

**Alliance Regional Water Authority  
Technical Committee**

**REGULAR MEETING**



**ALLIANCE WATER**

**COMMITTEE MEMBER PACKETS**

Friday, August 20th, 2021 at 1:00 P.M.

Conference Call Number: 1-903-405-2572  
Code: 662 821 534#

**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**

Friday, August 20th, 2021 at 1:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 662 821 534#

**In accordance with Governor Abbott's Executive Order, declaration of the COVID-19 public health threat, and action to temporarily suspend certain provisions of the Texas Open Meetings Act, a quorum of Alliance Regional Water Authority's (the Authority's) Technical Committee will hold a meeting by telephonic conference call at 1:00 PM, Friday, August 20, 2021. The public may participate in this meeting by calling the following number and code:**

**Conference Call Number: 1-903-405-2572**  
**Code: 662 821 534#**

**Members of the public wishing to make public comment during the meeting must register by emailing [info@alliancewater.org](mailto:info@alliancewater.org) prior to 1:00 p.m. on August 20, 2021. This meeting will be recorded and the audio recording will be available on the Authority's website after the meeting. A copy of the agenda packet will be available on the Authority's website at the time of the meeting. Additional information can be obtained by calling Graham Moore at (512) 294-3214.**

A. CALL TO ORDER

B. ROLL CALL

C. PUBLIC COMMENT PERIOD (Note: Each person wishing to speak must submit a completed Public Comment Form to the Executive Director or his/her designee before the public comment period begins.)

D. CONSENT AGENDA

D.1 Consider approval of minutes of the Regular Technical Committee Meeting held July 14, 2021. ~ *Graham Moore, P.E., Executive Director*

E. PRESENTATIONS TO THE COMMITTEE

E.1 None.

F. ITEMS FOR COMMITTEE ACTION OR DISCUSSION/DIRECTION

F.1 Update and possible direction to Staff regarding the Authority's Phase 1B program. ~ *Ryan Sowa, P.E., Kimley-Horn & Associates*

F.2 Update, discussion and possible direction to Staff regarding the Authority's Phase 1B program recent bid openings. ~ *Graham Moore, P.E., Executive Director*

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- F.3 Possible recommendation to the Board to contingently award a construction contract for the Authority's Phase 1B Booster Pump Station and Delivery Points Project. ~ *Graham Moore, P.E., Executive Director*
- F.4 Possible recommendation to the Board to authorize a Work Order with Freese and Nichols, Inc. for construction administration services on the Authority's Phase 1B Booster Pump Station and Delivery Points Project. ~ *Graham Moore, P.E., Executive Director*
- F.5 Possible recommendation to the Board to authorize a Work Order with CP&Y, Inc. for SCADA programming services for the Authority's Phase 1B infrastructure. ~ *Graham Moore, P.E., Executive Director*
- F.6 Discussion and possible direction to Staff regarding Considerations for Operations of the Authority's Water System. ~ *Graham Moore, P.E., Executive Director*
- F.7 Discussion of legislative issues for the 87th Texas Legislature Special Session #1, and possible direction to Staff. ~ *Graham Moore, P.E., Executive Director*
- F.8 Update on status of groundwater management in project target area, and Gonzales County Underground Water Conservation District, Plum Creek Conservation District, Groundwater Management Area 13, Region L Planning Group, Guadalupe-Blanco River Authority, Hays County and CAPCOG activities. ~ *Graham Moore, P.E., Executive Director*
- G. EXECUTIVE DIRECTOR REPORT - Update on future meeting dates, locations, consultant invoices paid, approved changed orders, status of Authority procurements, Executive Director activities and other operational activities where no action is required. ~ *Graham Moore, P.E., Executive Director*
- H. COMMITTEE MEMBER ITEMS OR FUTURE AGENDA ITEMS – Possible acknowledgement by Committee Members of future area events and/or requests for item(s) to be placed on a future agenda where no action is required.
- I. EXECUTIVE SESSION

**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**

Friday, August 20th, 2021 at 1:00 P.M.

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- I.1 *Executive Session pursuant to the Government Code, Section 551.071 (Consultation with Attorney) and/or Section 551.072 (Real Property Deliberations) regarding:*
  - A. *Water supply partnership options*
  - B. *Groundwater leases*
  - C. *Acquisition of real property for water supply project purposes*
  - D. *Phase 1B Segment A competitive sealed proposals*
  
- I.2 *Action from Executive Session on the following matters:*
  - A. *Water supply partnership options*
  - B. *Groundwater leases*
  - C. *Acquisition of real property for water supply project purposes*
  - D. *Possible direction to Staff regarding the Phase 1B Segment A competitive sealed proposals*

J. ADJOURNMENT

**NOTE:** *The Technical Committee may meet in Executive Session to consider any item listed on this agenda if a matter is raised that is appropriate for Executive Session discussion. An announcement will be made of the basis for the Executive Session discussion. The Technical Committee may also publicly discuss any item listed on the agenda for Executive Session.*

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**COMMITTEE MEMBER PACKETS**  
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**A. CALL TO ORDER**

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No Backup Information for this Item.

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**COMMITTEE MEMBER PACKETS**  
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**B. ROLL CALL**

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<u>NAME</u>	<u>PRESENT</u>
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Blake Neffendorf

James Earp

Vacant

Humberto Ramos

Tim Samford

Regina Franke

<u>NON-VOTING MEMBERS</u>	<u>PRESENT</u>
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Mayor Lee Urbanovsky

**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**

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**C. PUBLIC COMMENT PERIOD**

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Each person wishing to speak must submit a completed Public Comment Form to the Executive Director or his/her designee before the public comment period begins.

Comments are limited to 3-minutes per agenda item and three minutes total for all non-agenda topics. If using a translator, comments are limited to six minutes per agenda item and six minutes total for non-agenda topics.

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**D. CONSENT AGENDA**

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Item D.1 is presented as part of the consent agenda.



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**COMMITTEE MEMBER PACKETS**

Friday, August 20th, 2021 at 1:00 P.M.

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**D.1** Consider approval of minutes of the Technical Committee Meeting held July 14, 2021. ~ *Graham Moore, P.E., Executive Director*

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Attachment(s)

- 2021 07 14 Technical Committee Meeting Minutes

**Technical Committee decision needed:**

- Approval of minutes.



## ALLIANCE WATER

### Alliance Regional Water Authority

### TECHNICAL COMMITTEE MEETING

### MINUTES

**Wednesday, July 14, 2021**

The following represents the actions taken by the Technical Committee of the Alliance Regional Water Authority (Alliance Water) in the order they occurred during the meeting. The Technical Committee convened in a meeting on Wednesday, July 14, 2021 by telephonic conference call in accordance with Governor Abbott's Executive Order, declaration of the COVID-19 public health threat, and action to temporarily suspend certain provisions of the Texas Open Meetings Act.

A. CALL TO ORDER.

**The Alliance Water Technical Committee Meeting was called to order at 3:02 p.m. by Mr. Earp.**

B. ROLL CALL.

- **Present: Neffendorf, Earp, Ramos, Samford and Franke.**
- **Absent: San Marcos Vacant Seat and Urbanovsky.**

C. PUBLIC COMMENT PERIOD

- **None.**

D. CONSENT AGENDA

D.1 Consider approval of minutes of the Special Technical Committee Meeting held June 9, 2021.

- **Motion to adopt the minutes as presented was made by Mr. Earp, seconded by Mr. Ramos and approved on a 5-0 vote.**

E. PRESENTATIONS TO THE COMMITTEE

E.1 None.

## F. ITEMS FOR COMMITTEE ACTION OR DISCUSSION/DIRECTION

- F.1 Update and possible direction to Staff regarding the Authority's Phase 1B program.
- **Mr. Sowa provided an update on the Phase 1B program.**
  - **Mr. Taggart, as a member of the public, asked how the yields of the wells turned out.**
  - **Mr. Moore responded that yields are slightly higher than what RW Harden & Associates had anticipated.**
  - **Mr. Ramos asked why the budget update is showing a \$100,000 cost savings on the Operations Facility, since the project is on hold.**
  - **Mr. Sowa responded that the project is on hold and that the cost savings were identified much earlier in the process, shortly after the budget was created. He confirmed that no design work is underway for the facility.**
  - **No Action.**
- F.2 Discussion and possible recommendation to the Board regarding the Agreement between GVEC and ARWA for the Distribution Lines and Supply to the ARWA WTP and Well Sites 7, 8 & 9.
- **Mr. Ramos inquired if legal counsel has reviewed.**
  - **Mr. Moore responded that he has not, but will prior to it being signed.**
  - **Mr. Neffendorf inquired if the costs included are from GVEC and if they are all-inclusive.**
  - **Mr. Moore responded yes to both questions.**
  - **Motion to recommend to the Board approval of the agreement with GVEC for Distribution and Supply to the Authority's WTP and Well Sites was made by Mr. Ramos, seconded by Mr. Neffendorf and approved on a 5-0 vote.**
- F.3 Discussion and possible recommendation to the Board regarding a Master Agreement and initial Work Order with HVJ Associates for Materials Testing for the Water Treatment Plant and Raw Water Infrastructure project.
- **Mr. Moore presented the basic information regarding the agreement with HVJ.**
  - **Mr. Ramos inquired how much over the budget cost is the material testing.**
  - **Mr. Moore responded that it is approximately \$65,000.**
  - **Motion to recommend to the Board approval of a Master Agreement and Work Order with HVJ Associates for Materials Testing for the Water Treatment Plant and Raw Water Infrastructure was made by Mr. Ramos, seconded by Mr. Earp and approved on a 5-0 vote.**

- F.4 Discussion and possible recommendation to the Board regarding the addition of a new delivery point at the Authority's Phase 1B Segment C Pipeline as requested by the City of Kyle.
- **Mr. Moore provided background information on the request by the City of Kyle to add a new delivery point.**
  - **Mr. Earp noted that addition of new delivery points after design started is what triggers payment for the delivery point by the requestor.**
  - **Motion to recommend to the Board the continuance of discussions of the addition of a delivery point for Kyle on the Authority's 1B Segment C Pipeline project was made by Mr. Ramos, seconded by Mr. Neffendorf and approved on a 5-0 vote.**
- F.5 Discussion and possible recommendation to the Board regarding approval of a Work Order with AECOM for the Blanco Basin Wastewater Treatment Plant Feasibility Study Update.
- **Mr. Moore provided an update of the previous study and the need for the updated data.**
  - **Mr. Samford asked if the report captures the area west of Kyle.**
  - **Mr. Moore responded that it does cover that area.**
  - **Mr. Ramos asked if other CCNs are included and if costs are projected.**
  - **Mr. Moore responded that yes other wastewater CCNs are included in the study and that projected capital costs will be included in the report.**
  - **Motion to recommend to the Board approval of a Work Order with AECOM for the Blanco Basin Wastewater Treatment Plant Feasibility Study Update was made by Mr. Ramos, seconded by Mr. Earp and approved on a 5-0 vote.**
- F.6 Discussion of possible recommendation to the Board to adopt the Authority's Authority budget for FY 2021-22.
- **Mr. Moore presented the draft budget.**
  - **Motion to recommend to the Board the adoption of the Authority's FY 2021-22 was made by Mr. Neffendorf, seconded by Mr. Samford and approved on a 5-0 vote.**
- F.7 Review and possible direction to Staff regarding change order procedures included in the Authority's Purchasing Policy.
- **Mr. Moore provided an overview of the Authority's change order procedures.**
  - **No Action.**

F.8 Discussion of legislative issues for the 87th Texas Legislature Special Session #1, and possible direction to Staff.

- **Mr. Moore provided an update on the current session and legislation.**
- **No Action.**

F.9 Update on status of groundwater management in project target area, and Gonzales County Underground Water Conservation District, Plum Creek Conservation District, Groundwater Management Area 13, Region L Planning Group, Guadalupe-Blanco River Authority, Hays County and CAPCOG activities.

- **Mr. Moore provided an update.**
- **No Action.**

G. EXECUTIVE DIRECTOR REPORT

- **No Action.**

H. COMMITTEE MEMBER ITEMS OR FUTURE AGENDA ITEMS

- **No Items.**

I. EXECUTIVE SESSION

I.1 Executive Session on the following matters:

- A. Water supply partnership options
- B. Groundwater leases
- C. Acquisition of real property for water supply project purposes
- **No Executive Session.**

I.2 Action from Executive Session on the following matters:

- A. Water supply partnership options
- B. Groundwater leases
- C. Acquisition of real property for water supply project purposes
- **No Action.**

J. ADJOURNMENT

- **Meeting was adjourned at 4:03 p.m. by Mr. Earp.**

**APPROVED:** \_\_\_\_\_, 2021

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- F.1** Update and possible direction to Staff regarding the Authority's Phase 1B program.  
~ *Ryan Sowa, P.E., Kimley-Horn & Associates*
- 

Background/Information

Ryan Sowa with Kimley-Horn will update the Committee on their recent activities associated with the Phase 1B program.

Attachment(s)

- Phase 1B Program Update – August 20, 2021
- Kimley-Horn Monthly Summary of Activities for July 2021

**Technical Committee Decisions Needed:**

- None.



# Phase 1B Program Update

Technical Committee Meeting  
August 20, 2021



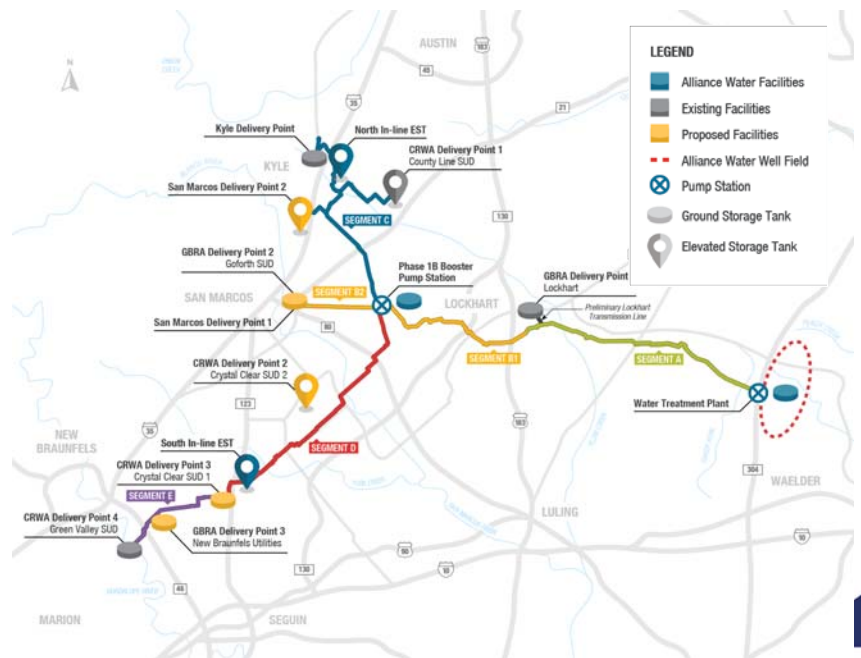
**ALLIANCE WATER**

PRESENTED BY **Kimley»Horn**  
Expect More. Experience Better.

## Ongoing Progress

### ► Design Milestone Status

- Design Submittals
  - Pipeline Segment C (100%) – August
  - Pipeline Segment E (100%) – September
  - Inline EST (60%) – September
- TWDB Reviews
  - Segment A
    - Approved for Procurement
    - Anticipated Release of Funds for Design Effort
  - Booster Pump Station & Delivery Points
    - Approved for Procurement
  - Segment B
    - Engineering Feasibility Report, Environmental Data Report, and Plans/Specifications Under Review



# Ongoing Progress

## ► Procurement/Construction Status

- Water Treatment Plant & Raw Water Infrastructure
  - Contractor has mobilized to the site
  - Upcoming work – site clearing
  
- Pipeline Segment A / Booster Pump Station & Delivery Points
  - Proposals Received (separate agenda item)
  - Anticipated NTP – October 15
  
- Pipeline Segment B
  - Preparing for Bidding



# Pipeline Easement Acquisition Status

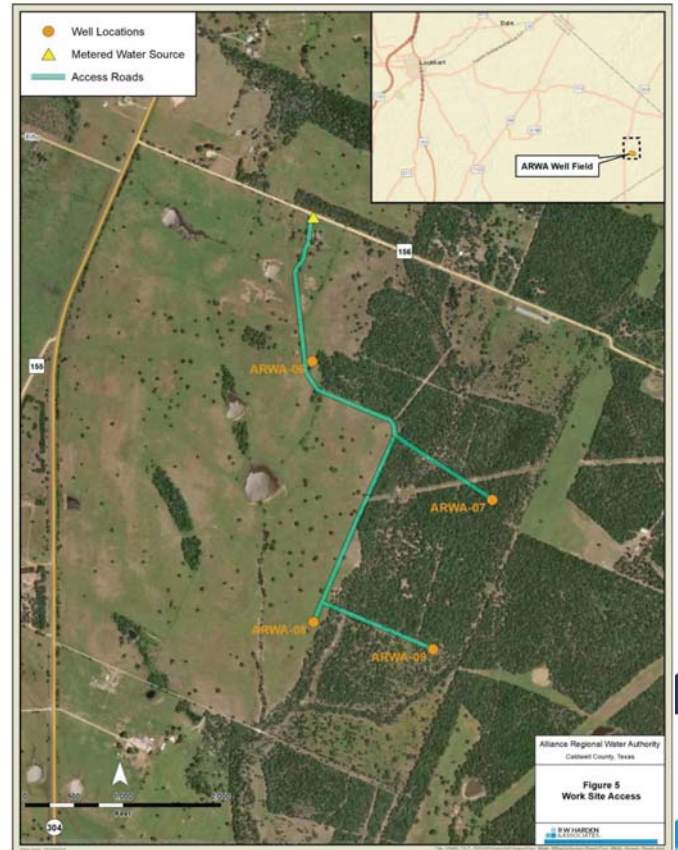
Pipeline Segment	Number of Parcels	STATUS						
		(A) Appraisal/Offer in Development	(B) Negotiation (Initial Offer)	(C) Negotiation (Final Offer)	(D) = (A+B+C) Appraisal / Negotiation	(E) Condemnation in Process	(F) = (D+E) Possession Still Needed	(G) Purchase Agreement Signed / Possession Obtained
A	39	0	0	0	0	3	3	36
B	52	0	0	0	0	20	20	32
D	57	0	0	6	6	31	37	20
C	74	15	30	10	55	10	65	9
E	37	10	4	3	17	17	34	3
Well Field	20	17	0	0	17	3	20	0
<b>Total</b>	<b>279</b>						<b>179</b>	<b>100</b>





# Well Drilling Construction Progress

- ▶ Actual Progress (last 30 days)
  - All Wells Finalized
  - Pouring Well Pads – Starting this Week
- ▶ Anticipated Progress (next 30 days)
  - Complete Well Pads
  - Substantial Completion Walkthrough



## Budget Update

## COST UPDATES BASED ON JULY MILESTONE SUBMITTALS

		ORIGINAL (FEB. 2019)	REVISED	
	Construction Package	ARWA Total Projected Cost	ARWA Total Projected Cost	DIFFERENCE
<b>Submittal (%) Combined Program Infrastructure</b>				
Const.	Water Treatment Plant	\$ 25,200,000	\$ 29,600,000	\$ 4,400,000
100	Booster Pump Station & GBRA Meter Stations	\$ 12,100,000	\$ 12,900,000	\$ 800,000
30	Inline EST (South)	\$ 3,600,000	\$ 3,600,000	\$ 0
100	Pipeline Segment A	\$ 27,200,000	\$ 26,400,000	(\$ 800,000)
100	Pipeline Segment B	\$ 27,100,000	\$ 32,400,000	\$ 5,300,000
100	Pipeline Segment D	\$ 36,300,000	\$ 37,700,000	\$ 1,400,000
90	Pipeline Segment E	\$ 9,500,000	\$ 10,300,000	\$ 800,000
	<b>Subtotal</b>	<b>\$141,000,000</b>	<b>\$152,900,000</b>	<b>\$ 11,900,000</b>
<b>ARWA-Only Infrastructure</b>				
Const.	Well Drilling	\$ 3,800,000	\$ 3,300,000	(\$ 500,000)
Const.	Raw Water Infrastructure	\$ 7,000,000	\$ 10,700,000	\$ 3,700,000
100	ARWA Booster Pump Station & Delivery Points	\$ 7,700,000	\$ 4,900,000	(\$ 2,800,000)
30	Inline EST (North)	\$ 5,400,000	\$ 6,600,000	\$ 1,200,000
60	Pipeline Segment C	\$ 64,500,000	\$ 62,500,000	(\$ 2,000,000)
90	Pipeline Segment E (ARWA-Only)	\$ 6,700,000	\$ 11,400,000	\$ 4,700,000
No Design	Administration and Operations Building	\$ 4,300,000	\$ 4,200,000	(\$ 100,000)
	<b>Subtotal</b>	<b>\$ 99,400,000</b>	<b>\$103,600,000</b>	<b>\$ 4,200,000</b>
<b>Total</b>		<b>\$240,400,000</b>	<b>\$256,500,000</b>	<b>\$16,100,000</b>

AUGUST 2021 UPDATE

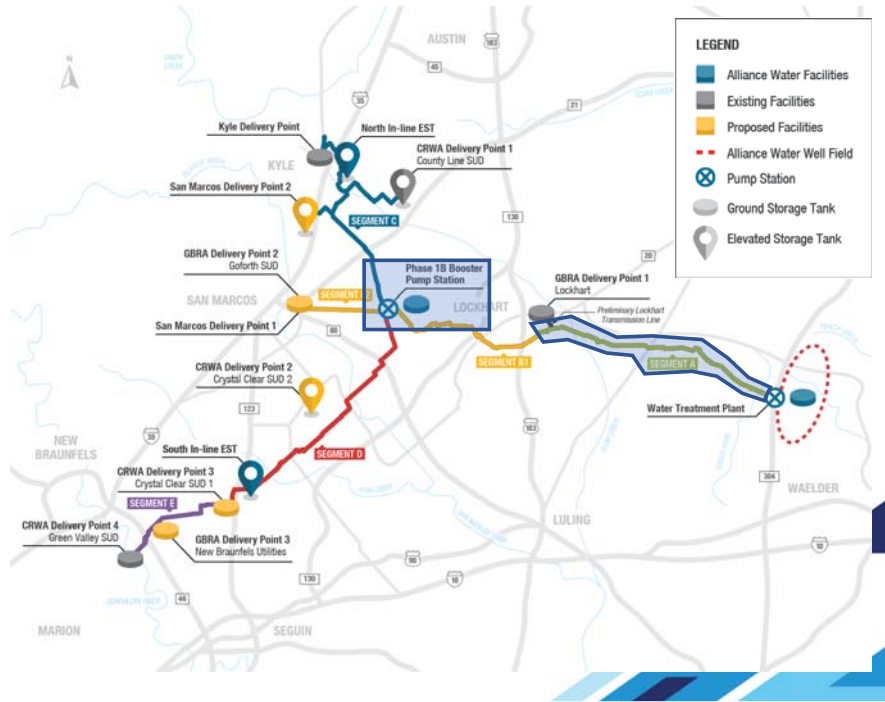
**NO CHANGE FROM  
JULY UPDATE**



# Consulting Services

# Construction Phase Services

- ▶ Construction Phase Services Template
- ▶ Projects on this Agenda:
  - Pipeline Segment A
  - Booster Pump Station
- ▶ Projects Upcoming:
  - Pipeline Segment B



## Pipeline Segment A

- ▶ Construction Phase Services (Hourly not to Exceed)
- ▶ Basic Services Scope to Include:
  - Construction Progress Meetings
  - Periodic Site Visits
  - Shop Drawing Submittals
  - Requests for Information
  - Requests for Proposals, Change Orders
  - Final Walkthroughs
  - Record Drawings



# Pipeline Segment A

- ▶ Construction Phase Services (Hourly not to Exceed)
- ▶ Supplemental Services Scope to Include:
  - Verifying / Resetting Horizontal and Vertical Control
  - Additional Meetings / Site Visits
  - Review of Additional Submittals, Substitutions, etc.
- ▶ Basic Services Fee = \$486,610.00
- ▶ Supplemental Services Fee = \$119,347.91



# Booster Pump Station & Delivery Points

- ▶ Construction Phase Services (Hourly not to Exceed)
- ▶ Basic Services Scope to Include:
  - Construction Progress Meetings
  - Periodic Site Visits
  - Shop Drawing Submittals
  - Requests for Information
  - Requests for Proposals, Change Orders
  - Final Walkthroughs
  - Record Drawings





# Booster Pump Station & Delivery Points

- ▶ Construction Phase Services (Hourly not to Exceed)
- ▶ Supplemental Services Scope to Include:
  - City of Maxwell Delivery Point Design
  - Specialty Observations
  - Additional Meetings / Site Visits
  - Additional Commissioning Assistance
  - Pump / PLC Witness Testing
- ▶ Basic Services Fee = \$497,224.00
- ▶ Supplemental Services Fee = \$95,716.00



Questions?

August 11, 2021

## **Project Monthly Summary**

### **July 2021 Tasks Performed:**

- Task 2 – Stakeholder Coordination
  - Coordination and/or meetings with entities including: Caldwell County, Guadalupe County, Bluebonnet Electric Coop, TxDOT, TCEQ, and TWDB.
  - Continued weekly task coordination with Alliance Water.
  - Prepared and presented the Technical Committee Update.
  - Prepared and presented the Board Meeting Update.
  - Prepared and presented the Project Advisory Committee Meeting Update.
  - Prepared for and held Monthly Status Meeting with Alliance Water.
  
- Task 3 – Budgeting
  - Prepared documentation for the upcoming Land Acquisition Cost Presentation.
  - Prepared and presented the monthly Budget Update for the Board meeting.
  - Continued updates to Budget Workbook to include monthly tracking of actual costs for ARWA review.
  
- Task 4 – Schedule
  - Revised Project Deliverable Schedule based on the feedback received from ARWA and Design Consultants.
  - Coordinated with Program team to integrate each project schedule into overall Program schedule. Developed and distributed the monthly Program schedule summary.
  
- Task 6 – Data Management
  - Ongoing maintenance of Microsoft SharePoint Online program.
  - Continued updating of web-based GIS for easement acquisition process and alignment changes.
  
- Task 7 – Environmental Management
  - Continued coordination with Program Environmental Consultant concerning the comment responses to the United States Army Corps of Engineers.
  - Coordinated with the Program Environmental Consultant regarding Inline Elevated Storage Tank site field work.
  - Continued coordination with the Program Environmental Consultant regarding additional hazmat studies for Segments C and E.
  - Performed coordination between Program Environmental Consultant and Land Acquisition Consultant to clarify environmental field work to be done on properties as part of right-of-entry process.

**Alliance Water – Phase 1B Infrastructure – Owner’s Representative**

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- Monthly progress meeting and ongoing coordination with Program Environmental Consultant.
- Continued coordination between Program Environmental Consultant and Design Engineers.
- Reviewed Program Environmental invoices, schedule, and risk log.
  
- Task 8 – Land Acquisition Management
  - Coordinated the appraisal process for Segments C, D, E, and W parcels.
  - Coordinated with Program Survey Consultant, Program Environmental Consultant, and Land Acquisition team to address questions that arise as part of the field work coordination process.
  - Performed weekly QC of parcel files in SharePoint, provided comments to Land Acquisition team.
  - Weekly coordination meeting with land agents to discuss status of rights-of-entry and to provide Program clarification on any questions/requests that have come from landowners.
  - Reviewed Program Land Acquisition team, Program Appraiser, and Program Survey invoices.
  - Continued field work coordination to notify landowners of upcoming field work by consultants.
  
- Task 9 – Texas Water Development Board Management
  - Continued coordination with TWDB Staff to track all EFRs, environmental reports, and bid documents currently under review.
  
- Task 10 – Design Standards
  - Revised and the Pipeline Construction Standards based on comments received during Segment A and BPS Advertising.
  
- Task 11 – Engineering Design Management
  - Pipelines:
    - Segment A
      - Continued coordination with Design Consultant for final design and procurement development.
    - Segment B
      - Continued coordination with Design Consultant for final design and preparation for bidding.
    - Segment C
      - Continue coordination with Design Consultant.
      - Continued coordination with Design Consultant regarding ongoing field work and pipeline alignment considerations as part of right-of-entry process and EFR development.
    - Segment D
      - Continued coordination with Design Consultant for final design and preparation for bidding.

**Alliance Water – Phase 1B Infrastructure – Owner’s Representative**

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- Segment E
      - Continued coordination with Design Consultant for final design.
  - Wellfield:
    - Continued coordination regarding the construction for Wells 6-9.
  - Raw Water Infrastructure:
    - Continued coordination with Design Consultant for pre-construction phase services.
  - Water Treatment Plant:
    - Continued coordination with Design Consultant concerning Hydraulics/Surge development.
    - Continued coordination with Design Consultant for pre-construction phase services.
  - Booster Pump Station:
    - Coordinated with Design Consultant for final design and procurement development.
  - Inline Elevated Storage Tanks:
    - Began review of the 60% design submittal prepared by the Design Consultant.
    - Continued coordination with Design Consultant for 60% design development.
  - Other:
    - Monthly progress meetings with all Design Consultants (pipelines, water treatment plant, raw water infrastructure, wellfield, booster pump station).
    - Review invoices, schedules, and risk logs for consultants.
- Task 13 – Electrical Power Planning
  - Continued coordination with ARWA and GVEC to develop agreement language for service to the well field.
  - Continued coordination with GVEC regarding electric service to the WTP and wellfield.
- Task 14 – Permit Coordination/Tracking
  - Continued Permit coordination with Pipeline Consultants.
  - Continued coordination with Caldwell, Guadalupe, and Hays County TxDOT offices concerning roadway crossings.
  - Continued coordination with Hays County concerning the Site Development Permit.
  - General Coordination with TxDOT.
  - Continued General Coordination with TxDOT.
  - Continued General Coordination with GVEC and BBEC.
  - On-going Permit Tracking Log Updates.
- Task 15 – Procurement and Construction Phase Services



**Alliance Water – Phase 1B Infrastructure – Owner’s Representative**

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- Coordinated with Segment A and BPS Design Consultants during the procurement phase.
  - Prepared for and attended Segment A and BPS Pre-Proposal Meeting.
  - Responded to applicable Program-related questions submitted for procurement phase for Segment A and BPS.
  - Compiled proposal data from Segment A and BPS submittals and coordinated with design consultant for proposer references.
  - On-going coordination with WTP and RWI Design Consultants during the construction phase.
- Task 16 – Other Services
    - Commissioning Planning
      - Continued evaluation of the Phase 1B infrastructure commissioning.

**August 2021 Projection:**

- Task 2 – Stakeholder Coordination
  - Coordination and/or meetings with entities including: Caldwell County, Guadalupe County, GVEC, Bluebonnet Electric Coop, TxDOT, TCEQ, and TWDB.
  - Continue weekly task coordination with Alliance Water.
  - Prepare and present the Technical Committee Update.
  - Prepare and present Project Advisory Committee Meeting Update.
  - Prepare and present Board Meeting Update.
  - Prepare for and hold Monthly Status Meeting with Alliance Water.
- Task 3 – Budgeting
  - Prepare and present the Land Acquisition Cost Presentation.
  - Prepare and present the monthly Budget Update for the Board meeting.
  - Continue updates to Budget Workbook to include monthly tracking of actual costs for ARWA review.
  - Continue development of projected Operation and Maintenance costs and address feedback received from ARWA.
- Task 4 – Schedule
  - Revise the Project Deliverable Schedule based on the feedback received from ARWA and Design Consultants.
  - Coordinate with Program team to integrate each project schedule into overall Program schedule. Develop and distribute schedule update and memorandum.
- Task 6 – Data Management
  - Ongoing maintenance of Microsoft SharePoint Online program.
  - Continued updating of web-based GIS for easement acquisition process and alignment changes.

**Alliance Water – Phase 1B Infrastructure – Owner’s Representative**

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- Task 7 – Environmental Management
  - Review the Segment C Hazmat Phase II and Technical Documents report prepared by the Environmental Consultant.
  - Continue coordination with Program Environmental Consultant concerning the comment responses to the United States Army Corps of Engineers.
  - Continued coordination with the Program Environmental Consultant regarding additional hazmat studies for Segment C and E.
  - Perform coordination between Program Environmental Consultant and Land Acquisition Consultant to clarify environmental field work to be done on properties as part of right-of-entry process.
  - Monthly progress meeting and ongoing coordination with Program Environmental Consultant.
  - Continue coordination between Program Environmental Consultant and Design Engineers.
  - Review Program Environmental invoices, schedule, and risk log.
  
- Task 8 – Land Acquisition Management
  - Coordinate the appraisal process for Segment C, D, E, and W parcels.
  - Coordinate with Program Survey Consultant, Program Environmental Consultant, and Land Acquisition team to address questions that arise as part of the field work coordination process.
  - Perform weekly QC of parcel files in SharePoint, provide comments to Land Acquisition team.
  - Weekly coordination meeting with land agents to discuss status of rights-of-entry and to provide Program clarification on any questions/requests that have come from landowners.
  - Review Program Land Acquisition team, Program Appraiser, and Program Survey invoices.
  - Continue field work coordination to notify landowners of upcoming field work by consultants.
  
- Task 9 – Texas Water Development Board Management
  - Continue coordination with TWDB Staff to track all EFRs, environmental reports, and bid documents currently under review.
  
- Task 10 – Design Standards
  - Revise and distribute the Pipeline Construction Standards based on comments received during Segment A and BPS Advertising.
  
- Task 11 – Engineering Design Management
  - Pipelines:
    - Segment A
      - Continue coordination with Design Consultant for final design and procurement development.

**Alliance Water – Phase 1B Infrastructure – Owner’s Representative**

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- Segment B
    - Continue coordination with Design Consultant for final design and preparation for bidding.
  - Segment C
    - Begin review of the Segment C 100% design submittal prepared by the Design Consultant.
    - Continue coordination with Design Consultant for final design.
    - Continue coordination with Design Consultant regarding ongoing field work and pipeline alignment considerations as part of right-of-entry process and EFR development.
  - Segment D
    - Continue coordination with Design Consultant for final design and preparation for bidding.
  - Segment E
    - Begin review of the Segment E 100% design submittal prepared by the Design Consultant.
    - Continue coordination with Design Consultant for final design.
- Wellfield:
  - Continue coordination regarding the construction of Wells 6-9.
- Raw Water Infrastructure:
  - Continued coordination with Design Consultant for pre-construction phase services.
- Water Treatment Plant:
  - Continue coordination with Design Consultant concerning Hydraulics/Surge development.
  - Continued coordination with Design Consultant for pre-construction phase services.
- Booster Pump Station:
  - Coordination with Design Consultant for final design and procurement development.
- Inline Elevated Storage Tanks:
  - Finalized review of the 60% design submittal prepared by the Design Consultant.
  - Attend the Inline Elevated Storage Tank 60% Design Workshop.
  - Coordination with Design Consultant for 90% design development.
- Other:
  - Monthly progress meetings with all Design Consultants (pipelines, water treatment plant, raw water infrastructure, wellfield).
  - Review invoices, schedules, and risk logs for consultants.
- Task 13 – Electrical Power Planning
  - Continue coordination with ARWA and GVEC to develop agreement language for service to the well field.

**Alliance Water – Phase 1B Infrastructure – Owner’s Representative**

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- Continue coordination with GVEC regarding electric service to the WTP and wellfield.
- Task 14 - Permit Coordination/Tracking
  - Continue Permit coordination with Pipeline consultants
  - Coordinate with Hays County concerning the Site Development Permit.
  - General Coordination with TxDOT.
  - Coordinate with Caldwell, Guadalupe, and Hays County TxDOT offices concerning roadway crossings.
  - General Coordination with GVEC and BBEC.
  - On-going Permit Tracking Log Updates.
- Task 15 - Procurement and Construction Phase Services
  - On-going coordination with Segment A and BPS Design Consultants during the procurement phase, including review of proposals
  - Coordination with Segment B to prepare for bidding.
- Task 16 - Other Services
  - Finalize additional solar analysis and memo to address ARWA’s comments.
  - Commissioning Planning
    - Finalize the evaluation of the Phase 1B infrastructure commissioning for ARWA’s review.
  - Finalize and submit the City of San Marcos Watershed Protection Plan for the Booster Pump Station Plat.

**Scope Elements Added/Removed:**

None at this time.

**Outstanding Issues/Concerns:**

None at this time.

**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**

Friday, August 20th, 2021 at 1:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 662 821 534#

- F.2** Update, discussion and possible direction to Staff regarding the Authority's Phase 1B program recent bid openings. ~ *Graham Moore, P.E., Executive Director*
- 

Background/Information

Attached is a presentation regarding the recent bid openings for the Booster Pump Station Delivery Pont and Segment A projects. The Booster Pump Station project includes a recommendation for awarding the contract.

Attachment(s)

- Attached is a presentation regarding the recent bid openings for the Booster Pump Station Delivery Pont and Segment A projects. The Booster Pump Station project includes a recommendation for awarding the contract.

**Technical Committee Decision Needed:**

- Possible direction to Staff.

# Alliance Regional Water Authority

## Booster Pump Station & Segment A Bid Openings

August 20, 2021



1

### Meeting Agenda

#### **Booster Pump Station**

- Summary of Proposals Received
- Alternative Bid Items
- Review Team Total Combined Score
- Recommendation

#### **Segment A Pipeline**

- Summary of Proposals Received



2

# Booster Pump Station

## Summary of Proposals Received

Proposal Price	Alt Description	Proposal Company		
		Archer Western	MWH Construction	Thalle
Base Proposal		\$16,610,000.00	\$16,250,331.00	\$16,386,000.00
Alt A	Ductile Iron	\$3,938,000.00	\$3,011,000.00	\$4,235,000.00
Alt B	Steel Pipe	\$4,577,000.00	\$3,843,000.00	\$7,220,000.00
Alt C	Reinforced Concrete	\$4,864,000.00	\$4,297,000.00	\$5,466,000.00
Alt D	5.0 MG Storage Tank	\$3,538,000.00	\$3,498,000.00	\$3,830,000.00
Savings if Awarded Both				(\$1,100,00.00)
Recommended Option (Base + Alt A + Alt D + Savings)		\$21,084,000.00	\$19,759,331.00	\$20,151,000.00



## Criteria for Selection

- Proposal Price (40 Points)
- Quality Reputation, and Ability to Complete Similar Projects on Schedule and Within Budget (20 Points)
- Key Personnel (15 Points)
- Project Approach (15 Points)
- Safety Record (5 Points)
- Historically Underutilized Business (HUB) Program Compliance Plan (5 Points)



## Review Team Total Combined Score

Criteria	Archer Western	MWH Construction	Thalle
Proposal Price (40 Points)	36.1	39.6	35.2
Quality, Reputation, and Ability to Complete Similar Projects on Schedule and Within Budget (20 Points)	18.8	16	13.5
Key Personnel (15 Points)	13.9	12	10.2
Project Approach (15 Points)	13.6	13.3	9.6
Safety Record (5 Points)	4.4	3.9	3.7
Historically Underutilized Business (HUB) Program Compliance Plan (5 Points)	1	4.6	2.6
<b>Total (100 Points Possible)</b>	<b>87.8</b>	<b>89.4</b>	<b>74.8</b>



## ARWA-GBRA Booster Pump Station Cost Split

Proposal Item	Cost Split				
	MWH Constructors	ARWA (%)	GBRA (%)	ARWA Cost	GBRA Cost
Base Bid	\$15,020,331.00	60.27	39.73	\$9,052,850.33	\$5,967,480.67
Allowances	\$1,230,000.00	95.42	4.58	\$1,173,619.28	\$56,380.72
<b>Sub-Total</b>	<b>\$16,250,331.00</b>			<b>\$10,226,469.61</b>	<b>\$6,023,861.39</b>
Alt A	\$3,011,000.00	64.49	35.51	\$1,941,793.90	\$1,069,206.10
Alt D	\$3,948,000.00	38.35	61.65	\$1,341,460.39	\$2,156,539.61
<b>TOTAL</b>	<b>\$19,759,331.00</b>			<b>\$12,359,243.29</b>	<b>\$7,400,087.71</b>

- ARWA Budget for BPS Construction = \$14,062,000





## Recommendation

- It is the recommendation that **MWH Constructors** be selected as the General Contractor for the Alliance Regional Water Authority Booster Pump Station and Delivery Points Projects.
- Award Bid Alternative No. A for **ductile iron** yard piping.
- Award Bid Alternative No. D for increasing the ground storage tank to a **5 million gallon** storage tank.



## Segment A Summary of Proposals Received

Proposal Price	Proposal Company						
	BRH Garver	Cash	Garney	McKee	Primoris	SJ Louis	Thalle
Base Proposal	\$7,187,628.00	\$6,341,812.45	\$10,758,104.59	\$9,017,848.50	\$13,028,656.60	\$10,174,072.07	\$9,376,690.00
Base + Alt A (42" DI)	No Bid	No Bid	\$57,741,206.09	\$65,868,998.50	No Bid	\$61,007,916.26	\$55,320,518.00
Base + Alt B (42" CSC)	\$4,577,000.00	\$43,409,914.45	\$47,348,257.34	\$44,143,760.50	No Bid	\$49,361,367.90	\$45,146,104.00
Base + Alt C (42" Steel)	\$4,864,000.00	\$44,086,774.45	\$45,580,321.93	\$46,586,284.50	\$57,842,734.60	\$49,812,634.80	\$44,932,622.00
Base + Alt D (48" DI)	\$3,538,000.00	No Bid	\$69,788,431.19	\$70,230,648.50	No Bid	\$70,519,097.16	\$67,042,418.00
Base + Alt E (48" CSC)	\$51,422,168.00	\$49,152,432.45	\$52,996,121.47	\$50,603,223.50	No Bid	\$54,172,434.76	\$50,551,108.00
Base + Alt F (48" Steel)	\$51,669,693.00	\$48,217,059.45	\$50,448,485.65	\$56,796,766.50	\$62,669,279.00	\$54,076,738.14	\$48,340,297.00

**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**

Friday, August 20th, 2021 at 1:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 662 821 534#

- F.3** Possible recommendation to the Board to contingently award a construction contract for the Authority's Phase 1B Booster Pump Station and Delivery Points Project. ~ *Graham Moore, P.E., Executive Director*
- 

Background/Information

Alliance Water sought proposals for the Phase 1B Booster Pump Station and Delivery Points Project starting in June with proposals submitted on August 3, 2021. In accordance with the Authority's policies and Texas Water Development Board (TWDB) requirements, the project was advertised for two consecutive weeks in the Hays Free Press and in the Lockhart Post-Register.

The project includes a new outdoor pump station with seven pumps and provisions for three future pumps, electrical, SCADA and instrumentation, new flow meter vaults, on-site yard piping, detention pond and drainage improvements and a 4 million gallon storage tank. Three different yard piping materials were included as add alternates: ductile iron, concrete steel cylinder pipe and welded steel pipe. Finally, a bid alternate to install a 5 million gallon storage tank was included.

A total of three proposals were received. The bidding documents utilized a Competitive Sealed Proposal (CSP) process whereby cost is considered but so too are the qualifications of the contractor to perform the work. MWH Constructors was the lowest bidder and also scored the best when all criteria were considered.

Staff is recommending that the ductile iron yard piping additive alternate be selected along with the bid alternat to increase the tank size to 5 million gallons.

Staff is requesting a recommendation from the Technical Committee to the Board on the award of the project.

Attachment(s)

- Review Committee Combined Scoring Sheet

**Technical Committee Decision Needed:**

- Possible recommendation to the Board to recommend contingently awarding the Booster Pump Station and Delivery Points Project to MWH Constructors with Bid Alternates A and D.

## Booster Pump Station & Delivery Point Review

	Archer Western	MWH	Thalle
Proposal Price - The lowest responsible Offeror's Proposal Price determines the baseline. All other Offeror's Proposal Price will be awarded points accordingly (40 Points)	36.1	39.6	35.2
Quality, Reputation, and Ability to Complete Similar Projects on Schedule and Within Budget (20 Points)	18.8	16.0	13.5
Key Personnel - will be evaluated for experience with the type and scope of work required for this Project, previous work history as a team, definition of roles in previous experience, and length of time with the company. (15 Points)	13.9	12.0	10.2
Project Approach - consider the Offeror's proposed number of crews, equipment assigned to each crew, and the Offeror's overall approach to completing the project within the specified time. (15 Points)	13.6	13.3	9.6
Safety Record (5 Points)	4.4	3.9	3.7
Historically Underutilized Business (HUB) Program Compliance Plan (5 Points)	1.0	4.6	2.62
<b>Total (100 Points Possible)</b>	<b>87.8</b>	<b>89.4</b>	<b>74.9</b>

**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**

Friday, August 20th, 2021 at 1:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 662 821 534#

- F.4** Possible recommendation to the Board to authorize a Work Order with Freese and Nichols, Inc. for construction administration services on the Authority's Phase 1B Booster Pump Station and Delivery Points Project. ~ *Graham Moore, P.E., Executive Director*
- 

Background/Information

Alliance Water entered into a Work Order in March 2020 with Freese & Nichols, Inc. (Freese & Nichols) to provide final design engineering services for the Phase 1B Booster Pump Station and Delivery Points project. The final design is complete and the construction notice-to-proceed is expected to be issued in October. In order to maintain progress, Staff has negotiated a scope and fee with Freese & Nichols to provide construction administration and construction engineering services for the Phase 1B Booster Pump Station and Delivery Points project.

Below are some of the key facts regarding the proposal:

Firm: Freese & Nichols, Inc.  
Fee: \$592,940 (50% ARWA)  
Work Order Type: Hourly, Not-to-Exceed  
Anticipated Duration: 28 months  
Project Manager: David Bennett, P.E.  
Key Subconsultants: Gupta & Associates

Staff is requesting that the Committee recommend Board approval of a Work Order with a fee for the basic services of \$497,224.00 and a fee for supplemental effort in an amount not-to-exceed \$95,716.00 for a total fee of \$592,940. The Executive Director will be given the discretion to authorize the supplemental effort if needed.

Attachment(s)

- August 17, 2021 - Booster Pump Station and Delivery Points Construction Phase Services.

**Technical Committee Decision Needed:**

- Possible recommendation to the Board to approve a work order with Freese & Nichols, Inc. for Construction Phase Services on the Phase 1B Booster Pump Station and Delivery Points Project.

August 17, 2021

Tyler Kay, P.E.  
 Program Manager - ARWA  
 Kimley-Horn  
 7740 N 16th St, Suite 300  
 Phoenix, AZ 85020

Re: Alliance Regional Water Authority - Phase 1B, Booster Pump Station and Delivery Points,  
 Construction Phase Services – Revised V1

Dear Mr. Kay:

Freese and Nichols, Inc. (FNI) is pleased to submit our revised Scope of Work (SOW) and level of effort estimate to provide Construction Phase Services for the above referenced project. FNI has developed a revised proposal based upon Program review comments received on 8/16/2021. We have Attached are the following documents for your review:


- Attachment A – Scope of Work
- Attachment B – Proposed Level of Effort Spreadsheet
- Attachment C – Subconsultant Proposal (Gupta)

The proposed level of effort (fee) is as follows:

Scope	Fee
Basic Services Total	\$ 497,224
Supplemental Services Total	\$ 95,716
<b>Construction Phase Services Total</b>	<b>\$ 592,939</b>

After you've had a chance to review, please let us know if you have any questions or would like to discuss. We appreciate this opportunity.

Sincerely,



David Bennett, P.E.  
 Project Manager  
 Principal / Vice President  
 Freese and Nichols, Inc.

**Alliance Regional Water Authority – Phase 1B  
Booster Pump Station and Delivery Points  
Construction Phase Scope of Work (Freese and Nichols, Inc.)**

1. Project Management
  - 1.1. Prepare Monthly Summary Reports/Invoicing as identified in the ARWA Phase 1B Program Management Plan
  - 1.2. Meetings
    - 1.2.1. Quality Control Audit (1 workshop)
2. Regulatory Agency Coordination and Permits
  - 2.1. Texas Commission on Environmental Quality (two one-hour virtual meetings or phone conf.)
  - 2.2. Texas Water Development Board (two one-hour virtual meetings or phone conf.)
  - 2.3. Texas Department of Transportation (TxDOT) (two one-hour virtual meetings or phone conf.)
  - 2.4. Caldwell County (one one-hour virtual meetings or phone conf.)
  - 2.5. City of San Marcos (two one-hour virtual meetings or phone conf.)
  - 2.6. City of Umland (one one-hour virtual meetings or phone conf.)
3. Public Utility Coordination
  - 3.1. Bluebonnet Electric Cooperative (two one-hour virtual meetings or phone conferences)
4. Delivery Point Owner Coordination (two one-hour virtual meetings or phone conferences with each Delivery Point Owner)
  - 4.1. CRWA #1 / County Line SUD
  - 4.2. CRWA #2 / Crystal Clear #2
  - 4.3. CRWA #3 / Crystal Clear #1
  - 4.4. CRWA #4 / Green Valley SUD
  - 4.5. City of Kyle
  - 4.6. City of San Marcos #1
  - 4.7. City of San Marcos #2
  - 4.8. GBRA Delivery Points (Lockhart and NBU)
5. Design Consultant Coordination (two one-hour virtual meetings or phone conferences with each)
  - 5.1. WTP Design Consultant
  - 5.2. EST Design Consultant
  - 5.3. Pipeline Segment B1
  - 5.4. Pipeline Segment B2
  - 5.5. Pipeline Segment C
  - 5.6. Pipeline Segment D
  - 5.7. Pipeline Segment E
6. Construction Site Visits and Progress Meetings
  - 6.1. Pre-Construction Meeting. Attend a pre-construction meeting coordinated by the Construction Management and Inspection (CM&I) team.
  - 6.2. Monthly Site Observation. Consultant will make 18 site visits to the BPS site and 2 site visits to each Delivery Point Site. Site observations will be limited to spot checking, selective measurement, and similar methods of general observation. Based on information obtained

during site visits, Consultant will evaluate whether Contractor's work is generally proceeding in accordance with the Contract Documents, and Consultant will keep Client informed of the general progress of the work. Consultant is not required to make exhaustive or continuous inspections to check the quality or quantity of the Work. In this effort, Consultant will endeavor to protect the Owner against defects and deficiencies in the work of Contractor and will report any observed deficiencies to CMI&I. Consultant's visits and observations are subject to the limitations on Consultant's authority and responsibility described in the General Conditions.

- 6.2.1. Consultant will not supervise, direct, or have control over Contractor's work, nor shall Consultant have authority to stop the Work or have responsibility for the means, methods, techniques, equipment choice and usage, schedules, or procedures of construction selected by Contractor, for safety programs incident to Contractor's work, or for any failure of Contractor to comply with any laws. Consultant does not guarantee the performance of any Contractor and has no responsibility for Contractor's failure to perform its work in accordance with the Contract Documents. Consultant is to inform the CM&I of issues or concerns and CM&I is to work with Contractor to address these issues or concerns.
- 6.2.2. Site observation reports will be prepared and provided to the CM&I team via the CM&I Electronic Document Management System (EDMS) within 48 hours of each site visit.
- 6.2.3. Notify CM&I team of inconsistencies with observed worked with respect to Contract Documents.
- 6.3. Specialty Observations will be limited to spot checking, selective measure, and similar methods of general observations for observation of equipment requiring additional observations beyond the monthly observations. Specialty Observation reports will be prepared and provided to the CM&I team via the CM&I Electronic Document Management System (EDMS) within 48 hours of each site visit. Provide up to ten Specialty Observation Site Visits for facilities/equipment including:
  - 6.3.1. Ground Storage Tank
  - 6.3.2. Pump Station
  - 6.3.3. Generator and Automatic Transfer Switch
  - 6.3.4. Solenoid Control Valves
  - 6.3.5. Mag Meters
  - 6.3.6. Chlorine Analyzers
  - 6.3.7. PLC Panel Witness Test
  - 6.3.8. PCSI Coordination
- 6.4. Monthly *(or as specified for each project – discuss with Owner's Representative team)* Construction Progress Meetings. Consultant will attend up to 18 monthly Construction Progress Meetings
  - 6.4.1. Attend Progress Meetings led by the CM&I team. Discuss status of document reviews, proposed contract modifications and any issues or concerns that need to be addressed to allow construction of the project to progress.
  - 6.4.2. Review Project Decision Register and Action Item Register prior to each meeting. Report discrepancies in the Project Decision Register to the CM&I team immediately. Update the status on Action Items at least 10 days before meetings.
  - 6.4.3. Review monthly Construction Activity Reports prepared by the CM&I team. Provide feedback on report content as appropriate.

7. Construction Coordination
  - 7.1. Regular coordination with Owner's Representative and CM&I group as required to facilitate administration of the project.
  - 7.2. Participate in project quality audits as necessary, and implementation of agreed corrective actions. Attend up to 3 meetings related to quality issues during construction.
  - 7.3. Review monthly construction pay applications and make recommendations for payment
  - 7.4. Review monthly schedules to confirm compliance with Contract dates and key milestones
  - 7.5. Review monthly as-builts provided by Contractor.
  - 7.6. Utilize EDMS for upload/download of all construction-related documentation.
8. Shop Drawing/Submittal Review
  - 8.1. Review shop drawings/submittals for conformance with the project plans and specifications and provide responses within 14 calendar days. For the purposes of this scope, assume review effort will include the original submittal and 1 resubmittal for 50% of all submittals. The scope of work assumes the following number of submittals:
    - 8.1.1. Shop Drawings (120)
    - 8.1.2. Record Data (50)
    - 8.1.3. Test Reports (20)
    - 8.1.4. Operation and Maintenance Manuals (35)
  - 8.2. Attend up to eight (8) pre-submittal phone conference coordination meetings for specialty equipment.
9. Alternatives and Substitutions
  - 9.1. Review alternatives and substitutions proposed by Contractor. Recommend acceptance or rejection of the request for substitutions. A budget amount has been established for evaluation of substitutions. If required effort exceeds the budgeted amount, Consultant may request additional budget for these services.
10. Request for Information (RFIs)
  - 10.1. Review up to sixty (60) Contractor questions or concerns that may arise during construction and respond within 5 calendar days.
11. Request for Proposals (RFPs) and Change Orders (Cos). Scope of Work assumes up to ten RFPs/Change Orders.
  - 11.1. Coordinate with CM&I to prepare a description of proposed Modifications. CM&I will issue the RFP form to Contractor through the EDMS.
  - 11.2. Coordinate with CM&I for review and response to RFP and provide recommendations to the Owner's Representative for consideration.
  - 11.3. Review Change Order prepared by the CM&I team.
12. Start-up and Commissioning
  - 12.1. Provide assistance to the Program and Contractor during start-up of the equipment and facilities with up to 5 full-days on-site (up to three (3) Engineers per day on-site – FNI and Electrical/Instrumentation Subconsultant). Basic Services assume commissioning activities will occur at the same time. If separate commissioning services are required due to availability of water or staggered completion of other pipeline segments and delivery points, Supplemental Services budget has been established for this case.



13. Substantial/Final Completion Walk-Throughs

- 13.1. Consultant to conduct one (1) substantial completion walk-through/inspection, coordinated by the CM&I. After considering any objections from Owner's Representative, if the Consultant considers the work substantially complete, Consultant will submit a Substantial Completion punch list and letter to the Owner's Representative. Substantial Completion walk-through/inspections for the BPS site and all DP sites are assumed to occur on the same day/trip.
- 13.2. Consultant to conduct one (1) final completion walk-through/inspection (coordinated by the CM&I) to determine if the completed work of Contractor is acceptable to both the Owner's Representative and Consultant so that Consultant may recommend, in writing, the final payment to the Contractor. Final Completion walk-through/inspections for the BPS site and all DP sites are assumed to occur on the same day/trip.

14. Record Drawings

- 14.1. Consultant will prepare Contract Record Drawings using the marked up red lines drawings provided by the Contractor during construction. Record drawing information will be based solely on the provided red line drawings and appropriate field documentation received from the Consultant and the CM&I group during construction site visits. Items associated with this work include:
  - 14.1.1. Prepare final Change Order (over and unders) recapitulation of the Project in conjunction with the final pay request
  - 14.1.2. Prepare Record Drawings of the constructed project based on change order revisions and as built information provided by the contractor.
  - 14.1.3. Provide the Owner's Representative:
    - 14.1.3.1. With one (1) set of Record Drawings in .pdf and .dwg electronic format.
    - 14.1.3.2. The DWG file with the reference state plan coordinate system for use by ARWA.

15. Supplemental (*as applicable to the specific project*)

- 15.1. General Construction Phase Services, which may include:
  - 15.1.1. Additional site visits (6 visits).
  - 15.1.2. Providing services to review or evaluate Contractor claims that are not due to causes within the control of Consultant. A budget amount has been established for evaluation of substitutions. If required effort exceeds the budgeted amount, Consultant may request additional budget for these services.
- 15.2. Attend additional meetings in the vicinity of the project (5 meetings)
- 15.3. Corrosion Investigation, Data Collection and Construction Support
- 15.4. Additional Delivery Point Design for the City of Maxwell
  - 15.4.1. Conduct 1 coordination meeting with the City of Maxwell, ARWA and Owner's Representative. Prepare meeting agenda and minutes.
  - 15.4.2. Perform hydraulic analysis to determine delivery hydraulics and sizing of control valve, flow meter, piping and appurtenances.
  - 15.4.3. Prepare 90% design plans including site location, pad layout, grading and drainage requirements. Submit 90% design plans for ARWA and Owner's Representative review
  - 15.4.4. Conduct a 90% virtual design review meeting with ARWA and Owner's Representative. Respond to review comments. Prepare meeting agenda and minutes.

- 15.4.5. Prepare 100% design plans incorporating 90% comments and submit for a final review by Owner's Representative.
- 15.4.6. Prepare signed/sealed 100% design plans and submit to Owner's Representative for preparation of a construction change order.
- 15.4.7. Provide 100% plans and documentation to Owner's Representative for TCEQ submittal/approval. Respond to TCEQ comments as required.
- 15.5. Additional Commissioning Services. If staggered commissioning of facilities are required, Provide additional assistance to the Program and Contractor during start-up of the equipment and facilities with up to 5 full-days on-site (up to three (3) Engineers per day on-site – FNI and Electrical/Instrumentation Subconsultant).
- 15.6. Pump Witness Testing. Attend pump manufacturer's witness testing site visit at manufacturer's facility. Budget includes up to 3 days for 1 Engineer including time on-site and travel time.
- 15.7. PLC Witness Testing. Attend pump manufacturer's witness testing site visit at manufacturer's facility. Budget includes up to 3 days for 1 Engineer including time on-site and travel time.

**ASSUMPTIONS:**

1. The Construction Phase scope of work is aligned with the construction contract and based upon the Contractor reaching substantial completion within 510 calendar days, followed by staggered testing and final completion of Delivery Point sites and the complete system testing extending the total substantial plus final completion to a maximum construction duration of 875 calendar days.
2. Owner's Representative will be the primary contact with TWDB and TCEQ and will facilitate all submittals and coordination. At request of Owner's Rep, Design Consultant may coordinate directly with TWDB and TCEQ as required to address specific comments.
3. Owner's Representative will provide overall Construction Contract Management and Administration Services including daily on-site inspection, administration of construction contract documentation and meeting facilitation.
4. Owner's Representative Construction Management team will provide a cursory review of all submittals for completeness prior to sending to the design consultant.
5. Owner's Representative will provide training for use of the CM&I Electronic Document Management System (EDMS) for access and use of construction-related documentation.
6. Budgetary amounts have been established for providing services associated with Supplemental Scope Item 14.2. If these services are needed, a specific scope of work and level of effort will be developed.
7. Assisting Owner in preparing for, or appearing at litigation, mediation, arbitration, dispute review boards, or other legal and/or administrative proceedings in the defense or prosecution of claims disputes with Contractor is an Additional Service.
8. Assisting Owner in the defense or prosecution of litigation in connection with or in addition to those services contemplated by this Agreement is an Additional Service.
9. Any services required as a result of default of the Contractor or the failure, for any reason, of the Contractor to complete the work within the Contract Time is an Additional Service.

<b>Alliance Regional Water Authority (ARWA)</b> <b>Phase 1B Booster Pump Station &amp; Delivery Points</b> <b>Construction Phase Services</b> <b>Detailed Cost Breakdown</b>	Project Fee Summary	
	Basic Services	\$ 497,224
	Special Services	\$ 95,716
	<b>Total Project</b>	<b>\$ 592,939</b>

Tasks		Labor													Total				
Task	Task Description	Drew Hardin	David Bennett	Ryan Ramsey	Erin Mills	David Guerrero	Cassie Grady	Ai Sexton	Ron Deal	George Fowler	Masoud Ghahremannejad	Andrew Perez	Stephanie Neises	Marissa Mendoza	Total Hours	Total Labor Effort	Total Expense Effort	Total Sub Effort	Total Effort
		Sr. Advisor / QA	Sr. Project Manager	Pump Station PE	Delivery Points PE	Design Engineer	Designer	HVAC	Corrosion	Stormwater	Structural	Architect	Hydraulics	Accounting					
		\$250	\$250	\$186	\$186	\$141	\$160	\$141	\$186	\$186	\$186	\$186	\$218	\$155					
1	<b>Project Management (875 days)</b>	4	30	30		10								30	104	\$ 20,140	\$ 884	\$ 9,681	\$ 30,705
2	<b>Regulatory Agency Coordination and Permits</b>															\$ -	\$ -	\$ -	\$ -
	2.1. TCEQ (two one-hour virtual meetings or phone conf.)		2	2	2	4									10	\$ 1,808	\$ 85	\$ -	\$ 1,893
	2.2. TWDB (two one-hour virtual meetings or phone conf.)		2	2		4									8	\$ 1,436	\$ 68	\$ -	\$ 1,504
	2.3. TxDOT (two one-hour virtual meetings or phone conf.)			2		4									6	\$ 936	\$ 51	\$ -	\$ 987
	2.4. Caldwell County (one one-hour virtual meetings or phone conf.)			1		2									3	\$ 468	\$ 26	\$ -	\$ 494
	2.5. City of San Marcos (two one-hour virtual meetings or phone conf.)			2		4			2						8	\$ 1,308	\$ 68	\$ -	\$ 1,376
	2.6. City of Umland (one one-hour virtual meetings or phone conf.)			1	2	2									5	\$ 840	\$ 43	\$ -	\$ 883
3	<b>Public Utility Coordination</b>															\$ -	\$ -	\$ -	\$ -
	3.1. Bluebonnet Electric (two one-hour virtual meetings or phone conf.)		2	2		4									8	\$ 1,436	\$ 68	\$ -	\$ 1,504
4	<b>Delivery Point Owner Coordination (two one-hour virtual meetings or phone conferences with each DP Owner)</b>															\$ -	\$ -	\$ -	\$ -
	4.1. CRWA #1 / County Line SUD		2		2	4									8	\$ 1,436	\$ 68	\$ -	\$ 1,504
	4.2. CRWA #2 / Crystal Clear #2		2		2	4									8	\$ 1,436	\$ 68	\$ -	\$ 1,504
	4.3. CRWA #3 / Crystal Clear #1		2		2	4									8	\$ 1,436	\$ 68	\$ -	\$ 1,504
	4.4. CRWA #4 / Green Valley SUD		2		2	4									8	\$ 1,436	\$ 68	\$ -	\$ 1,504
	4.5. City of Kyle		2		2	4									8	\$ 1,436	\$ 68	\$ -	\$ 1,504
	4.6. City of San Marcos #1		2		2	4									8	\$ 1,436	\$ 68	\$ -	\$ 1,504
	4.7. City of San Marcos #2		2		2	4									8	\$ 1,436	\$ 68	\$ -	\$ 1,504
	4.8. GBRA Delivery Points (Lockhart and NBU)		2		2	4									8	\$ 1,436	\$ 68	\$ -	\$ 1,504
5	<b>Design Consultant Coordination (two one-hour virtual meetings or phone conf w/each)</b>															\$ -	\$ -	\$ -	\$ -
	5.1. WTP Design Consultant		2	2		4									8	\$ 1,436	\$ 68	\$ -	\$ 1,504
	5.2. EST Design Consultant		2	2		4									8	\$ 1,436	\$ 68	\$ -	\$ 1,504
	5.3. Pipeline Segment B1		2	2		4									8	\$ 1,436	\$ 68	\$ -	\$ 1,504
	5.4. Pipeline Segment B2		2	2	2	4									10	\$ 1,808	\$ 85	\$ -	\$ 1,893
	5.5. Pipeline Segment C		2	2	2	4									10	\$ 1,808	\$ 85	\$ -	\$ 1,893
	5.6. Pipeline Segment D		2	2	2	4									10	\$ 1,808	\$ 85	\$ -	\$ 1,893
	5.7. Pipeline Segment E		2		2	4									8	\$ 1,436	\$ 68	\$ -	\$ 1,504
6	<b>Construction Site Visits and Progress Meetings</b>															\$ -	\$ -	\$ -	\$ -
	6.1. Pre-Construction Meeting		4	4	4	8									20	\$ 3,616	\$ 248	\$ -	\$ 3,864
	6.2. Monthly Site Observation & Reports. 18-BPS & 2 for each DP Site		18	54	42	50				16					180	\$ 32,382	\$ 2,650	\$ 12,819	\$ 47,851
	6.3 Specialty Observations															\$ -	\$ -	\$ 5,996	\$ 5,996
	6.3.1. Ground Storage Tank			8		10									18	\$ 2,898	\$ 187	\$ -	\$ 3,085
	6.3.2. Generator and Automatic Transfer Switch			4						8					12	\$ 2,232	\$ 119	\$ -	\$ 2,351
	6.3.3. Solenoid Control Valves			4	4	10									18	\$ 2,898	\$ 192	\$ -	\$ 3,090
	6.3.4. Mag Meters			4	4	10									18	\$ 2,898	\$ 192	\$ -	\$ 3,090
	6.3.5. Chlorine Analyzers			4	4	10									18	\$ 2,898	\$ 192	\$ -	\$ 3,090
	6.3.6. PLC Panel Witness Test			4											4	\$ 744	\$ 51	\$ -	\$ 795
	6.3.7. PCSI Coordination			4											4	\$ 744	\$ 51	\$ -	\$ 795
	6.3.7. Pump Station			4		5				8					17	\$ 2,937	\$ 161	\$ -	\$ 3,098
	6.4. Monthly Construction Progress Meetings (28)		18	84	18	112									232	\$ 39,264	\$ 1,972	\$ -	\$ 41,236
7	<b>Construction Coordination</b>															\$ -	\$ -	\$ -	\$ -
	7.1. Coordination with Owner's Representative and CM&I group		20	40	20										80	\$ 16,160	\$ 680	\$ -	\$ 16,840
	7.2. Quality audit meetings (3) on site		4	12	4	12									32	\$ 5,668	\$ 367	\$ -	\$ 6,035
	7.3. Review monthly construction pay applications			28	14										42	\$ 7,812	\$ 357	\$ -	\$ 8,169
	7.4. Review monthly schedules		4	14	8										26	\$ 5,092	\$ 221	\$ -	\$ 5,313
	7.5. Review monthly as-builts provided by Contractor.			8	4	14									26	\$ 4,206	\$ 221	\$ -	\$ 4,427
8	<b>Shop Drawing/Submittal Review</b>															\$ -	\$ -	\$ 51,613	\$ 51,613
	8.1. Shop Drawings/Submittals															\$ -	\$ -	\$ -	\$ -
	8.1.1. Shop Drawings (120)		8	40	20	180		8	8	16	40	16			336	\$ 54,548	\$ 2,856	\$ -	\$ 57,404
	8.1.2. Record Data (50)			4	2	25									31	\$ 4,641	\$ 264	\$ -	\$ 4,905
	8.1.3. Test Reports (20)			4	2	10									16	\$ 2,526	\$ 136	\$ -	\$ 2,662
	8.1.4. Operation and Maintenance Manuals (35)			8	4	35				4					51	\$ 7,911	\$ 434	\$ -	\$ 8,345
	8.2. Pre-Submittal Conference Meetings (8) for specialty equipment		4	8	4	16									32	\$ 5,488	\$ 272	\$ -	\$ 5,760
9	<b>Alternatives and Substitutions</b>															\$ -	\$ -	\$ -	\$ -
	9.1. Review alternatives and substitutions proposed by Contractor.		4	8	4	16		2	2	4	16	4			60	\$ 10,606	\$ 510	\$ -	\$ 11,116
10	<b>Request for Information (RFIs)</b>															\$ -	\$ -	\$ -	\$ -
	10.1. Review up to sixty (60) RFI's		20	60	20	60		4	4	8	24	8			208	\$ 37,088	\$ 1,768	\$ -	\$ 38,856
11	<b>Request for Proposals (RFPs) and Change Orders (Cos). (10)</b>															\$ -	\$ -	\$ 2,200	\$ 2,200
	11.1. Coordinate with CM&I to prepare proposed Modifications.		4	20	10	20	40								94	\$ 15,800	\$ 799	\$ -	\$ 16,599
	11.2. Coordinate with CM&I for review and response to RFP		4	20	10	20									54	\$ 9,400	\$ 459	\$ -	\$ 9,859
	11.3. Review Change Order prepared by the CM&I team.		2	8	4										14	\$ 2,732	\$ 119	\$ -	\$ 2,851
12	<b>Start-up and Commissioning</b>															\$ -	\$ -	\$ -	\$ -
	12.1. Start-up and Commissioning (5 full-days on-site)		8	40	40	16									104	\$ 19,136	\$ 1,276	\$ 5,996	\$ 26,408

<b>Alliance Regional Water Authority (ARWA)</b> <b>Phase 1B Booster Pump Station &amp; Delivery Points</b> <b>Construction Phase Services</b> <b>Detailed Cost Breakdown</b>	<b>Project Fee Summary</b>	
	<b>Basic Services</b>	\$ 497,224
	<b>Special Services</b>	\$ 95,716
	<b>Total Project</b>	\$ 592,939

Tasks		Labor													Total				
Task	Task Description	Drew Hardin	David Bennett	Ryan Ramsey	Erin Mills	David Guerrero	Cassie Grady	Ai Sexton	Ron Deal	George Fowler	Masoud Ghahremannejad	Andrew Perez	Stephanie Neises	Marissa Mendoza	Total Hours	Total Labor Effort	Total Expense Effort	Total Sub Effort	Total Effort
		Sr. Advisor / QA	Sr. Project Manager	Pump Station PE	Delivery Points PE	Design Engineer	Designer	HVAC	Corrosion	Stormwater	Structural	Architect	Hydraulics	Accounting					
		\$250	\$250	\$186	\$186	\$141	\$160	\$141	\$186	\$186	\$186	\$186	\$218	\$155					
<b>13</b>	<b>Substantial/Final Completion Walk-Throughs</b>															\$ -	\$ -	\$ -	\$ -
	13.1. Substantial completion walk-through/inspection (1)		10	4	6	12									32	\$ 6,052	\$ 350	\$ 1,999	\$ 8,401
	13.2. Final completion walk-through/inspection (1)		10	4	6	12									32	\$ 6,052	\$ 350	\$ 1,999	\$ 8,401
<b>14</b>	<b>Record Drawings</b>															\$ -	\$ -	\$ -	\$ -
	14.1.1. Prepare final Change Order		1	2	1	2									6	\$ 1,090	\$ 51	\$ -	\$ 1,141
	14.1.2. Prepare Record Drawings		2	8	6	16	40	2	2	6	16	6			104	\$ 17,622	\$ 884	\$ -	\$ 18,506
<b>15</b>	<b>Supplemental Services</b>															\$ -	\$ -	\$ -	\$ -
	15.1. General Construction Phase Services, which may include:															\$ -	\$ -	\$ -	\$ -
	15.1.1. Additional site visits (6 visits).			24						8					32	\$ 5,952	\$ 272	\$ -	\$ 6,224
	15.1.2. Evaluation of Contractor Claims		4	8	4	16									32	\$ 5,488	\$ 272	\$ -	\$ 5,760
	15.2. Attend additional meetings in the vicinity of the project (5 meetings)			24											24	\$ 4,464	\$ 204	\$ -	\$ 4,668
	15.3. Corrosion Investigation, Data Collection & Construction Support			4		8			16						28	\$ 4,848	\$ 238	\$ -	\$ 5,086
	15.4. Additional Delivery Point Design for the City of Maxwell									18					18	\$ 3,348	\$ 153	\$ -	\$ 3,501
	15.4.1. Coordination meeting with the City of Maxwell (1)		3	3	3	4									13	\$ 2,430	\$ 111	\$ -	\$ 2,541
	15.4.2. Perform hydraulic analysis		2	2	4	8						20			36	\$ 7,104	\$ 306	\$ -	\$ 7,410
	15.4.3. Prepare 90% design plans	1	2	4	8	16	16			8					55	\$ 9,286	\$ 468	\$ -	\$ 9,754
	15.4.4. Conduct a 90% design review meeting(1)		1	2	2	4									9	\$ 1,558	\$ 77	\$ -	\$ 1,635
	15.4.5. Prepare 100% design plans	1	1	2	4	8	8			8					32	\$ 5,512	\$ 272	\$ -	\$ 5,784
	15.4.6. Prepare signed/sealed design plans for Change Order			1	1	2	2								6	\$ 974	\$ 51	\$ -	\$ 1,025
	15.4.7. TCEQ submittal coordination & comment response		1	1	1	4									7	\$ 1,186	\$ 60	\$ -	\$ 1,246
	15.5. Additional Commissioning Services. (5 full-days on-site)		8	40	40	16									104	\$ 19,136	\$ 1,276	\$ 7,460	\$ 27,872
	15.6. Pump Witness Testing. (on-site and travel time = 3 days)			24											24	\$ 4,464	\$ 1,288	\$ -	\$ 5,752
	15.7. PLC Witness Testing. (on-site and travel time = 3 days)															\$ -	\$ -	\$ 7,460	\$ 7,460

**ATTACHMENT C**

ARWA Booster Pump Station & Delivery P Construction Phase Services																											
Gupta & Associates, Inc.																											
TASK SUMMARY - BASIC SERVICES	Principal		Project Manager		Engineer - Senior		Engineer		Project Engineer		Designer - Senior		Designer		CAD Tech - Senior		CAD Tech		Admin		Subtotal		ODCs	SUBs	Markup 5%	TOTAL Cost	
	Rate: \$	260	Rate: \$	250	Rate: \$	230	Rate: \$	175	Rate: \$	150	Rate: \$	140	Rate: \$	105	Rate: \$	110	Rate: \$	90	Rate: \$	75	Hours	Cost					Hours
1.0	Project Management/Administration	0	\$ -	18	\$ 4,500	0	\$ -	8	\$ 1,400	0	\$ -	5	\$ 700	0	\$ -	0	\$ -	0	\$ -	18	\$ 1,350	49	\$ 7,950	\$469	\$0	\$0	\$ 8,419
	1.1: Project Management/Administration		\$ -	18	\$ 4,500		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	18	\$ 1,350	49	\$ 7,950	\$90	\$0	\$0	\$ 4,590
	1.2: Invoice Processing		\$ -		\$ -	0	\$ -		\$ -		\$ -	5	\$ 700		\$ -		\$ -		\$ -	18	\$ 1,350	23	\$ 2,050	\$41	\$0	\$0	\$ 2,091
	1.3: Meetings		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	0	\$ -	\$0	\$0	\$0	\$ -
	1.4: Pre-Design Kickoff Meeting		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	0	\$ -	\$0	\$0	\$0	\$ -
	1.5: Design Progress Meetings (with Owner)		\$ -		\$ -		\$ -	8	\$ 1,400		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	8	\$ 1,400	\$338	\$0	\$0	\$ 1,738
	1.6: Pre-Construction Meeting		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	0	\$ -	\$0	\$0	\$0	\$ -
	1.7: Meetings		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	0	\$ -	\$0	\$0	\$0	\$ -
	1.8: Pre-Design Kickoff Meeting		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	0	\$ -	\$0	\$0	\$0	\$ -
	1.9: Design Progress Meetings (with Owner)		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	0	\$ -	\$0	\$0	\$0	\$ -
	1.10: Pre-Construction Meeting		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	0	\$ -	\$0	\$0	\$0	\$ -
7.0	Construction Phase Services	0	\$ -	0	\$ -	24	\$ 5,520	67	\$ 11,725	219	\$ 32,850	94	\$ 13,160	0	\$ -	0	\$ -	0	\$ -	39	\$ 2,925	443	\$ 66,180	\$5,664	\$0	\$0	\$ 71,844
	ED&C		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	0	\$ -	\$0	\$0	\$0	\$ -
	7.1: Conformed Drawings		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	0	\$ -	\$0	\$0	\$0	\$ -
	7.2: Shop Drawing Review		\$ -		\$ -		\$ -		\$ -	135	\$ 20,250	45	\$ 6,300		\$ -		\$ -		\$ -	23	\$ 1,725	203	\$ 28,275	\$566	\$0	\$0	\$ 28,841
	7.3: RFI Review		\$ -		\$ -		\$ -		\$ -	0	\$ -	0	\$ -		\$ -		\$ -		\$ -	0	\$ -	0	\$ -	\$0	\$0	\$0	\$ -
	7.4: Contract Change Processing		\$ -		\$ -		\$ -	2	\$ 350	6	\$ 900		\$ -		\$ -		\$ -		\$ -		\$ -	8	\$ 1,250	\$25	\$0	\$0	\$ 1,275
	7.5: Additional Site Visits		\$ -		\$ -		\$ -	24	\$ 4,200		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	24	\$ 4,200	\$1,014	\$0	\$0	\$ 5,214
	7.6: Final Acceptance Walk-Through and Punchlist		\$ -		\$ -		\$ -	16	\$ 2,800		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	16	\$ 2,800	\$676	\$0	\$0	\$ 3,476
	7.7: Record Drawings		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	0	\$ -	\$0	\$0	\$0	\$ -
	7.8: Monthly Project Progress Meetings (Construction)		\$ -		\$ -	24	\$ 5,520		\$ -		\$ -	24	\$ 3,360		\$ -		\$ -		\$ -	3	\$ 225	51	\$ 9,105	\$2,042	\$0	\$0	\$ 11,147
	7.9: Final O&M Documentatation		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	0	\$ -	\$0	\$0	\$0	\$ -
	I&C		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	0	\$ -	\$0	\$0	\$0	\$ -
	7.10: Conformed Drawings		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	0	\$ -	\$0	\$0	\$0	\$ -
	7.11: Shop Drawing Review		\$ -		\$ -		\$ -		\$ -	75	\$ 11,250	25	\$ 3,500		\$ -		\$ -		\$ -	13	\$ 975	113	\$ 15,725	\$315	\$0	\$0	\$ 16,040
	7.12: RFI Review		\$ -		\$ -		\$ -		\$ -	0	\$ -	0	\$ -		\$ -		\$ -		\$ -	0	\$ -	0	\$ -	\$0	\$0	\$0	\$ -
	7.13: Contract Change Processing		\$ -		\$ -		\$ -	1	\$ 175	3	\$ 450		\$ -		\$ -		\$ -		\$ -		\$ -	4	\$ 625	\$13	\$0	\$0	\$ 638
	7.14: Additional Site Visits		\$ -		\$ -		\$ -	24	\$ 4,200		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	24	\$ 4,200	\$1,014	\$0	\$0	\$ 5,214
	7.15: Final Acceptance Walk-Through and Punchlist		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	0	\$ -	\$0	\$0	\$0	\$ -
	7.16: Record Drawings		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	0	\$ -	\$0	\$0	\$0	\$ -
	7.17: Monthly Project Progress Meetings (Construction)		\$ -		\$ -	0	\$ -		\$ -		\$ -	0	\$ -		\$ -		\$ -		\$ -	0	\$ -	0	\$ -	\$0	\$0	\$0	\$ -
	7.18: Final O&M Documentatation		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	0	\$ -	\$0	\$0	\$0	\$ -
9.0	Special Services	0	\$ -	0	\$ -	0	\$ -	64	\$ 11,200	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	64	\$ 11,200	\$1,774	\$0	\$0	\$ 12,974
	9.1: MCC Witnessed Factory Test		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	0	\$ -	\$0	\$0	\$0	\$ -
	9.2: VFD Witnessed Factory Test		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	0	\$ -	\$0	\$0	\$0	\$ -
	9.3: Generator Witness Factory Test		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	0	\$ -	\$0	\$0	\$0	\$ -
	9.4: PLC Factory Acceptance Testing		\$ -		\$ -		\$ -	32	\$ 5,600		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	32	\$ 5,600	\$887	\$0	\$0	\$ 6,487
	9.5: Site Startup & Commissioning		\$ -		\$ -		\$ -	32	\$ 5,600		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	32	\$ 5,600	\$887	\$0	\$0	\$ 6,487
	9.6: Meetings		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	0	\$ -	\$0	\$0	\$0	\$ -
	9.7: Meetings		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -		\$ -	0	\$ -	\$0	\$0	\$0	\$ -
	<b>TOTAL</b>	<b>0</b>	<b>\$0</b>	<b>18</b>	<b>\$4,500</b>	<b>24</b>	<b>\$5,520</b>	<b>139</b>	<b>\$24,325</b>	<b>219</b>	<b>\$32,850</b>	<b>99</b>	<b>\$13,860</b>	<b>0</b>	<b>\$0</b>	<b>0</b>	<b>\$0</b>	<b>0</b>	<b>\$0</b>	<b>57</b>	<b>\$4,275</b>	<b>556</b>	<b>\$85,330</b>	<b>\$7,907</b>	<b>\$0</b>	<b>\$0</b>	<b>\$ 93,237</b>

**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**

Friday, August 20th, 2021 at 1:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 662 821 534#

- F.5** Possible recommendation to the Board to authorize a Work Order with CP&Y, Inc. for SCADA programming services for the Authority's Phase 1B infrastructure. ~  
*Graham Moore, P.E., Executive Director*
- 

Background/Information

Alliance Water is in need of SCADA programming and configuration services for the Phase 1B system. The Authority reached out to CP&Y, Inc. to request a proposal for this effort as CP&Y was instrumental in the hierarchy of the SCADA system and selection of system software. The services will generally consist of:

- Design, configure & program SCADA to include the PLC program, SCADA HMI program and SCADA reports for the Phase 1B project
- Integrate the Phase 1A system into the Phase 1B system
- Startup and test the entire SCADA system for 1B, including the integrated 1A system.
- ARWA to provide the remote access equipment and remote wireless services for engineer to remote access SCADA system.

Below are some of the key facts regarding the proposal:

Firm: CP&Y, Inc.  
Fee: \$1,085,390 (50% ARWA)  
Work Order Type: Hourly, Not-to-Exceed  
Anticipated Duration: 25 months  
Project Manager: Marisa Vergara, P.E.

Staff is requesting that the Committee recommend Board approval of a Work Order with a fee for the basic services of \$970,150 and a fee for supplemental effort in an amount not-to-exceed \$115,240 for a total fee of \$1,085,390. The Executive Director will be given the discretion to authorize the supplemental effort if needed.

Attachment(s)

- August 4, 2021 – CP&Y Scope of Services Proposal for Phase 1B SCADA Programming.

**Technical Committee Decision Needed:**

- Possible recommendation to the Board to approve a work order with CP&Y, Inc. for Phase 1B SCADA Programming services.





## Scope of Services Proposal for Phase 1B SCADA Programming

### Alliance Regional Water Authority

### Scope of Work for Engineering Services

August 4, 2021

#### I. General Overview

The general scope is for Engineering Services for ARWA Phase 1B Project SCADA system programming and configuration. The Engineer shall provide following services for Phase 1B SCADA system HMI and PLC configuration and programming:

1. Design, configuration, and program SCADA system include PLC program, SCADA HMI program, and SCADA reports for Phase 1B project.
2. Design, configuration, and program SCADA system to integrate Phase 1A system.
3. Startup and test the entire SCADA system for Phase 1B projects including Phase 1A system integration.
4. ARWA shall provide remote access equipment and remote wireless services for engineer to remote access SCADA system.

The scope of services of SCADA system design, programming and configuration, startup and test shall consist of two engineering services: Basic and Supplemental.

#### II. Basic Scope of Work

##### Task 1: Project Management

Plan: Start at September 2021 and complete in Oct 2023: Total 25 months

##### 1.1 Project management:

- 1.1.1 These services will include preparation of Project Controls including progress reports, action items log, decision log, design meetings, independent technical review, SCADA design workshops, schedule, and invoicing.
- 1.1.2 Coordinate with design consultant on construction process control/operation updates that affect SCADA programming.
- 1.1.3 Conduct project process and design status meetings. Each meeting will be 1 hour. Total number of meetings will be 12.



## **Task 2: SCADA Programming Standard Development**

Plan: Start at September 2021 and complete in November 2021: Total 3 months

2.1 Develop SCADA system programming and configuration standards for Phase 1B. The design standard will be used for future ARWA SCADA system design. The standards will define each design of SCADA system program and configuration including equipment tag naming, HMI screen animation, HMI/PLC database, SCADA network, SCADA HMI alarm, datalogging and reports. Project management

This task includes the Standard submittal. Engineer will provide two submittals of the SCADA system program and configuration standards.

2.2 Conduct SCADA Standards review meetings.

2.3. Final version of SCADA standards. Incorporate ARWA's comment on the first submittal.

## **Task 3: Phase 1A BPS and Buda Delivery Point SCADA Integration**

Provide SCADA HMI configuration and program for Phase 1A Booster Pump Station and Buda Delivery Point. Total number of PLCs: 2.

Plan: Start at October 2021 and complete in April 2022: Total 8 months

3.1 Conduct one day site visit to the pump station and delivery points.

3.2 SCADA HMI submittal design/review meetings. Remote meetings via MS Team.

3.3 PLC configuration and program. Development SCADA database. HMI screen, alarm and event, and historian program. Internal SCADA configuration and program test.

3.4 Existing PLC program modification: The scope includes software program modifications, if required. In general, the existing booster pump station and delivery point PLC program shall not be modified or changed unless some operation or control functions need to add or change. The phase 1A PLC program software change and modifications are budgeted with listed hours. Additional budget is listed in the Supplemental services.

3.5 Phase 1A SCADA system used the tag name that are different from Phase 1B design standards. Phase 1B SCADA will use standardized tag name for Phase 1A system. Change entire of Phase 1A equipment tag could be very cost. Recommend keeping the existing tag at facility and use new tag in the SCADA system:

3.5.1 Keep facility tag name intact and match ARWA SCADA Standards.

3.5.2 Provide a reference table of new and old tag name. Print and install the table on the back of PLC panel door.

3.5.3 Engineer to provide modified AutoCAD drawings of the existing PLC panel to show new tag along with the existing tag to facilitate maintenance. ARWA to provide as-built panel AutoCAD drawing.

3.6 Provide design submittal, training manual and Owner Manual (OM).

3.7 Provide training on operation and SCADA HMI configuration. Training will be 4 hour and remote training class by using Microsoft Team.





#### **Task 4: Well field SCADA HMI and PLC Programming**

Provide SCADA HMI and PLC programming for Phase 1B Well Field Facility. Total number of PLCs will be four (4) PLCs.

Plan: Start at December 2021 and complete in May 2022: Total 6 months

- 4.1 PLC configuration and program. Development SCADA database. HMI screen, alarm and event, and historian program. Conduct internal SCADA configuration and program at Engineer's office.
- 4.2 Provide design submittal, training manual and Owner Manual (OM).

#### **Task 5: Water Treatment Plant-Plant PLC SCADA HMI and PLC Programming**

Configure SCADA Top-end HMI servers and all workstations. Provide SCADA HMI and PLC programming for Phase 1B WTP plant PLC. Total number of PLCs will be three (3) PLCs.

Plan: Start at Oct 2021 and complete in Oct 2022: Total 12 months

- 5.1 Configure SCADA Top-end HMI servers and all workstations. Install SCADA HMI software. Configure computer network communication. Test all software and computer communication.
- 5.2 SCADA HMI submittal design/review meeting 16 hour (2 meeting, each 8 hour). Remote meeting via MS Team.
- 5.3 PLC configuration and program. Development SCADA database. HMI screen, alarm and event, and historian program. Conduct internal SCADA configuration and program at Engineer's office.
- 5.4 Provide design SCADA PLC/HMI submittal, training manual and Owner Manual (OM).
- 5.5 SCADA OM submittal design/review meeting 8 hour (2 meeting, each 4 hour). Remote meeting via MS Team.
- 5.6 Chemical system SCADA PLC program.

#### **Task 6: Water Treatment Plant- SCADA HMI System for Vendor provided systems**

Provide SCADA HMI programming for Phase 1B WTP vendor provided systems. The vendor provided systems will have (8) PLCs. The vendor provided system will be Filter system (8 PLCs) and Lime system (1 PLC).

Plan: Start at December 2021 and complete in November 2022. Total 12 months

- 6.1 Development SCADA database. HMI screen, alarm and event, and historian program. Conduct internal SCADA configuration and program at CP&Y's Dallas office
- 6.2 Refer to task 13.4 for scope of work.
- 6.3 Provide design submittal, training manual and Owner Manual (OM).

**Task 7: Booster Pump Station Programming**

Provide SCADA HMI and PLC programming for Phase 1B Booster Pump Station. Total number of PLCs will be one (1) PLCs.

Plan: Start at February 2022 and complete in July 2022. Total 6 months

- 7.1 PLC configuration and program. Development SCADA database. HMI screen, alarm and event, and historian program. Internal SCADA configuration and program test.
- 7.2 Provide design submittal, training manual and Owner Manual (OM).

**Task 8: Delivery Point and Elevated Storage Tank**

Provide SCADA HMI and PLC programming for Phase 1B delivery points. Total number of delivery points is 11. Each delivery point will have one PLC.

Plan: Start at February 2022 and complete in July 2022. Total 6 months

- 8.1 PLC configuration and program. Development SCADA database. HMI screen, alarm and event, and historian program. Internal SCADA configuration and program test.
- 8.2 Provide design submittal, training manual and Owner Manual (OM).

**Task 9: SCADA Report**

Provide SCADA Regulatory and Operation Reports. Total number of reports will be Ten (10).

Plan: Start at May 2022 and complete in Oct 2022. Total 6 months

- 9.1 Design configure and program reports. Engineer will work with ARWA to develop each report format and provide report format submittal.
- 9.2 Provide design submittal, training manual and Owner Manual (OM).

**Task 10: Network Configuration**

Provide network switch configuration for all remote facilities (remote facilities are well field, BPS, and Delivery Points).

Plan: Start at July 2022 and complete in Oct 2022. Total 4 months

- 10.1 Configure switch to disable network switch unused ports and security used ports for remote facility switches. Configure switch to provide network backup link between fiber and wireless network.
- 10.2 Provide design submittal, training manual and Owner Manual (OM).

**Task 11: Training**

Provide operation and SCADA configuration training at ARWA office. One session of 4-hour operation training and one session of 8-hour SCADA HMI and PLC configuration training. Plant: TBD



### **Task 12: SCADA Development Expense**

SCADA development expense includes 3-year license SCADA HMI and PLC program and test equipment.

Plan: Start at September 2021 and complete in Feb 2024: Total 30 months

### **Task 13: System Startup**

Plan: Start at Jan 2023 and complete in Oct 2023. Total 10 months

13.1 Phase 1A Startup: include remote startup/test from CP&Y Dallas office and field startup at facility. Task includes 1 (One) field startup 1 day by one project engineer.

13.2 Well field Startup: include remote startup/test from CP&Y Dallas office and field startup at facility. Task includes 1 (One) field startup 1 day by one project engineer.

13.3 Water Treatment Plant--Plant SCADA Startup: include remote startup/test from CP&Y Dallas office and field startup at facility. Task includes 1 (One) field startup 2 days by one senior and 2 project engineers.

13.4 Water Treatment Plant—Vendor provided PLC-Plant SCADA Startup: include remote startup/test from CP&Y Dallas office and field startup at facility. Task includes 1 (One) field startup 3 (three) days by one senior and 1(One) project engineers.

13.5 Booster Pump Station Startup: include remote startup/test from CP&Y Dallas office and field startup at facility. Task includes 1 (One) field startup 1 day by 1 (One) senior and 1 project engineer.

13.6 Delivery Point Startup: include remote startup/test from CP&Y Dallas office and field startup at facility. Task includes 1 (One) field startup 2 (two) days by 2 (Two)project engineers.

13.7 SCADA report Startup: include remote startup/test from CP&Y Dallas office and field startup at facility. Task includes 1 (One) field startup 1 (one) day by 1 (One)project engineer.

13.8 Network Configuration Startup: include remote startup/test from CP&Y Dallas office and field startup at facility. Task includes 1 (One) field startup 1 (one) day by 1 (One)project engineer.

### **Task 14 - Supplemental Scope of Work**

#### **Task 14.1: Phase 1A System Startup**

This task includes 1 (One) field startup 2(Two) days by 1(One) Project Engineer.

#### **Task 14.2: Well Field System Startup**

This task includes 1 (One) field startup 2(Two) days by 1(One) Project Engineer.



**Task 14.3: Water Treatment Plant—  
Plant SCADA System Startup**

This task includes 4 (four) field startup trips. Each trip includes 3 (three) days by 1(One) Senior and 2 (Two) Project Engineers.

**Task 14.4: Water Treatment Plant—Vendor Provided PLC SCADA System Startup**

This task includes Filter and Lime system factory acceptance test at manufacturer’s facility and one field trip startup at water treatment plant. Field startup at treatment plant for vendor provided PLC will be 1(One) trip 5(Five) days by 1(One) Senior and 2 Project Engineers.

**Task 14.5: Booster Pump Station Startup**

This task includes 2 (two) field startup 2(Two) days by 1(One) Project Engineer.

**Task 14.6: Delivery Point and Elevated Storage Tank Startup**

This task includes 2 (two) field startup 2 (two) days by 2(two) Project Engineer.

**Task 14.7: SCADA Report Startup**

This task includes 1 (One) field startup 2(Two) days by 1(One) Project Engineer.

**Task 14.8: Network Configuration Startup**

This task includes 2 (two) field startup 2(Two) days by 1(One) Project Engineer.

**III Scope of Services Provided by Others:**

Engineering service for SCADA program and configuration does not include any item listed below:

- a. SCADA equipment hardware include computers, PLC and PLC hardware, network switches, and printers.
- b. SCADA software, Windows OS, Windows Office, and SCADA report software.
- c. Remote access to ARWA SCADA equipment
- d. Remote access service provided by Verizon.
- e. Security system configuration and programming
- f. The configuration of wireless gateway that provides remote communication to SCADA.
- g. SCADA fiber and IC construction service including submittal review, RFI response, change order, and meeting. These services will be separated engineering services.
- h. Vendor provided PLC programming and configuration.
- i. Plant SCADA PLC program for water treatment plant lime and chemical system automation control such as flow pacing and residual control.
- j. Plant SCADA PLC program for water treatment plant filter system automation control such as filter backwash schedule and backwash automation sequence



Notes:

- 1. Item III. a, b, c, d, e, f will be provided by IC contractor.
- 2. Item III. h, i, and j will be provided by equipment manufacturer contractor.

**IV. Special Services Not Included (Additional Service)**

- a. Services for equipment hardware trouble shooting after the SCADA system has final acceptance.
- b. Warranty Support Services.

**V. Compensation**

The Fee for this scope of work is a time and material basis. Basic Services is \$970,150. Supplemental Services is \$115,240. Refer to the attached fee proposal for rates and additional detail.

CP&Y, Inc

Alliance Regional Water Authority

*Marisa Vergara*

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Authorized Signature

Marisa Treviño Vergara, PE - Sr. Vice President

\_\_\_\_\_  
Name

8/4/2021

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date



**ARWA PHASE 1B SCADA PROGRAMMING (DRAFT REVIEW)**  
**FEE ESTIMATE FOR SCOPE OF SERVICES**

**\$ 1,085,390**  
**Basic \$ 970,150**  
**Supple \$ 115,240**

TASK	POSITION	Principle	Sr. Eng/PM	PM	Proj. Eng	EIT	CAD Tech	Project Controls	Admin	TOTAL LABOR		Expenses	Travel Expense	Total
										Hours	Cost			
<b>SCADA Programming Services</b>														
<b>1 Project Management Services</b>														
1.1	Project Management	24	60		40				80	204	\$ 34,680			\$ 34,680
	Consultant Coordination (6 trips)	12	24		24					60	\$ 12,960		\$3,300	\$ 16,260
	Progress Meetings (2 trips)	4	8		16					28	\$ 5,640		\$1,100	\$ 6,740
														\$ -
														\$ -
<b>2 Standard Programming Development</b>														
2.1	SCADA Standards		40		100	60			16	216	\$ 35,340			\$ 35,340
2.2	SCADA Standards Review Meetings		16		16					32	\$ 6,480		\$800	\$ 7,280
2.3	SCADA Standards Final		16		20	20			8	64	\$ 10,460			\$ 10,460
														\$ -
<b>3 Phase 1A BPS and Buda Delivery Point SCADA Integration</b>														
3.1	Site Visit		8		8					16	\$ 3,240		\$800	\$ 4,040
3.2	SCADA HMI Design Meeting		8		8					16	\$ 3,240			\$ 3,240
3.3	Database Design		8		40					48	\$ 8,520			\$ 8,520
	HMI Programming		8		40	40				88	\$ 13,720			\$ 13,720
	Internal Test		8		16	16				40	\$ 6,640			\$ 6,640
3.4	PLC Programming (Modification budget listed)		8		16					24	\$ 4,560			\$ 4,560
3.5	PLC Panel Tag name change -- Drawing/Cross Ref. Table		4		16		16			36	\$ 5,600			\$ 5,600
3.6	Documents/Submittal/Training/OM										\$ -			\$ -
	Design submittal		8		8	16			8	40	\$ 6,040			\$ 6,040
	Training manual		4		8	8			4	24	\$ 3,680			\$ 3,680
	Owner Manual		4		8	8			4	24	\$ 3,680			\$ 3,680
3.7	Training (Remote meeting)		4		8	8				20	\$ 3,320			\$ 3,320
														\$ -
<b>4 Well field SCADA HMI and PLC programming</b>														
4.1	Database Design		12		40	40				92	\$ 14,680			\$ 14,680
	PLC Programming		12		40					52	\$ 9,480			\$ 9,480
	HMI Programming		12		40	40				92	\$ 14,680			\$ 14,680
	Internal Test/Checking		12		32					44	\$ 8,160			\$ 8,160
4.2	Documents/Submittal/Training/OM										\$ -			\$ -
	Design submittal		8		8	16				32	\$ 5,320			\$ 5,320
	Training manual		2		4	8			2	16	\$ 2,360			\$ 2,360
	Owner Manual		2		4	8			2	16	\$ 2,360			\$ 2,360
														\$ -
<b>5 Water Treatment Plant-Plant PLC SCADA HMI and PLC programming</b>														
5.1	Server/Workstation/Network Configuration/Software Installation		32		40					72	\$ 14,280			\$ 14,280
5.2	SCADA PLC Submit/HMI Design submittal Review Meeting		16		16					32	\$ 6,480		\$1,600	\$ 8,080

5.3	Database Design		40		80				120	\$	22,800		\$	22,800
	PLC Programming		80		200				280	\$	52,200		\$	52,200
	HMI Programming		80		240	240			560	\$	90,000		\$	90,000
	Internal Test/Checking		52		80				132	\$	25,680		\$	25,680
5.4	Documents/Submittal/Training/OM									\$	-		\$	-
	Design submittal		32		48	56			136	\$	22,880		\$	22,880
	Training manual		4		12	16		4	36	\$	5,380		\$	5,380
	Owner Manual		4		8	8		4	24	\$	3,680		\$	3,680
5.5	Owner Manual Review Meeting		8		8				16	\$	3,240		\$	3,240
5.6	Chemical System SCADA PLC Programming		16		36				52	\$	9,780		\$	9,780
													\$	-
6	<b>Water Treatment Plant- SCADA HMI System for Vendor provided systems</b>													
6.1	Database Design		40		80				120	\$	22,800		\$	22,800
	PLC Programming									\$	-		\$	-
	HMI Programming		40		80	120			240	\$	38,400		\$	38,400
	Internal Test/Checking		24		32				56	\$	11,040		\$	11,040
6.2	Factory Acceptance Test Filter system (refer to supplemental)									\$	-		\$	-
	Factory Acceptance Test Lime system (refer to supplemental)									\$	-		\$	-
6.3	Documents/Submittal/Training/OM									\$	-		\$	-
	Design submittal		24		32	40			96	\$	16,240		\$	16,240
	Training manual		4		4	8		4	20	\$	3,020		\$	3,020
	Owner Manual		4		4	8		4	20	\$	3,020		\$	3,020
								4					\$	-
7	<b>Booster Pump Station</b>													
7.1	Database Design		16		32	32			80	\$	13,280		\$	13,280
	PLC Programming		32		40				72	\$	14,280		\$	14,280
	HMI Programming		32		40	80			152	\$	24,680		\$	24,680
	Internal Test/Checking		16		16				32	\$	6,480		\$	6,480
7.2	Documents/Submittal/Training/OM									\$	-		\$	-
	Design submittal		16		24	32			72	\$	11,960		\$	11,960
	Training manual		4		4	8		4	20	\$	3,020		\$	3,020
	Owner Manual		4		4	8		4	20	\$	3,020		\$	3,020
													\$	-
8	<b>Delivery Point and Elevated Storage Tank</b>													
8.1	Database Design		8		48				56	\$	9,840		\$	9,840
	PLC Programming		4		48				52	\$	8,880		\$	8,880
	HMI Programming		8		48	40			96	\$	15,040		\$	15,040
	Internal Test/Checking		8		16				24	\$	4,560		\$	4,560
8.2	Documents/Submittal/Training/OM									\$	-		\$	-
	Design submittal		8		24	32			64	\$	10,040		\$	10,040
	Training manual		4		8	8			20	\$	3,320		\$	3,320
	Owner Manual		4		8	8			20	\$	3,320		\$	3,320
													\$	-
9	<b>SCADA Report</b>													
9.1	Design/Programming		40		120	60			220	\$	37,200		\$	37,200
	Internal Test/Checking		24		40				64	\$	12,360		\$	12,360
9.2	Documents/Submittal/Training/OM									\$	-		\$	-
	Design submittal		8		16	16			40	\$	6,640		\$	6,640

	Training manual		4		8	8			20	\$	3,320			\$	3,320	
	Owner Manual		4		8	8			20	\$	3,320			\$	3,320	
														\$	-	
<b>10</b>	<b>Network Configuration</b>													\$	-	
<b>10.1</b>	Well Site Network Switch Port Disable		8		16				24	\$	4,560			\$	4,560	
	WTP Network Rack SCADA Switch for remote site Network Security		8		40				48	\$	8,520			\$	8,520	
<b>10.2</b>	Documents/Submittal/Training/OM									\$	-			\$	-	
	Design submittal		8		8			16	32	\$	4,680			\$	4,680	
	Training manual		4		4	4		16	28	\$	3,580			\$	3,580	
	Owner Manual		4		8	8		16	36	\$	4,760			\$	4,760	
														\$	-	
<b>11</b>	<b>Training</b>													\$	-	
	SCADA Operation Training		8		16			8	32	\$	5,280			\$	5,280	
	SCADA Configuration Programming Training		8		16			8	32	\$	5,280		\$	800	\$	6,080
														\$	-	
<b>12</b>	<b>Development Expense</b>													\$	-	
	Software License--CP&Y VTScada/PLC 3yr license									\$	24,000		\$	24,000	\$	24,000
	Test Equipment									\$	9,000		\$	9,000	\$	9,000
														\$	-	
<b>13</b>	<b>System Startup and Test</b>													\$	-	
														\$	-	
<b>13.1</b>	Phase 1A													\$	-	
	Startup /Test Remote from CPY office		8		16				24	\$	4,560			\$	4,560	
	Field Startup One Trip 1 day 1 Project Engr				8								\$	800	\$	800
														\$	-	
<b>13.2</b>	Well Field													\$	-	
	Startup /Test Remote from CPY office		24		60				84	\$	15,660			\$	15,660	
	Field Startup One Trip 1 day 1 Project Engr				8								\$	800	\$	800
														\$	-	
<b>13.3</b>	Water Treatment Plant-- Plant SCADA													\$	-	
	Startup /Test Remote from CPY office		8		24				32	\$	5,880			\$	5,880	
	Field Trip 2 Day 1Sr Eng 2PrjEngr		16		16	16			48	\$	8,560		\$	1,350	\$	9,910
														\$	-	
<b>13.4</b>	Water Treatment Plant-- Vendor PLC-Plant SCADA													\$	-	
	Factory Acceptance Test Filter system				8											
	Factory Acceptance Test Lime system				8											
	Startup /Test Remote from CPY office				24				24	\$	3,960			\$	3,960	
	Field Trip 3 Day 1Sr Eng 1 PrjEngr		24		24				48	\$	9,720		\$	1,750	\$	11,470
														\$	-	
<b>13.5</b>	Booster Pump Station													\$	-	
	Startup /Test Remote from CPY office		16		40				56	\$	10,440			\$	10,440	
	Field Trip 1 Day 1Sr Eng 1 PrjEngr		8		8				16	\$	3,240		\$	1,600	\$	4,840



<b>13.6</b>	Delivery Point and Elevated Storage Tank												\$ -
	Startup /Test Remote from CPY office		16		48				64	\$ 11,760			\$ 11,760
	Field Trip 2 Day 2 PrjEngr				16	16			32	\$ 4,720		\$ 1,350	\$ 6,070
<b>13.7</b>	SCADA Report												\$ -
	Startup /Test Remote from CPY office		32		60			16	108	\$ 19,020			\$ 19,020
	Field Trip 1 Day 1 PrjEngr				8				8	\$ 1,320		\$ 800	\$ 2,120
<b>13.8</b>	Network Configuration												\$ -
	Startup /Test Remote from CPY office		24		40				64	\$ 12,360			\$ 12,360
	Field Trip 1 Day 1 PrjEngr				8				8	\$ 1,320		\$ 800	\$ 2,120
	<b>Supplemental Service</b>												\$ -
<b>1</b>	Phase 1A												\$ -
	Startup /Test (One Field Trip 2 Days) 1 PrjEngr				16				16	\$ 2,640		\$ 800	\$ 3,440
													\$ -
<b>2</b>	Well Field												\$ -
	Startup /Test (One Field Trip 2 Days) 1 PrjEngr				16							\$ 1,600	\$ 1,600
													\$ -
<b>3</b>	Water Treatment Plant-- Plant SCADA												\$ -
	Startup /Test (Four Trip Each 3 Days) 1 Sr Engr 2 PrjEngr		48		96	48			192	\$ 33,600		\$ 6,600	\$ 40,200
													\$ -
<b>4</b>	Water Treatment Plant-- Vendor PLC-Plant SCADA												\$ -
	Factory Acceptance Test Filter system		24		40				64	\$ 12,360			\$ 12,360
	Factory Acceptance Test Lime system		16		24				40	\$ 7,800			\$ 7,800
	Startup /Test (One Field Trip 5 Days) 1 Sr Engr 1 PrjEngr		16		40	40			96	\$ 15,640		\$ 3,150	\$ 18,790
													\$ -
<b>5</b>	Booster Pump Station												\$ -
	Startup /Test (Two Field Trip 2 Days) 1 PrjEngr				32	32			64	\$ 9,440		\$ 1,150	\$ 10,590
													\$ -
<b>6</b>	Delivery Point and Elevated Storage												\$ -
	Startup /Test Two Trip 2 Days 1 Proj Engr				32	32			64	\$ 9,440		\$ 1,150	\$ 10,590
													\$ -
<b>7</b>	SCADA Report												\$ -
	Startup /Test One Field Trip 2 Days 1 Project Engr				16				16	\$ 2,640		\$ 800	\$ 3,440
													\$ -
<b>8</b>	Network Configuration												\$ -
	Startup/Test Two Field Trip 2 Days 1 Project Engr				32				32	\$ 5,280		\$ 1,150	\$ 6,430
													\$ -
													\$ -
	<b>Total Hours</b>	40	1,264		2,644	1,168	16		232	5364		\$ 33,000	\$ 34,050
	<b>Total Cost</b>	\$10,800	\$303,360		\$436,260	\$151,840	\$2,000		\$20,880	\$925,140	\$ 1,051,340	<b>Total Task Fee =</b>	\$ 1,085,390

**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**

Friday, August 20th, 2021 at 1:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 662 821 534#

**F.6** Discussion and possible direction to Staff regarding Considerations for Operations of the Authority's Water System. ~ *Graham Moore, P.E., Executive Director*

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Background/Information

In June the Board of Directors instructed Staff to begin an analysis of the operations of the Authority's water system to include in-house operations, outsourced operations and a hybrid/transition model where the operations would be outsourced for a short period of time and then transfer to in-house.

Staff has prepared the attached presentation to set the framework for the analysis. Staff is requesting feedback from the Committee as to the attributes to be considered and the schedule.

Attachment(s)

- Considerations for Operations of the ARWA Water System – August 20, 2021.

**Technical Committee Decision Needed:**

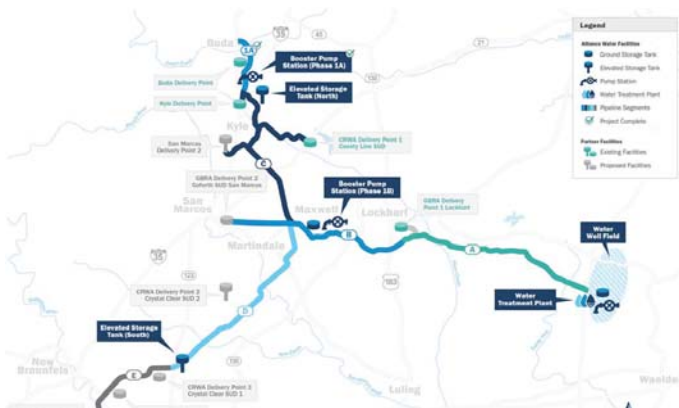
- Possible direction to Staff.



# Considerations for Operations of the ARWA Water System

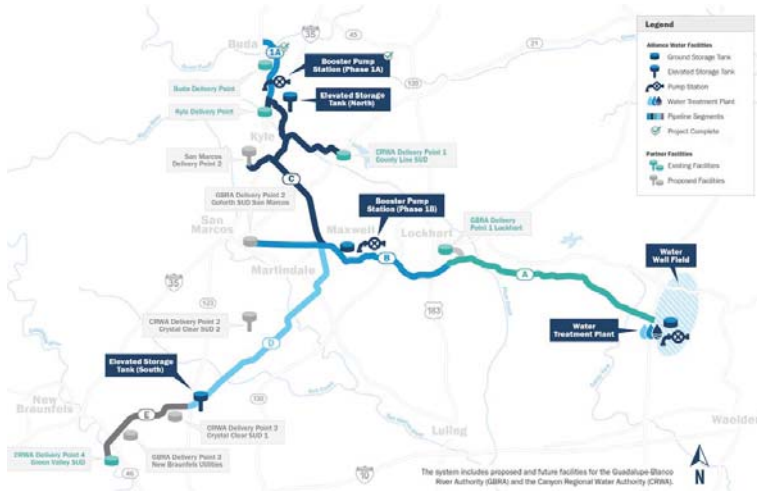
August 20, 2021

## Define Operations



- Well Field
- WTP
- Pipelines
- Booster Pump Stations (all)
- Elevated Tanks
- Delivery Points

# Define Operations



- Well Field
- WTP
- Pipelines
- Booster Pump Stations (all)
- Elevated Tanks
- Delivery Points

# Operational Scenarios to be Evaluated



In-House



Outsource



Hybrid / Transition

## Attributes to Consider

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Product Quality

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Financial Viability

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Infrastructure Strategy & Performance

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Customer Satisfaction

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Operational Optimization

## Definition of Attributes

### **Product Quality**

- Meets or exceeds regulatory and reliability requirements
- Operates consistent with customer, public health, economic and ecological needs.

### **Financial Viability**

- Understands and plans for full life-cycle cost of utility
- Effectively balances asset values, operations and maintenance expenditures and operating revenues
- Plans to invest in future needs
- Understand opportunities for diversifying revenue and raising capital

## Definition of Attributes

### Infrastructure Strategy & Performance

- Understands the condition of and costs associated with critical infrastructure needs
- Maintains and enhances assets over the long-term at the lowest possible life-cycle cost and risk
- Plans infrastructure investments consistent with community needs

### Customer Satisfaction

- Provides reliable, responsive, and affordable services
- Receives timely customer feedback
- Is responsive to customer needs and emergencies

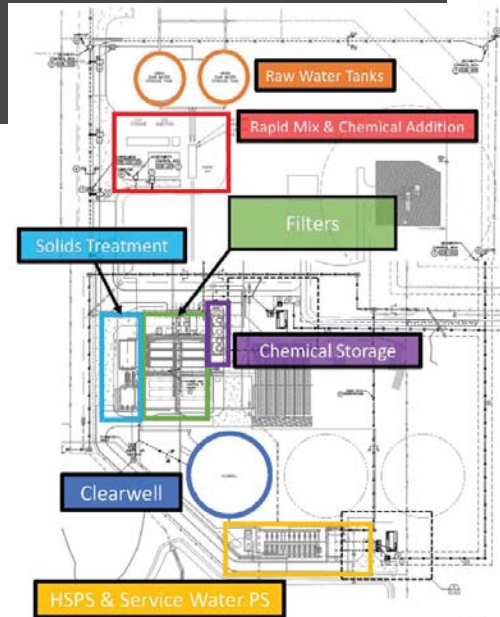
## Definition of Attributes

### Operational Optimization

- Conducts ongoing performance improvements informed by performance monitoring
- Minimizes resource use and loss from day-to-day operations
- Manages and utilizes data from automated and smart systems
- Is aware and adopts operational and technology improvements

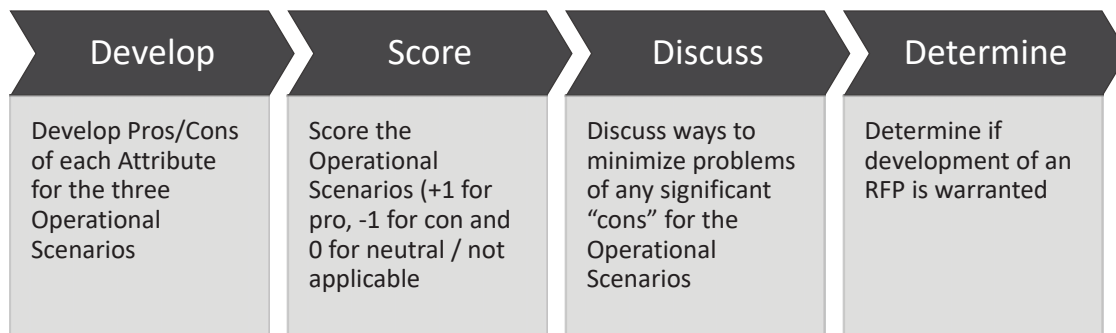
## Likely Challenges to Analysis

- No Baseline for Current Operations (flow, electricity, chemicals, etc.)
- Defining Performance – need to provide enough specificity to be meaningful



12

## Process



## Next Steps / Schedule

- September & October – Pros/Cons Presentations
- October – Overall Scoring
- November – RFP Determination & “Con” Mitigation

If an RFP is deemed necessary, then the schedule for its preparation, solicitation and review will be produced. This will likely take a minimum of 6 months.



**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**

Friday, August 20th, 2021 at 1:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 662 821 534#

**F.7** Discussion of legislative issues for the 87th Texas Legislature Special Session #1, and possible direction to Staff. ~ *Graham Moore, P.E., Executive Director*

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Background/Information

The second Special Session of the 87<sup>th</sup> Legislature began on August 7th. No items directly affecting water utilities, eminent domain or open meetings were on the Governor's call for the session. Staff and our Governmental Relations consultant will continue to monitor bills filed to determine if any will have impacts on the Authority. The special session can only last for 30 days unless extended by the Governor.

**Technical Committee Decision Needed:**

- Possible direction to Staff.

**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**

Friday, August 20th, 2021 at 1:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 662 821 534#

- F.8** Update on status of groundwater management in project target area, and Gonzales County Underground Water Conservation District, Plum Creek Conservation District, Groundwater Management Area 13, Region L Planning Group, Guadalupe-Blanco River Authority, Hays County and CAPCOG activities.  
~ *Graham Moore, P.E., Executive Director*
- 

Gonzales County Underground Water Conservation District (GCUWCD)

The GCUWCD met on August 10th – they discussed their draft budgets for the next year. In the past month the Authority received its disbursement check from the GCUWCD for the excess funds from the Monitoring Agreement.

Plum Creek Conservation District (PCCD)

The PCCD met on August 17<sup>th</sup> – nothing affecting the Authority was on the agenda.

Groundwater Management Area 13

No update.

Region L Planning Group

Region L is next scheduled to meet on August 5th. The group decided to slow down the process for selection of a technical consultant for the current planning cycle. The final decision is expected to be made at the November meeting.

Guadalupe-Blanco River Authority; Hays County Activities; CAPCOG Activities

No update.

**Technical Committee decision needed:**

- None.

**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**

Friday, August 20th, 2021 at 1:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 662 821 534#

- G. EXECUTIVE DIRECTOR REPORT** - Update on future meeting dates, locations, consultant invoices paid, approved changed orders, status of Authority procurements, Executive Director activities and other operational activities where no action is required. ~ *Graham Moore, P.E., Executive Director*

August Board Meeting

- The August Board meeting is scheduled for Wednesday, August 25th. The meeting will be held at the San Marcos Activity Center and a virtual attendance option will be available to Board members and the general public.

Consultant Invoices Paid

- Below are reports on the consultant invoices paid in July.

**FY 20-21 CONSULTANT INVOICES PAID IN JULY 2021**

<b>Consultant</b>	<b>Total Authorized</b>	<b>Current Invoice</b>	<b>Invoiced-to-Date</b>	<b>% of Contract Invoiced</b>	<b>Remaining</b>	<b>Notes/Anomalies</b>
LAN - Kyle/Buda Design	\$76,971.62	\$0.00	\$12,009.70	16%	\$64,961.92	
RW Harden	\$30,000.00	\$0.00	\$6,945.56	23%	\$23,054.44	
Tx Solutions Group	\$72,000.00	\$0.00	\$60,000.00	83%	\$12,000.00	
BGE - Ph 1A CA	\$7,110.08	\$0.00	\$1,400.30	20%	\$5,709.78	
Kent Alan Sick - ROW Legal	\$45,000.00	\$0.00	\$7,916.40	18%	\$37,083.60	
LNV - GIS Svcs	\$16,693.63	\$236.25	\$14,866.50	89%	\$1,827.13	
Armstrong, Vaughan & Associates, P.C.	\$10,930.00	\$0.00	\$10,930.00	100%	\$0.00	
J.R. Tolles & Associates, Inc.	\$245,000.00	\$0.00	\$168,675.00	69%	\$76,325.00	
Lloyd Gosselink Rochelle & Townsend	\$105,000.00	\$0.00	\$67,831.89	65%	\$37,168.11	
CD&P - Public Relations	\$45,404.50	\$0.00	\$28,510.28	63%	\$16,894.22	
MLA Labs, Inc. - Segment B	\$6,773.00	\$0.00	\$398.00	6%	\$6,375.00	
HDR - 2021 Rate Study	\$16,125.00	\$0.00	\$0.00	0%	\$16,125.00	
Law Offices of Patricia Erlinger Carls	\$25,000.00	\$0.00	\$1,102.50	4%	\$23,897.50	
<b>Total</b>	<b>\$702,007.83</b>	<b>\$236.25</b>	<b>\$380,586.13</b>		<b>\$321,421.70</b>	

**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**

Friday, August 20th, 2021 at 1:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 662 821 534#

- On the following page is the report on the Phase 1B invoices paid in July.

**PHASE 1B FY 20-21 CONSULTANT INVOICES PAID IN JULY 2021**

Consultant	Total Authorized	Current Invoice	Invoiced-to-Date	% of Contract Invoiced	Remaining	Notes/Anomalies
Kimley-Horn Ph 1B Owner's Rep W/O4	\$1,319,033.52	\$0.00	\$1,319,033.52	100%	\$0.00	
Kimley-Horn Ph 1B Owner's Rep W/O5	\$2,685,433.00	\$0.00	\$373,744.64	14%	\$2,311,688.36	
Blanton - Environmental	\$875,510.28	\$0.00	\$535,577.62	61%	\$339,932.66	
LAN - Segment A Prelim	\$116,364.20	\$0.00	\$2,266.60	2%	\$114,097.60	
LAN - Segment A Final	\$417,554.89	\$0.00	\$299,192.61	72%	\$118,362.28	
KFA - Segment B Prelim	\$13,275.94	\$0.00	\$0.00	0%	\$13,275.94	
KFA - Segment B Final	\$765,254.97	\$0.00	\$545,780.77	71%	\$219,474.20	
BGE - Segment C Prelim	\$15,099.24	\$0.00	\$0.00	0%	\$15,099.24	
BGE - Segment C Final	\$2,497,617.09	\$0.00	\$1,990,687.22	80%	\$506,929.87	
FNI - Segment D Prelim	\$63,533.66	\$0.00	\$0.00	0%	\$63,533.66	
FNI - Segment D Final	\$978,177.03	\$0.00	\$770,376.03	79%	\$207,801.00	
Walker - Segment E Prelim	\$58,638.01	\$0.00	\$13,349.75	23%	\$45,288.26	
Walker - Segment E Final	\$1,084,367.61	\$0.00	\$521,706.26	48%	\$562,661.35	
LAN - ROW Acquisition	\$1,601,100.28	\$0.00	\$569,233.85	36%	\$1,031,866.43	
DTR&G	\$1,272,719.30	\$0.00	\$510,382.36	40%	\$762,336.94	
CBRE - Appraisals	\$1,784,150.00	\$0.00	\$496,260.00	28%	\$1,287,890.00	
CP&Y - Survey	\$984,980.00	\$0.00	\$529,385.00	54%	\$455,595.00	
Rw Harden - WDH Const Admin	\$358,153.60	\$0.00	\$268,352.00	75%	\$89,801.60	
LMV - RWI	\$263,573.86	\$0.00	\$120,183.86	46%	\$143,390.00	
Walker Partners - WTP Final Design	\$1,029,963.16	\$0.00	\$787,766.84	76%	\$242,196.32	
FNI - BPS Prelim	\$4,772.50	\$0.00	\$4,772.50	100%	\$0.00	
FNI - BPS Final	\$838,134.63	\$0.00	\$543,701.86	65%	\$294,432.77	
Plummer - Inline Elevated Tank Prelim	\$42,799.42	\$0.00	\$39,069.35	91%	\$3,730.07	
Plummer - Inline Elevated Tank Final	\$423,526.00	\$0.00	\$0.00	0%	\$423,526.00	
Pape-Dawson - CM&I W/O#1	\$16,880.44	\$0.00	\$16,380.03	97%	\$500.41	
Pape-Dawson - CM&I W/O#2	\$147,500.00	\$0.00	\$130,335.00	88%	\$17,165.00	
Pape-Dawson - CM&I W/O#3	\$74,460.00	\$0.00	\$71,360.00	96%	\$3,100.00	
Pape-Dawson - CM&I W/O#4	\$100,600.00	\$0.00	\$44,825.00	45%	\$55,775.00	
Pape-Dawson - CM&I W/O#5	\$2,034,310.00	\$0.00	\$0.00	0%	\$2,034,310.00	
Hicks & Co - WDH Environmental	\$15,874.00	\$0.00	\$303.00	2%	\$15,571.00	
<b>Total</b>	<b>\$21,883,356.63</b>	<b>\$0.00</b>	<b>\$10,504,025.67</b>		<b>\$11,379,330.96</b>	

**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**

Friday, August 20th, 2021 at 1:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 662 821 534#

Approved Change Orders

<b>CHANGE ORDERS APPROVED IN JULY 2021</b>				
<b>Consultant</b>	<b>Original Authorization</b>	<b>Change Orders to Date</b>	<b>Change Order Approved this Month</b>	<b>New Total Contract Amount</b>
Walker Partners: 1B Segment E	\$ 408,755.00	\$ 164,719.00	\$ -	\$ 573,474.00
Drilling & Hydrogeology	\$ 114,000.00	\$ 31,380.00	\$ -	\$ 145,380.00
Freese & Nichols: 1B BPS & DP Prelim	\$ 771,617.00	\$ 44,408.00	\$ -	\$ 816,025.00
K Friese & Assoc.: 1B Segment B	\$ 565,417.00	\$ 60,095.00	\$ -	\$ 625,512.00
BGE: 1B Segment C Prelim	\$ 614,626.00	\$ 34,430.00	\$ -	\$ 649,056.00
Freese & Nichols: 1B Segment D	\$ 597,714.00	\$ 66,722.00	\$ -	\$ 664,436.00
Walker Partners: 1B WTP (Prelim)	\$ 1,203,606.00	\$ 40,406.00	\$ -	\$ 1,244,012.00
CP&Y: Ph 1B Program Survey	\$ 3,375,780.00	\$ 83,500.00	\$ -	\$ 3,459,280.00
Freese & Nichols: 1B Segment D (Final)	\$ 1,999,464.00	\$ 136,462.09	\$ -	\$ 2,135,926.09
LAN: 1B Segment A Final Design	\$ 1,903,077.00	\$ 196,591.00	\$ -	\$ 2,089,668.00
Blanton & Assoc: Environmental Invest.	\$ 1,398,775.00	\$ 150,703.00	\$ -	\$ 1,549,478.00
K Friese & Assoc: 1B Seg B Final Design	\$ 1,830,994.00	\$ 296,281.13	\$ -	\$ 2,063,949.13
Walker Partners: 1B WTP (Final)	\$ 2,900,402.00	\$ 564,435.00	\$ -	\$ 3,464,837.00
LNV: 1B Raw Water (Design)	\$ 1,418,700.00	\$ 75,337.00	\$ -	\$ 1,494,037.00
Walker Partners: 1B Seg E (Final)	\$ 1,190,421.00	\$ 88,128.00	\$ -	\$ 1,278,549.00
BGE: 1B Segment C Final	\$ 2,688,310.00	\$ 255,021.00	\$ -	\$ 2,943,331.00
Freese & Nichols: 1B BPS & DP Final	\$ 1,580,519.00	\$ 114,824.00	\$ 103,069.00	\$ 1,695,343.00
Pape Dawson: 1B BPS & DP Prelim	\$ 57,520.00	\$ 43,080.00	\$ -	\$ 100,600.00
CD&P: 2020 Public Relations	\$ 50,000.00	\$ 10,000.00	\$ 10,000.00	\$ 60,000.00

**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**

Friday, August 20th, 2021 at 1:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 662 821 534#

- H. COMMITTEE MEMBER ITEMS OR FUTURE AGENDA ITEMS – Possible acknowledgement by Committee Members of future area events and/or requests for item(s) to be placed on a future agenda where no action is required.
- 

Background/Information

The Committee Members have an opportunity to make announcements or to request that items be added to future Board or Committee agendas.

**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**

Friday, August 20th, 2021 at 1:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 662 821 534#

I.1 *Executive Session pursuant to the Government Code, Section 551.071 (Consultation with Attorney) and/or Section 551.072 (Real Property Deliberations) regarding:*

- A. *Water supply partnership options*
  - B. *Groundwater leases*
  - C. *Acquisition of real property for water supply project purposes*
  - D. *Phase 1B Segment A competitive sealed proposals*
-

**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**

Friday, August 20th, 2021 at 1:00 P.M.

Conference Call Number: 1-903-405-2572; Code: 662 821 534#

**I.2** Action from Executive Session on the following matters:

- A. *Water supply partnership options*
  - B. *Groundwater leases*
  - C. *Acquisition of real property for water supply project purposes*
  - D. *Possible direction to Staff regarding the Phase 1B Segment A competitive sealed proposals*
-



**REGULAR MEETING**  
**Alliance Regional Water Authority Technical Committee**

**COMMITTEE MEMBER PACKETS**  
Friday, August 20th, 2021 at 1:00 P.M.  
Conference Call Number: 1-903-405-2572; Code: 662 821 534#

**J. ADJOURNMENT**

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