

STATE OF TEXAS §
 §
COUNTY OF FORT BEND §

**AMENDMENT TO AGREEMENT FOR
PROFESSIONAL ENVIRONMENTAL SERVICES**

THIS AMENDMENT, is made and entered into by and between Fort Bend County (hereinafter "County"), a body corporate and politic under the laws of the State of Texas, and SWCA Environmental Consultants, (hereinafter "Contractor"), a company authorized to conduct business in the State of Texas.

WHEREAS, the parties executed and accepted that certain Agreement for Professional Environmental Services on December 16, 2014, (hereinafter "Agreement") pursuant to SOQ 14-025; and

WHEREAS, the parties desire to amend the Agreement to include additional services.

NOW, THEREFORE, the parties do mutually agree as follows:

1. Services to be rendered under the Agreement shall be amended to add an evaluation of the need for a U.S. Army Corps of Engineers (USACE) Clean Water Act (CWA) Section 404 permit for the proposed Project, as described in the Proposal dated July 30, 2015, attached hereto as Exhibit A, and incorporated herein for purposes.
2. County shall pay Contractor an additional forty-three thousand one hundred dollars and no/100 (\$43,100.00), on a lump sum basis, for the additional professional environmental services to be rendered under this Amendment.
3. The Maximum Compensation payable to Contractor for Services rendered is hereby increased to an amount not to exceed seventy-eight thousand nine hundred forty-six dollars and no/100 (\$78,946.00). In no case shall the amount paid by County for all Services under the Agreement and this Amendment exceed the Maximum Compensation without an approved change order.
4. The Time of Performance of the of the Scope of Services under the Agreement and this Amendment is extended to end no later than twenty-four (24) months after Contractor's receipt of Notice to Proceed issued by County under this Amendment.

Except as provided herein, all terms and conditions of the Agreement shall remain unchanged.

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FORT BEND COUNTY

Robert E. Hebert
Robert E. Hebert, County Judge

10-6-2015
Date

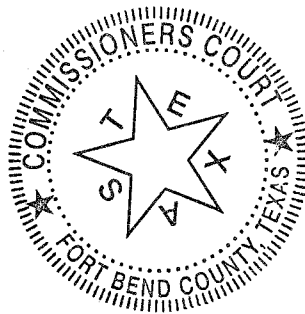
SWCA ENVIRONMENTAL CONSULTANTS

Matt Stahman
Matt Stahman, Principal

Sept. 23, 2015
Date

ATTEST:

Laura Richard
Laura Richard, County Clerk



APPROVED:

Richard W. Stolleis
Richard W. Stolleis, P.E., County Engineer

AUDITOR'S CERTIFICATE

I hereby certify that funds are available in the amount of \$28,946.⁰⁰ to accomplish and pay the obligation of Fort Bend County under this contract.

Robert Edward Sturdivant
Robert Edward Sturdivant, County Auditor

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EXHIBIT A



Sound Science. Creative Solutions.®

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2/36

July 30, 2015

Submitted via e-mail: stacy.slawinski@fortbendcountytexas.gov

Mr. Stacy Slawinski
Assistant County Engineer
Fort Bend County Engineering
1124 Blume Road
Rosenberg, Texas 77471

Re: Proposal/Cost Estimate Wetland Delineation, USACE Permitting, and Associate Services for Proposed Improvements to Bellaire Boulevard between San Pablo Drive and FM 1464

Dear Mr. Slawinski:

Thank you for allowing SWCA Environmental Consultants (SWCA) the opportunity to submit this proposal and cost estimate to the Fort Bend County Engineering Department (FBCED) for the proposed improvements to Bellaire Boulevard between San Pablo Drive and FM 1464 (FB Project 13202) (proposed project). This scope and cost estimate covers the environmental consulting services necessary to evaluate the need for a U.S. Army Corps of Engineers (USACE) Clean Water Act (CWA) Section 404 permit for the proposed project. The work to be performed by SWCA shall consist of providing professional consulting services, including performing wetland delineations, ordinary high water mark (OHWM) determinations, cultural resources investigations, Section 404 permitting, and a wetland mitigation plan related to proposed project in Fort Bend County. The proposed project length is approximately 0.66 mile. The project proposes to expand Bellaire Boulevard from a two-lane road to a four-lane road with concrete curb and gutter from FM 1464 to Chickory Woods Lane. In addition, the project proposes to extend Bellaire Boulevard from Chickory Woods Lane to San Pablo Drive by creating a four-lane divided road with concrete curb and gutter. The scope of professional environmental consulting services is outlined below. SWCA will coordinate throughout the project with the FBCED.

The following paragraphs provide the scope of work and cost estimate for wetland delineation, USACE Section 404 permit, mitigation planning, cultural resources, and associated services.

SCOPE OF WORK

TASK 1 – WETLAND DELINEATION

SWCA will conduct a formal wetland delineation to identify and map waters of the United States, including wetlands, within the proposed project boundaries. Field investigations would be conducted within the 100-foot project right-of-way (ROW), in addition to a 20-foot on each side of the proposed ROW. Identification of potential jurisdictional wetlands will be based upon the routine delineation methodology published in the 1987 *Corps of Engineers Wetlands Delineation Manual* (1987 Manual) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0)*. This methodology includes documentation of vegetation changes in both wetland and upland communities with representative data points. The OHWM of waters within the property boundaries



will be identified based on USACE regulations found at 33 Code of Federal Regulations (CFR) 328.3(e). It is estimated that one field day consisting of two wetland delineators will be required to complete the delineation of the 0.66 mile of proposed roadway ROW. SWCA will conduct the wetland delineation of the proposed roadway ROW when the notice to proceed is received.

Data point locations, potential wetland boundaries, and OHWM limits of potential waters of the United States within the property boundaries will be digitally mapped using a Trimble XH or XT differentially-corrected global positioning system (DGPS). Field activities include:

- Walking the ROW to review site conditions including soils, hydrology, and vegetation.
- Conducting field investigations to identify wetlands, completing wetland data forms, establishing data points, and mapping perimeter of delineated wetlands.
- Once wetland and waterbody boundaries are determined within the proposed ROW, SWCA will provide the shapefiles to the FBCED for the distribution to the design engineer for planning/design purposes.

TASK 2 – WETLAND DELINEATION REPORTING

SWCA will prepare a written report that summarizes the methods and findings of the wetland delineation. SWCA will also prepare aerial and topography-based exhibits depicting the location of (if they occur) any mapped waters of the United States, including wetlands and their boundaries, found within the proposed project ROW. The report will include the acreages of all wetlands and potential waters of the United States, descriptions of all wetlands and potential waters of the United States, and a preliminary analysis as to whether each potential water of the United States is jurisdictional. Copies of data sheets and site photographs would also be included in the reports.

The reports will provide sufficient data suitable for verification by the USACE Galveston District. SWCA will submit two hardcopies/one electronic copy of the report to FBCED. The reports will also assist in determining Section 404 permitting requirements for the project.

SWCA will assist the USACE with a preliminary jurisdictional determination (PJD) by providing nearly complete PJD forms for their use. These forms are required by the USACE when preliminary jurisdictional determinations are sought by the applicant to obtain a determination if wetlands and waterbodies exist on the property. The USACE may visit the site during the PJD process and if requested, SWCA will accompany them on the site visit.

TASK 3 – CULTURAL RESOURCES CONSTRAINTS ANALYSIS AND AGENCY COORDINATION

SWCA will conduct a cultural resources constraints analysis of the project area. The goals of the constraints analysis will be to gather all available information regarding previous surveys for cultural resources, previously documented cultural resources including archaeological sites and above-ground historical resources, identify the potential for these resources to affect future development, and determine the possible scope of further possible archaeological regulatory compliance work on the property, if any, such as pedestrian surveys.

SWCA has already completed a background archaeological literature and records search of the proposed project area. SWCA will additionally evaluate other critical factors including the level of previous disturbances from road construction and residential and/or commercial development, types of soils, and any obvious standing structures that appear on USGS topographic maps. This task will allow SWCA to identify any areas within the project area that have potential to contain significant, undocumented archaeological sites. With this information, SWCA will be able to evaluate archaeological potential and concerns as well as the probable level of archaeological effort that would be required to obtain compliance with any applicable federal or state cultural resource regulations.



Once review is completed and the results are reviewed, SWCA will prepare a brief letter report of the constraints analysis. This report will document the methodology used in the investigation, the presence and condition of any previously recorded sites and/or surveys revealed in the literature review, and provide estimates on the level of future archaeological work, if any, that may be necessary to satisfy potentially applicable federal or state cultural resource laws. SWCA will provide a draft report to the client for review and approval, followed by a final report incorporating all comments and suggestions from the client. This letter can then be used in coordination with the Texas Historical Commission (THC) and USACE to either dismiss the need for any further archaeological investigation or minimize the scope of such investigations should they be requested.

TASK 4 – PERMITTING ASSESSMENT

Following the field surveys, report preparation and detailed design, SWCA will assess the extent and types of potential impacts to waters of the United States, including wetlands, regulated by Section 404 of the CWA. Depending on the scope of impacts, it is anticipated at this time that the construction of the proposed project would be authorized under Nationwide Permit (NWP) 14, Linear Transportation Activities. This permit limits impacts to 1/2 acre of waters of the United States, including wetlands. SWCA will evaluate if a permit is required, if a NWP 14 is applicable with or without Pre-Construction Notification (PCN) based on survey results, potential impacts, meetings with FBCED, and the USACE (if necessary). SWCA will meet with the engineering design team to discuss potential impacts and ways to minimize and avoid potential impacts. SWCA will advise FBCED whether a permit is required and, if so, it can be met under a NWP 14. If potential impacts cannot be covered under a NWP 14, SWCA will advise FBCED of the appropriate permit to pursue. No other permits, such as an Individual Permit are included in this scope and cost at this time.

OPTIONAL TASKS

Additional services may be required for the proposed project. Any additional services required will not be initiated without FBCED approval.

TASK 5 – CLEAN WATER ACT (SECTION 404) USACE NATIONWIDE PERMIT AND FUNCTIONAL ASSESSMENT (OPTIONAL)

If it is determined during the permitting assessment that the proposed project would require a Pre-construction Notification (PCN), SWCA will prepare a PCN package to submit to the USACE Galveston District. The PCN document will address the following application requirements:

1. Identification of the applicant
2. Point-of-contact
3. Project description, location, and purpose
4. Identification of adjacent property owners
5. Site photographs
6. Direct and indirect environmental effects of the regulated activity
7. Avoidance and minimization efforts
8. Proposed mitigation plan (see Task 5 below)
9. Wetland Delineation Report



10. Preliminary Jurisdictional Determination Forms

11. Other information that may be required for agency coordination. (Threatened and Endangered Species and Cultural Resources)

The PCN will include exhibits, permit design drawings, and other details to facilitate an understanding of the proposed action. These exhibits/drawings include topographic maps, aerial photographs, design plan views, cross-sections, and elevations of the basins. FBCED (or its representative project engineer) will prepare the plan and cross-section drawings and provide review of these drawings. All other exhibits will be prepared by SWCA. All drawings and exhibits submitted as part of the PCN must be in reproducible black-and-white in 8 1/2 x 11 format.

Once project design provides detail to determine potential impacts to wetlands and waters of the United States, SWCA will conduct a wetland functional assessment in order to quantify the number of wetland mitigation credits necessary to compensate for the proposed project's unavoidable impacts. SWCA will conduct this assessment using the USACE Galveston District's Interim Hydrogeomorphic Method (iHGM). The iHGM assessment involves quantification of multiple wetland functional parameters including tree density counts, tree species richness determinations, tree basal diameter measurements, coarse wood debris counts, absorptive soil properties, herbaceous coverage, and mid-story coverage.

Though not anticipated at this time, SWCA can also conduct, if needed, a stream reach assessment for impacted streams within the project area. SWCA will use the USACE Galveston District's Stream Condition Assessment Procedure (SCAP). SWCA assumes a Level 1 SCAP effort, which is approved for impacts to intermittent and perennial waters less than 500 linear feet. The cost of a Level 1 SCAP will be covered under a separate scope.

TASK 6 – WETLAND MITIGATION PLAN (OPTIONAL)

SWCA will prepare a mitigation plan, if necessary, following the guidelines of the U.S. Environmental Protection Agency's 2008 document titled *Compensatory Mitigation for Losses of Aquatic Resources; Final Rule* (2008 Final Mitigation Rule). The mitigation plan will address the proposed impacts to waters of the United States, describe measures taken to avoid and minimize those impacts to the maximum extent practicable, and propose measures to mitigate those impacts. SWCA anticipates using mitigation banks to compensate for impacts to waters of the United States; however, it is unknown at this time if mitigation banks can be used because of the project location and proximity to mitigation banks with limited credit availability.

This scope and cost does not include development of a project specific Permittee-Responsible Mitigation (PRM) plan. Should a PRM become necessary, SWCA, in consultation with the project team and regulatory agencies, can develop a detailed mitigation plan or assist a third party in the development of the PRM plan consistent with the Mitigation Rule detailed in 40 CFR 332.4. The plan would be developed based on project site elements and plans, regional conservation initiatives, or other opportunities as identified through resource agency and public communication. This element of the permitting process can be highly variable with meetings, site visits, feasibility reports, and coordination dominating the effort. SWCA can identify, or can assist in identifying, available mitigation sites and concepts for the proposed project and the necessary work required to compensate for wetland impacts given specific site conditions at both the project site and the mitigation site.

The detailed mitigation plan development includes specific actions to be taken to ensure that function and value of impacted wetlands are compensated for with the mitigation action and consistent with the elements of the Mitigation Rule. Elements of the detailed mitigation plan will include, as applicable, location exhibits, conservation contracts, and an alternatives analysis.

The cost for third party PRM cannot be determined at this time and will be covered under a separate scope. Please note that SWCA's cost provided does not include the cost of mitigation itself. That cost cannot be accurately determined until actual project impacts have been assessed.



TASK 7 – MIGRATORY BIRD TREATY ACT PRE-CONSTRUCTION FIELD SURVEYS (OPTIONAL)

The Migratory Bird Treaty Act (MBTA) passed in 1918, states that it is illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird. Under this Act avoidance of impacts to active nests is necessary. Pre-construction surveys, while not required, can ensure no impacts occur.

Prior to any clearing or grading activities conducted in avian breeding season (February-September), SWCA can conduct pedestrian surveys of the project area to locate active nests, if requested by FBCED. Once the nest is observed, its approximate location would be recorded with a GPS. Additionally, information on each species (as possible), activity status, absence/presence of adult or juvenile birds, and habitat would be recorded for each nest observed. Photographs would also be taken and the nest flagged. A letter report and shapefile could be submitted to FBCED to document the location of all active nests found.

ADDITIONAL ASSUMPTIONS/CONSIDERATIONS

- SWCA will be responsible for the daily management of the environmental services for this proposed project. Frequent and appropriate communications will be maintained between SWCA and FBCED in an effort to expedite completion of the project.
- SWCA assumes a 1-day effort utilizing a 2-person crew to complete the pedestrian natural resource survey.
- No archaeological field surveys and preparation of an Archeological Resources Survey Report are included in this proposal. If these services are required after consultation with the USACE and THC, a Change Order can be provided.
- The ROW will be clearly demarcated in the field or an accurate .shp or .kmz file will be provided in advance of surveys to ensure an accurate assessment.
- SWCA assumes a maximum of one meeting with USACE and two meetings with FBCED and/or representative project engineering firm will be necessary for the Permitting Assessment (part of Task 4).
- SWCA assumes a maximum of two meetings with the USACE Galveston District will be necessary for the NWP 14 PCN.

No preparation of an Individual Permit and associated functional assessment under the CWA, Section 404 or any other permit preparation are included in this proposal. If these services are required after determination of potential impacts and consultation with USACE and FBCED, a Change Order can be provided.

- The cost does not include an approved jurisdictional determination (AJD). If the FBCED elects to pursue an AJD, the work will be covered under another scope and cost.
- The estimate is based on SWCA's current project understanding and subsequent design changes may warrant change orders.
- This scope and cost estimate does not include wetland delineation or functional habitat assessment of any proposed mitigation sites. Scope and cost assumes use of mitigation banks and does not include development of a PRM mitigation plan.
- Costs associated with significance testing or mitigation of archeological or historic resources are not included in this proposal.



COST ESTIMATE SUMMARY

SWCA's cost estimate, listed by task, is provided in the table below. **The TOTAL LUMP SUM AMOUNT for these tasks is \$43,100.** SWCA will initially conduct authorized tasks (Tasks 1 – 4) described in this proposal for a lump sum amount of \$20,405. Optional tasks (Tasks 5 – 7) described in this proposal for a lump sum amount of \$22,695 may be warranted dependent upon the permitting process and will not be initiated until approved by FBCED. Invoicing will be once per month.

Table 1. Cost estimate by task.

TASK	DESCRIPTION	COST
1	Wetland Delineation	\$7,200
2	Wetland Delineation Reporting	\$6,441
3	Permitting Assessment	\$5,264
4	Cultural Resources Constraints Analysis	\$1,500
	TASKS 1 – 4 TOTAL	\$20,405
	Optional Tasks	
5	Pre-construction notification (PCN) and Functional Assessment (Optional)	\$17,300
6	Wetland Mitigation Plan (Mitigation Bank Option Only) (Optional)	\$2,729
	MBTA Pre-construction surveys (Optional)	\$2,666
7	TASKS 5 – 7 TOTAL	\$22,695
	TOTAL	\$43,100

If you have any questions or require any additional information, please call 281.617.3217 or e-mail (kwinkler@swca.com). Thank you for the opportunity to assist with this project.

Sincerely,

Kerry Winkler
Senior Project Manager

- cc: Matt Stahman, SWCA, Houston Principal
- Matt Genotte, SWCA, Houston Natural Resources Program Director
- Mike Crow, SWCA, Houston Cultural Resources Program Director
- Lynne Ray, SWCA, Project Manager