C"**.

7. TERMINATION OF CONTRACT

The City may terminate this contract for convenience upon seven days written notice to the Consultant at the address of record. The City may terminate this agreement for cause upon ten days written notice to the Consultant. If Consultant begins, within three days of receipt of such notice, to correct its failure and proceeds to diligently cure such failure within the ten days, the agreement will not terminate.

In the event of termination, the Consultant will be compensated for its services on all stages authorized based upon Consultant and City's estimate of the proportion of the total services actually completed at the time of termination.

8. LOCAL PARTICIPATION

The City Council's stated policy is that City expenditures on contracts for professional services be of maximum benefit to the local economy.

9. ASSIGNABILITY

The Consultant will not assign, transfer or delegate any of its obligations or duties in this contract to any other person without the prior written consent of the City, except for routine duties delegated to personnel of the Consultant staff. If the Consultant is a partnership, then in the event of the termination of the partnership, this contract will inure to the individual benefit of such partner or partners as the City may designate. No part of the Consultant fee may be assigned in advance of receipt by the Consultant without written consent of the City.

The City will not pay the fees of expert or technical assistance and consultants unless such employment, including the rate of compensation, has been approved in writing by the City.

10. OWNERSHIP OF DOCUMENTS

All documents including contract documents (plans and specifications), record drawings, contractor's field data, inspection reports and submittal data will be the sole property of the City, may not be used again by the Consultant without the express written consent of the Director of Engineering Services. However, the Consultant may use standard details that are not specific to this project. The City agrees that any modification of the plans will be evidenced on the plans, and be signed and sealed by a professional engineer prior to re-use of modified plans.

11. STANDARD OF CARE

Services provided by Consultant under this Agreement shall be performed with the professional skill and care ordinarily provided by competent engineers or architects practicing in the same or similar locality and under the same or similar circumstances and professional license; and performed as expeditiously as is prudent considering the ordinary professional skill and care of a competent engineer or architect.

12. DISCLOSURE OF INTEREST

Consultant agrees to comply with City of Corpus Christi Ordinance No. 17112 and complete the *Disclosure of Interests* form as part of this contract.

13. CERTIFICATE OF INTERESTED PARTIES

For contracts that exceed \$50,000, Consultant agrees to comply with Texas Government

Code section 2252.908 and complete Form 1295 Certificate of Interested Parties as part of this agreement.

Form 1295 requires disclosure of “interested parties” with respect to entities that enter contracts with cities. These interested parties include:

- (1) persons with a “controlling interest” in the entity, which includes:
 - a. an ownership interest or participating interest in a business entity by virtue of units, percentage, shares, stock or otherwise that exceeds 10 percent;
 - b. membership on the board of directors or other governing body of a business entity of which the board or other governing body is composed of not more than 10 members; or
 - c. service as an officer of a business entity that has four or fewer officers, or service as one of the four officers most highly compensated by a business entity that has more than four officers.
- (2) a person who actively participates in facilitating a contract or negotiating the terms of a contract with a governmental entity or state agency, including a broker, intermediary, adviser or attorney for the business entity.

Form 1295 must be electronically filed with the Texas Ethics Commission at https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm. The form must then be printed, signed, notarized and filed with the City. For more information, please review the Texas Ethics Commission Rules at <https://www.ethics.state.tx.us/legal/ch46.html>.

14. CONFLICT OF INTEREST

Consultant agrees to comply with Chapter 176 of the Texas Local Government Code and file Form CIQ with the City Secretary’s Office, if required. For more information and to determine if you need to file a Form CIQ, please review the information on the City Secretary’s website at <http://www.cctexas.com/government/city-secretary/conflict-disclosure/index>.

15. ENTIRE AGREEMENT AND CONTROLLING LAW

This Agreement represents the entire and integrated Agreement between City and Consultant and supersedes all prior negotiations, representations or agreements, either oral or written. This Agreement may be amended only by written instrument signed by both the City and Consultant. This Agreement is governed by the laws of the State of Texas without regard to its conflicts of laws. Venue for legal proceedings lies exclusively in Nueces County, Texas.

16. CONFLICT RESOLUTION BETWEEN DOCUMENTS

Consultant hereby agrees and acknowledges if anything contained in the Consultant-prepared **Exhibit “A”**, Consultant’s Scope of Services, or contained in any other document prepared by Consultant and included herein, is in conflict with this Agreement, this Agreement shall take precedence and control to resolve said conflict.

CITY OF CORPUS CHRISTI

J.H. Edmonds, P.E. Date
Director of Engineering Services

RECOMMENDED

Operating Department Date

APPROVED AS TO LEGAL FORM

Legal Department Date

APPROVED

Office of Management Date
and Budget

ATTEST

Rebecca Huerta Date
City Secretary

HAZEN AND SAWYER

Chamindra Dassanayake 7/21/2016
Chamindra Dassanayake, Ph.D, P.E. Date
Vice President and Southwest Regional Manager
8350 N. Central Expressway, Suite 775
Dallas, Texas 75206
(214) 382-5750 Office

Project Name City of Corpus Christi Water
System Assessment and Optimization
Project Number E16332
Accounting Unit 4091-062
Account 550950
Activity E16332014091EXP
Account Category 50950
Fund Name Water 2012B RVBD
This is the original contract for \$500,000



Hazen and Sawyer
5262 S. Staples Ste. 300
Corpus Christi, TX 78411 • 361.992.9000

July 21, 2016

J.H. Edmonds, P.E.
Director of Engineering Services
City of Corpus Christi
P.O. Box 9277
Corpus Christi, TX 78469-9277

**Re: CITY OF CORPUS CHRISTI WATER SYSTEM ASSESSMENT AND OPTIMIZATION
City Project No. E16332
Hazen Project No. 60704-001**

Dear Mr. Edmonds:

In response to the City's request, Hazen and Sawyer is proposing the following large A/E contract for a total not-to-exceed amount of \$500,000 to be billed on a Time and Materials (T&M) basis. The purpose of this contract is to assist the City in evaluating its current water treatment unit processes at the O.N. Stevens Water Treatment Plant (ONSWTP) and distribution system operations, as well as develop and implement short-term improvements and modifications that will optimize the City's overall water system. The short-term action items identified for this project are provided as an attachment.

Project Description:

The City of Corpus Christi, Texas, hereinafter called "City", and Hazen and Sawyer, hereinafter called "Engineer", agree to the following contract for engineering and consulting services to perform detailed evaluations and analyses of the water treatment processes and the distribution system operations. This includes a thorough assessment of the ONSWTP operations, including a water quality analysis of raw water sources, unit treatment process performance, chemical addition effectiveness, water quality monitoring and analysis, instrumentation and controls, and all other pertinent operations. This project allows the Engineer to review all raw water and finished water quality data, assess the performance of unit processes at ONSWTP (i.e., coagulation/flocculation, sedimentation, filtration, and disinfection), and provide recommendations to optimize the overall water treatment process and mitigate any potential water quality issues that may arise. The Engineer will also to identify, perform testing, and provide conceptual design for strategies and/or modifications to the current operations at ONSWTP to improve water treatment and monitoring.

This project also allows the Engineer to perform a detailed assessment of the distribution system, including a review of the water quality data that is collected throughout the City, monitoring and sampling plans, the City's Nitrification Action Plan, and the operation of all water storage facilities, and provide recommendations to minimize water quality issues throughout the distribution system. The Engineer will evaluate the City's distribution system operations, including the management and operation of all ground storage tanks (GSTs) and elevated storage tanks (ESTs), water distribution lines, water quality monitoring protocols, and flushing plans. The Engineer will review all documentation related to

the distribution system and provide recommendations on updates and/or improvements to optimize its operation and mitigate potential water quality issues.

This project allows the Engineer to supplement the City's staff with personnel and resources to assist with any technical, operational, maintenance, diagnostic and design concerns related to water treatment processes and/or distribution system. The Engineer shall assist the City by performing the tasks outlined in this contract under the direction of the Utilities Department to ensure that the water treatment and distribution objectives for the City are being met in a cost-effective manner.

Scope of Services:

The tasks associated with the assessments and evaluations described above include, but are not limited to, the following:

1. O.N. Stevens Water Treatment Plant Process and Operations Assessment

- Perform a detailed water quality analysis of the raw water sources, including an inventory of potential disinfection byproduct precursors (total organic carbon, bromide) and nitrogen species (total ammonia, nitrite, nitrate)
- Perform evaluation of treatment process effectiveness, including types of chemicals employed at ONSWTP, chemical injection locations and dosing, condition of process units, etc. to aid in the identification of potential process improvements or modifications
- Review procedures for sampling and monitoring water quality parameters throughout ONSWTP, including sampling frequency and selected water quality parameters, and methods of process control that result from changes in overall water quality measurements
- Review standard operating procedures (SOPs) and current operational strategies to identify opportunities for water treatment improvements, including the potential implementation of flow-paced, automated chemical dosing and feedback systems to optimize chemical usage
- Conduct treatment process analysis (desktop, bench-scale, etc.) of various water treatment process alternatives to improve finished water quality along with possible cost-saving process improvements. Potential water treatment process alternatives to be evaluated may include, but are not limited to, the following:
 - Free chlorine disinfection
 - Chlorine dioxide (ClO₂) disinfection
 - Enhanced TOC removal processes
- Evaluate recycle flows throughout ONSWTP to assess its water quality and potential contributions to disinfectant instability and nitrification potential
- Evaluate solids management strategies and disposal methods to identify potential improvements and cost-saving measures

- On-site operations support for plant optimization and upgrades to meet best management practices.

2. Water Distribution System Analysis and Operations Assessment

- Review SOPs for distribution system operations, including EST and GST cleaning and maintenance, tank and distribution sampling and testing protocols schedules, flushing programs, disinfectant residual monitoring, and documentation associated with seasonal variations in distribution systems operations
- Conduct a performance analysis of the ESTs and GSTs throughout the system using computational fluid dynamics (CFD) modeling to ensure proper operations and stable disinfectant residuals and to identify potential improvements to EST and GST operations
- Evaluate the disinfectant residual throughout the system and investigate the need for temporary (or permanent) disinfectant booster stations at various locations
- Review the City's protocols for addressing low disinfectant residuals, including unidirectional flushing (UDF) plans, the City's Nitrification Action Plan, disinfectant conversion SOPs, and other documentation
- Identify additional strategies for improved water distribution system operations, such as ice pigging, improved pumping operations, real-time water quality monitoring and chemical feed control at pump stations
- On-going support as an extension of staff to review water quality and operations.

Schedule:

While the exact schedule is to be determined based on the needs and requests of the City staff, the anticipated completion date for on-call services is August 31, 2016 and the anticipated completion for project deliverables is September 30, 2016.

Fees:

Services will be provided on a Time and Materials (T&M) basis for a total not-to-exceed contract amount of \$500,000. Monthly invoices will be provided by the Engineer based on actual working hours and associated expenses at agreed upon hourly rates. The City's Project Manager is responsible for assigning tasks to the Engineer and approving daily/weekly/monthly hours. The Engineer is required to submit a detailed and approved man-hour breakdown accompanying with monthly invoices to Engineering Services for payment.



If you have any questions or if you would like to discuss in more detail, please feel free to call me at 469-250-3781.

Sincerely,
Hazen and Sawyer
TBPE Firm No. F-13618

A handwritten signature in cursive script that reads "Chamindra Dassanayake, Ph.D., P.E.".

Chamindra Dassanayake, Ph.D., P.E.
Vice President and Southwest Regional Manager

EXHIBIT "B"

SAMPLE PAYMENT REQUEST FORM

Sample form for:
Payment Request
Revised 07/27/00

COMPLETE PROJECT NAME
Project No. XXXX
Invoice No. 12345
Invoice Date:

	Contract	Amd No. 1	Amd No. 2	Total Contract	Amount Invoiced	Previous Invoice	Total Invoice	Percent Complete
Basic Services:								
Preliminary Phase	\$1,000	\$0	\$0	\$1,000	\$0	\$1,000	\$1,000	100%
Design Phase	2,000	1,000	0	3,000	1,000	500	1,500	50%
Bid Phase	500	0	250	750	0	0	0	0%
Construction Phase	2,500	0	1,000	3,500	0	0	0	0%
Subtotal Basic Services	\$6,000	\$1,000	\$1,250	\$8,250	\$750	\$1,500	\$2,500	30%
Additional Services:								
Permitting	\$2,000	\$0	\$0	\$2,000	\$500	\$0	\$500	25%
Warranty Phase	0	1,120	0	1,120	0	0	0	0%
Inspection	0	0	1,627	1,627	0	0	0	0%
Platting Survey	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0%
O & M Manuals	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0%
SCADA	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0%
Subtotal Additional Services	\$2,000	\$1,120	\$1,627	\$4,747	\$500	\$0	\$500	11%
Summary of Fees								
Basic Services Fees	\$6,000	\$1,000	\$1,250	\$8,250	\$750	\$1,500	\$2,500	30%
Additional Services Fees	2,000	1,120	1,627	4,747	500	0	500	11%
Total of Fees	\$8,000	\$2,120	\$2,877	\$12,997	\$1,250	\$1,500	\$3,000	23%

EXHIBIT "C"

Insurance Requirements

Pre-Design, Design and General Consulting Contracts

1.1 Consultant must not commence work under this agreement until all required insurance has been obtained and such insurance has been approved by the City. Consultant must not allow any subcontractor to commence work until all similar insurance required of any subcontractor has been obtained.

1.2 Consultant must furnish to the Director of Engineering Services with the signed agreement a copy of Certificates of Insurance (COI) with applicable policy endorsements showing the following minimum coverage by an insurance company(s) acceptable to the City's Risk Manager. **A waiver of subrogation is required on all applicable policies. Endorsements must be provided with COI. Project name and or number must be listed in Description Box of COI.**

TYPE OF INSURANCE	MINIMUM INSURANCE COVERAGE
30-written day notice of cancellation, required on all certificates or by applicable policy endorsements	Bodily Injury and Property Damage Per occurrence - aggregate
PROFESSIONAL LIABILITY (Errors and Omissions)	\$1,000,000 Per Claim (Defense costs shall be outside policy limits) If claims made policy, retro date must be prior to inception of agreement, have extended reporting period provisions and identify any limitations regarding who is insured.

1.3 In the event of accidents of any kind related to this agreement, Consultant must furnish the City with copies of all reports of any accidents within 10 days of the accident.

1.4 Consultant shall obtain and maintain in full force and effect for the duration of this Contract, and any extension hereof, at Consultant's sole expense, insurance coverage written on an occurrence basis, by companies authorized and admitted to do business in the State of Texas and with an A.M. Best's rating of no less than A- VII. **Consultant is required to provide City with renewal Certificates.**

1.5 Consultant shall be required to submit a copy of the replacement certificate of insurance to City at the address provided below within 10 days of the requested change. Consultant shall pay any costs incurred resulting from said changes. All notices under this Article shall be given to City at the following address:

City of Corpus Christi
Attn: Engineering Services
P.O. Box 9277
Corpus Christi, TX 78469-9277

1.6 Consultant agrees that with respect to the above required insurance, all insurance policies are to contain or be endorsed to contain the following required provisions:

1.6.1 Provide thirty (30) calendar days advance written notice directly to City of any suspension, cancellation, non-renewal or material change in coverage, and not less than ten (10) calendar days advance written notice for nonpayment of premium.

1.7 Within five (5) calendar days of a suspension, cancellation or non-renewal of coverage, Consultant shall provide a replacement Certificate of Insurance and applicable endorsements to City. City shall have the option to suspend Consultant's performance should there be a lapse in coverage at any time during this contract. Failure to provide and to maintain the required insurance shall constitute a material breach of this contract.

1.8 In addition to any other remedies the City may have upon Consultant's failure to provide and maintain any insurance or policy endorsements to the extent and within the time herein required, the City shall have the right to order Consultant to remove the exhibit hereunder, and/or withhold any payment(s) if any, which become due to Consultant hereunder until Consultant demonstrates compliance with the requirements hereof.

1.9 Nothing herein contained shall be construed as limiting in any way the extent to which Consultant may be held responsible for payments of damages to persons or property resulting from Consultant's or its subcontractor's performance of the work covered under this agreement.

1.10 It is agreed that Consultant's insurance shall be deemed primary and non-contributory with respect to any insurance or self-insurance carried by the City of Corpus Christi for liability arising out of operations under this agreement.

1.11 It is understood and agreed that the insurance required is in addition to and separate from any other obligation contained in this agreement.



City of
Corpus
Christi

SUPPLIER NUMBER _____
TO BE ASSIGNED BY CITY
PURCHASING DIVISION

CITY OF CORPUS CHRISTI DISCLOSURE OF INTEREST

City of Corpus Christi Ordinance 17112, as amended, requires all persons or firms seeking to do business with the City to provide the following information. Every question must be answered. If the question is not applicable, answer with "NA". See reverse side for Filing Requirements, Certifications and definitions.

COMPANY NAME: Hazen and Sawyer

P. O. BOX: _____

STREET ADDRESS: 8350 N. Central Expressway,
Suite 775 **CITY:** Dallas **ZIP:** 75206

FIRM IS: 1. Corporation ☒ 2. Partnership ☐ 3. Sole Owner ☐
 4. Association ☐ 5. Other ☐

DISCLOSURE QUESTIONS

If additional space is necessary, please use the reverse side of this page or attach separate sheet.

1. State the names of each "employee" of the City of Corpus Christi having an "ownership interest" constituting 3% or more of the ownership in the above named "firm."

Name	Job Title and City Department (if known)
<u>N/A</u>	_____
_____	_____
_____	_____

2. State the names of each "official" of the City of Corpus Christi having an "ownership interest" constituting 3% or more of the ownership in the above named "firm."

Name	Title
<u>N/A</u>	_____
_____	_____
_____	_____

3. State the names of each "board member" of the City of Corpus Christi having an "ownership interest" constituting 3% or more of the ownership in the above named "firm."

Name	Board, Commission or Committee
<u>N/A</u>	_____
_____	_____
_____	_____

4. State the names of each employee or officer of a "consultant" for the City of Corpus Christi who worked on any matter related to the subject of this contract and has an "ownership interest" constituting 3% or more of the ownership in the above named "firm."

Name	Consultant
<u>N/A</u>	_____
_____	_____
_____	_____

FILING REQUIREMENTS

If a person who requests official action on a matter knows that the requested action will confer an economic benefit on any City official or employee that is distinguishable from the effect that the action will have on members of the public in general or a substantial segment thereof, you shall disclose that fact in a signed writing to the City official, employee or body that has been requested to act in the matter, unless the interest of the City official or employee in the matter is apparent. The disclosure shall also be made in a signed writing filed with the City Secretary.
[Ethics Ordinance Section 2-349 (d)]

CERTIFICATION

I certify that all information provided is true and correct as of the date of this statement, that I have not knowingly withheld disclosure of any information requested; and that supplemental statements will be promptly submitted to the City of Corpus Christi, Texas as changes occur.

Certifying Person: Chamindra Dassanayake, Ph.D, P.E. **Title:** Vice President and Southwest Regional Manager
(Type or Print)

Signature of Certifying Person:



Date:

7/21/2016

DEFINITIONS

- a. "Board member." A member of any board, commission, or committee appointed by the City Council of the City of Corpus Christi, Texas.
- b. "Economic benefit". An action that is likely to affect an economic interest if it is likely to have an effect on that interest that is distinguishable from its effect on members of the public in general or a substantial segment thereof.
- c. "Employee." Any person employed by the City of Corpus Christi, Texas either on a full or part-time basis, but not as an independent contractor.
- d. "Firm." Any entity operated for economic gain, whether professional, industrial or commercial, and whether established to produce or deal with a product or service, including but not limited to, entities operated in the form of sole proprietorship, as self-employed person, partnership, corporation, joint stock company, joint venture, receivership or trust, and entities which for purposes of taxation are treated as non-profit organizations.
- e. "Official." The Mayor, members of the City Council, City Manager, Deputy City Manager, Assistant City Managers, Department and Division Heads, and Municipal Court Judges of the City of Corpus Christi, Texas.
- f. "Ownership Interest." Legal or equitable interest, whether actually or constructively held, in a firm, including when such interest is held through an agent, trust, estate, or holding entity. "Constructively held" refers to holdings or control established through voting trusts, proxies, or special terms of venture or partnership agreements."
- g. "Consultant." Any person or firm, such as engineers and architects, hired by the City of Corpus Christi for the purpose of professional consultation and recommendation.