

**EXHIBIT  
A**

STATE OF TEXAS

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§

COUNTY OF WILLIAMSON

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**SUPPLEMENTAL CONTRACT NO. 1  
TO CONTRACT FOR ENGINEERING SERVICES**

**FIRM:** AECOM TECHNICAL SERVICES (“Engineer”)

**ADDRESS:** 13640 Briarwick Drive, Suite 200, Austin, TX 78729

**PROJECT:** BCRWWS East WWTP Floodwall Study

This Supplemental Contract No. 1 to Contract for Engineering Services is made by and between the City of Round Rock, Texas, hereinafter called the “City” and AECOM Technical Services, hereinafter called the “Engineer.”

**WHEREAS**, the City and Engineer executed a Contract for Engineering Services, hereinafter called the “Contract,” on the 27th day of September, 2024 for the BCRWWS East WWTP Floodwall Study Project in the amount of \$93,640.00; and

**WHEREAS**, it has become necessary to amend the Contract to modify the provisions for the scope of services and to increase the compensation by \$51,270.00 to a total of \$144,910.00;

**NOW THEREFORE**, premises considered, the City and the Engineer agree that said Contract is amended as follows:

I.

Article 1, City Services and Exhibit A, City Services shall be amended as set forth in the attached Addendum To Exhibit A.

II.

Article 2, Engineering Services and Exhibit B, Engineering Services shall be amended as set forth in the attached Addendum to Exhibit B. Exhibit C, Work Schedule shall be amended as set forth in the attached Addendum to Exhibit C.

III.

Article 4, Compensation and Exhibit D, Fee Schedule shall be amended by increasing by \$51,270.00 the maximum amount payable under the Contract for a total of \$144,910.00, as shown by the attached Addendum to Exhibit D.

**IN WITNESS WHEREOF**, the City and the Engineer have executed this Supplemental Contract in duplicate.

**AECOM TECHNICAL SERVICES**

**By:** \_\_\_\_\_

\_\_\_\_\_

7/9/2025

**Date** \_\_\_\_\_

**CITY OF ROUND ROCK**

**APPROVED AS TO FORM:**

**By:** \_\_\_\_\_  
**Craig Morgan, Mayor**

\_\_\_\_\_  
**Stephanie L. Sandre, City Attorney**

\_\_\_\_\_  
**Date**

## **ADDENDUM TO EXHIBIT A City Services**

City of Round Rock services for the BCER WWTP Amendment 1 study will include:

- Photogrammetric or other aerial mapping, as available.
- Existing digital 2D/3D terrain and facility data from Civil 3D or other software.
- Data for any projects adjacent to the subject project.
- Existing hydrologic and hydraulic studies associated with the project and project area.
- Proposed hydrologic and hydraulic studies associated with the project and project area.
- Coordination and assistance, for the Engineer, in acquiring information from other local, regional, state and federal agencies, as needed.
- Provide timely reviews and decisions necessary to maintain the project work schedule.
- Design criteria for drainage and hydraulics.
- Available supplemental Federal Emergency Management Agency (FEMA) Hydrologic & Hydraulic (H&H) data that may have previously been acquired by the City.

# **ADDENDUM TO EXHIBIT B**

## **Engineering Services**

June 15, 2025

Federico Sanchez, P.E., CFM  
Stormwater Engineer, Public Works-Utilities  
City of Round Rock  
3400 Sunrise Road  
Round Rock, Texas 78665

**Reference: Proposal for Professional Engineering Services, BCER WWTP Floodwall Study, Supplement 1**

Dear Mr. Sanchez:

AECOM Technical Services, Inc. (AECOM) is pleased to submit this supplementary proposal to the City of Round Rock (CoRR). This proposal is for professional engineering services to develop a conceptual Opinion of Probable Cost (OPC) for preliminary engineering, design and construction of the proposed Brushy Creek East Regional (BCER) Wastewater Treatment Plant (WWTP) floodwall and associated site items.

AECOM recently performed preliminary hydrologic and hydraulic analysis to assess the floodplain impacts of a floodwall installation to protect the expanding BCER WWTP. The approximate length and height of the wall was identified, but no further studies have been performed to advance preliminary design or construction of the floodwall. This evaluation aims to provide the CoRR with an estimate of the expected range of planning, design, and construction costs for planning budgetary purposes only.

### **SCOPE OF WORK**

This scope of work will identify field work, analyses, and project components that will be needed to advance to final design, construction, and permitting of a floodwall. AECOM will draw upon our extensive knowledge of both WWTPs and flood defense design both locally and throughout the United States to complete the OPC. Supplement 1 will include Task 5 – Prepare Conceptual Opinion of Probably Cost, described in further detail below.

### **Task 5 – Prepare Conceptual Opinion of Probable Cost**

#### **Task 5.1 – Additional Project Management**

This subtask includes time for general management, team coordination, conducting team meetings necessary for successful task completion, and invoicing. AECOM will host two virtual meetings with the CoRR. The first meeting is aimed to review initial assumptions and clarify any questions that arise. The second meeting will discuss draft memorandum prior to completion of Supplement 1.

**Task 5.2 – Develop Final Design Cost Estimate and Assumptions**

This task includes time for reviewing available BCER WWTP data and prior studies, comparing these site conditions to similar projects, and developing high-level costs for final floodwall and onsite drainage design to protect the BCER WWTP from 1% Annual Exceedance Probability (AEP) flood. The Final Design estimate will consist of conceptual cost estimates for the following preliminary engineering, and all phases of final design.

**Preliminary Engineering Phase**

- Topographic Survey
- Subsurface Utility Engineering (SUE) Survey
- Geotechnical Investigation
- Geotechnical Analysis and Reporting (GIR/SMR)
- Utility Conflict Assessment
- Structural Design Considerations
- Floodwall Closure Structure (e.g. Gate) or Pond Pump Station Electrical Considerations
- Interior/On site Drainage Analysis and Concept Design
- Environmental Studies. The need for a CLOMR/LOMR on the floodwall project requires compliance with federal regulations including, but not limited to, the Endangered Species Act, Clean Water Act, and National Historical Preservation Act. Studies that may be required include a Waters of the US delineation, habitat assessment, and cultural resources evaluations.
- Preliminary Engineering Report – will summarize the above investigation and studies. Where appropriate this report will present multiple design options when certain components have several possible configurations needing client input. This report will set the final design components for the subsequent design phases.

**30% Design**

- Includes plans, specification, and estimates (PS&E) development conceptual cost estimate to the 30% level of design. The level of effort for this item will be based on a percentage of total construction cost and/or comparison and scaling to a similar floodwall design effort for a WWTP in the central Texas area.

**60% Design**

- Includes PS&E development conceptual cost estimate to the 60% level of design. The level of effort for this item will be based on a percentage of total construction cost and/or comparison and scaling to a similar floodwall design effort for a WWTP in the central Texas area.

**90% Design**

- Includes PS&E development conceptual cost estimate to the 90% level of design. The level of effort for this item will be based on a percentage of total construction cost and/or comparison and scaling to a similar floodwall design effort for a WWTP in the central Texas area.

**CLOMR Preparation**

- Includes preparation of the Conditional Letter of Map Revision (CLOMR) application package (MT-2 application and report) for FEMA review and approval

**Final Design**

- Includes PS&E development conceptual cost estimate to the 100% level of design. The level of effort for this item will be based on a percentage of total construction cost and/or comparison and scaling to a similar floodwall design effort for a WWTP in the central Texas area.

**Task 5.3 – Develop Construction Cost Estimate and Assumptions**

This task includes time for reviewing the following:

- Available BCER WWTP data and prior studies,
- Comparing these site conditions to similar projects AECOM has successfully delivered,
- Developing high-level costs for floodwall construction to protect the BCER WWTP from 1% AEP flood event.

The items to be considered in the cost estimate include but are not limited to the following:

**Floodwall Construction**

- Construction oversight
- Site preparation
- Surveying and layout, including but not limited to construction staking, baseline and control point establishment, and as-built surveys.
- Environmental and safety compliance, including but not limited to erosion and sediment control, dust and noise mitigation, spill prevention and response.
- Excavation and earthwork for floodwall installation
- Installation of temporary flood barriers to protect both the contractor and BCER WWTP during construction
- Drainage and underseepage control
- Floodwall – the results of the preliminary floodwall H&H evaluation will be used to conceptually size the wall height needed along the alignment with consideration of FEMA freeboard requirements. These wall heights will then be used estimate an approximate bedding depth(s) along the alignment after a cursory review of available geotechnical data. Conceptual construction costs will be developed for wall type(s) best suited to the geologic conditions at the site (i.e. earthen levee, T -Type concrete floodwall, I-Type sheetpile floodwall). These costs could include as applicable: formwork, reinforcing steel placement, concrete placement, expansion and control joints, water stops and sealants.
- Closure structures, including floodwall gate installation(s)
- Quality control and testing, including but not limited to concrete testing, soil compaction testing, pile load testing.
- Site restoration

**Interior Drainage / Site Stormwater (collection system to onsite pond(s) with gravity outfall)**

- Collection system. Cost will be based on a percentage of ditch versus storm drain needed to collect and convey water..
- Onsite pond. The available H&H models will be used to estimate the 100-year storage volume. The pond will be sized accordingly with appropriate gravity outlet works. The City of Round Rock Design and Construction Standards Drainage Criteria Manual will be reviewed.

- Pump station. At this time, pumped discharge to either Brushy Creek or Chandler Branch will be considered as an optional item. It is not known whether this will be needed as part of final design.
- Structural components. These could include concrete walls for pond interior or outlet pipes and structures.
- A high-level review of site drainage patterns and any assumptions on conveyance to the ponds will be stated,

**Permitting**

- City of Round Rock Development Permit(s)
- Letter of Map Revision (LOMR) – Includes preparation of the LOMR application package (MT-2 application and report) for FEMA review and approval.
- Levee accreditation – preparation of the levee accreditation package for compliance with 44 CFR 65.10. This package includes an overall summary report plus a series of attachments and exhibits to highlight that the design meets all required FEMA items. This includes updating the interior drainage modeling from the PER phase for inclusion in the submittal package.
- USACE 404 Permit/TCEQ Section 401 Certification
- Stormwater Pollution Prevention Plan

**Task 5.4 – Memorandum**

The only deliverable associated with Supplement 1 (Task 5) will be the provision of a memorandum documenting the OPCC and necessary assumption used to generate it, will be submitted to the CoRR. The cost associated with this task includes an initial draft submittal, one round of consolidated comments from CoRR and resolution, and a final submittal.

**Notes and Other Assumptions:**

- The approximate length and height of the flood wall has been determined from initial hydraulic modeling, this is subject to change as the design develops.
- This OPC represents a high-level estimate of planning, design, and construction costs for budgetary purposes only based on best available information at the time of preparation. As additional information, such as geotechnical investigation, becomes available, the cost of design and construction will change.
- While three flood wall types were previously discussed as construction options, earthen levee, T-Type concrete floodwall and I-Type sheetpile floodwall, high level construction costs will be based on the type best suited to the geological conditions.
- Geological conditions assessment used to inform the OPC will be based on best available information and may be subject to change following site investigation.
- Optimism bias will be applied to costing of scope items detailed under Task 5. CoRR should determine whether additional contingency should be applied given the uncertainty given the preliminary design phase has not been undertaken. The location of utilities is not fully understood. Utility relocation to accommodate the design or design refinements associated with the wall may be required. This could impact design and construction costs.
- When preparing cost associated with the collection system it is assumed that flow will be conveyed to no more than two onsite ponds via gravity drainage.
- Temporary flood protection measures will be designed based on government-furnished criteria and must accommodate hurricane season constraints.



- The standard of protection for the flood wall is assumed to be the 1% AEP.
- Detailed drainage calculations will not be performed as part of the OPC scope.
- Drainage patterns and assumptions on conveyance are subject to change based on site investigation.
- Construction sequencing will need to consider hurricane season restrictions and an allowance for weather delays will need to be made during cost of the construction once a preferred flood wall solution has been designed.
- This scope of work represents a costing exercise only, all design elements including preliminary, 30%, 60% and 90% design are excluded from the proposed scope of work. The OPC is the only deliverable.
- Only two virtual meetings have been allowed: one to review initial assumptions and a second meeting to discuss draft deliverables associated with Supplement 1 prior to issuing for CoRR review.
- AECOM will assume a streamlined approach to costing permitting approvals as part of the OPC. However, timing of permit issuance by regulatory agencies is outside of AECOM's control.
- AECOM will list all assumptions in pricing out each phase of study, design, and construction based on best available information at the time of preparation. Assumptions in the OPC are subject to change as the design develops.

## COST

AECOM proposes to perform this study for a total estimated cost of \$51,270. The cost per task summary is provided in **Table 1**. A detailed cost estimate is provided in **Exhibit D**.

**Table 1. Brushy Creek East Regional WWTP Floodwall Study Supplement 1 Fee Summary**

Task	Task Cost
Task 5 Prepare Conceptual Opinion of Probable Cost	\$51,270
<b>Total</b>	<b>\$51,270</b>

## SCHEDULE

Upon notice to proceed, AECOM proposes the deliverable schedule provided in **Table 2**. If an extension to the schedule is required, then AECOM will coordinate with CoRR staff on the additional time only needed to complete the cost estimate and accompanying memo.

**Table 2. Brushy Creek East Regional WWTP Floodwall Study Schedule**

Task	Start Date	End Date
Notice to Proceed	7/15/2025	--
Task 5 Prepare Conceptual Opinion of Probable Cost	7/15/2025	10/14/2025

## TERMS AND CONDITIONS

The fee will be effective if this proposal is accepted by the CoRR within 90 days of the date of this proposal. The scope of services will be performed in accordance with the terms and conditions in our Time and Materials Engineering Services Contract CM-2024-251 dated September 27, 2024. Please indicate your acceptance of this proposal by issuing a Supplement referencing this proposal.

Thank you for selecting our firm for providing the above services. Ms. Monica Wedo will be the project manager and AECOM contact for this work. If you have questions or would like additional information, please feel free to contact Ms. Monica Wedo at 512-779-0880 or email listed below or Carla Fischer, at the contact information listed below.

Sincerely,



Monica Wedo, P.E.  
Project Manager  
Surface Water, Central US  
AECOM Technical Services, Inc.  
[monica.wedo@aecom.com](mailto:monica.wedo@aecom.com)



Carla Fischer, P.E. (WI), CFM  
Vice President Business Line Director,  
Surface Water, Central US  
AECOM Technical Services, Inc.  
[carla.fischer@aecom.com](mailto:carla.fischer@aecom.com)

## ADDENDUM TO EXHIBIT C Work Schedule

The proposed work schedule for the Brushy Creek East Regional WWTP Floodwall Study Supplement 1 is provided below. The schedule assumes a NTP date of 7/15/2025.

Task	Start Date	End Date
Notice to Proceed	7/15/2025	--
Task 5 Prepare Conceptual Opinion of Probable Cost	7/15/2025	10/14/2025

**ADDENDUM TO EXHIBIT D**  
**Fee Schedule**

Attached Behind This Page

**Exhibit D: Fee Schedule**  
**Brushy Creek East Regional WWTP Floodwall Study Supplement 1**

City of Round Rock Brushy Creek East (BCE) Regional Wastewater Treatment Plant (WWTP) Floodplain Study Supplement 1	Program Principal	Project Principal	Senior Engineer III	Cost Estimator	Senior Engineer I	Senior Scientist	Project Engineer II	Staff Engineer I	Geologist	Admin	Contract Admin.	TOTAL HOURS	TASK LEVEL FEE
<b>TASK</b>	\$265.00	\$245.00	\$220.00	\$245.00	\$175.00	\$220.00	\$120.00	\$105.00	\$110.00	\$95.00	\$135.00	\$0.00	\$0.00
<b>Task 5 - Prepare Conceptual Opinion of Probable Cost</b>													
<b>Task 5.1 - Additional Project Management</b>	3	11	3	0	0	1	0	0	0	0	7	25	\$5,315
<b>Task 5.2 - Develop Final Design Cost Estimate and Assumptions</b>	6	19	9	0	3	6	3	0	10	0	0	56	\$11,530
Topographic Survey	2											2	
SUE Survey	2											2	
Geotechnical Investigation			2						6			8	
Geotechnical Analysis and Reporting (GIR/SMR)			4						4			8	
Utility Conflict Assessment	2											2	
Floodwall Structural Design Considerations			3									3	
Floodwall Closure Structure or Pond Pump Station Electrical Considerations		3										3	
Interior/On site Drainage Analysis and Concept Design		4					3					7	
Environmental Studies						6						6	
Preliminary Engineering Report (PER)		4										4	
30% Design PS&E		2										2	
60% Design PS&E		2										2	
90% Design PS&E		2										2	
CLOMR					3							3	
100% Design PS&E		2										2	
<b>Task 5.3 - Develop Construction Cost Estimate and Assumptions</b>	5	30	5	40	9	2	14	0	0	0	0	105	\$23,270
Develop Floodwall Assumptions and Cost Estimate	1	10	5	40	6		5					67	
Develop Interior Drainage/Site Stormwater Assumptions and Cost Estimate	4	17					9					30	
Permitting Assumptions and Cost Estimate		3			3	2						8	
<b>Task 5.4 - Memorandum</b>	6	24	6	0	0	2	6	6	0	6	0	56	\$11,150
<b>TOTAL HOURS</b>	20	84	23	40	12	11	23	6	10	6	7	242	
<b>TOTAL LABOR COSTS</b>	\$5,300	\$20,580	\$5,060	\$9,800	\$2,100	\$2,420	\$2,760	\$630	\$1,100	\$570	\$945		\$51,265
													\$51,270