

AGREEMENT FOR ENGINEERING SERVICES

THE STATE OF TEXAS §
§
COUNTY OF HARRIS §

THIS 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" or "HCFCD," and **Burns & McDonnell Engineering Company, Inc.**, a Missouri corporation, hereinafter called "Engineer."

WITNESSETH, that

WHEREAS, the District desires to enhance the cost estimating process for all projects executed for and by the District, hereinafter called the "Project"; and

WHEREAS, the District desires that the Engineer create a standard cost estimating methodology from an engineering perspective to enhance the District's long-range project planning ("Engineering Services"); and

WHEREAS, the District desires the Engineer provide the Engineering Services for the Project; and

WHEREAS, the Engineer represents that it is capable and qualified to perform the various services that may be required.

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

SECTION I**CHARACTER AND EXTENT OF SERVICES**

From time to time during the course of this Agreement, the Executive Director of the District or designee (the "Director") may deliver to the Engineer written authorization in accordance with this Section for the performance of certain engineering services with regard to the Project, which services the Engineer shall then perform in accordance with this Agreement. The Director may authorize the Engineer to provide all or any of the engineering services in connection with the study and design phase of the Project that are listed in Appendix A.

The District shall have no obligation to pay for any services hereunder that have been rendered without the prior written authorization for such services by the Director. The written authorization shall specify the services to be performed, a budget amount for such services, and a required completion date for such services. During the course of any services authorized hereunder, the Engineer shall provide the District with progress reports at such times and in such manner as may be requested by the Director. If it should become evident that the Engineer will not be able to

complete any service hereunder by the previously set completion date or within the previously set budget for same, the Engineer shall notify the Director as soon as possible.

SECTION II

TIME OF PERFORMANCE

Upon receipt of a written authorization to perform certain services hereunder, the Engineer shall proceed diligently to complete each service within the limits of time therein specified. The District shall have no obligation to pay for a service performed after the required completion date for same as set forth in its authorization, except to the extent the date for required completion is extended and continuation of such service is approved by further written authorization from the Director.

SECTION III

THE ENGINEER'S COMPENSATION

For and in consideration of services rendered by employees of the Engineer pursuant to this Agreement, the District shall pay the Engineer in accordance with the following maximum hourly rates:

<u>Position</u>	<u>Maximum Hourly Rate</u>
Senior Technical Advisor/QC	\$289.00
Project Administrator	\$111.00
Project Controls Manager	\$258.00
Project Engineer.....	\$151.00
Senior Project Manager	\$289.00
Staff Estimator.....	\$232.00
Chief W/WW Estimator	\$284.00
Senior Project Controls Lead	\$284.00
Management Consultant Lead (E98)	\$304.00
Organizational Change Consultant (E98)	\$277.00

Adjustments to fixed fee allocations may be made with prior review and written approval by the Director pursuant to Section I of this Agreement.

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, blue-line drawings or photocopies specifically required by Section I, 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 expense 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 I, 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.

The District shall have no obligation to pay compensation or reimbursement for any service or expense in excess of the amount budgeted for same in its written authorization, except to the extent the budget for such service is increased and continuation of such service is approved by further written authorization from the Director.

At the option of the Director, the Director may also issue work authorization(s) for performance of specified professional services to be compensated on a lump sum basis upon acceptance by Engineer. If a work authorization specifies payment on a lump sum basis for certain services, the hourly rates set out above shall not apply. In addition, where work performed pursuant to a work authorization is to be compensated on a lump sum basis, the budget for same shall not be increased pursuant to Section I or Section III of this Agreement, except to the extent that additional services are assigned to be performed by the Engineer by further written authorization from the Director.

SECTION IV

TIME OF PAYMENT

During the performance of the services provided herein, at intervals of not fewer than thirty (30) days each, the Engineer shall submit to the District a statement sworn to by the Engineer or an officer of the Engineer, in a form acceptable to the County Auditor of Harris County and in compliance with Section III, setting forth the services completed and the compensation due for the same that have not been previously billed or paid. All hourly charges shall be itemized on the basis of the hourly rates and shall be certified in writing by the Engineer to be true and correct. The Director and the Harris County Auditor shall approve each statement after review, with such modifications as may be deemed appropriate. The District shall pay each statement approved within thirty (30) days after approval by the Director and the County Auditor, provided that the approval or payment of any such statement shall not be considered to be evidence of performance by the Engineer to the point indicated by such statement, or of the receipt of or acceptance by the District of the work covered by such statement. The Engineer shall in no case submit an invoice for less than \$500.00, except where the invoice is for the final payment.

Time sheets corroborating the information provided in the statement, signed by individuals performing services under this Agreement and their supervisor(s), showing the name of each individual performing services hereunder, the date or dates that he or she performed said services, his or her hourly rate, the total amount billed for each individual, and the total amount billed for all individuals, and including such other details as may be requested by the Harris County Auditor for verification purposes, shall be kept and maintained by the Engineer for a period of five (5) years after the completion of performance hereunder. The Director and/or the County Auditor shall have the right, after giving written notice, to review any and all documents or other data in the custody of the Engineer, in connection with any statement submitted by the Engineer to the District for approval and payment by the District.

SECTION V

TERMINATION

The District may terminate this Agreement at any time by notice in writing to the Engineer. Upon receipt of such notice, the Engineer shall discontinue all services in connection with the performance of this Agreement. As soon as practicable after receipt of notice of termination, the Engineer shall submit a statement, showing in detail the services performed under this Agreement to the date of termination. The District shall pay the Engineer the prescribed compensation for the services actually performed under this Agreement, less such payments on account of the charges as have been previously made. Copies of all complete or partially complete designs,

plans, specifications, and other documents prepared or obtained under this Agreement shall be delivered to the District when and if the Agreement is terminated.

SECTION VI

ADDRESS OF NOTICES AND COMMUNICATIONS

All notices and communications under this Agreement shall be mailed by certified mail, return receipt requested, or delivered to the Engineer at the following address:

Burns & McDonnell Engineering Company, Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
Attn: Darin Brickman

All notices and communications under this Agreement shall be mailed by certified mail, return receipt requested, or delivered to the District at the following address:

Harris County Flood Control District
9900 Northwest Freeway
Houston, Texas 77092
Attn: Executive Director

SECTION VII

LIMIT OF APPROPRIATION

The 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 \$750,000.00, specifically allocated to fully discharge any and all liabilities 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 VIII

SUCCESSORS AND ASSIGNS

The District and the Engineer bind themselves and their successors, executors, administrators, and assigns to the other party of this Agreement and to the successors, executors, administrators and assigns of such other party in respect to all covenants of this Agreement. Neither the District nor the Engineer shall assign, sublet, or transfer its or his interest in this Agreement without the written consent of the other. Nothing herein shall be construed as creating any personal liability on the part of any officer or agent of any public body that may be a party hereto.

SECTION IX

PUBLIC CONTACT

Engineer shall under no circumstances release any material or information developed in the performance of services hereunder, without the prior express written permission of the Director. Contact with the news media, private citizens, or community organizations shall be the sole

responsibility of the District. Inquiries concerning this Agreement or any Requested Service shall be referred to the Director.

SECTION X COMPLIANCE AND STANDARDS

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.

SECTION XI LICENSE REQUIREMENTS

The Engineer shall have and maintain any licenses or certification required by the State of Texas or recognized professional organization governing the services performed under this Agreement.

SECTION XII

CERTIFICATE OF INTERESTED PARTIES

In compliance with Government Code § 2252.908, the Engineer must submit a completed Certificate of Interested Parties Form 1295, including an unsworn declaration and the Certification of Filing, printed after completing the electronic filing requirements on the Texas Ethics Commission website (see www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm), to the District along with this signed Agreement.

SECTION XIII

CONFLICT OF INTEREST CERTIFICATION

The Engineer certifies that the Engineer has complied with Chapter 176 of the Texas Local Government Code by completing and filing any required conflict of interest disclosures or questionnaires (see www.ethics.state.tx.us). If this certification is materially incomplete or inaccurate, the Engineer acknowledges that the District shall have the right to terminate this Agreement without prior notice.

SECTION XIV

INDEMNIFICATION

TO THE EXTENT ALLOWED BY LAW, THE ENGINEER AGREES TO INDEMNIFY AND HOLD HARMLESS THE DISTRICT, ITS OFFICERS, EMPLOYEES, AND AGENTS FROM LIABILITY, LOSSES, EXPENSES, DEMANDS, REASONABLE ATTORNEYS' FEES, AND CLAIMS FOR BODILY INJURY (INCLUDING DEATH) AND PROPERTY DAMAGE TO THE EXTENT CAUSED BY THE NEGLIGENCE, INTENTIONAL TORT, INTELLECTUAL PROPERTY INFRINGEMENT OF THE ENGINEER (INCLUDING THE ENGINEER'S AGENTS, EMPLOYEES, VOLUNTEERS, AND SUBCONTRACTORS/CONSULTANTS UNDER CONTRACT, OR ANY OTHER ENTITY OVER WHICH ENGINEER EXERCISES CONTROL) IN THE PERFORMANCE OF THE SERVICES DEFINED IN THIS AGREEMENT. THE ENGINEER SHALL ALSO SAVE THE DISTRICT HARMLESS FROM AND AGAINST ANY AND ALL EXPENSES, INCLUDING REASONABLE ATTORNEYS' FEES, IN PROPORTION TO THE ENGINEER'S LIABILITY, THAT MIGHT BE INCURRED BY THE DISTRICT, IN LITIGATION OR OTHERWISE RESISTING SUCH CLAIMS OR LIABILITIES.

SECTION XV

INSURANCE REQUIREMENTS

Coverage and Limits. During the Term of this Agreement and any extensions thereto, the Engineer at its sole cost and expense shall provide insurance of such type and with such terms and limits as may be reasonably associated with this Agreement. As a minimum, the Engineer shall provide and maintain the following coverage and limits:

- (a) Workers Compensation, as required by the laws of Texas, and Employers' Liability, as well as All States, United States Longshore & Harbor Workers Compensation Act and other endorsements, if applicable to the project, and in accordance with state law.

Employers' Liability		
(i)	Each Accident	\$1,000,000
(ii)	Disease – Each Employee	\$1,000,000
(iii)	Policy Limit	\$1,000,000

(b) Commercial General Liability, including but not limited to, the coverage indicated below. This policy will provide coverage for personal and bodily injury, including death, and for property damage, and include an endorsement for contractual liability. Coverage shall not exclude or limit the Products/Completed Operations, Contractual Liability, or Cross Liability. Where exposure exists, the District may require coverage for watercraft, blasting, collapse, explosions, blowout, cratering, underground damage, pollution, and other coverage. *The District shall be named Additional Insured on primary/non-contributory basis.*

(i)	Each Occurrence	\$1,000,000
(ii)	Personal and Advertising Injury	\$1,000,000
(iii)	Products/Completed Operations	\$1,000,000
(iv)	General Aggregate (per project)	\$2,000,000

(c) Professional Liability/Errors and Omissions, in an amount not less than One Million Dollars (\$1,000,000) per claim and in the aggregate.

(d) Umbrella/Excess Liability in an amount not less than One Million Dollars (\$1,000,000) per occurrence and in the aggregate. *The District shall be named Additional Insured on primary/non-contributory basis.*

(e) Automobile Liability insurance to include the Engineer's liability for death, bodily injury, and property damage resulting from the Engineer's activities covering use of owned, hired, and non-owned vehicles, with combined single limit of not less than One Million Dollars (\$1,000,000) for each accident. *The District shall be named Additional Insured on primary/non-contributory basis.*

(f) Any other coverage required of the Engineer pursuant to statute.

Delivery of Policies. Immediately upon execution of this Agreement and before any services are commenced by the Engineer, the Engineer shall provide the District evidence of all of the above coverage on forms and with insurers acceptable to the District. The Engineer must maintain a valid Certificate of Insurance as described herein on file with the District at all times during the term of this Agreement. The Engineer must either (1) mail the Certificate of Insurance to the District at 9900 Northwest Freeway, Houston, TX 77092, Attn: Contract Management or (2) submit it by email to HCFCFCD_AdminServices@hcfcd.hctx.net.

Issuers of Policies. Coverage shall be issued by company(s) licensed by the Texas Department of Insurance to do business in Texas, unless said coverage is not available or economically feasible except through an excess or surplus lines company, in which case the company(s) should be registered to do business in Texas. Companies shall have an A.M. Best rating of at least A-VII.

Certificates of Insurance. The Engineer shall provide unaltered Certificates of Insurance which evidence the required coverage and endorsements and satisfy the following requirements:

- (a) Be less than 12 months old;
- (b) Include all pertinent identification information for the Insurer, including the company name and address, policy number, NAIC number or AMB number, and an authorized signature;
- (c) Include the project name and reference numbers and indicate the name and address of the Project Manager in the Certificate Holder Box; and
- (d) Be appropriately marked to accurately identify:
 - (i) All coverage and limits of the policy;
 - (ii) Effective and expiration dates;

- (iii) Waivers of subrogation, endorsement of primary insurance and additional insured language, as described herein.

Certified Copies of Policies and Endorsements. Upon request, the Engineer shall furnish certified copies of insurance policies and endorsements to the District.

Renewal Certificates. Renewal certificates are due to the District at least thirty (30) days prior to the expiration of the current policies.

Subcontractors. If any part of the Agreement is sublet, insurance shall be provided by or on behalf of any subcontractor, and shall be sufficient to cover their portion of the Agreement. The Engineer shall furnish evidence of such insurance to the District as well.

Additional Insured. The Engineer shall include the District and its respective officers, directors, agents, and employees as an Additional Insured on the Commercial General Liability, Automobile Liability, and Umbrella/Excess Liability insurance certificates. The Engineer's coverage shall be primary insurance to any similar insurance maintained by the District and must contain an endorsement stating such. Coverage to the District as an Additional Insured on any of the Engineer's insurance coverage shall not be subject to any deductible.

Deductibles. The Engineer shall be responsible for and pay any claims or losses to the extent of any deductible amounts applicable under all such policies and waives any claim it may have for the same against the District, its officers, directors, agents, or employees.

Claims-made Policies. All insurance policies written on a claims-made basis, including Professional Liability/Errors and Omissions, shall be maintained for a minimum of two (2) years following completion of all services under this Agreement ("Extended Reporting Period"). The Engineer shall obtain or maintain full prior acts coverage at least to the effective date of this Agreement in the event of a carrier or policy change.

Waiver of Subrogation. The Engineer waives any claim or right of subrogation to recover against the District, its officers, directors, agents, and employees ("Waiver of Subrogation"). Each policy required under this Agreement must contain a Waiver of Subrogation endorsement.

Notice of Cancellation, Non-Renewal, or Material Change. The Engineer shall provide the District with thirty (30) days' minimum written notification in the event of cancellation, non-renewal, or material change to any or all of the required coverage.

Remedies for Noncompliance. Failure to comply with any part of this Article is a material breach of this Agreement. The Engineer could immediately, and without notice, have all compensation withheld or suspended, be suspended from providing further services, or be terminated from this Agreement for any lapse in coverage or material change in coverage which causes the Engineer to be in noncompliance with the requirements of this Article.

SECTION XVI

OWNERSHIP OF PLANS, COPYRIGHT

The District shall be the absolute and unqualified owner of any information, programs, Mylar reproductions, plans, preliminary layouts, sketches, reports, cost estimates, inventions, software, firmware, designs, computer applications, computations, computer input/output information, and other documents or materials prepared pursuant to this Agreement, including source codes therefor, with the same force and effect as if the District prepared the same. The District shall have an exclusive and perpetual copyright in and to any and all materials produced for the District pursuant to this Agreement and the Engineer shall convey and assign, and does hereby convey and assign, to District all right, title, and interest, including but not limited to copyright, the Engineer

may have or may acquire in and to such materials. The Engineer agrees that work performed hereunder for the District will be deemed to have been done, to the extent authorized by law, on a "works made for hire" basis. In the event and to the extent such works are determined not to constitute "works made for hire" as that term is understood in copyright law, the Engineer hereby irrevocably assigns and transfers to the District all right, title, and interest in and to such works, including, but not limited to, copyrights. The Engineer agrees to promptly deliver to the District copies, in a form acceptable to the Director, of any and all such information, programs, Mylar reproductions, plans, preliminary layouts, sketches, reports, cost estimates, inventions, software, firmware, designs, computer applications, documents, materials and/or data, including the source codes therefor, upon request from the District. Copies of all complete or partially complete information, programs, Mylar reproductions, plans, preliminary layouts, sketches, reports, cost estimates, inventions, software, firmware, designs, computer applications, and other documents and materials, including source codes therefor, prepared pursuant to this Agreement, shall also be delivered to the District when and if the Agreement is terminated, or upon completion of performance hereunder, whichever occurs first. The Engineer may retain one (1) set of reproducible copies of such documents and materials, but such copies shall be for the Engineer's use in the preparation of studies or reports for the District only. The Engineer is expressly prohibited from selling, licensing, or otherwise marketing or donating such documents or materials, or using the same in the preparation of work for any other client without the express written permission of the Director. The Engineer does not intend or represent that construction documents or materials will be suitable for reuse. If the District reuses the same, such action shall be at the District's risk and without liability to the Engineer. If the Engineer furnishes partially complete plans, layouts, sketches, specifications, or other documents and materials by virtue of termination under Section VII above, the Engineer shall not be held accountable or responsible for the completeness of any document or material so produced.

SECTION XVII MODIFICATIONS

This instrument contains the entire Agreement between the parties relating to the rights herein granted and obligations herein assumed. Any oral or written representations or modifications concerning this instrument shall be of no force or effect, excepting a subsequent modification in writing signed by both parties hereto.

EXECUTED on _____.

APPROVED AS TO FORM:

CHRISTIAN D. MENESEE
Harris County Attorney

HARRIS COUNTY FLOOD CONTROL
DISTRICT


DocuSigned by:

D9FE318CE1BA4BE...
By _____
LAURA FIORENTINO CAHILL
Senior Assistant County Attorney

By _____
LINA HIDALGO
County Judge

ATTEST:

BURNS & MCDONNELL ENGINEERING
COMPANY, INC.

DocuSigned by:

098298E7DEE9486...

Scott Clark

Name

Vice President

Title

DocuSigned by:

07A004697F1F405...

CHITRA P FOSTER

Name

REGIONAL WATER PRACTICE MANAGER

Title

APPENDIX A

The Harris County Flood Control District (the District) is a special purpose district created by the Texas Legislature in 1937 and governed by Harris County Commissioners Court. It was created in response to devastating floods that struck the region in 1929 and 1935. The District serves Harris County, a community of more than 4.5 million people (2015) that includes the City of Houston.

In 2018, Harris County voters approved bonds to finance almost 200 individual flood risk reduction projects. This funding, together with other funding sources, supports a wide variety of recovery and resiliency initiatives being conducted by the District, with the Bond Program remaining as one of the most significant portions of the District's portfolio.

In 2022, funding changes, staffing changes, sustained development in the Flood Control District's 23 watersheds and unprecedented public health, environmental and geopolitical changes reshaped public policy. There have been unprecedented impacts on the engineering and construction markets in the last 36 months. These changes demand that the District review and improve their cost estimating process with the objective of providing accurate projections upon which the District can base important policy decisions and future funding requests.

STATEMENT OF WORK

Burns & McDonnell and its minority-owned subconsultant team partners ("Engineer") will use its engineering background and cost estimating expertise to assist the District by providing technical assistance in establishing a standardized Estimating Process for the "Planning", "Implementing" and "Maintaining" Project Phases as defined in the document "Estimating Overview – All Phases.pdf".

The standards will be utilized for engineering projects executed by and for the District, including both internal (self-estimated) and external (estimates provided to the District). Estimates are to be both cost and time derived, to allow for proper cash flow projection for expenditures and funding forecasts.

Concurrently, on a fast-track, Engineer will use information and processes developed in the above activity to provide a high-level review of the current Bond Program estimate, to be followed by a more detailed review.

Task A. Standardized Estimating Process

Task A.1 Definition

- Kickoff meeting – Engineer will lead a kick-off meeting with the District Project Manager (PM) and those Stakeholders (as defined in "Statement of Work – Standard Estimating Process.pdf") invited by the District PM. The aim of the Kickoff meeting will be to introduce team members, roles and responsibilities, project objectives, scope and schedule, establish communication protocols and ultimately to build consensus for and ownership of the project outcomes.
- Data collection – based on communication protocols established at kickoff, Engineer will gather needed information on prior estimates, software use, and lessons learned to establish a baseline for the technical assistance and validate the Q&A and decision timelines for the District, County and any external stakeholders.

- Review the current P6 schedule management procedures implemented by the District.
- With specific attention to the desired Organizational Change Management task:
 - Stakeholder Assessment - There are numerous stakeholders important to not only this Estimating and Scheduling effort, but to all aspects of the District's operation. Understanding the perspectives of each stakeholder/stakeholder group is critical, as specific interventions and strategies will be designed for each project phase. Characteristics such as stakeholder's interest and influence will be assessed. For this initial effort, Engineer will conduct interviews with key internal groups (this may be a broader group than described in the 'Stakeholders' list above).
 - Design Communication Strategies: Engineer recognizes the key role that communication plays in any organizational or process change, especially something as foundational as estimating and scheduling – cost and time of project delivery receive intense scrutiny. Engineer will work closely with the District's project leads to understand and leverage common communication methods at the District (and introduce new methods, as appropriate).
- Develop detailed workplan for review by the District PM.

Deliverables:

- Project Work Plan document and P6 schedule.

Task A.2 Development

- Establish standard 'project definition' descriptions, based on Association for the Advancement of Cost Engineering (AACE) and Project Management Institute (PMI) recommended practices as applicable to the Public Sector, Civil Engineering and Environmental project guidelines, relevant to the District. These project definitions will be matched to the District's long-range Planning, Implementation and Maintenance project phases.
- Evaluate the quality hold points and metrics used to evaluate the quality and performance of the schedules developed and received from the Design Consultants and Contractors.
- Work with District staff to find best potential alternates to traditional cost trending indicators. This is needed because CPI (Cost Performance Index) is infeasible as District schedules are not typically resource-loaded and that many of the cost elements are "non-productivity" elements such as permitting and ROW acquisition. Provide options by which the District can trend if cost at completion will be on budget.
- Provide feedback on the current scheduling procedures and specifications to generate or enhance schedule development standards and standardization for District's Project Management Manual.
- The review and recommendations herein will encompass the Conceptual (Planning) phase as well as the Maintenance budgets development when capital projects are complete. These are anticipated gap areas where processes and protocols are needed to resolve the following issues:
 - Validation of Conceptual stage estimate once District budget allocation is finalized and prior to the Implementation Phase. This may involve a formalized risk assessment and decision framework when there is significant variance between the budget allocation and Conceptual Estimate.

- The need to properly account for impact on future Operations and Maintenance costs upon project completion and turnover.
- Solicit stakeholder input to incorporate relevant project scope items to obtain the comprehensive project estimates (for example, scope elements for a watershed study will be very different than for construction of a tunnel).
- Work with IT staff to incorporate documented processes into Unifier and P6 (other associated IT platforms will be evaluated for inclusion but are not known/identified in this scope).
- As development on the Standard Estimating Process (SEP) progresses, review and fit the procedures to the District Project Management Manual as well as the existing District and Harris County software systems. Also note if/where there might be significant conflict, inconsistencies or adoption roadblocks between SEP recommendations and these existing systems and protocols.
- Provide a Draft SEP Document to the District PM and Stakeholders for their review and comment.
- Work with process Stakeholders to apply any changes needed and create a final Standard Estimating Process Document. This document is to be used in support of the existing District PM Manual.

Deliverables:

- Standard Estimating Process Document (to be used in conjunction with Project Management Manual) that includes an Appendix with necessary supporting documents such as templates and forms.
- Templates & Forms to be included in HCFCD contracting documents.
- Templates and Forms to be used and integrated into P6 and Unifier.
- Schedule Specification to be included in District contracts.
- Technical Memo: Schedule Management Procedures with appended P6 Schedule reporting and schedule quality reporting templates.

Task A.3 Deployment

- Based on the SEP Document and information gathered on institutional readiness, create a training curriculum with needed training material and quick reference guides for adoption and organizational change management efforts.
- Implement the Communication Plan – Based on the communications strategies developed in Task A.1, Engineer will assist the District in delivering appropriate tailored messaging to address internal and external audiences for adoption purposes.
- Deliver *Train the Trainer* sessions in order that District staff can train internal staff.
- Monitor one training session and provide feedback and recommendations.

Deliverables:

- Training Materials (PowerPoint slide deck, Participant Guide, Instructor Guide).
- Quick reference guide (1-2 page pamphlet type layout) for training materials.
- Two Train-the-Trainer virtual training sessions to District staff as assigned by the District PM.

Task B. Bond Program Review

Conduct a phased review of all 2018 Bond Projects to provide an updated estimate.

Task B1. Bond Program Update

- Review the 2018 Bond Program original and updated cost estimates and as-bid/contracted amounts for each project.
- Review the 2018 Bond Program original and updated schedule estimates and as-bid/contracted schedules for each project as well as overall review of Bond Program P6 integration.
- Review project implementation sequence based on priority of infrastructure improvements, geographical location, contractor availability, and capital cost.
- Provide a fast-track high-level estimate and schedule updates for all 2018 Bond Projects.
- Provide a workplan and scope for a detailed project-by-project planned vs. actual review for identification of revised cost estimates, schedules, risk and contingency assessment for a thorough Estimate-To-Complete (ETC) analysis of the Bond Program. [this task may lead to inclusion of this work in B.2 Bond Program Review task]
- Analyze scope of work for each project to determine and identify key elements affected by escalation. Estimate potential escalation costs based on key factors and proposed schedule for project completion.
- Engage preliminary and intermediate input from Executive Director and Deputy Director to provide interim reviews and outline approach to messaging and reporting.

Task B2. Bond Program Review

- Taking into consideration the outcome/deliverable of the SEP and using the same foundational principles, this activity will build upon the preliminary estimate. It will provide a more granular risk review, analyzing which project estimates (or elements of estimates) have the highest potential cost and schedule risk.
- Provide recommendations for sequencing of projects based on District management resources and review completed in Task B.1.
- An analysis will identify areas where program and project estimates can be improved to provide a more detailed update based on the established Standard Estimating Process.

Deliverables:

- Memo: 2022 Revised 2018 Bond Estimate and Schedule Update.
 - Memo: Risks and Constraints to Bond Program Forecast and Recommendations for Improvement.

Task C. Project Management & Reporting

- Manage communications and serve as primary contact point for Engineer
- Manage resources and oversee budget and schedule management to keep project progressed per contract.
- Scope out, then solicit and contract with M/WBE Subconsultants.
- Oversee all M/WBE Subconsultant work to keep scope, budget, quality and schedule progressed per contract.
- Provide financial and contractual administration for this project.
- Prepare, submit and manage invoicing.
- Provide directly or by others as necessary quality review and management of deliverables.
- Schedule and facilitate meetings with the District and stakeholders including Kick-Off Meeting.

Deliverables:

- Facilitation (agenda, minutes) Kickoff meetings
- 1-page weekly progress reporting with 30-minute meeting (in person and/or virtual) to project manager
- Monthly invoices with supporting documentation
- Oversight and management of subcontracts

CLARIFICATIONS

- The project schedule is predicated on the availability of stakeholders and other District resources throughout the development purposes.
- Project schedule is predicated on the District providing the following information within a reasonable timeframe:
 - All available information pertinent to the Project including previous reports and any other data relative thereto.
 - Staff introductions and access to and make all provisions for the Project team to enter upon public and private property as required to perform its services under this Project.
- Specific to Task B (Bond Program Evaluation):
 - Deliverables defined in this Scope of Services will be based on information provided by the District. Engineer does not assume any responsibility for the accuracy and completeness of data and/or documents prepared by others, or for defects, omissions, departures from contractual requirements, or breach of performance of others working for the District. Engineer's services are not intended to, and cannot, eliminate all risk or guarantee an efficient or best value program and/or project.
 - Engineer does not control the cost, schedule, and risks of Bond Program contractors or others working for the District, therefore the services provided herein are consultative and the District retains responsibility for consideration, decision, and actions based on that consultation.
 - The nature of this Scope is amorphous because the detail and quality of the Work Products to be analyzed are not yet known. Work Products in reference are those produced by the District (e.g., the PMM) or the District's Contractors (e.g. project scopes or estimates produced by others). Therefore, the level of effort will be constrained as agreed to in fee table.

- The following services are not included in this scope and could be authorized as Additional Services by mutual agreement:
 - Changes in the extent or character of the scope due to changes in the District's project portfolio size, complexity, schedule or funding.
 - Appearances at, or preparation of materials tailored for, public hearings or Commissioners Court.
 - Public relations services.
 - Development of alternative designs to modify or optimize designs completed by others for the District to meet budget, schedule or other constraints.
 - Audit-related support during internal or external audits.
 - Provide scheduling support to create and/or evaluate "What If" scenarios for Bond Program implementation.
 - Field investigations, condition inspections/assessment of District infrastructure geotechnical investigations, environmental site assessments, or easement or right-of-way selection, preparation, appraisals, negotiation, or acquisition work.
 - Development of data dashboards and KPIs to view and trigger actionable in-time operational activities; or to support capital project delivery or system performance assessment and regulatory reporting.
 - Data migration to/from file management systems and/or the District's document storage systems.
 - The review of or implementation of changes to existing District standard documents beyond those defined in the Basic Services related to the SEP.
 - Portfolio Management enhancements as the volume of Bond Program or project data grows.
 - Preparation of application materials and supporting documentation to request funding.

Revisions

The Engineer shall make requested revisions to documents and materials prepared under this Agreement. The Engineer also shall 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.

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 AN AGREEMENT FOR ENGINEERING SERVICES
 BETWEEN THE HARRIS COUNTY FLOOD CONTROL DISTRICT
 AND BURNS & MCDONNELL ENGINEERING COMPANY, 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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NAYS:	Comm. Rodney Ellis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ABSTENTIONS:	Comm. Adrian Garcia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Comm. Tom S. Ramsey, P.E.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Comm. R. Jack Cagle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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, the District desires to enhance the cost estimating process for all projects executed for and by the District, hereinafter called the "Project"; and

WHEREAS, the District desires that the Engineer create a standard cost estimating methodology from an engineering perspective to enhance the District's long-range project planning ("Engineering Services"); and

WHEREAS, the District desires the Engineer provide the Engineering Services for the Project; and

WHEREAS, the Engineer represents that it is capable and qualified to perform the various services that may be required.

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, an Agreement by and between the Harris County Flood Control District and Burns & McDonnell Engineering Company, Inc., for a fee to be paid by the District of \$750,000.00, said Agreement being incorporated herein by reference for all purposes as though fully set forth verbatim herein.

COO BURNS MCDONNELL 2022-169.DOCX