AMENDMENT NO. 2 TO AGREEMENT FOR ENGINEERING SERVICES

THE STATE OF TEXAS §
§
COUNTY OF HARRIS §

THIS AMENDMENT NO. 2 TO AGREEMENT is made, entered into, and executed by and between the **Harris County Flood Control District**, a body corporate and politic under the laws of the State of Texas, hereinafter called "District," and **R.G. Miller Engineers, Inc.**, a Texas corporation, hereinafter called "Engineer."

WITNESSETH, THAT

WHEREAS, on or about March 26, 2019, the District and the Engineer entered into an Agreement for Engineering Services, under Purchase Order No. P317581, to provide design, bidding, and construction phase engineering services in support of construction of the Inwood Forest Stormwater Detention Basins; Harris County Flood Control Unit E500-21-00 (the "Agreement"); and

WHEREAS, the District and the Engineer previously amended the Agreement, on May 19, 2020, to provide for additional design, bidding, and construction phase engineering services to be performed by Engineer and additional compensation to be paid to Engineer in connection with the project; and

WHEREAS, the District requires additional design, bidding, and construction phase engineering services as provided under Section II, Character and Extent of Services, Section III, Additional Services and under Appendix A and Appendix B to the Agreement; and

WHEREAS, the District and the Engineer now desire to replace Appendix B, General Scope of Additional Services with the attached Appendix B (Revised), General Scope of Additional Services, to the Agreement; and

WHEREAS, the Engineer is willing to provide the necessary additional engineering services for further consideration; and

WHEREAS, the District and the Engineer now desire to increase the Limit of Appropriation by $312,295.23, to $1,687,830.23.

NOW, THEREFORE, the District and the Engineer, in consideration of the mutual covenants and agreements herein contained, do mutually agree as follows:

SECTION V of the Agreement, entitled, "The Engineer's Compensation," reading:

For and in consideration of the Basic Services performed by the Engineer, as set forth in Section I, the District shall pay the Engineer a fixed fee of $874,000.00, with monthly payments toward same based on the percentage of each task completed during the preceding calendar month, subject to acceptance by the District. The fee allocation by task to be used for billing purposes is as follows:

		Amount
A.1.A	50% Submittal	$491,500.00
A.1.B	Bid Ready Submittal	$255,000.00
A.1.C	Final Plans Submittal	$127,500.00
		$874,000.00

Adjustments to the fee allocation may be made within the Total Basic Services Fee with prior review and written approval by the Director.

The District shall reimburse the Engineer according to the following rates for Additional Services provided pursuant to Section III by employees of the Engineer:

Responsibility	Maximum Hourly Rate
Principal	$255.00
Department Manager	$240.00
Senior Project Manager	$225.00
Project Manager	$195.00
Project Engineer	$150.00
Graduate Engineer I	$117.00
Graduate Engineer II	$105.00
Engineering Associate	$ 96.00
H&H Specialist	$165.00
Senior Scientist III	$242.00
Scientist II	$105.00
Environmental Scientist	$ 96.00
Senior Designer	$126.00
Designer	$ 96.00
Senior CADD Operator	$105.00
CADD Operator	$ 90.00
CADD Technician	$ 84.00
Senior Administrative Assistant	$ 96.00
Administrative Assistant	$ 66.00
Clerical Support	$ 75.00
Contract Administrator	$126.00
Construction Manager	$135.00
Field Inspector	$ 90.00

The District may also authorize Additional Services to be compensated on a fixed fee basis upon acceptance by the Engineer. The District shall pay the Engineer a prorated amount of the fixed fee monthly, based on the percentage of the task completed during the preceding calendar month,

subject to acceptance by the District. Where authorization of Additional Services is made on a fixed fee basis, the hourly rates set out above shall not apply.

Notwithstanding anything that may be construed to the contrary herein, in no event shall the Engineer be entitled to compensation and reimbursement in excess of $501,535.00 for performing Additional Services hereunder. Nor shall the Engineer be required to perform Additional Services hereunder after becoming entitled to compensation and reimbursement of $501,535.00 for Additional Services.

Adjustments to the Additional Services budget allocation may be made with written approval by the Director.

It is expressly understood that the Engineer shall neither seek reimbursement nor will the District be obligated to pay or reimburse the Engineer for normal business expenses such as overtime, postage, messenger services, delivery charges, mileage within Harris County, parking fees, facsimile (fax) transmissions, computer time on in-house computers and graphic systems, blueline drawings or photocopies specifically required in Section II, or other costs or expenses, except those for which reimbursement is specifically provided in the following sentence. If approved in writing by the Director prior to their being incurred, the Engineer may be reimbursed the reasonable and necessary cost of the following, to the extent they are incurred in providing services hereunder: services performed by a subcontractor pursuant to authorization for such expenses and as permitted by the County Purchasing Act, copies of reports or other documents to be delivered to the District or in accordance with instructions of the District in excess of the number specifically required by Section II, costs of travel outside of Harris County, rental costs of transportation equipment necessary to gain access to the Project site, costs of presentation materials (i.e., charts, slides, transparencies), costs of abstracting, and costs of photographic and video services.

is hereby amended to read:

For and in consideration of the Basic Services performed by the Engineer, as set forth in Section I, the District shall pay the Engineer a fixed fee of $897,649.00, with monthly payments toward same based on the percentage of each task completed during the preceding calendar month, subject to acceptance by the District. The fee allocation by task to be used for billing purposes is as follows:

	Amount
A.1.A 50% Submittal	$491,500.00
A.1.B Bid Ready Submittal	$255,000.00
A.1.C Final Plans Submittal	$151,149.00
	$897,649.00

Adjustments to the fee allocation may be made within the Total Basic Services Fee with prior review and written approval by the Director.

The District shall reimburse the Engineer according to the following rates for Additional Services provided pursuant to Section III by employees of the Engineer:

Responsibility	Maximum Hourly Rate
Principal	$255.00
Department Manager	$240.00
Senior Project Manager	$225.00
Project Manager	$195.00
Project Engineer	$150.00
Graduate Engineer I	$117.00
Graduate Engineer II	$105.00
Engineering Associate	$ 96.00
H&H Specialist	$165.00
Senior Scientist III	$242.00
Scientist II	$105.00
Environmental Scientist	$ 96.00
Senior Designer	$126.00
Designer	$ 96.00
Senior CADD Operator	$105.00
CADD Operator	$ 90.00
CADD Technician	$ 84.00
Senior Administrative Assistant	$ 96.00
Administrative Assistant	$ 66.00
Clerical Support	$ 75.00
Contract Administrator	$126.00
Construction Manager	$135.00
Field Inspector	$ 90.00

The District may also authorize Additional Services to be compensated on a fixed fee basis upon acceptance by the Engineer. The District shall pay the Engineer a prorated amount of the fixed fee monthly, based on the percentage of the task completed during the preceding calendar month, subject to acceptance by the District. Where authorization of Additional Services is made on a fixed fee basis, the hourly rates set out above shall not apply.

Notwithstanding anything that may be construed to the contrary herein, in no event shall the Engineer be entitled to compensation and reimbursement in excess of $790,181.23 for performing Additional Services hereunder. Nor shall the Engineer be required to perform Additional Services hereunder after becoming entitled to compensation and reimbursement of $790,181.23 for Additional Services.

Adjustments to the Additional Services budget allocation may be made with written approval by the Director.

It is expressly understood that the Engineer shall neither seek reimbursement nor will the District be obligated to pay or reimburse the Engineer for normal business expenses such as overtime, postage, messenger services, delivery charges, mileage within Harris County, parking fees, facsimile (fax) transmissions, computer time on in-house computers and graphic systems, blueline drawings or photocopies specifically required in Section II, or other costs or expenses, except those for which reimbursement is specifically provided in the following sentence. If approved in writing by the Director prior to their being incurred, the Engineer may be reimbursed the reasonable and necessary cost of the following, to the extent they are incurred in providing

services hereunder: services performed by a subcontractor pursuant to authorization for such expenses and as permitted by the County Purchasing Act, copies of reports or other documents to be delivered to the District or in accordance with instructions of the District in excess of the number specifically required by Section II, costs of travel outside of Harris County, rental costs of transportation equipment necessary to gain access to the Project site, costs of presentation materials (i.e., charts, slides, transparencies), costs of abstracting, and costs of photographic and video services.

SECTION IX of the Agreement, entitled, "Limit of Appropriation," now reading:

The Engineer clearly understands and agrees, such understanding and agreement being of the absolute essence to this Agreement, that District shall have available the total maximum sum of $1,375,535.00 specifically allocated to fully discharge any and all liabilities that may be incurred by District pursuant to the terms of this Agreement, and that the total maximum compensation the Engineer may become entitled to hereunder and the total maximum sum the District shall become liable to pay to the Engineer hereunder shall not under any conditions, circumstances, or interpretations hereof exceed the said total maximum sum provided for in this Section and certified as available therefor by the County Auditor as evidenced by the issuance of a purchase order from the Harris County Purchasing Agent.

is hereby amended to read:

Engineer clearly understands and agrees, such understanding and agreement being of the absolute essence to this Agreement, that the District shall have available the total maximum sum of $1,687,830.23, specifically allocated to fully discharge any and all liabilities that may be incurred by the District pursuant to the terms of this Agreement, and that the total maximum compensation the Engineer may become entitled to hereunder and the total maximum sum the District shall become liable to pay to the Engineer hereunder shall not under any conditions, circumstances, or interpretations hereof exceed the said total maximum sum provided for in this Section and certified as available therefor by the County Auditor as evidenced by the issuance of a purchase order from the Harris County Purchasing Agent.

SECTION XII of the Agreement, entitled, "Compliance and Standards," reading:

The Engineer agrees to perform the work hereunder in accordance with generally accepted standards applicable thereto and shall use that degree of care and skill commensurate with the Engineer's profession to comply with all applicable state, federal, and local laws, ordinances, rules, and regulations relating to the work to be performed hereunder and the Engineer's performance. The Engineer represents that, prior to performing hereunder, he has or shall obtain all necessary licenses, ownership, or permission for use of any and all proprietary information, materials, or trade secrets employed in the performance of work hereunder for the District and agrees that it shall not copy, reproduce, recreate, distribute, or use any such proprietary information, materials, or trade secrets of any third party, except to the extent permitted by such third parties, or as otherwise authorized by law.

In accordance with TEX. GOV'T CODE ANN. § 2270.002, the Engineer warrants and represents that it does not boycott Israel and agrees that it will not boycott Israel during the term of this contract.

The Engineer represents and certifies that, at the time of execution of this Agreement, the Engineer (including, in this provision, any wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate of the same) is not listed by the Texas Comptroller of Public Accounts pursuant to Chapters 2252 or 2270 of the Texas Government Code, nor will the Engineer engage in scrutinized business operations or other business practices that could cause it to be listed during the term of this Agreement.

is hereby amended to read:

The Engineer agrees to perform the work hereunder in accordance with generally accepted standards applicable thereto and shall use that degree of care and skill commensurate with the Engineer's profession to comply with all applicable state, federal, and local laws, ordinances, rules, and regulations relating to the work to be performed hereunder and the Engineer's performance. The Engineer represents that, prior to performing hereunder, it has or shall obtain all necessary licenses, ownership, or permission for use of any and all proprietary information, materials, or trade secrets employed in the performance of work hereunder for the District and agrees that he shall not copy, reproduce, recreate, distribute, or use any such proprietary information, materials, or trade secrets of any third party, except to the extent permitted by such third parties, or as otherwise authorized by law.

In accordance with TEX. GOV'T CODE ANN. § 2270.002, the Engineer warrants and represents that it does not boycott Israel and agrees that it will not boycott Israel during the term of this contract.

The Engineer represents and certifies that, at the time of execution of this Agreement, the Engineer (including, in this provision, any wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate of the same) is not listed by the Texas Comptroller of Public Accounts pursuant to Chapters 2252 or 2270 of the Texas Government Code, nor will the Engineer engage in scrutinized business operations or other business practices that could cause it to be listed during the term of this Agreement.

The Engineer warrants and represents, in accordance with Tex. Gov't Code Ann. § 2274.002, that unless the Engineer meets an exemption under subsection (c), then, as required by subsection (b), the Engineer's signature on this Agreement constitutes the Engineer's written verification that it does not boycott energy companies and will not boycott energy companies during the term of the contract.

The Engineer warrants and represents, in accordance with Tex. Gov't Code Ann. § 2274.002, that unless the Engineer meets an exemption under subsection (c) or section 2274.003, then, as required by subsection (b) of section 2274.002, the Engineer's signature on this Agreement constitutes the Engineer's written verification that it does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association and will not discriminate against a firearm entity or firearm trade association during the term of the contract.

Appendix B to the Agreement entitled "General Scope of Additional Services," is hereby replaced by the attached Appendix B (Revised), "General Scope of Additional Services," which is made a part thereof by reference for all purposes.

All other terms and provisions of the Agreement and the previous Amendment shall remain in full force and effect as originally written.

EXECUTED on _____.

APPROVED AS TO FORM:

CHRISTIAN D. MENEFEE
HARRIS COUNTY ATTORNEY

DocuSigned by:
Mitzi Turner
27D876F21B1047A...

By_____
Mitzi Turner
Assistant County Attorney

HARRIS COUNTY FLOOD CONTROL DISTRICT

By_____
Lina Hidalgo
County Judge

ATTEST:

DocuSigned by:
Urs Rathgeb
788E058BD2F94A6...

Urs Rathgeb
Name

Chief Financial Officer
Title

R.G. MILLER ENGINEERS, INC.

DocuSigned by:
Jack Miller
97305AED667E4F9...

Jack Miller
Name

President
Title

APPENDIX B (Revised)

GENERAL SCOPE OF ADDITIONAL SERVICES

The Engineer shall render the following Additional Services in connection with the Project when authorized in writing by the Director:

1. COMMUNITY ENGAGEMENT SERVICES

A. Provide support services required to plan, prepare for, and conduct a community engagement meeting (or meetings) related to the Project in accordance with District guidelines.

B. Work with HCFCD to define and clearly outline project communications so that all collaborating entities (City of Houston, Harris County Precinct 1, Houston Parks Board, HCFCD) are on the same page. In addition to the required HCFCD 2018 Bond Program Community Engagement Public Meeting tactics required for this project as outlined in the ensuring section, to assist HCFCD's goal to inform the public and relevant stakeholders, the project communications may include, but are not limited to the following tactics.

Important note:

1) Attending project team meetings.
2) Prepare and support the execution of a strategic communications plan.
3) Developing talking points or key messages, example: about why the project is changing and why construction hasn't started yet.
4) Attending or providing written updates for meetings hosted by area HOA, management districts, or others.
5) Developing web copy.
6) Drafting communications for internal or external purposes.
7) Research, coordination with partners or community leaders (example First Tee).
8) Any other tasks requested by HCFCD or R.G. Miller Engineering which are specific to communications and/or community engagement.
9) Developing Email communications.
10) Preparing project updates for elected officials.
11) Direct Mail.
12) Social media content development.
13) Tracking communications activities.

C. Based on our scoping knowledge of the project at this time, the project may utilize HCFCD 2018 Bond Funds and a Bond Program Community Engagement Public Meeting will be hosted by HCFCD during the design phase for the purpose of gathering public input for amenities, recreation and design.

The following tasks will be performed in coordination with HCFCD guidance documents:

1) Task 2a: Community Meeting Noticing
   a. Develop a bond project specific stakeholder database including elected officials, property owners, residents, business owners, and associated community groups interested/impacted by the bond project.
   b. Draft notices for a community meeting. HCFCD to distribute all electronic notices. Plans for door-to-door delivery and/or US Postal service needs/roles and responsibilities will be discussed during the planning process. HCFCD will reimburse any costs related to US Postal processing and mailing. Audiences include:

- Elected officials
- Stakeholders
- HCFCD website visitors
- HCFCD social media followers (i.e. Twitter, Facebook, NextDoor)
- Neighbors

2) Tasks 2b: Community Meeting Logistics and Implementation
   a. Participate in a project kick off meeting.
   b. Develop a meeting format.
   c. Develop a written meeting plan, including detailed delivery schedules.
   d. Develop and/or coordinate public information tools for distribution at each bond project community meeting, including:
      - A project-specific PowerPoint presentation.
      - Project-specific informational handout (consisting of meeting agenda and project problem statement).
      - Project-specific comment form.
      - Project-specific website content and graphics.
      - Roll plots, informational maps, and exhibits.
      - Community meeting registration documents.
      - Hardcopy bond project public comment forms.
      - Nametags for project leadership.
   e. Coordinate with HCFCD to secure all necessary community meeting resources and infrastructure, including, but not limited to:
      - Outdoor and indoor directional signage.
      - Community meeting equipment, including easels, a microphone/PA system, projector, projection screen, multiple computers, required cables, podium, pens, comment collection boxes, name badge holders, a digital camera to document the meeting, a digital video camera/and or equipment necessary to livestream the meeting online, and additional tables and chairs (if required by the meeting facility).
      - Printed public information tools as identified above (quantity should exceed anticipated attendance/venue capacity).
   f. Identify and secure community meeting venue
   g. Coordinate security and Harris County Fire Marshal personnel, as needed.
3) Tasks 2c: Public Comment and Community Meeting Documentation
   a. Provide responses for all public comments received during the stated public comment period in coordination with the HCFCD.
   b. Update all online tools and materials to convey the end of the comment period.
   c. Document community engagement efforts, including public comments and responses related to the bond project, color photographs, electronic links to video files, and examples of public noticing and public information tools prepared to support each meeting.
4) Tasks 2d: Community Engagement Completion Activities
   a. Draft a “Thank you” letter to be delivered to each meeting venue, acknowledging their support and assistance.
   b. Provide finalized, project-related files to the HCFCD at the close of the community engagement process for each meeting.
   c. Participate in a “Community Engagement Close-out” meeting with HCFCD.
5) Assumptions:
   a. Engineer consultant team will provide three public involvement specialists for each community meeting.
   b. Video production services and printing costs will not be provided by Engineer’s consultant team to support the community meetings.
   c. HCFCD will provide audio visual equipment and personnel to deliver the presentation and/or live stream the presentations during each community meeting.
   d. HCFCD will provide notice of the meeting to Harris County Commissioners Court.

e. Three planning meetings will be held in preparation for each community meeting (Kick off, Noticing Review, and Close-out).
f. The client and/or HCFCD will provide project information to support the development of public information tools.

2. SURVEY SERVICES

A. Perform survey in accordance with the District's Surveying Guidelines and other District design requirements as designated in writing by the Director.

B. Provide new District monumentation as required.

C. Provide as-built surveys to determine final quantities of excavated material upon completion of construction. Provide information for the Record Drawings.

D. Unit of Measure – this project shall be prepared using English units.

E. Deliverables in Electronic Format: In addition to the hard copy Project deliverables required below, Engineer shall submit electronic copies of intermediate and final reports, documents, plans and other work products on Compact Disks (CDs) or other suitable media.
   1) Submit design drawing files and exhibits in AutoCAD Civil 3D 2011 or later version format.

3. GEOTECHNICAL INVESTIGATION

A. Perform in accordance with the District's Geotechnical Investigation Guidelines and other District requirements.

B. Review the "Bid Ready" plans for the purpose of confirming that the design recommendations of the geotechnical report are complied with.

C. Boring Logs in the final plans shall be signed and sealed by the Professional Engineer licensed in the State of Texas who was responsible for signing and sealing the Geotechnical Work the plans are based upon.

4. ENVIRONMENTAL SERVICES

The project area was previously evaluated for the presence of waters of the U.S. (WOTUS), and an approved jurisdictional determination was issued by the U.S. Army Corps of Engineers (USACE) Galveston District on October 25, 2017. It is anticipated that a USACE Section 404 Individual Permit (IP) will be necessary for construction of the proposed project. In addition, development of an Environmental Assessment (EA) in accordance with the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) – Hazard Mitigation Grant Program (HMGP) is necessary.

To facilitate the permitting and construction of the proposed Inwood Forest Stormwater Detention Basin Project, the proposed scope of work (SOW) includes USACE Section 404 Individual Permit coordination, and preparation of an Environmental Assessment (EA) with the following tasks:

A. Threatened and Endangered Species Assessment

The Engineer will provide a review of federally and state-listed threatened and endangered (T&E) species potentially occurring in the Harris County project area and an effects

determination of potential impacts to listed species within the project area. Included in the assessment is a review of aerial imagery, U.S. Geological Survey topographic maps, U.S. Department of Agriculture soil maps, Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panels, and US Fish & Wildlife Service (USFWS) datasets. In addition, the Engineer will:

1) Review official USFWS / IPaC species list for the project area,
2) Review TPWD Annotated County List of Rare Species for Harris County,
3) Review USFWS critical habitat maps for project area,
4) Review site photographs and descriptions,
5) Provide an effects determination for each federally-listed T&E species,
6) Provide an impact determination for each state-listed T&E species.

The results of the T&E assessment will be presented in a threatened and endangered species review technical memorandum, typically provided to the client within 10 days of the completion of a 1-day site visit. A final technical memorandum will be provided within five (5) business days of the receipt of comments from the client.

B. Waters of the U.S. Functional/Conditional Assessment

Since the project proposes greater than 1/10-acre impacts to wetlands, compensatory mitigation will be required for Section 404 permitting. Mitigation planning requires the current condition of wetlands and streams within the project area be assessed in order to quantitatively calculate the required mitigation credits for the project. The Engineer will conduct a conditional/functional assessment for all impacted wetlands and streams in the project area following the USACE Galveston District approved methodology, which includes the Level 1 Stream Condition Assessment and Interim Hydrogeomorphic Approach (iHGM) for wetlands.

Results of the functional/conditional assessment will be provided in a technical report to the client typically within 10 days of the completion of a 2-day site visit and will detail the calculations of compensatory mitigation required for the project. A final technical report will be provided to the client within 5 business days of the receipt of comments from the client.

This task assumes the client will provide the necessary engineering site plan drawings required to calculate WOTUS impacts.

C. Cultural Resources Background Study

The PEER documents indicate that all or portions of the project area have been surveyed for cultural resources, although a summary of the findings of those surveys and a recommendation on whether a pedestrian survey of the project area would be warranted was not included. Based on this information, it is recommended that a cultural resources background study technical memorandum be prepared for the proposed project.

An archeologist will compile available information on previously recorded cultural resources surveys, archaeological sites, and historic resources within the proposed project area and to assess the potential for the presence of unidentified cultural resources eligible for inclusion in the National Register of Historic Places (NRHP). The cultural resources background study document is intended to be used to coordinate the cultural resource compliance with relevant regulatory agencies.

D. Cultural Resources Pedestrian Survey

This is an optional task based on the outcome of future correspondence with the USACE during the Section 404 permitting process. Upon consultation with the USACE

archeologist regarding the proposed project, there is a potential for the USACE to require a cultural resources pedestrian survey of the project area. **If required by the USACE, the client may authorize this task individually.**

Following appropriate agency coordination, an intensive archaeological field survey will be conducted within the project area. The survey will be of sufficient intensity to determine the nature, extent, and if possible, significance of any cultural resources located within the survey area. Archaeologists will complete a pedestrian survey of the proposed project area utilizing pedestrian transects. In addition to pedestrian transects, shovel test units will also be excavated within the project area in order to examine subsurface deposits. Based on the estimated scope of the survey area, Texas Historical Commission (THC) survey standards require 1 excavated shovel test unit per every 3 acres of project area.

If an archaeological site is encountered in the proposed project area during the investigation, it will be explored as much as possible with consideration to land access constraints. Any discovered sites will be assessed in regard to potential significance so that recommendations can be made for proper management (avoidance, non-avoidance, or further work). Additional shovel tests will be conducted per agency standards at any discovered sites to define horizontal and vertical boundaries. Appropriate state site forms will be filled out for each site discovered during the investigations.

If archaeological sites are identified in the project area that are potentially eligible for listing on the NRHP, the Engineer would alert the client immediately and assist in finding an appropriate management strategy prior to completing the summary letter or agency permit report. Draft copies of the reports will be submitted to the client for review and comment. Once this has been accomplished, appropriate edits will be made, and copies of the report will be produced and submitted to the appropriate agencies.

For purposes of this proposal, the Engineer assumes a level of effort for field work that includes documentation of one (1) archaeological site as part of the project. Discovery of more sites may affect the cost estimate.

The Engineer assumes that the project will avoid all potential impacts to cultural resources and that only survey documentation required for the acquisition of permits within USACE jurisdictional areas will be necessary. If the scope of documentation changes, the cost may be affected. Increased documentation/examination (i.e. deep testing, testing, or data recovery) within the project area was not included in this scope of work. This proposal includes approximately 200 acres of cultural field survey.

E. Mitigation Bank Coordination

Mitigation is required for permitting impacts to wetlands greater than 0.1-acre. This task includes mitigation bank credit cost development for the proposed project, including research of the available Mitigation Banks within the project area watershed, and identification of mitigation credit costs for proposed impacts to WOTUS using a set of assumptions on the functional/conditional values of WOTUS in the project area. This task does not include development of a permittee-responsible mitigation (PRM) plan. The actual purchase cost of the mitigation bank credits is not included in the cost estimate herein. Information from this task will be summarized in a findings letter to the client, and the information will be used to complete the mitigation plan requirement for the Section 404 Individual Permit application identified in the following task.

F. Section 404 Individual Permit Application

Section 404 Individual Permits are authorizations issued by the USACE where the project does not meet the requirements of a general permit (i.e. Nationwide General Permit or

Regional Permit) and involves the proposed discharge of dredge or fill materials to WOTUS. These permits receive the highest level of scrutiny by the USACE and are generally subject to a public comment period.

Assuming potential waters of the U.S. are identified within the Project Area and a Section 404 permit is required for construction of a proposed project that involves greater than 0.5-acre fill within waters of the U.S., an Individual Permit including a mitigation plan would be required.

The Engineer will prepare a USACE Section 404 Individual Permit application for the proposed project in collaboration with the client, describing the existing property and the proposed mitigation plan, and provide permitting assistance for submittal to the USACE Galveston District. This task will include:

1) Preparation of Engineering Form 4345.
2) Completion of TCEQ Tier II 401 Certification Questionnaire, including a description of Alternatives Analysis based on engineering design alternatives reviewed by the client.
3) Completion of Coastal Zone Management Consistency statement.
4) Include the WOTUS functional/conditional assessment of the project area and prepare mitigation banking plan for the project.
5) Include the threatened and endangered species assessment of the proposed project.
6) Include the cultural resources background study of the project area (and pedestrian survey report, if applicable).
7) Conduct one pre-submittal meeting with the USACE Galveston District.
8) SOW includes one revision to the application documents to incorporate comments from the USACE. This task assumes that only minor revisions would be necessary with effort up to 8 hours of work at the current rate for Wetland Delineator.
9) SOW includes identification of mitigation credit costs for proposed impacts to wetlands and/or streams in the Project Area.
10) SOW includes preparation of one round of public comment responses with one revision to the application following the Public Notice response period. This task assumes the level of effort for public comment response as shown in the budget. Additional work necessary can be completed and billed at the current hourly rate for Environmental Professional based on an updated estimate provided to the Client for approval prior to conducting this additional work.
11) SOW includes weekly communication with the client regarding documentation status prior to USACE submittal. Upon IP application submittal, monthly communication with the client will be upheld as the application is processed by the USACE.

It is assumed that the Client will provide the required Plan View and Elevation (Cross-Section) site development engineering drawings, and information regarding design alternatives as required by the USACE to avoid and minimize impacts to WOTUS. The actual purchase cost of mitigation bank credits required for the mitigation plan is not included in the cost estimate herein.

G. Environmental Assessment Documentation

A draft Environmental Assessment (EA) will be prepared to analyze the potential consequences to the natural and human environment associated with the Proposed Action, the No Action Alternative, and other potential alternatives per the National Environmental Policy Act (NEPA) (42 United States Code [USC] 55 parts 4321 et seq., 2000), the President's Council on Environmental Quality (CEQ) implementing regulations. The draft EA will include documentation on the proposed project and potential impacts to environmental resources including:

1) Purpose and Need
2) Alternatives Analysis
3) Physical Resources, including soils, air quality, and climate
4) Water Resources, including surface water, ground water, and water quality, wetlands, and floodplains
5) Biological Resources, including threatened and endangered species and critical habitats, and wildlife
6) Cultural Resources
7) Socioeconomic Resources, including Environmental Justice, hazardous materials, noise, traffic, public service and utilities, public health and safety
8) Cumulative Impacts

This task assumes that the Engineer consultant team will assist the client and the lead agency in charge of the NEPA process (FEMA) by preparing a draft EA for the proposed project, with input from the project design team, the regulatory agencies, and the public. The draft EA will be submitted to FEMA for review and comment. It is assumed that Engineer consultant team will respond to comments and minor revisions will be incorporated into a final draft EA.

This task also assumes that the public meeting coordination and public meeting comments and responses will be summarized by a separate public relations team under a separate task, not included in the budget herein.

H. Public Involvement Support

This task is intended to provide support assistance to the public involvement portion of the proposed project, in a role related to participation in activities related to the environmental documentation of the project. This task includes time for two staff to attend one public meeting to support the engineer and client with the environmental documentation for the project. In addition, assistance will be provided in responding to public comments related to the environmental documentation that arise from the public engagement activities.

Assumptions

- The compensatory mitigation required for the proposed project will be accomplished with mitigation bank credit purchase. A permittee-responsible mitigation (PRM) plan is not included in this scope.

5. IMPACT ANALYSIS & ADDITIONAL MODELING

A. Prepare, sign and seal a letter summarizing the impact of the Project on flood profiles and peak flows.

B. Current project will be a single phase with all the basins west of Antoine deepened to capture benefits from planned improvements along White Oak Bayou in the area. This task will include modeling to support these revisions and provide revised flood reduction benefit (WSE data).

C. The Engineer regrade all the basins and seek HCFCD concurrence with the general design approach, basin interconnections, and grading plan including considerations for First Tee impacts. Upon HCFCD approval, Engineer will incorporate into an updated dynamic HEC-RAS model (to be constructed using the models prepared by LAN in the PER Phase) including updating all cells within the Inwood Forest basin system. As part of this task, confirm basin cell interconnect and overflow weir sizes and prepare a technical

memorandum summarizing the updated modeling efforts and results. The pre-project conditions dynamic modeling and results will be evaluated but are assumed to be suitable for use in this analysis. HEC-RAS version 5.0.3 will be used again to stay consistent with previous modeling efforts. It is assumed that no phasing will occur, and the entire basin system will be constructed at the same time. The technical memorandum and models will be submitted HCFCD for up to two (2) rounds of review and comment.

D. An HMGP application for funding will need to be updated to capture the revised post-project water surface elevations, benefit-cost ratios, etc. This task will provide support on for the HMGP Application task related to the hydraulic modeling and model results used in the benefit-cost analysis to be performed by another firm.

E. Upon completion of a final plan set, an adverse impact analysis will be conducted. Previously, an impact analysis had been submitted and approved by HCFCD for Phase 1 of the Inwood Forest Stormwater Detention Basin. The same methodology used in that effort will be applied here. The dynamic HEC-RAS models developed under Task 1 will be used to inflow basin inflow and outflow to develop two (2) steady state HEC- RAS models for the FEMA-studied streams impacted by the construction of this project, E100-00-00 and E121-00-00. The pre-project conditions steady-state modeling and results developed during the Phase 1 impact analysis will be evaluated but are assumed to be suitable for use in this analysis. Water surface elevations will be evaluated to ensure a strict no- rise condition in going from pre-project to post-project conditions. The impact analysis report will be submitted to HCFCD for up to two (2) rounds of review and comment.

6. SUBSURFACE UTILITY EXPLORATION (SUE)

A. Conduct where appropriate a subsurface utility exploration (SUE) to definitively locate potential utilities (public and private) that are in conflict with the Project. Located utilities shall then be shown on the plans as location verified.

7. BIDDING PHASE

A. Attend and assist the District in conducting the pre-bid conference including answering questions and interpreting the drawings and specifications.

B. Prepare necessary addenda to address issues or clarifications necessary for completion of the bidding process.

C. Review tabulated bid results for discrepancies including potential unbalancing of unit bid prices and provide a written recommendation issued on company letterhead for the award of a construction contract.

D. Provide clarification, correct discrepancies, correct errors and omissions; assist the District in evaluating the bid proposals; and assist in the preparation of a construction contract between the District and the successful bidder.

E. Prepare a Submittal Log in coordination with the District Design and Construction Project Managers for District approval. The log shall list those items identified in the Contract Documents that require a submittal by the Contractor for District approval. Issue the Submittal Log to the Contractor within one week after the Project is awarded.

F. Prepare a set of “Issued for Construction Drawings” within 10 business days after bids are received. Revise the “Issued for Construction Drawings” to reflect all addenda changes made to the Bid Documents during the bid period.

8. CONSTRUCTION MANAGEMENT SERVICES

A. Assign a professional engineer with Construction Management experience, licensed in the State of Texas, to manage a project and to attend meetings of any official nature concerning the project, unless otherwise set forth in the scope of work or approved in writing by the District. All submittal approvals and Request for Information (RFI) responses must include the signature of either the assigned CM Engineer, Engineer of Record or their equally qualified designee also licensed as a professional engineer in the State of Texas.

1) Schedule and attend a pre-construction prep meeting to discuss with the District Construction Project Manager the roles and requirements during construction.
2) Conduct pre-construction conferences for assigned projects.
3) Prepare for, schedule and conduct monthly construction progress meetings at the project site with the District and the contractor in attendance. Meetings shall be scheduled a minimum one (1) week prior to the contractor's scheduled application for payment. Items to be updated and discussed include:
   a. Meeting Agenda
   b. Update to Submittal and RFI Logs Manage submittals and RFIs in Unifier
   c. Receive a revised construction schedule from the contractor, review the schedule and provide comments to District Construction Project Manager. Schedules shall be tracked in the Submittal Log in Unifier
   d. Work progress accomplished in previous month
   e. Issues encountered at the construction site including utility conflicts
   f. Planned activities for next month
   g. Progress meeting notes shall be prepared, distributed for comments, finalized after incorporating comments and provided to the attendees at the next meeting.
4) Make periodic visits to the project site at appropriate intervals (not less than monthly). Personal Protective Equipment (PPE) requirements at the project site shall be followed, and all visitors must check in with the District Designee immediately upon accessing the site. Monthly visits shall be combined with the monthly construction progress meetings as applicable.
   a. When making a site visit, the Engineer shall check in with the Inspector at the site so it can be noted in the Daily Work Report. If the inspector is not present, the Engineer shall notify the District Construction Project Manager that he/she is on-site.
5) Immediately notify the District of any unsafe conditions or major work deficiencies observed during the site visits for incorporation into the project daily work report.
6) Submittals: The Engineer will manage and review submittals, shop drawings, samples, and other submissions furnished by the contractor that are submitted to the Engineer via Unifier. The Engineer will determine if the shop drawings, samples, and other submissions conform to the requirements of the Contract Documents.
   a. The Engineer will review and ensure a response to the Contractor per construction contract terms with copy to the District
   b. If a submittal from a contractor is for approval of a disposal site for excavated material, the Engineer will forward the submittal to the District's Environmental Regulatory Compliance Department and will not issue approval or disapproval of the site without written notification from the District's Environmental Regulatory Compliance Department.
7) Requests for Information (RFI's): The Engineer shall manage RFIs through Unifier. Provide all responses within three (3) business days of a logged request. Responses shall clearly provide design clarification and recommendations to assist the District in resolving field problems relating to construction.
   a. If the response does not impact the contract time and/or result in a change in cost, the Engineer shall provide responses directly to the contractor within three (3) business days of a logged request.

b. If the response does impact the contract time and/or result in a change in cost, the Engineer shall provide a draft response to the District. The Engineer shall coordinate with the District for a response prior to returning to the contractor.

8) When required as a result of field conditions, an RFI, or other reasons, the Engineer shall coordinate modifications to construction documents with the design Engineer of Record as needed during construction of the project. The Engineer will include an opinion of whether any additional costs or time or changes to the contract are potentially warranted.—Upon approval by the District, the Engineer shall issue the revised plan(s) to all planholders.
   a. The Engineer shall maintain a formal list of planholders and track all plan revisions on the list.
   b. The Engineer shall also obtain and coordinate with the Engineer or Record any change in quantities (extensions, additions and deletions) with all revisions.
9) Evaluate contractor change and cost proposals, including changes by RFI's, by preparing an independent estimate of the extended pay item quantities and the proposed new pay items required. Document sources used to determine the costs for new work. Recommend to the District to either approve or disapprove the contractor's proposal and justify the recommendation by providing all backup used in the evaluation of the cost proposal.
10) Review monthly pay estimates to substantiate contractor payments. Notify District within five (5) business days of receipt if issues or concerns are found. If designated by the District, the Engineer will approve contractor's payment applications.
11) The Engineer shall review all material test results received from the contractor and/or the District's Independent Material Testing and Engineering consultant. The Engineer shall advise the District in writing if any discrepancies are observed and evaluate solutions proposed by the contractor for failing materials.
12) Schedule and conduct at the appropriate time a 90% construction site walkthrough. Scheduling shall be coordinated through the District Design Project Manager and include invitations to appropriate District staff that will be responsible for maintenance and further efforts at the site after construction is complete. PPE requirements at the project site shall be followed and all visitors must check in with the District immediately upon accessing the site. Prepare a site observation report to document all comments received by the attendees. This site visit shall be scheduled coincident to a monthly construction progress meeting.
13) Schedule and conduct the Substantial Completion inspection (a definition of Substantially Complete is provided in the Project Manual General Conditions or as provided in Special Provisions). The Engineer shall prepare a list of items remaining to be completed or corrected by the contractor (the Punch List), and provide the list to the contractor with a copy to the District and attendees within one (1) business day after the date of the inspection. When the project is found by the Engineer to be Substantially Complete, the Engineer will provide a written recommendation to the District stating such.
14) Schedule and conduct the Final Inspection to verify all Punch List items have been corrected by the contractor. Provide written notification to the District stating whether or not all Punch List items have been completed.
15) The Engineer shall coordinate with the EOR and the District to determine final quantity of material excavated in comparison with the pre-construction conditions and submit to the District. This determination will be made using survey provided by others and provide written comments to the District of any concerns or discrepancies. Final approved quantities should be logged using Unifier.
16) The Engineer shall review and sign off on final pay estimate within two (2) business days.
17) Coordinate preparation of the Record Drawings. The Record Drawings shall become the property of the District and shall show significant changes made in the work by the contractor during the construction of the project. Record Drawings shall be

prepared on the original "Issued for Construction" drawings in the format specified by the District at the time of execution. The Engineer shall prepare the Record Documents based solely upon the annotated "as-built" drawings provided by Contractor, addenda, revisions issued by the Engineer, and change orders. The Engineer shall also include any other data furnished by the District or the contractor that the Engineer feels is substantial. Engineer should label the drawings as Record Drawings, and follow Record Drawings standards, as provided by the District.

9. REVISIONS

A. Make requested revisions to documents and materials prepared under this Agreement.

B. Provide such engineering services necessary for such revision, when they are not necessitated by any fault of the Engineer and such revisions are inconsistent with approvals or instructions previously given by the District, or are made necessary by the enactment or revision of codes, laws, or regulations issued subsequent to the preparation of such documents.

10. CONSTRUCTION PROJECT MANAGEMENT

A. The Engineer will provide the following services in addition to the Construction Management Services listed in Section 2 above. Some services listed below may be performed in Unifier.
   1) Determine limits of proposed repairs where indicated in the plans "as directed by the Engineer."
   2) Assess field conditions and modify proposed repair methods through coordination efforts with the contractor onsite. Provide the contractor and District with the proposed modifications.
   3) Interface with other governmental agencies and citizens in the field and discuss their concerns and requests with District Construction Management.
   4) Communicate with the District Design Project Manager when conditions require alternate methods of construction in the field.
   5) Discuss proposed construction repair methods with the District Design Project Manager when a modification to the design repair is required. Alternate methods of construction may require the addition of pay items to the contract.
   6) Manage contract quantities for unit pay items and discuss potential quantity overruns with Construction Management prior to exceeding contract quantities.
   7) Prepare Variances and Contract Modifications to document extensions in pay item quantities or additional pay items required for changes in contract.
   8) Discuss field progress and concerns with Construction Management prior to monthly progress meetings.
   9) Provide interpretation of District Specifications and contract Pay Items to the Inspector and the contractor.
   10) Facilitate understanding and agreement between the District and the contractor in matters concerning the project plans and contract.
   11) Review contractor's monthly schedule updates and report schedule variations and reasons for the variations to District Construction Management.
   12) Review contractor's pay applications for accuracy.

11. RESIDENT PROJECT REPRESENTATIVE

A. If requested by the District, provide the services of a Resident Project Representative ("RPR") at the Site to assist the Engineer and District, and to provide extensive observation of contractor's work. Duties, responsibilities, and authority of the RPR are as set forth herein. The furnishing of such RPR's services will not limit, extend, or modify the Engineer's responsibilities or authority except as expressly set forth herein.

1) RPR is the Engineer's representative at the site, will act as directed by and under the supervision of the Engineer, and will confer with the Engineer regarding RPR's actions.
2) RPR shall provide representation which is estimated at 20 hours on average per week for the duration of the project. Additional hours including night and/or weekend work may be required.
    a. A week is hereby defined as five calendar days, not including Sundays, Saturdays, and County holidays, in which weather or other conditions permit a contractor's performance of work on the project for a continuous period of not less than seven (7) hours between 7:00 am. and 6:00 p.m.
3) Through RPR's observations of the work, including field checks of installed materials and equipment, materials on hand, and materials testing processes, the Engineer shall endeavor to provide further protection for District against defects and deficiencies in the work.
4) The qualification requirements of the RPR are as follows:
    a. Bachelor of Science in Civil Engineering, Engineering Technology, Construction Management, or closely related field.
    b. Experience as a construction manager, construction engineer, RPR, or in an equivalent role on at least 2 projects similar to the type, complexity and size of the project designed under this Scope of Services.
    c. Experience in the construction of cast-in-place RCB's, roadway bridges, large diameter water lines, and traffic control.
    d. Familiarity with District, Harris County, City of Houston, TxDOT, and UPRR Requirements.
5) The duties and responsibilities of the RPR are as follows:
    a. General: RPR's interactions in matters pertaining to the work in general shall be with the Engineer, District and contractor. RPR's interactions with Subcontractors shall only be through or with the full knowledge and approval of contractor. RPR shall provide information to the District with the knowledge of and under the direction of the Engineer.
    b. Schedules: Review the progress schedule, schedule of Shop Drawing and Sample submittals, schedule of values, and other schedules prepared by contractor and consult with the Engineer concerning acceptability of such schedules.
    c. Conferences and Meetings: Attend meetings with contractor and District, such as preconstruction conferences, progress meetings, job conferences, and other project-related meetings (but not including contractor's safety meetings), and as appropriate prepare and circulate copies of meeting minutes thereof.
    d. Safety Compliance: Comply with the Site safety programs, as they apply to RPR, and if required to do so by such safety programs, receive safety training specifically related to RPR's own personal safety while at the Site.
    e. Liaison:
        i. Serve as the Engineer's liaison with contractor. Working principally through contractor's authorized representative or designee, assist in providing information regarding the provisions and intent of the Construction Contract Documents.
        ii. Assist the Engineer in serving as District's liaison with contractor as requested.
        iii. Assist in obtaining from District additional details or information, when required for proper execution of the work.
        iv. Assist the Engineer in serving as Liaison with the District to inform the District of inquiries by the public concerning the work, as required.
    f. Clarifications and Interpretations: Receive from contractor or District submittal of any matters in question concerning the requirements of the Construction Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the work under the Construction Contract Documents. Promptly report to Engineer regarding such RFIs. Report to the Engineer when clarifications and interpretations of the Construction Contract

Documents are needed, whether as the result of a contractor RFI or otherwise. Promptly transmit Engineer's clarifications, interpretations, and decisions to contractor and District. Coordinate Clarifications and Interpretations as necessary in Unifier.

g. Shop Drawings:
   i. Promptly inform the Engineer, the District and the contractor of the commencement of any portion of the work requiring a Shop Drawing or Sample submittal, if RPR believes that the submittal has not been received from contractor, or has not been approved by the contractor or the Engineer.

h. Proposed Modifications: Receive, in the form of RFIs, contractor's suggestions for modifications to the Drawings or Specifications, and report such suggestions, together with RPR's recommendations, if any, to the Engineer and the District. Transmit the Engineer's response to RFIs to the contractor and the District via Unifier.

i. Review of Work; Defective Work:
   i. Report to the Engineer and the District whenever RPR believes that any part of the work is defective under the terms and standards set forth in the Construction Contract Documents, and provide recommendations as to whether such work should be corrected, removed and replaced, as provided in the Construction Contract Documents.
   ii. Inform the Engineer and District of any work that RPR believes is not defective under the terms and standards set forth in the Construction Contract Documents, but is nonetheless not compatible with the design concept of the completed project as a functioning whole, and provide recommendations to the Engineer for addressing such work; and
   iii. Advise the Engineer and District of that part of the work that RPR believes should be uncovered for observation, or requires special testing, inspection, or approval.

j. Records:
   i. Maintain at the site orderly files for correspondence, reports of job conferences, copies of Construction Contract Documents including all Change Orders, Field Orders, Work Change Directives, Addenda, additional Drawings issued subsequent to the execution of the Construction Contract, RFIs, the Engineer's clarifications and interpretations of the Construction Contract Documents, progress reports, approved Shop Drawing and Sample submittals, permits, and other project-related documents, as required. Maintain documents via Unifier as necessary.
   ii. Prepare construction site observation reports daily, for each day the RPR is on the project site, in Unifier and submit to the District on a weekly basis.
   iii. Upon request from District, photograph or video work in progress or site conditions.

k. Reports:
   i. Immediately inform the Engineer and District of the occurrence of any Site accidents, emergencies, acts of God endangering the work, possible force majeure or delay events, damage to property by fire or other causes, or the discovery of any potential differing site condition or Constituent of Concern.

l. Completion:
   i. Participate in the Engineer's and District's site visits to determine the status of work prior to Substantial Completion. Assist in the determination of Substantial Completion, and prior to the issuance of a Certificate of Substantial Completion submit a punch list of observed items requiring completion or correction.
   ii. Participate in the Engineer's visit to the site in the company of District and contractor, to determine completion of the work, and prepare a final punch list of items to be completed or corrected by contractor.

iii. Observe whether all items on the final punch list have been completed or corrected, and make recommendations to the Engineer concerning acceptance.

F. Resident Project Representative shall not:
   a. Authorize any deviation from the Construction Contract Documents or substitution of materials or equipment (including "or-equal" items).
   b. Exceed limitations of the Engineer's authority as set forth in this Agreement.
   c. Undertake any of the responsibilities of contractor, Subcontractors, or Suppliers, or any Constructor.
   d. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of the work, by contractor or any other constructor.
   e. Advise on, issue directions regarding, or assume control over security or safety practices, precautions, and programs in connection with the activities or operations of District or contractor.
   f. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by the Engineer.
   g. Accept Shop Drawing or Sample submittals from anyone other than contractor.
   h. Authorize District to occupy the project in whole or in part.

11. CONSTRUCTION INSPECTION

A. Inspection Plan: The Engineer shall develop an Inspection plan for specific projects and provide construction inspectors under the supervision of the Engineer.
   1) The Engineer will submit to the District a descriptive resume and pay grade of inspectors proposed for assignment to a project.
   2) Construction inspectors shall have local construction inspection experience acceptable to the District.
   3) The Engineer will provide effective management of time charged to this Contract. In general, onsite personnel work hours will be adjusted to coincide with the construction contractors' work hours. Periods when no construction work is being performed, such as rain delay times will be utilized for administrative work. The Engineer will make personnel adjustments as necessary during any extended construction down time. Overtime rates for work in excess of 40 hours per week will not be paid without the prior written approval of the District.

B. The Engineer will provide Construction Inspectors to perform daily inspection of projects to reasonably assure compliance with the project's Plans and Specifications. The inspections will require, but not be limited to the following:
   1) Provide Daily Inspection of projects in accordance with the Plans and Specifications for each project.
   2) Collect and organize documentation required to support payment for work done (delivery tickets, rebar tags, invoices, etc.)
   3) Prepare Daily Work Reports, Pay Estimates & Variances using Unifier. Access to District network is necessary for operation utilizing District supplied computers and is available in the office or via VPN from the field.
   4) Complete Daily Work Reports in Unifier including information supporting payment of Pay Items in the Construction Contract.
   5) Photograph the work as required to document payment (prior to, in progress, and after completion.)
   6) Schedule Material Testing Laboratory 24 hours in advance of the planned work requiring testing (Material Testing Laboratory will be provided by the District.) Call Chief Inspector by 7:30am each day to report status of each assigned project.
   7) Notify Chief Inspector with details of all weekend work 24 hours in advance of planned

work and several days in advance of Holiday work.

8) Prepare supporting documents for Variances for quantities exceeding the plan quantities or design changes in Unifier (many of these will be accompanied by the corresponding RFI from the Design Engineer.)
9) Discuss quantity overruns and items needing a variance with the Construction Project Manager.
10) Attend monthly onsite visit and progress meetings prior to pay estimate preparation.

C. Pay Estimate Preparation
   1) Approximately every 30 days, the contractor will submit an Application for Payment to the Inspector in Unifier. In coordination with the Engineer, include the following items/tasks in review and approval of the pay estimate:
      a. Provide Estimate Quantity Verification summary (from the Construction Management Application) to the contractor and discuss quantities completed for pay period.
      b. Provide Estimate Quantity Verification summary for pay period and for length of entire project to support pay application submission to District.
      c. Provide Monthly Workday Summary (from the Construction Management Application) for the pay period to support pay application submission to District.
      d. Provide updated copy of the Submittal Log.
      e. Provide documentation for all pay items entered on Daily Work Reports and attach to corresponding Daily Work Reports.
      f. Provide updated construction schedule from the contractor.
      g. Provide Stormwater Pollution Prevention Plan (SWPPP) Reporting and Inspection forms received from the contractor for each week in pay period.
      h. Provide sketches and calculations for work measured and paid in pay period and attach to corresponding Daily Work Report.
      i. Provide completed Payment Process form (from the Construction Management Application) for submission with the pay application request.
      j. Submit package to District Construction Clerk for Processing.
      k. Submit Preconstruction Site Inspection checklist (from the Construction Management Application) for submission with first pay estimate for project (when required.)
      l. Submit Contract Closeout Checklist (from Construction Management Application) with all required items, included those required by the formal SWPPP with the final pay estimate for project.

D. PROJECT COMPLETION
   1) The following items/tasks will need to be completed prior to project completion:
      a. Create and submit Turf Establishment Requests, as required, to the Chief Inspector.
      b. Provide updated Contract Balance Sheet (from Construction Management Application) weekly, after 90% of the purchase order has been spent.
      c. Review proposed date and provide comments to the Chief Inspector on the contractor's letter of request for Substantial Completion.
      d. Prepare list of items that need to be corrected prior to the Substantial Completion walk and review with the Chief Inspector.
      e. Schedule and attend the Substantial Completion walk with the Chief Inspector and Construction Project Manager when the Inspector and contractor agree that the project is Substantially Complete.
      f. Prepare list of items that need to be corrected prior to the Final Completion walk and review with the Chief Inspector.
      g. Schedule and attend the Final Completion walk with the Chief Inspector and the Construction Project Manager when the Chief Inspector and Inspector agree that the project is complete.

h. Amend the correction list with items identified on the Final Completion walk and transmit a formal punchlist to the contractor (copy the Construction Project Manager.)
i. Document the completion of punchlist items, sign and have the contractor sign, and submit the completed punchlist to the District with the final pay estimate for the project.

THE STATE OF TEXAS §
§
COUNTY OF HARRIS §

The Commissioners Court of Harris County, Texas, convened at a meeting of said Court at the Harris County Administration Building in the City of Houston, Texas, on _____, with the following members present, to-wit:

Lina Hidalgo	County Judge
Rodney Ellis	Commissioner, Precinct No. 1
Adrian Garcia	Commissioner, Precinct No. 2
Tom S. Ramsey, P.E.	Commissioner, Precinct No. 3
R. Jack Cagle	Commissioner, Precinct No. 4

and the following members absent, to-wit: _____, constituting a quorum, when among other business, the following was transacted:

ORDER AUTHORIZING EXECUTION OF AMENDMENT NO. 2 TO AGREEMENT FOR ENGINEERING SERVICES BETWEEN THE HARRIS COUNTY FLOOD CONTROL DISTRICT AND R.G. MILLER ENGINEERS, INC.

Commissioner _____ introduced an order and made a motion that the same be adopted. Commissioner _____ seconded the motion for adoption of the order. The motion, carrying with it the adoption of the order, prevailed by the following vote:

		Yes	No	Abstain
AYES:	Judge Lina Hidalgo	☐	☐	☐
NAYS:	Comm. Rodney Ellis	☐	☐	☐
ABSTENTIONS:	Comm. Adrian Garcia	☐	☐	☐
	Comm. Tom S. Ramsey, P.E.	☐	☐	☐
	Comm. R. Jack Cagle	☐	☐	☐

The County Judge thereupon announced that the motion had duly and lawfully carried and that the order had been duly and lawfully adopted. The order thus adopted follows:

WHEREAS, on or about March 26, 2019, the District and the Engineer entered into an Agreement for Engineering Services, under Purchase Order No. P317581, to provide design, bidding, and construction phase engineering services in support of construction of the Inwood Forest Stormwater Detention Basins; Harris County Flood Control Unit E500-21-00 (the "Agreement"); and

WHEREAS, the District and the Engineer previously amended the Agreement, on May 19, 2020, to provide for additional design, bidding, and construction phase engineering services to be performed by Engineer and additional compensation to be paid to Engineer in connection with the project; and

WHEREAS, the District requires additional design, bidding, and construction phase engineering services as provided under Section II, Character and Extent of Services, Section III, Additional Services and under Appendix A and Appendix B to the Agreement; and

WHEREAS, the District and the Engineer now desire to replace Appendix B, General Scope of Additional Services with the attached Appendix B (Revised), General Scope of Additional Services, to the Agreement; and

WHEREAS, the Engineer is willing to provide the necessary additional engineering services for further consideration; and

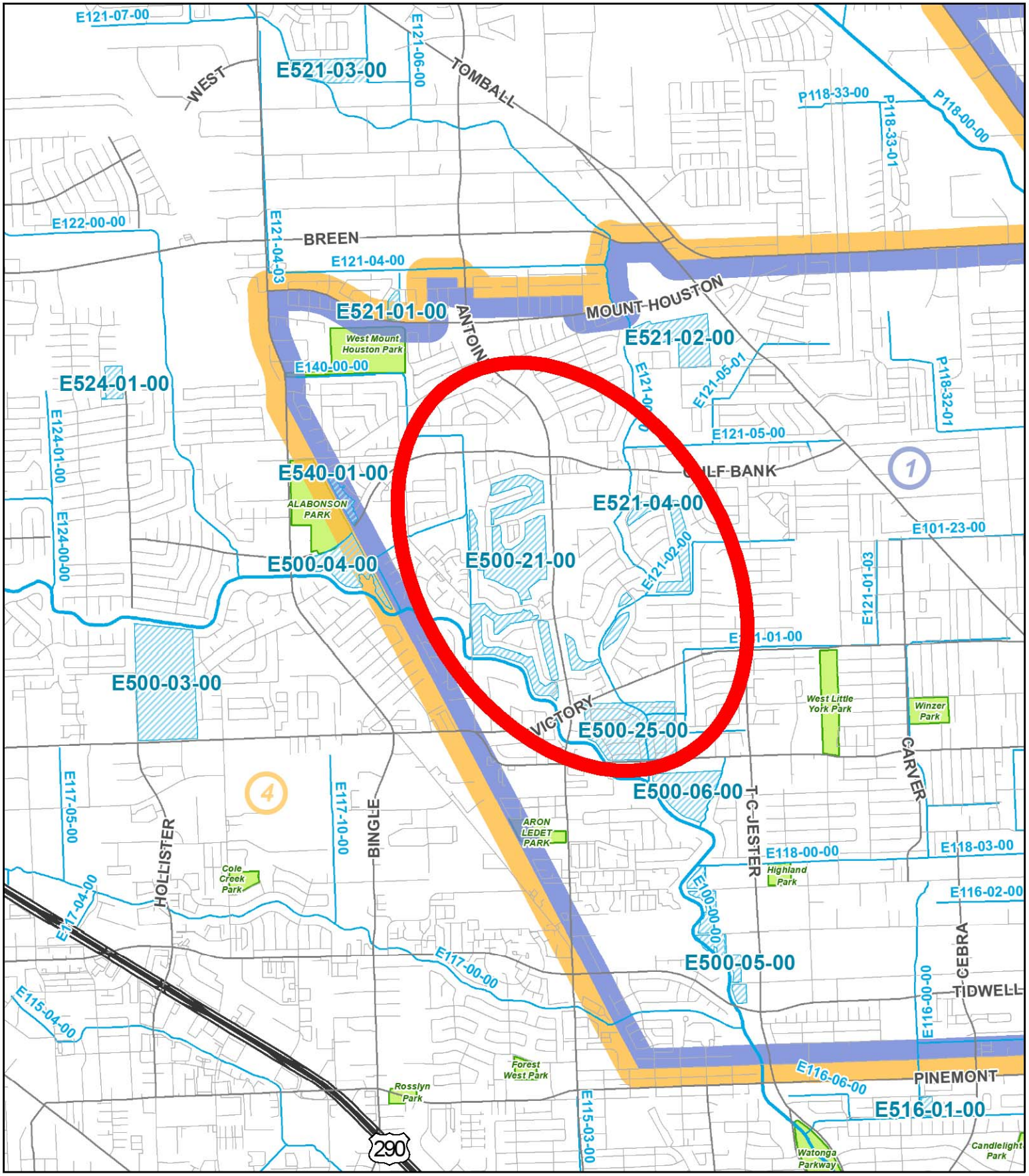
WHEREAS, the District and the Engineer now desire to increase the Limit of Appropriation by $312,295.23, to $1,687,830.23.

NOW, THEREFORE, BE IT ORDERED BY THE COMMISSIONERS COURT OF HARRIS COUNTY, TEXAS THAT:

Section 1: The recitals set forth in this order are true and correct.

Section 2: Exemption from the County Purchasing Act under Texas Local Government Code § 262.024(a)(4) is hereby granted.

Section 3: County Judge Lina Hidalgo is hereby authorized to execute for and on behalf of the Harris County Flood Control District, Amendment No. 2 to Agreement for Engineering Services by and between the Harris County Flood Control District and R.G. Miller Engineers, Inc., to provide additional design, bidding, and construction phase engineering services in support of construction of the Inwood Forest Stormwater Detention Basins, for a fee increase of $312,295.23, raising the maximum fee to be paid by the District to $1,687,830.23, said Amendment No. 2 to Agreement being incorporated herein by reference for all purposes as though fully set forth verbatim herein.



Project ID: E500-21-00-E002
Watershed: White Oak Bayou
Precinct: 1

Pct No
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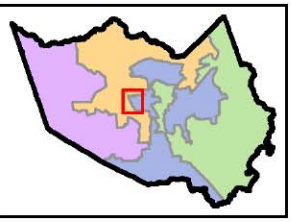

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