

**CITY OF CORPUS CHRISTI
 CONTRACT FOR MONITORING SERVICES
 AMENDMENT NO. 1**

The City of Corpus Christi, Texas hereinafter called "CITY", and the **Conrad Blucher Institute at Texas A&M University-Corpus Christi**, hereinafter called "CBI," agree to the following amendment to the Contract for Monitoring Services for **Nueces Bay System Salinity and Freshwater Inflow Monitoring 2014-2015 (Project No. 8443)**, as authorized and amended by:

Original A/E Agreement	November 12, 2013	Motion No. 2013-170	\$94,605.00
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In the original contract, **Exhibit "A". SECTION II. SCOPE OF SERVICES** shall be amended to include the additional tasks as described in Amendment No. 1 Exhibit "A".

In the original contract, the **FEES** shall be amended and is attached as Amendment No. 1 Exhibit "A" for a revised fee not to exceed **\$97,687.00 (Ninety-Seven Thousand Six Hundred Eighty-Seven Dollars and Zero Cents)**, for a total restated fee not to exceed **\$192,292.00 (One Hundred Ninety-Two Thousand Two Hundred Ninety-Two Dollars and Zero Cents)**. Monthly invoices shall be submitted in accordance with Exhibit "B".

All other terms and conditions of the November 12, 2013 contract between the City and CBI, and any amendments to that contract, which are not specifically addressed herein shall remain in full force and effect.

CITY OF COPUS CHRISTI

 Natasha Fudge, P.E., (Date)
 Acting Director, Capital Programs

RECOMENDED

 Operating Department (Date)

APPROVED AS TO LEGAL FORM

 Assistant City Attorney (Date)
 for City Attorney

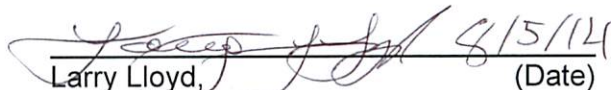
APPROVED

 Office of Management and Budget (Date)

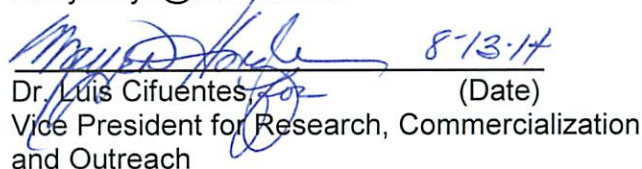
ATTEST

 Rebecca Huerta, City Secretary

TEXAS A&M UNIVERSITY-CORPUS CHRISTI


 Larry Lloyd, (Date) 8/15/14

Research Specialist II
 Conrad Blucher Institute for Surveying and Science
 Texas A&M University – Corpus Christi
 6300 Ocean Drive, Unit 5799
 Corpus Christi, Texas 78412
 (361) 825-5759 Office
 Larry.Lloyd@tamucc.edu


 Dr. Luis Cifuentes, (Date) 8-13-14
 Vice President for Research, Commercialization and Outreach

Project No: <u>8443</u>
Fund Source No: <u>530000-4010-30220-180227</u>
Fund Name: <u>Water Operating</u>
Encumbrance No: _____



**CONRAD BLUCHER
INSTITUTE
FOR SURVEYING AND SCIENCE**

Larry Lloyd
Research Specialist II
Conrad Blucher Institute for Surveying and Science
College of Science and Engineering
6300 OCEAN DRIVE, UNIT 5799
CORPUS CHRISTI, TEXAS 78412
O 361.825.5759 • C 361.438.6594

Sharon Bailey Lewis
1201 Leopard
City of Corpus Christi
Corpus Christi, Texas 78401

8 July, 2014

Dear Sharon Lewis:

The statements of work covered herein are submitted to the City of Corpus Christi for consideration. These statements will constitute a fee for services rendered by the Conrad Blucher Institute for Surveying and Science (CBI) at Texas A&M University - Corpus Christi (TAMUCC). Included is an outline of our scope of work and budget to continue the ongoing salinity monitoring efforts in the Nueces Estuary.

**PROPOSED SCOPE OF WORK FOR NUECES BAY SYSTEM
SALINITY AND FRESHWATER INFLOW MONITORING: 2014-2015**

Summary

Three salinity monitoring stations in the Nueces River and Bay will be covered under this agreement. Station service includes exchange of Hydrolab[®] instruments with a freshly calibrated unit. In order to reduce costs, station service frequency will be based on observed marine growth fouling the instruments; for example, every 2 weeks when warmer bay waters foster excessive marine growth and every 3 weeks when water temperatures are cooler. All salinity monitoring stations will report salinity and water temperature. All monitoring stations will also report dissolved oxygen, pH, and water depth. All data will be available in graphical and tabular format on the CBI website (<http://www.cbi.tamucc.edu/Nueces-BayWater-Quality-Monitoring>) within one hour of the time data were collected. This proposal covers a period of 1 year.

Research Objectives

The Conrad Blucher Institute for Surveying and Science (CBI) at TAMUCC has been operating and maintaining salinity monitoring equipment in the Nueces Estuary for the City of Corpus Christi since November 1991, trying to help understand the effects of freshwater inflows on salinity into the Nueces system. Additional funding from the Coastal Bend Bays and Estuaries Program (CBBEP) will ensure that comprehensive spatial coverage of the Nueces Estuary continues. This proposal is for a continuation of the current monitoring effort in support of salinity conditions in Nueces Bay and river. The data collected will be used to help the City of Corpus Christi water supply managers determine quantities of fresh water required by the amended Agreed Order between the City and the State of Texas. Other benefits of the data collection include collaboration with other researchers in the delta, namely, The Center for Coastal Studies (CCS) and Harte Research Institute for Gulf of Mexico Studies (HRI) at TAMUCC, the University of Texas Marine Science Institute at Port Aransas (UTMSI), and the U.S. Army Corps of Engineers (COE; Fort Worth District).

Nueces Bay Salinity Monitoring – Freshwater Inflow

This is an ongoing project originating in the fall of 1991. Nueces Bay salinity monitoring by CBI consists of 2 monitoring platforms in the bay: one near Whites Point (SALT03) and the other mid bay, near the CPL power lines (SALT01); plus one station in the Nueces River (SALT05). In addition, with support from CBBEP, CBI will continue to maintain SALT08, at the mouth of the Rincon Bayou, which was, until recently, sponsored by the City. Parameters measured at stations SALT01, SALT03 and SALT05 include salinity, conductivity, dissolved oxygen, water temperature, water depth, and pH. The stations are located in such a manner to track fresh water inflows into Nueces Bay using salinity levels as the indicator. Relief for required freshwater releases may be taken by the City if the salinity levels in Nueces Bay fall below the Upper Salinity Bounds. A daily running report (<http://lighthouse.tamucc.edu/salrel>) produced by CBI and the Nueces River Authority (NRA) shows the current freshwater relief status.

Nueces Delta Diversion Project – Freshwater Inflow

The City has designed and built a diversion channel from the Nueces River into the delta at the head of the Rincon Bayou channel. The diverted river water is designed to flow into the Rincon Bayou and adjacent wetland. UTMSI, HRI, and CCS are presently conducting long-term ecological studies of the effects of this diversion. Five salinity monitoring stations along the Rincon Bayou, beginning at the head and ending of Nueces Bay have been established to determine the fate of freshwater diversions from the pipeline.

Nueces Bay Tidal and Meteorological Station

The Texas Coastal Oceanic Observation Network (TCOON) operated a tidal/meteorological station (011) in the upper part of Nueces Bay at Whites Point. This station was replaced in the winter of 2010 with a new tidal monitoring platform (185) just across the bay, near the mouth of the Nueces River. Although not an official TCOON station, all maintenance and operation of the tidal station will follow TCOON protocols. Precise water level measurements from this station are used as a reference for work by the others in the various projects in the bay, river, and delta. The initial installation and maintenance was funded by the CBBEP. Funding for continuing maintenance of this station is currently being sought.

Station Service and Maintenance

All water quality monitoring stations consist of a Hydrolab[®] water quality datasonde, a modem, data collection platform, and 12 volt solar power system. TAMUCC owns and maintains all monitoring equipment. Freshly calibrated units are exchanged with units on the station every 2 to 3 weeks, depending on the degree of observed marine fouling on the instruments. The Hydrolabs[®] are taken back to CBI for post calibration and preparation for future service. An annual maintenance agreement with HydrotechZS ensures the accuracy of the Hydrolab[®] units. Covered under this agreement are all components of the Hydrolab[®], ensuring that the instruments deployed meet factory standards. All datasondes will be placed under the annual service agreement to ensure continual data collection at all stations.

Data Collection

A computer program, written by staff at CBI, polls each station every six minutes. Five measurements are requested from each instrument, these five are then averaged. The hourly averages are then placed into the database and reported on the CBI web site. Daily salinity reports are produced showing the running ten and seven day averages as well as the daily average (<http://www.nueces-ra.org/CP/CITY/passthru/index.php>). Monthly salinity levels in relation to the Upper and Lower Salinity bounds are found at <http://lighthouse.tamucc.edu/salrel>, and are used to help determine if the City may take credits to offset scheduled freshwater releases from the storage impounds.

Instrument Calibration

All calibration standards used are NIST traceable, and purchased from HydrotechZS. Calibration and post-calibration methods used are those established by the manufacturer of Hydrolab[®]. All calibration and post-calibration records are kept on the CBI environmental monitoring database and available upon request. An instrument maintenance agreement with HydrotechZS is used with each Hydrolab[®]. Each unit is sent to the manufacturer annually for inspection and refurbishment. All components of the instrument are covered under the warranty agreement and they are replaced as needed.

Collaborative Monitoring

This proposed continuation of the salinity monitoring program is designed to provide data to support those research efforts currently being done by CCS, UTMSI, HRI, COE, CBBEP, USGS and the City. Should the need or occasion arise where additional monitoring efforts are required, CBI will be in a position to support those efforts.

Schedule of Work and Fee for Service

The Conrad Blucher Institute for Surveying and Science at Texas A&M University – Corpus Christi hereby agrees for the duration of one year (1 October, 2014 through 30 September, 2015) to perform all services necessary to provide water quality monitoring, as described in this proposal. The budget for 1 October, 2014 through 30 September, 2015 is \$97,687 and is enclosed with this proposal.

Budget Summary

	TOTAL
Salaries & Benefits	\$57,692
Travel Pool	\$6,178
Supplies	\$4,000
Other Expenses (IP modem fee, freight service warranty)	\$6,700
Indirect	\$23,117
TOTAL	\$97,687

NUECES BAY SYSTEM
SALINITY AND FRESHWATER INFLOW MONITORING 2014-2015
SUMMARY OF FEES

		ORIGINAL CONTRACT	AMEND. NO. 1	TOTAL
1	Salaries & Benefits	\$50,263.00	\$57,692.00	\$107,955.00
2	Travel Pool	10,005.00	6,178.00	16,183.00
3	Supplies	4,000.00	4,000.00	8,000.00
4	Other Expenses	7,950.00	6,700.00	14,650.00
5	Indirect	22,387.00	23,117.00	45,504.00
TOTAL		94,605.00	97,687.00	192,292.00
		11/12/13 M2013-170	M2014	

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%



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: Conrad Blucher Institute at Texas A&M University-Corpus Christi

P. O. BOX: _____

STREET ADDRESS: 6300 Ocean Drive, Unit 5799 CITY: Corpus Christi ZIP: 78412

FIRM IS: 1. Corporation 2. Partnership 3. Sole Owner
4. Association 5. Other State-Controlled Institution of Higher Education

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 N/A Job Title and City Department (if known)

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 N/A Title

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 N/A Board, Commission or Committee

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 N/A Consultant

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: Dr. Luis Cifuentes **Title:** Vice President for Research, Commercialization, & Outreach
(Type or Print)

Signature of Certifying Person:  **Date:** 8-13-14

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.