

Meeting Minutes
Region 15 Lower Rio Grande Flood Planning
Group Meeting February 24, 2021
8:30 AM Virtual Meeting

Roll Call:

<u>Voting Member</u>	<u>Interest Category</u>	<u>Present (x) / Absent () / Alternate Present (*)</u>
Jose "Joe" Angel Hinojosa	<i>Agricultural interests</i>	X
David A. Garza	<i>Counties</i>	X
Daniel Lucio, Jr.	<i>Electric generating utilities</i>	X
Hudson DeYoe	<i>Environmental interests</i>	X
David L. Fuentes	<i>Flood districts</i>	X
Plinio Joey Trevino	<i>Industries</i>	X
Vanessa Rosales-Herrera	<i>Municipalities</i>	X
Joe A. Califa	<i>Public</i>	X
Jose Luis Caso	<i>Small business</i>	X
Sonia Lambert	<i>Water districts</i>	X
Riazul I. Mia	<i>Water utilities</i>	X
Eduardo Gonzalez	<i>Counties</i>	X
Raul Pena Jr	<i>Counties</i>	X
Alan Moore	<i>Flood Districts</i>	X

<u>Non-voting Member</u>	<u>Agency</u>	<u>Present(x)/Absent()/ Alternate Present (*)</u>
Willy Cupit	Tx Parks and Wildlife Department	
Tim Frere	Tx Division of Emergency Management	
Nelda Barrera	Tx Department of Agriculture	X
Adrian Perez	Tx State Soil and Water Conservation Board	
Shonda Mace	General Land Office	X
David Ramirez	Tx Commission on Environmental Quality	
Megan Ingram	Tx Water Development Board (TWDB)	X
Manuel Cruz	Tx Commission on Environmental Quality	X
Ramon Mancias	Tx Commission on Environmental Quality	X

Quorum:

Quorum: **Yes**

Number of voting members or alternates representing voting members present: **14**

Number required for quorum per current voting positions of 11: **6.**

Other Meeting Attendees: **

Director Brooke Paup	Anna Maria Clardy
Derek Katznelson	Andrew Smith
Rick Carrera	Patrick Looez
Ana Laurel	Kelly Dillard
TW Mountz	Raul E Sestin, PE, CFM
Saul Garcia	Miles Bullion
Derek Katznelson	Tiffany Cartwright
Robert Saenz	Kristina Leal
Mike Ramirez Kanto	Jaime Salazar
Nora D Cavazos	

****Meeting attendee names were gathered from those who entered information for joining the Zoom meeting.**

All meeting materials are available for the public at:

<http://www.twdb.texas.gov/flood/planning/regions/schedule.asp>.

AGENDA ITEM NO. 1: Call to Order and welcoming remarks

David Garza called the meeting to order at 8:32AM.

AGENDA ITEM NO. 2: Roll Call and establish quorum:

A roll call of the planning group members was taken to record attendance and a quorum was established prior to calling the meeting to order.

AGENDA ITEM NO. 3: Review of written public comments received:

No written public comments were received.

AGENDA ITEM NO. 4: Discussion and action as appropriate - consider approval of minutes from previous meeting on January 13, 2021

A motion was made by Eduardo Gonzalez to approve minutes from previous meeting January 13, 2021. The motion was seconded by Jose Califa. The motion passed by unanimous consent.

AGENDA ITEM NO. 5: Introduction of Region 15 new voting and non-voting members

Jaime Salazar introduced the new voting members; Eduardo Gonzalez, Raul Pena, Jr and Alan Moore and non-voting members; Ramon Macias and Manuel Cruz.

AGENDA ITEM NO. 6: Update from the Texas Water Development Board

Megan Ingram presented Director Brooke Paup.

Megan Ingram provided an update on the Flood Planning Grant Application. Application was submitted on time and will receive a response by March 31, 2021.

AGENDA ITEM NO. 7: Discussion and action as appropriate – additional non-voting entity members

Pre-registered public comment and public comments (Public comments limited to 3 minutes per speaker) No points or comments/concerns were brought forth during open discussion.

Update from Planning Group Sponsor:

- i. Non-voting member assigned by South Texas Development Council
- ii. Non-voting member assigned by Middle Rio Grande Development Council
- iii. Non-voting member assigned by Oklahoma/Texas U.S. Geological Survey

As per Jaime Salazar, he had not received any responses from the above entities with the exception of Oklahoma/Texas US Geological Survey who requested a copy of the signed by laws.

Chairman Garza assigned Manuel Cruz to make contact with South Texas Development Council and Middle Rio Grande Development Council.

AGENDA ITEM NO 8: Presentation and Discussion of scoring grid of Engineering firms who submitted Statement of Qualifications for RFQ No. HCDD1-21-003-02-10 - Professional Engineering Services for Regional Flood Planning – Region 15 Lower Rio Grande for the purpose of ranking by Region 15 Flood Planning Committee

- **Riazul Mia abstained from this item.**

As per Jaime Salazar, there were two (2) advertisements and openings were February 10, 2021. Seven (7) RFQ packets were requested and three (3) were received. RFQ was ranked and scored by the HCDD1 Engineers. Halff & Associates score was 93.33, Black & Veatch Corporation score was 92 and SWG Engineering, LLC score was 84. Halff & Associates was selected for the provision of Professional Engineering Services for Region 15 Flood Planning.

A motion was made by Jose Caso to approve nominations. The motion was second by David Fuentes. The motion passed by unanimous consent.

AGENDA ITEM NO 9: Pursuant to the Committees approval, requesting authority for the Hidalgo County Drainage District No.1 to negotiate a Professional Services Agreement with the number (1) ranked firm of Halff & Associates for the provisions of Professional Engineering Services for Region 15 Flood Planning.

Pre-registered public comment and public comments (Public comments limited to 3 minutes per speaker) No points or comments/concerns were brought forth during open discussion.

Hudson DeYoe had comments regarding the Scope of Work. He stated there was nothing that benefits Environmental.

As per Megan Ingram, Scope of Work is being reviewed by Texas Water Development Board.

Jaime Salazar requested that Mr. DeYoe submit any of his concerns in writing so it can be incorporated into the Scope of Work.

A motion was made by Jose Casos to approve. The motion was second by Joe Califa. The motion passed by unanimous consent.

AGENDA ITEM NO 10: Discussion and action as appropriate – development of public website

Pre-registered public comment and public comments (Public comments limited to 3 minutes per speaker) No points or comments/concerns were brought forth during open discussion.

Jaime Salazar made a presentation on venders and recommended EZ Task for the Web Services.

A motion was made by Riazul Mia to approve. The motion was second by Sonial Lambert. The motion passed by unanimous consent.

AGENDA ITEM NO 11: Receive general public comment (Public comments will be limited to 3 minutes per speaker)

No points or comments/concerns were brought forth during open discussion.

AGENDA ITEM NO 12: Consider date and agenda items for next meeting

Next meeting will be held on April 1, 2021 at 8:30 am

AGENDA ITEM NO 13. Adjourn

The meeting adjourned by David Garza.

Approved by the Region 15 Lower Rio Grande RFGP at a meeting held on April 1, 2021.

SONIA LAMBERT, SECRETARY

DAVID A. GARZA, CHAIR

THE STATE OF TEXAS §

COUNTY OF HIDALGO §

AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES

**"REGIONAL FLOOD PLAN FOR REGION 15 LOWER RIO GRANDE
REGIONAL FLOOD PLANNING GROUP"**

C-HCDD1-21-003-XX-XX

THIS AGREEMENT (this "Agreement") is made, by and between **HIDALGO COUNTY DRAINAGE DISTRICT NO. 1**, acting as the **GROUP SPONSOR FOR THE REGION 15 LOWER RIO GRANDE REGIONAL FLOOD PLANNING GROUP** hereinafter called the "Owner", and **HALF ASSOCIATES, INC.**, professional engineers, hereinafter called the "Engineer".

WITNESSETH:

WHEREAS the Owner desires to contract with the Engineer to provide management and professional engineering services to the Owner for the **Regional Flood Plan for Region 15 Lower Rio Grande Regional Flood Planning Group** which shall (the "Project").

WHEREAS, the Project will be conducted on and affect the area represented by the Region 15 Lower Rio Grande Valley Flood Planning Group, and information required by the Texas Water Development Board ("TWDB") in Article II, Project Description and Services to Be Performed as set forth in **Exhibit "A"**, TWDB Contract No. 2101792500 with the Owner.

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

ARTICLE 1. Services of Engineer. This Agreement constitutes an agreement between Owner and Engineer whereby Engineer shall perform professional engineering services for the Project.

ARTICLE 2. Character and Extent of Services. The services to be provided by Owner and Engineer for the Project shall be as follows:

2.1 Scope of Work and Project Team.

A. Owner Services. The Owner will deliver to Engineer all of the items and provide those services for the development of the Project identified in **Exhibit “B” - Information to be Provided by the Owner** (the “Owner Services”), which shall include Owner’s delivery to Engineer any available relevant data the Owner may have on file concerning the Project for the Engineer to review.

B. Engineering Services. The Engineer will provide the professional management and engineering services identified in **Exhibit “C”- Services to be Provided by the Engineer** (the “Engineering Services”).

C. Project Team. The Engineer shall allocate the tasks necessary to complete the Engineer Services between the different members of the project team (the “Project Team”) for the Project (as identified in the organizational chart shown in **Exhibit “C-1” - Project Team**). Engineer acknowledges and agrees that each member of the Project Team must be approved in writing by Owner, and, similarly, any change in a member of the Project Team must also be approved in writing by Owner.

2.2 Classification of Services For purposes of this Agreement, the Engineering Services (specifically described on Exhibit “C”) includes Engineer’s assistance with in completing and submitting to the Executive Administrator of the Texas Water Development Board: a) A technical memorandum

summarizing the findings and all work performed under the scope of work to this Agreement and any future amended scope of work; b) a draft of the Regional Flood Plan ¹; and c) a Final Regional Flood Plan.

2.3 Schedule of Work. As part of the Engineering Services, the Engineer shall prepare a schedule of work (the “Work Schedule”) for the Project in the form attached hereto as **Exhibit “D” – Work Schedule**. Engineer shall submit the Work Schedule for the Project to Owner for Owner’s review and approval. The work schedule must allow for sufficient time for Engineer to assist Owner in completing and submitting to the Executive Administrator of the Texas Water Development Board the following: a) A technical memorandum to Executive Administrator by January 7, 2022, summarizing the findings and all work performed under the scope of work to this Agreement and any future amended scope of work; b) a draft of the Regional Flood Plan to be submitted by August 1, 2022; and c) a final regional flood plan by January 10, 2023.

Upon the approval of the Work Schedule by Owner, the Work Schedule shall not thereafter be revised without the written agreement of Owner, which shall be in the form of a Supplemental Agreement.

ARTICLE 3. Period of Service. The Engineer shall only perform Engineering Services upon execution of this Agreement by the Owner. Engineer shall complete the Engineering Services for the Project within the time frame set forth in the Work Schedule (the “Engineering Services Completion Date”).

3.1 Termination Date. Engineer agrees to complete the deliverables under this agreement as set forth in the Work Schedule unless earlier terminated as provided in Section 3.4 of this Agreement (the “Termination Date”). The Owner assumes no liability or obligation for payment to the Engineer for Engineering Services or work of any kind performed or costs incurred by the Engineer (i) during periods

¹ “Regional Flood Plan” is a plan including any amendments that have been adopted by the Regional Flood Planning Group and that meets the requirements contained in Texas Water Code §16.062 and 31 Texas Administrative Code Chapters 631 and 362.

when Engineering Services are suspended, (ii) subsequent to the Engineering Services Completion Date, or (iii) subsequent to the Termination Date.

3.2 Extension of the Engineering Services Completion Date. The Engineer shall notify the Owner in writing as soon as possible if it is determined, or reasonably anticipated, that Engineer will not be able to perform the Engineering Services for the Project prior to the Engineering Services Completion Date, and the Owner may, at the Owner's sole discretion, agree to extend the Engineering Services Completion Date by written supplemental agreement as provided in Article 8 hereof. The Engineer shall allow adequate time for review and approval by the Owner of the written notice and request by the Engineer to extend any Engineering Services Completion Date.

3.3 Suspension of Work. Should the Owner desire to suspend the Engineering Services for the Project but not terminate this Agreement, the Owner shall provide Engineer with no less than fifteen (15) days verbal notification that the Engineering Services for the Project, followed by written confirmation from the Owner to the Engineer of such suspension. The fifteen (15) day notice may be waived as agreed in writing by both the Owner and the Engineer. The Engineering Services may be reinstated and resumed in full force and effect within thirty (30) days of receipt of written notice from the Owner to the Engineer. The thirty (30) day notice may be waived as agreed in writing by both the Owner and the Engineer.

If the Owner suspends the Engineering Services, the Engineering Services Completion Date shall not be affected, and the Engineering Services for the Project will terminate on the date specified herein, unless extended by Supplemental Agreement, as provided in Article 8 hereof, duly executed by the Engineer and the Owner prior to the Termination Date.

3.4 Termination of Agreement. This Agreement may be terminated by Owner before the applicable Engineering Services Completion Date, upon the following terms and conditions:

- (1) Commitment of Current Revenues. In the event that, during any term hereof, the Owner does not appropriate sufficient funds to meet to the obligations for the Project,

the Owner may terminate the applicable Work Authorization(s) upon thirty (30) days written notice to the Engineer. The parties intend this provision to be a continuing right to terminate this Agreement at the expiration of each budget period of the Owner pursuant to the provisions of Tex. Loc. Govt. Code Ann. §271.903.

- (2) By mutual agreement and consent, in writing, of both the Engineer and the Owner.
- (3) By the Owner, upon failure of the Engineer to perform the Engineering Services in a satisfactory manner, as determined by the Owner and in its sole discretion, provided that Owner has given written notice to the Engineer of such failure and the Engineer has not corrected such failure, as determined by Owner in Owner's sole discretion, within (30) days of such written notice by the Owner.
- (4) By the Engineer, upon failure of the Owner to perform the Owner's Services, provided that Engineer has given written notice to the Owner of such failure and the Owner has not corrected such failure within thirty (30) days of such written notice by the Engineer.
- (5) By the Owner without cause upon thirty (30) days written notice to the Engineer.

Should the Owner terminate this Agreement as herein provided, no fees other than fees due and payable at the time of termination shall thereafter be paid to the Engineer notwithstanding anything herein to the contrary. In determining the value of the Engineering Services performed by the Engineer prior to termination, the Owner shall be the sole judge of the value of such Engineering Services performed. Compensation for Engineering Services at termination will be based on a percentage of the work completed at that time.

If the termination of this Agreement is due to the failure of the Engineer to fulfill the Engineer's obligations under this Agreement, the Owner may take over the Engineering Services related to the Project and prosecute the Engineering Services to completion. In such case, the Engineer shall be liable to the

Owner for any additional cost incurred by the Owner in having the Engineering Services for the Project completed.

If the Engineer defaults in the performance of the Engineering Services or other obligations set forth in this Agreement or if the Owner terminates this Agreement due to a default on the part of the Engineer, the Owner may, but shall not be obligated to, consider paying to Engineer a final amount in full satisfaction of any previously completed Engineering Services. In making its determination as to whether or not Engineer is entitled to any further consideration for Engineering Services performed under this Agreement prior to its termination, and if so, in what amounts, Owner agrees to consider the following factors: (i) the actual costs incurred by the Engineer in performing the Engineering Services prior to the date of Engineer's default; (ii) the amount of work required which was satisfactorily completed to date of default; (iii) the value of the Engineering Services which is usable to the Owner; (iv) the cost to the Owner of employing another engineer to complete the Engineering Services for the Project and the time required to do so; and (v) and other factors which affect the value to the Owner of the value of the Engineering Services performed at the time of default. This Agreement shall not be considered as specifying the exclusive remedy for any default by the Engineer, but all remedies existing at law and in equity may be availed of by either party and shall be cumulative.

The termination of the Agreement and payment of any amount prescribed above shall extinguish all rights, duties, and obligations of the Owner and the Engineer under this Agreement, except the obligations set forth in Articles 10, 11, 13, 14, 15.3, 16, 19 and 35 (A-I) hereto.

ARTICLE 4. Progress and Coordination. The Engineer shall, from time to time during the progress of the Engineering Services, confer with the Owner. The Engineer shall prepare and present such information as may be pertinent and necessary, or as may be requested by the Owner, in order to evaluate features of the Engineer's performance of the Engineering Services.

At the request of the Owner or the Engineer, conferences shall be provided at the Engineer's office, the office of the Owner, or at other locations designated by the Owner. These conferences shall also include evaluation of the Engineer's performance of the Engineering Services.

All applicable study reports shall be submitted in preliminary form for approval by the Owner before the final report is issued. The Owner's comments regarding the Engineer's preliminary report will be addressed by the Engineer in the final report.

If funds by other agencies or entities are to be used for the development of the Project under this Agreement, the Engineer's performance of the Engineering Services shall also be subject to periodic review and approval by such other agencies or entities (which may include city, county, state and/or federal agencies).

If it is determined that the progress of the Engineer's performance of the Engineering Services does not satisfy the requirements of the Work Schedule associated therewith, the Owner and Engineer shall review the Work Schedule to determine the proper corrective action needed by either the Owner or the Engineer.

The Engineer shall promptly advise the Owner in writing of events which have a significant impact upon the progress of the Work Schedule (each a "Work Schedule Notice"). Each Work Schedule Notice shall include the following:

- (1) An explanation of the problems, delays, adverse conditions which will materially affect the ability to attain contract objectives, prevent the meeting of time schedules and goals, or preclude the timely completion and submittal of the deliverables by the Engineer within the time periods for such established in the Work Schedule; and
- (2) An explanation of any favorable developments or events which enable meeting the Work Schedule goals sooner than anticipated.

For each Work Schedule Notice relating to a delay in the Work Schedule, Engineer shall also include a statement from the Engineer of recommended or immediate action taken, or contemplated, and any Owner or other agency or entity assistance needed to resolve the situation.

ARTICLE 5. Compensation and Fees. For and in consideration of the services to be rendered by the Engineer, the Owner shall compensate the Engineer as follows:

5.1 Basic Services. For and in consideration of the basic services to be rendered by the Engineer as part of the Engineering Services for the Project, which are set forth in Exhibit “C” the Owner shall pay to Engineer no more than One Million One Hundred Ninety-Eight Thousand Nine Hundred Seventy-Eight Dollars which is based on hourly rates set forth in **Exhibit D-1** and the fee schedule in **Exhibit D-2**.

ARTICLE 6. Method of Payment.

6.1 Request for Payment. Payments to the Engineer for Engineering Services rendered for the Project will be made while the Engineering Services are in progress. The Engineer shall prepare and submit to the Owner a progress report for the Project in sufficient detail to verify the progress of the Engineering Services and in support of a request for payment (each a “Request for Payment”). The Request for Payment shall indicate the percent completion of the Engineering Services relating to the Project accomplished by the Engineer during the billing period and to the date of the Request for Payment. Each Request for Payment shall be delivered by Engineer to Owner in accordance with a monthly payment schedule. Each Request for Payment shall include the percent completion of the Engineering Services for the Project as identified in Exhibit C together with a detailed breakdown of the amount and the sum of all prior payments made on the Project and the amount remaining to be paid to Engineer for the Engineering Services relating to the Project. The Owner shall review each such Request for Payment and may make such exceptions as the Owner deems necessary or appropriate, in Owner’s sole discretion, under the circumstances then existing. Within ten (10) business days after the Owner’s Board of Directors

approves such payment, the Owner shall make payment to the Engineer of the approved amount. Owner may withhold 10% retainage from each approved Request for Payment which shall be paid to Engineer upon final completion of this Agreement.

6.2 Final Payment. After Engineer has achieved final completion of the Engineering Services for the Project, as determined by Owner in its sole discretion, the Engineer shall submit a final request for payment (“Final Request for Payment”) which shall set forth all amounts due and remaining to be paid to the Engineer. Upon approval of a Final Request for Payment by the Owner, the Owner shall pay to the Engineer the amount due (“Final Payment”) under such Final Request for Payment. Notwithstanding the foregoing, Owner shall not be obligated to deliver the Final Payment to Engineer until the Engineer delivers to the Owner an affidavit stating that to the Engineer’s knowledge any and all amounts due for materials and services over which the Engineer has control have been paid.

6.3 Qualification on Obligations to Pay. Any provision hereof to the contrary notwithstanding, the Owner shall not be obligated to make any payment (whether a progress payment under Article 6.1 hereof or a Final Payment) to the Engineer hereunder if any one or more of the following conditions exist:

- (1) The Engineer is in default of any of its obligations under this Agreement.
- (2) Any part of such payment is attributable to Engineering Services which are not performed in accordance with this Agreement; provided, however, such payment shall be made as to the part thereof attributable to the Engineering Services which were performed in accordance with this Agreement.
- (3) The Engineer has failed to make payments promptly to consultants or other third parties used in connection with the Project for which the Owner has made payment to the Engineer.
- (4) If the Owner, in its sole discretion, determines that the portion of the compensation then remaining unpaid will not be sufficient to complete the Engineering Services in accordance with this Agreement, no additional payments will be due the Engineer hereunder unless and until the Engineer, at its sole cost, performs a sufficient portion of the Engineering Services so that such portion of the compensation then remaining unpaid is determined by the Owner to be sufficient to so complete the Engineering Services.

6.4 No partial payment made hereunder shall (i) constitute or be construed to constitute final acceptance or approval of that part of the Engineering Services to which such partial payment relates, or (ii) relieve the Engineer of any of its obligations hereunder with respect to such portion of the Engineering Services.

6.5 The Engineer shall promptly pay all bills for labor and material performed and furnished by others in connection with the performance of the Engineering Services.

ARTICLE 7. Supplemental Agreements. The terms of this Agreement or the members of the Project Team may be amended only by supplemental agreement executed by Owner and Engineer if the Owner determines that (1) there is a need to extend the Engineering Services Completion Date set forth herein, (2) there has been a significant change in the scope, complexity or character of the services to be performed by the Engineer, and/or (3) for any other reason agreeable to the Owner and the Engineer. All supplemental agreements will be developed in the form identified in **Exhibit “E” - Supplemental Agreement Form** (each a “Supplemental Agreement”).

If determined appropriate by the Owner in Owner’s sole discretion, additional compensation to the Engineer for (1), (2) and/or (3) above shall be paid as set forth in the Supplemental Agreement.

Any Supplemental Agreement must be executed by both the Engineer and the Owner prior to either (i) the Engineering Services Completion Date, or (ii) the Termination Date for any other modifications to this Agreement.

It is expressly understood and agreed that no claim by the Engineer for additional Engineering Services or changes or revisions in the Engineering Services shall be made by the Engineer unless both Owner and Engineer have fully executed a Supplemental Agreement setting forth such additions, changes or revisions.

ARTICLE 8. Additional Services. If the Engineer is of the opinion that any of the Engineering Services it has been directed to perform is beyond the scope of this Agreement and constitutes extra work,

the Engineer shall promptly notify the Owner in writing. In the event the Owner, in Owner's sole discretion, finds that such Engineer has performed Engineering Services in addition to those required by this Agreement at the request of Owner and such was not covered by a Supplemental Agreement, the Owner shall so advise the Engineer and a Supplemental Agreement may be executed between the Owner and the Engineer as provided herein.

ARTICLE 9. Changes or Revisions in Work Produced. If the Owner finds it necessary to request changes to any work product of Engineer delivered to Owner as a part of the Engineering Services, and the changes are within the applications of sound engineering principles, the Engineer shall make such revisions as requested and directed by the Owner.

9.1 Preliminary Work. The Engineer will make, without expense to the Owner, such revisions of any preliminary reports or drawings as may be required to meet the needs of the Owner and the applications of sound engineering principles.

9.2 Previously Approved or Satisfactorily Completed Work. If the Owner funds it necessary to request the Engineer to make changes to (i) any work product previously approved by the Owner, or (ii) after a definite plan has been approved by the Owner, which for proper execution involves extra Engineering Services for changes in or additions to the such work product, such will be treated as additional services for which Engineer shall be entitled to compensation in accordance with Article 8 hereof, and Owner and Engineer shall execute a Supplemental Agreement setting forth such terms.

ARTICLE 10 Discounts, Rebates, Refunds. In connection with procurement services rendered by the Engineer, if procurement services are required of the Engineer hereunder, all discounts, rebates and refunds shall accrue to the Owner. For some purchases, the Engineer may deem that payment within the discount period is not safe; and/or inspection, guarantees, or other considerations may dictate delay. In such cases, the Engineer shall promptly notify the Owner so that a course of action may be mutually agreed upon by the Owner and the Engineer.

ARTICLE 11. Records, Accounting, Inspection. The Engineer shall keep full and detailed records and accounts in a manner approved by the Owner. On no less than ten (10) days' written notice, the Engineer shall make available to Owner's authorized personnel and independent auditors' full access to the work performed by the Engineer regarding the Project and to all of the Engineer's books, records, correspondence, instructions, drawings, receipts, vouchers, and other documents relating to the Project. The Engineer shall preserve all such records for no less than five (5) years after the termination of this Agreement.

ARTICLE 12. Subcontracting and Assignment. The Engineer shall not assign, subcontract or transfer the Engineer's interest in this Agreement without the prior written consent of the Owner. The Engineer shall bind every sub-consultant by written subcontract to observe all the terms of this Agreement to the extent that they may be applicable to each sub-consultant. No subcontract relieves the Engineer of any responsibilities under this Agreement.

The Engineer, and the Owner, do hereby bind themselves, their successors, executors, administrators and assigns to each 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. All subcontractors, sub-consultants and vendors utilized by Engineer for any project in connection with this Agreement shall be disclosed as part of the Project Team. Although Engineer is responsible for payment of the approved subcontractors, sub-consultants and vendors it utilizes, Engineer is responsible for identifying the contract rates for each and every such subcontractor, sub-consultant and vendor which is a part of the Project Team. Engineer shall obtain and provide to Owner evidence of insurance in limits no less than that required in Article 18 below, from each of its subcontractors, sub-consultants and vendors that perform any work under this Agreement.

ARTICLE 13. Patents. The Engineer shall indemnify and save the Owner and the Texas Water Development Board harmless from all liability for alleged or actual infringement of any patent resulting

from the use of apparatus or equipment furnished or designed by the Engineer or from the use of any process designed by the Engineer or effected by said apparatus or equipment, and the Engineer shall indemnify and save the Owner and the Texas Water Development Board harmless from and against all costs, legal fees, expenses and liabilities incurred in or about any claim of or action for such infringement: provided, however, that the Owner and the Texas Water Development Board shall promptly transmit to the Engineer all papers served on the Owner or Texas Water Development Board in any suit involving such claim of infringement. If because of actual infringement the use of such apparatus, equipment, or process is enjoined, the Engineer shall refund the purchase price thereof in proportion to the length of service uncompleted, the life of such apparatus or equipment being assumed as five years. The Engineer hereby grants to the Owner a non-exclusive, royalty-free license under patents now or hereafter owned by the Engineer covering any machines, apparatus, processes, articles, or products included in the Engineering Services hereunder.

ARTICLE 14. Engineer's Seal, Responsibility and Warranties.

14.1 Engineer's Seal. The Engineer shall assign a responsible Engineer or Engineers licensed to practice in the State of Texas, who shall sign, seal and date all appropriate Engineering submissions to the Owner in accordance with the Texas Engineering Practice Act and the Rules of the State Board of Registration for Professional Engineers.

14.2 Engineer's Responsibility. The Engineer shall be responsible for the accuracy of the work for the Project and shall promptly make necessary revisions or corrections resulting from errors, omissions, or negligent acts by the Engineer. No additional compensation will be made to the Engineer for any necessary revisions or corrections resulting from errors, omissions, or negligent acts by the Engineer.

The Engineer's responsibility for all questions arising from design errors and/or omissions will be determined by the Owner or a designee appointed by the Owner.

14.3 Warranties.

(a) The Engineer warrants that Engineering work performed by the Engineer hereunder shall be in accordance with sound Engineering design practices and in conformance with applicable code and standards established for such work.

(b) Notwithstanding anything to the contrary contained in this Agreement, the Owner and the Engineer agree and acknowledge that the Owner is entering into this Agreement in reliance on the Engineer's experience and abilities with respect to performing the Engineer's services hereunder. The Engineer accepts the relationship of trust and confidence established between it and the Owner by this Agreement. The Engineer covenants with the Owner to use the Engineer's best efforts, skill, judgment and abilities to perform the Project and to further the interests of the Owner in accordance with the Owner's requirements and procedures, in accordance with all professional standards, and in compliance with all applicable national, federal, state, county and municipal laws, regulations, codes, ordinances, orders and with those of any other body having jurisdiction.

(c) The Engineer represents, covenants and agrees that all of Engineering Services to be furnished by the Engineer until the Project has been fully completed, shall be of the standard and quality which prevail among Engineers of similar experience, knowledge, skill and ability engaged in engineering practice throughout Texas under the same or similar circumstances involving the Project.

(d) The Engineer represents, covenants and agrees that the Engineer's special talent, training and experience cause the Engineer to be the prime professional on the Project; that because of such talent and training, the Engineer envisions the Project in its entirety and possesses the special skills which enable the Engineer to recognize dangerous conditions that a reasonable, prudent Engineer having such special skills could anticipate may arise from the proper use of the Project after acceptance by Owner; and that the Engineer recognizes that any board members, elected officials, employees and agents of the

Owner, plus residents and owners of property within the area affected by the Project are within a class of foreseeable persons who will be relying on the Project being designed in a professional and safe manner.

ARTICLE 15. Engineer's Resources. The Engineer shall furnish and maintain, at the Engineer's own expense, office space for the performance of all Engineering Services, skilled and sufficient personnel, as well as adequate and sufficient equipment to perform the Engineering Services as required under this Agreement.

15.1 Project Manager. The Engineer shall provide a manager (the "Project Manager") for the Project who must be a registered professional engineer in the State of Texas. The Project Manager shall have such knowledge and experience as will enable that Project Manager to complete the Engineering Services in compliance with the terms of this Agreement.

15.2 Employees of the Engineer. All employees of the Engineer shall have such knowledge and experience as will enable them to perform the duties assigned to them and required for the Engineering Services under this Agreement. Any employee of the Engineer, including the Project Manager, who, in Owner's sole opinion, is incompetent, or whose conduct becomes detrimental to the work required under this Agreement, shall immediately be removed from association with the Project by Engineer when so instructed by the Owner. The Engineer certifies that the Engineer presently has employed sufficient and qualified personnel and will maintain sufficient and qualified personnel for performance of the Engineering Services under this Agreement.

15.3 Documents/Information Exchange The purpose of this Article is to define the required automated resources, format for graphics files, and information exchange pertaining to the Project. Taking into consideration that the Owner has a significant investment in the development of the Project, there is a need for the Engineer to provide consistency in document development for information exchange. Consistency in document development for information exchange and production will help facilitate an

economically efficient project. Therefore, the Engineer shall provide the Owner with documents and information in accordance with any special requirements outlined in Exhibit "C" attached hereto.

ARTICLE 16. Indemnification.

16.1 Indemnity for the Negligence of Engineer-Related Persons. TO THE FULLEST EXTENT PERMITTED BY LAW INCLUDING CHAPTER 151 OF THE TEXAS INSURANCE CODE, ENGINEER AGREES TO INDEMNIFY, DEFEND AND HOLD HARMLESS OWNER AND ITS AGENTS, EMPLOYEES, SUCCESSORS, AFFILIATES AND ASSIGNS ("OWNER-RELATED PERSONS") AND THE TEXAS WATER DEVELOPMENT BOARD FROM AND AGAINST ALL CLAIMS, DAMAGES, LOSSES, LIABILITIES AND EXPENSES (INCLUDING, BUT NOT LIMITED TO, REIMBURSEMENT OF ATTORNEYS' FEES EXPENDED IN LITIGATION OR ARBITRATION OR ENFORCEMENT OF THIS AGREEMENT), FOR BODILY INJURY OR DEATH OF PERSONS OTHER THAN AN EMPLOYEE OF ENGINEER, ITS AGENTS, OR ITS SUBENGINEERS OF ANY TIER, TO THE EXTENT CAUSED IN WHOLE OR IN PART BY THE NEGLIGENT ACTS OR OMISSIONS, OF ENGINEER, SUBENGINEERS AND ALL OTHER PERSONS FOR WHOM ENGINEER IS LEGALLY LIABLE (A "ENGINEER-RELATED PERSON"), BUT NOT TO THE EXTENT CAUSED IN WHOLE OR IN PART BY THE NEGLIGENT ACT OR OMISSION OF AN OWNER-RELATED PERSON.

16.2 Enforcement Costs. EXPENSES RECOVERABLE BY THE OWNER-RELATED PERSONS AS PART OF THE ENGINEER'S INDEMNITY OBLIGATIONS UNDER THIS ARTICLE 18 (INDEMNIFICATION) SHALL INCLUDE, WITHOUT LIMITATION, ALL ATTORNEYS' FEES AND ANY COSTS INCURRED BY SUCH OWNER-RELATED PERSONS IN ENFORCING THE PROVISIONS OF THE ENGINEER'S INDEMNITY OBLIGATIONS.

16.3 Proceedings. THE ENGINEER SHALL PROMPTLY ADVISE OWNER IN WRITING OF ANY ACTION, ADMINISTRATIVE OR LEGAL PROCEEDING OR INVESTIGATION AS TO

WHICH THIS INDEMNIFICATION MAY APPLY, AND ENGINEER, AT ENGINEER'S EXPENSE, SHALL ASSUME ON BEHALF OF THE OWNER-RELATED PERSONS AND CONDUCT WITH DUE DILIGENCE AND IN GOOD FAITH THE DEFENSE THEREOF WITH COUNSEL SATISFACTORY TO OWNER; PROVIDED, HOWEVER, THAT OWNER AND THE OTHER OWNER-RELATED PERSONS SHALL EACH HAVE THE RIGHT, AT THEIR OPTION, TO BE REPRESENTED THEREIN BY LEGAL COUNSEL OF THEIR OWN SELECTION AND AT THEIR OWN EXPENSE. IN THE EVENT OF FAILURE BY THE ENGINEER TO FULLY PERFORM IN ACCORDANCE WITH THIS INDEMNIFICATION ARTICLE, THE OWNER-RELATED PERSONS, AT THEIR OPTION, AND WITHOUT RELIEVING ENGINEER OF ITS OBLIGATIONS HEREUNDER, MAY SO PERFORM, BUT ALL COSTS AND EXPENSES SO INCURRED BY THE OWNER-RELATED PERSONS IN THAT EVENT SHALL BE REIMBURSED BY ENGINEER TO SUCH OWNER-RELATED PERSONS, TOGETHER WITH INTEREST ON THE SAME FROM THE DATE ANY SUCH EXPENSE WAS PAID BY SUCH OWNER-RELATED PERSONS UNTIL REIMBURSED BY ENGINEER, AT THE RATE OF INTEREST PROVIDED TO BE PAID ON JUDGMENTS UNDER THE LAWS OF THE STATE OF TEXAS.

16.4 Chapter 151 Texas Insurance Code. IT IS THE INTENT OF THE PARTIES TO THIS AGREEMENT NOT TO VIOLATE THE PROVISIONS OF CHAPTER 151 OF THE TEXAS INSURANCE CODE. IN THE EVENT THAT ANY PROVISION OF THIS AGREEMENT VIOLATES THE PROVISIONS OF CHAPTER 151 OF THE TEXAS INSURANCE CODE, THIS AGREEMENT SHALL BE REVISED TO LIMIT THIS AGREEMENT TO COMPLY WITH CHAPTER 151 OF THE TEXAS INSURANCE CODE.

16.5 Survival. THE INDEMNITIES IN THIS ARTICLE 18 (INDEMNIFICATION) SURVIVE THE EXPIRATION OR EARLIER TERMINATION OF THIS AGREEMENT, THE FINAL

COMPLETION OF THE ENGINEERING SERVICES, AND ANY OTHER SERVICES TO BE PROVIDED PURSUANT TO THIS AGREEMENT.

ARTICLE 17. Joint and Several Liability. In the event more than one of the Indemnitors are connected with an accident or occurrence covered by the indemnification in Article 18 hereof, then each of such Indemnitors shall be jointly and severally responsible to the Indemnitees for indemnification and the ultimate responsibility among such Indemnitors for the loss and expense of any such indemnification shall be settled by separate proceedings and without jeopardy to any Indemnitee. The provisions of this Article shall not be construed to eliminate or reduce any other indemnification or right which the Owner or any of the Indemnitees has by law.

ARTICLE 18. Insurance. The Engineer shall obtain and maintain insurance in the limits of liability for each of the types of insurance coverage identified as follows.

- (1) Workers' Compensation, endorsed with a waiver of subrogation in favor of the Owner in accordance with the statutory obligations imposed by Worker's Compensation or Occupational Disease laws under the Texas Workers' Compensation Law ("Statutory Texas")
- (2) Commercial General Liability, endorsed with the Owner as an additional insured and endorsed with a waiver of subrogation in favor of the Owner all to the extent of the liabilities assumed by the Engineer under Article 18 and Article 19 herein, in limits of liability not less than One Million Dollars (\$1,000,000) for personal or bodily injury or death of anyone person, Two Million Dollars (\$2,000,000) for any single occurrence and One Million Dollars (\$1,000,000) for property damage in anyone occurrence.
- (3) Texas Business Automobile Policy, endorsed with the Owner as an additional insured and endorsed with a waiver of subrogation in favor of the Owner all to the extent of

the liabilities assumed by the Engineer under Article 18 and Article 19 herein, in limits of liability not less than One Million Dollars (\$1,000,000) each person for bodily injury, One Million Dollars (\$1,000,000) each occurrence for bodily injury, and Five Hundred Thousand Dollars (\$500,000) each occurrence for property damage.

- (4) Professional Liability in limits of One Million Dollars (\$1,000,000) each claim and aggregate.

The Engineer covenants and agrees to maintain an insurance policy in the minimum limits of liability for each of the types of insurance coverage identified above. The Engineer shall furnish the Owner with a certificate of insurance showing the said policy to be in full force and effect during the term of this Agreement. The Certificate of Insurance shall be attached hereto and identified as **Exhibit “F”-Certificate of Insurance**. The Engineer will be considered in breach of contract should the Engineer fail to maintain an insurance policy in the minimum limits of liability and requirements identified above while performing services for and under this Agreement, and will be subject to default and termination of the Agreement as outlined in Article 3.4 hereto. Additionally, the Engineer covenants to maintain an insurance policy in the minimum limits of liability and requirements identified above until one year following the date of termination of this Agreement.

ARTICLE 19. Compliance with Laws. The Engineer shall comply with all applicable federal, state and local laws, statutes, codes, ordinances, rules and regulations and the orders and decrees of any court, or administrative bodies or tribunals in any manner affecting the performance of this Agreement including, without limitation, worker’s compensation laws, minimum and maximum salary and wage statutes and regulations and licensing laws and regulations. When required the Engineer shall furnish the Owner with satisfactory proof of its compliance therewith.

ARTICLE 20. Non-collusion. The Engineer warrants that the Engineer has not employed or retained any company or persons, other than a bona fide employee working solely for the Engineer, to solicit or secure this Agreement, and that the Engineer has not paid or agreed to pay any company, Engineer or any other person or entity any fee, commission, percentage, brokerage fee, gifts or any other consideration contingent upon or resulting from the award or execution of this Agreement. For breach or violation of this warranty the Owner shall have the right to annul this Agreement without liability or, in the Owner's discretion, to deduct from the Basic Services Fee, or otherwise recover, the full amount of each fee, commission, percentage, brokerage fee, gift or contingent fee.

ARTICLE 21. Gratuities. The Owner mandates that employees of the Owner shall not accept any benefits, gifts or favors from any person doing business or who reasonably speaking may do business with the Owner under this Agreement; the only exceptions allowed are ordinary business meals. Any person doing business with or who may reasonably seek to do business with the Owner under this Agreement may not make any offer of benefits, gifts or favors to Owner employees, except as mentioned herein above. Failure on the part of the Engineer to adhere to this provision may result in the termination of this Agreement.

ARTICLE 22. Payment of Franchise Tax. The Engineer hereby certifies that the Engineer is not delinquent in Texas franchise tax payments, or that the Engineer is exempt from, or not subject to, such as tax. A false statement concerning corporation's franchise tax status shall constitute grounds for termination of the Agreement at the sole option of the Owner.

ARTICLE 23. Disputes. The Engineer shall be responsible for the settlement of all contractual and administrative issues arising out of any procurement made by the Engineer in support of the services under this Agreement.

ARTICLE 24. Severability. In the event any one or more of the provisions contained in this Agreement shall for any reason, be held to be invalid, illegal, or unenforceable in any respect such

invalidity, illegality or unenforceability shall not affect any other provision thereof and this Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

ARTICLE 25. Notices. All notices to either party by the other required under this Agreement shall be personally delivered or mailed to such party at the following respective addresses:

OWNER:

Hidalgo County Drainage District No. 1
Attn: Chairman of the Board
902 N. Doolittle Rd
Edinburg, TX 78542

ENGINEER:

With Copy to:

Hidalgo County Drainage District No. 1
Attn: District Manager
902 N. Doolittle Rd
Edinburg, TX 78542

The Address may be changed by either party by written notice and notice is effective upon mailing.

ARTICLE 26. Owner's Remedies. In the event Engineer defaults in its performance of the services hereunder, Owner shall be entitled to enforce all rights and remedies available at law or in equity. Additionally, in the event Engineer fails to complete the Engineering Services on or before the Engineering Services Completion Date, Owner shall be entitled a per diem liquidated damage amount (the "Per Diem Damage") for each day between the Engineering Services Completion Date and the actual date that Engineer completes the Engineering Services. The amount of the Per Diem Charge shall be \$300 per day. **Owner and Engineer acknowledge that the damages to Owner in the event Engineer fails to complete the Engineering Services by the Engineering Services Completion Date would be difficult or impossible to determine and that the amount of the Per Diem Damage set forth in the Work Authorization represents the parties' best and most accurate estimate of the damages that would be**

suffered by Owner if Engineer so fails and that such estimate is reasonable under the circumstances existing as of the date of this Agreement. The foregoing shall not restrict or limit any rights of Owner for a default by Engineer other than a failure to complete the Engineering Services by the Engineering Services Completion Date.

ARTICLE 27. Miscellaneous Provisions.

(a) This Agreement constitutes the entire Agreement between the Engineer and the Owner relating to the services herein described and supersedes any prior understanding or written or oral contracts between the parties respecting the subject matter defined herein. These are no previous or contemporary representations or warranties of the Owner or the Engineer not set forth herein.

(b) Except as specifically provided herein no modification, waiver, termination, rescission, discharge or cancellation of this Agreement or of any terms thereof shall be binding on the Owner unless in writing and executed by an officer or employee of the Owner specifically authorized to do so.

(c) No waiver of any provision of or a default under this Agreement shall affect the right of the Owner thereafter to enforce said provision or to exercise any right or remedy in the event of any other default whether or not similar.

(d) No modification, waiver, termination, discharge or cancellation of this Agreement or of any terms thereof shall impair the Owner's right with respect to any liabilities whether or not liquidated of the Engineer to the Owner theretofore accrued.

(e) All rights and remedies of the Owner specified in this Agreement are in addition to the Owner's other rights and remedies.

(f) The Engineer shall remain an independent contractor and shall have no power nor shall the Engineer represent that the Engineer has any power to bind the Owner or to assume or to create any

obligation express or implied on behalf of the Owner except as specifically authorized in advance by the Owner.

(g) The Agreement shall be construed under the laws of the State of Texas and is performable in Hidalgo County, Texas.

(h) This Agreement may only be amended by a written document executed by the Owner and the Engineer as provided by Article 8 herein.

ARTICLE 28. Signatory Warranty The undersigned signatory or signatories for the Engineer hereby represent and warrant that the signatory is an officer of the organization for which he or she has executed this Agreement and that he or she has full and complete authority to enter into this Agreement on behalf of the Engineer. The above-stated representations and warranties are made for the purpose of inducing the Owner to enter into this Agreement.

ARTICLE 29. Immunities. Nothing in this Agreement is intended to and Owner does not hereby waive, release or relinquish any right to assert any of the defenses Owner enjoys by virtue of the state or federal constitution, laws, rules or regulations, and any sovereign, official or qualified immunity available to Owner as to any claim or action of any person, entity, or individual against Owner.

ARTICLE 30. HB 89 and SB 252 Certification. Engineer hereby certifies that it is not a company identified on the Texas Comptroller's list of companies known to have contracts, with, or provide supplies or services to, a foreign organization designated as a Foreign Terrorist Organization by the U.S. Secretary of State under federal law. Engineer hereby verifies and certifies that neither Engineer, nor any of its affiliates, subsidiaries, or parent entities, if any, boycotts Israel. Engineer agrees that Engineer and any of its affiliates, subsidiaries, or parent entities will not boycott Israel during the term of this Agreement.

ARTICLE 31. Non-Discrimination. This Parties Agree that this Agreement and all related activities shall be conducted in a manner that does not discriminate against any person on a basis prohibited by applicable law, including without limitation race, color, national origin, religion, sex, age, veteran status, or disability.

ARTICLE 32. Governmental Purpose. The Owner is entering into this Agreement for the purpose of providing for governmental services or functions and will pay for such services out of current revenues available to the paying party as herein provided.

ARTICLE 33. Appendix II to CFR 200-Contract Provisions. Pursuant to 2 CFR 200.326, a non-Federal entity's contracts must contain the applicable provisions described in Appendix II to 2 CFR 200-Contract Provisions for non-Federal Entity Contracts under Federal Awards. Therefore, if applicable, the provisions of Appendix II to 2 CFR 200 are incorporated by reference into this agreement should it be subject to Federal award.

ARTICLE 34. Exhibits. The Parties agree that any obligations set forth in the Exhibits attached to this Agreement are binding on the Parties.

ARTICLE 35. Provisions Required by Texas Water Development Board (“TWDB”)

A. State Auditor’s Right to Audit. The auditor for the State of Texas may conduct an audit or investigation of any entity receiving funds from the state directly under the contract with the State or indirectly through a Subcontract. The Parties acknowledge the Owner is receiving funds from the State for this Contract, and Engineer shall receive funds indirectly from the State. The acceptance of funds directly or indirectly acts as acceptance of the authority of the state auditor, under the direction of the legislative audit committee, to conduct an audit or investigation in connection with those funds. Under the direction of the legislative audit committee, an entity that is the subject of an audit or investigation by the state auditor must provide the state auditor with access to any information the state auditor considers relevant to the investigation or audit.

B. Financial Records: Engineer must maintain satisfactory financial accounting documents and records, including copies of invoices and receipts, and must make them available for examination and audit by the Executive Administrator of the TWDB. Accounting by the Engineer and its subconsultants must be in a manner consistent with generally accepted accounting principles.

C. Excess Obligations Prohibited/No Debt Against the State: This Contract is subject to termination or cancellation without penalty to TWDB, either in whole or in part, subject to the availability of state funds.

D. License, Permits, and Insurance: Engineer is considered an independent contractor and therefore solely responsible for liability resulting from negligent acts or omissions. Engineer must obtain all necessary insurance to protect itself, the Owner, the TWDB, and employees and officials of TWDB from liability arising out of this Contract. Engineer must indemnify and hold TWDB and the State of Texas harmless, to the extent the Engineer may do so in accordance with state law, from any and all losses, damages, liability, or claims therefore, on account of personal injury, death, or property damage of any nature whatsoever caused by the Engineer, arising out of the activities under this Agreement. Engineer must be solely and entirely responsible for procuring all necessary licenses and permits which may be required for the Agreement to perform the subject work.

E. Ownership: It is agreed that all reports, drafts of reports, or other material, data, drawings, computer programs and codes associated with this Agreement and developed by the Engineer pursuant to this Agreement will become the joint property of the Region 15 Lower Rio Grande Regional Flood Planning Group, the Owner, Engineer, and the TWDB. These materials must not be copyrighted or patented by the Engineer. Engineer agrees that neither the Regional Flood Planning Group nor the Texas Water Development Board are parties to this Agreement and agrees that that these entities have no liability under the terms of this Agreement. The Texas Water Development Board is solely a third-party beneficiary under this Agreement.

F. Compliance with TWDB rules and state law: The Engineer must comply with TWDB rules and adhere to all requirements in state law pertaining to the procurement of professional services.

G. Conflicts with TWDB Contract No. 2101792500. The Engineer agrees that to the extent any conflicts exist between this Agreement and Owner's Contract with TWDB for Regional Flood Planning, the provisions of Owner's Contract with TWDB will prevail. The Engineer agrees that it will require include in its subcontracts related to this Agreement, all provisions required by TWDB Contract No. 2101792500 of subcontractors in order to secure rights and protections for TWDB.

H. Approval of This Agreement by the TWDB. The Parties agree that for all reimbursement billings and expenses to be paid, the Executive Administrator of the TWDB must have provided written approval of this Agreement.

I. Rights to Work Product Developed In Whole or In Part Under this Agreement:
Engineer grants to Owner and TWDB:

1. an unlimited, unrestricted, perpetual, irrevocable, royalty-free rights to access and receive, and to use, any and all technical or other data or information developed in or resulting from the performance of services under this Agreement, with no compensation obligation; and
2. a non-exclusive, unrestricted, unlimited, perpetual, irrevocable, world-wide, royalty-free license to use any and all work product developed under this Agreement, including the right to sublicense use to third parties, with no compensation obligation.

WITNESS WHEREOF, the Engineer and the Owner have caused this Agreement for Professional Engineering Services to be effective as of the date approved by the Hidalgo County Drainage District No.1's Board of Directors on the _____ day of _____, 2021.

**ENGINEER:
HALF ASSOCIATES, INC**

BY: _____

**OWNER:
HIDALGO COUNTY DRAINAGE DISTRICT
NO. 1**

BY: _____
Richard F. Cortez, Chairman of the Board
Hidalgo County Drainage District No. 1

- Exhibit "A": TWDB Contract 2101792500
- Exhibit "B": Scope of Services to be provided by the Owner
- Exhibit "C": Scope of Services to be provided by the Engineer
- Exhibit "C-1": Project Team
- Exhibit "D": Work Schedule
- Exhibit "D-1": Contract Hourly Rates
- Exhibit "D-2" Fee Schedule
- Exhibit "E": Supplemental Agreement Form
- Exhibit "F": Certificate of Insurance

**APPROVED AS TO FORM:
Jones, Galligan, Key & Lozano, L.L.P.**

EXHIBIT A
TWDB Contract 2101792500



STATE OF TEXAS

TWDB Contract No. 2101792500

COUNTY OF TRAVIS

Floodplain Management Account

REGIONAL FLOOD PLANNING

THIS Contract, (hereinafter "CONTRACT"), between the Texas Water Development Board (hereinafter "TWDB") and Hidalgo County Drainage District No. 1, the political subdivision designated by the REGIONAL FLOOD PLANNING GROUP as its representative (hereinafter "CONTRACTOR"), is composed of two parts: Section I - Specific Conditions and Exceptions to the Standard Agreement; and Section II - Standard Agreement. In the event of any conflict, the terms and conditions set forth in Section I will prevail over terms and conditions in Section II.

SECTION I. SPECIFIC CONDITIONS AND EXCEPTIONS TO STANDARD AGREEMENT

ARTICLE I. DEFINITIONS:

For the purposes of this CONTRACT, the following terms or phrases are defined as follows:

- A. TWDB – the Texas Water Development Board, or its designated representative.
- B. TWDB APPROVAL DATE – November 19, 2020
- C. COMMITTED FUNDS – \$1,270,000.00 is currently available to CONTRACTOR pursuant to the terms of this CONTRACT for the development of the TECHNICAL MEMORANDUM and the REGIONAL FLOOD PLAN. The COMMITTED FUNDS include necessary and direct costs incurred on or after CONTRACT EXECUTION DATE, and certain eligible costs related to Task 10 incurred on or after the CONTRACT INITIATION DATE.
- D. CONTRACT INITIATION DATE – October 26, 2020
- E. CONTRACTOR – Hidalgo County Drainage District No. 1
- F. DEADLINE FOR CONTRACT EXECUTION – April 15, 2021
- G. EXECUTIVE ADMINISTRATOR – the Executive Administrator of TWDB or a designated representative.
- H. TECHNICAL MEMORANDUM – a memorandum to be prepared by CONTRACTOR and submitted to the EXECUTIVE ADMINISTRATOR summarizing the findings and all

work performed under the Scope of Work and any future amended Scope of Work (i.e., through the identification of the region's flood risks and identification of potential flood management evaluations and potentially feasible flood management strategies and flood mitigation projects).

- I. TECHNICAL MEMORANDUM DEADLINE – January 7, 2022
- J. DRAFT REGIONAL FLOOD PLAN – the Regional Flood Plan to be initially prepared by CONTRACTOR and submitted to the EXECUTIVE ADMINISTRATOR for comments pursuant to the CONTRACT.
- K. DRAFT REGIONAL FLOOD PLAN DEADLINE – August 1, 2022
- L. REGIONAL FLOOD PLAN – a plan including any amendments that have been adopted by the REGIONAL FLOOD PLANNING GROUP and that meets the requirements contained in Texas Water Code § 16.062 and 31 Texas Administrative Code Chapters 361 and 362 and is submitted to TWDB for approval.
- M. FINAL REGIONAL FLOOD PLAN DEADLINE – January 10, 2023
- N. FIRST REIMBURSEABLE EXPENSE DATE – The first day that work performed under this CONTRACT is eligible for reimbursement will be the CONTRACT INITIATION DATE for limited administrative costs associated with public notices. TWDB will not reimburse expenses associated with Exhibit A, Scope of Work, until after CONTRACT EXECUTION DATE.
- O. FINAL REIMBURSEABLE EXPENSE DATE – The last day that work performed under this CONTRACT is eligible for reimbursement will be June 30, 2023.
- P. CONTRACT EXPIRATION DATE – This CONTRACT expires on June 30, 2023. The last day that any budget amendment requests may be submitted under the CONTRACT will be May 1, 2023.
- Q. FINAL PAYMENT REQUEST DEADLINE – The latest day that the final payment request may be submitted for reimbursement will be September 30, 2023.
- R. FLOOD PLANNING REGION – Region 15 Lower Rio Grande designated under Texas Water Code § 16.062(a)(1) and 31 Texas Administrative Code § 361.11.
- S. REGIONAL FLOOD PLANNING GROUP – Region 15 Lower Rio Grande Regional Flood Planning Group, designated under and in compliance with Texas Water Code §16.062(c) and 31 Texas Administrative Code § 361.11 to develop regional flood plans.
- T. STATE FLOOD PLANNING DATASET – A data platform to be developed and maintained by TWDB that stores data related to flood planning. It is used to collect, analyze, and disseminate regional and statewide flood planning data.

- U. PAYMENT REQUEST SUBMISSION SCHEDULE – A minimum of quarterly.
- V. CONTRACT EXECUTION DATE– The date CONTRACT is signed by the EXECUTIVE ADMINISTRATOR as shown on the last page of this CONTRACT document.

ARTICLE II. OTHER SPECIAL CONDITIONS AND EXCEPTIONS TO STANDARD AGREEMENT OF THIS CONTRACT.

- A. TWDB will not be liable for any expenses incurred in excess of COMMITTED FUNDS.

This CONTRACT does not require CONTRACTOR to incur costs beyond those that can be paid with COMMITTED FUNDS. However, this provision does not relieve the REGIONAL FLOOD PLANNING GROUP from its duty under Texas Water Code § 16.062 to prepare a regional flood plan.

- B. Other provisions specific to each region: None.

SECTION II. STANDARD AGREEMENT

ARTICLE I. RECITALS

Whereas, CONTRACTOR has been designated by the REGIONAL FLOOD PLANNING GROUP as its representative to enter into Contracts with TWDB for financial assistance to develop a REGIONAL FLOOD PLAN for the FLOOD PLANNING REGION;

Whereas, CONTRACTOR applied to TWDB for a planning grant to develop a REGIONAL FLOOD PLAN;

Whereas, CONTRACTOR is the entity acting as administrator of TWDB's planning grant and responsible for the execution of this CONTRACT; and

Whereas, on TWDB APPROVAL DATE, TWDB approved CONTRACTOR's application for financial assistance.

Now, therefore, TWDB and CONTRACTOR, agree as follows:

ARTICLE II. PROJECT DESCRIPTION AND SERVICES TO BE PERFORMED

- A. CONTRACTOR must develop a TECHNICAL MEMORANDUM and REGIONAL FLOOD PLAN for the FLOOD PLANNING REGION according to:
 - 1. Exhibit A – Scope of Work
 - 2. Exhibit B – Task and Expense Budgets

3. Exhibit C – Technical Guidelines for Regional Flood Planning¹
 4. Exhibit D – Data Submittal Guidelines for Regional Flood Planning¹
 5. Exhibit E – Original Application (cover pages as a reference to the full, original grant application)
 6. Exhibit F – Certification of Procurement of Professional Services and in accordance with the requirements of Texas Water Code Chapter 16 and with 31 Texas Administrative Code Chapters 361 and 362.
- B. The EXECUTIVE ADMINISTRATOR will provide technical assistance within available resources to CONTRACTOR if such assistance is requested for performing regional flood planning activities; and, as necessary, will facilitate resolution of conflicts within the FLOOD PLANNING REGION or between regions.
- C. CONTRACTOR must provide for public participation in the planning process as specified in Texas Water Code § 16.062 and 31 Texas Administrative Code § 361.21.
- D. CONTRACTOR must provide its best efforts as determined by the EXECUTIVE ADMINISTRATOR to produce a REGIONAL FLOOD PLAN that has been adopted by the REGIONAL FLOOD PLANNING GROUP and that was developed in accordance with the statutory and rule requirements identified in this CONTRACT.
- E. CONTRACTOR must obtain prior approval of the REGIONAL FLOOD PLANNING GROUP for all potential flood management evaluations and potentially feasible flood management strategies and flood mitigation projects to be evaluated as part of the REGIONAL FLOOD PLAN development.

ARTICLE III. SCHEDULE, REPORTS, AND OTHER PRODUCTS

- A. CONTRACTOR must execute this CONTRACT on or before the DEADLINE FOR CONTRACT EXECUTION or TWDB's commitment to pay COMMITTED FUNDS will be rescinded.
- B. This CONTRACT begins on the CONTRACT INITIATION DATE and expires on the CONTRACT EXPIRATION DATE.
- C. CONTRACTOR must provide written progress reports according to the PAYMENT REQUEST SUBMISSION SCHEDULE with each payment reimbursement request or release of advance funds. The progress reports must include:
1. a brief statement of the overall progress made since the last progress report for each task budget item;
 2. a brief description of any problems that have been encountered during the previous reporting period that may affect the study, delay the timely

¹ Exhibit C, Technical Guidelines for Regional Flood Planning, and Exhibit D, Data Submittal Guidelines for Regional Flood Planning, will be posted on the TWDB website at: <https://www.twdb.texas.gov/flood/planning/planningdocu/2023/index.asp>. The RFPs must utilize the latest version posted on the website until July 31, 2021.

- completion of any portion of this CONTRACT, or inhibit the completion of or cause a change in any of the study's products or objects; and
3. a description of any action CONTRACTOR plans to take to correct any problems that have been encountered or identified.

- D. CONTRACTOR must complete the TECHNICAL MEMORANDUM according to Article II, Paragraph A of this Section. CONTRACTOR must submit the TECHNICAL MEMORANDUM to the REGIONAL FLOOD PLANNING GROUP for approval at a regular REGIONAL FLOOD PLANNING GROUP meeting. After approval, CONTRACTOR must submit the TECHNICAL MEMORANDUM to the EXECUTIVE ADMINISTRATOR, if the REGIONAL FLOOD PLANNING GROUP authorizes such submittal. CONTRACTOR must deliver two electronic copies of the TECHNICAL MEMORANDUM, one (1) in searchable Portable Document Format (PDF) and one (1) in Microsoft Word (MSWord) Format, to the EXECUTIVE ADMINISTRATOR no later than the TECHNICAL MEMORANDUM DEADLINE.

CONTRACTOR must populate TWDB's state flood planning database with associated data, prior to submission of the TECHNICAL MEMORANDUM in accordance with this CONTRACT.

The TECHNICAL MEMORANDUM DEADLINE may be extended at the discretion of the EXECUTIVE ADMINISTRATOR either on the EXECUTIVE ADMINISTRATOR's initiative or upon a written request received from CONTRACTOR, at least thirty (30) days prior to the deadline, stating good cause for the extension.

TWDB will not accept a TECHNICAL MEMORANDUM or consider it administratively complete until the associated data in TWDB's state flood planning data submittal is complete and accurate, and the required summary tables are included in the TECHNICAL MEMORANDUM in accordance with this CONTRACT.

After a 30-day review period, the EXECUTIVE ADMINISTRATOR will either accept or reject the TECHNICAL MEMORANDUM based on administrative completeness. If the TECHNICAL MEMORANDUM is rejected, the rejection letter sent to CONTRACTOR will state the reasons for rejection and the steps CONTRACTOR needs to take to have the TECHNICAL MEMORANDUM accepted.

In the event CONTRACTOR has produced a TECHNICAL MEMORANDUM that, despite CONTRACTOR'S best efforts, has not been authorized for submittal by the REGIONAL FLOOD PLANNING GROUP, CONTRACTOR must provide all data, material, reports, and work accomplished under the CONTRACT to TWDB.

- E. CONTRACTOR or CONTRACTOR's representative (e.g., Subcontractor) must attend at least one state flood planning data submittal training session provided by TWDB staff at times and locations to be determined by TWDB.
- F. CONTRACTOR must complete the DRAFT REGIONAL FLOOD PLAN according to Article II, Paragraph A of this Section. CONTRACTOR must submit the DRAFT

REGIONAL FLOOD PLAN to the REGIONAL FLOOD PLANNING GROUP and allow the REGIONAL FLOOD PLANNING GROUP to conduct a public meeting to receive and consider comments on the DRAFT REGIONAL FLOOD PLAN. CONTRACTOR must submit the DRAFT REGIONAL FLOOD PLAN to the EXECUTIVE ADMINISTRATOR after the REGIONAL FLOOD PLANNING GROUP authorizes such submittal. The REGIONAL FLOOD PLANNING GROUP may submit the DRAFT REGIONAL FLOOD PLAN prior to the required public meeting but must assure the EXECUTIVE ADMINISTRATOR that the meeting will be completed in time to meet the FINAL REGIONAL FLOOD PLAN DEADLINE for submission of an APPROVED REGIONAL FLOOD PLAN. CONTRACTOR must deliver two electronic copies of a DRAFT REGIONAL FLOOD PLAN, one (1) in searchable Portable Document Format (PDF) and one (1) in Microsoft Word (MSWord) Format, to the EXECUTIVE ADMINISTRATOR no later than the DRAFT REGIONAL FLOOD PLAN DEADLINE. The EXECUTIVE ADMINISTRATOR will provide any written comments to CONTRACTOR within 120 calendar days.

CONTRACTOR must provide the pertinent TWDB state flood planning dataset, including appropriate documentation and quality check, by DRAFT REGIONAL FLOOD PLAN DEADLINE, in accordance with this CONTRACT. CONTRACTOR must incorporate the required online planning database reports from the state flood planning database within the submitted DRAFT REGIONAL FLOOD PLAN in accordance with this CONTRACT.

The DRAFT REGIONAL FLOOD PLAN DEADLINE may be extended at the discretion of the EXECUTIVE ADMINISTRATOR either on their own initiative or upon a written request received from CONTRACTOR at least thirty (30) days prior to the deadline, stating good cause for the extension.

- G. CONTRACTOR must include a copy of the EXECUTIVE ADMINISTRATOR'S comments on the DRAFT REGIONAL FLOOD PLAN in the adopted REGIONAL FLOOD PLAN, with a summary of all other comments received on the DRAFT REGIONAL FLOOD PLAN, including written explanations of how the REGIONAL FLOOD PLAN was revised in response to comments or why changes recommended in a comment were not warranted.

CONTRACTOR must submit:

- one (1) electronic copy of all files on which the plan is based (e.g. spreadsheets, maps);
- two (2) electronic copies of the entire REGIONAL FLOOD PLAN, one (1) in searchable Portable Document Format (PDF) and one (1) in Microsoft Word (MSWord) Format. In compliance with Texas Administrative Code Chapters 206 and 213 (related to Accessibility and Usability of State Web Sites, Web Content Accessibility Guidelines (WCAG) 2.1 Level AA Standard – WCAG 2.1 Quick Reference, which can be found at: <https://www.w3.org/WAI/WCAG21/quickref/>), the electronic copy of the REGIONAL FLOOD PLAN will comply with the requirements and standards specified in statute; and,

- five (5) bound, double-sided copies of the REGIONAL FLOOD PLAN to the EXECUTIVE ADMINISTRATOR no later than the FINAL REGIONAL FLOOD PLAN DEADLINE.
- H. CONTRACTOR must make corrections, updates, or modifications, to the TWDB state flood planning dataset, as necessary, prior to the FINAL REGIONAL FLOOD PLAN DEADLINE in accordance with this CONTRACT. TWDB will not accept a REGIONAL FLOOD PLAN or consider it administratively complete until the associated data in TWDB's state flood planning dataset is complete and accurate and the relevant flood planning data and maps are included in the REGIONAL FLOOD PLAN. CONTRACTOR also must transfer copies of all data and reports generated by the planning process and used in developing the REGIONAL FLOOD PLAN to the EXECUTIVE ADMINISTRATOR no later than the FINAL REGIONAL FLOOD PLAN DEADLINE. The REGIONAL FLOOD PLAN and the data collected and transmitted for the REGIONAL FLOOD PLAN must be prepared in the format and according to specifications prescribed in Flood Planning Guidance Documents to this CONTRACT. In the event CONTRACTOR has produced a REGIONAL FLOOD PLAN, that despite CONTRACTOR'S best efforts has not been adopted by the REGIONAL FLOOD PLANNING GROUP, CONTRACTOR must provide all data, material, reports, and work accomplished under the CONTRACT to TWDB.
- I. Delivery of a REGIONAL FLOOD PLAN that meets statutory and rule requirements as determined by the EXECUTIVE ADMINISTRATOR on or before the FINAL REGIONAL FLOOD PLAN DEADLINE constitutes completion of the terms of this CONTRACT by CONTRACTOR.
- J. After a 90-day review period, the EXECUTIVE ADMINISTRATOR will either accept or reject the REGIONAL FLOOD PLAN. If the final plan is rejected, the rejection letter sent to CONTRACTOR will state the reasons for rejection and the steps CONTRACTOR must take to have the REGIONAL FLOOD PLAN accepted and the retainage released.
- K. ANNUAL AUDIT. During the term of this CONTRACT, TWDB reserves the right to request that CONTRACTOR submit an annual audit of the general purpose financial statements prepared in accordance with generally accepted auditing standards by a certified public accountant or licensed public accountant. Audits must be submitted to TWDB no later than 120 days following the close of CONTRACTOR's fiscal year.

ARTICLE IV. COMPENSATION AND REIMBURSEMENT

- A. TWDB agrees to compensate and reimburse CONTRACTOR in a total amount not to exceed the COMMITTED FUNDS for costs incurred and paid by CONTRACTOR pursuant to performance of this CONTRACT, as specified in Section I, Article I.
- B. Eligible expenses incurred by CONTRACTOR from the FIRST REIMBURSEABLE EXPENSE DATE through FINAL REIMBURSEABLE EXPENSE DATE will be reimbursed by TWDB. CONTRACTOR will be eligible for reimbursement only for the categories set forth in the budget for this CONTRACT. All requests for reimbursement must be

accompanied by copies of invoices and receipts. TWDB will reimburse the actual expenses allowed herein during the term of the CONTRACT.

- C. Requests for Advance or Reimbursement for Subcontractor Expenses. Requests for advance or reimbursement for subcontractor expenses will only be considered where such subcontracts or agreements have been determined by the EXECUTIVE ADMINISTRATOR to be consistent with the terms of this CONTRACT. The purpose of this review is Solely to ensure that the subcontracts and agreements are consistent with this CONTRACT and that the rights of TWDB, particularly in regard to ownership of data, are protected. CONTRACTOR understands that CONTRACTOR should obtain its own legal review of subcontracts and agreements that CONTRACTOR enters into. CONTRACTOR agrees that TWDB assumes no legal obligations under its subcontracts or agreements and is merely a third-party beneficiary of the same. CONTRACTOR is fully responsible for paying all eligible charges by subcontractors prior to reimbursement by TWDB.

Each subcontract or agreement must include a task and expense budget estimate in a format similar to Exhibit B to this CONTRACT, with specific cost details for each task or specific item of work to be performed by the subcontractor and for each category of reimbursable expenses. The subcontracts and agreements must conform to the terms of the CONTRACT and include provisions which require subcontractor compliance with TWDB rules. The subcontracts and agreements must provide that in the event of any conflict with the provisions of this CONTRACT the provisions of the CONTRACT will prevail. In addition, each subcontract or agreement that in any manner involves the collection or manipulation of data must include the provisions in Paragraph D of this Article below.

- D. CONTRACTOR must adhere to all requirements in state law and TWDB rules pertaining to the procurement of professional services, including 31 TAC § 361.72(c). Prior to associated reimbursements, CONTRACTOR must submit a Certification of Procurement of Professional Services in accordance with Exhibit F to this CONTRACT, evidencing that the Region's subcontractors were properly and competitively procured for this planning cycle. Expenses incurred under subcontracts or agreements that have not been approved by the EXECUTIVE ADMINISTRATOR or do not otherwise comply with the terms of this CONTRACT are not eligible for reimbursement.
- E. At the sole discretion of the EXECUTIVE ADMINISTRATOR, CONTRACTOR may modify task and expense budget categories to the extent that the resulting change in amount in any one task or expense category does not exceed 35% of the total authorized amount by this CONTRACT for that task or category. Larger deviations require submission of a written request that is approved by the Regional Flood Planning Group and approved by the EXECUTIVE ADMINISTRATOR or designee which will be documented through an Approved Budget Memorandum to the TWDB CONTRACT file. CONTRACTOR will be required to provide written explanation for the overage and reallocation of the task and expense amount. Associated shifts in

amounts between budget task and expense categories authorized under this paragraph will not change the COMMITTED FUNDS amount.

- F. CONTRACTOR and its subcontractors must maintain satisfactory financial accounting documents and records, including copies of invoices, receipts, time and attendance records, supporting salaries and wages, in accordance with generally accepted accounting principles for a term of three years after completion of this CONTRACT and must make them available for examination and audit by TWDB at any time upon 24 hours' notice from the EXECUTIVE ADMINISTRATOR or the EXECUTIVE ADMINISTRATOR's designee. Accounting by CONTRACTOR and its subcontractors must be in a manner consistent with generally accepted accounting principles.
- G. CONTRACTOR must provide information to an entity or person who is independent of CONTRACTOR and who is selected by the REGIONAL FLOOD PLANNING GROUP sufficient to allow that person or entity to routinely provide reports of expenses and use of planning funds to the REGIONAL FLOOD PLANNING GROUP. The person to whom the information is provided may be a member of the REGIONAL FLOOD PLANNING GROUP. CONTRACTOR must allow such person or entity full access to all records relating to this CONTRACT, including all financial records.

Method of Payment: Initial Advance followed by Reimbursement of Invoice

- H. Within thirty (30) days after the execution of this CONTRACT, the EXECUTIVE ADMINISTRATOR will advance to CONTRACTOR twenty percent of the COMMITTED FUNDS, unless CONTRACTOR requests and the EXECUTIVE ADMINISTRATOR approves advances of less than twenty percent.
- I. All advanced funds received must be deposited into an interest-bearing account by CONTRACTOR and proportionate share of the interest earned must be allocated to the grant to be used to reimburse the SUBCONTRACTOR(S).
- J. After CONTRACTOR has received the initial advance, the TWDB will then begin reimbursing CONTRACTOR based on reimbursement request amounts, in addition to and aside from the initial twenty percent advance, so that after the first TWDB reimbursement is received by CONTRACTOR, CONTRACTOR will have retained the full amount of the initial advance funds to be available to pay its SUBCONTRACTOR prior to the CONTRACTOR'S second reimbursement request to TWDB.
- K. TWDB will reimburse CONTRACTOR up to 95 percent of the COMMITTED FUNDS available for costs incurred and paid by CONTRACTOR pursuant to performance of this CONTRACT. Once seventy-five percent of the contract amount has been reimbursed, aside from the initial twenty percent advance amount, CONTRACTOR may submit reimbursement requests that will apply to the twenty percent advance amount remaining. The five percent retainage will be withheld until CONTRACTOR submits a REGIONAL FLOOD PLAN, as described in Article III, Paragraphs G and H of this section. If the EXECUTIVE ADMINISTRATOR determines that CONTRACTOR has utilized its best efforts to have a DRAFT REGIONAL FLOOD PLAN adopted by the

REGIONAL FLOOD PLANNING GROUP for submittal to TWDB, but has been unable, despite those best efforts, to do so, the EXECUTIVE ADMINISTRATOR may release the five percent retainage solely within the EXECUTIVE ADMINISTRATOR's discretion.

- L. CONTRACTOR must submit payment requests and documentation for reimbursement in accordance with the approved task and expense budgets contained in Exhibit B to this CONTRACT. For all reimbursement billings, including any subcontractor's expenses, the EXECUTIVE ADMINISTRATOR must have provided written approval of all CONTRACTS or agreements between CONTRACTOR and the subcontractor. CONTRACTOR is fully responsible for paying all eligible charges by subcontractors prior to reimbursement by TWDB.

- M. The written progress report required by Article III, Paragraph C of this Section, and the following documentation which documents the COMMITTED FUNDS, must be submitted by CONTRACTOR to the EXECUTIVE ADMINISTRATOR in support of its requests for reimbursement. CONTRACTOR must submit a progress report and the following documentation which documents the COMMITTED FUNDS for the reporting period even if the COMMITTED FUNDS for the period is ZERO:
 - 1. Completed and Signed Payment Request Checklist which includes the following:
 - (a) TWDB CONTRACT Number;
 - (b) Total expenses for the billing period; beginning (date) to ending (date);
 - (c) Total Services for this billing period;
 - (d) Total In-kind services;
 - (e) Less Local Share of the COMMITTED FUNDS for the billing period;
 - (f) Total of TWDB's share of the COMMITTED FUNDS for the billing period;
 - (g) Amount of retainage to be withheld for the billing period;
 - (h) Total costs to be reimbursed by TWDB for the billing period; and
 - (i) Certification, signed by CONTRACTOR's authorized representative, that the expenses submitted for the billing period are a true and correct representation of amounts paid for work performed directly related to this CONTRACT.

 - 2. For direct expenses incurred by CONTRACTOR other than subcontracted work:
 - (a) A spreadsheet showing the tasks that were performed; the percent and cost of each task completed; a total cost figure for each direct expense category including labor, fringe, overhead, travel, and other expenses such as communication and postage, technical and computer services, expendable supplies, printing and reproduction; and
 - (b) Copies of invoices for other expenses.

 - 3. For direct expenses incurred by CONTRACTOR for subcontracted work:
 - (a) Copies of invoices from the SUBCONTRACTOR(S) to CONTRACTOR
 - (b) A spreadsheet showing the tasks that were performed; the percent and cost of each task completed; a total cost figure for each direct expense

- category including labor, fringe, overhead, travel, and other expenses such as communication and postage, technical and computer services, expendable supplies, printing and reproduction; and the total dollar amount due to the SUBCONTRACTOR(S); and
- (c) Copies of invoices for other expenses.
4. For travel expenses for CONTRACTOR and/or subcontractor(s):
- (a) Names, dates, work locations, time periods at work locations, itemization of subsistence expenses of each employee, which will be reimbursed at rates authorized for state employees by the General Appropriations Act, Tex. Leg. Regular Session, 2019, Article IX, Part 5, as amended or superseded. Receipts required for lodging. Any eligible travel expenses related to a subcontract may be reimbursed at the current rate for State of Texas employees which can be found at: <https://fmx.cpa.state.tx.us/fmx/travel/texttravel/trans/personal.php>
 - (b) Copies of invoices or tickets for transportation costs or, if not available, names, dates, and points of travel of individuals; and
 - (c) All other reimbursable travel expenses -- invoices or purchase vouchers showing reason for expense with receipts to evidence the amount incurred.
5. Incomplete requests will be returned to CONTRACTOR if deficiencies are not resolved within ten (10) business days.
6. If for some reason the reimbursement request cannot be processed due to the need for an amendment to the CONTRACT, CONTRACTOR must resubmit the Payment Request Checklist dated after the execution of the amendment.
- N. In accordance with Section I, Article I, CONTRACTOR must provide a final reconciliation of expended amounts under the CONTRACT. Within thirty (30) days of the EXECUTIVE ADMINISTRATOR'S final accounting of the amounts expended by CONTRACTOR and the amounts reimbursed by TWDB to CONTRACTOR, the EXECUTIVE ADMINISTRATOR will reimburse the difference provided the reimbursement does not exceed the COMMITTED FUNDS.

ARTICLE V. INTELLECTUAL PROPERTY: OWNERSHIP, PUBLICATION, AND ACKNOWLEDGEMENT

- A. "Use" of a work product, whether a Contractor Work, a Subcontractor Work or otherwise, means and includes, without limitation, any lawful use, copying or dissemination of the work product, or any lawful development, use, copying or dissemination of derivative works of the work product, in any media or forms, whether now known or later existing.
- B. "No Compensation Obligation" means there is no obligation on the part of one co-owner or licensee of a work, whether a Contractor Work, a Subcontractor Work or otherwise, to compensate other co-owners, licensees or licensors of the work for any

use of the work by the using co-owner or licensee, including but not limited to compensation for or in the form of: royalties; co-owner or licensee accounting; sharing of revenues or profits among co-owners, licensees or licensors; or any other form of compensation to the other co-owners, licensees or licensors on account of any use of the work.

- C. "Dissemination" includes, without limitation, any and all manner of: physical distribution; publication; broadcast; electronic transmission; Internet streaming; posting on the Internet or world wide web; or any other form of communication, transmission, distribution, sending or providing, in any forms or formats, and in or using any media, whether now known or later existing.
- D. TWDB has an unlimited, unrestricted, perpetual, irrevocable, non-exclusive royalty-free right to access and receive in usable form and format, and to use all technical or other data or information developed by CONTRACTOR and SUBCONTRACTOR in, or otherwise resulting from, the performance of services under this CONTRACT.
- E. For purposes of this Article, "Contractor Works" are work products developed by CONTRACTOR and Subcontractor(s) using funds provided under this CONTRACT or otherwise rendered in or related to the performance in whole or in part of this CONTRACT, including but not limited to reports, drafts of reports, or other material, data, drawings, studies, analyses, notes, plans, computer programs and codes, or other work products, whether final or intermediate.
 - 1. It is agreed that all Contractor Works will be the joint property of TWDB and CONTRACTOR.
 - 2. The parties hereby agree that, if recognized as such by applicable law, the Contractor Works are intended to and will be works-made-for-hire with joint ownership between TWDB and CONTRACTOR as such works are created in whole or in part.
 - 3. If the Contractor Works do not qualify as works-made-for-hire under applicable law, CONTRACTOR hereby conveys co-ownership interest in such works to TWDB as they are created in whole or in part. If present conveyance is ineffective under applicable law, CONTRACTOR agrees to convey a co-ownership interest in the Contractor Works to TWDB after creation in whole or in part of such works, and to provide written documentation of such conveyance upon request by TWDB.
 - 4. TWDB and CONTRACTOR acknowledge that the copyright in and to a copyrightable Contractor Work exists upon creation of the Contractor Work and its fixing in any tangible medium. CONTRACTOR or TWDB may register the copyrights to such Works jointly in the names of CONTRACTOR and TWDB.
 - 5. TWDB and CONTRACTOR each have full and unrestricted rights to use a Contractor Work with No Compensation Obligation.
- F. For purposes of this Article, "Subcontractor Works" include all work product developed in whole or in part by or on behalf of SUBCONTRACTOR(S) engaged by CONTRACTOR to perform work for or on behalf of CONTRACTOR under this

CONTRACT (or by the SUBCONTRACTOR'S SUBCONTRACTOR(S) hereunder, and so on). CONTRACTOR must secure in writing from any SUBCONTRACTOR(S) so engaged:

1. unlimited, unrestricted, perpetual, irrevocable, royalty-free rights of TWDB (and, if desired, of CONTRACTOR) to access and receive, and to use, any and all technical or other data or information developed in or resulting from the performance of services under such engagement, with No Compensation Obligation; and either:
 2. assignment by the Subcontractor to TWDB (and, if desired by them, jointly to CONTRACTOR) of ownership (or joint ownership with CONTRACTOR) of all Subcontractor Works, with No Compensation Obligation; or
 3. grant by Subcontractor of a non-exclusive, unrestricted, unlimited, perpetual, irrevocable, world-wide, royalty-free license to TWDB (and, if desired by them, CONTRACTOR) to use any and all Subcontractor Works, including the right to sublicense use to third parties, with No Compensation Obligation.
- G. No unauthorized patents. Contractor Works and Subcontractor Works or other work product developed or created in the performance of this CONTRACT or otherwise using funds provided hereunder must not be patented by CONTRACTOR or their SUBCONTRACTOR(S) unless the Executive Administrator consents in writing to submission of an application for patent on such works; and provided that, unless otherwise agreed in writing:
1. any application made for patent must include and name TWDB (and, as applicable and desired by them, both CONTRACTOR and the SUBCONTRACTOR(S)) as co-owners of the patented work;
 2. no patent granted will in any way limit, or be used by CONTRACTOR or Subcontractor to limit or bar TWDB's rights hereunder to access and receive in useable form and format, and right to use, any and all technical or other data or information developed in or resulting from performance pursuant to this CONTRACT or Subcontract or the use of funds provided hereunder; and
 3. TWDB (and, if applicable, CONTRACTOR) has No Compensation Obligation to any other co-owners or licensees of any such patented work.
- H. CONTRACTOR must include terms and conditions in all CONTRACTS or other engagement agreements with any SUBCONTRACTOR(S) as are necessary to secure these rights and protections for TWDB; and must require that their Subcontractors include similar such terms and conditions in any CONTRACTS or other engagements with their Subcontractors. For the purposes of this section, "SUBCONTRACTOR(S)" includes independent contractors (including consultants) and also employees working outside the course and scope of employment.
- I. Any work products subject to a TWDB copyright or joint copyright and produced or developed by CONTRACTOR or their SUBCONTRACTOR(S) pursuant to this CONTRACT or Subcontract or using any funding provided by TWDB may be reproduced in any media, forms or formats by TWDB or CONTRACTOR at their own cost, and be disseminated in any medium, format or form by any party at its sole cost

and in its sole discretion. CONTRACTOR may utilize such work products as they may deem appropriate, including Dissemination of such work products or parts thereof under their own name, provided that any TWDB copyright is noted on the materials.

- J. CONTRACTOR agrees to acknowledge TWDB in any news releases or other publications relating to the work performed under this CONTRACT.

ARTICLE VI. SUBCONTRACTS

Each Subcontract entered into to perform required work under this CONTRACT must contain the following information and provisions:

- A. **Contract Dates** – There should be a starting date and ending date for work under the Subcontract.
- B. **Contract Amount** – The subcontract should list the total dollar value.
- C. **Terms of Reimbursement** – Subcontracts must be cost reimbursable. Lump sum agreements are not permitted for services. Please also note that TWDB does not reimburse “handling costs” (mark-ups) on any expenses. Any eligible travel expenses related to a subcontract may be reimbursed at the current rate for State of Texas employees which can be found at: <https://fm.x.cpa.texas.gov/fmx/travel/texttravel/>
- D. **Scope of Work** – The terms of the scope of work must be consistent with the scope of the CONTRACT.
- E. **Task Budget** – as appropriate. The task budget must be consistent with the task budget specified in the TWDB CONTRACT.
- F. **Expense Budget** – as appropriate. The expense budget must be consistent with the expense budget specified in the TWDB CONTRACT.
- G. **Signatures** – Each subcontract must be executed appropriately by signature, by each party to the agreement.
- H. **State Auditor’s Right to Audit** - The state auditor may conduct an audit or investigation of any entity receiving funds from the state directly under the CONTRACT or indirectly through a Subcontract under the CONTRACT. The acceptance of funds directly under the CONTRACT or indirectly through a Subcontract under the CONTRACT acts as acceptance of the authority of the state auditor, under the direction of the legislative audit committee, to conduct an audit or investigation in connection with those funds. Under the direction of the legislative audit committee, an entity that is the subject of an audit or investigation by the state auditor must provide the state auditor with access to any information the state auditor considers relevant to the investigation or audit.

- I. **Financial Records:** SUBCONTRACTOR(s) and any contracted parties must maintain satisfactory financial accounting documents and records, including copies of invoices and receipts, and must make them available for examination and audit by the EXECUTIVE ADMINISTRATOR of TWDB. Accounting by the SUBCONTRACTOR(s) and any contracted parties must be in a manner consistent with generally accepted accounting principles.
- J. **Excess Obligations Prohibited/No Debt Against the State:** Any SUBCONTRACT is subject to termination or cancellation without penalty to TWDB, either in whole or in part, subject to the availability of state funds.
- K. **License, Permits, and Insurance:** For the purpose of this SUBCONTRACT, SUBCONTRACTOR is an independent CONTRACTOR and therefore solely responsible for liability resulting from negligent acts or omissions. SUBCONTRACTOR must obtain all necessary insurance, in the judgment of the SUBCONTRACTOR(s), to protect itself, CONTRACTOR, TWDB, and employees and officials of TWDB from liability arising out of this SUBCONTRACT. SUBCONTRACTOR(s) must indemnify and hold TWDB and the State of Texas harmless, to the extent the SUBCONTRACTOR may do so in accordance with state law, from any and all losses, damages, liability, or claims therefore, on account of personal injury, death, or property damage of any nature whatsoever caused by the SUBCONTRACTOR arising out of the activities under this SUBCONTRACT. SUBCONTRACTOR must be solely and entirely responsible for procuring all necessary licenses and permits which may be required for the SUBCONTRACTOR to perform the subject work.
- L. **Ownership:** It is agreed that all reports, drafts of reports, or other material, data, drawings, computer programs and codes associated with this SUBCONTRACT and developed by SUBCONTRACTOR pursuant to this CONTRACT will become the joint property of the REGIONAL FLOOD PLANNING GROUP, CONTRACTOR, SUBCONTRACTOR), and the Texas Water Development Board. These materials must not be copyrighted or patented by the SUBCONTRACTOR. SUBCONTRACTOR agrees that neither the Regional Flood Planning Group nor the Texas Water Development Board are parties to this SUBCONTRACT and agrees that that these entities have no liability under the terms of this SUBCONTRACT. The Texas Water Development Board is solely a third-party beneficiary under this SUBCONTRACT.
- M. **Compliance with TWDB rules and state law:** SUBCONTRACTOR must comply with TWDB rules and adhere to all requirements in state law pertaining to the procurement of professional services.

ARTICLE VII. AMENDMENT, TERMINATION, AND STOP ORDERS

- A. This CONTRACT may be altered or amended by mutual written consent or terminated by the EXECUTIVE ADMINISTRATOR at any time by written notice to CONTRACTOR. The EXECUTIVE ADMINISTRATOR may terminate this CONTRACT if the REGIONAL FLOOD PLANNING GROUP withdraws its designation of CONTRACTOR as the CONTRACT representative of the REGIONAL FLOOD PLANNING GROUP. Upon receipt of such termination notice, CONTRACTOR must, unless the notice directs otherwise, immediately discontinue all work in connection with the performance of this CONTRACT and cancel all existing orders insofar as such orders are chargeable to this CONTRACT. CONTRACTOR must submit a statement showing in detail the work performed under this CONTRACT up to the date of termination. TWDB, at its discretion, will pay CONTRACTOR for the work, actually performed under this CONTRACT, less all payments that have been previously made and any approved by the EXECUTIVE ADMINISTRATOR to conclude the CONTRACT. Thereupon, copies of all work accomplished under this CONTRACT must be delivered promptly to TWDB.
- B. Any request to amend the CONTRACT Scope of Work (Exhibit A) must be submitted in writing by CONTRACTOR to TWDB following approval by the REGIONAL FLOOD PLANNING GROUP [31 TAC § 361.12(a)(5)].
- C. The EXECUTIVE ADMINISTRATOR may issue a Stop Work Order to CONTRACTOR at any time. Upon receipt of such order, CONTRACTOR must discontinue all work and cancel all orders under to this CONTRACT, unless the Stop Work Order directs otherwise. If the EXECUTIVE ADMINISTRATOR does not issue a Restart Order within 60 days after receipt by CONTRACTOR of the Stop Work Order, this CONTRACT terminated in accordance with the foregoing provisions.

ARTICLE IX. LICENSES, PERMIT, AND INSURANCE

- A. For the purpose of this CONTRACT, CONTRACTOR is an independent contractor and therefore solely responsible for liability resulting from negligent acts or omissions.
- B. CONTRACTOR is solely and entirely responsible for procuring all necessary licenses and permits which may be required for CONTRACTOR to perform the subject work.

ARTICLE X. SEVERANCE PROVISION

Should any one or more provisions of this CONTRACT be held to be null, void, voidable, or for any reason whatsoever of no force and effect, such provision(s) will be construed as severable from the remainder of this CONTRACT and will not affect the validity of all other provisions of this CONTRACT, which will remain of full force and effect.

ARTICLE XI. GENERAL TERMS AND CONDITIONS

1. **GENERAL TERMS**

- A. **Disaster Recovery Plan.** Upon request of TWDB, CONTRACTOR must provide descriptions or copies of its business continuity and disaster recovery plans.
- B. **Dispute Resolution.** The dispute resolution process provided for in Texas Government Code Chapter 2260 must be used to attempt to resolve any dispute arising under this CONTRACT.
- C. **Excess Obligations Prohibited/No Debt Against the State.** This Contract is subject to termination or cancellation without penalty to TWDB, either in whole or in part, subject to the availability of state funds
- D. **False Statements.** If CONTRACTOR signs its application with a false statement or it is subsequently determined that CONTRACTOR has violated any of the representations, guarantees, warranties, certifications or affirmations included in its application, CONTRACTOR will be in default under the CONTRACT and TWDB may terminate or void the CONTRACT.
- E. **Force Majeure.** Neither CONTRACTOR nor TWDB will be liable to the other for any delay in or failure of performance of any requirement contained in this CONTRACT caused by force majeure. The existence of such causes of delay or failure will extend the period of performance until after the causes of delay or failure have been removed, provided the non-performing party exercises all reasonable due diligence to perform. Force majeure is defined as acts of God, war, fires, explosions, hurricanes, floods, failure of transportation or other causes that are beyond the reasonable control of either party and that by exercise of due foresight such party could not reasonably have been expected to avoid, and which, by the exercise of all reasonable due diligence, such party is unable to overcome.
- F. **Governing Law and Venue.** This CONTRACT is governed by and construed in accordance with the laws of the State of Texas, without regard to the conflicts of law provisions. The venue of any suit arising under this CONTRACT is fixed in any court of competent jurisdiction in Travis County, Texas, unless the specific venue is otherwise identified in a statute which directly names or otherwise identifies its applicability to TWDB.
- G. **Indemnification.** CONTRACTOR AGREES TO DEFEND, INDEMNIFY AND HOLD HARMLESS THE STATE OF TEXAS AND TWDB, AND/OR THEIR OFFICERS, AGENTS, EMPLOYEES, REPRESENTATIVES, CONTRACTORS, ASSIGNEES, AND/OR DESIGNEES FROM ANY AND ALL LIABILITY, ACTIONS, CLAIMS, DEMANDS, OR SUITS, AND ALL RELATED COSTS, ATTORNEY FEES, AND EXPENSES ARISING OUT OF, OR RESULTING FROM ANY ACTS OR OMISSIONS OF CONTRACTOR OR ITS AGENTS, EMPLOYEES, SUBCONTRACTORS, ORDER FULFILLERS, OR SUPPLIERS OF

SUBCONTRACTORS IN THE EXECUTION OR PERFORMANCE OF THE CONTRACT AND ANY PURCHASE ORDERS ISSUED UNDER THE CONTRACT. THE DEFENSE MUST BE COORDINATED BY CONTRACTOR WITH THE OFFICE OF THE TEXAS ATTORNEY GENERAL WHEN TEXAS STATE AGENCIES ARE NAMED DEFENDANTS IN ANY LAWSUIT, AND CONTRACTOR MAY NOT AGREE TO ANY SETTLEMENT WITHOUT FIRST OBTAINING THE CONCURRENCE FROM THE OFFICE OF THE TEXAS ATTORNEY GENERAL. CONTRACTOR AND TWDB AGREE TO FURNISH TIMELY WRITTEN NOTICE TO EACH OTHER OF ANY SUCH CLAIM.

- H. **Public Information Act.** CONTRACTOR understands that TWDB will comply with the Texas Public Information Act, Texas Government Code Chapter 552, as interpreted by judicial rulings and opinions of the Attorney General of the State of Texas. Information, documentation and other material in connection with this CONTRACT may be subject to public disclosure pursuant to the Texas Public Information Act. In accordance with Texas Government Code § 2252.907, CONTRACTOR is required to make any information created or exchanged with the State pursuant to this CONTRACT, and not otherwise excepted from disclosure under the Texas Public Information Act, available in a format that is accessible by the public at no additional charge to the State.
- I. **State Auditor's Right to Audit.** The state auditor may conduct an audit or investigation of any entity receiving funds from the state directly under the contract or indirectly through a subcontract under the contract. The acceptance of funds directly under the contract or indirectly through a subcontract under the contract acts as acceptance of the authority of the state auditor, under the direction of the legislative audit committee, to conduct an audit or investigation in connection with those funds. Under the direction of the legislative audit committee, an entity that is the subject of an audit or investigation by the state auditor must provide the state auditor with access to any information the state auditor considers relevant to the investigation or audit.
- J. **Uniform Grant Management Standards.** CONTRACTOR is required to follow the Texas Comptroller of Public Account's Uniform Grant Management Standards in accordance with Chapter 783 of the Texas Government Code, as applicable.

2. STANDARDS OF PERFORMANCE

- A. **Personnel.** CONTRACTOR must assign only qualified personnel to perform the services required under this CONTRACT. CONTRACTOR is responsible for ensuring that any Subcontractor utilized also assigns only qualified personnel. Qualified personnel are persons who are properly licensed to perform the work and who have sufficient knowledge, skill and ability to perform the tasks and services required herein according to the standards of performance and care for their trade or profession.

- B. **Professional Standards.** CONTRACTOR must provide the services and deliverables in accordance with applicable professional standards. CONTRACTOR represents and warrants that it is authorized to acquire Subcontractors with the requisite qualifications, experience, personnel and other resources to perform in the manner required by this CONTRACT.
- C. **Procurement Laws.** CONTRACTOR must comply with applicable State of Texas procurement laws, rules and policies, including but not limited to competitive bidding and the Professional Services Procurement Act, Texas Government Code, Chapter 2254, relating to contracting with persons whose services are within the scope of practice of: accountants, architects, landscape architects, land surveyors, medical doctors, optometrists, professional engineers, real estate appraisers, professional nurses, and certified public accountants.
- D. **Independent Contractor.** Both parties hereto, in the performance of this CONTRACT, act in an individual capacity and not as agents, employees, partners, joint ventures or associates of one another. The employees or agents of one party will not be deemed or construed to be the employees or agents of the other party for any purposes whatsoever.
- E. **Proprietary and Confidential Information.** CONTRACTOR warrants and represents that any information that is proprietary or confidential and is received by CONTRACTOR from TWDB or any governmental entity will not be disclosed to third parties without the written consent of TWDB or applicable governmental entity, whose consent will not be unreasonably withheld.
- F. **Contract Administration.** TWDB will designate a project manager for this CONTRACT. The project manager will serve as the point of contact between TWDB and CONTRACTOR. TWDB's project manager will supervise TWDB's review of CONTRACTOR's technical work, deliverables, draft reports, the FINAL REPORT, payment requests, schedules, financial and budget administration, and similar matters. The project manager does not have any express or implied authority to vary the terms of the CONTRACT, amend the CONTRACT in any way or waive strict performance of the terms or conditions of the CONTRACT.
- G. **Nepotism.** CONTRACTOR must comply with Texas Government Code Chapter 573 by ensuring that no officer, employee or member of CONTRACTOR's governing body votes or confirm the employment of any person related within the second degree of affinity or the third degree of consanguinity to any member of the governing body or to any other officer or employee authorized to employ or supervise such person. This prohibition does not prohibit the employment of a person who has been continuously employed for a period of two years prior to the election or appointment of the officer, employee or

governing body member related to such person in the prohibited degree.

- H. **Open Meetings.** CONTRACTOR must comply with Texas Government Code Chapter 551, which requires all regular, special or called meetings of governmental bodies to be open to the public, except as otherwise provided by law.

3. AFFIRMATIONS AND CERTIFICATIONS

- A. **Antitrust Affirmation.** CONTRACTOR represents and warrants that, in accordance with Texas Government Code § 2155.005, neither CONTRACTOR nor any firm, corporation, partnership, or institution represented by CONTRACTOR, or anyone acting for such a firm, corporation, partnership, or institution has (1) violated any provision of the Texas Free Enterprise and Antitrust Act of 1983, Chapter 15 of the Texas Business & Commerce Code, or the federal antitrust laws; or (2) communicated directly or indirectly the contents of the proposal resulting in this CONTRACT to any competitor or any other person engaged in the same line of business as CONTRACTOR.
- B. **Child Support Obligation Affirmation.** Under Texas Family Code § 231.006, CONTRACTOR certifies that the individual or business entity named in this CONTRACT is not ineligible to receive the specified grant, loan or payment, and acknowledges that this CONTRACT may be terminated and payment may be withheld if this certification is inaccurate.
- C. **Dealings With Public Servants.** Pursuant to Texas Government Code § 2155.003, CONTRACTOR represents and warrants that it has not given, offered to give, nor intends to give at any time hereafter any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a public servant in connection with the goods or services being supplied.
- D. **Debts and Delinquencies Affirmation.** CONTRACTOR agrees that any payments due under the CONTRACT will be applied towards any debt or delinquency that is owed to the State of Texas.
- E. **E-Verify Program.** CONTRACTOR certifies that for contracts for services, CONTRACTOR will utilize the U.S. Department of Homeland Security's E-Verify system during the term of the CONTRACT to determine the eligibility of: 1) all persons employed by CONTRACTOR to perform duties within Texas; and 2) all persons, including Subcontractors, assigned by CONTRACTOR to perform work pursuant to the CONTRACT within the United States of America.
- F. **Entities that Boycott Israel.** Pursuant to Texas Government Code § 2270.002, CONTRACTOR certifies that either (i) it meets one of the exemption criteria under § 2270.002; or (ii) it does not boycott Israel and will not boycott Israel during the term of the contract resulting from this solicitation. CONTRACTOR must state any facts that make it exempt from the boycott certification.

- G. **Excluded Parties.** CONTRACTOR certifies that it is not listed on the federal government's terrorism watch list as described in Executive Order 13224.
- H. **Executive Head of a State Agency Affirmation.** In accordance with Texas Government Code § 669.003, relating to contracting with the executive head of a state agency, CONTRACTOR certifies that it is not: 1) the executive head of TWDB; 2) a person who at any time during the four years before the date of this CONTRACT was the executive head of TWDB; or 3) a person who employs a current or former executive head of TWDB.

If Section 669.003 applies, CONTRACTOR must provide the following information:

Name of Former Executive:

Name of State Agency:

Date of Separation from State Agency:

Position with Contractor:

Date of Employment with Contractor:

- I. **Financial Participation Prohibited.** Pursuant to Texas Government Code § 2155.004(a), CONTRACTOR certifies that neither CONTRACTOR nor any person or entity represented by CONTRACTOR has received compensation from TWDB or any agency of the State of Texas for participation in the preparation of the specifications or solicitation on which this CONTRACT is based. Under Texas Government Code § 2155.004(b), CONTRACTOR certifies that the individual or business entity named in this CONTRACT is not ineligible to receive the specified contract and acknowledges that this CONTRACT may be terminated and payment withheld if this certification is inaccurate.
- J. **Foreign Terrorist Organizations.** CONTRACTOR represents and warrants that it is not engaged in business with Iran, Sudan, or a foreign terrorist organization, as prohibited by Texas Government Code § 2252.152.
- K. **Human Trafficking Prohibition.** Under Texas Government Code § 2155.0061, CONTRACTOR certifies that the individual or business entity named in this CONTRACT is not ineligible to receive the specified contract and acknowledges that this Contract may be terminated and payment withheld if this certification is inaccurate.
- L. **Lobbying Prohibition.** CONTRACTOR represents and warrants that TWDB's payments to CONTRACTOR and CONTRACTOR's receipt of appropriated or other funds under the contract are not prohibited by Texas Government Code §§ 556.005 or 556.0055, related to the prohibition on payment of state funds to a lobbyist or for lobbying activities.

- M. **No Conflict of Interest.** CONTRACTOR represents and warrants that the provision of goods and services or other performance under this CONTRACT will not constitute an actual or potential conflict of interest or reasonably create an appearance of impropriety. CONTRACTOR also represents and warrants that, during the term of this CONTRACT, CONTRACTOR will immediately notify TWDB, in writing, of any existing or potential conflict of interest relative to the performance of the CONTRACT.
- N. **Prior Disaster Relief Declaration.** Texas Government Code §§ 2155.006 and 2261.053 prohibit state agencies from accepting a response or awarding a contract that includes proposed financial participation by a person who, in the past five years, has been convicted of violating a federal law or assessed a penalty in connection with a contract involving relief for Hurricane Rita, Hurricane Katrina, or any other disaster, as defined by Texas Government Code § 418.004, occurring after September 24, 2005. Under Texas Government Code §§ 2155.006 and 2261.053, CONTRACTOR certifies that the individual or business entity named in this CONTRACT is not ineligible to receive the specified contract and acknowledges that this CONTRACT may be terminated and payment withheld if this certification is inaccurate.
- O. **Suspension and Debarment.** Contractor certifies that it and its principals are not suspended or debarred from doing business with the state or federal government as listed on the State of Texas Debarred Vendor List maintained by the Texas Comptroller of Public Accounts and the System for Award Management (SAM) maintained by the General Services Administration.

ARTICLE XII. CORRESPONDENCE

All correspondence between the parties must be made to the following addresses:

For **TWDB:**

Contract Issues:

Texas Water Development Board
Attention: Procurement & Contract Services
P.O. Box 13231
Austin, Texas 78711-3231
Email: contracts@twdb.texas.gov

Payment Request Submission:

Texas Water Development Board
Attention: Accounts Payable
P.O. Box 13231
Austin, Texas 78711-3231
Email: invoice@twdb.texas.gov

Physical Address:

Stephen F. Austin Building
1700 N. Congress Avenue, 6th Floor
Austin, Texas 78701

For **HIDALGO COUNTY DRAINAGE DISTRICT 1:**

Contract Issues:

Jaime Salazar
Hidalgo County Drainage District No.1
902 N. Doolittle Rd.
Edinburg, TX 78542
Email: jaime.salazar@hcdd1.org

Payment Request Submission:

Jaime Salazar
Hidalgo County Drainage District No.1
902 N. Doolittle Rd.
Edinburg, TX 78542
Email: jaime.salazar@hcdd1.org

Physical Address:

Hidalgo County Drainage District No.1
902 N. Doolittle Rd.
Edinburg, TX 78542


IN WITNESS WHEREOF, the parties have caused this CONTRACT to be duly executed.

TEXAS WATER DEVELOPMENT BOARD

HIDALGO COUNTY DRAINAGE DISTRICT 1



Jeff Walker
Executive Administrator



Raul E. Sesin
General Manager

Date: 4/1/2021

Date: 4/1/2021

Exhibit A

Scope of Work

March 2021

**First Cycle of Regional Flood Plan Development
(2020–2023)**

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Task 1 – Planning Area Description

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 Texas Administrative Code (TAC) Chapters 361 and 362, this portion of work must, in particular, include all work necessary to meet all the requirements of 31 TAC §361.30, 361.31, and 361.32.

The objective of this task is to prepare a standalone chapter to be included in the 2023 Regional Flood Plan that describes the Flood Planning Region (FPR).

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to prepare a chapter that includes:

1. A brief, general descriptions of the following:
 - a. social and economic character of the region such as information on development, population, economic activity, and economic sectors most at risk of flood impacts;
 - b. the areas in the FPR that are flood-prone and the types of major flood risks to life and property in the region;
 - c. key historical flood events within the region including associated fatalities and loss of property;
 - d. political subdivisions with flood-related authority and whether they are currently actively engaged in flood planning, floodplain management, and flood mitigation activities;
 - e. the general extent of local regulation and development codes relevant to existing and future flood risk;
 - f. agricultural and natural resources most impacted by flooding; and
 - g. existing local and regional flood plans within the FPR.
2. A general description of the location, condition, and functionality of existing natural flood mitigation features and constructed major flood infrastructure within the FPR, including but not limited to:
 - a. rivers, tributaries, and functioning floodplains;
 - b. wetlands;
 - c. playa lakes;
 - d. sinkholes;
 - e. alluvial fans;
 - f. vegetated dunes;
 - g. levees;
 - h. sea barriers, walls, and revetments;
 - i. tidal barriers and gates;
 - j. stormwater tunnels;
 - k. stormwater canals;
 - l. dams that provide flood protection;
 - m. detention and retention ponds;

- n. weirs;
 - o. storm drain systems; and
 - p. any other flood-related infrastructure within the FPR.
3. Include a tabulated list and GIS map of existing infrastructure.
 4. Include an assessment of existing infrastructure.
 5. Explain, in general, the reasons for non-functional or deficient natural flood mitigation features or major flood infrastructure being non-functional or deficient, provide a description of the condition and functionality of the feature or infrastructure and whether and when the natural flood feature or major flood infrastructure may become fully functional, and provide the name of the owner and operator of the major flood infrastructure.
 6. A general description of the location, source of funding, and anticipated benefits of proposed or ongoing major infrastructure and flood mitigation projects in the FPR, including:
 - a. new structural flood mitigation projects currently under construction;
 - b. non-structural flood mitigation projects currently being implemented; and
 - c. structural and non-structural flood mitigation projects with dedicated funding to construct and the expected year of completion.
 7. A review and summary of relevant existing planning documents in the region. Documents to be summarized include those referenced under 31 TAC §361.22.

The information gathered and developed in preparation of this chapter must be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the Regional Flood Plan chapter by TWDB.

Deliverables: A completed Chapter 1 describing the FPR, existing natural flood mitigation features, constructed major flood infrastructure, and major infrastructure and flood mitigation projects currently under development. A tabulated list and GIS map of existing infrastructure and their conditions. Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 2A – Existing Condition Flood Risk Analyses

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work must, in particular, include all work necessary to meet all the requirements of 31 TAC §361.33.

The objective of this task is to prepare a chapter to be combined with Task 2B and included in the 2023 Regional Flood Plan that describes the existing and future condition flood risk in the FPR.

The RFPGs must perform existing condition flood risk analyses for the region comprising: (1) flood hazard analyses that determine the location, magnitude, and frequency of flooding; (2) flood exposure analyses to identify who and what might be harmed within the region; and (3) vulnerability analyses to identify vulnerabilities of communities and critical facilities.

The information developed must be used to assist the RFPG to establish priorities in subsequent planning tasks, to identify areas that need Flood Management Evaluations (FMEs), and to efficiently deploy its resources.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Perform existing condition flood hazard analyses to determine the location and magnitude of both 1% annual chance and 0.2% annual chance flood events as follows:
 - a. collect data and conduct analyses sufficient to characterize the existing conditions for the planning area;
 - b. identify areas within each FPR where hydrologic and hydraulic model results are already available and summarize the information;
 - c. utilize best available data, including hydrologic and hydraulic models for each area;
 - d. prepare a map showing areas identified by the RFPG as having an annual likelihood of inundation of more than 1% and 0.2%, the areal extent of this inundation, and the sources of flooding for each area; and
 - e. prepare a map showing gaps in inundation boundary mapping and identify known flood-prone areas based on location of hydrologic features, historic flooding and/or local knowledge.
2. Develop high-level, region-wide, and largely GIS-based existing condition flood exposure analyses using the information identified in the flood hazard analysis to identify who and what might be harmed within the region for, at a minimum, both 1% annual chance and 0.2% annual chance flood events as follows:
 - a. analyses of existing development within the existing condition floodplain and the associated flood hazard exposure;
 - b. for the floodplain as defined by FEMA or as defined by an alternative analysis if the FEMA-defined floodplain is not considered best available;
 - c. may include only those flood mitigation projects with dedicated construction funding and scheduled for completion prior to adoption of the next state flood plan.

- d. must consider the population and property located in areas where existing levees or dams do not meet FEMA accreditation as inundated by flooding without those structures in place. Provisionally accredited structures may be allowed to provide flood protection, unless best available information demonstrates otherwise.
 - e. must consider available datasets to estimate the potential flood hazard exposure including, but not limited to:
 - i. number of residential properties and associated population;
 - ii. number of non-residential properties;
 - iii. other public infrastructure;
 - iv. major industrial and power generation facilities;
 - v. number and types of critical facilities;
 - vi. number of roadway crossings;
 - vii. length of roadway segments; and
 - viii. agricultural area and value of crops exposed.
 - f. must include a qualitative description of expected loss of function, which is the effect that a flood event could have on the function of inundated structures (residential, commercial, industrial, public, or others) and infrastructure, such as transportation, health and human services, water supply, wastewater treatment, utilities, energy generation, and emergency services.
3. Perform existing condition vulnerability analyses as follows:
- a. identify resilience of communities located in flood-prone areas identified as part of the existing condition flood exposure analyses, utilizing relevant data and tools.
 - b. identify vulnerabilities of critical facilities to flooding by looking at factors such as proximity to a floodplain or other bodies of water, past flooding issues, emergency management plans, and location of critical systems like primary and back-up power.
4. All data produced as part of the existing condition flood exposure analysis and the existing condition vulnerability analysis must include:
- a. underlying flood event return frequency;
 - b. type of flood risk;
 - c. county;
 - d. HUC12;
 - e. existing flood authority boundaries;
 - f. Social Vulnerability Indices for counties and census tracts; and
 - g. other categories as determined by RFPGs or in TWDB Flood Planning guidance documents.

The information gathered and developed in preparation of this chapter must be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the Regional Flood Plan chapter by TWDB.

Deliverables:

- Prepare a stand-alone chapter (including work from both Tasks 2A & 2B) to be included in the 2023 Regional Flood Plan.
- Prepare maps according to 1(d) and 1(e).
- A tabulated list and GIS map of all pertinent information. All maps should be submitted with underlying GIS data utilized to prepare them.
- Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 2B – Future Condition Flood Risk Analyses

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work must, in particular, include all work necessary to meet all the requirements of 31 TAC §361.34.

The objective of this task is to prepare a chapter to be combined with Task 2A and included in the 2023 Regional Flood Plan that describes the existing and future condition flood risk in the FPR.

RFPGs must perform future condition flood risk analyses for the region comprising: (1) flood hazard analyses that determine the location, magnitude and frequency of flooding; (2) flood exposure analyses to identify who and what might be harmed within the region; and (3) vulnerability analyses to identify vulnerabilities of communities and critical facilities.

The information developed must be used to assist the RFPG to establish priorities in subsequent planning tasks, to identify areas that need FMEs, and to efficiently deploy its resources.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Perform future condition flood hazard analyses to determine the location and magnitude of both 1% annual chance and 0.2% annual chance flood events as follows:
 - a. collect data and conduct analyses sufficient to characterize the future conditions for the planning area based on a "no-action" scenario of approximately 30 years of continued development and population growth

under current development trends and patterns, and existing flood regulations and policies based on:

- i. current land use and development trends and practices and associated projected population based on the most recently adopted state water plan decade and population nearest the next regional flood plan adoption date plus approximately 30 years or as provided for in TWDB Flood Planning guidance documents;
 - ii. reasonable assumptions regarding locations of residential development and associated population growth;
 - iii. anticipated relative sea level change and subsidence based on existing information;
 - iv. anticipated changes to the functionality of the existing floodplain;
 - v. anticipated sedimentation in flood control structures and major geomorphic changes in riverine, playa, or coastal systems based on existing information;
 - vi. assumed completion of flood mitigation projects currently under construction or that already have dedicated construction funding; and
 - vii. other factors deemed relevant by the RFPG.
- b. identify areas within each FPR where future condition hydrologic and hydraulic model results are already available and summarize the information;
 - c. utilize best available data, including hydrologic and hydraulic models for each area;
 - d. where future condition results are not available, but existing condition hydrologic and hydraulic model results are already available, the RFPGs must modify hydraulic models to identify future conditions flood risk for 1% and 0.2% annual chance storms based on simplified assumptions utilizing the information identified in this task.
 - e. prepare a map showing areas of 1% and 0.2% annual chance of inundation for future conditions, the areal extent of this inundation, and the sources of flooding for each area.
 - f. prepare a map showing gaps in inundation boundary mapping and identify known flood-prone areas based on location of hydrologic features, historic flooding, and/ or local knowledge.
2. Perform future condition flood exposure analyses using the information identified in the future condition flood hazard analysis to identify who and what might be harmed within the region for, at a minimum, both future condition 1% annual chance and future condition 0.2% annual chance flood events as follows:
 - a. analyses of existing and future developments within the future condition floodplain and the associated flood hazard exposure; and
 - b. to include only those flood mitigation projects with dedicated construction funding scheduled for completion prior to the next regional flood plan

- adoption date plus 30 years or as provided for in TWDB Flood Planning guidance documents.
- c. Identification of flood prone areas associated with the hazard exposure analyses must be based on analyses that rely primarily on the use and incorporation of existing and available:
 - i. FIRMs or other flood inundation maps and GIS related data and analyses;
 - ii. available hydraulic flood modeling results;
 - iii. model-based or other types of geographic screening tools for identifying flood prone areas; and
 - iv. other best available data or relevant technical analyses that the RFPG determines to be the most updated or reliable.
 3. Perform future condition vulnerability analyses as follows:
 - a. identify resilience of communities located in flood-prone areas identified as part of the future condition flood exposure analyses, utilizing relevant data and tools.
 - b. identify vulnerabilities of critical facilities to flooding by looking at factors such as proximity to a floodplain or other bodies of water, past flooding issues, emergency management plans, and location of critical systems like primary and back-up power.
 4. All data produced as part of the future condition flood exposure analysis and the future condition vulnerability analysis must include:
 - a. underlying flood event return frequency;
 - b. type of flood risk;
 - c. county;
 - d. HUC12;
 - e. existing flood authority boundaries;
 - f. Social Vulnerability Indices for counties and census tracts; and
 - g. other categories as determined in TWDB Flood Planning guidance documents.

The information gathered and developed in preparation of this chapter must be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the Regional Flood Plan chapter by TWDB.

Deliverables:

- Prepare a stand-alone chapter (including work from both Tasks 2A & 2B) to be included in the 2023 Regional Flood Plan.
- Prepare maps according to 1(e) and 1(f). A tabulated list and GIS map of all pertinent information. All maps should be submitted with underlying GIS data utilized to prepare them.
- Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 3A – Evaluation and Recommendations on Floodplain Management Practices

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work must, in particular, include all work necessary to meet all the requirements of 31 TAC §361.35.

Recognizing the extent that previous and current practices may have increased flood risks, including residual risks, and considering broad floodplain management and land use approaches that will avoid increasing flood risks, and avoid negatively affecting neighboring areas, the RFPG must accomplish the following tasks.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Consider the extent to which a lack of, insufficient, or ineffective current floodplain management and land use practices, regulations, policies, and trends related to land use, economic development, and population growth, allow, cause, or otherwise encourage increases to flood risks to both:
 - a. existing population and property, and
 - b. future population and property.
2. Take into consideration the future flood hazard exposure analyses performed under Task 2B, consider the extent to which the 1% annual chance floodplain, along with associated flood risks, may change over time in response to anticipated development and associated population growth and other relevant man-made causes, and assess how to best address these potential changes.
3. Based on the analyses in (1) and (2), make recommendations regarding forward-looking floodplain management and land use recommendations, and economic development practices and strategies, that should be implemented by entities within the FPR. These region-specific recommendations may include minimum floodplain management and land use standards and should focus on how to best address the changes in (2) for entities within the region. These recommendations will inform recommended strategies for inclusion in the Regional Flood Plan.

4. RFPGs may also choose to adopt region-specific, minimum floodplain management or land use or other standards that impact flood-risk, that may vary geographically across the region, that each entity in the FPR must adopt prior to the RFPG including in the Regional Flood Plan any Flood Management Evaluations, Flood Management Strategies, or Flood Mitigation Projects that are sponsored by or that will otherwise be implemented by that entity.
5. Consider example floodplain management and infrastructure protection standards provided by TWDB.

The information gathered and developed in preparation of this chapter must be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the Regional Flood Plan chapter by TWDB.

Deliverables:

- Prepare a stand-alone chapter (including work from both Tasks 3A & 3B) to be included in the 2023 Regional Flood Plan.
- List region-specific recommendations regarding forward-looking floodplain management and land use, which may include minimum floodplain management and land use standards.
- Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 3B – Flood Mitigation and Floodplain Management Goals

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work must, in particular, include all work necessary to meet all the requirements of 31 TAC §361.36.

In this task, the RFPG must consider the Guidance Principles under 31 TAC §362.3, Tasks 1-3A, input from the public, and other relevant information and considerations.

The RFPG must use these goals to guide the RFPG in carrying out the following Tasks 4A – 5.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Identify specific and achievable flood mitigation and floodplain management goals along with target years by which to meet those goals for the FPR to include, at a minimum, goals specifically addressing risks to life and property.
2. Recognize and clearly state the levels of residual risk that will remain in the FPR even after the stated flood mitigation goals are fully met.
3. Structure and present the goals and the residual risks in an easily understandable format for the public including in conformance with TWDB Flood Planning guidance documents.
4. When appropriate, choose goals that apply to full single HUC8 watershed boundaries or coterminous groups of HUC8 boundaries within the FPR.
5. Identify both short-term goals (10 years) and long-term goals (30 years).

The information gathered and developed in preparation of this chapter must be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the Regional Flood Plan chapter by TWDB.

Deliverables:

- Prepare a stand-alone chapter (including work from both Tasks 3A & 3B) to be included in the 2023 Regional Flood Plan.
- Identify flood mitigation and floodplain management goals considering minimum recommended flood protection goal provided by TWDB.
- Identify specific and achievable flood mitigation and floodplain management goals (10 year and 30 year) in an easily understandable format for the public.
- Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 4A – Flood Mitigation Needs Analysis

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work must, in particular, include all work necessary to meet all the requirements of 31 TAC §361.37.

The RFPG must conduct the analysis in a manner that will ensure the most effective and efficient use of the resources available to the RFPG.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Based on the analyses and goals developed by the RFPG under Tasks 2A through 3B and any additional analyses or information developed using available screening-level models or methods, the RFPG must identify locations within the FPR that the RFPG considers to have the greatest flood mitigation and flood risk study needs by considering:
 - a. the areas in the FPR that the RFPG identified as the most prone to flooding that threatens life and property;
 - b. the relative locations, extent, and performance of current floodplain management and land use policies and infrastructure located within the FPR, particularly within the locations described in (a);
 - c. areas identified by the RFPG as prone to flooding that don't have adequate inundation maps;
 - d. areas identified by the RFPG as prone to flooding that don't have hydrologic and hydraulic models;
 - e. areas with an emergency need;
 - f. existing modeling analyses and flood risk mitigation plans within the FPR;
 - g. flood mitigation projects already identified and evaluated by other flood mitigation plans and studies;
 - h. documentation of historic flooding events;
 - i. flood mitigation projects already being implemented; and
 - j. any other factors that the RFPG deems relevant to identifying the geographic locations where potential FMEs and potentially feasible FMSs and FMPs must be identified and evaluated under §361.38.

The information gathered and developed in preparation of this chapter must be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the Regional Flood Plan chapter by TWDB.

Deliverables:

- Prepare a stand-alone chapter (including work from both Tasks 4A & 4B) to be included in the 2023 Regional Flood Plan.
- A map identifying the geographic locations within the FPR considered to have the greatest flood mitigation and flood risk study needs where potential FMEs and potentially feasible FMSs and FMPs must be evaluated

- A tabulated list and GIS map of all pertinent information. All maps should be submitted with underlying GIS data utilized to prepare them.
- Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 4B – Identification and Evaluation of Potential Flood Management Evaluations and Potentially Feasible Flood Management Strategies and Flood Mitigation Projects

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work must, in particular, include all work necessary to meet all the requirements of 31 TAC §361.38.

Based on analyses and decisions under Tasks 2A through 4A the RFPG must identify and evaluate potential FMEs and potentially feasible FMSs and FMPs, including nature-based solutions, some of which may have already been identified by previous evaluations and analyses by others.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Receive public comment on a proposed process to be used by the RFPG to identify and select FMEs, FMSs, and FMPs for the 2023 Regional Flood Plan.
2. Summarize the RFPG process for identifying potential FMEs and potentially feasible FMSs and FMPs and include a description of the process in the draft and final adopted Regional Flood Plan.
3. Identify potentially feasible FMSs and FMPs in accordance with the RFPG established process.
4. When evaluating FMSs and FMPs the RFPG must, at a minimum, identify one solution that provides flood mitigation associated with a 1% annual chance flood event. In instances where mitigating for 1% annual chance events is not feasible, the RFPG must document the reasons for its infeasibility, and at the discretion of the RFPG, other FMSs and FMPs to mitigate more frequent events may also be identified and evaluated based on TWDB Flood Planning guidance documents.
5. For areas within the FPR that the RFPG does not yet have sufficient information or resources to identify potentially feasible FMSs and FMPs, the RFPG must identify areas for potential FMEs that may eventually result in FMSs and/or FMPs.
6. The RFPG must evaluate potentially feasible FMSs and FMPs understanding that, upon evaluation and further inspection, some FMSs or FMPs initially identified as potentially feasible may, after further inspection, be reclassified as infeasible.
7. FMPs will be ranked in the state flood plan and
 - a. must represent discrete, projects;
 - b. must not entail an entire capital program or drainage masterplan; and
 - c. may rely on other flood-related projects.

8. Evaluations of potentially feasible FMSs and FMPs require associated, detailed hydrologic and hydraulic modeling results that quantify the reduced impacts from flood events and the associated benefits and costs. Information may be based on previously performed evaluations of projects and related information. Evaluations of potentially feasible FMS and FMPs must include the following information and be based on the following analyses:
- a. A reference to the specific flood mitigation or floodplain management goal addressed by the feasible FMS or FMP;
 - b. A determination of whether FMS or FMP meets an emergency need;
 - c. An indication regarding the potential use of federal funds, or other sources of funding, as a component of the total funding mechanism;
 - d. An equitable comparison between and consistent assessment of all FMSs and FMPs that the RFPG determines to be potentially feasible;
 - e. A demonstration that the FMS or FMP will not negatively affect a neighboring area;
 - f. A quantitative reporting of the estimated benefits of the FMS or FMP, including reductions of flood impacts of the 1% annual chance flood event and other storm events identified and evaluated if the project mitigates to a more frequent event, to include, but not limited to:
 - (1) Associated flood events that must, at a minimum, include the 1% annual chance flood event and other storm events identified and evaluated;
 - (2) Reduction in habitable, equivalent living units flood risk;
 - (3) Reduction in residential population flood risk;
 - (4) Reduction in critical facilities flood risk;
 - (5) Reduction in road closure occurrences;
 - (6) Reduction in acres of active farmland and ranchland flood risk;
 - (7) Estimated reduction in fatalities, when available;
 - (8) Estimated reduction in injuries, when available;
 - (9) Reduction in expected annual damages from residential, commercial, and public property; and
 - (10) Other benefits as deemed relevant by the RFPG including environmental benefits and other public benefits.
 - g. A quantitative reporting of the estimated capital cost of FMPs in accordance with TWDB Flood Planning guidance documents;
 - h. Calculated benefit-cost ratio for FMPs in accordance with *Exhibit C: General Guidelines* and based on current, observed conditions;
 - i. For projects that will contribute to water supply, all relevant evaluations required under §357.34(e) (relating to Identification and Evaluation of Potentially Feasible Water Management Strategies and Water Management Strategy Projects), as determined by the EA based on the type of

- contribution, and a description of its consistency with the currently adopted State Water Plan;
- j. A description of potential impacts and benefits from the FMS or FMP to the environment, agriculture, recreational resources, navigation, water quality, erosion, sedimentation, and impacts to any other resources deemed relevant by the RFPG;
 - k. A description of residual, post-project, and future risks associated with FMPs including the risk of potential catastrophic failure and the potential for future increases to these risks due to lack of maintenance;
 - l. Implementation issues including those related to rights-of-way, permitting, acquisitions, relocations, utilities and transportation; and
 - m. Funding sources and options that exist or will be developed to pay for development, operation, and maintenance of the FMS or FMP.
9. Evaluations of potential FMEs must be at a reconnaissance or screening-level, unsupported by associated detailed hydrologic and hydraulic analyses. These must be identified for areas that the RFPG considers a priority for flood risk evaluation but that do not yet have the required detailed hydrologic and hydraulic modeling or associated project evaluations available to evaluate specific FMSs or FMPs for recommendation in the Regional Flood Plan. These FMEs must be based on recognition of the need to develop detailed hydrologic models or to perform associated hydraulic analyses and associated project evaluations in certain areas identified by the RFPG. Evaluations of potential FMEs must include the following analyses:
- a. A reference to the specific flood mitigation or floodplain management goal to be addressed by the potential FME.
 - b. A determination of whether FME may meet an emergency need.
 - c. An indication regarding the potential use of federal funds, or other sources of funding as a component of the total funding mechanism.
 - d. An equitable comparison between and consistent assessment of all FMEs.
 - e. An indication of whether hydrologic and or hydraulic models are already being developed or are anticipated in the near future and that could be used in the FME.
 - f. A quantitative reporting of the estimated benefits, including reductions of flood risks, to include:
 - (1) Estimated habitable, living unit equivalent and associated population in FME area;
 - (2) Estimated critical facilities in FME area;
 - (3) Estimated number of roads closures occurrences in FME area;
 - (4) Estimated acres of active farmland and ranchland in FME area; and
 - (5) A quantitative reporting of the estimated study cost of the FME and whether the cost includes use of existing or development of new hydrologic or hydraulic models.

- g. For FMEs, RFPGs do not need to demonstrate that an FME will not negatively affect a neighboring area.
10. RFPGs must evaluate and present potential FMEs and potentially feasible FMSs and FMPs with sufficient specificity to allow state agencies to make financial or regulatory decisions to determine consistency of the proposed action before the state agency with an approved Regional Flood Plan.
11. Analyses must clearly designate a representative location of the FME and beneficiaries including a map and designation of HUC12 and county location.
12. Analyses must be performed in accordance with TWDB Flood Planning guidance documents.
13. All data produced as part of the analyses under this task must be organized and summarized in the Regional Flood Plan in accordance with TWDB Flood Planning guidance documents.
14. Plans to be considered in developing this chapter include relevant plans referenced under 31 TAC §361.22.

The information gathered and developed in preparation of this chapter must be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the Regional Flood Plan chapter by TWDB.

Deliverables:

- Prepare a stand-alone chapter (including work from both Tasks 4B & 5) to be included in the 2023 Regional Flood Plan.
- A list of the potentially feasible FMSs and associated FMPs that were identified by the RFPG. The TWDB Flood Planning guidance documents will include minimum data submittal requirements and deliverable format.
- A map identifying the geographic locations within the FPR considered to have the greatest flood mitigation and flood risk study needs where potential FMEs and potentially feasible FMSs and FMPs must be evaluated. TWDB Flood Planning guidance documents will include minimum data submittal requirements and deliverable format.
- Data must be organized and summarized in the Regional Flood Plan in accordance with TWDB Flood Planning guidance documents.
- A tabulated list and GIS map of all pertinent information. All maps should be submitted with underlying GIS data utilized to prepare them.
- Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 4C – Prepare and Submit Technical Memorandum

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work must, in particular, include all work necessary to meet all the requirements of 31 TAC §361.13(e).

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Prepare a concise Technical Memorandum to include:
 - a. A list of existing political subdivisions within the FPR that have flood-related authorities or responsibilities;
 - b. A list of previous flood studies considered by the RFPG to be relevant to development of the Regional Flood Plan;
 - c. A geodatabase and associated maps in accordance with TWDB Flood Planning guidance documents that the RFPG considers to be best representation of the region-wide 1% annual chance flood event and 0.2% annual chance flood event inundation boundaries, and the source of flooding for each area, for use in its risk analysis, including indications of locations where such boundaries remain undefined;
 - d. A geodatabase and associated maps in accordance with TWDB Flood Planning guidance documents that identifies additional flood-prone areas not described in (c) based on location of hydrologic features, historic flooding, and/or local knowledge;
 - e. A geodatabase and associated maps in accordance with TWDB Flood Planning guidance documents that identifies areas where existing hydrologic and hydraulic models needed to evaluate FMSs and FMPs are available;
 - f. A list of available flood-related models that the RFPG considers of most value in developing its plan;
 - g. The flood mitigation and floodplain management goals adopted by the RFPG per §361.36;
 - h. The documented process used by the RFPG to identify potentially feasible FMSs and FMPs;
 - i. A list of potential FMEs and potentially feasible FMSs and FMPs identified by the RFPG, if any; and
 - j. A list of FMSs and FMPs that were identified but determined by the RFPG to be infeasible, including the primary reason for it being infeasible.
2. Approve submittal of the Technical Memorandum to TWDB at a RFPG meeting subject notice requirements in accordance with 31 TAC §361.21(h). The Technical Memorandum must be submitted to TWDB in accordance with Section I Article I of the contract.

Task 5 – Recommendation of Flood Management Evaluations and Flood Management Strategies and Associated Flood Mitigation Projects

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work must, in particular, include all work necessary to meet all the requirements of 31 TAC §361.39.

The objective of this task is to evaluate and recommend Flood Management Evaluations (FMEs), Flood Management Strategies (FMSs) and their associated Flood Mitigation Projects (FMPs) to be included in the 2023 Regional Flood Plan that describes the work completed, presents the potential FMEs, potentially feasible FMSs and FMPs, recommended and alternative FMSs and FMPs, including all the technical evaluations, and presents which entities will benefit from the recommended FMSs and FMPs.

Work associated with any Task 5 subtasks is contingent upon a written notice-to-proceed. This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Recommend FMSs and FMPs to reduce the potential impacts of flood based on the evaluations under §361.38 and RFPG goals and that must, at a minimum, mitigate for flood events associated with at 1% annual chance (100-yr flood) where feasible. In instances where mitigating for 100-year events is not feasible, FMS and FMPs to mitigate more frequent events may be recommended based on TWDB Flood Planning guidance documents. Recommendations must be based upon the identification, analysis, and comparison of alternatives that the RFPG determines will provide measurable reductions in flood impacts in support of the RFPG's specific flood mitigation and/or floodplain management goals.
2. Provide additional information in conformance with TWDB Flood Planning guidance documents which will be used to rank recommended FMPs in the state flood plan.
3. Recommend FMEs that the RFPG determines are most likely to result in identification of potentially feasible FMSs and FMPs that would, at a minimum, identify and investigate one solution to mitigate for flood events associated with a 1% annual chance flood event and that support specific RFPG flood mitigation and/or floodplain management goals.
4. Recommended FMSs or FMPs may not negatively affect a neighboring area or an entity's water supply.
5. Recommended FMSs or FMPs that will contribute to water supply may not result in an overallocation of a water source based on the water availability allocations in the most recently adopted State Water Plan.
6. Specific types of FMEs, FMSs, or FMPs that should be included and that should not be included in Regional Flood Plans must be in accordance with TWDB Flood Planning guidance documents.

7. FMS and FMP documentation must include a strategy or project description, discussion of associated facilities, project map, and technical evaluations addressing all considerations and factors required under 31 TAC §361.38(h).
8. Coordinate and communicate with FME, FMS, and FMP sponsors, individual local governments, regional authorities, and other political subdivisions.
9. Process documentation of selecting all recommended FMSs and associated FMPs including development of FMS evaluations matrices and other tools required to assist the RFPG in comparing and selecting recommended FMSs and FMPs.
10. Document the evaluation and selection of all recommended FMS and FMPs, including an explanation for why certain types of strategies may not have been recommended.

The information gathered and developed in preparation of this chapter must be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the Regional Flood Plan chapter by TWDB.

Deliverables:

- Prepare a stand-alone chapter (including work from both Tasks 4B & 5) to be included in the 2023 Regional Flood Plan to include technical analyses of all evaluated FMSs and FMPs.
- A list of the recommended FMEs, FMSs, and associated FMPs that were identified by the RFPG. TWDB Flood Planning guidance documents will include minimum data submittal requirements and deliverable format.
- Data must be organized and summarized in the Regional Flood Plan in accordance with TWDB Flood Planning guidance documents.
- A tabulated list and GIS map of all pertinent information. All maps should be submitted with underlying GIS data utilized to prepare them.
- Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 6A – Impacts of Regional Flood Plan

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work must, in particular, include all work necessary to meet all the requirements of 31 TAC §361.40.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to include:

1. a region-wide summary of the relative reduction in flood risk that implementation of the Regional Flood Plan would achieve within the region including with regard to life, injuries, and property.
2. a statement that the FMPs in the plan, when implemented, will not negatively affect neighboring areas located within or outside of the FPR.
3. a general description of the types of potential positive and negative socioeconomic or recreational impacts of the recommended FMSs and FMPs within the FPR.
4. a general description of the overall impacts of the recommended FMPs and FMSs in the Regional Flood Plan on the environment, agriculture, recreational resources, water quality, erosion, sedimentation, and navigation.

The information gathered and developed in preparation of this chapter must be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the Regional Flood Plan chapter by TWDB.

Deliverables: Prepare a stand-alone chapter (including work from both Tasks 6A & 6B) to be included in the 2023 Regional Flood Plan. Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 6B – Contributions to and Impacts on Water Supply Development and the State Water Plan

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work must, in particular, include all work necessary to meet all the requirements of 31 TAC §361.41.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Include a region-wide summary and description of the contribution that the regional flood plan would have to water supply development including a list of the specific FMSs and FMPs that would contribute to water supply.
2. Include a description of any anticipated impacts, including to water supply or water availability or projects in the State Water Plan, that the regional flood plan FMSs and FMPs may have.

The information gathered and developed in preparation of this chapter must be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the Regional Flood Plan chapter by TWDB.

Deliverables: Prepare a stand-alone chapter (including work from both Tasks 6A & 6B) to be included in the 2023 Regional Flood Plan. Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 7 – Flood Response Information and Activities

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work must, in particular, include all work necessary to meet all the requirements of 31 TAC §361.42.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Summarize the nature and types of flood response preparations within the FPR including providing where more detailed information is available regarding recovery.
2. Coordinate and communicate, as necessary, with entities in the region to gather information.
3. RFPGs must not perform analyses or other activities related to planning for disaster response or recovery activities.
4. Plans to be considered in developing this chapter include relevant plans referenced under 31 TAC §361.22.

The information gathered and developed in preparation of this chapter must be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the Regional Flood Plan chapter by TWDB.

Deliverables: Prepare a stand-alone chapter to be included in the 2023 Regional Flood Plan. Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 8 – Administrative, Regulatory, and Legislative Recommendations

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work must, in particular, include all work necessary to meet all the requirements of 31 TAC §361.43.

The objective of this task is to prepare a separate chapter to be included in the 2023 Regional Flood Plan that presents the RFPG’s administrative, legislative, and regulatory recommendations.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to develop:

1. Legislative recommendations that they consider necessary to facilitate floodplain management and flood mitigation planning and implementation.
2. Other regulatory or administrative recommendations that they consider necessary to facilitate floodplain management and flood mitigation planning and implementation.
3. Any other recommendations that the RFPG believes are needed and desirable to achieve its regional flood mitigation and floodplain management goals.
4. Recommendations regarding potential, new revenue-raising opportunities, including potential new municipal drainage utilities or regional flood authorities, that could fund the development, operation, and maintenance of floodplain management or flood mitigation activities in the region.

The information gathered and developed in preparation of this chapter must be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the Regional Flood Plan chapter by TWDB.

Deliverables: Prepare a stand-alone chapter to be included in the 2023 Regional Flood Plan. Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 9 – Flood Infrastructure Financing Analysis

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work must, in particular, include all work necessary to meet all the requirements of 31 TAC §361.44.

The objective of this task is to report on how sponsors of recommended FMPs propose to finance projects.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Coordinate and communicate with individual local governments, regional authorities, and other political subdivisions.
2. Perform a survey, including the following work:
 - a. Contacting FME and FMP sponsors.
 - b. Collection and collation of data.
 - c. Documentation of the effectiveness of survey methodology, providing percent survey completions, and whether an acceptable minimum percent survey completion was achieved.
 - d. Submission of data.
3. Coordinate with FME and FMP sponsors as necessary to ensure detailed needs and costs associated with their anticipated evaluations and projects are sufficiently represented in the Regional Flood Plan for future funding determinations.
4. Indicate how individual local governments, regional authorities, and other political subdivisions in their region propose to finance the region's recommended FMPs, and FMEs included in their flood plan. The assessment must also describe what role the RFPG proposes for the state in financing recommended FMPs, and FMEs. As projects are implemented, those improvements and associated benefits must be incorporated into and reflected in the subsequent Regional Flood Plans.
5. Summarize the survey results.

The information gathered and developed in preparation of this chapter must be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the Regional Flood Plan chapter by TWDB.

Deliverables: A completed Chapter 9 must be delivered in the 2023 Regional Flood Plan to include summary of reported financing approaches for all recommended FMPs and FMEs. Data must be submitted in accordance with TWDB guidance documents. Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 10 – Public Participation and Plan Adoption

The objective of this task is to address public participation, public meetings, eligible administrative and technical support activities, and other requirements and activities eligible for reimbursement. Objectives also include activities necessary to complete and

submit a draft and final Regional Flood Plan, and obtain TWDB approval of the Regional Flood Plan.

In this task, the RFPG must evaluate and ensure that the draft and final Regional Flood Plan satisfies the requirements for regional flood plans in the guidance principles adopted in Title 31 TAC §362.3 and must include a statement in the draft and final Regional Flood Plan explaining how the Regional Flood Plan satisfies the requirements of each of the guidance principles in accordance with Title 31 TAC §361.20.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. In addition to generally meeting all applicable statute requirements governing regional and state flood planning this portion of work must, in particular, include all technical and administrative support activities necessary to meet all the requirements of 31 TAC Chapters 361 and 362 that are not already addressed under the scope of work associated with other contract Tasks but that are necessary and or required to complete and deliver an draft Regional Flood Plan and final, adopted Regional Flood Plan to TWDB and obtain approval of the adopted Regional Flood Plan by TWDB.
2. Organization, support, facilitation, and documentation of all meetings associated with: preplanning meeting; consideration of a substitution of alternative flood management strategies; public meeting after adoption of the draft Regional Flood Plan and prior to adoption of the final Regional Flood Plan; and consideration of Regional Flood Plan amendments, alternative FMS substitutions, or Board-directed revisions.

Technical Support and Administrative Activities

1. RFPGs must support and accommodate periodic presentations by the TWDB for the purpose of orientation, training, and retraining as determined and provided by the TWDB during regular RFPG meetings.
2. Attendance and participation of technical consultants at RFPG, subgroup, subcommittees, special and or other meetings including preparation and follow-up activities.
3. Developing technical and other presentations and handout materials for regular and special meetings to provide technical and explanatory data to the RFPG and its subcommittees, including follow-up activities.
4. Administrative and technical support and participation in RFPG activities, and documentation of any RFPG workshops, work groups, subgroup and/or subcommittee activities.
5. Technical support and administrative activities associated with periodic and special meetings of the RFPG including developing agendas and coordinating activities for the RFPG.
6. Provision of progress reports to TWDB for work performed under this Contract.

7. Development of draft and final responses for RFPG approval to public questions or comments as well as approval of the final responses to comments on Regional Flood Plan documents.
8. Intraregional and interregional coordination and communication, and or facilitation required within the FPR and with other RFPGs to develop a Regional Flood Plan.
9. Incorporation of all required data and reports into Regional Flood Plan document.
10. Modifications to the Regional Flood Plan documents based on RFPG, public, and or agency comments.
11. Preparation of a Regional Flood Plan chapter summarizing Task 10 activities including review by RFPG and modification of document as necessary.
12. Development and inclusion of Executive Summaries in both draft Regional Flood Plan and final Regional Flood Plan.
13. Production, distribution, and submittal of all draft and final Regional Flood Plan-related planning documents for RFPG, public and agency review, including in hard-copy format when required.
14. Assembling, compiling, and production of the completed draft Regional Flood Plan and Final Regional Flood Plan document(s) that meet all requirements of statute, 31 TAC Chapters 361 and 362, Contract and associated guidance documents.
15. Submittal of the Regional Flood Plan documents in both hard copy and electronic formats to TWDB for review and approval; and all effort required to obtain final approval of the Regional Flood Plan by TWDB.

Other Activities

1. Review of all Regional Flood Plan-related documents by RFPG members.
2. Development and maintenance of a RFPG website or RFPG-dedicated webpage on the RFPG administrator's website for posting planning group meeting notices, agendas, materials, and plan information.
3. Limited non-labor, direct costs associated with maintenance of the RFPG website.
4. Development of agendas, presentations, and handout materials for the public meetings to provide to the general public.
5. Documentation of meetings to include recorded minutes and/or audio recordings as required by the RFPG bylaws and archiving and provision of minutes to public.
6. Preparation and transmission of correspondence, for example, directly related to public comments on Regional Flood Plan documents.
7. Promoting consensus decisions through conflict resolution efforts including monitoring and facilitation required to resolve issues between and among RFPG members and stakeholders in the event that issues arise during the process of developing the Regional Flood Plan, including mediation between RFPG members, if necessary.
8. RFPG membership solicitation activities.

9. Meeting all posting, meeting, and other public notice requirements in accordance with the open meetings act, statute, and 31 TAC §361.21 and any other applicable public notice requirements.
10. Solicitation, review, and dissemination of public input, as necessary.
11. Any efforts required, but not otherwise addressed in other SOW tasks that may be required to complete an Regional Flood Plan in accordance with all statute and rule requirements.

Deliverables:

- A completed Chapter 10 summarizing public participation activities and appendices with public comments and RFPG responses to comments.
- Complete draft Regional Flood Plan and final, adopted Regional Flood Plan documents.
- Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Exhibit B

**Region 15 Lower Rio Grande
Flood Planning Group
Task and Expense Budgets**

February 2021

**First Cycle of Regional Flood Plan Development
(2020–2023)**

This document is subject to future revision based upon any future Legislative actions.

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1 Contractor Task Budget

	TASK		AMOUNT
CAS Item No.	Regional Flood Planning Task No.	Description	
1	1	Planning Area Description	\$63,500.00
2	2A	Existing Condition Flood Risk Analysis	\$127,000.00
3	2B	Future Condition Flood Risk Analysis	\$127,000.00
4	3A	Evaluation and Recommendations on Floodplain Management Practices	\$25,400.00
5	3B	Flood Mitigation and Floodplain Management Goals	\$12,700.00
6	4A	Flood Mitigation Needs Analysis	\$38,100.00
7	4B	Identification and Evaluation of Potential Flood Management Evaluations and Potentially Feasible Flood Management Strategies and Flood Mitigations Projects	\$190,500.00
8	4C	Prepare and Submit Technical Memorandum	\$25,400.00
9	5	Recommendation of Flood Management Evaluations and Flood Management Strategies and Associated Flood Mitigation Projects	\$254,000.00
10	6A	Impacts of Regional Flood Plan	\$50,800.00
11	6B	Contributions to and Impacts on Water Supply Development and the State Water Plan	\$12,700.00
12	7	Flood Response Information and Activities	\$12,700.00
13	8	Administrative, Regulatory, and Legislative Recommendations	\$12,700.00
14	9	Flood Infrastructure Financing Analysis	\$25,400.00
15	10	Public Participation and Plan Adoption	\$292,100.00
		Total Committed Funds	\$1,270,000.00

TWDB Contract No. 2101792500

Task and Expense Budgets

EXHIBIT B Page 4 of 6

2 Contractor Expense Budget

CATEGORY	AMOUNT
Other Expenses ¹	\$ 60,000.00
Subcontract Services #1	\$ 1,203,000.00
Subcontract Services #2	\$0
Subcontract Services #3	\$0
Voting Planning Member Travel ²	\$ 7,000.00
Total Committed Funds ³	\$1,270,000.00

¹Eligible Other Expenses as described in 31 TAC § 361.72(b) include the following administrative costs if the RFPG or its chairperson certifies, during a public meeting, that the expenses are eligible for reimbursement and are correct and necessary:

- a) Travel expenses as authorized by the General Appropriations Act are available only for attendance at a posted meeting of the RFPG, unless the travel is specifically authorized by the RFPG and EA;
- b) Costs associated with providing translators and accommodations for persons with disabilities for public meetings when required by law or deemed necessary by the RFPGs and certified by the chairperson;
- c) Direct costs, excluding personnel-related costs of the Planning Group Sponsor, for placing public notices for the legally required public meetings and of providing copies of information for the public and for members of the RFPGs as needed for the efficient performance of planning work such as:
 1. expendable supplies actually consumed in direct support of the planning process;
 2. direct communication charges;
 3. limited direct costs/fees of maintaining RFPG website domain, website hosting, and/or website;
 4. reproduction of materials directly associated with notification or planning activities (the actual non-labor direct costs as documented by the Contractor);
 5. direct postage (e.g., postage for mailed notification of funding applications or meetings); and
 6. other direct costs of public meetings, all of which must be directly related to planning (e.g., newspaper and other public notice posting costs).
- d) The cost of public notice postings including a website and for postage for mailing notices of public meetings; and
- e) The Planning Group Sponsor's personnel costs for the staff hours that are directly spent providing, preparing for, and posting public notice for RFPG meetings, including labor, fringe, overhead, and other expenses for their support of and attendance at such RFPG meetings, in accordance with, and as specifically limited by, the flood

planning grant contract with the Board. This may not exceed: \$5,000 per regular RFPG meeting nor a total of \$60,000 over the first planning cycle.

² Voting Planning Member Travel Expenses is defined as eligible mileage expenses incurred by regional flood planning members that cannot be reimbursed by any other entity, planning group sponsor, etc. as certified by the voting member. Travel expenses are available only for attendance at a posted meeting of the RFPG unless the travel is specifically authorized by the RFPG and EA. The reimbursed amount is limited to the maximum amounts authorized for state employees by the General Appropriations Act, Tex. Leg. Regular Session, 2019, Article IX, Part 5, as amended or superseded.

³ Ineligible Expenses as described in 31 TAC § 361.72(a) include, but are not limited to:

- a) Activities for which the Board determines existing information, data, or analyses are sufficient for the planning effort
- b) Activities directly related to the preparation of applications for state or federal permits or other approvals, activities associated with administrative or legal proceedings by regulatory agencies, and preparation of engineering plans and specifications;
- c) Compensation for the time or expenses of RFPGs members' service on or for the RFPG
- d) Costs of administering the RFPG, other than those explicitly allowed under 31 TAC § 361.72(b)
- e) Staff or overhead costs for time spent providing public notice and meetings, including time and expenses for attendance at such meetings;
- f) Costs for training;
- g) Costs of developing an application for funding or reviewing materials developed due to this grant;
- h) Costs of administering the regional flood planning grant and associated contracts;
- i) Analysis or other activities related to planning for disaster response or recovery activities; and
- j) Analyses of benefits and costs of FMSs beyond the scope of such analyses that is specifically allowed or required by regional flood planning guidance to be provided by the EA unless the RFPG demonstrates to the satisfaction of the EA that these analyses are needed to determine the selection of the FMS or FMP.
- k) Labor, reproduction, or distribution of newsletters;
- l) Food, drink, or lodging for Regional Flood Planning Group members (including tips and alcoholic beverages);
- m) Purchase, rental, or depreciation of equipment (e.g., computers, copiers, fax machines);
- n) General purchases of office supplies not documented as consumed directly for the planning process; and
- o) Costs associated with social events or tours.

Exhibit C

Technical Guidelines for Regional Flood Planning

When available, the document will be posted at
<https://www.twdb.texas.gov/flood/planning/planningdocu/2023/index.asp>

**First Cycle of Regional Flood Plan Development
(2020–2023)**

Exhibit D

Data Submittal Guidelines for Regional Flood Planning

When available, the document will be posted at
<https://www.twdb.texas.gov/flood/planning/planningdocu/2023/index.asp>

First Cycle of Regional Flood Plan Development (2020–2023)

Exhibit E

Cover Page

(Original application in contract file)

First Cycle of Regional Flood Plan Development(2020-2023)

TWDB Contract No. 2101792500

Cover Page

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Exhibit F

Certification of Procurement of
Professional Services

**First Cycle of Regional Flood Plan Development
(2020–2023)**

Certification of Procurement of Professional Services – 2023 Regional Flood Plan

Each of the following subcontractor(s) was procured through a Request for Qualifications in accordance with the procurement requirements applicable to Brazos River Authority, as required in 31 TAC 361.12 (a)(2) and 361.72 (c).

Subcontractor Name	Date Procured
Subcontractor Name	Date Procured
Subcontractor Name	Date Procured
Subcontractor Name	Date Procured
Subcontractor Name	Date Procured
Subcontractor Name	Date Procured
Subcontractor Name	Date Procured
Subcontractor Name	Date Procured

Certification:

I, _____ the authorized representative for Region _____, do hereby certify that each of the subcontractor(s) listed above were procured through a Request for Qualifications which was either published or sent to more than one professional inviting their response, and that the subcontractor(s) listed above were selected from such responses based on their demonstrated competence and qualifications.

Signature of Authorized Representative	Date
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31 TAC 361.12 (a)(2). General Regional Flood Planning Group Responsibilities and Procedures. The following activities are required of each RFPG every planning cycle: Select a technical consultant(s) to be procured by the Planning Group Sponsor in accordance with the procurement requirements that apply to that political subdivision and Texas Government Code Chapter 2254.

31 TAC 361.72(c). A RFPG through the Planning Group Sponsor's contractor or subcontractor may obtain professional services, including the services of a planner, land surveyor, licensed engineer, or attorney, for development or revision of a regional flood plan only if such services are procured on the basis of demonstrated competence and qualifications through a request for qualifications process in accordance with Texas government Code Chapter 2254 including Qualifications Based Selection of an Architect, Engineer, or Land Surveyor.

EXHIBIT B
Scope of Services to be provided by the Owner

Scope of Services to be provided by the Owner

The following provides an outline of the services to be provided by the Owner in the development of the Project.

General:

The Owner will provide to the Engineer the following:

- 1) Provide the authorization to proceed with services through coordination with the project Engineer.
- 2) Assistance to the Engineer, as necessary, to obtain the required data and information from other local, regional, State and Federal agencies the Engineer cannot easily obtain.
- 3) Provide any available relevant data the Owner may have on file concerning the Project including the following, which may be supplemented throughout the term of the Project:
 - a. _____
 - b. _____
 - c. _____
 - d. _____
- 4) Provide timely review and decisions in response to the Engineer's request for information and/or required submittals and deliverables, in order for the Engineer to maintain the Work Schedule. Owner shall be deemed to have responded in a timely manner if it provides comments to Engineer within fifteen (15) days after Owner's receipt of such plans.
- 5) Attend and participate in progress meetings as required and as coordinated and conducted by Engineer.
- 6) Provide the authorization to proceed with Engineering Services on the Project.

Regional Flood Planning (RFQ) Scope of Work

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Task 1 – Planning Area Description

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 Texas Administrative Code (TAC) Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.30, 361.31, and 361.32.

The objective of this task is to prepare a standalone chapter to be included in the 2023 Regional Flood Plan (RFP) that describes the Flood Planning Region (FPR).

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to prepare a chapter that includes:

1. A brief, general descriptions of the following:
 - a. social and economic character of the region such as information on development, population, economic activity, and economic sectors most at risk of flood impacts;
 - b. the areas in the FPR that are flood-prone and the types of major flood risks to life and property in the region;
 - c. key historical flood events within the region including associated fatalities and loss of property;
 - d. political subdivisions with flood-related authority and whether they are currently actively engaged in flood planning, floodplain management, and flood mitigation activities;
 - e. the general extent of local regulation and development codes relevant to existing and future flood risk;
 - f. agricultural and natural resources most impacted by flooding; and
 - g. existing local and regional flood plans within the FPR.
2. A general description of the location, condition, and functionality of existing natural flood mitigation features and constructed major flood infrastructure within the FPR.
3. Include a tabulated list and GIS map of existing infrastructure.
4. Include an assessment of existing infrastructure.
5. Explain, in general, the reasons for non-functional or deficient natural flood mitigation features or major flood infrastructure being non-functional or deficient, provide a description of the condition and functionality of the feature or infrastructure and whether and when the natural flood feature or major flood infrastructure may become fully functional, and provide the name of the owner and operator of the major flood infrastructure.
6. A general description of the location, source of funding, and anticipated benefits of proposed or ongoing major infrastructure and flood mitigation projects in the FPR.
7. A review and summary of relevant existing planning documents in the region. Documents to be summarized include those referenced under 31 TAC §361.22.

The information gathered and developed in preparation of this chapter shall be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the RFP chapter by TWDB.

Deliverables: A completed Chapter 1 describing the FPR, existing natural flood mitigation features, constructed major flood infrastructure, and major infrastructure and flood mitigation projects currently under development. A tabulated list and GIS map of existing infrastructure and their conditions. Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 2A – Existing Condition Flood Risk Analyses

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.33.

The objective of this task is to prepare a chapter to be combined with Task 2B and included in the 2023 Regional Flood Plan (RFP) that describes the existing and future condition flood risk in the FPR.

The RFPGs shall perform existing condition flood risk analyses for the region comprising: (1) flood hazard analyses that determine the location, magnitude, and frequency of flooding; (2) flood exposure analyses to identify who and what might be harmed within the region; and (3) vulnerability analyses to identify vulnerabilities of communities and critical facilities.

The information developed shall be used to assist the RFPG to establish priorities in subsequent planning tasks, to identify areas that need Flood Management Evaluations (FMEs), and to efficiently deploy its resources.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Perform existing condition flood hazard analyses to determine the location and magnitude of both 1.0% annual chance and 0.2% annual chance flood events as follows:
 - a. collect data and conduct analyses sufficient to characterize the existing conditions for the planning area;
 - b. identify areas within each FPR where hydrologic and hydraulic model results are already available and summarize the information;
 - c. utilize best available data, including hydrologic and hydraulic models for each area;

- d. prepare a map showing areas identified by the RFPG as having an annual likelihood of inundation of more than 1.0% and 0.2%, the areal extent of this inundation, and the sources of flooding for each area; and
 - e. prepare a map showing gaps in inundation boundary mapping and identify known flood-prone areas based on location of hydrologic features, historic flooding and/or local knowledge.
2. Develop high-level, region-wide, and largely GIS-based existing condition flood exposure analyses using the information identified in the flood hazard analysis to identify who and what might be harmed within the region for, at a minimum, both 1.0% annual chance and 0.2% annual chance flood events as follows:
- a. analyses of existing development within the existing condition floodplain and the associated flood hazard exposure;
 - b. for the floodplain as defined by FEMA or as defined by an alternative analysis if the FEMA-defined floodplain is not considered best available;
 - c. may include only those flood mitigation projects with dedicated construction funding and scheduled for completion prior to adoption of the next state flood plan.
 - d. shall consider the population and property located in areas where existing levees or dams do not meet FEMA accreditation as inundated by flooding without those structures in place. Provisionally accredited structures may be allowed to provide flood protection, unless best available information demonstrates otherwise.
 - e. shall consider available datasets to estimate the potential flood hazard exposure including, but not limited to:
 - i. number of residential properties and associated population;
 - ii. number of non-residential properties;
 - iii. other public infrastructure;
 - iv. major industrial and power generation facilities;
 - v. number and types of critical facilities;
 - vi. number of roadway crossings;
 - vii. length of roadway segments; and
 - viii. agricultural area and value of crops exposed.
 - f. shall include a qualitative description of expected loss of function, which is the effect that a flood event could have on the function of inundated structures (residential, commercial, industrial, public, or others) and infrastructure, such as transportation, health and human services, water supply, wastewater treatment, utilities, energy generation, and emergency services.
3. Perform existing condition vulnerability analyses as follows:
- a. identify resilience of communities located in flood-prone areas identified as part of the existing condition flood exposure analyses, utilizing relevant data and tools.

- b. identify vulnerabilities of critical facilities to flooding by looking at factors such as proximity to a floodplain or other bodies of water, past flooding issues, emergency management plans, and location of critical systems like primary and back-up power.
4. All data produced as part of the existing condition flood exposure analysis and the existing condition vulnerability analysis shall include:
 - a. underlying flood event return frequency;
 - b. type of flood risk;
 - c. county;
 - d. HUC8;
 - e. existing flood authority boundaries;
 - f. Social Vulnerability Indices for counties and census tracts; and
 - g. other categories as determined by RFPGs or in TWDB Flood Planning guidance documents.

The information gathered and developed in preparation of this chapter shall be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the RFP chapter by TWDB.

Deliverables:

- Prepare a stand-alone chapter (including work from both Tasks 2A & 2B) to be included in the 2023 RFP.
- Prepare maps according to 1(d) and 1(e).
- A tabulated list and GIS map of all pertinent information. All maps should be submitted with underlying GIS data utilized to prepare them.
- Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 2B – Future Condition Flood Risk Analyses

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.34.

The objective of this task is to prepare a chapter to be combined with Task 2A and included in the 2023 Regional Flood Plan (RFP) that describes the existing and future condition flood risk in the FPR.

RFPGs shall perform future condition flood risk analyses for the region comprising: (1) flood hazard analyses that determine the location, magnitude and frequency of flooding; (2) flood exposure analyses to identify who and what might be harmed within the region; and (3) vulnerability analyses to identify vulnerabilities of communities and critical facilities.

The information developed shall be used to assist the RFPG to establish priorities in subsequent planning tasks, to identify areas that need FMEs, and to efficiently deploy its resources.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Perform future condition flood hazard analyses to determine the location and magnitude of both 1.0% annual chance and 0.2% annual chance flood events as follows:
 - a. collect data and conduct analyses sufficient to characterize the future conditions for the planning area based on a "no-action" scenario of approximately 30 years of continued development and population growth under current development trends and patterns, and existing flood regulations and policies based on:
 - i. current land use and development trends and practices and associated projected population based on the most recently adopted state water plan decade and population nearest the next RFP adoption date plus approximately 30 years or as provided for in TWDB Flood Planning guidance documents;
 - ii. reasonable assumptions regarding locations of residential development and associated population growth;
 - iii. anticipated relative sea level change and subsidence based on existing information;
 - iv. anticipated changes to the functionality of the existing floodplain;
 - v. anticipated sedimentation in flood control structures and major geomorphic changes in riverine, playa, or coastal systems based on existing information;
 - vi. assumed completion of flood mitigation projects currently under construction or that already have dedicated construction funding; and
 - vii. other factors deemed relevant by the RFPG.
 - b. identify areas within each FPR where future condition hydrologic and hydraulic model results are already available and summarize the information;
 - c. utilize best available data, including hydrologic and hydraulic models for each area;
 - d. where future condition results are not available, but existing condition hydrologic and hydraulic model results are already available, the RFPGs shall

modify hydraulic models to identify future conditions flood risk for 1.0% and 0.2% annual chance storms based on simplified assumptions utilizing the information identified in this task.

- e. prepare a map showing areas of 1.0% and 0.2% annual chance of inundation for future conditions, the areal extent of this inundation, and the sources of flooding for each area.
 - f. prepare a map showing gaps in inundation boundary mapping and identify known flood-prone areas based on location of hydrologic features, historic flooding, and/ or local knowledge.
2. Perform future condition flood exposure analyses using the information identified in the flood hazard analysis to identify who and what might be harmed within the region for, at a minimum, both 1.0% annual chance and 0.2% annual chance flood events as follows:
- a. analyses of existing development within the existing condition floodplain and the associated flood hazard exposure;
 - b. analyses of existing and future developments within the future condition floodplain and the associated flood hazard exposure; and
 - c. to include only those flood mitigation projects with dedicated construction funding scheduled for completion prior to the next RFP adoption date plus 30 years or as provided for in TWDB Flood Planning guidance documents.
 - d. Identification of flood prone areas associated with the hazard exposure analyses shall be based on analyses that rely primarily on the use and incorporation of existing and available:
 - i. FIRMs or other flood inundation maps and GIS related data and analyses;
 - ii. available hydraulic flood modeling results;
 - iii. model-based or other types of geographic screening tools for identifying flood prone areas; and
 - iv. other best available data or relevant technical analyses that the RFPG determines to be the most updated or reliable.
3. Perform future condition vulnerability analyses as follows:
- a. identify resilience of communities located in flood-prone areas identified as part of the future condition flood exposure analyses, utilizing relevant data and tools.
 - b. identify vulnerabilities of critical facilities to flooding by looking at factors such as proximity to a floodplain or other bodies of water, past flooding issues, emergency management plans, and location of critical systems like primary and back-up power.
4. All data produced as part of the future condition flood exposure analysis and the future condition vulnerability analysis shall include:
- a. underlying flood event return frequency;
 - b. type of flood risk;

- c. county;
- d. HUC8;
- e. existing flood authority boundaries;
- f. Social Vulnerability Indices for counties and census tracts; and
- g. other categories as determined in TWDB Flood Planning guidance documents.

The information gathered and developed in preparation of this chapter shall be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the RFP chapter by TWDB.

Deliverables:

- Prepare a stand-alone chapter (including work from both Tasks 2A & 2B) to be included in the 2023 RFP.
- Prepare maps according to 1(e) and 1(f). A tabulated list and GIS map of all pertinent information. All maps should be submitted with underlying GIS data utilized to prepare them.
- Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 3A - Evaluation and Recommendations on Floodplain Management Practices

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.35.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Consider the extent to which a lack of, insufficient, or ineffective current floodplain management and land use practices, regulations, policies, and trends related to land use, economic development, and population growth, allow, cause, or otherwise encourage increases to flood risks to both:
 - a. existing population and property, and
 - b. future population and property.
2. Take into consideration the future flood hazard exposure analyses performed under Task 2B, consider the extent to which the 1.0% annual chance floodplain, along with associated flood risks, may change over time in response to anticipated

development and associated population growth and other relevant man-made causes, and assess how to best address these potential changes.

3. Based on the analyses in (1) and (2), make recommendations regarding forward-looking floodplain management and land use recommendations, and economic development practices and strategies, that should be implemented by entities within the FPR. These region-specific recommendations may include minimum floodplain management and land use standards and should focus on how to best address the changes in (2) for entities within the region. These recommendations shall inform recommended strategies for inclusion in the RFP.
4. RFPGs may also choose to adopt region-specific, minimum floodplain management or land use or other standards that impact flood-risk, that may vary geographically across the region, that each entity in the FPR must adopt prior to the RFPG including in the RFP any Flood Management Evaluations, Flood Management Strategies, or Flood Mitigation Projects that are sponsored by or that will otherwise be implemented by that entity.

The information gathered and developed in preparation of this chapter shall be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the RFP chapter by TWDB.

Deliverables:

- Prepare a stand-alone chapter (including work from both Tasks 3A & 3B) to be included in the 2023 RFP.
- List region-specific recommendations regarding forward-looking floodplain management and land use, which may include minimum floodplain management and land use standards.
- Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 3B – Flood Mitigation and Floodplain Management Goals

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.36.

Consider the Guidance Principles under 31 TAC §362.3, Tasks 1-3A, input from the public, and other relevant information and considerations.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Identify specific and achievable flood mitigation and floodplain management goals along with target years by which to meet those goals for the FPR to include, at a minimum, goals specifically addressing risks to life and property.
2. Consider minimum recommended flood protection goal provided by TWDB.
3. Recognize and clearly state the levels of residual risk that will remain in the FPR even after the stated flood mitigation goals are fully met.
4. Structure and present the goals and the residual risks in an easily understandable format for the public including in conformance with TWDB Flood Planning guidance documents.
5. When appropriate, choose goals that apply to full single HUC8 watershed boundaries or coterminous groups of HUC8 boundaries within the FPR.
6. Identify both short-term goals (10 years) and long-term goals (30 years).

The information gathered and developed in preparation of this chapter shall be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the RFP chapter by TWDB.

Deliverables:

- Prepare a stand-alone chapter (including work from both Tasks 3A & 3B) to be included in the 2023 RFP.
- Identify flood mitigation and floodplain management goals considering minimum recommended flood protection goal provided by TWDB.
- Identify specific and achievable flood mitigation and floodplain management goals (10 year and 30 year) in an easily understandable format for the public.
- Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 4A – Flood Mitigation Needs Analysis

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.37.

The RFPG shall conduct the analysis in a manner that will ensure the most effective and efficient use of the resources available to the RFPG.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Based on the analyses and goals developed by the RFPG under Tasks 2A through 3B and any additional analyses or information developed using available screening-level models or methods, the RFPG shall identify locations within the FPR that the RFPG considers to have the greatest flood mitigation and flood risk study needs by considering:
 - a. the areas in the FPR that the RFPG identified as the most prone to flooding that threatens life and property;
 - b. the relative locations, extent, and performance of current floodplain management and land use policies and infrastructure located within the FPR;
 - c. areas identified by the RFPG as prone to flooding that don't have adequate inundation maps;
 - d. areas identified by the RFPG as prone to flooding that don't have hydrologic and hydraulic models;
 - e. areas with an emergency need;
 - f. existing modeling analyses and flood risk mitigation plans within the FPR;
 - g. flood mitigation projects already identified and evaluated by other flood mitigation plans and studies;
 - h. documentation of historic flooding events;
 - i. flood mitigation projects already being implemented; and
 - j. any other factors that the RFPG deems relevant to identifying the geographic locations where potential FMEs and potentially feasible FMSs and FMPs shall be identified and evaluated under §361.38.

The information gathered and developed in preparation of this chapter shall be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the RFP chapter by TWDB.

Deliverables:

- Prepare a stand-alone chapter (including work from both Tasks 4A & 4B) to be included in the 2023 RFP.
- A map identifying the geographic locations within the FPR considered to have the greatest flood mitigation and flood risk study needs where potential FMEs and potentially feasible FMSs and FMPs shall be evaluated
- A tabulated list and GIS map of all pertinent information. All maps should be submitted with underlying GIS data utilized to prepare them.

- Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 4B – Identification and Evaluation of Potential Flood Management Evaluations and Potentially Feasible Flood Management Strategies and Flood Mitigation Projects

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.38.

Based on analyses and decisions under Tasks 2A through 4A the RFPG shall identify and evaluate potential FMEs and potentially feasible FMSs and FMPs, including nature-based solutions, some of which may have already been identified by previous evaluations and analyses by others.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Receive public comment on a proposed process to be used by the RFPG to identify and select FMEs, FMSs, and FMPs for the 2023 RFP. Revise and update documentation of the process by which FMS that were identified as potentially feasible and selected for evaluation in the 2023 RFP. Include a description of the process selected by the RFPG in the Technical Memorandum and the draft Regional Flood Plan and adopted RFPs.
2. Plans to be considered in developing this chapter include relevant plans referenced under 31 TAC §361.22.
3. When evaluating FMSs and FMPs the RFPG will, at a minimum, identify one solution that provides flood mitigation associated a with 1.0% annual chance flood event. In instances where mitigating for 1.0% annual chance events is not feasible, the RFPG shall document the reasons for its infeasibility, and at the discretion of the RFPG, other FMSs and FMPs to mitigate more frequent events may also be identified and evaluated based on TWDB Flood Planning guidance documents.
4. A summary of the RFPG process for identifying potential FMEs and potentially feasible FMSs and FMPs shall be established and included in the draft and final adopted RFP.
5. The RFPG shall then identify potentially feasible FMSs and FMPs in accordance with the RFPG established process.
6. For areas within the FPR that the RFPG does not yet have sufficient information or resources to identify potentially feasible FMSs and FMPs, the RFPG shall identify areas for potential FMEs that may eventually result in FMSs and/or FMPs.
7. The RFPG shall evaluate potentially feasible FMSs and FMPs understanding that, upon evaluation and further inspection, some FMSs or FMPs initially identified as potentially feasible may, after further inspection, be reclassified as infeasible.

8. Evaluations of potentially feasible FMSs and FMPs will require associated, detailed hydrologic and hydraulic modeling results that quantify the reduced impacts from flood events and the associated benefits and costs. Information may be based on previously performed evaluations of projects and related information. Evaluations of potentially feasible FMS and FMPs shall include the following information and be based on the following analyses:
- a. A reference to the specific flood mitigation or floodplain management goal addressed by the feasible FMS or FMP;
 - b. A determination of whether FMS or FMP meets an emergency need;
 - c. An indication regarding the potential use of federal funds, or other sources of funding, as a component of the total funding mechanism;
 - d. An equitable comparison between and consistent assessment of all FMSs and FMPs that the RFPG determines to be potentially feasible;
 - e. A demonstration that the FMS or FMP will not negatively affect a neighboring area;
 - f. A quantitative reporting of the estimated benefits of the FMS or FMP, including reductions of flood impacts of the 1.0% annual chance flood event and other storm events identified and evaluated if the project mitigates to a more frequent event, to include, but not limited to:
 - (1) Associated flood events that must, at a minimum, include the 1.0% annual chance flood event and other storm events identified and evaluated;
 - (2) Reduction in habitable, equivalent living units flood risk;
 - (3) Reduction in residential population flood risk;
 - (4) Reduction in critical facilities flood risk;
 - (5) Reduction in road closure occurrences;
 - (6) Reduction in acres of active farmland and ranchland flood risk;
 - (7) Estimated reduction in fatalities, when available;
 - (8) Estimated reduction in injuries, when available;
 - (9) Reduction in expected annual damages from residential, commercial, and public property; and
 - (10) Other benefits as deemed relevant by the RFPG including environmental benefits and other public benefits.
 - g. A quantitative reporting of the estimated capital cost of FMPs in accordance with TWDB Flood Planning guidance documents;
 - h. Calculated benefit-cost ratio for FMPs in accordance with *Exhibit C: General Guidelines* and based on current, observed conditions;
 - i. For projects that will contribute to water supply, all relevant evaluations required under §357.34(e) (relating to Identification and Evaluation of Potentially Feasible Water Management Strategies and Water Management Strategy Projects), as determined by the EA based on the type of

contribution, and a description of its consistency with the currently adopted State Water Plan;

- j. A description of potential impacts and benefits from the FMS or FMP to the environment, agriculture, recreational resources, navigation, water quality, erosion, sedimentation, and impacts to any other resources deemed relevant by the RFPG;
 - k. A description of residual, post-project, and future risks associated with FMPs including the risk of potential catastrophic failure and the potential for future increases to these risks due to lack of maintenance;
 - l. Implementation issues including those related to rights-of-way, permitting, acquisitions, relocations, utilities and transportation; and
 - m. Funding sources and options that exist or will be developed to pay for development, operation, and maintenance of the FMS or FMP.
9. Evaluations of potential FMEs will be at a reconnaissance or screening-level, unsupported by associated detailed hydrologic and hydraulic analyses. These will be identified for areas that the RFPG considers a priority for flood risk evaluation but that do not yet have the required detailed hydrologic and hydraulic modeling or associated project evaluations available to evaluate specific FMSs or FMPs for recommendation in the RFP. These FMEs shall be based on recognition of the need to develop detailed hydrologic models or to perform associated hydraulic analyses and associated project evaluations in certain areas identified by the RFPG.

Evaluations of potential FMEs shall include the following analyses:

- a. A reference to the specific flood mitigation or floodplain management goal to be addressed by the potential FME.
- b. A determination of whether FME may meet an emergency need.
- c. An indication regarding the potential use of federal funds, or other sources of funding as a component of the total funding mechanism.
- d. An equitable comparison between and consistent assessment of all FMEs.
- e. An indication of whether hydrologic and or hydraulic models are already being developed or are anticipated in the near future and that could be used in the FME.
- f. A quantitative reporting of the estimated benefits, including reductions of flood risks, to include:
 - (1) Estimated habitable, living unit equivalent and associated population in FME area;
 - (2) Estimated critical facilities in FME area;
 - (3) Estimated number of roads closures occurrences in FME area;
 - (4) Estimated acres of active farmland and rangeland in FME area; and
 - (5) A quantitative reporting of the estimated study cost of the FME and whether the cost includes use of existing or development of new hydrologic or hydraulic models.

- g. For FMEs, RFPGs do not need to demonstrate that an FME will not negatively affect a neighboring area.
10. RFPGs shall evaluate and present potential FMEs and potentially feasible FMSs and FMPs with sufficient specificity to allow state agencies to make financial or regulatory decisions to determine consistency of the proposed action before the state agency with an approved RFP.
11. Analyses shall be performed in accordance with TWDB Flood Planning guidance documents.
12. All data produced as part of the analyses under this task shall be organized and summarized in the RFP in accordance with TWDB Flood Planning guidance documents.
13. Analyses shall clearly designate a representative location of the FME and beneficiaries including a map and designation of HUC8 and county location.

The information gathered and developed in preparation of this chapter shall be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the RFP chapter by TWDB.

Deliverables:

- Prepare a stand-alone chapter (including work from both Tasks 4B & 5) to be included in the 2023 RFP.
- A list of the potentially feasible FMSs and associated FMPs that were identified by the RFPG. The TWDB Flood Planning guidance documents will include minimum data submittal requirements and deliverable format.
- A map identifying the geographic locations within the FPR considered to have the greatest flood mitigation and flood risk study needs where potential FMEs and potentially feasible FMSs and FMPs shall be evaluated. TWDB Flood Planning guidance documents will include minimum data submittal requirements and deliverable format.
- Data shall be organized and summarized in the RFP in accordance with TWDB Flood Planning guidance documents.
- A tabulated list and GIS map of all pertinent information. All maps should be submitted with underlying GIS data utilized to prepare them.
- Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 4C – Prepare and Submit Technical Memorandum

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.13(e).

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Prepare a concise Technical Memorandum to include:
 - a. A list of existing political subdivisions within the FPR that have flood-related authorities or responsibilities;
 - b. A list of previous flood studies considered by the RFPG to be relevant to development of the RFP;
 - c. A geodatabase and associated maps in accordance with TWDB Flood Planning guidance documents that the RFPG considers to be best representation of the region-wide 1.0% annual chance flood event and 0.2% annual chance flood event inundation boundaries, and the source of flooding for each area, for use in its risk analysis, including indications of locations where such boundaries remain undefined;
 - d. A geodatabase and associated maps in accordance with TWDB Flood Planning guidance documents that identifies additional flood-prone areas not described in (c) based on location of hydrologic features, historic flooding, and/or local knowledge;
 - e. A geodatabase and associated maps in accordance with TWDB Flood Planning guidance documents that identifies areas where existing hydrologic and hydraulic models needed to evaluate FMSs and FMPs are available;
 - f. A list of available flood-related models that the RFPG considers of most value in developing its plan;
 - g. The flood mitigation and floodplain management goals adopted by the RFPG per §361.36;
 - h. The documented process used by the RFPG to identify potentially feasible FMSs and FMPs;
 - i. A list of potential FMEs and potentially feasible FMSs and FMPs identified by the RFPG, if any; and
 - j. A list of FMSs and FMPs that were identified but determined by the RFPG to be infeasible, including the primary reason for it being infeasible.
2. Approve submittal of the Technical Memorandum to TWDB at a RFPG meeting subject notice requirements in accordance with 31 TAC §361.21(h). The Technical Memorandum must be submitted to TWDB in accordance with Section I Article I of the contract.

Task 5 – Recommendation of Flood Management Evaluations and Flood Management Strategies and Associated Flood Mitigation Projects

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.39.

The objective of this task is to evaluate and recommend Flood Management Evaluations (FMEs), Flood Management Strategies (FMSs) and their associated Flood Mitigation Projects (FMPs) to be included in the 2023 RFP that describes the work completed, presents the potential FMEs, potentially feasible FMSs and FMPs, recommended and alternative FMSs and FMPs, including all the technical evaluations, and presents which entities will benefit from the recommended FMSs and FMPs.

Work associated with any Task 5 subtasks shall be contingent upon a written notice-to-proceed. This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Recommend FMSs and FMPs to reduce the potential impacts of flood based on the evaluations under §361.38 and RFPG goals and that must, at a minimum, mitigate for flood events associated with at 1.0 percent annual chance (100-yr flood) where feasible. In instances where mitigating for 100-year events is not feasible, FMS and FMPs to mitigate more frequent events may be recommended based on TWDB Flood Planning guidance documents. Recommendations shall be based upon the identification, analysis, and comparison of alternatives that the RFPG determines will provide measurable reductions in flood impacts in support of the RFPG's specific flood mitigation and/or floodplain management goals.
2. Provide additional information in conformance with TWDB Flood Planning guidance documents which will be used to rank recommended FMPs in the state flood plan.
3. Recommend FMEs that the RFPG determines are most likely to result in identification of potentially feasible FMSs and FMPs that would, at a minimum, identify and investigate one solution to mitigate for flood events associated with a 1.0% annual chance flood event and that support specific RFPG flood mitigation and/or floodplain management goals.
4. Recommended FMSs or FMPs may not negatively affect a neighboring area or an entity's water supply.
5. Recommended FMSs or FMPs that will contribute to water supply may not result in an overallocation of a water source based on the water availability allocations in the most recently adopted State Water Plan.
6. Specific types of FMEs, FMSs, or FMPs that should be included and that should not be included in RFPs must be in accordance with TWDB Flood Planning guidance documents.

7. FMS and FMP documentation shall include a strategy or project description, discussion of associated facilities, project map, and technical evaluations addressing all considerations and factors required under 31 TAC §361.38(h).
8. Coordinate and communicate with FME, FMS, and FMP sponsors, individual local governments, regional authorities, and other political subdivisions.
9. Process documentation of selecting all recommended FMSs and associated FMPs including development of FMS evaluations matrices and other tools required to assist the RFPG in comparing and selecting recommended FMSs and FMPs.
10. Document the evaluation and selection of all recommended FMS and FMPs, including an explanation for why certain types of strategies may not have been recommended.

The information gathered and developed in preparation of this chapter shall be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the RFP chapter by TWDB.

Deliverables:

- Prepare a stand-alone chapter (including work from both Tasks 4B & 5) to be included in the 2023 RFP to include technical analyses of all evaluated FMSs and FMPs.
- A list of the recommended FMEs, FMSs, and associated FMPs that were identified by the RFPG. TWDB Flood Planning guidance documents will include minimum data submittal requirements and deliverable format.
- Data shall be organized and summarized in the RFP in accordance with TWDB Flood Planning guidance documents.
- A tabulated list and GIS map of all pertinent information. All maps should be submitted with underlying GIS data utilized to prepare them.
- Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 6A – Impacts of Regional Flood Plan

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.40.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to include:

1. a region-wide summary of the relative reduction in flood risk that implementation of the RFP would achieve within the region including with regard to life, injuries, and property.
2. a statement that the FMPs in the plan, when implemented, will not negatively affect neighboring areas located within or outside of the FPR.
3. a general description of the types of potential positive and negative socioeconomic or recreational impacts of the recommended FMSs and FMPs within the FPR.
4. a general description of the overall impacts of the recommended FMPs and FMSs in the RFP on the environment, agriculture, recreational resources, water quality, erosion, sedimentation, and navigation.

The information gathered and developed in preparation of this chapter shall be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the RFP chapter by TWDB.

Deliverables: Prepare a stand-alone chapter (including work from both Tasks 6A & 6B) to be included in the 2023 RFP. Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 6B – Contributions to and Impacts on Water Supply Development and the State Water Plan

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.41.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Include a region-wide summary and description of the contribution that the regional flood plan would have to water supply development including a list of the specific FMSs and FMPs that would contribute to water supply.
2. Include a description of any anticipated impacts, including to water supply or water availability or projects in the State Water Plan, that the regional flood plan FMSs and FMPs may have.

The information gathered and developed in preparation of this chapter shall be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the RFP chapter by TWDB.

Deliverables: Prepare a stand-alone chapter (including work from both Tasks 6A & 6B) to be included in the 2023 RFP. Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 7 – Flood Response Information and Activities

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.42.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Summarize the nature and types of flood response preparations within the FPR including providing where more detailed information is available regarding recovery.
2. Coordinate and communicate, as necessary, with entities in the region to gather information.
3. RFPGs shall not perform analyses or other activities related to planning for disaster response or recovery activities.
4. Plans to be considered in developing this chapter include relevant plans referenced under 31 TAC §361.22.

The information gathered and developed in preparation of this chapter shall be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the RFP chapter by TWDB.

Deliverables: Prepare a stand-alone chapter to be included in the 2023 RFP. Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 8 – Administrative, Regulatory, and Legislative Recommendations

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.43.

The objective of this task is to prepare a separate chapter to be included in the 2023 RFP that presents the RFPG's administrative, legislative, and regulatory recommendations.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to develop:

1. Legislative recommendations that they consider necessary to facilitate floodplain management and flood mitigation planning and implementation.
2. Other regulatory or administrative recommendations that they consider necessary to facilitate floodplain management and flood mitigation planning and implementation.
3. Any other recommendations that the RFPG believes are needed and desirable to achieve its regional flood mitigation and floodplain management goals.
4. Recommendations regarding potential, new revenue-raising opportunities, including potential new municipal drainage utilities or regional flood authorities, that could fund the development, operation, and maintenance of floodplain management or flood mitigation activities in the region.

The information gathered and developed in preparation of this chapter shall be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the RFP chapter by TWDB.

Deliverables: Prepare a stand-alone chapter to be included in the 2023 RFP. Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 9 – Flood Infrastructure Financing Analysis

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.44.

The objective of this task is to report on how sponsors of recommended FMPs propose to finance projects.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Coordinate and communicate with individual local governments, regional authorities, and other political subdivisions.
2. Perform a survey, including the following work:
 - a. Contacting FME and FMP sponsors.

- b. Collection and collation of data.
 - c. Documentation of the effectiveness of survey methodology, providing percent survey completions, and whether an acceptable minimum percent survey completion was achieved.
 - d. Submission of data.
3. Coordinate with FME and FMP sponsors as necessary to ensure detailed needs and costs associated with their anticipated evaluations and projects are sufficiently represented in the RFP for future funding determinations.
 4. Assist the RFPG with the development of recommendations regarding the proposed role of the State in financing flood infrastructure projects identified in the RFP.
 5. Summarize the survey results.

The information gathered and developed in preparation of this chapter shall be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the RFP chapter by TWDB.

Deliverables: A completed Chapter 9 shall be delivered in the 2023 RFP to include summary of reported financing approaches for all recommended FMPs. Data shall be submitted in accordance with TWDB guidance documents. Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 10 – Public Participation and Plan Adoption

The objective of this task is to address public participation, public meetings, eligible administrative and technical support activities, and other requirements and activities eligible for reimbursement. Objectives also include activities necessary to complete and submit a draft RFP and final RFP, and obtain TWDB approval of the RFP.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. In addition to generally meeting all applicable statute requirements governing regional and state flood planning this portion of work shall, in particular, include all technical and administrative support activities necessary to meet all the requirements of 31 TAC Chapters 361 and 362 that are not already addressed under the scope of work associated with other contract Tasks but that are necessary and or required to complete and deliver an draft Regional Flood Plan and final, adopted RFP to TWDB and obtain approval of the adopted RFP by TWDB.
2. Organization, support, facilitation, and documentation of all meetings/hearings associated with: preplanning meeting; consideration of a substitution of alternative flood management strategies; public hearing after adoption of the draft Regional

Flood Plan and prior to adoption of the final RFP; and consideration of RFP amendments, alternative FMS substitutions, or Board-directed revisions.

Technical Support and Administrative Activities

1. RFPGs shall support and accommodate periodic presentations by the TWDB for the purpose of orientation, training, and retraining as determined and provided by the TWDB during regular RFPGRWPG meetings.
2. Attendance and participation of technical consultants at RFPG, subgroup, subcommittees, special and or other meetings and hearings including preparation and follow-up activities.
3. Developing technical and other presentations and handout materials for regular and special meetings to provide technical and explanatory data to the RFPG and its subcommittees, including follow-up activities.
4. Administrative and technical support and participation in RFPG activities, and documentation of any RFPG workshops, work groups, subgroup and/or subcommittee activities.
5. Technical support and administrative activities associated with periodic and special meetings of the RFPG including developing agendas and coordinating activities for the RFPG.
6. Provision of status reports to TWDB for work performed under this Contract.
7. Development of draft and final responses for RFPG approval to public questions or comments as well as approval of the final responses to comments on RFP documents.
8. Intraregional and interregional coordination and communication, and or facilitation required within the FPR and with other RFPGs to develop a RFP.
9. Incorporation of all required data and reports into RFP document.
10. Modifications to the RFP documents based on RFPG, public, and or agency comments.
11. Preparation of a RFP chapter summarizing Task 10 activities including review by RFPG and modification of document as necessary.
12. Development and inclusion of Executive Summaries in both draft Regional Flood Plan and final RFP.
13. Production, distribution, and submittal of all draft and final RFP-related planning documents for RFPG, public and agency review, including in hard-copy format when required.
14. Assembling, compiling, and production of the completed draft Regional Flood Plan and Final Regional Flood Plan document(s) that meet all requirements of statute, 31 TAC Chapters 361 and 362, Contract and associated guidance documents.
15. Submittal of the RFP documents in both hard copy and electronic formats to TWDB for review and approval; and all effort required to obtain final approval of the RFP by TWDB.

Other Activities

1. Review of all RFP-related documents by RFPG members.
2. Development and maintenance of a RFPG website or RFPG-dedicated webpage on the RFPG administrator's website for posting planning group meeting notices, agendas, materials, and plan information.
3. Limited non-labor, direct costs associated with maintenance of the RFPG website.
4. Development of agendas, presentations, and handout materials for the public meetings and hearings to provide to the general public.
5. Documentation of meetings and hearings to include recorded minutes and/or audio recordings as required by the RFPG bylaws and archiving and provision of minutes to public.
6. Preparation and transmission of correspondence, for example, directly related to public comments on RFP documents.
7. Promoting consensus decisions through conflict resolution efforts including monitoring and facilitation required to resolve issues between and among RFPG members and stakeholders in the event that issues arise during the process of developing the RFP, including mediation between RFPG members, if necessary.
8. RFPG membership solicitation activities.
9. Meeting all posting, meeting, hearing and other public notice requirements in accordance with the open meetings act, statute, and 31 TAC §361.21 and any other applicable public notice requirements.
10. Solicitation, review, and dissemination of public input, as necessary.
11. Any efforts required, but not otherwise addressed in other SOW tasks that may be required to complete an RFP in accordance with all statute and rule requirements.

Deliverables:

- A completed Chapter 10 summarizing public participation activities and appendices with public comments and RFPG responses to comments.
- Complete draft Regional Flood Plan and final, adopted RFP documents.
- Any additional deliverables identified in the TWDB Flood Planning guidance documents.

EXHIBIT C
Scope of Services to be provided by the Engineer

Proposal to provide Professional Engineering Services for the Regional Flood Planning for Region 15 Lower Rio Grande

Halff Associates' team of engineers will provide professional services needed to assist the Region 15 Regional Flood Planning Group develop the Regional Flood Plan for Region 15, in accordance with the Scope of Work provided by the Texas Water Development Board (via Hidalgo County Drainage District No. 1's Request for Qualifications HCDD1-21-003-02-10) and the applicable rules and statues requirements governing regional and state flood planning under 31 Texas Administrative Code (TAC) Chapters 361 and 362. The Halff team will utilize the Preliminary Working Draft of the Technical Guidelines for Regional Flood Planning, dated March 2021 as the detailed guidance for the Regional Flood Plan development.

The boundary of the Region 15 Flood Planning Region is included in Figure 1 below, as provided by the TWDB.

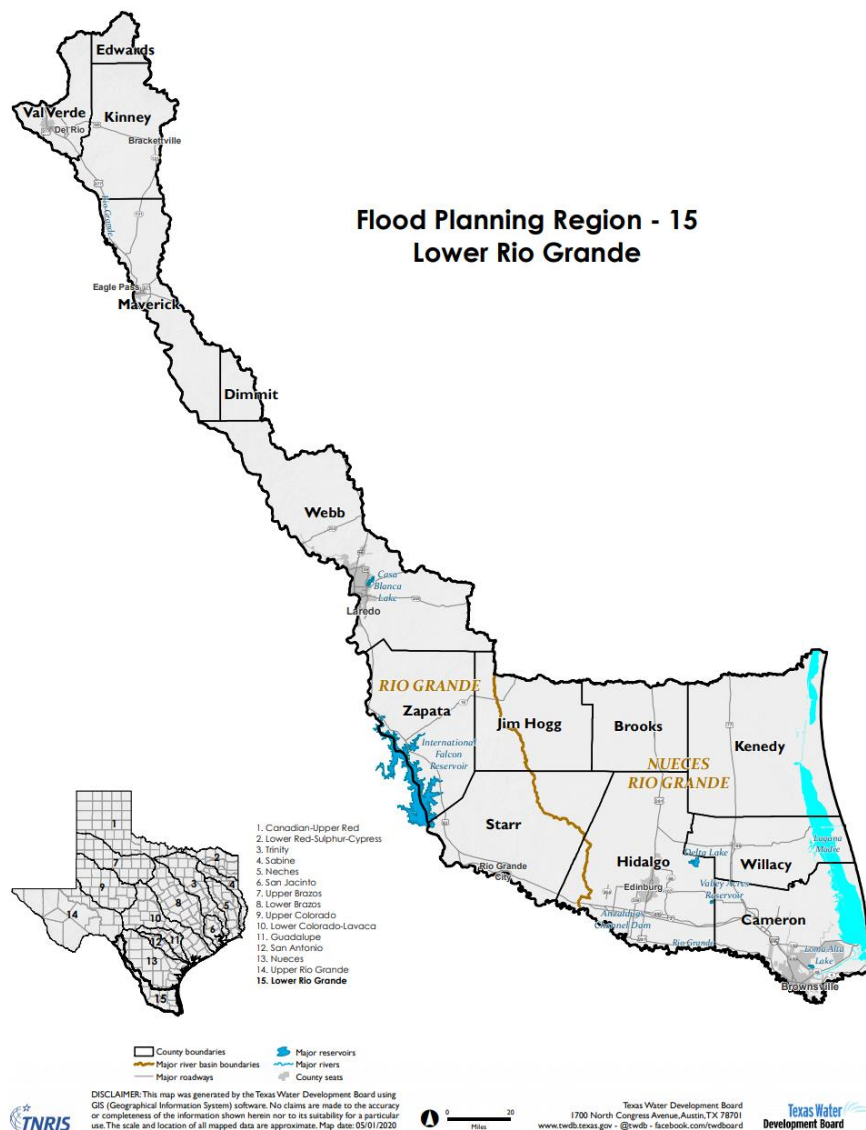


Figure 1. Region 15 Flood Planning Group boundary.

Proposal to provide Professional Engineering Services for the Regional Flood Planning for Region 15 Lower Rio Grande Scope of Services

Halff Associates’ team of engineers will provide professional services needed to assist the Region 15 Regional Flood Planning Group develop the Regional Flood Plan for Region 15, in accordance with the Scope of Work provided by the Texas Water Development Board (via Hidalgo County Drainage District No. 1’s Request for Qualifications HCDD1-21-003-02-10) and the applicable rules and statues requirements governing regional and state flood planning under 31 Texas Administrative Code (TAC) Chapters 361 and 362. The Halff team will utilize the Preliminary Working Draft of the Technical Guidelines for Regional Flood Planning, dated March 2021 as the detailed guidance for the Regional Flood Plan development.

The boundary of the Region 15 Flood Planning Region is included in Figure 1 below, as provided by the TWDB.

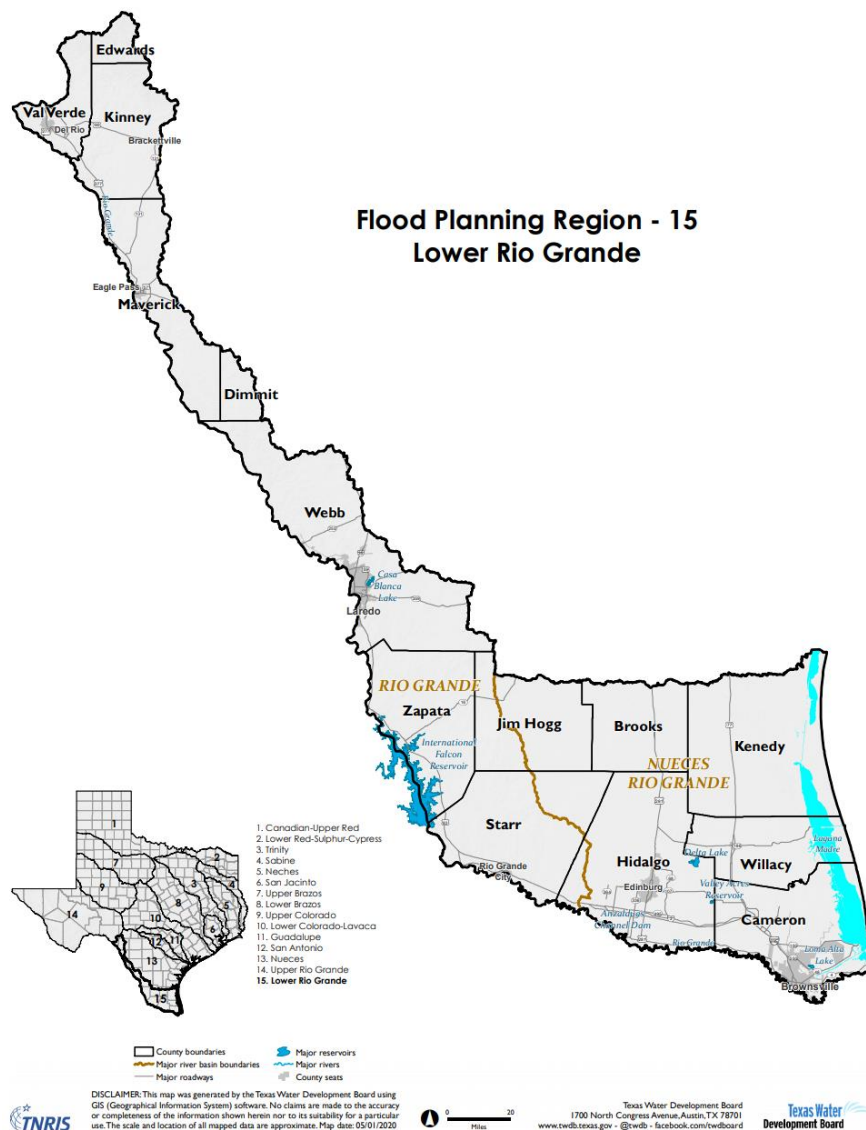


Figure 1. Region 15 Flood Planning Group boundary.

The Scope of Services proposed for this project are as follows:

Regional Flood Planning (RFP) Scope of Work

Task 1 – Planning Area Description

Task 2A – Existing Condition Flood Risk Analyses

Task 2B – Future Condition Flood Risk Analyses

Task 3A - Evaluation and Recommendations on Floodplain Management Practices

Task 3B – Flood Mitigation and Floodplain Management Goals

Task 4A – Flood Mitigation Needs Analysis

Task 4B – Identification and Evaluation of Potential Flood Management Evaluations and Potentially Feasible Flood Management Strategies and Flood Mitigation Projects

Task 4C – Prepare and Submit Technical Memorandum

Task 5 – Recommendation of Flood Management Evaluations and Flood Management Strategies and Associated Flood Mitigation Projects

Task 6A – Impacts of Regional Flood Plan

Task 6B – Contributions to and Impacts on Water Supply Development and the State Water Plan

Task 7 – Flood Response Information and Activities

Task 8 – Administrative, Regulatory, and Legislative Recommendations

Task 9 – Flood Infrastructure Financing Analysis

Task 10 – Public Participation and Plan Adoption

Task 1 – Planning Area Description

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 Texas Administrative Code (TAC) Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.30, 361.31, and 361.32.

The objective of this task is to prepare a standalone chapter to be included in the 2023 Regional Flood Plan (RFP) that describes the Flood Planning Region (FPR).

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to prepare a chapter that includes:

1. A brief, general descriptions of the following:
 - a. social and economic character of the region such as information on development, population, economic activity, and economic sectors most at risk of flood impacts;
 - b. the areas in the FPR that are flood-prone and the types of major flood risks to life and property in the region;
 - c. key historical flood events within the region including associated fatalities and loss of property;
 - d. political subdivisions with flood-related authority and whether they are currently actively engaged in flood planning, floodplain management, and flood mitigation activities;
 - e. the general extent of local regulation and development codes relevant to existing and future flood risk;
 - f. agricultural and natural resources most impacted by flooding; and
 - g. existing local and regional flood plans within the FPR.
2. A general description of the location, condition, and functionality of existing natural flood mitigation features and constructed major flood infrastructure within the FPR.
3. Include a tabulated list and GIS map of existing infrastructure.
4. Include an assessment of existing infrastructure.
5. Explain, in general, the reasons for non-functional or deficient natural flood mitigation features or major flood infrastructure being non-functional or deficient, provide a description of the condition and functionality of the feature or infrastructure and whether and when the natural flood feature or major flood infrastructure may become fully functional, and provide the name of the owner and operator of the major flood infrastructure.
6. A general description of the location, source of funding, and anticipated benefits of proposed or ongoing major infrastructure and flood mitigation projects in the FPR.
7. A review and summary of relevant existing planning documents in the region. Documents to be summarized include those referenced under 31 TAC §361.22.

The information gathered and developed in preparation of this chapter shall be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the RFP chapter by TWDB.

Deliverables: A completed Chapter 1 describing the FPR, existing natural flood mitigation features, constructed major flood infrastructure, and major infrastructure and flood mitigation projects currently under development. A tabulated list and GIS map of existing infrastructure and their conditions. Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 2A – Existing Condition Flood Risk Analyses

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.33.

The objective of this task is to prepare a chapter to be combined with Task 2B and included in the 2023 Regional Flood Plan (RFP) that describes the existing and future condition flood risk in the FPR.

The RFPGs shall perform existing condition flood risk analyses for the region comprising: (1) flood hazard analyses that determine the location, magnitude, and frequency of flooding; (2) flood exposure analyses to identify who and what might be harmed within the region; and (3) vulnerability analyses to identify vulnerabilities of communities and critical facilities.

The information developed shall be used to assist the RFPG to establish priorities in subsequent planning tasks, to identify areas that need Flood Management Evaluations (FMEs), and to efficiently deploy its resources.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Perform existing condition flood hazard analyses to determine the location and magnitude of both 1.0% annual chance and 0.2% annual chance flood events as follows:
 - a. collect data and conduct analyses sufficient to characterize the existing conditions for the planning area;
 - b. identify areas within each FPR where hydrologic and hydraulic model results are already available and summarize the information;
 - c. utilize best available data, including hydrologic and hydraulic models for each area;
 - d. prepare a map showing areas identified by the RFPG as having an annual likelihood of inundation of more than 1.0% and 0.2%, the areal extent of this inundation, and the sources of flooding for each area; and
 - e. prepare a map showing gaps in inundation boundary mapping and identify known flood-prone areas based on location of hydrologic features, historic flooding and/or local knowledge.
2. Develop high-level, region-wide, and largely GIS-based existing condition flood exposure analyses using the information identified in the flood hazard analysis to identify who and what might be harmed within the region for, at a minimum, both 1.0% annual chance and 0.2% annual chance flood events as follows:
 - a. analyses of existing development within the existing condition floodplain and the associated flood hazard exposure;
 - b. for the floodplain as defined by FEMA or as defined by an alternative analysis if the FEMA-defined floodplain is not considered best available;
 - c. may include only those flood mitigation projects with dedicated construction funding and scheduled for completion prior to adoption of the next state flood plan.

- d. shall consider the population and property located in areas where existing levees or dams do not meet FEMA accreditation as inundated by flooding without those structures in place. Provisionally accredited structures may be allowed to provide flood protection, unless best available information demonstrates otherwise.
 - e. shall consider available datasets to estimate the potential flood hazard exposure including, but not limited to:
 - i. number of residential properties and associated population;
 - ii. number of non-residential properties;
 - iii. other public infrastructure;
 - iv. major industrial and power generation facilities;
 - v. number and types of critical facilities;
 - vi. number of roadway crossings;
 - vii. length of roadway segments; and
 - viii. agricultural area and value of crops exposed.
 - f. shall include a qualitative description of expected loss of function, which is the effect that a flood event could have on the function of inundated structures (residential, commercial, industrial, public, or others) and infrastructure, such as transportation, health and human services, water supply, wastewater treatment, utilities, energy generation, and emergency services.
3. Perform existing condition vulnerability analyses as follows:
 - a. identify resilience of communities located in flood-prone areas identified as part of the existing condition flood exposure analyses, utilizing relevant data and tools.
 - b. identify vulnerabilities of critical facilities to flooding by looking at factors such as proximity to a floodplain or other bodies of water, past flooding issues, emergency management plans, and location of critical systems like primary and back-up power.
 4. All data produced as part of the existing condition flood exposure analysis and the existing condition vulnerability analysis shall include:
 - a. underlying flood event return frequency;
 - b. type of flood risk;
 - c. county;
 - d. HUC8;
 - e. existing flood authority boundaries;
 - f. Social Vulnerability Indices for counties and census tracts; and
 - g. other categories as determined by RFPGs or in TWDB Flood Planning guidance documents.

The information gathered and developed in preparation of this chapter shall be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the RFP chapter by TWDB.

Deliverables:

- Prepare a stand-alone chapter (including work from both Tasks 2A & 2B) to be included in the 2023 RFP.
- Prepare maps according to 1(d) and 1(e).

- A tabulated list and GIS map of all pertinent information. All maps should be submitted with underlying GIS data utilized to prepare them.
- Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 2B – Future Condition Flood Risk Analyses

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.34.

The objective of this task is to prepare a chapter to be combined with Task 2A and included in the 2023 Regional Flood Plan (RFP) that describes the existing and future condition flood risk in the FPR.

RFPGs shall perform future condition flood risk analyses for the region comprising: (1) flood hazard analyses that determine the location, magnitude and frequency of flooding; (2) flood exposure analyses to identify who and what might be harmed within the region; and (3) vulnerability analyses to identify vulnerabilities of communities and critical facilities.

The information developed shall be used to assist the RFPG to establish priorities in subsequent planning tasks, to identify areas that need FMEs, and to efficiently deploy its resources.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Perform future condition flood hazard analyses to determine the location and magnitude of both 1.0% annual chance and 0.2% annual chance flood events as follows:
 - a. collect data and conduct analyses sufficient to characterize the future conditions for the planning area based on a "no-action" scenario of approximately 30 years of continued development and population growth under current development trends and patterns, and existing flood regulations and policies based on:
 - i. current land use and development trends and practices and associated projected population based on the most recently adopted state water plan decade and population nearest the next RFP adoption date plus approximately 30 years or as provided for in TWDB Flood Planning guidance documents;
 - ii. reasonable assumptions regarding locations of residential development and associated population growth;
 - iii. anticipated relative sea level change and subsidence based on existing information;
 - iv. anticipated changes to the functionality of the existing floodplain;
 - v. anticipated sedimentation in flood control structures and major geomorphic changes in riverine, playa, or coastal systems based on existing information;
 - vi. assumed completion of flood mitigation projects currently under construction or that already have dedicated construction funding; and
 - vii. other factors deemed relevant by the RFPG.
 - b. identify areas within each FPR where future condition hydrologic and hydraulic model results are already available and summarize the information;
 - c. utilize best available data, including hydrologic and hydraulic models for each area;

- d. where future condition results are not available, but existing condition hydrologic and hydraulic model results are already available, the RFPGs shall modify hydraulic models to identify future conditions flood risk for 1.0% and 0.2% annual chance storms based on simplified assumptions utilizing the information identified in this task.
 - e. prepare a map showing areas of 1.0% and 0.2% annual chance of inundation for future conditions, the areal extent of this inundation, and the sources of flooding for each area.
 - f. prepare a map showing gaps in inundation boundary mapping and identify known flood-prone areas based on location of hydrologic features, historic flooding, and/ or local knowledge.
2. Perform future condition flood exposure analyses using the information identified in the flood hazard analysis to identify who and what might be harmed within the region for, at a minimum, both 1.0% annual chance and 0.2% annual chance flood events as follows:
 - a. analyses of existing development within the existing condition floodplain and the associated flood hazard exposure;
 - b. analyses of existing and future developments within the future condition floodplain and the associated flood hazard exposure; and
 - c. to include only those flood mitigation projects with dedicated construction funding scheduled for completion prior to the next RFP adoption date plus 30 years or as provided for in TWDB Flood Planning guidance documents.
 - d. Identification of flood prone areas associated with the hazard exposure analyses shall be based on analyses that rely primarily on the use and incorporation of existing and available:
 - i. FIRMs or other flood inundation maps and GIS related data and analyses;
 - ii. available hydraulic flood modeling results;
 - iii. model-based or other types of geographic screening tools for identifying flood prone areas; and
 - iv. other best available data or relevant technical analyses that the RFPG determines to be the most updated or reliable.
 3. Perform future condition vulnerability analyses as follows:
 - a. identify resilience of communities located in flood-prone areas identified as part of the future condition flood exposure analyses, utilizing relevant data and tools.
 - b. identify vulnerabilities of critical facilities to flooding by looking at factors such as proximity to a floodplain or other bodies of water, past flooding issues, emergency management plans, and location of critical systems like primary and back-up power.
 4. All data produced as part of the future condition flood exposure analysis and the future condition vulnerability analysis shall include:
 - a. underlying flood event return frequency;
 - b. type of flood risk;
 - c. county;
 - d. HUC8;
 - e. existing flood authority boundaries;
 - f. Social Vulnerability Indices for counties and census tracts; and
 - g. other categories as determined in TWDB Flood Planning guidance documents.

The information gathered and developed in preparation of this chapter shall be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the RFP chapter by TWDB.

Deliverables:

- Prepare a stand-alone chapter (including work from both Tasks 2A & 2B) to be included in the 2023 RFP.
- Prepare maps according to 1(e) and 1(f). A tabulated list and GIS map of all pertinent information. All maps should be submitted with underlying GIS data utilized to prepare them.
- Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 3A - Evaluation and Recommendations on Floodplain Management Practices

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.35.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Consider the extent to which a lack of, insufficient, or ineffective current floodplain management and land use practices, regulations, policies, and trends related to land use, economic development, and population growth, allow, cause, or otherwise encourage increases to flood risks to both:
 - a. existing population and property, and
 - b. future population and property.
2. Take into consideration the future flood hazard exposure analyses performed under Task 2B, consider the extent to which the 1.0% annual chance floodplain, along with associated flood risks, may change over time in response to anticipated development and associated population growth and other relevant man-made causes, and assess how to best address these potential changes.
3. Based on the analyses in (1) and (2), make recommendations regarding forward-looking floodplain management and land use recommendations, and economic development practices and strategies, that should be implemented by entities within the FPR. These region-specific recommendations may include minimum floodplain management and land use standards and should focus on how to best address the changes in (2) for entities within the region. These recommendations shall inform recommended strategies for inclusion in the RFP.
4. RFPGs may also choose to adopt region-specific, minimum floodplain management or land use or other standards that impact flood-risk, that may vary geographically across the region, that each entity in the FPR must adopt prior to the RFPG including in the RFP any Flood Management Evaluations, Flood Management Strategies, or Flood Mitigation Projects that are sponsored by or that will otherwise be implemented by that entity.

The information gathered and developed in preparation of this chapter shall be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.

3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the RFP chapter by TWDB.

Deliverables:

- Prepare a stand-alone chapter (including work from both Tasks 3A & 3B) to be included in the 2023 RFP.
- List region-specific recommendations regarding forward-looking floodplain management and land use, which may include minimum floodplain management and land use standards.
- Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 3B – Flood Mitigation and Floodplain Management Goals

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.36.

Consider the Guidance Principles under 31 TAC §362.3, Tasks 1-3A, input from the public, and other relevant information and considerations.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Identify specific and achievable flood mitigation and floodplain management goals along with target years by which to meet those goals for the FPR to include, at a minimum, goals specifically addressing risks to life and property.
2. Consider minimum recommended flood protection goal provided by TWDB.
3. Recognize and clearly state the levels of residual risk that will remain in the FPR even after the stated flood mitigation goals are fully met.
4. Structure and present the goals and the residual risks in an easily understandable format for the public including in conformance with TWDB Flood Planning guidance documents.
5. When appropriate, choose goals that apply to full single HUC8 watershed boundaries or coterminous groups of HUC8 boundaries within the FPR.
6. Identify both short-term goals (10 years) and long-term goals (30 years).

The information gathered and developed in preparation of this chapter shall be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the RFP chapter by TWDB.

Deliverables:

- Prepare a stand-alone chapter (including work from both Tasks 3A & 3B) to be included in the 2023 RFP.
- Identify flood mitigation and floodplain management goals considering minimum recommended flood protection goal provided by TWDB.

- Identify specific and achievable flood mitigation and floodplain management goals (10 year and 30 year) in an easily understandable format for the public.
- Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 4A – Flood Mitigation Needs Analysis

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.37.

The RFPG shall conduct the analysis in a manner that will ensure the most effective and efficient use of the resources available to the RFPG.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Based on the analyses and goals developed by the RFPG under Tasks 2A through 3B and any additional analyses or information developed using available screening-level models or methods, the RFPG shall identify locations within the FPR that the RFPG considers to have the greatest flood mitigation and flood risk study needs by considering:
 - a. the areas in the FPR that the RFPG identified as the most prone to flooding that threatens life and property;
 - b. the relative locations, extent, and performance of current floodplain management and land use policies and infrastructure located within the FPR;
 - c. areas identified by the RFPG as prone to flooding that don't have adequate inundation maps;
 - d. areas identified by the RFPG as prone to flooding that don't have hydrologic and hydraulic models;
 - e. areas with an emergency need;
 - f. existing modeling analyses and flood risk mitigation plans within the FPR;
 - g. flood mitigation projects already identified and evaluated by other flood mitigation plans and studies;
 - h. documentation of historic flooding events;
 - i. flood mitigation projects already being implemented; and
 - j. any other factors that the RFPG deems relevant to identifying the geographic locations where potential FMEs and potentially feasible FMSs and FMPs shall be identified and evaluated under §361.38.

The information gathered and developed in preparation of this chapter shall be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the RFP chapter by TWDB.

Deliverables:

- Prepare a stand-alone chapter (including work from both Tasks 4A & 4B) to be included in the 2023 RFP.

- A map identifying the geographic locations within the FPR considered to have the greatest flood mitigation and flood risk study needs where potential FMEs and potentially feasible FMSs and FMPs shall be evaluated
- A tabulated list and GIS map of all pertinent information. All maps should be submitted with underlying GIS data utilized to prepare them.
- Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 4B – Identification and Evaluation of Potential Flood Management Evaluations and Potentially Feasible Flood Management Strategies and Flood Mitigation Projects

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.38.

Based on analyses and decisions under Tasks 2A through 4A the RFPG shall identify and evaluate potential FMEs and potentially feasible FMSs and FMPs, including nature-based solutions, some of which may have already been identified by previous evaluations and analyses by others.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Receive public comment on a proposed process to be used by the RFPG to identify and select FMEs, FMSs, and FMPs for the 2023 RFP. Revise and update documentation of the process by which FMS that were identified as potentially feasible and selected for evaluation in the 2023 RFP. Include a description of the process selected by the RFPG in the Technical Memorandum and the draft Regional Flood Plan and adopted RFPs.
2. Plans to be considered in developing this chapter include relevant plans referenced under 31 TAC §361.22.
3. When evaluating FMSs and FMPs the RFPG will, at a minimum, identify one solution that provides flood mitigation associated a with 1.0% annual chance flood event. In instances where mitigating for 1.0% annual chance events is not feasible, the RFPG shall document the reasons for its infeasibility, and at the discretion of the RFPG, other FMSs and FMPs to mitigate more frequent events may also be identified and evaluated based on TWDB Flood Planning guidance documents.
4. A summary of the RFPG process for identifying potential FMEs and potentially feasible FMSs and FMPs shall be established and included in the draft and final adopted RFP.
5. The RFPG shall then identify potentially feasible FMSs and FMPs in accordance with the RFPG established process.
6. For areas within the FPR that the RFPG does not yet have sufficient information or resources to identify potentially feasible FMSs and FMPs, the RFPG shall identify areas for potential FMEs that may eventually result in FMSs and/or FMPs.
7. The RFPG shall evaluate potentially feasible FMSs and FMPs understanding that, upon evaluation and further inspection, some FMSs or FMPs initially identified as potentially feasible may, after further inspection, be reclassified as infeasible.
8. Evaluations of potentially feasible FMSs and FMPs will require associated, detailed hydrologic and hydraulic modeling results that quantify the reduced impacts from flood events and the associated benefits and costs. Information may be based on previously performed evaluations of projects and related

information. Evaluations of potentially feasible FMS and FMPs shall include the following information and be based on the following analyses:

- a. A reference to the specific flood mitigation or floodplain management goal addressed by the feasible FMS or FMP;
- b. A determination of whether FMS or FMP meets an emergency need;
- c. An indication regarding the potential use of federal funds, or other sources of funding, as a component of the total funding mechanism;
- d. An equitable comparison between and consistent assessment of all FMSs and FMPs that the RFPG determines to be potentially feasible;
- e. A demonstration that the FMS or FMP will not negatively affect a neighboring area;
- f. A quantitative reporting of the estimated benefits of the FMS or FMP, including reductions of flood impacts of the 1.0% annual chance flood event and other storm events identified and evaluated if the project mitigates to a more frequent event, to include, but not limited to:
 - i. Associated flood events that must, at a minimum, include the 1.0% annual chance flood event and other storm events identified and evaluated;
 - ii. Reduction in habitable, equivalent living units flood risk;
 - iii. Reduction in residential population flood risk;
 - iv. Reduction in critical facilities flood risk;
 - v. Reduction in road closure occurrences;
 - vi. Reduction in acres of active farmland and ranchland flood risk;
 - vii. Estimated reduction in fatalities, when available;
 - viii. Estimated reduction in injuries, when available;
 - ix. Reduction in expected annual damages from residential, commercial, and public property; and
 - x. Other benefits as deemed relevant by the RFPG including environmental benefits and other public benefits.
- g. A quantitative reporting of the estimated capital cost of FMPs in accordance with TWDB Flood Planning guidance documents;
- h. Calculated benefit-cost ratio for FMPs in accordance with Exhibit C: General Guidelines and based on current, observed conditions;
- i. For projects that will contribute to water supply, all relevant evaluations required under §357.34(e) (relating to Identification and Evaluation of Potentially Feasible Water Management Strategies and Water Management Strategy Projects), as determined by the EA based on the type of contribution, and a description of its consistency with the currently adopted State Water Plan;
- j. A description of potential impacts and benefits from the FMS or FMP to the environment, agriculture, recreational resources, navigation, water quality, erosion, sedimentation, and impacts to any other resources deemed relevant by the RFPG;
- k. A description of residual, post-project, and future risks associated with FMPs including the risk of potential catastrophic failure and the potential for future increases to these risks due to lack of maintenance;
- l. Implementation issues including those related to rights-of-way, permitting, acquisitions, relocations, utilities and transportation; and
- m. Funding sources and options that exist or will be developed to pay for development, operation, and maintenance of the FMS or FMP.

9. Evaluations of potential FMEs will be at a reconnaissance or screening-level, unsupported by associated detailed hydrologic and hydraulic analyses. These will be identified for areas that the RFPG considers a priority for flood risk evaluation but that do not yet have the required detailed hydrologic and hydraulic modeling or associated project evaluations available to evaluate specific FMSs or FMPs for recommendation in the RFP. These FMEs shall be based on recognition of the need to develop detailed hydrologic models or to perform associated hydraulic analyses and associated project evaluations in certain areas identified by the RFPG.

Evaluations of potential FMEs shall include the following analyses:

- a. A reference to the specific flood mitigation or floodplain management goal to be addressed by the potential FME.
 - b. A determination of whether FME may meet an emergency need.
 - c. An indication regarding the potential use of federal funds, or other sources of funding as a component of the total funding mechanism.
 - d. An equitable comparison between and consistent assessment of all FMEs.
 - e. An indication of whether hydrologic and or hydraulic models are already being developed or are anticipated in the near future and that could be used in the FME.
 - f. A quantitative reporting of the estimated benefits, including reductions of flood risks, to include:
 - i. Estimated habitable, living unit equivalent and associated population in FME area;
 - ii. Estimated critical facilities in FME area;
 - iii. Estimated number of roads closures occurrences in FME area;
 - iv. Estimated acres of active farmland and ranchland in FME area; and
 - v. A quantitative reporting of the estimated study cost of the FME and whether the cost includes use of existing or development of new hydrologic or hydraulic models.
 - g. For FMEs, RFPGs do not need to demonstrate that an FME will not negatively affect a neighboring area.
10. RFPGs shall evaluate and present potential FMEs and potentially feasible FMSs and FMPs with sufficient specificity to allow state agencies to make financial or regulatory decisions to determine consistency of the proposed action before the state agency with an approved RFP.
 11. Analyses shall be performed in accordance with TWDB Flood Planning guidance documents.
 12. All data produced as part of the analyses under this task shall be organized and summarized in the RFP in accordance with TWDB Flood Planning guidance documents.
 13. Analyses shall clearly designate a representative location of the FME and beneficiaries including a map and designation of HUC8 and county location.

The information gathered and developed in preparation of this chapter shall be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the RFP chapter by TWDB.

Deliverables:

- Prepare a stand-alone chapter (including work from both Tasks 4B & 5) to be included in the 2023 RFP.

- A list of the potentially feasible FMSs and associated FMPs that were identified by the RFPG. The TWDB Flood Planning guidance documents will include minimum data submittal requirements and deliverable format.
- A map identifying the geographic locations within the FPR considered to have the greatest flood mitigation and flood risk study needs where potential FMEs and potentially feasible FMSs and FMPs shall be evaluated. TWDB Flood Planning guidance documents will include minimum data submittal requirements and deliverable format.
- Data shall be organized and summarized in the RFP in accordance with TWDB Flood Planning guidance documents.
- A tabulated list and GIS map of all pertinent information. All maps should be submitted with underlying GIS data utilized to prepare them.
- Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 4C – Prepare and Submit Technical Memorandum

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.13(e).

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Prepare a concise Technical Memorandum to include:
 - a. A list of existing political subdivisions within the FPR that have flood-related authorities or responsibilities;
 - b. A list of previous flood studies considered by the RFPG to be relevant to development of the RFP;
 - c. A geodatabase and associated maps in accordance with TWDB Flood Planning guidance documents that the RFPG considers to be best representation of the region-wide 1.0% annual chance flood event and 0.2% annual chance flood event inundation boundaries, and the source of flooding for each area, for use in its risk analysis, including indications of locations where such boundaries remain undefined;
 - d. A geodatabase and associated maps in accordance with TWDB Flood Planning guidance documents that identifies additional flood-prone areas not described in (c) based on location of hydrologic features, historic flooding, and/or local knowledge;
 - e. A geodatabase and associated maps in accordance with TWDB Flood Planning guidance documents that identifies areas where existing hydrologic and hydraulic models needed to evaluate FMSs and FMPs are available;
 - f. A list of available flood-related models that the RFPG considers of most value in developing its plan;
 - g. The flood mitigation and floodplain management goals adopted by the RFPG per §361.36;
 - h. The documented process used by the RFPG to identify potentially feasible FMSs and FMPs;
 - i. A list of potential FMEs and potentially feasible FMSs and FMPs identified by the RFPG, if any; and
 - j. A list of FMSs and FMPs that were identified but determined by the RFPG to be infeasible, including the primary reason for it being infeasible.

2. Approve submittal of the Technical Memorandum to TWDB at a RFPG meeting subject notice requirements in accordance with 31 TAC §361.21(h). The Technical Memorandum must be submitted to TWDB in accordance with Section I Article I of the contract.

Task 5 – Recommendation of Flood Management Evaluations and Flood Management Strategies and Associated Flood Mitigation Projects

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.39.

The objective of this task is to evaluate and recommend Flood Management Evaluations (FMEs), Flood Management Strategies (FMSs) and their associated Flood Mitigation Projects (FMPs) to be included in the 2023 RFP that describes the work completed, presents the potential FMEs, potentially feasible FMSs and FMPs, recommended and alternative FMSs and FMPs, including all the technical evaluations, and presents which entities will benefit from the recommended FMSs and FMPs.

Work associated with any Task 5 subtasks shall be contingent upon a written notice-to-proceed. This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Recommend FMSs and FMPs to reduce the potential impacts of flood based on the evaluations under §361.38 and RFPG goals and that must, at a minimum, mitigate for flood events associated with at 1.0 percent annual chance (100-yr flood) where feasible. In instances where mitigating for 100-year events is not feasible, FMS and FMPs to mitigate more frequent events may be recommended based on TWDB Flood Planning guidance documents. Recommendations shall be based upon the identification, analysis, and comparison of alternatives that the RFPG determines will provide measurable reductions in flood impacts in support of the RFPG's specific flood mitigation and/or floodplain management goals.
2. Provide additional information in conformance with TWDB Flood Planning guidance documents which will be used to rank recommended FMPs in the state flood plan.
3. Recommend FMEs that the RFPG determines are most likely to result in identification of potentially feasible FMSs and FMPs that would, at a minimum, identify and investigate one solution to mitigate for flood events associated with a 1.0% annual chance flood event and that support specific RFPG flood mitigation and/or floodplain management goals.
4. Recommended FMSs or FMPs may not negatively affect a neighboring area or an entity's water supply.
5. Recommended FMSs or FMPs that will contribute to water supply may not result in an overallocation of a water source based on the water availability allocations in the most recently adopted State Water Plan.
6. Specific types of FMEs, FMSs, or FMPs that should be included and that should not be included in RFPs must be in accordance with TWDB Flood Planning guidance documents.
7. FMS and FMP documentation shall include a strategy or project description, discussion of associated facilities, project map, and technical evaluations addressing all considerations and factors required under 31 TAC §361.38(h).
8. Coordinate and communicate with FME, FMS, and FMP sponsors, individual local governments, regional authorities, and other political subdivisions.

9. Process documentation of selecting all recommended FMSs and associated FMPs including development of FMS evaluations matrices and other tools required to assist the RFPG in comparing and selecting recommended FMSs and FMPs.
10. Document the evaluation and selection of all recommended FMS and FMPs, including an explanation for why certain types of strategies may not have been recommended.

The information gathered and developed in preparation of this chapter shall be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the RFP chapter by TWDB.

Deliverables:

- Prepare a stand-alone chapter (including work from both Tasks 4B & 5) to be included in the 2023 RFP to include technical analyses of all evaluated FMSs and FMPs.
- A list of the recommended FMEs, FMSs, and associated FMPs that were identified by the RFPG. TWDB Flood Planning guidance documents will include minimum data submittal requirements and deliverable format.
- Data shall be organized and summarized in the RFP in accordance with TWDB Flood Planning guidance documents.
- A tabulated list and GIS map of all pertinent information. All maps should be submitted with underlying GIS data utilized to prepare them.
- Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 6A – Impacts of Regional Flood Plan

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.40.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to include:

1. a region-wide summary of the relative reduction in flood risk that implementation of the RFP would achieve within the region including with regard to life, injuries, and property.
2. a statement that the FMPs in the plan, when implemented, will not negatively affect neighboring areas located within or outside of the FPR.
3. a general description of the types of potential positive and negative socioeconomic or recreational impacts of the recommended FMSs and FMPs within the FPR.
4. a general description of the overall impacts of the recommended FMPs and FMSs in the RFP on the environment, agriculture, recreational resources, water quality, erosion, sedimentation, and navigation.

The information gathered and developed in preparation of this chapter shall be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the RFP chapter by TWDB.

Deliverables: Prepare a stand-alone chapter (including work from both Tasks 6A & 6B) to be included in the 2023 RFP. Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 6B – Contributions to and Impacts on Water Supply Development and the State Water Plan

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.41.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Include a region-wide summary and description of the contribution that the regional flood plan would have to water supply development including a list of the specific FMSs and FMPs that would contribute to water supply.
2. Include a description of any anticipated impacts, including to water supply or water availability or projects in the State Water Plan, that the regional flood plan FMSs and FMPs may have.

The information gathered and developed in preparation of this chapter shall be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the RFP chapter by TWDB.

Deliverables: Prepare a stand-alone chapter (including work from both Tasks 6A & 6B) to be included in the 2023 RFP. Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 7 – Flood Response Information and Activities

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.42.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Summarize the nature and types of flood response preparations within the FPR including providing where more detailed information is available regarding recovery.
2. Coordinate and communicate, as necessary, with entities in the region to gather information.

3. RFPGs shall not perform analyses or other activities related to planning for disaster response or recovery activities.
4. Plans to be considered in developing this chapter include relevant plans referenced under 31 TAC §361.22.

The information gathered and developed in preparation of this chapter shall be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the RFP chapter by TWDB.

Deliverables: Prepare a stand-alone chapter to be included in the 2023 RFP. Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 8 – Administrative, Regulatory, and Legislative Recommendations

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.43.

The objective of this task is to prepare a separate chapter to be included in the 2023 RFP that presents the RFPG’s administrative, legislative, and regulatory recommendations.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to develop:

1. Legislative recommendations that they consider necessary to facilitate floodplain management and flood mitigation planning and implementation.
2. Other regulatory or administrative recommendations that they consider necessary to facilitate floodplain management and flood mitigation planning and implementation.
3. Any other recommendations that the RFPG believes are needed and desirable to achieve its regional flood mitigation and floodplain management goals.
4. Recommendations regarding potential, new revenue-raising opportunities, including potential new municipal drainage utilities or regional flood authorities, that could fund the development, operation, and maintenance of floodplain management or flood mitigation activities in the region.

The information gathered and developed in preparation of this chapter shall be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the RFP chapter by TWDB.

Deliverables: Prepare a stand-alone chapter to be included in the 2023 RFP. Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 9 – Flood Infrastructure Financing Analysis

In addition to generally meeting all applicable rules and statute requirements governing regional and state flood planning under 31 TAC Chapters 361 and 362, this portion of work shall, in particular, include all work necessary to meet all the requirements of 31 TAC §361.44.

The objective of this task is to report on how sponsors of recommended FMPs propose to finance projects.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. Coordinate and communicate with individual local governments, regional authorities, and other political subdivisions.
2. Perform a survey, including the following work:
 - a. Contacting FME and FMP sponsors.
 - b. Collection and collation of data.
 - c. Documentation of the effectiveness of survey methodology, providing percent survey completions, and whether an acceptable minimum percent survey completion was achieved.
 - d. Submission of data.
3. Coordinate with FME and FMP sponsors as necessary to ensure detailed needs and costs associated with their anticipated evaluations and projects are sufficiently represented in the RFP for future funding determinations.
4. Assist the RFPG with the development of recommendations regarding the proposed role of the State in financing flood infrastructure projects identified in the RFP.
5. Summarize the survey results.

The information gathered and developed in preparation of this chapter shall be subject to the following review process prior to submission of any deliverables:

1. Review of the chapter documents and related information by RFPG members.
2. Modifications to the chapter document based on RFPG, public, and/or agency comments.
3. Submittal of chapter document to TWDB for review and approval.
4. All effort required to obtain final approval of the RFP chapter by TWDB.

Deliverables: A completed Chapter 9 shall be delivered in the 2023 RFP to include summary of reported financing approaches for all recommended FMPs. Data shall be submitted in accordance with TWDB guidance documents. Any additional deliverables identified in the TWDB Flood Planning guidance documents.

Task 10 – Public Participation and Plan Adoption

The objective of this task is to address public participation, public meetings, eligible administrative and technical support activities, and other requirements and activities eligible for reimbursement. Objectives also include activities necessary to complete and submit a draft RFP and final RFP, and obtain TWDB approval of the RFP.

This Task includes, but is not limited to, performing all work in accordance with TWDB rules and guidance required to:

1. In addition to generally meeting all applicable statute requirements governing regional and state flood planning this portion of work shall, in particular, include all technical and administrative support activities necessary to meet all the requirements of 31 TAC Chapters 361 and 362 that are not already addressed

under the scope of work associated with other contract Tasks but that are necessary and or required to complete and deliver an draft Regional Flood Plan and final, adopted RFP to TWDB and obtain approval of the adopted RFP by TWDB.

2. Organization, support, facilitation, and documentation of all meetings/hearings associated with: preplanning meeting; consideration of a substitution of alternative flood management strategies; public hearing after adoption of the draft Regional Flood Plan and prior to adoption of the final RFP; and consideration of RFP amendments, alternative FMS substitutions, or Board-directed revisions.

Technical Support and Administrative Activities

1. RFPGs shall support and accommodate periodic presentations by the TWDB for the purpose of orientation, training, and retraining as determined and provided by the TWDB during regular RFPGRWPG meetings.
2. Attendance and participation of technical consultants at RFPG, subgroup, subcommittees, special and or other meetings and hearings including preparation and follow-up activities.
3. Developing technical and other presentations and handout materials for regular and special meetings to provide technical and explanatory data to the RFPG and its subcommittees, including follow-up activities.
4. Administrative and technical support and participation in RFPG activities, and documentation of any RFPG workshops, work groups, subgroup and/or subcommittee activities.
5. Technical support and administrative activities associated with periodic and special meetings of the RFPG including developing agendas and coordinating activities for the RFPG.
6. Provision of status reports to TWDB for work performed under this Contract.
7. Development of draft and final responses for RFPG approval to public questions or comments as well as approval of the final responses to comments on RFP documents.
8. Intraregional and interregional coordination and communication, and or facilitation required within the FPR and with other RFPGs to develop a RFP.
9. Incorporation of all required data and reports into RFP document.
10. Modifications to the RFP documents based on RFPG, public, and or agency comments.
11. Preparation of a RFP chapter summarizing Task 10 activities including review by RFPG and modification of document as necessary.
12. Development and inclusion of Executive Summaries in both draft Regional Flood Plan and final RFP.
13. Production, distribution, and submittal of all draft and final RFP-related planning documents for RFPG, public and agency review, including in hard-copy format when required.
14. Assembling, compiling, and production of the completed draft Regional Flood Plan and Final Regional Flood Plan document(s) that meet all requirements of statute, 31 TAC Chapters 361 and 362, Contract and associated guidance documents.
15. Submittal of the RFP documents in both hard copy and electronic formats to TWDB for review and approval; and all effort required to obtain final approval of the RFP by TWDB.

Other Activities

1. Review of all RFP-related documents by RFPG members.
2. Development and maintenance of a RFPG website or RFPG-dedicated webpage on the RFPG administrator's website for posting planning group meeting notices, agendas, materials, and plan information.
3. Limited non-labor, direct costs associated with maintenance of the RFPG website.

4. Development of agendas, presentations, and handout materials for the public meetings and hearings to provide to the general public.
5. Documentation of meetings and hearings to include recorded minutes and/or audio recordings as required by the RFPG bylaws and archiving and provision of minutes to public.
6. Preparation and transmission of correspondence, for example, directly related to public comments on RFP documents.
7. Promoting consensus decisions through conflict resolution efforts including monitoring and facilitation required to resolve issues between and among RFPG members and stakeholders in the event that issues arise during the process of developing the RFP, including mediation between RFPG members, if necessary.
8. RFPG membership solicitation activities.
9. Meeting all posting, meeting, hearing and other public notice requirements in accordance with the open meetings act, statute, and 31 TAC §361.21 and any other applicable public notice requirements.
10. Solicitation, review, and dissemination of public input, as necessary.
11. Any efforts required, but not otherwise addressed in other SOW tasks that may be required to complete an RFP in accordance with all statute and rule requirements.

Deliverables:

- A completed Chapter 10 summarizing public participation activities and appendices with public comments and RFPG responses to comments.
- Complete draft Regional Flood Plan and final, adopted RFP documents.
- Any additional deliverables identified in the TWDB Flood Planning guidance documents.

EXHIBIT C-1
Project Team

Project Team

Engineer shall use the following subcontractors, sub-consultants and vendors in connection with the Project, which may not be changed except as set forth in a Supplemental Agreement executed by Owner and Engineer:

Subcontractor/sub-consultant/vendor	Contract Rate(s)	Evidence of Insurance Attached (yes/no)
1. <u>S&B Infrastructure, LTD</u>	<u>\$453,450</u>	_____
2. <u>B2Z Engineering</u>	<u>\$20,000</u>	_____
3. <u>Pathfinder Public Affairs</u>	<u>\$18,000</u>	_____
4. <u>Tetra Tech, Inc.</u>	<u>\$16,000</u>	_____

EXHIBIT D
Project Schedule

Project Schedule

PROJECT TASK		COMPLETION DATE
Task 1	Planning Area Description	May 31, 2021*
Task 2A	Existing Condition Flood Risk Analyses	July 5, 2021*
Task 2B	Future Condition Flood Risk Analyses	Aug 30, 2021*
Task 3A	Evaluation and Recommendation on Floodplain Management Practices	Oct 1, 2021*
Task 3B	Flood Mitigation and Floodplain Management Goals	Oct 29, 2021*
Task 4A	Flood Mitigation Needs Analysis	Dec 3, 2021*
Task 4B	Identification and Evaluation of Potential Flood Management Evaluations and Potentially Feasible Flood Management Strategies and Flood Mitigation Projects	Apr 4, 2022*
Task 4C	Prepare and Submit Technical Memorandum	Jan. 7, 2022
Task 5	Recommendation of Flood Management Evaluations and Flood Management Strategies and Associated Flood Mitigation Projects	Dec 16, 2022*
Task 6A	Impacts of Regional Flood Plan	Jan 6, 2023*
Task 6B	Contributions to and Impacts on Water Supply Development and the State Water Plan	Feb 24, 2023*
Task 7	Flood Response Information and Activities	Apr 7, 2023*
Task 8	Administrative, Regulatory, and Legislative Recommendations	Jun 2, 2023*
Task 9	Flood Infrastructure Financing Analysis	Jun 2, 2023*
Task 10	Public Participation and Plan Adoption	
	Draft Regional Flood Plan Deadline	August 10, 2023
	Final Regional Flood Plan Deadline	Jan. 10, 2023

* Substantial completion, subject to change as study progresses and reviews are made.

EXHIBIT D-1
Contract Hourly Rates

PROFESSIONAL ENGINEERING SERVICES FOR REGIONAL FLOOD PLANNING FOR REGION 15 LOWER RIO GRANDE
3/22/2021

PROJECT TASK	PRINCIPAL	PROJECT MANAGER / PLANNER	SENIOR ENGINEER	RPLS/ PROJECT ENGINEER	EIT ENGINEER	CADD TECH	SURVEY TECH	GIS ANALYST	GIS OPERATOR	QUALITY MANAGER	CLERICAL	SUBS	TOTAL	GRAND TOTAL (with Subs)
Labor Rate	\$ 343.00	\$ 225.00	\$ 180.00	\$ 150.00	\$ 120.00	\$ 100.00	\$ 135.00	\$ 143.00	\$ 111.00	\$ 270.00	\$ 64.00			
Task 1 PLANNING AREA DESCRIPTION	0	9	8	22	4	0	0	37	96	0	4	\$ 40,000.00	\$ 23,448.00	\$ 63,448.00
1.1 Develop chapter with brief, general description of:				4							4	\$ -	\$ 856.00	\$ 856.00
a. Social and economic characteristics			1	1	2							\$ 2,000.00	\$ 570.00	\$ 2,570.00
b. Flood-prone areas and major flood risks			1	1	2			3	8			\$ 2,000.00	\$ 1,887.00	\$ 3,887.00
c. Historical flood events and associated fatalities		1		1				3	8			\$ 2,000.00	\$ 1,692.00	\$ 3,692.00
d. Political subdivisions with flood-related authority				1				3	8			\$ 2,000.00	\$ 1,467.00	\$ 3,467.00
e. Extent of local flood risk regulations and development codes		1		1				3	8			\$ 2,000.00	\$ 1,692.00	\$ 3,692.00
f. Most impacted agricultural and natural resources				1				3	8			\$ 2,000.00	\$ 1,467.00	\$ 3,467.00
g. Existing local & regional flood plans		1		1				3	8			\$ 2,000.00	\$ 1,692.00	\$ 3,692.00
1.2 Describe and summarize the location, condition and functionality of natural and constructed flood mitigation features/ infrastructure		1	1	2				3	8			\$ 2,000.00	\$ 2,022.00	\$ 4,022.00
1.3 Develop tabulated list and GIS map of existing natural flood mitigation features and constructed major flood infrastructure		1		1				3	8			\$ 20,000.00	\$ 1,692.00	\$ 21,692.00
1.4 Assessment of existing infrastructure			1	2								\$ -	\$ 705.00	\$ 705.00
1.5 Describe and explain the reasons for non-functional or deficient natural and constructed flood infrastructure (include needed, status of, and cost of repairs, timeframe to complete, name of owner and operator)		1	1	2								\$ 2,000.00	\$ 705.00	\$ 2,705.00
1.6 Describe major infrastructure and flood mitigation projects currently under development (361.32), including location, source of funding and anticipated benefits		1	1	1				3	8			\$ 2,000.00	\$ 1,872.00	\$ 3,872.00
1.7 Review and summarize relevant existing planning documents (361.22)		1	2	3				10	24			\$ -	\$ 5,129.00	\$ 5,129.00
Task 2A EXISTING CONDITION FLOOD RISK ANALYSES	0	8	24	62	28	48	0	126	266	0	0	\$ 55,500.00	\$ 71,124.00	\$ 126,624.00
2A.1 Perform existing condition flood hazard analyses (location & magnitude) for 1.0% and 0.2% ACE flood events as follows:												\$ -	\$ -	\$ -
a. Collect and analyze data to characterize the existing conditions of region		1	2	4				12	20			\$ 5,000.00	\$ 5,121.00	\$ 10,121.00
b. Collect existing H&H models and summarize data availability in geodatabase (GIS map)			2	6				12	20			\$ 5,000.00	\$ 5,196.00	\$ 10,196.00
c. Utilize best available data			1	2				6	16			\$ 2,500.00	\$ 3,114.00	\$ 5,614.00
d. Develop map(s) of the 1.0% and 0.2% ACE floodplains and the sources of flooding		1	2	8				16	30			\$ 5,000.00	\$ 7,403.00	\$ 12,403.00
e. Develop map(s) showing data gaps for inundation, as well as flood-prone areas based on hydrologic features, historic flooding and/or local knowledge			1	2				10	20			\$ 2,500.00	\$ 4,130.00	\$ 6,630.00
2A.2 Develop high-level, region-wide and largely GIS-based existing condition flood exposure analyses to identify who/what might be harmed in the 1.0% and 0.2% ACE floods, considering the			2	8				2	4			\$ 2,500.00	\$ 2,290.00	\$ 4,790.00
a. Analyze existing development within the existing conditions floodplain and the associated flood hazard exposure		1	2	4				8	24			\$ 2,500.00	\$ 4,993.00	\$ 7,493.00
b. Gather FEMA floodplains (FIRM, FIS and LOMR) and/or best available data			1	2				4	12			\$ 5,000.00	\$ 2,384.00	\$ 7,384.00
c. Include flood mitigation projects with dedicated construction funding and scheduled completion prior to Jan 2024		1	2	6				8	24			\$ 2,500.00	\$ 5,293.00	\$ 7,793.00
d. Analyze flood exposure of population and property where existing levees or dams do not meet FEMA accreditation		1	2	6				16	30			\$ 2,500.00	\$ 7,103.00	\$ 9,603.00
e. Estimate the potential (existing conditions) flood hazard exposure (include at a minimum number of properties (residential & nonresidential), population, other public infrastructure (water, sewer, etc.), major industry, power generation facilities, critical facilities (number & type), number of roadway crossings, length of roadway segments and ag area with crop values)		1	2	8	20	40		16	30			\$ 5,000.00	\$ 13,803.00	\$ 18,803.00
f. Provide a qualitative description of expected loss of function, including impacts on inundated structures (residential, commercial, industrial, public, etc.), infrastructures and services such as transportation, health and human services, water supply, water treatment, utilities, energy generation and emergency services		1	1	2				4	8			\$ 2,500.00	\$ 2,165.00	\$ 4,665.00
2A.3 Perform existing conditions vulnerability analyses to:												\$ 2,500.00	\$ -	\$ 2,500.00
a. Identify resilience of communities located in flood-prone areas (existing conditions flood exposure analyses)			1	1	2			4	8			\$ 3,000.00	\$ 2,030.00	\$ 5,030.00
b. Identify vulnerabilities of critical facilities to flooding, considering proximity to floodplain, past flooding, emergency management plans and critical systems (existing conditions)			1	1	2							\$ 2,500.00	\$ 570.00	\$ 3,070.00

PROJECT TASK	PRINCIPAL	PROJECT MANAGER / PLANNER	SENIOR ENGINEER	RPLS/ PROJECT ENGINEER	EIT ENGINEER	CADD TECH	SURVEY TECH	GIS ANALYST	GIS OPERATOR	QUALITY MANAGER	CLERICAL	SUBS	TOTAL	GRAND TOTAL (with Subs)
2A.4 Summary of existing condition flood exposure analysis and vulnerability analysis , including the (a) underlying flood event return frequency; (b) type of flood risk; (c) county; (d) HUC8; (e) existing flood authority boundaries; (f) social vulnerability index for counties and census tracts; and (g) other categories determined by RFPG or in TWDB Flood Planning Guidance documents		1	2	2	4	8		8	20			\$ 5,000.00	\$ 5,529.00	\$ 10,529.00
Task 2B FUTURE CONDITION FLOOD RISK ANALYSES	0	7	27	57	43	8	0	133	276	0	0	\$ 56,200.00	\$ 70,600.00	\$ 126,800.00
2B.1 Perform future condition flood hazard analyses to determine location and magnitude of the 1.0% and 0.2% ACE (30 year planning horizon) (361.34)			1	2	4			8	12			\$ 3,000.00	\$ 3,436.00	\$ 6,436.00
a. Collect data and analyze future conditions based on "no action" scenario and 30 years continued development and population growth under current trends and regulations. Consider (i) current land use plans and development trends; (ii) locations and amount of anticipated population growth; (iii) anticipated relative sea level change and subsidence; (iv) anticipated changes in floodplain functional; (v) anticipated sedimentation in flood control structures and major geomorphic changes; (vi) anticipated completion of mitigation projects under construction/in progress; and (vii) other relevant features			1	4	8			8	10			\$ 8,000.00	\$ 3,994.00	\$ 11,994.00
b. Identify areas where future conditions H&H models are available			1	2	3			8	16			\$ 3,000.00	\$ 3,760.00	\$ 6,760.00
c. Utilize best available data, H&H models for each area	1		1	2				4	16			\$ -	\$ 3,053.00	\$ 3,053.00
d. Modify existing H&H models to include future flood risk conditions for 1.0% and 0.2% ACE where existing conditions H&H models are available but not future conditions			4	10				10	20			\$ 5,000.00	\$ 5,870.00	\$ 10,870.00
e. Develop map showing future conditions 1.0% and 0.2% ACE	1		5	10				12	32			\$ 5,000.00	\$ 7,893.00	\$ 12,893.00
f. Develop map(s) showing data gaps for inundation, as well as flood-prone areas based on hydrologic features, historic flooding and/or local knowledge			1	1				15	32			\$ 3,500.00	\$ 6,027.00	\$ 9,527.00
2B.2 Analyze future condition flood exposure 1% and 0.2% ACE												\$ -	\$ -	\$ -
a. Analyze existing development within the existing condition floodplain and associated flood hazard exposure	1		2	4	6			16	30			\$ 4,500.00	\$ 7,523.00	\$ 12,023.00
b. Analyze existing and future developments within the future condition floodplain and associated flood hazard exposure	1		2	4	6			16	30			\$ 4,500.00	\$ 7,523.00	\$ 12,023.00
c. Identify flood mitigation projects with dedicated construction funding and anticipated completion date within 30 years or as provided for in TWDB Flood Planning guidance doc	1		1	2	4							\$ 2,000.00	\$ 1,185.00	\$ 3,185.00
d. Determine future condition flood exposure based on (i) FIRMs, other flood maps, GIS analysis; (ii) available hydraulic models; (iii) model-based or geographic screening to identify flood-prone areas; and (iv) other data	1		5	10				16	32			\$ 8,700.00	\$ 8,465.00	\$ 17,165.00
2B.3 Perform future conditions vulnerability analyses to:												\$ -	\$ -	\$ -
a. Identify resilience of communities located in flood-prone areas (future conditions flood exposure analyses)			1	2	4			4	8			\$ 1,500.00	\$ 2,420.00	\$ 3,920.00
b. Identify vulnerabilities of critical facilities to flooding, considering proximity to floodplain, past flooding, emergency management plans and critical systems (future conditions)			1	2	4			4	8			\$ 1,500.00	\$ 2,420.00	\$ 3,920.00
2B.4 Summary of future condition flood exposure analysis and vulnerability analysis , including the (a) underlying flood event return frequency; (b) type of flood risk; (c) county; (d) HUC8; (e) existing flood authority boundaries; (f) social vulnerability index for counties and census tracts; and (g) other categories determined by RFPG or in TWDB Flood Planning Guidance documents	1		1	2	4	8		12	30			\$ 6,000.00	\$ 7,031.00	\$ 13,031.00
												\$ -	\$ -	\$ -
Task 3A EVALUATION AND RECOMMENDATIONS ON FLOODPLAIN MANAGEMENT PRACTICES (361.35)	0	2	6	11	10	0	0	24	48	0	0	\$ 12,000.00	\$ 13,140.00	\$ 25,140.00
3A.1 current floodplain management and land use practices, regulations, policies, and trends related to land use, economic development, and population growth, allow, cause, or otherwise encourage increases to flood risks for (a) existing and (b) future populations and properties.			1	1	4			6	12			\$ 3,000.00	\$ 3,000.00	\$ 6,000.00
3A.2 Consider future flood hazard exposure analyses performed under Task 2B, consider extent to which the 1.0% ACE floodplain and associated risks may change over time with development, population growth and other man-made causes and assess how to address potential changes			1	2	6			6	12			\$ 3,500.00	\$ 3,390.00	\$ 6,890.00
3A.3 Make recommendations for forward-looking floodplain management, land use, and economic development practices and strategies that should be adopted by each entity in the FPR.	1		2	4				6	12			\$ 2,500.00	\$ 3,375.00	\$ 5,875.00
3A.4 Consider adopting region-specific, minimum floodplain management or land use or other standards that impact flood-risk, that may vary geographically across the region that each entity must adopt prior to the RFPG including the local entity's requested FME, FMS or FMP in the RFP	1		2	4				6	12			\$ 3,000.00	\$ 3,375.00	\$ 6,375.00

PROJECT TASK	PRINCIPAL	PROJECT MANAGER / PLANNER	SENIOR ENGINEER	RPLS/ PROJECT ENGINEER	EIT ENGINEER	CADD TECH	SURVEY TECH	GIS ANALYST	GIS OPERATOR	QUALITY MANAGER	CLERICAL	SUBS	TOTAL	GRAND TOTAL (with Subs)
Task 3B FLOOD MITIGATION AND FLOODPLAIN MANAGEMENT GOALS (361.36)	0	3	6	14	0	0	0	15	21	0	0	\$ 4,250.00	\$ 8,331.00	\$ 12,581.00
3B.1 Identify specific and achievable flood mitigation and floodplain management goals with target years (including goals specifically addressing risk to life and property)			1	2				3	4			\$ 1,000.00	\$ 1,353.00	\$ 2,353.00
3B.2 Consider minimum recommended flood protection goal provided by TWDB		1	1	2				3	4			\$ 500.00	\$ 1,578.00	\$ 2,078.00
3B.3 Identify levels of residual risk that will remain even after flood mitigation goals are met			1	4				3	4			\$ 1,000.00	\$ 1,653.00	\$ 2,653.00
3B.4 Present goals and residual risk for the public in format conforming to TWDB guidance		1	1	2				3	4			\$ 750.00	\$ 1,578.00	\$ 2,328.00
3B.5 Select goals that apply to HUC8 watersheds, when appropriate		1	1	2				3	3			\$ -	\$ 1,467.00	\$ 1,467.00
3B.6 Identify short-term (10-year) goals and long-term (30-year) goals			1	2					2			\$ 1,000.00	\$ 702.00	\$ 1,702.00
Task 4A FLOOD MITIGATION NEEDS ANALYSIS (361.37)	0	2	10	11	30	0	0	47	70	0	0	\$ 16,000.00	\$ 21,991.00	\$ 37,991.00
4A.1 Identify locations within the FPR that the RFPG considers to have the greatest flood mitigation and flood risk needs considering:			1	1	2							\$ -	\$ 570.00	\$ 570.00
a. Identified locations of greatest risk (most prone to flooding) that threaten life and property			1	1	3			4	6			\$ 2,000.00	\$ 1,928.00	\$ 3,928.00
b. the relative location, extent and performance of current floodplain management and land use policies and infrastructure within the RFPG		1	1	1	1			4	6			\$ 1,300.00	\$ 1,913.00	\$ 3,213.00
c. Areas identified by RFPG that are prone to flooding that do not have adequate inundation maps				1	1			2	3			\$ 2,200.00	\$ 889.00	\$ 3,089.00
d. models			1	1	2			4	10			\$ 2,200.00	\$ 2,252.00	\$ 4,452.00
e. Identified areas with an emergency need			1	1	3			2	8			\$ 1,500.00	\$ 1,864.00	\$ 3,364.00
f. Existing modeling analyses and flood risk mitigation plans			1	1	4			2	8			\$ 1,200.00	\$ 1,984.00	\$ 3,184.00
g. Flood mitigation projects already identified and evaluated by other flood mitigation plan/study			1	1	6			2	8			\$ 2,000.00	\$ 2,224.00	\$ 4,224.00
h. Documentation of historic flood events			1	1	2			2	3			\$ 600.00	\$ 1,189.00	\$ 1,789.00
i. Flood mitigation projects being implemented		1	1	1	2			4	12			\$ 2,000.00	\$ 2,699.00	\$ 4,699.00
j. Any other factors the RFPG deems relevant to this subject			1	1	4			21	6			\$ 1,000.00	\$ 4,479.00	\$ 5,479.00
Task 4B IDENTIFICATION AND EVALUATION OF POTENTIAL FLOOD MANAGEMENT EVALUATIONS AND POTENTIALLY FEASIBLE FLOOD MANAGEMENT STRATEGIES AND FLOOD MITIGATION PROJECTS (361.38)	0	32	62	132	200	18	0	110	179	2	8	\$ 90,100.00	\$ 100,611.00	\$ 190,711.00
4B.1 Receive public comment on process to identify and select FMEs, FMSs, and FMPs; document process in Tech Memo, draft RFP and final RFP		1	2	2	2			4	4	1	8	\$ 4,000.00	\$ 2,923.00	\$ 6,923.00
4B.2 Consider relevant plans from Task 1.7 (361.22)			1	1	2							\$ 2,200.00	\$ 570.00	\$ 2,770.00
4B.3 Identify at least one solution (FMSs and FMPs) that mitigates to the 1.0% ACE, or explain why that is infeasible		1	2	4	8			4	8			\$ 4,000.00	\$ 3,605.00	\$ 7,605.00
4B.4 Summarize RFPG process for identifying potential FMEs and potentially feasible FMSs and FMPs		1	1	2	3							\$ 2,200.00	\$ 1,065.00	\$ 3,265.00
4B.5 Identify potentially feasible FMSs and FMPs per RFPG process		1	2	4	6							\$ 2,200.00	\$ 1,905.00	\$ 4,105.00
4B.6 Identify areas for potential FMEs for areas having insufficient		1	1	2	4			8	8			\$ 2,500.00	\$ 3,217.00	\$ 5,717.00
4B.7 Evaluate potentially feasible FMSs and FMPs		1	2	4	6							\$ 2,500.00	\$ 1,905.00	\$ 4,405.00
4B.8 Evaluate potentially feasible FMSs and FMPs using existing detailed H&H models that quantify the reduction in flood impacts and BCR, where possible; Evaluations shall include the following information		1	2	4	8			4	8			\$ 4,000.00	\$ 3,605.00	\$ 7,605.00
a. Identify specific goal addressed by feasible FMS or FMP		1	2	4	3							\$ 2,200.00	\$ 1,545.00	\$ 3,745.00
b. Determine if a FMS or FMP meets an emergency need		1	1	3	4							\$ 2,200.00	\$ 1,335.00	\$ 3,535.00
c. Indicate potential funding source (local, state, federal) with input from locals responsible for flood-related activities		1	2	6	6							\$ 2,200.00	\$ 2,205.00	\$ 4,405.00
d. Compare and assess potentially feasible FMSs and FMPs in an equitable and consistent manner		1	2	4	8			4	8			\$ 2,200.00	\$ 3,605.00	\$ 5,805.00
e. Demonstrate that the FMS or FMP will not negatively impact a neighboring area		1	2	4	6			8	16			\$ 3,200.00	\$ 4,825.00	\$ 8,025.00
f. Report estimated benefits of the FMS or FMP, including reduction of flood impacts of 1.0% ACE and other storm event identified and evaluated if the project mitigates to a more frequent event, include (1) the 1.0% ACE event; (2) reduction of flood risk for habitable equivalent living units; (3) residential population; (4) critical facilities; (5) road closures; (6) active farmland/ranchland; (7) fatalities; (8) injuries; (9) expected annual property damages from residential, commercial, and public property; and (10) other benefits (i.e. environmental).		1	2	4	6			12	18			\$ 4,000.00	\$ 5,619.00	\$ 9,619.00
g. Estimate capital cost of FMPs, in accordance with TWDB guidance		1	1	2	6	10		2	6			\$ 5,000.00	\$ 3,377.00	\$ 8,377.00
h. Calculate benefit-cost ratio for FMPs, in accordance with guidance		1	1	4	8	8		4	8	1		\$ 4,500.00	\$ 4,495.00	\$ 8,995.00

PROJECT TASK	PRINCIPAL	PROJECT MANAGER / PLANNER	SENIOR ENGINEER	RPLS/ PROJECT ENGINEER	EIT ENGINEER	CADD TECH	SURVEY TECH	GIS ANALYST	GIS OPERATOR	QUALITY MANAGER	CLERICAL	SUBS	TOTAL	GRAND TOTAL (with Subs)
i. Evaluate contribution of FMPs that contribute to water supply, in accordance with 357.34E and as determined by		1	2	3	6							\$ 2,200.00	\$ 1,755.00	\$ 3,955.00
j. Describe potential environmental, agricultural, recreational, navigation, water quality, erosion, sedimentation impacts and benefits of FMSs and FMPs on other resources, as deemed relevant by RFPG		1	2	3	8							\$ 2,200.00	\$ 1,995.00	\$ 4,195.00
k. Describe residual, post-project and future risks with FMPs, including catastrophic failure and lack of maintenance		1	2	4	6							\$ 2,200.00	\$ 1,905.00	\$ 4,105.00
l. Describe implementation issues, including ROW, permitting, acquisition, relocation, utilities and transportation		1	2	4	6							\$ 2,200.00	\$ 1,905.00	\$ 4,105.00
m. Identify potential funding sources to pay for FMS or FMP development and O&M		1	2	4	6							\$ 2,200.00	\$ 1,905.00	\$ 4,105.00
4B.9 Evaluate potential FMEs without H&H models at a screening level (for high priority areas without existing detailed H&H)		1	4	8	6							\$ 2,200.00	\$ 2,865.00	\$ 5,065.00
a. Identify specific goal addressed by potential FME		1	2	4	6							\$ 2,200.00	\$ 1,905.00	\$ 4,105.00
b. Determine whether a FME might meet an emergency need		1	2	6	6							\$ 2,200.00	\$ 2,205.00	\$ 4,405.00
c. Indicated potential funding source (local, state, federal)		1	2	4	6							\$ 2,200.00	\$ 1,905.00	\$ 4,105.00
d. Compare and assess potentially feasible FMEs in an equitable and consistent manner		1	2	4	6							\$ 2,200.00	\$ 1,905.00	\$ 4,105.00
e. Indicate whether H&H models are being developed or are anticipated in the near future that could be used in FME		1	2	4	6							\$ 2,200.00	\$ 1,905.00	\$ 4,105.00
f. Report estimated benefits, including reduction of flood risk for (1) habitable living unit equivalent and associated population; (2) critical facilities; (3) road closure occurrences; (4) acres of farmland/ranchland; and (5) estimated study cost.		1	2	8	12			8	16			\$ 2,200.00	\$ 6,145.00	\$ 8,345.00
g. "No negative impact" analysis required for FMEs		1	2	4	6			16				\$ 3,000.00	\$ 4,193.00	\$ 7,193.00
4B.10 Evaluate and present potential FMEs and potentially feasible FMSs and FMPs that allows state agencies to make financial or regulatory decisions		1	2	6	8			4	8			\$ 2,200.00	\$ 3,905.00	\$ 6,105.00
4B.11 Perform analysis per TWDB guidance		1	2	4	6			8	16			\$ 2,200.00	\$ 4,825.00	\$ 7,025.00
4B.12 Summarize data resulting from this analysis according to TWDB guidance		1	2	4	6			16	40			\$ 2,200.00	\$ 8,633.00	\$ 10,833.00
4B.13 Designate representative location of the FME and beneficiaries including a map with HUC8 and county locations		1	2	4	8			8	15			\$ 5,000.00	\$ 4,954.00	\$ 9,954.00
Task 4C PREPARE AND SUBMIT TECHNICAL MEMORANDUM	1	10	10	16	32	0	0	8	25	2	0	\$ 10,800.00	\$ 15,092.00	\$ 25,892.00
4C.1 Prepare a concise Technical Memorandum that includes:												\$ -	\$ -	\$ -
a. List political subdivisions within the FPR that have flood-related authorities/responsibilities (Task 1.1.d)		1	1	2	4				4			\$ -	\$ 1,629.00	\$ 1,629.00
b. List previous studies (Task 1.1.g)		1	1	2	4							\$ -	\$ 1,185.00	\$ 1,185.00
c. Provide geodatabase and associated maps per TWDB Guidance document representing region-wide 1.0% ACE and 0.2% ACE, source of flooding for use in risk analysis (Task 2A.1.b)		1	1	2	4			4	8			\$ 3,000.00	\$ 2,645.00	\$ 5,645.00
d. Provide geodatabase and associated maps per TWDB Guidance document identifying flood-prone areas based on hydrologic feature, historic flooding and/or local knowledge		1	1					2	8			\$ 2,000.00	\$ 1,579.00	\$ 3,579.00
e. Provide geodatabase and associated maps per TWDB Guidance document identifying areas where H&H models are needed to evaluate FMSs and FMPs		1	1					2	5			\$ 2,000.00	\$ 1,246.00	\$ 3,246.00
f. List available flood models of value to the region (Tasks 2A.1.c and 2B.1.b)		1	1	2	4							\$ 1,800.00	\$ 1,185.00	\$ 2,985.00
g. Provide flood mitigation and floodplain management goals adopted by the RFPG (361.36) (Task 3B.1)		1	1	2	4							\$ 1,000.00	\$ 1,185.00	\$ 2,185.00
h. Document process to identify potentially feasible FMSs and FMPs (Task 4B.4)		1	1	2	4							\$ 1,000.00	\$ 1,185.00	\$ 2,185.00
i. List potential FMEs and potentially feasible FMSs and FMPs (Task 4B.5)		1	1	2	4							\$ -	\$ 1,185.00	\$ 1,185.00
j. List FMSs and FMPs identified but determined to be infeasible and reason for decision		1	1	2	4							\$ -	\$ 1,185.00	\$ 1,185.00
4C.2 Approve Tech Memo to TWDB at RFPG Meeting (361.21(h)), in accordance with Section I Article I of the contract.	1									2		\$ -	\$ 883.00	\$ 883.00
Task 5 RECOMMENDATION OF FLOOD MANAGEMENT EVALUATIONS AND FLOOD MANAGEMENT STRATEGIES AND ASSOCIATED FLOOD MITIGATION PROJECTS	3	22	58	118	181	80	0	254	440	4	20	\$ 99,000.00	\$ 151,361.00	\$ 250,361.00
5.1 Recommend FMSs and FMPs to reduce flood impacts associated with 1.0% ACE where feasible; more frequent storm events may be analyzed (TWDB guidance) when 1.0% ACE is not feasible;	1	4	8	16	20			20	40	1		\$ 10,000.00	\$ 15,053.00	\$ 25,053.00
5.2 Provide additional information (TWDB guidance) to rank FMPs		4	8	16	30			24	48			\$ 12,000.00	\$ 17,100.00	\$ 29,100.00
5.3 Recommend FMEs that the RFPG expects will result in potentially feasible FMSs and FMPs that address 1.0% ACE		4	12	24	30			16	32			\$ 11,000.00	\$ 16,100.00	\$ 27,100.00

PROJECT TASK	PRINCIPAL	PROJECT MANAGER / PLANNER	SENIOR ENGINEER	RPLS/ PROJECT ENGINEER	EIT ENGINEER	CADD TECH	SURVEY TECH	GIS ANALYST	GIS OPERATOR	QUALITY MANAGER	CLERICAL	SUBS	TOTAL	GRAND TOTAL (with Subs)
5.4 Confirm that recommended FMSs and FMPs do not negatively impact a neighboring area or an entity's water supply	1	2	8	16	25			60	80			\$ 13,000.00	\$ 25,093.00	\$ 38,093.00
5.5 Confirm that recommended FMSs and FMPs that contribute to water supply do not result in overallocation of a water source based on more recent State Water Plan		1	2	4	8			60	80	1		\$ 10,000.00	\$ 19,875.00	\$ 29,875.00
5.6 Include only specific FMEs, FMSs and FMPs allowed per TWDB guidance		1	2	4	12			24	40	1		\$ 5,000.00	\$ 10,767.00	\$ 15,767.00
5.7 Include FMS and FMP description, discussion of associated facilities, project maps and technical evaluations required by 361.38(h)		2	8	15	20	80		30	80			\$ 18,000.00	\$ 27,710.00	\$ 45,710.00
5.8 Coordinate FME, FMS and FMP sponsors, local governments, regional authorities and other political subdivisions		2	8	15	20			20	40			\$ 14,000.00	\$ 13,840.00	\$ 27,840.00
5.9 Document process of selecting recommended FMSs and FMPs, including an explanation for certain strategies not recommended		1	1	4	8						20	\$ 3,000.00	\$ 3,245.00	\$ 6,245.00
5.10 Document evaluation and selection of recommended FMS and FMPs, including explanations for why certain types of strategies not recommended	1	1	1	4	8					1		\$ 3,000.00	\$ 2,578.00	\$ 5,578.00
Task 6A IMPACTS OF REGIONAL FLOOD PLAN	2	7	15	37	72	0	0	50	100	1	0	\$ 12,200.00	\$ 37,671.00	\$ 49,871.00
6A.1 Prepare region-wide summary of relative reduction in flood risk by implementation of the plan with regard to life, injuries and property	1	2	4	10	16			20	40			\$ 3,000.00	\$ 12,233.00	\$ 15,233.00
6A.2 Develop statement that implementing FMPs will not adversely impact neighboring areas within or outside FPR		1	1	3	8							\$ 2,000.00	\$ 1,815.00	\$ 3,815.00
6A.3 Prepare general description of types of positive and negative socioeconomic or recreational impacts of the recommended FMSs and FMPs within the FPR.		2	8	16	32			10	20			\$ 2,200.00	\$ 11,780.00	\$ 13,980.00
6A.4 Prepare general description of overall impacts of FMPs and FMSs on environmental, agricultural, recreational, water quality, erosion, sedimentation and navigation concerns/impacts and water quality	1	2	2	8	16			20	40	1		\$ 5,000.00	\$ 11,843.00	\$ 16,843.00
Task 6B CONTRIBUTIONS TO AND IMPACTS ON WATER	1	2	4	6	14	0	0	8	16	1	0	\$ 5,000.00	\$ 7,283.00	\$ 12,283.00
6B.1 Prepare region-wide summary and description of the flood plan on water supply development including strategies that would contribute to water supply in the regional water plan	1	1	2	3	8			4	8	1		\$ 2,500.00	\$ 4,068.00	\$ 6,568.00
6B.2 Describe any anticipated impacts on water supply or water availability in the State Water Plan (including the State Water Quality Plan specified in TAC 362)		1	2	3	6			4	8			\$ 2,500.00	\$ 3,215.00	\$ 5,715.00
Task 7 FLOOD RESPONSE INFORMATION AND ACTIVITIES	0	2	3	8	16	16	0	0	0	0	20	\$ 5,400.00	\$ 6,990.00	\$ 12,390.00
7.1 Summarize the nature and types of flood response preparations within the FPR, including detailed recovery information, where available.		1	2	4	8							\$ 2,400.00	\$ 2,145.00	\$ 4,545.00
7.2 Coordinate with regional entities to gather information					8	16					20	\$ 3,000.00	\$ 3,840.00	\$ 6,840.00
7.3 Do not perform analyses or other disaster response or recovery planning or activities.												\$ -	\$ -	\$ -
7.4 Include relevant existing planning documents (361.22) (See Task		1	1	4								\$ -	\$ 1,005.00	\$ 1,005.00
Task 8 ADMINISTRATIVE, REGULATORY, AND LEGISLATIVE RECOMMENDATIONS	1	4	11	9	10	0	0	0	0	1	0	\$ 6,400.00	\$ 6,043.00	\$ 12,443.00
8.1 Develop legislative recommendations necessary to facilitate floodplain management and flood mitigation planning and		1	2	4	4					1		\$ 1,200.00	\$ 1,935.00	\$ 3,135.00
8.2 Develop other regulatory or administrative recommendations necessary to facilitate floodplain management and flood mitigation planning and implementation, including recommended changes at local and state levels		1	2	4	6							\$ 2,000.00	\$ 1,905.00	\$ 3,905.00
8.3 Develop other recommendations needed and desired to achieve regional flood mitigation and floodplain management goals		1	4	1								\$ 1,200.00	\$ 1,095.00	\$ 2,295.00
8.4 Develop recommendations regarding potential new revenue-raising opportunities, including potential drainage utilities or regional flood authorities that could fund the development, operation and maintenance of floodplain management or flood mitigation activities in the region	1	1	3									\$ 2,000.00	\$ 1,108.00	\$ 3,108.00
Task 9 FLOOD INFRASTRUCTURE FINANCING ANALYSIS	0	4	6	9	20	28	0	1	4	1	42	\$ 12,200.00	\$ 12,075.00	\$ 24,275.00
9.1 Coordinate with local governments, regional authorities and other political subdivisions		1	1	2	6							\$ 2,000.00	\$ 1,425.00	\$ 3,425.00
9.2 Perform survey of (a) FME and FMP sponsors to (b) collect data, (c) document effectiveness of survey methodology (% participation) and (d) submit data		1	1	2	6	12					20	\$ 3,500.00	\$ 3,905.00	\$ 7,405.00
9.3 Coordinate with FME and FMP sponsors to ensure detailed needs and costs are sufficiently represented		1	2	4	6	12					12	\$ 3,200.00	\$ 3,873.00	\$ 7,073.00
9.4 Assist RFPG in developing recommendations of State's role in financing flood infrastructure projects		1	1							1		\$ -	\$ 675.00	\$ 675.00

PROJECT TASK	PRINCIPAL	PROJECT MANAGER / PLANNER	SENIOR ENGINEER	RPLS/ PROJECT ENGINEER	EIT ENGINEER	CADD TECH	SURVEY TECH	GIS ANALYST	GIS OPERATOR	QUALITY MANAGER	CLERICAL	SUBS	TOTAL	GRAND TOTAL (with Subs)
9.5 Summarize survey results			1	1	2	4		1	4		10	\$ 3,500.00	\$ 2,197.00	\$ 5,697.00
Task 10 PUBLIC PARTICIPATION AND PLAN ADOPTION	0	56	104	173	244	84	0	98	226	5	162	\$ 82,400.00	\$ 145,768.00	\$ 228,168.00
10.1 Perform technical and administrative support activities necessary to deliver draft and final Regional Flood Plan		2	4	10	18	24		28	50	1	50	\$ 15,000.00	\$ 20,254.00	\$ 35,254.00
10.2 Organize, support, facilitate and document all public meetings/hearings associated with preplanning meeting, consideration of a substitution of alternative FMS, public hearing after adoption of the draft RFP and prior adoption of the final RFP, and considerations of RFP amendment, alternative FMS substitution, or Board directed revisions.		1		8	8						20	\$ 6,000.00	\$ 3,665.00	\$ 9,665.00
10.3 RFPG shall support and accommodate periodic TWDB presentations during regular RFPG meetings												\$ -	\$ -	\$ -
10.4 Attend and participate at RFPG, subgroup, subcommittee, special and other meetings/hearings and hearings including preparation and follow-up activities		4	4	8	8			8	32			\$ 3,000.00	\$ 8,476.00	\$ 11,476.00
10.5 Develop technical and other presentations and handouts for meetings to provide technical and explanatory data to the RFPG and its subcommittees, including follow-up activities		1	4	8				6	16		20	\$ 2,500.00	\$ 6,059.00	\$ 8,559.00
10.6 Provide administrative and technical support and participation for RFPG activities along with documentation of an any RFPG workshops, work groups, subgroup, and/or subcommittee activities		4		8							12		\$ 3,108.00	\$ 3,108.00
10.7 Provide technical support and administrative activities associated with RFPG meetings, including developing agendas and coordinating activities		6		8								\$ -	\$ 2,790.00	\$ 2,790.00
10.8 Provide status reports to TWDB for work performed		2	4	12							20	\$ 2,000.00	\$ 4,250.00	\$ 6,250.00
10.9 Develop draft and final responses for RFPG approval to public questions/comments as well as approval of the final response to comments on RFP documents.		1	2	7								\$ 1,000.00	\$ 1,635.00	\$ 2,635.00
10.10 Coordinate and facilitate intraregional and interregional communication with other RFPGs to develop the RFP		4		8								\$ 1,500.00	\$ 2,340.00	\$ 3,840.00
10.11 Incorporate all required data and reports into RFP document		1	2	4	8			16	32			\$ 5,000.00	\$ 7,985.00	\$ 12,985.00
10.12 Modify RFP documents based on RFPG, public or agency comments		2	4	8								\$ 2,000.00	\$ 2,370.00	\$ 4,370.00
10.13 Prepare RFP chapter summarizing Task 10 activities including review by RFPG and modification of document as necessary.		4		8	16	28						\$ 3,000.00	\$ 8,100.00	\$ 11,100.00
10.14 Develop and include Executive Summaries in draft and final RFP		6	12	20	30	60		40	96	4	40	\$ 17,000.00	\$ 36,126.00	\$ 53,126.00
10.15 Produce, distribute and submit draft and final RFP-related documents for RFPG, planning and agency review, including hard copies when required		2	4	8	16							\$ -	\$ 4,290.00	\$ 4,290.00
10.16 Assemble, compile and produce draft and final RFP that meet all requirements of 31 TAC Chapter 361 and 362		1	2	4	8							\$ 1,000.00	\$ 2,145.00	\$ 3,145.00
10.17 Submit RFP documents in hard copy and electronic copy to TWDB for review and approval, including all effort required to obtain final approval of the RFP by TWDB		1	2	4	8							\$ 2,000.00	\$ 2,145.00	\$ 4,145.00
10.18 Review all RFP-related documents by RFPG members		2	4	8	16							\$ 2,000.00	\$ 4,290.00	\$ 6,290.00
10.19 Develop and maintain a RFPG website or webpage on RFPG administrator's website for posting planning group meeting notices, agendas, materials, and plan information.												\$ -	\$ -	\$ -
10.20 Limited non-labor, direct costs associated with maintenance of the RFPG website.												\$ -	\$ -	\$ -
10.21 Develop agendas, presentations and handouts for the public meetings and hearings to provide to the general public		2	4	8	16							\$ 7,500.00	\$ 4,290.00	\$ 11,790.00
10.22 Document meetings and hearings to include recorded minutes and/or audio recordings as required by RFPG bylaws and archive and provide minutes to public		2	4	8	16							\$ 3,500.00	\$ 4,290.00	\$ 7,790.00
10.23 Prepare and transmit correspondence directly related to public comments on RFP documents		2	4	8	16							\$ 1,200.00	\$ 4,290.00	\$ 5,490.00
10.24 Promote consensus decisions through conflict resolution, including monitoring and facilitating discussions between and among RFPG members and stakeholders, including mediation if necessary		2	4	8	16							\$ 1,200.00	\$ 4,290.00	\$ 5,490.00
10.25 Solicit RFPG membership activities												\$ 1,500.00	\$ -	\$ 1,500.00
10.26 Meet all posting, meeting, hearing and other public notice requirements per Open Meetings Act, statute and 31 TAC 361.21 and other applicable requirements												\$ -	\$ -	\$ -
10.27 Solicit, review and disseminate public input		2	4	8	16							\$ 2,500.00	\$ 4,290.00	\$ 6,790.00
10.28 Incorporate any efforts required as needed to complete RFP according to all statute and rule requirements		2	4	8	16							\$ 2,000.00	\$ 4,290.00	\$ 6,290.00
Task 11 REIMBURSABLE EXPENSES	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL Labor Summary	\$ 2,744.00	\$ 38,250.00	\$ 63,720.00	\$ 102,750.00	\$ 108,480.00	\$ 28,200.00	\$ -	\$ 130,273.00	\$ 196,137.00	\$ 4,590.00	\$ 16,384.00	\$ 507,450.00	\$ 691,528.00	\$ 1,198,978.00
TOTAL Expenses	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
GRAND TOTAL													\$ 691,528.00	\$ 1,198,978.00

EXHIBIT D-2
Fees Schedule

Fee Schedule

PROJECT TASK		COMPLETION DATE
Task 1	Planning Area Description	\$ 23,448
Task 2A	Existing Condition Flood Risk Analyses	\$ 71,124
Task 2B	Future Condition Flood Risk Analyses	\$ 70,600
Task 3A	Evaluation and Recommendation on Floodplain Management Practices	\$ 13,140
Task 3B	Flood Mitigation and Floodplain Management Goals	\$ 8,331
Task 4A	Flood Mitigation Needs Analysis	\$ 21,991
Task 4B	Identification and Evaluation of Potential Flood Management Evaluations and Potentially Feasible Flood Management Strategies and Flood Mitigation Projects	\$ 100,611
Task 4C	Prepare and Submit Technical Memorandum	\$ 15,092
Task 5	Recommendation of Flood Management Evaluations and Flood Management Strategies and Associated Flood Mitigation Projects	\$ 151,361
Task 6A	Impacts of Regional Flood Plan	\$ 37,671
Task 6B	Contributions to and Impacts on Water Supply Development and the State Water Plan	\$ 7,283
Task 7	Flood Response Information and Activities	\$ 6,990
Task 8	Administrative, Regulatory, and Legislative Recommendations	\$ 6,043
Task 9	Flood Infrastructure Financing Analysis	\$ 12,075
Task 10	Public Participation and Plan Adoption	\$ 145,768
SubC	SUB CONSULTANTS	\$ 507,450
TOTAL		\$ 1,198,978

EXHIBIT E
Supplemental Agreement Form

Supplemental Agreement Form

THE STATE OF TEXAS §
COUNTY OF HIDALGO §

SUPPLEMENTAL AGREEMENT NO.
TO AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES
C-HCDD1-XX-XXX-XX-XX

THIS SUPPLEMENTAL AGREEMENT is made pursuant to the terms and conditions of Article 7 of the Agreement for Professional Engineering Services (the "Agreement") entered into on by and between HIDALGO COUNTY DRAINAGE DISTRICT NO. 1, acting herein by and through the BOARD OF DIRECTORS, hereinafter called the "Owner", and Professional Engineers of, Texas, hereinafter called the "Engineer".

WITNESSETH

WHEREAS the Agreement provides that Engineer will provide the Engineering Services for the Project; and

WHEREAS Article 7 of the Agreement provides that all amendments to the terms of the Agreement shall be made by Supplemental Agreement; and

WHEREAS, it has become necessary to amend the Agreement to

NOW THEREFORE, premises considered, the Owner and the Engineer agree that the Agreement is amended as follows:

I. Paragraph of the Agreement, (paragraph title), is revised to

Blank lines for text entry.

All defined terms used herein shall have the meaning ascribed to them in the Agreement.

Except as modified by the terms of this Supplemental Agreement, all other provisions of the Agreement remain unchanged and in full force and effect.

IN WITNESS WHEREOF, the Engineer and the Owner have caused this Supplemental Agreement to be executed as of the _____ day of _____, 20__.

THE ENGINEER:

BY: _____

Address for Giving Notices:

THE OWNER:

HIDALGO COUNTY DRAINAGE DISTRICT NO. 1

BY: _____

Richard F. Cortez, Chairman of the Board
Hidalgo County Drainage District No. 1

APPROVED AS TO FORM:

By: _____ Date: _____

APPROVAL BY HCDD#1 STAFF:

By: _____ Date: _____

Name: _____

Title: _____

LIST OF ATTACHMENTS

(as required)

EXHIBIT F
Certificate of Insurance



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 3/25/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement.

Table with 2 main sections: PRODUCER (Greyling Ins. Brokerage/EPIC) and INSURED (Half Associates, Inc.), and a table listing INSURER(S) AFFORDING COVERAGE (National Fire Ins of Hartford, The Continental Insurance Company, American Casualty Company of Reading, PA, Allied World Surplus Lines Ins, Transportation Insurance Company).

COVERAGES CERTIFICATE NUMBER: 20-21 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES.

Table with columns: INSR LTR, TYPE OF INSURANCE, ADDL INSR, SUBR WVD, POLICY NUMBER, POLICY EFF, POLICY EXP, LIMITS. Contains rows A (Commercial General Liability), E (Automobile Liability), B (Umbrella Liability), C (Workers Compensation and Employers' Liability), and D (Professional Liability).

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) Re: AVO #36617.010; TWDB Contract #2101792500; Regional Flood Plan for Region 15 Lower Rio Grande Regional Flood Planning Group.

Table with 2 columns: CERTIFICATE HOLDER (Hidalgo County Drainage District No.1) and CANCELLATION (SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF...).

DESCRIPTIONS (Continued from Page 1)

Waiver of Subrogation is applicable where required by written contract & allowed by law.