

**Alliance Regional Water Authority
Technical Committee**

REGULAR MEETING



COMMITTEE MEMBER PACKETS

Wednesday, December 14th, 2022 at 3:00 P.M.

Call-In Number: 1-346-248-7799

Meeting ID: 982 8616 3170

Passcode: 495028

REGULAR MEETING
Alliance Regional Water Authority Technical Committee

COMMITTEE MEMBER PACKETS

Wednesday, December 14th, 2022 at 3:00 P.M.

Conference Call Number: 1-346-248-7799; Meeting ID: 982 8616 3170; Code: 495028

A quorum of Alliance Regional Water Authority's (the Authority's) Technical Committee will hold a meeting by telephonic conference call at 3:00 PM, Wednesday, December 14th, 2022. The public may participate in this meeting by calling the following number and code:

ZOOM MEETING LINK

Call-In Number: 1-346-248-7799

Meeting ID: 982 8616 3170

Passcode: 495028

Members of the public wishing to make public comment during the meeting must register by emailing info@alliancewater.org prior to 3:00 p.m. on December 14, 2022. 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 October 12, 2022. ~ *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 construction of the Authority's Phase 1B program. ~ *Toby Flinn, P.E., Pape-Dawson Engineers*

F.2 Update, discussion and possible direction to Staff regarding the Authority's Phase 1B program. ~ *Ryan Sowa, P.E., Kimley-Horn & Associates*

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- F.3 Possible recommendation to the Board to contingently award a construction contract for the Authority's Phase 1B Segment E Pipeline Project. ~ *Graham Moore, P.E., Executive Director*
- F.4 Possible recommendation to the Board to authorize a Work Order with Walker Partners, LLC for construction administration services on the Authority's Phase 1B Segment E Pipeline Project. ~ *Graham Moore, P.E., Executive Director*
- F.5 Possible recommendation to the Board to authorize a Work Order with Pape-Dawson Engineers, Inc. for Construction Management and Inspection Services on the Authority's Phase 1B program. ~ *Graham Moore, P.E., Executive Director*
- F.6 Update, discussion and possible direction to Staff regarding the Corrosion Report process and submittals to the Texas Commission on Environmental Quality. ~ *Marisa Vergara, P.E., CP&Y*
- F.7 Update, discussion and possible direction to Staff regarding updated water projections from the Authority's Sponsors. ~ *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.

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I. EXECUTIVE SESSION

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*

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*

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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A. CALL TO ORDER

No Backup Information for this Item.

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B. ROLL CALL

NAME PRESENT

Blake Neffendorf

Derrick Turley

Paul Kite

Humberto Ramos

Tim Samford

Regina Franke

NON-VOTING MEMBERS PRESENT

Mayor Lee Urbanovsky

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C. PUBLIC COMMENT PERIOD

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

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

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D.1 Consider approval of minutes of the Technical Committee Meeting held October 12, 2022. ~ *Graham Moore, P.E., Executive Director*

Attachment(s)

- 2022 10 12 Technical Committee Meeting Minutes

Technical Committee decision needed:

- Approval of minutes.



Alliance Regional Water Authority

TECHNICAL COMMITTEE MEETING

MINUTES

Wednesday, October 12, 2022

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, October 12, 2022 by telephonic conference call.

A. CALL TO ORDER.

The Alliance Water Technical Committee Meeting was called to order at 3:00 p.m. by Mr. Neffendorf.

B. ROLL CALL.

- **Present: Neffendorf, Turley, Kite, Ramos and Samford.**
- **Absent: Franke and Urbanovsky.**

C. PUBLIC COMMENT PERIOD

- **None.**

D. CONSENT AGENDA

D.1 Consider approval of minutes of the Regular Technical Committee Meeting held September 14, 2022.

- **Motion to adopt the minutes as presented was made by Mr. Samford, seconded by Mr. Turley 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 Election of a Chair for the Technical Committee.
- **Motion to nominate Blake Neffendorf as Chair of the Technical Committee was made by Mr. Samford, seconded by Mr. Ramos and approved on a 5-0 vote.**
 - **No Action.**
- F.2 Update and possible direction to Staff regarding construction of the Authority's Phase 1B program.
- **Mr. Flinn with Pape-Dawson provided an update on the Phase 1B construction.**
 - **No Action.**
- F.3 Update, discussion and possible direction to Staff regarding the Authority's Phase 1B program.
- **Mr. Nathan Cobler with Kimley-Horn provided an update on the Phase 1B program.**
 - **Mr. Neffendorf asked about the schedule for Segment C bidding.**
 - **Mr. Moore responded that early 2023 is targeted with a Notice to Proceed in the April/May timeframe.**
 - **No Action.**
- F.4 Update, discussion and possible direction to Staff regarding the Corrosion Report process and submittals to the Texas Commission on Environmental Quality.
- **Ms. Marisa Vergara with CP&Y attended the meeting and provided an update.**
 - **Mr. Neffendorf asked if we anticipate having the same reviewer for all submissions.**
 - **Ms. Vergara confirmed that we expect the same reviewer, that we are simply staggering the submittals to help with the reviewer's workload.**
 - **No Action.**
- F.5 Update, discussion and possible direction to Staff regarding the Authority's Graphical Information Systems and information gathered during construction.
- **Mr. Moore provided an update.**
 - **No Action.**
- F.6 Update, discussion and possible direction to Staff regarding updated water projections from the Authority's Sponsors.
- **Mr. Moore provided an update on the projections.**

- **Mr. Samford supported the idea of the Authority providing a standard form for the Sponsors to fill out so that the information will be more uniform. Mr. Neffendorf and Mr. Ramos agreed.**
 - **No Action.**
- F.7 Update, discussion and possible direction to Staff regarding the Authority's request to the Texas Water Development Board for additional SWIFT Funding.
- **Mr. Moore provided an update.**
 - **Motion to recommend to the Board that the current fiscal year budget not be amended due to larger than expected interest-only debt payments in 2023, but instead to utilize the surplus funds in the debt reserve accounts was made by Mr. Ramos, seconded by Mr. Samford and approved on a 5-0 vote.**
- 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.
- **Mr. Moore provided an update on permitting at the GCUWCD.**
 - **No Action.**

G. EXECUTIVE DIRECTOR REPORT

- **No Action.**

H. COMMITTEE MEMBER ITEMS OR FUTURE AGENDA ITEMS

- **Mr. Neffendorf requested an update in the future on the Blanco Basin Study.**

I. EXECUTIVE SESSION

- 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
- 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 4:01 p.m. based on the motion by Mr. Ramos, seconded by Mr. Samford and approved on a 5-0 vote.**

APPROVED: _____, 2022

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- F.1** Update and possible direction to Staff regarding construction of the Authority's Phase 1B program. ~ *Toby Flinn, P.E., Pape-Dawson Engineers*
-

Background/Information

Toby Flinn with Pape Dawson will update the Committee on recent construction activities associated with the Phase 1B program.

Attachment(s)

- Phase 1B Construction Update – December 14, 2022

Technical Committee Decisions Needed:

- None.



PHASE 1B CONSTRUCTION UPDATE

TECHNICAL COMMITTEE MEETING

CMI Progress

December 14, 2022

Water Resources | Transportation | Land Development | Surveying | Environmental

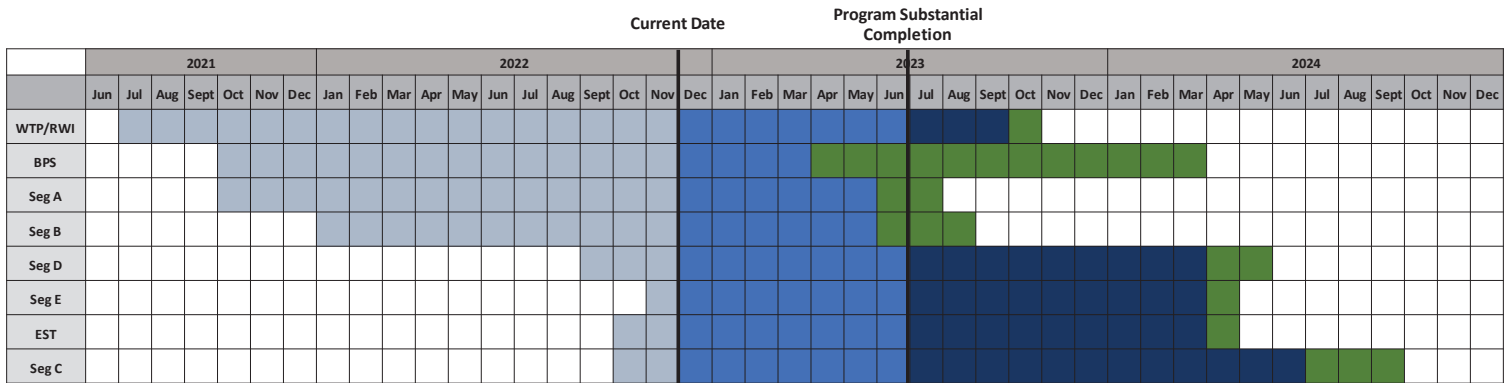


PROGRAM CONTRACT VALUES



PROJECT	CURRENT CONTRACT VALUE	BILLED TO DATE	REMAINING	% COMPLETE
WTP/RWI	\$55,002,687.00	\$30,401,735.60	\$24,600,951.40	55.27%
BPS	\$19,706,258.71	\$11,420,879.41	\$8,285,379.30	57.96%
Seg A	\$49,471,384.71	\$35,061,611.44	\$14,409,773.27	70.87%
Seg B	\$37,629,104.42	\$19,065,216.06	\$18,563,888.36	50.67%
Seg D	\$46,663,969.35	\$0.00	\$46,663,969.35	0.00%

PROGRAM SCHEDULE DURATIONS



Contract Dates					Program Sub Completion Status (June 2023)
Project	Notice to Proceed	Original Sub Completion	Current Sub Completion	Final Completion	
WTP/RWI	7/16/2021	7/16/2023	9/3/2023	11/2/2023	Behind 9 wks
BPS	10/25/2021	3/19/2023	3/19/2023	3/18/2024	On Time
Seg A	11/16/2021	6/9/2023	6/9/2023	10/7/2023	On Time
Seg B	2/15/2022	8/9/2023	8/9/2023	10/8/2023	On Time (Garney SCH showing SC 6/9/23)
Seg D	9/19/2022	4/1/2024	4/1/2024	5/31/2024	On Time

3

Water Treatment Plant / Raw Water Infrastructure (Archer Western / Walker Partners)

Construction Status

- Completed installation of 36" GWI yard piping to Raw Water tanks & tested lines.
- Completed construction of the Rapid Mix Basin.
- Completed the Lime System Foundation and containment walls
- Completed the installation of the 42" filter influent line.
- Continued installation of the process piping for the filter units at the Filter Complex
- Began CMU masonry walls installation at the Filter Complex.
- Completed the installation of the HSPS suction piping and valves
- Began HSPS surge valve bypass piping installation and vault construction.
- Continued the installation of the 48" PW-A line from the HSPS towards FM304.
- Continued electrical building underground electrical installation.
- Placed Lobe pumps foundation pad.
- Installed 24" BWW piping from Filter Complex to Flow EQ Basin.
- Installed the 8" fire line from PW-A to the plant entrance gate.
- Began 4" plant waterline installation.
- Completed the fire line meter vault.
- Continued installation of site electrical and fiber ductbanks.



WTP – 48" Potable Water Line A Setting Pipe HSPS-81

WTP/WRI - PROGRESS PHOTOS



WTP – Fire Line Meter Vault Setting Rebar for Floor



WTP – Fire Line Meter Vault Floor Concrete Placement



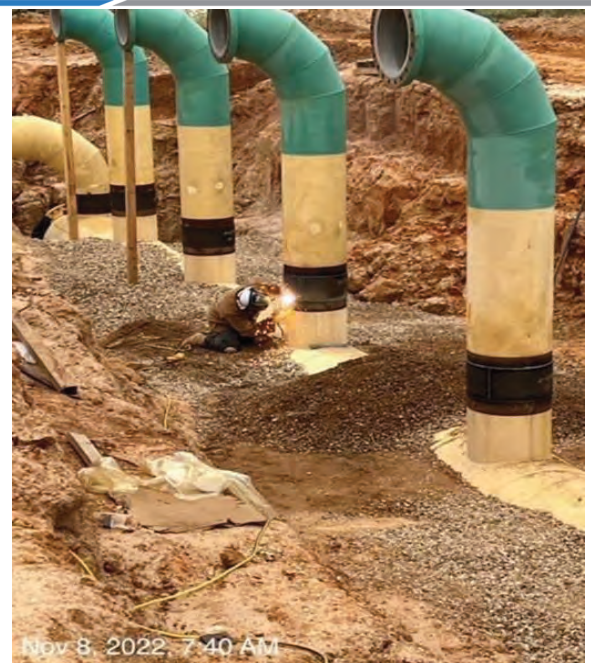
WTP – Backfill 36" Ground Water Piping to GBRA RW Tank

5

Water Treatment Plant / Raw Water Infrastructure (Archer Western / Walker Partners)

Next Month - Projected Construction Activities

- Connect to 36" GBRA GWI line and fill Raw Water Tanks.
- Install Lime Silos at Lime System.
- Continue installation of the process piping for the filter units at the Filter Complex.
- Continue CMU masonry walls installation at the Filter Complex.
- Begin Filter Complex structural steel installation.
- Continue HSPS surge valve bypass piping installation and vault construction.
- Form and place grade beams for HSPS electrical building.
- Continue the installation of the 48" PW-A line from the HSPS towards FM304.
- Complete bypass surge valve vault construction.
- Continue electrical building underground electrical installation.
- Continue 4" plant waterline installation.
- Install 24" Backwash Supply piping.
- Erect structural steel canopies at well sites.



WTP – HSPS Discharge Header AW Welding Risers

Booster Pump Station (MWH / Freese and Nichols)

Construction Status

- Continue electrical underground ductbank installations at BPS site.
- Placed electrical building foundation slab.
- Continued Segments B, C and D rework.
- Continued installation of Segment D to the 24" transition point.
- Completed pump station suction piping installation. (Awaiting testing prior to backfill)
- Begin SM#1 DP mechanical pad excavation and formwork.
- Rough-in electrical conduits for SM#1 DP mechanical pad.
- Install SM#1 DP 36" DIP inlet piping at Segment B2 connection. (Connection has not been made)



Nov 3, 2022 at 3:02:45 PM
9675 SH-142
Maxwell TX 78656
United States

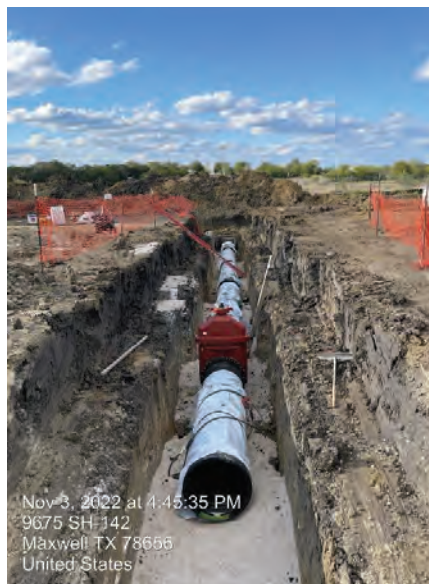
BPS – D Ductbank Installation

BPS- PROGRESS PHOTOS



Nov 3, 2022 at 10:31:12 AM
9675 SH-142
Maxwell TX 78656
United States

BPS – Cathodic Protection for Seg D 24" Gate Valve STA 12+86



Nov 3, 2022 at 4:45:35 PM
9675 SH-142
Maxwell TX 78656
United States

BPS – Seg D Pipe Installation and 24" Gate Valve Installation



Nov 11, 2022 at 9:10:06 AM
9675 SH-142
Maxwell TX 78656
United States

BPS – Backfilling towards STA 12+86

Booster Pump Station (MWH / Freese and Nichols)

Next Month - Projected Construction Activities

- Erect precast concrete electrical building at BPS site.
- Continued Segments B, C and D rework.
- Continue segment D 24" installation to BPS.
- Continue segment C 24" installation to BPS.
- Test suction header piping in preparation for backfill.
- Begin installation of the suction piping to the GST.
- Form and place concrete for SM#1 mechanical pad.
- Begin SM#1 DP above ground piping.
- Continue underground ductbank installation at the BPS site.



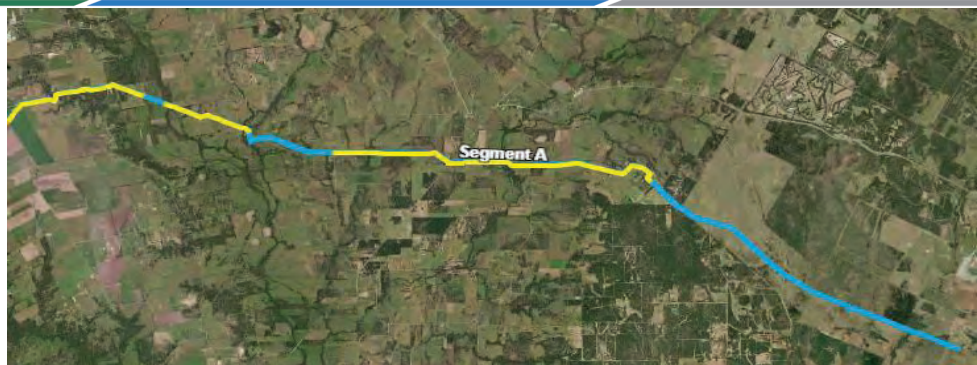
Nov 15, 2022 at 10:20:02 AM
9675 SH-142
Maxwell TX 78656
United States

BPS – Flow Meter Vault Excavation for Segment D

Segment A (Garney Construction / LAN)

Construction Status

- Not Started
- ROW Cleared
- Pipe Delivered
- Pipe Installed
- Complete



Activity	Status
ROW Cleared	100%
Pipe Delivered	100%
Tunnels Completed	93% (15 of 16)
Pipe Installed	45%
Major Crossing (Plum Creek)	De-watering plan waws approved with exceptions as noted on 12/02/2022. Construction of launch shaft and proceeding tunneling operation on hold until re-mobilization is initiated by Garney to Melcar.

SEGMENT A - PROGRESS PHOTOS



Seg A – Daniel Creek Equipment Mobilization



Seg A – Daniel Creek Bore setup on West Side



Seg A – Daniel Creek Place and Weld Encasement Pipe 11

Segment A (Garney Construction / LAN)

Next Month - Projected Construction Activities

- Continue conducting testing on embedment material, native backfill and weld inspections thru HVJ
- Minor Hand Tunnel Crossings Completed 100% (15 of 15)
- Major Crossing Completed 0% (0 of 1)
 - Start installation of launch shaft on West side of Plum Creek
- Pipe Installation
 - Continue stripping, trenching, and pipe installation operations with pipe laying Crew 1, heading west paralleling Sand Hill Road.
 - Continue stripping, trenching, and pipe installation operations with pipe laying Crew 2, west of Cattlemen's Row access point to easement and continue installation west towards Star Road.
 - Finish mobilization of pipe laying Crew 3 and prep to perform prove out the first week of December
 - Start stripping, trenching, and pipe installation operations with pipe laying Crew 3, west of Plum Creek and heading West towards RC Lane.
- All pipe laying crews are loading carrier pipe in tunnels, pouring CLSM at ends of tunnels, pouring 3000 psi concrete anchors as they lay past appurtenance locations, installing test stations for cathodic protection, and stacking out precast at appurtenance locations after concrete cures.



Seg A – Daniel Creek subcontractor Casing Placement

Segment B (Garney Construction / K Friese)

Construction Status

- Not Started
- ROW Cleared
- Pipe Delivered
- Pipe Installed
- Complete



Activity	Status
ROW Cleared	100%
Pipe Delivered	67%
Tunnels Completed	90% (19 of 21)
Pipe Installed	33%
Major Crossing (TX 130)	Initial delivery of materials to construct receiving shaft on Northeast side of TX 130 was delivered and receiving shaft has started. Pre-construction meeting conducted and overall approach reviewed onsite for full scope of work to be completed for shaft construction and setup for tunneling operations.

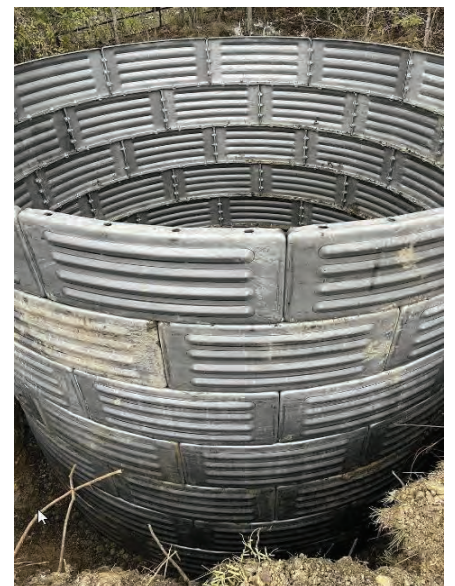
SEGMENT B - PROGRESS PHOTOS



Seg B – SH130 BoreCo Receiving Pit Layout



Seg B – SH130 BoreCo Placing CLSM around Tunnel Liner



Seg B – SH130 BoreCo Assembled Tunnel Liners

Segment B (Garney Construction / K Friese)

Next Month - Projected Construction Activities

- Continue boring and contact grouting operations on B1
- Continue installation of LOC/SWPPP fencing on B1
- Continue tunneling operations on B1
- Continue compaction testing and welding inspection by HVJ on B2
- Tunnels
 - Install tunnels to bring total to 20 of 21 (95%)
 - Bore Location # 4 on B1 – Clear Fork/Plum Creek
- Major Crossings
 - Delivery of approved casing for crossing
 - Delivery of launch shaft materials
 - Continue and finish installation of receiving shaft
 - Start installation of launch shaft
- Pipe Installation
 - Continue 36" Pipe Installation on B2 West of 1984 continuing towards WTP
 - Installation of 36" pipe on Segment B2 will be laid out to metering station at WTP
 - Mobilizing laying crew back to Church Street tunnels on B2 to install final open cut pipe installation on original scope of work to be completed on Segment B2 (approximately 450 LF)



SH130 – BoreCO Pumping Grout behind Tunnel Plate Liner

Segment D (SJ Louis / Freese & Nichols)

Pre-Construction Activities

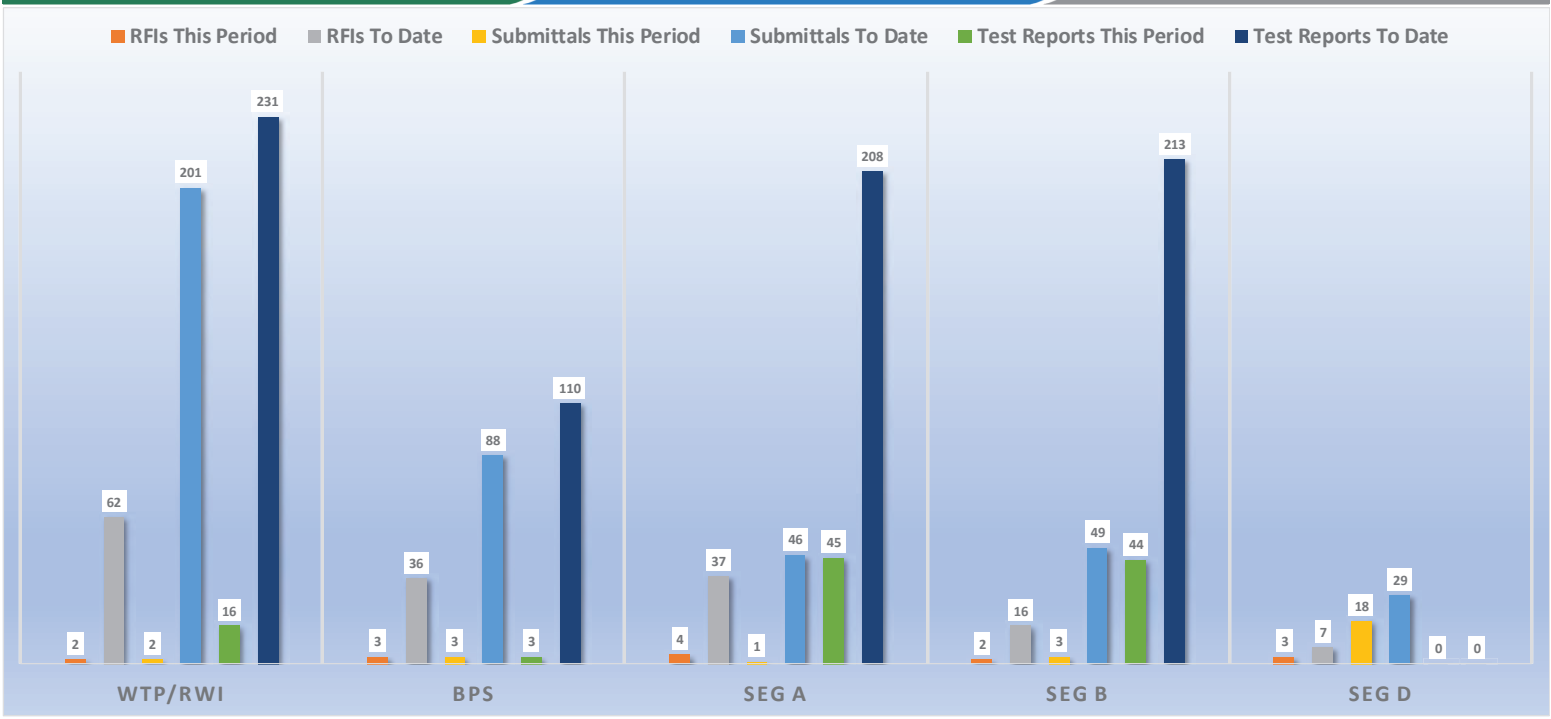
- Received and processed Contract documents
- Conducted Pre-Construction Kickoff meeting
- Processing RFI's and Shop Drawings
- Mobilization of survey crew and start of survey ahead of clearing operations.

Next Month - Projected Activities

- Continue processing documentation in SharePoint.
- Continue survey ahead of clearing operations.
- Mobilization of fencing company to install temporary access ahead of clearing operation.
- Crews off-site and shutdown for Christmas Holiday from 12/17/22 to 1/2/23



PROGRAM OVERSIGHT RECAP



QUESTIONS?

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- F.2** 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 – November 14, 2022
- Kimley-Horn Monthly Summary of Activities for November 2022

Technical Committee Decisions Needed:

- None.



Phase 1B Program Update

Technical Committee Meeting
December 14, 2022



ALLIANCE WATER

Kimley»Horn
Expect More. Experience Better.

PRESENTED BY

Ongoing Progress

► Design Milestone Status

- Design Submittals
 - South In-line EST – final submittal in early December
 - Segment C – 100% submittal anticipated in December
 - North In-line EST – 60% submittal in January
- TWDB Reviews
 - WTP
 - Change Order No. 1 and 2 Release of Funds Under Review
 - Segment D
 - Engineering Feasibility Report - Approved
 - Plans and Specs – Approved
 - Segment E
 - Engineering Feasibility Report - Approved



Ongoing Progress

► South In-line EST Procurement Schedule

- Dec. 14th – Advertisement
- Jan. 18th – Proposals Received/Opened
- February – Anticipated Contract Award
- March – Notice to Proceed



Pipeline Easement Acquisition Status

Pipeline Segment	Number of Parcels	STATUS						
		(A) Appraisal/Offer in Development	(B) Negotiation	(C) = (A+B) Appraisal / Negotiation	(D) Condemnation in Process	(E) = (C+D) Possession Still Needed	(F) Purchase Agreement Signed / Possession Obtained	Final Settlement Outstanding
A	39	0	0	0	0	0	39	5
B	47	0	0	0	0	0	47	16
D	60	0	0	0	0	0	60	22
C	75	4	9	13	10	23	52	41
E	38	0	4	4	3	7	31	22
Well Field	16	0	4	4	0	4	12	4
Total	275					34	241	110



COST UPDATES BASED ON NOVEMBER MILESTONE SUBMITTALS/RESULTS

		ORIGINAL (FEB. 2019)	REVISED	
	Construction Package	ARWA Total Projected Cost	ARWA Total Projected Cost	DIFFERENCE
Submittal (%)	Combined Program Infrastructure			
Const.	Water Treatment Plant	\$ 25,200,000	\$ 29,500,000	\$ 4,300,000
Const.	Booster Pump Station & GBRA Meter Stations	\$ 12,100,000	\$ 13,700,000	\$ 1,600,000
100	Inline EST (South)	\$ 3,600,000	\$ 4,800,000	\$ 1,200,000
Const.	Pipeline Segment A	\$ 27,200,000	\$ 28,600,000	\$ 1,400,000
Const.	Pipeline Segment B	\$ 27,100,000	\$ 33,800,000	\$ 6,700,000
Const.	Pipeline Segment D	\$ 36,300,000	\$ 44,200,000	\$ 7,900,000
90	Pipeline Segment E	\$ 9,500,000	\$ 10,900,000	\$ 1,400,000
	Subtotal	\$141,000,000	\$165,500,000	\$ 24,500,000
	ARWA-Only Infrastructure			
Closed	Well Drilling	\$ 3,800,000	\$ 3,300,000	(\$ 500,000)
Const.	Raw Water Infrastructure	\$ 7,000,000	\$ 10,600,000	\$ 3,600,000
Const.	ARWA Booster Pump Station & Delivery Points	\$ 7,700,000	\$ 4,800,000	(\$ 2,900,000)
30	Inline EST (North)	\$ 5,400,000	\$ 6,500,000	\$ 1,100,000
90	Pipeline Segment C	\$ 64,500,000	\$ 68,600,000	\$ 4,100,000
90	Pipeline Segment E (ARWA-Only)	\$ 6,700,000	\$ 12,600,000	\$ 5,900,000
No Design	Administration and Operations Building	\$ 4,300,000	\$ 4,200,000	(\$ 100,000)
	Subtotal	\$ 99,400,000	\$110,600,000	\$ 11,200,000
	Total	\$240,400,000	\$276,100,000	\$35,700,000

DECEMBER 2022 UPDATE

NO CHANGE FROM
NOVEMBER UPDATE



Questions?

December 9, 2022

Project Monthly Summary

November 2022 Tasks Performed:

- Task 1 – Program Management Plan Updates
 - *Updated the Document Control Data Management Section given ARWA’s document retention feedback.*
- 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 Project Advisory Committee Meeting Update.
 - Prepared and presented the Board Meeting Update.
 - Prepared for and held Monthly Status Meeting with Alliance Water.
- Task 3 – Budgeting
 - Addressed ARWA’s comments on the budget projection.
 - Prepared and presented the monthly Budget Update for the Technical Committee and Board meetings.
 - Continued updates to Budget Workbook to include monthly tracking of actual costs for ARWA review.
- Task 4 – Schedule
 - Revised the Project Deliverable Schedule based on the feedback received from ARWA, Design Consultants, and Construction Management & Inspection team.
 - Integrated each project schedule into overall Program schedule. Developed and distributed the monthly Program schedule summary.
- Task 6 – Data Management
 - *Performed spot check audit of LAN’s land acquisition files on the SharePoint site.*
 - Continued to coordinate with ARWA and Construction Management & Inspection Team to integrate construction data collected on the GIS WebMap.
 - Ongoing maintenance of Microsoft SharePoint Online program.
 - Continued updating of web-based GIS for easement acquisition process and alignment changes.
- Task 7 – Environmental Management
 - *Reviewed the Segment C drafted agency reports prepared by the Program Environmental Consultant.*

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

- *Assisted the Program Environmental Consultant in submitting Segment C agency reports for review by the U.S. Fish and Wildlife Service and Texas Parks and Wildlife Department.*
- Continued coordination with ARWA and the Program Environmental Consultant regarding the burial relocation proceedings.
- Continued coordination with Program Environmental Consultant concerning the comments from the United States Army Corps of Engineers.
- Monthly progress meeting and ongoing coordination with Program Environmental Consultant.
- Continued coordination between Program Environmental Consultant and Design Engineers.

- Task 8 – Land Acquisition Management
 - *Continued negotiations with remaining Segment C parcels.*
 - *Finalized agreement for drainage easement adjacent to booster pump station tract.*
 - Coordinated the appraisal process for Segments C and W parcels.
 - Coordinated with Program Survey Consultant, Program Environmental Consultant, and Land Acquisition legal 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 legal team.
 - Weekly coordination meeting with Legal Land Acquisition to discuss status of easement acquisition proceedings and to provide Program clarification on any questions/requests that have come from landowners.
 - Reviewed 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 ARWA, GBRA, and TWDB Staff to track all EFRs, environmental reports, and bid documents currently under review as well as preparation of funding release requests.

- Task 11 – Engineering Design Management
 - Pipelines:
 - Segment A
 - Continue coordination with Design Consultant for construction phase services.
 - Segment B
 - Continued coordination with Design Consultant for construction phase services.
 - Segment C
 - Continued coordination with Design Consultant for final design.

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

- Continued coordination with Design Consultant regarding ongoing field work and pipeline alignment considerations.
 - Segment D
 - Continue coordination with Design Consultant for construction phase services.
 - Segment E
 - *Coordinated with Design Consultant during project procurement services.*
 - Raw Water Infrastructure:
 - Continued coordination with Design Consultant for construction phase services.
 - Water Treatment Plant:
 - *Continued coordination with Design Consultant concerning Hydraulics/Surge report submitted on November 21st.*
 - Continued coordination with Design Consultant for construction phase services.
 - Booster Pump Station:
 - Coordinated with Design Consultant for construction phase services.
 - Inline Elevated Storage Tanks:
 - *Coordinated with Design Consultant during the South Inline Elevated Storage Tank final design and preparation for upcoming project procurement services.*
 - Continued coordination with Design Consultant for final design development for the South and North Inline Elevated Storage Tanks.
 - 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 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 Caldwell, Guadalupe, and Hays Counties regarding on going permit reviews.
 - Continued General Coordination with GVEC, BBEC, and LCRA.
 - On-going Permit Tracking Log Updates.
- Task 15 – Procurement and Construction Phase Services
 - *Continued coordination with Segment E Design Consultant during the procurement phase.*

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

- On-going coordination with WTP, RWI, BPS, Segment A, Segment B, and Segment D Design Consultants during the construction phase.
- Continued coordination with the Construction Management & Inspection team.
- Task 18 – Environmental Construction Services
 - Continue coordination with USACE regarding Sandy Creek and Plum Creek permits.
 - Attended construction status meetings.

December 2022 Projection:

- Task 1 – Program Management Plan Updates
 - *Finalized the updates to the Document Control Data Management Section given ARWA’s document retention feedback.*
- Task 2 – Stakeholder Coordination
 - *Prepare and present the Easement Acquisition Cost update at the Board meeting.*
 - 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 Meeting 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
 - *Finalize budget projection for ARWA’s review.*
 - Prepare and present the monthly Budget Update for the Technical Committee and Board meetings.
 - Continue updates to Budget Workbook to include monthly tracking of actual costs for ARWA review.
- Task 4 – Schedule
 - Revise the Project Deliverable Schedule based on the feedback received from ARWA, Design Consultants, and Construction Management & Inspection team.
 - Integrate each project schedule into overall Program schedule. Develop and distribute schedule update and memorandum.
- Task 6 – Data Management
 - *Update Easement Acquisition tracking information to determine the number of easements with final settlement outstanding.*

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

- Continued coordination with ARWA and Construction Management & Inspection Team to integrate construction data collected on the new GIS WebMap.
- Ongoing maintenance of Microsoft SharePoint Online program.
- Continued updating of web-based GIS for easement acquisition process and alignment changes.
- Task 7 – Environmental Management
 - Assist the Program Environmental Consultant in addressing Segment C agency comments on submitted reports.
 - Continue coordination with ARWA and the Program Environmental Consultant regarding the burial relocation proceedings.
 - Continue coordination with Program Environmental Consultant concerning the comments from the United States Army Corps of Engineers.
 - 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 and W parcels.
 - Coordinate with Program Survey Consultant and Design Consultants to address questions that arise as part of the field work coordination process.
 - Perform weekly QC of parcel files in SharePoint, provide comments to Legal Land Acquisition team.
 - Weekly coordination meeting with Legal Land Acquisition to discuss status of easement acquisition proceedings and to provide Program clarification on any questions/requests that have come from landowners.
 - Review 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
 - Prepare the Segment D Construction Phase Release of Funds request and submit to TWDB for review.
 - Continue coordination with ARWA, GBRA, and TWDB Staff to track all EFRs, environmental reports, and bid documents currently under review as well as preparation of funding release requests.
- Task 10 – Design Standards
 - Review Construction Standards given questions arising from construction activities and coordinate with the Program Design Consultants as needed.
- Task 11 – Engineering Design Management
 - Pipelines:

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

- Segment A
 - Continue coordination with Design Consultant for construction phase services.
 - Segment B
 - Continue coordination with Design Consultant for construction phase services.
 - Segment C
 - *Begin review of 100% 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.
 - Segment D
 - Continue coordination with Design Consultant for construction phase services.
 - Segment E
 - *Review and provide feedback on the Segment E Proposals.*
 - *Coordinate with Design Consultant during project procurement and construction phase services.*
 - Raw Water Infrastructure:
 - Continue coordination with Design Consultant for construction phase services.
 - Water Treatment Plant:
 - Continue coordination with Design Consultant for construction phase services.
 - Booster Pump Station:
 - Continue coordination with Design Consultant for construction phase services.
 - Inline Elevated Storage Tanks:
 - *Continue to coordinate with Design Consultant during the South Inline Elevated Storage Tank final design and project procurement services.*
 - Continue coordination with Design Consultant for final design development for the North Inline Elevated Storage Tanks.
 - 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 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.

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

- General Coordination with TxDOT.
- Coordinate with Caldwell, Guadalupe, and Hays County TxDOT offices concerning roadway crossings.
- Continue General Coordination with GVEC, BBEC, and LCRA.
- On-going Permit Tracking Log Updates.

- Task 15 – Procurement and Construction Phase Services
 - *Continue coordination with Segment E Design Consultant during the procurement phase and construction phase.*
 - *Coordinate with Inline Elevated Storage Tank Design Consultant during the South Inline Elevated Storage Tank procurement phase services.*
 - On-going coordination with WTP, RWI, BPS, Segment A, Segment B, and Segment D Design Consultants during the construction phase.
 - On-going coordination with the Construction Management & Inspection team.

- Task 16 – Other Services
 - *Prepare the updated City of San Marcos Watershed Protection Plan for the Booster Pump Station Plat.*

- Task 18 – Environmental Construction Services
 - Continue coordination with USACE regarding Sandy Creek and Plum Creek permits.
 - Attend construction status meetings.

Scope Elements Added/Removed:

- *Evaluated and prepared possible WTP Expansion options given GBRA’s request for additional capacity at the WTP in the future.*
- *Reviewed impacts to Phase 1B infrastructure based on WTP Expansion options recommended.*

Outstanding Issues/Concerns:

None at this time.

REGULAR MEETING
Alliance Regional Water Authority Technical Committee

COMMITTEE MEMBER PACKETS

Wednesday, December 14th, 2022 at 3:00 P.M.

Conference Call Number: 1-346-248-7799; Meeting ID: 982 8616 3170; Code: 495028

- F.3** Possible recommendation to the Board to contingently award a construction contract for the Authority's Phase 1B Segment E Pipeline Project. ~ *Graham Moore, P.E., Executive Director*
-

Background/Information

Alliance Water sought proposals for the Phase 1B Segment E Pipeline Project starting in October with proposals submitted on November 14, 2022. 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 approximately 8.8-miles of 36-inch pipeline and related appurtenances generally from Geronimo, Texas to the CRWA Lake Dunlap Water Treatment Plant on the south side of the Guadalupe River. The bid was setup for additive alternates of pipe material (ductile iron, concrete steel cylinder and welded steel) as well as three alternatives for the crossing of the Guadalupe River (microtunneling, horizontal directional drilling and direct pipe method).

Two 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.

Attachment(s)

- Segment E Recommendation Presentation

Technical Committee Decision Needed:

- Possible recommendation to the Board to recommend contingently awarding the Segment E Pipeline Project to Garney Construction with Alternative B (Steel Pipe) and Alternative E (Horizontal Directional Drilling) of the Guadalupe River.

Alliance Regional Water Authority

Segment E – Recommendation of Construction Award

December 14, 2022



1

1

Meeting Agenda

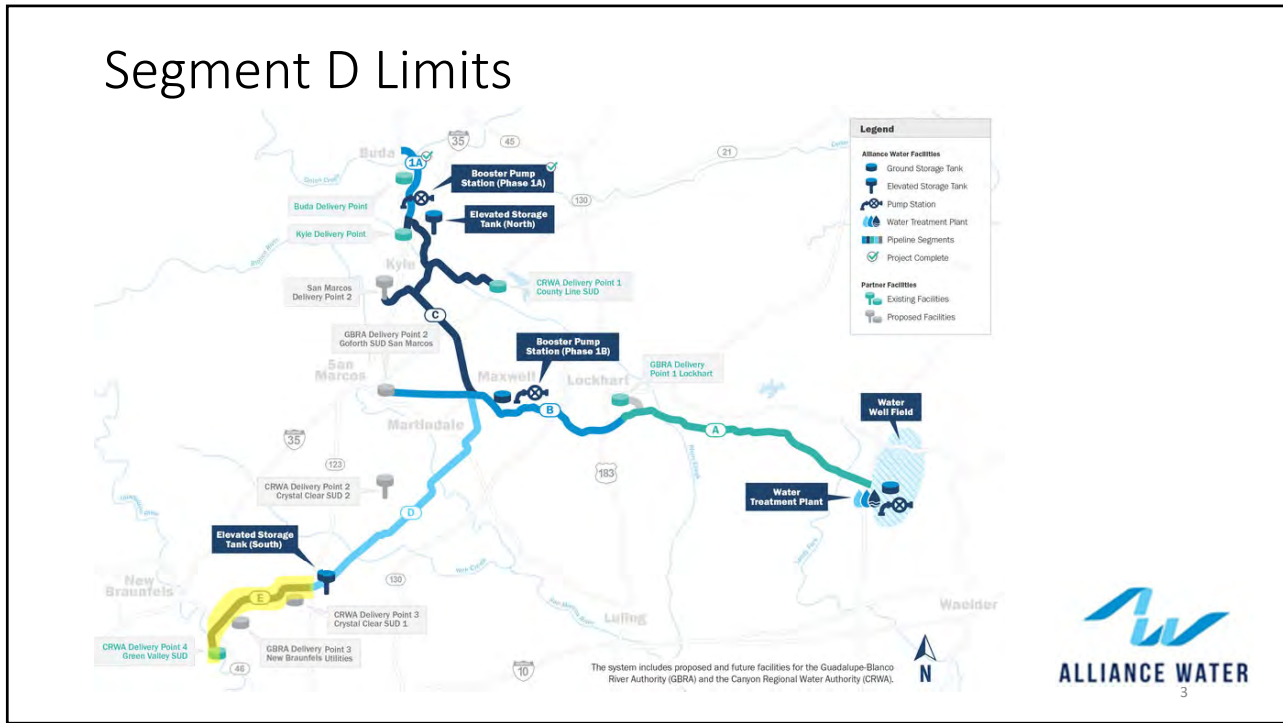
Segment E Pipeline

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



2

Segment D Limits



3

Segment E Pipeline Summary of Proposals Received

Proposal Price	Alt Description	Proposal Company	
		Garney	SJ Louis
Base Proposal		\$8,237,984.25	\$7,013,373.72
Alt A	Ductile Iron	No Bid	No Bid
Alt B	Steel Pipe	\$16,482,818.21	\$16,218,188.18
Alt C	Steel Cylinder	\$25,495,691.20	\$18,094,890.80
Alt D - Microtunnel Guadalupe River		\$8,716,028.00	\$7,917,723.28
Alt E - HDD Guadalupe River		\$2,556,968.00	No Bid
Alt F - Direct Pipe (36-Inch) Guadalupe River		\$6,471,560.00	No Bid
Alt G - Direct Pipe (42-Inch) Guadalupe River		\$4,649,556.00	\$8,535,125.00
Lowest Cost Option by Bidder (Base + Alt B + Alt E)		\$27,277,770.46 (Base + Alt B + Alt E)	\$31,149,285.18 (Base + Alt B + Alt D)

↑
RECOMMENDED



4

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)



5

Review Team Total Combined Score

Criteria	Garney	SJ Louis
Proposal Price (40 Points)	40.0	32.6
Quality, Reputation, and Ability to Complete Similar Projects on Schedule and Within Budget (20 Points)	18.0	15.6
Key Personnel (15 Points)	12.2	10.5
Project Approach (15 Points)	12.8	10.8
Safety Record (5 Points)	4.6	4.6
Historically Underutilized Business (HUB) Program Compliance Plan (5 Points)	4.6	4.4
Total (100 Points Possible)	92.2	78.5



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ARWA-GBRA Segment E Cost Split

Proposal Item	Cost Split				
	Garney	ARWA (%)	GBRA (%)	ARWA Cost	GBRA Cost
Base Bid	\$8,237,984.25	82.2	17.8	\$6,770,006.01	\$1,467,978.24
HDD – Guadalupe River	\$2,406,000.00	100.0	0.0	\$2,406,000.00	\$0
Alt B – Welded Steel	\$16,482,818.21	78.1	21.9	\$12,866,459.23	\$3,616,358.98
TOTAL (Base + Alt B)	\$27,277,770.46			\$22,193,433.25	\$5,084,337.21

- ARWA Budget for Segment E Construction = \$24,600,000



7

Recommendation

- It is the recommendation that **Garney Construction** be selected as the General Contractor for the Alliance Regional Water Authority Segment E Project.
- Award Bid Alternative B for **welded steel** piping with Alternative E for **horizontal directional drilling** of the Guadalupe River.



8

REGULAR MEETING
Alliance Regional Water Authority Technical Committee

COMMITTEE MEMBER PACKETS

Wednesday, December 14th, 2022 at 3:00 P.M.

Conference Call Number: 1-346-248-7799; Meeting ID: 982 8616 3170; Code: 495028

- F.4** Possible recommendation to the Board to authorize a Work Order with Walker Partners, LLC for construction administration services on the Authority's Phase 1B Segment E Pipeline Project. ~ *Graham Moore, P.E., Executive Director*
-

Background/Information

Alliance Water entered into a Work Order in March 2022 with Walker Partners, LLC (Walker Partners) to provide final design engineering services for the Phase 1B Segment E Pipeline project. The final design is complete and the construction notice-to-proceed is expected to be issued in January. In order to maintain progress, Staff has negotiated a scope and fee with Walker Partners to provide construction administration and construction engineering services for the Phase 1B Segment E Pipeline project.

Below are some of the key facts regarding the proposal:

Firm: Walker Partners, LLC
Fee: \$598,776.50 (50% ARWA)
Work Order Type: Hourly, Not-to-Exceed
Anticipated Duration: 18 months
Project Manager: Joe Jenkins, P.E.

Staff is requesting that the Committee recommend Board approval of a Work Order with a fee for the basic services of \$412,264.20 and a fee for supplemental effort in an amount not-to-exceed \$186,512.30 for a total fee of \$598,776.50. The Executive Director will be given the discretion to authorize the supplemental effort if needed.

Attachment(s)

- December 12, 2022 – Segment E Pipeline Construction Phase Services.

Technical Committee Decision Needed:

- Possible recommendation to the Board to approve a work order with Walker Partners, LLC for Construction Phase Services on the Phase 1B Segment E Pipeline Project.

Alliance Regional Water Authority – Phase 1B
Construction Phase Pipeline Scope
Treated Pipeline Segment E

1. Project Management
 - 1.1. Prepare Monthly Summary Reports/Invoicing as identified in the ARWA Phase 1B Program Management Plan (*assume up to 18 reports/invoices*)
 - 1.2. Meetings
 - 1.2.1. Quality Control Audit (1 virtual workshop) (2 Walker Partner attendees)
2. Regulatory Agency Coordination and Permits
 - 2.1. Texas Commission on Environmental Quality (one one-hour virtual meetings or phone conf.)
 - 2.2. Texas Water Development Board (one one-hour virtual meetings or phone conf.)
 - 2.3. Texas Department of Transportation (TxDOT) (one one-hour virtual meetings or phone conf.)
 - 2.4. Guadalupe County (one one-hour virtual meetings or phone conf.)
 - 2.5. City of New Braunfels (one one-hour virtual meetings or phone conf.)
 - 2.6. Attend up to three (3) one-hour meetings on site or in-person, in-lieu of virtual meetings
 - 2.7. Prepare meeting agendas, summarize meeting minutes, and provide meeting minutes (for up to five (5) meetings) to Construction Management and Inspection (CM&I) via the CM&I Electronic Document Management System (EDMS) within 2 business days of each meeting.
3. Public Utility Coordination
 - 3.1. Guadalupe Valley Electric Cooperative (one one-hour virtual meetings or phone conferences to coordinate GVEC pole relocations)
 - 3.2. Central Texas Regional Water Supply Corporation (one one-hour virtual meetings or phone conferences)
 - 3.3. Canyon Regional Water Authority (one one-hour virtual meetings or phone conferences to discuss open trench utility crossings and coordinate work on CRWA WTP)
 - 3.4. Guadalupe-Blanco River Authority (one one-hour virtual meetings or phone conferences to discuss open trench utility crossing and connection to GBRA waterline)
 - 3.5. New Braunfels Utilities (one one-hour virtual meetings or phone conferences to discuss open trench utility crossings and water service relocation by NBU on Parcel E035G)
 - 3.6. Energy Transfer Company (one one-hour virtual meetings or phone conferences)
 - 3.7. Lower Colorado River Authority (one one-hour virtual meetings or phone conferences)
 - 3.8. Attend up to seven (7) one-hour meetings on site or in-person, in-lieu of virtual meetings
 - 3.9. Prepare meeting agendas, summarize meeting minutes, and provide meeting minutes (for up to seven (7) meetings) to Construction Management and Inspection (CM&I) via the CM&I Electronic Document Management System (EDMS) within 2 business days of each meeting.
4. Construction Site Observations and Progress Meetings
 - 4.1. Pre-Construction Meeting
 - 4.1.1. Attend a pre-construction meeting coordinated by the Construction Management and Inspection (CM&I) team. (2 Walker Partner attendees)
 - 4.2. Lake Dunlap Trenchless Crossing Pre-Construction Meeting
 - 4.2.1. Attend a pre-construction meeting coordinated by the CM&I team to discuss the construction plan and submittals for the Lake Dunlap Trenchless Crossing. (2 Walker Partner attendees)(1 Schnabel attendee)
 - 4.3. Monthly Site Observations (*assume up to 18 months*):

4.3.1. 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 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 CM&I. Consultant's visits and observations are subject to the limitations on Consultant's authority and responsibility described in the General Conditions.

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.

4.3.2. Site observation reports will be prepared and provided to the CM&I team via the CM&I Electronic Document Management System (EDMS) within 2 business days of each site visit.

4.3.3. Notify CM&I team of inconsistencies with observed work with respect to Contract Documents.

4.4. Special Site Observations

4.4.1. 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. Includes up to 3 on-site observations of the trenchless work associated with the Lake Dunlap Crossing and other trenchless crossings by Schnabel (1 Schnabel representative, up to 10 hrs each).

4.4.2. Specialty Observation reports will be prepared and provided to the CM&I team via the CM&I Electronic Document Management System (EDMS) within 2 business days of each site visit.

4.4.3. Notify CM&I team of inconsistencies with observed work with respect to Contract Documents.

4.4.4. Coordination with CMI Team to discuss specification requirements, key points of approved contractor submittals, and periodic review and discussion of their daily observations.

4.4.5. Also perform up to six (6) visits to the Project Site at the specific request of the OWNER by the next business day after a request is made.

4.5. Monthly Construction Progress Meetings (*assume up to 18 months, 6 in-person and 12 virtual meetings of phone conferences*) (2 Walker Partner attendees)

- 4.5.1. 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.
 - 4.5.2. 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.
 - 4.5.3. Review monthly Construction Activity Reports prepared by the CM&I team. Provide feedback on report content as appropriate.
5. Construction Coordination
 - 5.1. Regular coordination with Owner's Representative and CM&I group as required to facilitate administration of the project (*assume 15 hours per month*).
 - 5.2. Participate in project quality audits as necessary, and implementation of agreed corrective actions. Attend up to three (3) virtual meetings related to quality issues during construction. (2 Walker Partner attendees)
 - 5.3. Review monthly construction pay applications and make recommendations for payment (*assume 18 pay applications*)
 - 5.4. Review monthly schedules to confirm compliance with Contract dates and key milestones (*assume 18 monthly schedules*)
 - 5.5. Review monthly as-builts provided by Contractor (*assume 15 as-builts*).
 - 5.6. Utilize EDMS for upload/download of all construction-related documentation.
6. Shop Drawing/Submittal Review
 - 6.1. Review up to sixty (60) shop drawings/submittals for conformance with the project plans and specifications and provide responses within ten (10) working days. For the purposes of this scope, assume review effort will include the original submittal and first resubmittal.
 - 6.2. Task will include receiving and evaluation geotechnical instrumentation and monitoring data.
 - 6.3. Attend one (1) pre-submittal meeting for valves if needed to accelerate submittal preparation.
 - 6.4. Attend one (1) pre-submittal meeting for pipe if needed to accelerate submittal preparation.
 - 6.5. Attend one (1) pre-submittal meeting for GBRA waterline connection if needed to accelerate submittal preparation.
 - 6.6. Attend one (1) pre-submittal meeting for lead-based paint abatement if needed to accelerate submittal preparation.
7. Alternatives and Substitutions
 - 7.1. Review alternatives and substitutions proposed by Contractor (*assume up to ten (10) for budgeting purposes*). Recommend acceptance or rejection of the request for substitutions with ten (10) working days.
8. Request for Information (RFIs)
 - 8.1. Review Contractor questions or concerns that may arise during construction and respond within 5 calendar days (*assume fifteen (15) for budgeting purposes*).
9. Request for Proposals (RFPs), Change Orders (COs), Change Directives, or Field Orders (*assume a total of seven (7) Modifications*)
 - 9.1. Coordinate with CM&I to prepare a description of proposed Modifications. CM&I will issue the RFP form to Contractor through the EDMS.

- 9.2. Coordinate with CM&I for review and response to RFP and provide recommendations to the Owner's Representative for consideration.
 - 9.3. Review Change Order or Change Directive prepared by the CM&I team.
 - 9.4. Coordinate with CM&I to prepare Field Orders. CM&I will issue the Field Order form to Contractor through the EDMS.
10. Substantial/Final Completion Walk-Throughs
- 10.1. Consultant to conduct one (1) substantial completion walk-through/inspection (per segment for a total of two (2)), 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.
 - 10.2. 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.
11. Record Drawings
- 11.1. 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:
 - 11.1.1. Prepare final Change Order (over and under reconciliations) recapitulation of the Project in conjunction with the final pay request
 - 11.1.2. Prepare Record Drawings of the constructed project based on change order revisions and as built information provided by the contractor.
 - 11.1.3. Prepare Record Drawings of the constructed project based on asset management tagging and/or numbering information provided by the CM&I group
 - 11.1.4. Provide the Owner's Representative:
 - 11.1.4.1. With one (1) set of Record Drawings in .pdf and .dwg electronic format.
 - 11.1.4.2. The DWG file with the reference state plan coordinate system for use by ARWA.
12. Corrosion Investigation, Data Collection, and Design Support
- 12.1. Attend a pre-commissioning site visit prior to testing
 - 12.1.1. Conduct an alignment walk-thru and develop a punch list of deficiencies
 - 12.1.2. Attend a site visit to approve contractor's method of checking continuity and isolation along pipeline.
 - 12.1.3. Check continuity testing performed by contractor (maximum 2 days of site visits)
 - 12.2. Commissioning/Testing
 - 12.2.1. Attend and witness testing performed by contractor (maximum 2 days of site visits).
 - 12.2.2. Review commissioning survey data and report from contractor.
 - 12.2.3. Prepare Commissioning Report and develop post-commissioning punch list.
 - 12.2.4. Adjust for any shortcomings.
13. Subconsultant 10% Mark-up for Basic Services

14. Supplemental

14.1. Survey

14.1.1. Verify/Reset horizontal and vertical control points for construction purposes

14.2. General Construction Phase Services, which may include:

14.2.1. Additional site visits, includes up to six (6) additional site visits.

14.2.2. Additional shop drawing/submittal reviews, includes up to seven (7) original submittals and first resubmittal.

14.2.3. Providing services to review or evaluate Contractor claims that are not due to causes within the control of Consultant.

14.2.4. 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.

14.2.5. Assisting Owner in the defense or prosecution of litigation in connection with or in addition to those services contemplated by this Agreement.

14.2.6. 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.

14.3. Attend additional meetings in the vicinity of the project (5 meetings)

14.4. Survey, Design, and Permitting After Final Design and Procurement

14.4.1. Coordinate with developers' engineers who are designing and/or constructing improvements over ARWA's easements.

14.4.2. Attend up to ten (10) one-hour virtual meetings or phone conferences and up to five (5) on site or in-person meetings.

14.4.3. Conduct additional topographic survey of subdivisions/developments and Weltner Road after construction by others.

14.4.4. Update designs based on the final design and/or construction of subdivisions/developments and Weltner Road by others.

14.4.5. Update permit for proposed maintenance driveway on Weltner Road and submit updated driveway permit to the City of New Braunfels.

14.4.6. Prepare and submit Guadalupe County Excavation Permits for up to five (5) new County roadways that are expected to be constructed before ARWA's pipeline is constructed. Casing pipes are to be installed, for ARWA's use, prior to roadway construction on Parcels E005G (4 roads) and E041G (1 road). It is our understanding that the permits will be required to install ARWA's carrier pipe through an existing casing pipe.

14.4.7. Update project documents based on specific easement requirements that are added after procurement and require revisions to the project documents.

14.5. Additional Request for Proposals (RFPs), Change Orders (Cos), Change Directives, or Field Orders, includes up to three (3) Modifications.

14.6. Additional Support – Trenchless Crossings and Lake Dunlap Crossing

14.6.1. Three (3) additional site visits for observation of the microtunnel, HDD, or Direct Pipe construction of the Lake Dunlap Crossing.

14.6.2. Observation reports will be prepared and provided to the CM&I team via the CM&I Electronic Document Management System (EDMS) within 2 business days of each site visit.

14.6.3. Notify CM&I team of inconsistencies with observed worked with respect to Contract Documents.

14.6.4. Additional support for trenchless-related deviations, deficiencies, non-conforming work, clarifications, interpretations, field orders, and/or substitutes.

14.7. Additional Support – Cathodic Protection System

14.8. Subconsultant 10% Mark-up for Supplemental Services

Alliance Water Phase 1B Program															Project Fee Summary				
Pipeline Consultant - Construction Phase Services															Basic Effort	\$	412,264.20		
12/12/2022															Supplemental	\$	186,512.30		
Detailed Overall Walker Partners Cost Breakdown															Total Effort	\$	598,776.50		

Task	Employee	J. Jenkins	J. Bybel	D. Smith	E. Nelson	H. Miller	R. Cuellar	M. Campbell	K. Hessel	K. Smith	Survey	J. Montemayor	J. Moser	M. Rudloff	Total Hours	Total Labor Effort	Total Expense Effort	Schnabel Engineering	Elk Engineering	Total Sub Effort	Total Effort	Assumptions
	Project Role	Manager VII	Senior Engineer III	Senior Engineer I	Project Manager VII	Professional VI	Technician VIII	Support Staff III	Survey Manager	Project Surveyor IV	3-Man Crew	Technician VII	Construction Manager IX	Construction Manager VII								
	Hourly Bill Rate	\$305.00	\$255.00	\$205.00	\$210.00	\$115.00	\$130.00	\$85.00	\$205.00	\$125.00	\$230.00	\$115.00	\$305.00	\$155.00								
Basic Services																						
Task 1 - Project Management		19	0	0	38	2	0	0	0	0	0	0	0	0	59	\$ 14,005.00	\$ -	\$ 3,510.00	\$ 2,088.00	\$ 5,598.00	\$ 19,603.00	
1.1	Prepare Monthly Summary Reports/Invoicing as identified in the ARWA Phase 1B Program Management Plan	18			36										54	\$ 13,050.00		\$ 3,510.00	\$ 2,088.00	\$ 5,598.00	\$ 18,648.00	up to 18 reports/invoices
1.2	Meetings																					
1.2.1	Quality Control Audit	1			2	2									5	\$ 955.00		\$ -	\$ -	\$ -	\$ 955.00	1 virtual workshop
Task 2 - Regulatory Agency Coordination and Permits		5	0	0	18	23	0	5	0	0	0	0	0	0	51	\$ 8,375.00	\$ 300.00	\$ -	\$ -	\$ -	\$ 8,675.00	
2.1	Texas Commission on Environmental Quality				1	1									2	\$ 325.00		\$ -	\$ -	\$ -	\$ 325.00	one 1-hour virtual meeting or phone conf.
2.2	Texas Water Development Board				1	1									2	\$ 325.00		\$ -	\$ -	\$ -	\$ 325.00	one 1-hour virtual meeting or phone conf.
2.3	Texas Department of Transportation (TxDOT)				1	1									2	\$ 325.00		\$ -	\$ -	\$ -	\$ 325.00	one 1-hour virtual meeting or phone conf.
2.4	Guadalupe County				1	1									2	\$ 325.00		\$ -	\$ -	\$ -	\$ 325.00	one 1-hour virtual meeting or phone conf.
2.5	City of New Braunfels				1	1									2	\$ 325.00		\$ -	\$ -	\$ -	\$ 325.00	one 1-hour virtual meeting or phone conf.
2.6	Attend up to three (3) one-hour meetings on site or in-person, in-lieu of virtual meetings				3	3									6	\$ 975.00	\$ 300.00	\$ -	\$ -	\$ -	\$ 1,275.00	
2.7	Prepare meeting agendas, summarize meeting minutes, and provide meeting minutes (for up to five (5) meetings) to Construction Management and Inspection (CM&I) via the CM&I Electronic Document Management System (EDMS) within 2 business days of each meeting	5			10	15		5							35	\$ 5,775.00		\$ -	\$ -	\$ -	\$ 5,775.00	
Task 3 - Public Utility Coordination		7	0	0	28	35	0	7	0	0	0	0	0	0	77	\$ 12,635.00	\$ 700.00	\$ -	\$ -	\$ -	\$ 13,335.00	
3.1	Guadalupe Valley Electric Cooperative				1	1									2	\$ 325.00		\$ -	\$ -	\$ -	\$ 325.00	one 1-hour virtual meeting or phone conf.
3.2	Central Texas Regional Water Supply Corporation				1	1									2	\$ 325.00		\$ -	\$ -	\$ -	\$ 325.00	one 1-hour virtual meeting or phone conf.
3.3	Canyon Regional Water Authority				1	1									2	\$ 325.00		\$ -	\$ -	\$ -	\$ 325.00	one 1-hour virtual meeting or phone conf.
3.4	Guadalupe-Blanco River Authority				1	1									2	\$ 325.00		\$ -	\$ -	\$ -	\$ 325.00	one 1-hour virtual meeting or phone conf.
3.5	New Braunfels Utilities				1	1									2	\$ 325.00		\$ -	\$ -	\$ -	\$ 325.00	one 1-hour virtual meeting or phone conf.
3.6	Energy Transfer Company				1	1									2	\$ 325.00		\$ -	\$ -	\$ -	\$ 325.00	one 1-hour virtual meeting or phone conf.
3.7	Lower Colorado River Authority				1	1									2	\$ 325.00		\$ -	\$ -	\$ -	\$ 325.00	one 1-hour virtual meeting or phone conf.
3.8	Attend up to seven (7) one-hour meetings on site or in-person, in-lieu of virtual meetings				7	7									14	\$ 2,275.00	\$ 700.00	\$ -	\$ -	\$ -	\$ 2,975.00	
3.9	Prepare meeting agendas, summarize meeting minutes, and provide meeting minutes (for up to seven (7) meetings) to Construction Management and Inspection (CM&I) via the CM&I Electronic Document Management System (EDMS) within 2 business days of each meeting	7			14	21		7							49	\$ 8,085.00		\$ -	\$ -	\$ -	\$ 8,085.00	
Task 4 - Construction Site Observations and Progress Meetings		6	8	0	142	232	0	0	0	0	0	0	4	4	396	\$ 62,210.00	\$ 4,425.00	\$ 17,045.00	\$ -	\$ 17,045.00	\$ 83,680.00	
4.1	Pre-Construction Meeting	2			8	8									18	\$ 3,210.00		\$ -	\$ -	\$ -	\$ 3,210.00	
4.2	Lake Dunlap Trenchless Crossing Pre-Construction Meeting				8	8									16	\$ 2,600.00		\$ 2,330.00	\$ -	\$ 2,330.00	\$ 4,930.00	
4.3	Monthly Site Observations				54	108									162	\$ 23,760.00	\$ 2,475.00	\$ -	\$ -	\$ -	\$ 26,235.00	up to 18 months
4.4	Special Site Observations	4	8		36	36							4	4	92	\$ 16,800.00	\$ 1,350.00	\$ -	\$ -	\$ -	\$ 18,150.00	up to 9 (includes Task 4.4.5)
4.4.1	Specialty Observations														0	\$ -		\$ 6,180.00	\$ -	\$ 6,180.00	\$ 6,180.00	
4.4.2	Specialty Observation reports														0	\$ -		\$ 3,105.00	\$ -	\$ 3,105.00	\$ 3,105.00	
4.4.3	Notify CM&I team of inconsistencies with observed work														0	\$ -		\$ 900.00	\$ -	\$ 900.00	\$ 900.00	
4.4.4	Coordination with CMI Team														0	\$ -		\$ 4,530.00	\$ -	\$ 4,530.00	\$ 4,530.00	to discuss specification requirements, key points of approved contractor submittals, and periodic review and discussion of their daily observations.
4.5	Monthly Construction Progress Meetings				36	72									108	\$ 15,840.00	\$ 600.00	\$ -	\$ -	\$ -	\$ 16,440.00	up to 18 months, 6 in-person and 12 virtual meetings or phone conferences
Task 5 - Construction Coordination		36	0	0	225	182	0	54	0	0	0	0	0	0	497	\$ 83,750.00	\$ -	\$ -	\$ -	\$ -	\$ 83,750.00	
5.1	Regular coordination with Owner's Representative and CM&I group as required to facilitate administration of the project	18			162	72		18							270	\$ 49,320.00		\$ -	\$ -	\$ -	\$ 49,320.00	15 hours per month
5.2	Participate in project quality audits as necessary, and implementation of agreed corrective actions. Attend up to three (3) virtual meetings related to quality issues during construction.	2			12	8									22	\$ 4,050.00		\$ -	\$ -	\$ -	\$ 4,050.00	
5.3	Review monthly construction pay applications and make recommendations for payment	4			9	18									31	\$ 5,180.00		\$ -	\$ -	\$ -	\$ 5,180.00	18 pay applications
5.4	Review monthly schedules to confirm compliance with Contract dates and key milestones	4			9	18									31	\$ 5,180.00		\$ -	\$ -	\$ -	\$ 5,180.00	18 monthly schedules
5.5	Review monthly as-builts provided by Contractor	4			15	30									49	\$ 7,820.00		\$ -	\$ -	\$ -	\$ 7,820.00	15 as-builts
5.6	Utilize EDMS for upload/download of all construction-related documentation	4			18	36		36							94	\$ 12,200.00		\$ -	\$ -	\$ -	\$ 12,200.00	
Task 6 - Shop Drawing / Submittal Review		0	16	0	48	168	0	0	0	0	0	0	0	0	232	\$ 33,480.00	\$ -	\$ 20,280.00	\$ 5,256.00	\$ 25,536.00	\$ 59,016.00	
6.1	Review up to sixty (60) shop drawings/submittals for conformance with the project plans and specifications and provide responses within ten (10) working days		8		40	160									208	\$ 28,840.00		\$ 16,680.00	\$ 5,256.00	\$ 21,936.00	\$ 50,776.00	review effort will include the original submittal and first resubmittal
6.2	Task will include receiving and evaluation geotechnical instrumentation and monitoring data.														0	\$ -		\$ 3,600.00	\$ -	\$ 3,600.00	\$ 3,600.00	up to 4 months of data and that it all looks good.
6.3	Attend one (1) pre-submittal meeting for valves if needed to accelerate submittal preparation.		2		2	2									6	\$ 1,160.00		\$ -	\$ -	\$ -	\$ 1,160.00	
6.4	Attend one (1) pre-submittal meeting for pipe if needed to accelerate submittal preparation.		2		2	2									6	\$ 1,160.00		\$ -	\$ -	\$ -	\$ 1,160.00	
6.5	Attend one (1) pre-submittal meeting for GBRA waterline connection if needed to accelerate submittal preparation		2		2	2									6	\$ 1,160.00		\$ -	\$ -	\$ -	\$ 1,160.00	
6.6	Attend one (1) pre-submittal meeting for lead-based paint abatement if needed to accelerate submittal preparation.		2		2	2									6	\$ 1,160.00		\$ -	\$ -	\$ -	\$ 1,160.00	

Alliance Water Phase 1B Program																				Project Fee Summary		
Pipeline Consultant - Construction Phase Services																				Basic Effort	\$	412,264.20
12/12/2022																				Supplemental	\$	186,512.30
Detailed Overall Walker Partners Cost Breakdown																				Total Effort	\$	598,776.50

Task	Employee	Project Role	J. Jenkins	J. Bybel	D. Smith	E. Nelson	H. Miller	R. Cuellar	M. Campbell	K. Hessel	K. Smith	Survey	J. Montemayor	J. Moser	M. Rudloff	Total Hours	Total Labor Effort	Total Expense Effort	Schnabel Engineering	Elk Engineering	Total Sub Effort	Total Effort	Assumptions																						
			Manager VII	Senior Engineer III	Senior Engineer I	Project Manager VII	Professional VI	Technician VIII	Support Staff III	Survey Manager	Project Surveyor IV	3-Man Crew	Technician VII	Construction Manager IX	Construction Manager VII									Hourly Bill Rate	\$305.00	\$255.00	\$205.00	\$210.00	\$115.00	\$130.00	\$85.00	\$205.00	\$125.00	\$230.00	\$115.00	\$305.00	\$155.00								
Task 7 - Alternatives and Substitutions																							0	8	0	20	40	0	0	0	0	0	0	0	5	5	78	\$ 13,140.00	\$ -	\$ 2,490.00	\$ -	\$ 2,490.00	\$ 15,630.00		
7.1	Review alternatives and substitutions proposed by Contractor. Recommend acceptance or rejection of the request for substitutions with ten (10) working days.																						8		20	40								5	5	78	\$ 13,140.00		\$ 2,490.00	\$ -	\$ 2,490.00	\$ 15,630.00	up to 10 (1 for trenchless)		
Task 8 - Request for Information																							0	7	0	30	60	60	0	0	0	0	0	0	3	7	167	\$ 24,785.00	\$ -	\$ 4,905.00	\$ 1,752.00	\$ 6,657.00	\$ 31,442.00		
8.1	Review Contractor questions or concerns that may arise during construction and respond within 5 calendar days																						7		30	60	60							3	7	167	\$ 24,785.00		\$ 4,905.00	\$ 1,752.00	\$ 6,657.00	\$ 31,442.00	up to 15 (3 for trenchless & 1 for cathodic)		
Task 9 - Request for Proposals (RFPs), Change Orders (COs), Change Directives, or Field Orders																							4	8	0	28	56	28	0	0	0	0	0	0	8	18	150	\$ 24,450.00	\$ -	\$ 3,780.00	\$ 3,504.00	\$ 7,284.00	\$ 31,734.00	up to 7 Modifications (1 CO for trenchless & 1 CO and 1 FO for cathodic)	
9.1	Coordinate with CM&I to prepare a description of proposed Modifications. CM&I will issue the RFP form to Contractor through the EDMS.																						1	2	7	14							1	2	27	\$ 4,510.00		\$ -	\$ -	\$ -	\$ 4,510.00				
9.2	Coordinate with CM&I for review and response to RFP and provide recommendations to the Owner's Representative for consideration.																						1	2	7	14							1	2	27	\$ 4,510.00		\$ -	\$ -	\$ -	\$ 4,510.00				
9.3	Review Change Order or Change Directive prepared by the CM&I team.																						1	2	7	14	14						3	7	48	\$ 7,715.00		\$ 3,780.00	\$ 1,752.00	\$ 5,532.00	\$ 13,247.00				
9.4	Coordinate with CM&I to prepare Field Orders. CM&I will issue the Field Order form to Contractor through the EDMS.																						1	2	7	14	14						3	7	48	\$ 7,715.00		\$ -	\$ 1,752.00	\$ 1,752.00	\$ 9,467.00				
Task 10 - Substantial/Final Completion Walk-Throughs																							2	0	0	28	28	0	0	0	0	0	0	0	0	0	58	\$ 9,710.00	\$ 400.00	\$ -	\$ -	\$ -	\$ 10,110.00		
10.1	Consultant to conduct one (1) substantial completion walk-through/inspection (per segment for a total of two (2)), 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.																								20	20										40	\$ 6,500.00	\$ 250.00	\$ -	\$ -	\$ -	\$ 6,750.00			
10.2	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.																						2		8	8										18	\$ 3,210.00	\$ 150.00	\$ -	\$ -	\$ -	\$ 3,360.00			
Task 11 - Record Drawings																							3	4	0	17	38	88	0	0	0	0	0	0	0	0	150	\$ 21,315.00	\$ -	\$ -	\$ -	\$ -	\$ 21,315.00		
11.1	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:																																												
11.1.1	Prepare final Change Order (over and under reconciliations) recapitulation of the Project in conjunction with the final pay request																						1		4	8										13	\$ 2,065.00		\$ -	\$ -	\$ -	\$ 2,065.00			
11.1.2	Prepare Record Drawings of the constructed project based on change order revisions and as built information provided by the contractor																						1	2	8	20	60									91	\$ 12,595.00		\$ -	\$ -	\$ -	\$ 12,595.00			
11.1.3	Prepare Record Drawings of the constructed project based on asset management tagging and/or numbering information provided by the CM&I group																						1	2	4	8	20									35	\$ 5,175.00		\$ -	\$ -	\$ -	\$ 5,175.00			
11.1.4	Provide the Owner's Representative: 1. With one (1) set of Record Drawings in .pdf and .dwg electronic format. 2. The DWG file with the reference state plan coordinate system for use by ARWA.																								1	2	8									11	\$ 1,480.00		\$ -	\$ -	\$ -	\$ 1,480.00			
Task 12 - Corrosion Investigation, Data Collection, and Design Support																							0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ 25,012.00	\$ 25,012.00	\$ 25,012.00		
12.1	Attend a pre-commissioning site visit prior to testing																																												
12.1.1	Conduct an alignment walk-thru and develop a punch list of deficiencies																																			0	\$ -		\$ -	\$ 6,034.00	\$ 6,034.00	\$ 6,034.00			
12.1.2	Attend a site visit to approve contractor's method of checking continuity and isolation along pipeline.																																			0	\$ -		\$ -	\$ 6,034.00	\$ 6,034.00	\$ 6,034.00			
12.1.3	Check continuity testing performed by contractor (maximum 2 days of site visits)																																			0	\$ -		\$ -	\$ 3,844.00	\$ 3,844.00	\$ 3,844.00			
12.2	Commissioning/Testing																																												
12.2.1	Attend and witness testing performed by contractor (maximum 2 days of site visits)																																			0	\$ -		\$ -	\$ 3,844.00	\$ 3,844.00	\$ 3,844.00			
12.2.2	Review commissioning survey data and report from contractor.																																			0	\$ -		\$ -	\$ 1,752.00	\$ 1,752.00	\$ 1,752.00			
12.2.3	Prepare Commissioning Report and develop post-commissioning punch list.																																			0	\$ -		\$ -	\$ 1,752.00	\$ 1,752.00	\$ 1,752.00			
12.2.4	Adjust for any shortcomings.																																			0	\$ -		\$ -	\$ 1,752.00	\$ 1,752.00	\$ 1,752.00			
Task 13 - Subconsultant Mark-up																							0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,962.20	
Subconsultant 10% Mark-up - Basic Services																																												\$ 8,962.20	

Alliance Water Phase 1B Program																				Project Fee Summary			
Pipeline Consultant - Construction Phase Services																							
12/12/2022																							
Detailed Overall Walker Partners Cost Breakdown																							
																				Basic Effort			412,264.20
																				Supplemental			\$ 186,512.30
																				Total Effort			\$ 598,776.50

Task	Employee	J. Jenkins	J. Bybel	D. Smith	E. Nelson	H. Miller	R. Cuellar	M. Campbell	K. Hessel	K. Smith	Survey	J. Montemayor	J. Moser	M. Rudloff	Total Hours	Total Labor Effort	Total Expense Effort	Schnabel Engineering	Elk Engineering	Total Sub Effort	Total Effort	Assumptions
		Project Role	Manager VII	Senior Engineer III	Senior Engineer I	Project Manager VII	Professional VI	Technician VIII	Support Staff III	Survey Manager	Project Surveyor IV	3-Man Crew	Technician VII	Construction Manager IX								
	Hourly Bill Rate	\$305.00	\$255.00	\$205.00	\$210.00	\$115.00	\$130.00	\$85.00	\$205.00	\$125.00	\$230.00	\$115.00	\$305.00	\$155.00								
Supplemental Services																						
Task 14 - Supplemental Services		20	24	6	207	345	175	0	12	12	80	50	11	6	948	\$ 151,740.00	\$ 2,000.00	\$ 20,085.00	\$ 9,708.00	\$ 29,793.00	\$ 186,512.30	
14.1	Survey														948	\$ 151,740.00	\$ 2,000.00	\$ 20,085.00	\$ 9,708.00	\$ 29,793.00	\$ 186,512.30	
14.1.1	Verify/Reset horizontal and vertical control points for construction purposes				2	2	2		4	4	20	10			44	\$ 7,980.00		\$ -	\$ -	\$ -	\$ 7,980.00	
14.2	General Construction Phase Services, which may include:																					
14.2.1	Additional site visits, includes up to six (6) additional site visits.		4		24	24									52	\$ 8,820.00	\$ 600.00	\$ -	\$ -	\$ -	\$ 9,420.00	
14.2.2	Additional shop drawing/submittal reviews, includes up to seven (7) original submittals and first resubmittal.	2	3		7	14									26	\$ 4,455.00		\$ -	\$ -	\$ -	\$ 4,455.00	
14.2.3	Providing services to review or evaluate Contractor claims that are not due to causes within the control of Consultant	2			20	40	8						2		72	\$ 11,060.00		\$ -	\$ -	\$ -	\$ 11,060.00	
14.2.4	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.	2			20	40	8						2		72	\$ 11,060.00	\$ 300.00	\$ -	\$ -	\$ -	\$ 11,360.00	
14.2.5	Assisting Owner in the defense or prosecution of litigation in connection with or in addition to those services contemplated by this Agreement	2			20	40	8						2		72	\$ 11,060.00	\$ 300.00	\$ -	\$ -	\$ -	\$ 11,360.00	
14.2.6	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	2			20	40	8						2		72	\$ 11,060.00	\$ 300.00	\$ -	\$ -	\$ -	\$ 11,360.00	
14.3	Attend additional meetings in the vicinity of the project (5 meetings)	8	8		20	20									56	\$ 10,980.00	\$ 500.00	\$ -	\$ -	\$ -	\$ 11,480.00	
14.4	Survey, Design, and Permitting After Final Design and Procurement																					
14.4.1	Coordinate with developers' engineers who are designing and/or constructing improvements over ARWA's easements.				20	20	40								80	\$ 11,700.00		\$ -	\$ -	\$ -	\$ 11,700.00	
14.4.2	Attend up to five (5) one-hour virtual meetings or phone conferences.		2	2	10	10									24	\$ 4,170.00		\$ -	\$ -	\$ -	\$ 4,170.00	
14.4.3	Conduct additional topographic survey of subdivisions/developments and Weltner Road after construction by others.				2	4	4		8	8	60	40			126	\$ 22,440.00		\$ -	\$ -	\$ -	\$ 22,440.00	
14.4.4	Update designs based on the final design and/or construction of subdivisions/developments and Weltner Road by others		4	4	20	40	60								128	\$ 18,440.00		\$ -	\$ -	\$ -	\$ 18,440.00	
14.4.5	Update permit for proposed maintenance driveway on Weltner Road and submit updated driveway permit to the City of New Braunfels.				1	2									3	\$ 440.00		\$ -	\$ -	\$ -	\$ 440.00	
14.4.6	Prepare and submit Guadalupe County Excavation Permits for up to five (5) new County roadways that are expected to be constructed before ARWA's pipeline is constructed. Casing pipes are to be installed, for ARWA's use, prior to roadway construction on Parcels E005G (4 roads) and E041G (1 road). It is our understanding that the permits will be required to install ARWA's carrier pipe through an existing casing pipe				1	5	5								11	\$ 1,435.00		\$ -	\$ -	\$ -	\$ 1,435.00	
14.4.7	Update project documents based on specific easement requirements that are added after procurement and require revisions to the project documents.				8	20	20								48	\$ 6,580.00		\$ -	\$ -	\$ -	\$ 6,580.00	
14.5	Additional Request for Proposals (RFPs), Change Orders (Cos), Change Directives, or Field Orders, includes up to three (3) Modifications.	2	3		12	24	12						3	6	62	\$ 10,060.00		\$ -	\$ -	\$ -	\$ 10,060.00	
14.6	Additional Support – Trenchless Crossings and Lake Dunlap Crossing														0	\$ -		\$ 20,085.00	\$ -	\$ 20,085.00	\$ 20,085.00	
14.7	Additional Support – Cathodic Protection System														0	\$ -		\$ -	\$ 9,708.00	\$ 9,708.00	\$ 9,708.00	
14.8	Subconsultant 10% Mark-up - Supplemental Services														0	\$ -		\$ -	\$ -	\$ -	\$ 2,979.30	

Task	Employee	J. Jenkins	J. Bybel	D. Smith	E. Nelson	H. Miller	R. Cuellar	M. Campbell	K. Hessel	K. Smith	Survey	J. Montemayor	J. Moser	M. Rudloff	Total Hours	Total Labor Effort	Total Expense Effort	Schnabel Engineering	Elk Engineering	Total Sub Effort	Total Effort	Assumptions
		Project Role	Manager VII	Senior Engineer III	Senior Engineer I	Project Manager VII	Professional VI	Technician VIII	Support Staff III	Survey Manager	Project Surveyor IV	3-Man Crew	Technician VII	Construction Manager IX								
	Hourly Bill Rate	\$305.00	\$255.00	\$205.00	\$210.00	\$115.00	\$130.00	\$85.00	\$205.00	\$125.00	\$230.00	\$115.00	\$305.00	\$155.00								
Basic Services Totals		82	51	0	622	864	176	66	0	0	0	0	20	34	1,915	\$ 307,855.00	\$ 5,825.00	\$ 52,010.00	\$ 37,612.00	\$ 89,622.00	\$ 412,264.20	
Supplemental Services Totals		20	24	6	207	345	175	0	12	12	80	50	11	6	948	\$ 151,740.00	\$ 2,000.00	\$ 20,085.00	\$ 9,708.00	\$ 29,793.00	\$ 186,512.30	
Grand Totals		102	75	6	829	1,209	351	66	12	12	80	50	31	40	2,863	\$ 459,595.00	\$ 7,825.00	\$ 72,095.00	\$ 47,320.00	\$ 119,415.00	\$ 598,776.50	

REGULAR MEETING
Alliance Regional Water Authority Technical Committee

COMMITTEE MEMBER PACKETS

Wednesday, December 14th, 2022 at 3:00 P.M.

Conference Call Number: 1-346-248-7799; Meeting ID: 982 8616 3170; Code: 495028

- F.5** Possible recommendation to the Board to authorize a Work Order with Pape-Dawson Engineers, Inc. for Construction Management and Inspection Services on the Authority's Phase 1B program. ~ *Graham Moore, P.E., Executive Director*

Background/Information

The Authority issued RFQ 2019-003 in December 2019 for the Construction Management & Inspection Services for the Authority's Phase 1B Program. In May 2021 the Authority issued a work order to Pape-Dawson for Construction Management and Inspection on the Phase 1B Program through the end of 2021. In January 2022 the Board approved a Work Order for services through December 2022. These same services are needed in 2023 as construction continues on five projects (the Water Treatment Plant, the Booster Pump Station and Pipeline Segments A, B and D) and as construction starts on Segments E and C and the two elevated storage tanks.

The work order for 2022 was a total amount of \$5,804,358. Based on the current spending rates, the total amount anticipated to be expended out of this work order is \$4,800,000 or 83% of the amount authorized.

The Executive Director negotiated the attached scope and fee for the construction management and inspection services. The effort is based on an hourly rates with staff brought on Board to the program as the various projects move into construction. The work order has been structured to last the entirety of 2023.

In addition to the typical observation and inspection efforts (observing construction, periodic contractor meetings, submittal/RFI coordination, review of pay apps, schedules and change order requests, etc.), the scope of services includes fee to maintain the electronic document tracking system and maintaining construction trailers at the treatment plant and booster pump station.

Staff anticipates multiple work orders over the next several years with Pape-Dawson for the construction management and inspection work.

Below are some of the key facts regarding the proposal:

Firm: Pape-Dawson Engineers, Inc.

Fee: \$6,437,459

Work Order Type: Hourly Rate, Not-to-Exceed

Anticipated Duration: 12 months

Project Manager: Toby Flinn, P.E.

Key Subconsultants: TEC Consulting & JH Engineering

REGULAR MEETING
Alliance Regional Water Authority Technical Committee

COMMITTEE MEMBER PACKETS

Wednesday, December 14th, 2022 at 3:00 P.M.

Conference Call Number: 1-346-248-7799; Meeting ID: 982 8616 3170; Code: 495028

Staff is requesting Board approval of the Work Order #7 with a fee not-to-exceed \$6,437,459.

Attachment(s)

- ARWA Phase 1B CM&I Proposal for 2023 dated December 9, 2022

Technical Committee Decision Needed:

- Possible recommendation to the Board to approve a work order with Pape-Dawson Engineers, Inc. for Construction Management and Inspection Services on the Phase 1B Program for 2023.

November 22, 2022

Mr. Graham Moore, P.E.
Alliance Regional Water Authority
630 E. Hopkins
San Marcos, TX 78666

Re: ARWA Phase 1B CM&I – Work Order #7

Dear Mr. Moore:

We are pleased to present this proposal for providing Construction Management and Inspection (CMI) services in connection with the above referenced project. Our proposed scope of services and associated fees are as follows:

I. GENERAL TASKS

A. Program Construction Manager Services

- Perform construction observation and construction administration tasks as ARWA's designated Owner's Representative during construction.
- Serve as the primary point of contact for the Owner's Project Team (OPT) in the administration of the construction program. The OPT consists of ARWA, Kimley-Horn, Pape-Dawson, the Design Consultants and the Material Testing Service. Pape-Dawson will establish the construction oversight processes and procedures and conduct progress meetings for the program.
- Suggest required staffing levels and make assignments as necessary to see that construction activities are adequately covered and that the needs of the program are being met. Provide a Construction Management Team (CMT) of qualified personnel to execute the responsibilities of the Owner's Representative. Major team roles to be staffed include:
 - *Owner's Representative during Construction (referred to as the CMI in Specification Section 00 73 00 of the Contract Documents)*
 - The single-point of contact for the OPT for Construction Phase activities and is responsible for the execution of Owner's Representative Services across the Program.
 - *Construction Managers*
 - Provide on-site, full-time Construction Manager for facilities projects for coordination and oversight of project Contractor and PDC activities on behalf of PMC and Owner.
 - Provide on-site, full-time Construction Manager for pipeline projects for coordination and oversight of project Contractor and PDC activities on behalf of PMC and Owner.

- *Owner's Field Representatives*
 - Provide on-site, full-time Owner's Field Representatives for facilities projects for observation of construction activities on behalf of ARWA.
 - Provide on-site, full-time Owner's Field Representatives for pipeline projects for observation of construction activities on behalf of ARWA.
 - Provide specialized Owner's Field Representatives for as needed to support facility and pipeline Owner's Field Representatives. Examples include activities such as electrical, welding, and tunneling.
- *Owner's Representative Scheduler*
 - Provide Owner's Representative Scheduler for facility and pipeline projects.
- *Commissioning Manager*
 - Provide Commissioning Manager to oversee Program's commissioning and startup planning and execution activities.
- Develop, implement, and execute a Construction Management Plan to assist in the administration of the construction contracts in accordance with the Program's requirements and Construction Documents. The Construction Management Plan (CMP) establishes standard operating procedures, protocols and forms for construction management and administration activities, including submittals, substitution requests, construction schedule, requests for information, requests for change in the Contract Amount or the Contract Time, applications for payment, as-builts, records drawings, materials testing, record-keeping, and operating and maintenance manuals.
 - Review schedules, project costs and project progress payment requests from the Contractor and make recommendations to the Design Consultant for approval or rejection.
 - Provide monthly status reports which include at a minimum:
 - Pape-Dawson progress pay requests
 - Risk Register updates
 - Decision Register updates
 - Updates to Program Schedule milestones which are mutually agreed upon by ARWA, Pape-Dawson and Kimley-Horn
 - Overall Work completed to Date
 - Tasks completed in the last 30 days
 - Tasks to be completed in the next 30 days
 - Overall Work to be completed
 - Reasons & Solutions for Delays
- Develop, implement, and maintain an Electronic Document Management System (EDMS) using Microsoft SharePoint. Pape-Dawson will host the SharePoint site and provide access to individuals involved in Construction Phase activities. Pape-Dawson intends to maintain documents in electronic format to the extent possible to be sustainable and also for ease of search and retrieval. Documentation includes drawings, logs, RFIs, submittals, correspondence, letters and reports. Manage access to EDMS.

- Provide temporary field offices at the Water Treatment Plant and Booster Pump Station for Pape-Dawson use. The Contractor will provide temporary services and connections to the CMT trailer and provide a level gravel pad to support the trailer. Pape-Dawson is responsible for monthly service charges which will be invoiced to ARWA.
- Provide a Field Observation Report platform that promotes consistency in data collections, is searchable using metadata, and provides near-real time information to the OPT. Pape-Dawson intends to use Headlight to provide this service.

B. Field Construction Manager Services

- Manage and administer the day-to-day Owner Representative requirements of the Projects.
- Serve as the liaison between the construction contractors and the OPT. Provide leadership to the assigned Field Staff in the performance of their duties and manage the administrative efforts required to support construction of the Projects.
- Execute the Construction Management Plan. This includes such activities as determination of pay application quantities, review of schedule updates, coordination of change orders, coordinate material testing, lead daily site observations, and coordinate quality assurance activities with the OPT.
- Maintain and monitor project risk using a risk register. Project risk registers will initially be the Design Consultant's list of open risk items remaining at the end of the Design Phase. The risk register will be reviewed by the OPT and Contractor during progress meetings. As risks to the project develop or change, the register will be updated and reported in Pape-Dawson's monthly status report to ARWA.
- Maintain a decision register to track major discussions items that come up throughout the life of the project. These items will be pulled from the meeting notes as well other communications such as calls and e-mails. Major discussion items will be tracked along with initial and final decisions that are proposed for the item. This log will be a living document and that is updated monthly.

C. Owner's Field Representative Services

- Perform observation and documentation of construction activities for conformance to the Contract Documents as directed by the Construction Manager.
- Provide adequate, qualified staff to conduct daily, on-site, full-time observation services.
- Provide daily quality assurance of the Contractor's quality control process.
- Coordinate Material Testing Service verification testing with Contractors.

D. Commissioning

Serve as ARWA's designated representative as the Program-wide commissioning manager responsible for integrating the commissioning and startup activities of the

Program's multiple Projects. Review the Contractor's Facility Startup and Performance Plan, functional and performance test results, completed unit process startup forms, and completed facility performance demonstration/certification forms. Check the Contractor's scheduled tasks and timelines against the Contractor's Facility Startup and Performance plan for adequacy to meet Program milestones. Coordinate specialists or technical advisers required from the Design Consultant. Work directly with ARWA to facilitate seamless handover to operations staff prior to Commercial Operations. Attend facility startup meetings conducted by the Contractor.

II. SIGNIFICANT SPECIFIC TASKS

A. Bidding Support Services

1. Participate as a member of the Competitive Seal Proposal evaluation team.
2. Compile contract documents from the Contractor and provide to the Program Team.

B. Schedule and Conduct Construction Meetings

1. Preconstruction Conferences
Coordinate and conduct preconstruction conferences with OPT and Contractors. Prepare the meeting agenda packet and meeting minutes for Project meetings and distribute copies as directed by ARWA.
2. Construction Meetings
Coordinate and conduct construction meetings with OPT and Contractors for purposes of conforming with Program schedule goals.

C. Monitor Contractor Activities During Construction Phase to Check Conformance with Program Schedule, Budget and Quality Goals

1. Site Visits
Prepare daily field reports and representative photos that generally document the Contractor's personnel, hours on job site, equipment in use and idle, general safety observations, quality control activities, weather conditions, data relative to extras or deductions in bid items, Work in progress and accomplished, whether Work is in general conformance with the Contract Documents, general observations and documentation of testing procedures and results. Identify deviations in the Work from the Contract Documents, note the deviations in daily reports, notify the Contractor and, as needed, the OPT of the deviations, and monitor the deviations until they are resolved.

Review documentation and Contractor resources to check that Contractor, Subcontractor, and other Project team members have the required qualifications, training, licenses, and certifications as specified.

2. Design Consultant Observation
Monitor Design Consultant observations of the progress and quality of the executed work and coordinate responses to Contractors when work is not proceeding according to contract requirements.

3. Contractor Pay Requests
Before the Contractor submits applications for payment to the Design Consultant under Section 12.1 of the TWDB Supplemental Contract Conditions, review each application in draft form, check whether the amount requested reflects the progress of the Work and is in accordance with the Contract Documents, and provide a recommendation to the Design Consultant as to the acceptability of the application.

4. Contractor Schedule
Review, analyze, and check logic, sequencing, and required milestones in the Contractor's initial schedule. Check Contractor's WBS against SOV to facilitate future payment review process. Translate Contractor's detailed WBS into Program Master Schedule WBS.

Review schedule for variances Contractor's schedule as part of the monthly pay application review process and notify OPT of potential concerns in delivering the Project on time.

5. Contractor Redlines
Maintain records of construction activity, approved changes, and contract deviations to support the preparation of accurate Record Drawings at the conclusion of construction.

6. Quality Assurance
Monitor the Contractor for implementation, documentation, and verification of the Contractor's Quality Control Plan. Receive, log, and distribute QA and testing results from the Material Testing Service. Review submittals and Certified Test Reports. Conduct preparatory meetings of the three-phase control system with CMT, Design Consultant, and Contractor.

7. Change Order Documentation
Monitor and coordinate with the Design Consultant the preparation of supporting documentation and/or design, and review of final draft of Change Order documents. Coordinate with the Design Consultant in the preparation, maintenance, and distribution of the Project Change Order log.

8. Substantial Completion Coordination
Coordinate with OPT and Contractor to conduct an on-site review. Maintain records of list of Work corrections (punch-list items) that need to be addressed for Final Completion and provide to Contractor.

9. Final Completion Coordination

Coordinate with the OPT and Contractor to conduct an on-site review upon notification by Contractor that Work is ready for final inspection and acceptance, and receipt of Contractor's final Application for Payment. Support the Design Consultant with preparation of the final Application for Payment upon work being found acceptable.

E. Monitor, Review and Coordinate RFIs, Change Orders, Field Revisions, Punch Lists, and other Actions during Construction

1. RFI Coordination

Coordinate monitor and log Design Consultant responses to requests for information (RFI) submitted by the Contractor. Prepare, maintain and distribute a Project RFI log. Assist in the resolution of RFI's as needed.

2. Technical Documentation Coordination

Coordinate the provision of technical documentation to support the resolution of claims, disputes and other matters relating to the execution or progress of the construction work or interpretation of the Contract Documents.

3. Change Management

Track the progress of changes (potential and approved). Notify ARWA and Kimley-Horn of potential change requests based on RFI submitted by the Contractor, or discussions of the work. Review Contractor change orders and delay claims and make recommendations to ARWA. Assist the Design Consultant in the preparation of change requests for review, approval or rejection by ARWA providing photographs, field records, testing results and other documentation as needed to help evaluate the change request.

4. Substantial and Final Completion

Coordinate and support the Design Consultants professional inspections to determine the dates of substantial completion and final completion for the Project, to evaluate the work for acceptable conformance with the construction contract documents and to verify that any minor deviations from the construction contract documents have been corrected. Coordinate with the Design Consultants to receive and review written warranties and related documents required by the construction contract documents and assembled by the Contractor.

5. Submittals

- Monitor and record the progress of Contractor submittals such as shop drawings, product data, samples, schedules, laboratory, quarry, shop and mill tests of material and equipment. Coordinate and monitor Design Consultant progress in review and processing of Contractor submittals.
- Identify if submittals are reviewed and returned to the Contractor by the Design Consultants with recommendation for action to be taken

- Prepare, maintain and provide updated electronic copies of the Master Submittal Log. The Master Submittal Log will indicate the accurate status of project submittal requirements. Maintain status of submittals such as Reviewed, Reviewed with Comments, Revise and Resubmit or Other Action. The Contractor will prepare a Submittal Schedule, based on the Master Submittal Log. The Master Submittal Log will be distributed as requested by ARWA.

E. Monitor and Coordinate Program and Project Close Out

1. Record Drawings

Coordinate and monitor the Design Consultant's review of contractor as-built drawings and check that compiled field changes and orders, and permit corrections are complete and correctly reflected on drawings according to best available information and knowledge. Production of the record drawings will be done by the Design Consultant.

2. Close Out Procedure

Work with the Design Consultants and ARWA to check that close out paperwork required by the TWDB and Contract Documents is completed and submitted to receive release of retainage and Certificate of Approval for each Project.

Estimate of costs: See attached Exhibit A.

THIS PROPOSAL ASSUMES AND/OR EXCLUDES THE FOLLOWING:

- *Because the construction phase Owner's Representative support services are dependent on the number and duration of individual construction projects, this scope and fee is only an estimate to establish an initial funding of the Owner's Representative's work. The fee will be reevaluated as work progresses and additional fees may be required.*
- *Staffing is based on full-time observation, estimated up to 65 hours per week, one crew per heading and one crew per facility. The time frames are shown in Exhibits B and C.*
- *Work will be invoiced on an hourly basis using the attached rate schedule (Exhibit D). Rates are valid through 2023.*
- *Microsoft SharePoint services are estimated based upon standard cloud business deployment. Program needs that escalate those standard deployments, such as cyber-security requirements, will require additional fees.*
- *Direct expenses for reproduction, travel, express mail, special deliveries, trailer rental, and temporary office utilities will be invoiced at cost per the Master Agreement.*
- *Additional services requested by ARWA which may arise, and are not outlined above, to be compensated for on an hourly basis or negotiated to a lump sum fee.*

BASIS OF COMPENSATION

Pape-Dawson's compensation for the above services will be a charge for personnel services plus an hourly charge for specialized equipment and computers. A budget of **\$8,650,290** is the estimated cost of Pape-Dawson's current understanding of the services identified above. This also includes estimated expenses for field office trailers, temporary field office services, a cloud-based field reporting system, and other

direct expenses as defined below. This budget figure does not include applicable sales tax on services. If this budget figure is exceeded, Pape-Dawson may request modification of this Agreement.

Direct Expenses include reproduction, travel, express mail, special deliveries and subcontractor expenses related to these services. Direct Expenses include a 10% markup on cost.

AGREEMENT

Upon the signing of this Proposal by Client, this Proposal to be governed by the existing Master Agreement for Professional Engineering Services by and between Client and Engineer, dated effective as of the **27th** day of **May 2020**, with the same force and effect as if all of the terms of such Master Agreement were recited verbatim herein. Conflicts between the Master Agreement and this Proposal to be governed and controlled by this Proposal.

We appreciate the opportunity to work with you on this project. If this proposal meets with your approval, please acknowledge such by signing this proposal letter and returning it to our office via email, fax or US Mail for our records. Receipt of the executed document serves as authorization for us to proceed with the work.

Sincerely,
Pape-Dawson Engineers, Inc.

Chris Noe, P.E.
Vice President

Cara C. Tackett, P.E.
Managing Principal, Water Resources

Attachments

- Exhibit A – Estimate of Costs
- Exhibit B – CMI Organization Chart
- Exhibit C – Estimated Staffing Matrix for 2021
- Exhibit D – 2021 Hourly Rate Schedule

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EXHIBIT B
CMI Organization Chart

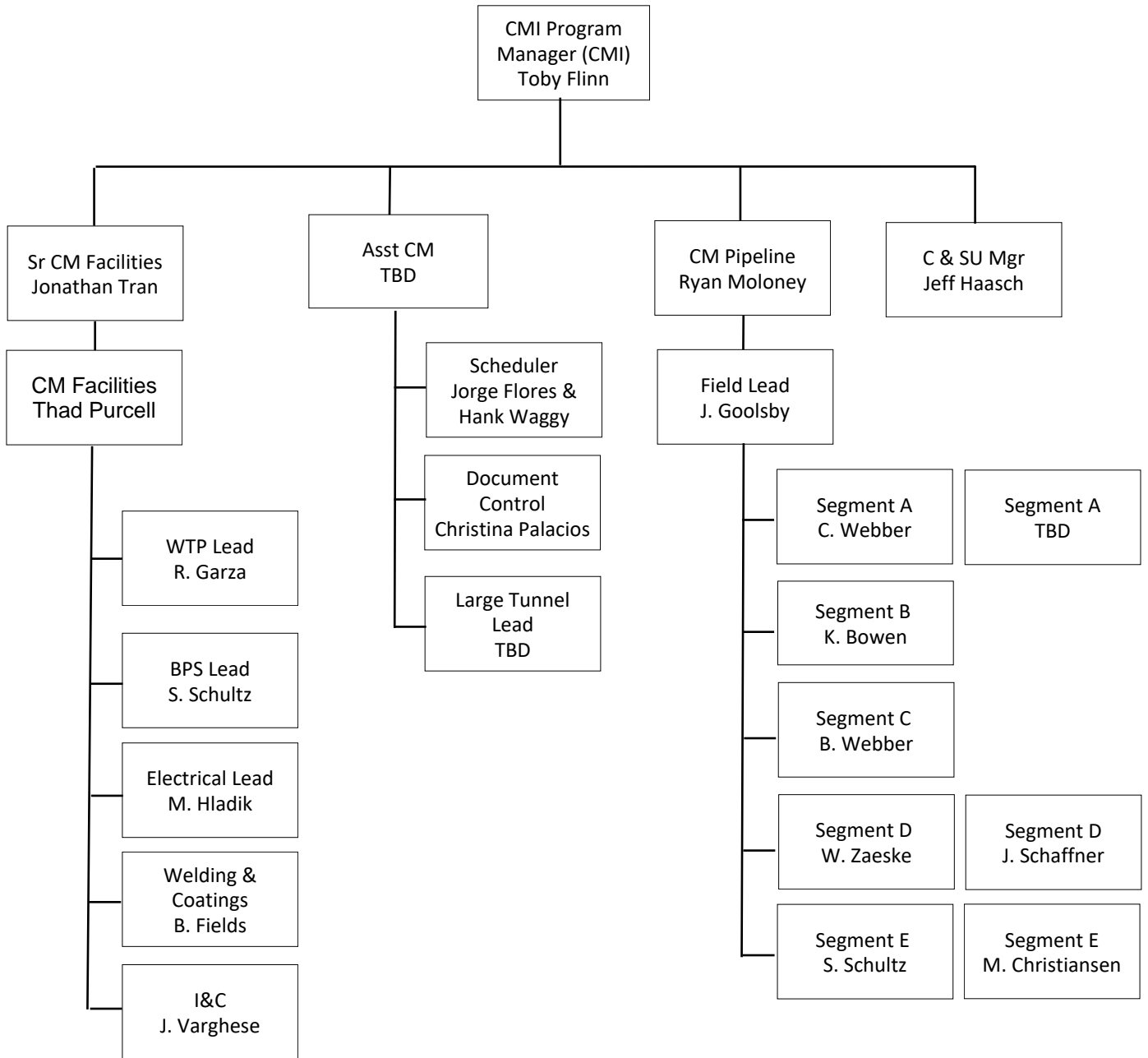


EXHIBIT A
Estimate of Costs Option 3

	2023	
	<u>Hr - total</u>	<u>Fee</u>
A. Program Construction Manager Services		
Develop, Implement and Execute CMP	Jan - Dec 2023 (12 months)	
CMI Program Manager (PD)	1,740	400,200
Assistant CM (PD)	2,288	457,600
Administrative (PD)	520	57,200
Develop, Implement and Maintain EDMS	Jan - Dec 2023 (12 months)	
SharePoint Tech (PD)		
Document Control Manager	1,800	234,000
Provide Field Observation Platform	Jan - Dec 2023 (12 months)	
	<u>Total</u>	<u>Fee</u>
Headlight Platform (10 seats x 12 months)	120	34,980
GPS Equipment	60	7,920
Provide Temporary Field Offices	Jan - Dec 2023 (12 months)	
	<u>Total</u>	<u>Fee</u>
WTP Trailer (Rent/mo)	12	22,070
WTP Utilities (Monthly)	12	2,640
WTP Trailer (Teardown)		6,820
BPS Trailer (Rent)	12	20,645
BPS Utilities	12	2,640
BPS Trailer (Teardown)		6,270
Labor Subtotal	6,348	1,149,000
Non-Labor Subtotal		103,985
B. Field Construction Manager Services		
Execute CMP	Jan - Dec 2023 (12 months)	
Senior CM Facilities (TEC)	104	22,880
CM Facilities (TEC)	2,640	580,800
CM Pipelines	2,640	580,800
Labor Subtotal	5,384	1,184,480
C. Owner's Field Representative Services		
WTP Field Observation and Reporting	Jan -Dec 2023 (12 months)	
WTP Lead Field Representative	2,880	518,400
Facility Electrical Field Representative	60	10,800
Facilities - I&C Field Representative	50	10,400
BPS Field Observation and Reporting	Jan -Dec 2023 (12 months)	
BPS Lead Field Representative	880	158,400
Facility Electrical Field Representative	20	3,600
Facilities - I&C Field Representative	40	8,320
Senior Pipeline Field Oversight	Jan - Dec 2023 (12 months)	
Tunnel Field Representative (PE)	50	15,125
Segment A Field Observation and Reporting	Jan - Dec 2023 (12 months)	
Inspector	1,540	261,800
Inspector	1,820	309,400

EXHIBIT A
Estimate of Costs Option 3

	2023	
	<u>Hr - total</u>	<u>Fee</u>
Segment B Field Observation and Reporting	Jan - Dec 2023 (12 months)	
Inspector	2,200	374,000
Inspector	440	74,800
Inspector	240	40,800
Segment C Field Observation and Reporting	Jan - Dec 2023 (12 months)	
Inspector	1,100	187,000
Inspector	1,300	221,000
Inspector	440	74,800
Segment D Field Observation and Reporting	Jan - Dec 2023 (12 months)	
Inspector	2,640	448,800
Inspector	2,760	469,200
Segment E Field Observation and Reporting	Jan - Dec 2023 (12 months)	
	2,640	448,800
Labor Subtotal	21,100	3,635,445
<u>D. Commissioning Services</u>		
Program-Wide Commissioning and Startup Oversight	Jan - Dec 2023 (12 months)	
Facility - Commissioning and Startup Manager	160	42,400
JE Engineering		163,643
Labor Subtotal		206,043
TOTALS		
Labor Total	32,832	6,174,968
Non-Labor Total		103,985
Estimated Direct Expenses (2% of Labor)		123,499
Grand Total		6,402,453

	NTP	2023												Hours
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
A. Program Construction Manager Services														
Develop, Implement and Execute CMP														
CMI Program Manager (PD)		145	145	145	145	145	145	145	145	145	145	145	145	1,740
Assistant CM (PD)		192	190	192	190	190	190	190	192	192	190	190	190	2,288
Administrative (PD)		44	44	44	44	44	44	44	44	44	44	44	36	520
Develop, Implement and Maintain EDMS														
Document Control Manager		150	150	150	150	150	150	150	150	150	150	150	150	1,800
B. Field Construction Manager Services														
Execute CMP														
Senior CM Facilities (TEC)		9	9	9	9	9	9	9	9	9	9	9	5	104
CM Facilities (TEC)		220	220	220	220	220	220	220	220	220	220	220	220	2,640
CM Pipeline (PD)		220	220	220	220	220	220	220	220	220	220	220	220	2,640
C. Owner's Field Representative Services														
WTP Field Observation and Reporting														
	Jul-21													
WTP Lead Field Representative		240	240	240	240	240	240	240	240	240	240	240	240	2,880
Facility Electrical Field Representative								10	10	10	10	10	10	60
Facilities - I&C Field Representative		-	-						10	10	10	10	10	50
BPS Field Observation and Reporting														
	Oct-21													
BPS Lead Field Representative		220	220	220	220									880
Facility Electrical Field Representative		-	-	10	10									20
Facilities - I&C Field Representative		-	-	10	10	10	10							40
Delivery Points Field Observation and Reporting														
	Nov-21													
BPS Lead Field Representative		Included in BPS Effort												-
BPS Electrical Field Representative		Included in WTP & BPS Effort												-
Facility Quality Manager		Included in WTP & BPS Effort												-
Senior Pipeline Field Oversight														
Tunnel Field Representative (PE)		-	-	-	-	-	10	10	10	10	10	-	-	50
Pipe Lead Field Representative		Included in Field Observation and Reporting						-	-	-	-	-	-	-
Field Observation and Reporting														
RWI Field Observation and Reporting	Jul-21	Included in WTP												-
Segment A Field Observation and Reporting	Nov-21	220	220	220	220	220	220	220	220					1,540
Segment A Field Observation and Reporting	Nov-21	260	260	260	260	260	260	260	-	-	-	-	-	1,820
Segment B Field Observation and Reporting	Feb-22	220	220	220	220	220	220	220	220	220	220			2,200
Segment B Field Observation and Reporting	Feb-22	220	220	-	-	-								440
Segment B Field Observation and Reporting	Feb-22	240												240
Segment C Field Observation and Reporting		-	-	-	-	-	-	-	220	220	220	220	220	1,100
Segment C Field Observation and Reporting									260	260	260	260	260	1,300
Segment C Field Observation and Reporting		-	-	-	-	-	-	-	-	-	-	220	220	440
Segment D Field Observation and Reporting	Sep-22	220	220	220	220	220	220	220	220	220	220	220	220	2,640
Segment D Field Observation and Reporting	Sep-22	230	230	230	230	230	230	230	230	230	230	230	230	2,760
Segment E Field Observation and Reporting		-	-	-	-	-	-	-	-	-	-	-	-	-
Segment E Field Observation and Reporting		-	240	240	240	240	240	240	240	240	240	240	240	2,640
D. Commissioning Services														
Program-Wide Commissioning and Startup Oversight														
	Jan-22													
Facility - Commissioning and Startup Manager						20	20	20	20	20	20	20	20	160
JEH Engineering														
TOTALS LABOR													32,992	

EXHIBIT D
2023 Hourly Rates

Key Staff		Range (\$/Hr)	
Principal In Charge		\$300	
Project Manager (CMI)		\$230	
Construction Manager		\$220	
Assistant Construction Manager		\$210	\$215
Commissioning Manager		\$265	
Full-Time Inspectors ⁽¹⁾		Range (\$/Hr)	
Pipeline (Senior)		\$155	\$170
Pipeline (Junior)		\$110	\$120
Facility - Building/Structural/Mechanical		\$180	\$205
Facility - Quality Manager		\$160	\$180
As-Needed Inspectors ⁽²⁾		Range (\$/Hr)	
Electrical / I&C		\$200	\$220
CWI/Coatings		\$155	\$175
Cathodic Protection		\$190	\$220
Process Equipment		\$180	\$205
Tunnel (P.E.)		\$200	\$225
Support		Range (\$/Hr)	
Scheduler		\$190	\$200
Administrative		\$100	\$110
SharePoint Manager		\$150	\$170
SharePoint Tech		\$110	\$130
Document Control Manager		\$130	\$135
Document Control Assistant		\$85	\$100
Notes			
(1) Rates include costs for vehicle, per diem, and lodging			
(2) Mileage, vehicle, and lodging costs may be charged for this group at standard allowable rates			

REGULAR MEETING
Alliance Regional Water Authority Technical Committee

COMMITTEE MEMBER PACKETS

Wednesday, December 14th, 2022 at 3:00 P.M.

Conference Call Number: 1-346-248-7799; Meeting ID: 982 8616 3170; Code: 495028

- F.6** Update, discussion and possible direction to Staff regarding the Corrosion Report process and submittals to the Texas Commission on Environmental Quality. ~
Marisa Vergara, P.E., CP&Y
-

Background/Information

Marisa Vergara with CP&Y will attend the meeting and will provide an update on the Corrosion Report process and submittals to TCEQ.

Technical Committee Decision Needed:

- Possible direction to Staff.

REGULAR MEETING
Alliance Regional Water Authority Technical Committee

COMMITTEE MEMBER PACKETS

Wednesday, December 14th, 2022 at 3:00 P.M.

Conference Call Number: 1-346-248-7799; Meeting ID: 982 8616 3170; Code: 495028

- F.7** Update, discussion and possible direction to Staff regarding updated water projections from the Authority's Sponsors. ~ *Graham Moore, P.E., Executive Director*
-

Background/Information

The Authority recently received the final water projections from the Sponsors. Staff will present the projected water needs at the Committee meeting.

Technical Committee Decisions Needed:

- Possible Direction to Staff.

REGULAR MEETING
Alliance Regional Water Authority Technical Committee

COMMITTEE MEMBER PACKETS

Wednesday, December 14th, 2022 at 3:00 P.M.

Conference Call Number: 1-346-248-7799; Meeting ID: 982 8616 3170; Code: 495028

- 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 is scheduled to meet on December 13th. Among other items is an update on the GCUWCD Mitigation Program.

Plum Creek Conservation District (PCCD)

The PCCD is scheduled to meet on December 20th – one item to be discussed are the specifications for the monitoring well required by the District.

Groundwater Management Area 13

No update.

Region L Planning Group

No update.

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

No update.

Technical Committee decision needed:

- None.

REGULAR MEETING
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- 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*

Consultant Invoices Paid

- Below are reports on the FY 21-22 consultant invoices paid in October.

FY 21-22 CONSULTANT INVOICES PAID IN OCTOBER 2022

Consultant	Total Authorized	Current Invoice	Invoiced-to-Date	% of Contract Invoiced	Remaining	Notes/Anomalies
RW Harden	\$30,000.00	\$0.00	\$20,437.33	68%	\$9,562.67	
Kent Alan Sick - ROW Legal	\$30,000.00	\$0.00	\$495.00	2%	\$29,505.00	
LNV - GIS Svcs	\$1,590.88	\$0.00	\$0.00	0%	\$1,590.88	
Armstrong, Vaughan & Associates, P.C.	\$10,930.00	\$0.00	\$10,930.00	100%	\$0.00	
J.R. Tolles & Associates, Inc.	\$255,000.00	\$23,971.00	\$233,141.40	91%	\$21,858.60	
Lloyd Gosselink Rochelle & Townsend	\$125,000.00	\$10,320.70	\$104,046.69	83%	\$20,953.31	
CD&P - Public Relations	\$50,000.00	\$0.00	\$47,158.37	94%	\$2,841.63	
Law Offices of Patricia Erlinger Carls	\$22,284.70	\$0.00	\$0.00	0%	\$22,284.70	
Schlueter Group of Texas, LLC	\$45,000.00	\$0.00	\$45,000.00	100%	\$0.00	
Texas Land & Right of Way Company, LLC	\$40,000.00	\$0.00	\$39,095.63	98%	\$904.37	
AECOM - Blanco Basin WW Study	\$47,010.00	\$0.00	\$42,309.00	90%	\$4,701.00	
Total	\$609,805.58	\$34,291.70	\$500,304.42		\$109,501.16	

- Below are reports on the FY 21-22 consultant invoices paid in November.

FY 21-22 CONSULTANT INVOICES PAID IN NOVEMBER 2022

Consultant	Total Authorized	Current Invoice	Invoiced-to-Date	% of Contract Invoiced	Remaining	Notes/Anomalies
RW Harden	\$30,000.00	\$2,760.00	\$23,197.33	77%	\$6,802.67	
Kent Alan Sick - ROW Legal	\$30,000.00	\$0.00	\$495.00	2%	\$29,505.00	
LNV - GIS Svcs	\$1,590.88	\$0.00	\$0.00	0%	\$1,590.88	
Armstrong, Vaughan & Associates, P.C.	\$10,930.00	\$0.00	\$10,930.00	100%	\$0.00	
J.R. Tolles & Associates, Inc.	\$255,000.00	\$0.00	\$233,141.40	91%	\$21,858.60	
Lloyd Gosselink Rochelle & Townsend	\$125,000.00	\$9,801.00	\$104,046.69	83%	\$20,953.31	
CD&P - Public Relations	\$50,000.00	\$0.00	\$47,158.37	94%	\$2,841.63	
Law Offices of Patricia Erlinger Carls	\$22,284.70	\$0.00	\$0.00	0%	\$22,284.70	
Schlueter Group of Texas, LLC	\$45,000.00	\$0.00	\$45,000.00	100%	\$0.00	
Texas Land & Right of Way Company, LLC	\$40,000.00	\$0.00	\$39,095.63	98%	\$904.37	
AECOM - Blanco Basin WW Study	\$47,010.00	\$0.00	\$42,309.00	90%	\$4,701.00	
Total	\$609,805.58	\$12,561.00	\$503,064.42		\$106,741.16	

REGULAR MEETING
Alliance Regional Water Authority Technical Committee

COMMITTEE MEMBER PACKETS

Wednesday, December 14th, 2022 at 3:00 P.M.

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- Below are reports on the FY 22-23 consultant invoices paid in October.

FY 22-23 CONSULTANT INVOICES PAID IN OCTOBER 2022

Consultant	Total Authorized	Current Invoice	Invoiced-to-Date	% of Contract Invoiced	Remaining	Notes/Anomalies
RW Harden	\$30,000.00	\$0.00	\$0.00	0%	\$30,000.00	
Kent Alan Sick - ROW Legal	\$10,000.00	\$0.00	\$0.00	0%	\$10,000.00	
Armstrong, Vaughan & Associates, P.C.	\$11,250.00	\$0.00	\$0.00	0%	\$11,250.00	
J.R. Tolles & Associates, Inc.	\$265,000.00	\$0.00	\$0.00	0%	\$265,000.00	
Lloyd Gosselink Rochelle & Townsend	\$125,000.00	\$0.00	\$0.00	0%	\$125,000.00	
CD&P - Public Relations	\$60,000.00	\$0.00	\$0.00	0%	\$60,000.00	
Schlueter Group of Texas, LLC	\$60,000.00	\$5,000.00	\$5,000.00	8%	\$55,000.00	
Texas Land & Right of Way Company, LLC	\$10,000.00	\$0.00	\$0.00	0%	\$10,000.00	
AECOM - Blanco Basin WW Study	\$4,701.00	\$0.00	\$0.00	0%	\$4,701.00	
Total	\$571,250.00	\$5,000.00	\$5,000.00		\$566,250.00	

- Below are reports on the FY 22-23 consultant invoices paid in November.

FY 22-23 CONSULTANT INVOICES PAID IN NOVEMBER 2022

Consultant	Total Authorized	Current Invoice	Invoiced-to-Date	% of Contract Invoiced	Remaining	Notes/Anomalies
RW Harden	\$30,000.00	\$0.00	\$0.00	0%	\$30,000.00	
Kent Alan Sick - ROW Legal	\$10,000.00	\$0.00	\$0.00	0%	\$10,000.00	
Armstrong, Vaughan & Associates, P.C.	\$11,250.00	\$0.00	\$0.00	0%	\$11,250.00	
J.R. Tolles & Associates, Inc.	\$265,000.00	\$23,249.00	\$23,249.00	9%	\$241,751.00	
Lloyd Gosselink Rochelle & Townsend	\$125,000.00	\$0.00	\$0.00	0%	\$125,000.00	
CD&P - Public Relations	\$60,000.00	\$8,891.83	\$8,891.83	15%	\$51,108.17	
Schlueter Group of Texas, LLC	\$60,000.00	\$5,000.00	\$10,000.00	17%	\$50,000.00	
Texas Land & Right of Way Company, LLC	\$10,000.00	\$1,015.00	\$1,015.00	10%	\$8,985.00	
AECOM - Blanco Basin WW Study	\$4,701.00	\$0.00	\$0.00	0%	\$4,701.00	
Total	\$571,250.00	\$38,155.83	\$43,155.83		\$528,094.17	

REGULAR MEETING
Alliance Regional Water Authority Technical Committee

COMMITTEE MEMBER PACKETS

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

PHASE 1B FY 21-22 CONSULTANT INVOICES PAID IN OCTOBER 2022

Consultant	Total Authorized	Current Invoice	Invoiced-to-Date	% of Contract Invoiced	Remaining	Notes/ Anomalies
Kimley-Horn Ph 1B Owner's Rep WO5	\$1,211,382.72	\$0.00	\$902,176.05	74%	\$309,206.67	
Kimley-Horn Ph 1B Owner's Rep WO5	\$1,989,091.00	\$143,325.31	\$950,211.75	48%	\$1,038,879.25	
Blanton - Environmental	\$1,184,938.15	\$0.00	\$790,192.76	67%	\$394,745.39	
LAN - Segment A	\$37,197.04	\$0.00	\$37,182.42	100%	\$14.62	
LAN - Segment A Construction	\$805,957.91	\$0.00	\$149,370.33	25%	\$456,587.58	
KFA - Segment B	\$89,769.42	\$0.00	\$66,133.15	74%	\$23,636.27	
KFA - Segment B Construction	\$471,544.00	\$0.00	\$59,085.38	13%	\$412,458.62	
BGE - Segment C Prelim	\$15,099.24	\$0.00	\$0.00	0%	\$15,099.24	
BGE - Segment C	\$519,338.89	\$242,493.15	\$275,732.53	53%	\$243,606.36	
FNI - Segment D Prelim	\$61,533.66	\$0.00	\$0.00	0%	\$61,533.66	
FNI - Segment D Final	\$307,435.65	\$0.00	\$308,721.36	100%	\$714.29	
Walker - Segment E Prelim	\$38,153.24	\$0.00	\$0.00	0%	\$38,153.24	
Walker - Segment E Final	\$450,315.35	\$0.00	\$188,907.40	42%	\$261,407.95	
LAN - ROW	\$741,441.42	\$0.00	\$326,379.54	44%	\$415,061.88	
DTR&G	\$2,000,000.00	\$186,827.61	\$1,699,426.18	85%	\$300,573.82	
CBRE - Appraisals	\$943,090.00	\$0.00	\$612,150.00	65%	\$330,940.00	
CP&Y - Survey	\$357,734.00	\$29,131.50	\$243,911.00	68%	\$113,823.00	
RW Harden - WDH Const Admin	\$12,470.00	\$0.00	\$12,470.00	100%	\$0.00	
LNV - RWI	\$163,760.50	\$0.00	\$5,370.00	3%	\$158,390.50	
FNI - BPS Final	\$267,620.10	\$0.00	\$56,675.37	21%	\$210,944.73	
Plummer - Inline Elevated Tank Prelim	\$3,730.07	\$0.00	\$0.00	0%	\$3,730.07	
Plummer - Inline Elevated Tank Final	\$290,663.43	\$10,371.40	\$65,667.26	23%	\$224,996.17	
Pape-Dawson - CM&I WO#5	\$1,501,376.61	\$0.00	\$935,095.71	62%	\$566,280.90	
Pape-Dawson - CM&I WO#8	\$5,601,900.00	\$471,150.97	\$2,596,991.59	46%	\$3,004,908.41	
Hicks & Co - WDH Environmental	\$15,571.00	\$0.00	\$0.00	0%	\$15,571.00	
Walker Partners - WTP CA Svcs	\$1,253,702.22	\$0.00	\$541,823.82	43%	\$711,878.40	
LNV/Ardurura - RWI CA Svcs	\$340,160.00	\$0.00	\$14,704.50	4%	\$325,455.50	
FNI - BPS CA Svcs	\$527,630.50	\$0.00	\$189,282.26	36%	\$338,348.24	
CP&Y - SCADA Programming Svcs	\$821,470.94	\$0.00	\$257,508.45	31%	\$563,962.49	
HVJ - Materials Testing (WTP)	\$473,148.75	\$8,076.75	\$126,775.00	27%	\$346,373.75	
HVJ - Materials Testing (BPS)	\$131,259.00	\$4,473.00	\$67,414.75	51%	\$63,844.25	
HVJ - Materials Testing (Segment A)	\$730,665.00	\$18,050.00	\$0.00	0%	\$730,665.00	
HVJ - Materials Testing (Segment B)	\$485,483.00	\$40,887.00	\$86,011.72	18%	\$399,471.28	
Total	\$23,644,632.81	\$1,154,786.69	\$11,563,370.28	49%	\$12,081,262.53	

REGULAR MEETING
Alliance Regional Water Authority Technical Committee

COMMITTEE MEMBER PACKETS

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Approved Change Orders

- Below are the Consultant changes that were issued in October 2022.

CHANGE ORDERS APPROVED IN OCTOBER 2022				
Consultant	Original Authorization	Change Orders to Date	Change Order Approved this Month	New Total Contract Amount
Freese & Nichols: 1B BPS & DP Prelim	\$ 771,617.00	\$ 44,408.00	\$ -	\$ 816,025.00
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	\$ 418,373.96	\$ -	\$ 2,417,837.96
LAN: 1B Segment A Final Design	\$ 1,903,077.00	\$ 262,949.00	\$ -	\$ 2,166,026.00
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	\$ 334,387.13	\$ 3,145.00	\$ 2,165,381.13
LAN: 1A Seg B Const Admin	\$ 108,860.01	\$ 6,204.04	\$ -	\$ 115,064.05
LNV: 1B Raw Water (Design)	\$ 1,418,700.00	\$ 107,570.00	\$ -	\$ 1,526,270.00
Walker Partners: 1B Seg E (Final)	\$ 1,190,421.00	\$ 286,628.00	\$ -	\$ 1,477,049.00
BGE: 1B Segment C Final	\$ 2,688,310.00	\$ 652,306.00	\$ -	\$ 3,340,616.00
Freese & Nichols: 1B BPS & DP Final	\$ 1,580,519.00	\$ 163,657.00	\$ -	\$ 1,744,176.00
Pape Dawson: CMI	\$ 57,520.00	\$ 43,080.00	\$ -	\$ 100,600.00
Walker Partners: WTP (CA Svcs)	\$ 1,638,207.00	\$ 164,682.00	\$ -	\$ 1,802,889.00
Freese & Nichols: 1B BPS & DP (CA Svcs)	\$ 497,224.00	\$ 32,896.00	\$ -	\$ 530,120.00
LAN: 1B Segment A (CA Svcs)	\$ 486,610.00	\$ 25,000.00	\$ -	\$ 511,610.00
LNV: 1B Raw Water (Const Admin)	\$ 210,345.00	\$ 28,500.00	\$ -	\$ 238,845.00
K Friese & Assoc: 1B Seg B CA	\$ 471,544.00	\$ 10,000.00	\$ 10,000.00	\$ 481,544.00

REGULAR MEETING
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COMMITTEE MEMBER PACKETS

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- 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

Wednesday, December 14th, 2022 at 3:00 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*
-

REGULAR MEETING
Alliance Regional Water Authority Technical Committee

COMMITTEE MEMBER PACKETS

Wednesday, December 14th, 2022 at 3:00 P.M.

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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*
-

REGULAR MEETING
Alliance Regional Water Authority Technical Committee

COMMITTEE MEMBER PACKETS

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J. ADJOURNMENT
