

**Alliance Regional Water Authority  
Board of Directors**

**REGULAR MEETING**



**ALLIANCE WATER**

**BOARD MEMBER PACKETS**

Wednesday, February 23, 2022 at 3:00 P.M.

Call-In Number: 1-346-248-7799  
Meeting ID: 978 1228 2647  
Passcode: 506563

**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, February 23, 2022 at 3:00 P.M.  
County Line SUD Offices, 8870 Camino Real, Kyle, TX 78640

This Notice is posted pursuant to the Texas Open Meetings Act (Texas Government Code Chapter 551). The Alliance Regional Water Authority (the Authority) Board of Directors will hold a meeting at 3:00 PM, Wednesday, January 26, 2022, at the County Line Special Utility District Offices, 8870 Camino Real, Kyle, Texas. The presiding officer of the meeting will be physically present at the location noted above. Some directors may participate remotely through videoconference. The public may observe this meeting in person or by using the following videoconference link and/or calling the number and code provided:

**[ZOOM MEETING LINK](#)**

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

Meeting ID: 978 1228 2647

Passcode: 506563

Members of the public wishing to make public comment during the meeting must (1) be present at the public meeting location or (2) join by videoconference and register by emailing [info@alliancewater.org](mailto:info@alliancewater.org) prior to 3:00 p.m. on February 23, 2022. Public comment is not allowed by call-in. 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 register with the Executive Director at [info@alliancewater.org](mailto:info@alliancewater.org) before 3:00 p.m.)

D. CONSENT AGENDA

*The items included in the Consent Agenda portion of this meeting agenda can be considered and approved by the Board of Directors by one motion and vote. A Board member may request that an item included in the Consent Agenda be considered separately, in which event the Board of Directors will take action on the remaining Consent Agenda items and then consider the item removed from the Consent Agenda.*

D.1 Consider approval of minutes of the Regular Meeting held January 26, 2022. ~  
*Graham Moore, P.E., Executive Director*

D.2 Consider approval of the financial report for December 2021. ~  
*Graham Moore, P.E., Executive Director*

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E. PUBLIC HEARINGS / PRESENTATIONS - None

F. ITEMS FOR DISCUSSION NOT REQUIRING ACTION

F.1 Report on Technical Committee activities. ~ *Graham Moore, P.E., Executive Director*

F.2 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 AND LEGAL COUNSEL REPORTS - Update on future meeting dates, locations, status of Authority procurements, Executive Director activities, other operational activities and the status of legal issues, where no action is required. ~ *Graham Moore, P.E., Executive Director / Mike Gershon, Lloyd Gosselink Rochelle & Townsend, P.C.*

H. ITEMS FOR ACTION OR DISCUSSION/DIRECTION

H.1 Update and discussion regarding the Authority's public relations activities possible direction to staff and consultants. ~ *CD&P*

H.2 Update and possible direction to Staff regarding construction of the Authority's Phase 1B program. ~ *Chris Noe, P.E., Pape-Dawson Engineers*

H.3 Update and discussion regarding the status of the Authority's Phase 1B program, and direction to staff and consultants. ~ *Ryan Sowa, P.E., Kimley-Horn & Associates*

H.4 Consider adoption of Resolution 2022-02-23-001 approving Work Order #10 and #11 with Blanton and Associates, Inc. for additional environmental work on the Phase 1B Program, as recommended by the Technical Committee. ~ *Graham Moore, P.E., Executive Director*

H.5 Consider adoption of Resolution 2022-02-23-002 approving Supplemental Amendment #2 to Work Order #5 with Walker Partners, LLC for additional hydraulic evaluation of the Phase 1B transmission system. ~ *Graham Moore, P.E., Executive Director*

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- H.6 Update, discussion and possible direction to Staff regarding the Authority's Phase 1B Cost and Schedule Updates. ~ *Ryan Sowa, P.E., Kimley-Horn & Associates*
- H.7 Update, discussion and possible direction to Staff regarding timing and financing of project cost increases. ~ *Graham Moore, P.E., Executive Director*
- H.8 Consider adoption of Resolution 2022-02-23-004 approving Work Order #6 with Kimley-Horn & Associates, Inc. for Owner's Representative Services for March 2022 through February 2023 for the Authority's Phase 1B Program, as recommended by the Technical Committee. ~ *Graham Moore, P.E., Executive Director*
- H.9 Consider adoption of Resolution 2022-02-23-005 approving Work Order #2 and Work Order #3 with HVJ Associates for material testing on the Booster Pump Station and Delivery Points Project and the Segment A Pipeline project. ~ *Graham Moore, P.E., Executive Director*
- H.10 Consider adoption of Resolution 2022-02-23-006 approving the process for mediation on land acquisition efforts. ~ *Graham Moore, P.E., Executive Director*
  
- I. BOARD MEMBER ITEMS OR FUTURE AGENDA ITEMS – Possible acknowledgement by Board Members of future area events and/or requests for item(s) to be placed on a future agenda where no action is required.
  
- J. EXECUTIVE SESSION
  - J.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*
  
  - J.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*



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K. ADJOURNMENT

**NOTE:** *The Board of Directors may meet in Executive Session for any purpose authorized under the Texas Open Meetings Act, Chapter 551 of the Texas Government Code, for any item listed on this agenda or as otherwise authorized by law. An announcement will be made of the basis for Executive Session. The Board of Directors may also publicly discuss any item listed on the agenda for Executive Session.*

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**A. CALL TO ORDER**

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No Backup Information for this Item.

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**B. ROLL CALL**

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<b>NAME</b>	<b>TERM ENDS</b>	<b>PRESENT</b>
Mayor Jane Hughson – Vice-Chair (San Marcos)	April 2023	
Regina Franke (CRWA - General Manager, Crystal Clear SUD)	April 2023	
Tim Samford (Kyle – Treatment Operations Manager)	April 2024	
Blake Neffendorf – Treasurer (Buda – Water Resources Coordinator)	April 2023	
Councilmember Mark Gleason (San Marcos)	April 2022	
Humberto Ramos (CRWA – Water Resources Director)	April 2024	
James Earp – Secretary (Kyle – Assistant City Manager)	April 2024	
Tyler Hjorth (San Marcos – Director, Utilities)	April 2024	
Chris Betz – Chair (CRWA - President, County Line SUD)	April 2022	
Derrick Turley (Kyle – Water Quality Technician)	April 2024	
Shaun Condor (San Marcos – Interim Director of Engineering & CIP)	April 2022	
Pat Allen (CRWA - General Manager, Green Valley SUD)	April 2023	
Paul Kite (San Marcos – Asst. Director of Public Services)	April 2022	

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- C.** PUBLIC COMMENT PERIOD (Note: Each person wishing to speak must register with the Executive Director at [info@alliancewater.org](mailto:info@alliancewater.org) before 3:00 p.m.)
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**D. CONSENT AGENDA**

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Items D.1 and D.2 are presented as part of the consent agenda.

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**D.1** Consider approval of minutes of the Regular Meeting held January 26, 2022. ~  
*Graham Moore, P.E., Executive Director*

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Attachment(s)

- 2022 01 26 Board Meeting Minutes

**Board Decision(s) Needed:**

- Approval of minutes.



## ALLIANCE WATER

### Alliance Regional Water Authority

### BOARD MEETING

### MINUTES

**Wednesday, January 26, 2022**

The following represents the actions taken by the Board of Directors of the Alliance Regional Water Authority (ARWA) in the order they occurred during the meeting. The Board of Directors convened in a meeting on Wednesday, January 26, 2022 at the County Line Special Utility District offices and via video conference call.

- A. CALL TO ORDER.  
**The Alliance Water Board Meeting was called to order at 3:03 p.m. by Mr. Betz.**
  
- B. ROLL CALL.
  - **Present: Hughson, Franke, Samford, Neffendorf, Gleason, Ramos, Earp, Hjorth, Betz, Turley, Allen and Kite.**
  - **Absent: Vacancy.**
  
- C. PUBLIC COMMENT PERIOD
  - **None.**
  
- D. CONSENT AGENDA
  - D.1 Consider approval of minutes of the Regular Meeting held December 15, 2021.
  - D.2 Consider approval of the financial reports for October 2021 and November 2021.
  - D.3 Consider approval of the Quarterly Investment Report for the period ending December 31, 2021.
    - **Motion to approve the consent agenda item as presented was made by Mr. Ramos, seconded by Ms. Hughson and approved on an 12-0 vote.**

E. PUBLIC HEARINGS / PRESENTATIONS

- **None.**

F. ITEMS FOR DISCUSSION NOT REQUIRING ACTION

- F.1 Report on Technical Committee activities.
- F.2 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.
- **No items opened.**

G. EXECUTIVE DIRECTOR AND LEGAL COUNSEL REPORTS

- **Mr. Moore provided an update on the canceled Leaseholder Meeting.**
- **Mr. Gershon noted that he sent a legal opinion to the Board and was available by phone should any Director have questions.**
- **No action.**

H. ITEMS FOR ACTION OR DISCUSSION/DIRECTION

- H.1 Consider adoption of Resolution 2022-01-26-001 accepting and approving the Audit Report for the 2020-2021 Financial Audit of the Authority.
- **Mr. Phil Vaughn with Armstrong, Vaughn and Associated attended the meeting and provided an overview of the audit.**
  - **Mr. Vaughn noted that they are providing a clean opinion.**
  - **Motion to adopt Resolution 2022-01-26-001 accepting and approving the Audit Report for the 2020-21 Financial Audit of the Authority was made by Mr. Earp, seconded by Ms. Hughson and approved on a 12-0 vote.**
- H.2 Update and possible direction to Staff regarding construction of the Authority's Phase 1B program.
- **Mr. Noe provided an update on the construction of the Phase 1B Program.**
  - **No Action.**
- H.3 Update and discussion regarding the status of the Authority's Phase 1B program, and direction to staff and consultants.
- **Mr. Sowa provided an update on the Phase 1B Program.**
  - **No Action.**



- H.4 Consider adoption of Resolution 2022-01-26-002 approving an Interlocal Cooperation Agreement with the City of San Marcos for San Marcos Regional Water Treatment Plant and Blanco Vista Storage Tank Improvements as recommended by the Technical Committee.
- **Mr. Moore provided an overview of the Interlocal Cooperation Agreement.**
  - **Motion to Amend Section 4 of the Resolution to clearly indicate both parties benefit from jointly bidding the Blanco Vista Storage Tank with the Alliance Water elevated water tanks was made by Mr. Hjorth, seconded by Ms. Hughson and approved on a 12-0 vote.**
  - **Motion to Amend Exhibit B of the Agreement to match the schedules included in the version of the agreement passed by the San Marcos City Council was made by Ms. Hughson, seconded by Mr. Hjorth and approved on a 12-0 vote.**
  - **Motion to Amend Section 2.07 of the Agreement to indicate the estimated construction cost for the Blanco Vista Storage Tank is \$5,000,000 was made by Mr. Hjorth, seconded by Ms. Hughson and approved on a 12-0 vote.**
  - **Motion to adopt Resolution 2022-01-6-002 approving an Interlocal Cooperation Agreement with the City of San Marcos Regional Water Treatment Plant and Blanco Vista Storage Tank Improvements as amended was made by Ms. Hughson, seconded by Mr. Hjorth and approved on an 12-0 vote.**
- H.5 Consider adoption of Resolution 2022-01-26-003 approving Work Order #6 with Pape-Dawson Engineers, Inc. for Construction Management and Inspection Services on the Authority's Phase 1B Program through December 31, 2022.
- **Mr. Moore provided a review of the Pape-Dawson Work Orders, previous actions and the discussion that occurred with the review committee.**
  - **Mr. Ramos noted that Mr. Moore is also responsible for reviewing the Pape-Dawson expenditures and making a quarterly report to the Technical Committee.**
  - **Motion to adopt Resolution 2022-01-26-003 approving Work Order #6 with Pape-Dawson Engineer's, Inc. for Construction Management and Inspection Services was made by Mr. Ramos, seconded by Mr. Neffendorf and approved on a 12-0 vote.**
- H.6 Discussion and possible creation of a Temporary Committee and designation of Directors to the Committee for the purpose of reviewing the responses to the Authority's Carrizo Water Supply Project Operation and Maintenance Services RFP and recommending selection of a proponent to the Board of Directors.

- **Mr. Moore provided an overview of the need for the review committee.**
  - **Directors Ramos, Neffendorf, Samford, Franke and Hjorth volunteered to participate on the committee.**
  - **Mr. Ramos requested that the Authority's legal counsel, Mike Gershon, also be involved to help facilitate the discussion and to make note of any items that may ultimately be written into an operations contract.**
  - **Mr. Hjorth noted that he would be interested in Tom Taggart joining the committee as a non-voting member.**
  - **Mr. Taggart noted that he must recuse himself as his current employer is interested in the RFP.**
  - **Motion to appoint Directors Ramos, Neffendorf, Samford, Franke and Hjorth to the Temporary Committee was made by Ms. Hughson, seconded by Mr. Kite and approved on a 12-0 vote.**
- H.7 Discussion and possible adoption of the Authority's Board of Directors meeting schedule for 2022.
- **Motion to adopt the 2022 Board meeting scheduled as presented was made by Ms. Hughson, seconded by Ms. Franke and approved on an 12-0 vote.**
- H.8 Discussion and possible direction to Staff regarding the Authority's process for mediation.
- **The Board indicated a clear preference for virtual mediation when at all possible. Staff was directed to prepare a resolution whereby the entire Board would be eligible to participate in the mediation, with a minimum of two Directors plus the Executive Director participating in any mediation. The approval limits will be discussed in Executive Session at the February Board meeting.**
  - **No Action.**
- I. BOARD MEMBER ITEMS OR FUTURE AGENDA ITEMS
- **No Action.**
- J.1 The Board of Directors recessed into Executive Session at 4:26 p.m. pursuant of the Government Code, Section 551.071, to seek the General Counsel's advice regarding matters involving attorney-client privilege, Section 551.072 to discuss water supply project partnership options. The Board of Directors reconvened from Executive Session at 5:14 p.m.
- J.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.
  - **Staff is to proceed as directed in Executive Session.**
- D. Consideration of Resolution 2022-01-26-004 finding Public Convenience and Necessity for and authorizing the acquisition of certain water pipeline easements and temporary construction easements and certain fee estates for the Alliance Regional Water Authority, Phase 1B Water Line Project in connection therewith, over, across, upon and under certain privately owned real estate properties; authorizing all appropriate actions by the Board of Directors, staff, retained attorneys and engineering and technical consultants in the institution and prosecution of condemnation proceedings to acquire any such needed fee estates and easements and temporary construction easements and related rights of ingress and egress that cannot be acquired through negotiation; declaring further negotiations futile; ratifying and affirming all acts and proceedings heretofore done or initiated by employees, agents, and attorneys of ARWA to acquire such property interests including necessary acts for any applicable lienholders for such properties; authorizing all other lawful action necessary and incidental to such acquisitions or eminent domain proceedings to survey, specify, define, and secure the necessary interests in real property; declaring the sections of the resolution to be severable one from the other in the event any section of the resolution is determined to be invalid; establishing an effective date; and finding and determining that the meeting at which this resolution is passed was noticed and is open to the public as required by law.
  - **Motion to adopt Resolution 2022-01-26-004 finding Public Convenience and Necessity and authorizing Eminent Domain Proceedings, if necessary, for acquisitions as presented was made by Mr. Neffendorf, seconded by Mr. Ramos and approved on an 12-0 vote.**

K. ADJOURNMENT

- **Meeting was adjourned at 5:16 p.m. based on the motion by Mr. Neffendorf, seconded by Ms. Hughson on an 12-0 vote.**

**APPROVED:** \_\_\_\_\_, 2022

**ATTEST:**

\_\_\_\_\_  
Chair, Board of Directors

\_\_\_\_\_  
Secretary, Board of Directors

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**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

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**D.2** Consider approval of the financial report for December 2021. ~ *Graham Moore, P.E., Executive Director*

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Background/Information

Attached is the financial report for the periods ending December 2021.

Attachment(s)

- 2021 12 31 Financial Report

**Board Decision(s) Needed:**

- Approval of the financial report for the periods ending December 2021.



**ALLIANCE WATER**

# **Alliance Regional Water Authority**

**Financial Statements  
(Compilation)**

**For the One Month Ended and Year-to-Date  
December 31, 2021**

## Alliance Regional Water Authority

## Balance Sheet

01/23/22

As of December 31, 2021

Accrual Basis

	<u>Dec 31, 21</u>
<b>ASSETS</b>	
<b>Current Assets</b>	
<b>Checking/Savings</b>	
1004 · Broadway Bank	
1005 · Broadway Checking (8040)	-496,889.49
1010 · Broadway Savings (4415)	1,600,803.91
<b>Total 1004 · Broadway Bank</b>	<u>1,103,914.42</u>
1015 · TexStar	
1015-01 · TexStar (3310)	45,568,672.18
1015-02 · TexStar (0300)	24,524,009.90
<b>Total 1015 · TexStar</b>	<u>70,092,682.08</u>
1050 · Broadway Bank (Reserved)	
1051 · CRWA Debt Service (2785)	1,549,420.44
1052 · Kyle Debt Service (2787)	1,266,162.51
1055 · San Marcos Debt Service (6390)	1,827,018.92
1056 · Buda Debt Service (6391)	278,891.63
<b>Total 1050 · Broadway Bank (Reserved)</b>	<u>4,921,493.50</u>
1100 · Escrow Accounts	
1105 · BOKF, Escrow, CRWA Series 2015A	335,084.71
1106 · BOKF, Escrow, Kyle Series 2015B	221,958.25
1107 · BOKF, Escrow, CRWA Series 2017A	266,108.02
1108 · BOKF, Escrow, Kyle Series 2017B	242,555.25
1109 · BOKF, Escrow, SM Series 2017C	334,008.02
1110 · BOKF, Escrow, Buda Series 2017D	43,179.42
1111 · BOKF, Escrow, CRWA Series 2019A	5,028,946.50
1112 · BOKF, Escrow, Kyle Series 2019B	4,586,309.46
1113 · BOKF, Escrow, SM Series 2019C	5,872,525.61
1114 · BOKF, Escrow, Buda Series 2019D	754,145.73
1115 · BOKF, Escrow, CRWA Series 2020A	29,070,567.85
1116 · BOKF, Escrow, CRWA 2020A-LM67	8,346,639.09
1117 · BOKF, Escrow, Kyle Series 2020B	26,509,566.22
1118 · BOKF, Escrow, Kyle 2020B-LM68	7,606,422.39
1119 · BOKF, Escrow, SM Series 2020C	33,780,863.65
1120 · BOKF, Escrow, SM 2020C-LM69	9,686,811.45
1121 · BOKF, Escrow, BUDA Series 2020D	4,687,174.77
1122 · BOKF, Escrow, Buda 2020D-LM70	1,365,255.33
<b>Total 1100 · Escrow Accounts</b>	<u>138,738,121.72</u>
<b>Total Checking/Savings</b>	<u>214,856,211.72</u>
<b>Total Current Assets</b>	<u>214,856,211.72</u>
<b>Fixed Assets</b>	
1405 · Engineering & Construction Cost	2,402,294.20
1420 · Projects in Progress (Cash)	
1420-01 · Legal Support	64,673.27
1420-02 · Hydrogeologic Support	184,089.50
1420-03 · PCCD Permitting	105,095.16
1420-04 · Kyle Water Model	25,000.00
1420-11 · Legal Support, GBRA	45,251.01
<b>Total 1420 · Projects in Progress (Cash)</b>	<u>424,108.94</u>

## Alliance Regional Water Authority

## Balance Sheet

01/23/22

As of December 31, 2021

Accrual Basis

	Dec 31, 21
<b>1430 · Projects in Progress Eng (Cash)</b>	
1430-02 · Engineering - Plumbing Plan	17,663.79
1430-03 · Engineering Fees-ROW	11,594.69
1430-05 · Engineering - Rate Study	50,760.00
1430-06 · DPR Study	59,880.00
1430-07 · Alignment Study	261,120.80
1430-08 · Prelim Engineering-Well Field	65,586.00
1430-09 · GCUWCD Monitoring Wells	129,175.39
1430-10 · 2017 SWIFT Funding Apps	23,107.96
1430-11 · Blanco Basin WW	41,880.00
1430-12 · Phase 1B Programming	107,761.14
1430-13 · ARWA-GBRA MOU Study	15,000.00
1430-14 · Phase 1A GIS	59,840.62
<b>Total 1430 · Projects in Progress Eng (Cash)</b>	<b>843,370.39</b>
<b>1440 · Projects in Prog Eng. (Finance)</b>	
1440-01 · Engineering-Phase 1A Pipeline	540,838.84
1440-02 · Engineering-Phase 1A Pump Stat	1,001,947.66
1440-03 · Engineering-ROW Acquisition	412,064.67
1440-04 · Phase 1A Const Observation	907,824.16
1440-05 · Phase 1A-Construction Trailer	60,489.29
1440-06 · Phase 1A Segment A Construction	1,734,150.32
1440-07 · Phase 1A BPS Construction	5,142,172.37
1440-08 · Phase 1A Segment B Construction	3,980,928.06
1440-15 · Land Acquisition Phase 1B	21,169,830.20
1440-16 · Phase 1B-Owners Rep	9,766,877.69
1440-17 · Phase 1B Environmental	2,846,082.77
1440-18 · Phase 1B Segment A Design	2,811,097.09
1440-19 · Phase 1B Segment B Design	2,692,798.54
1440-20 · Phase 1B Segment C Design	3,460,400.87
1440-21 · Phase 1B Segment D Design	2,385,127.66
1440-22 · Phase 1B Segment E Design	1,877,117.57
1440-23 · Phase 1B Land Attorney	1,529,196.55
1440-24 · Phase 1B Hydrogeology	532,654.75
1440-25 · Phase 1B WTP Design	4,817,078.35
1440-26 · Raw Water Infr.	1,506,229.50
1440-27 · Phase 1B Program Survey	3,105,295.00
1440-28 · Phase 1B BPS Design	2,590,321.34
1440-29 · GVEC Construction-in-Aid	1,740,143.30
1440-30 · Phase 1B Inline Tanks	440,344.06
1440-31 · Construction Mgmt & Inspection	1,325,893.09
1440-32 · Phase 1B Construction ARWA Only	2,784,665.00
1440-33 · SCADA Programming	230,704.60
1440-34 · Materials Testing	15,336.25
1440-35 · Shared Construction	4,999,599.38
<b>Total 1440 · Projects in Prog Eng. (Finance)</b>	<b>86,407,208.93</b>
<b>1447 · Land &amp; Easements</b>	<b>943,215.70</b>
<b>1448 · Capitalized Interest</b>	
1448-51 · Cap Interest, CRWA Series 2015A	152,369.03
1448-52 · Cap Interest, Kyle Series 2015B	222,143.28
1448-53 · Cap Interest, CRWA Series 2017A	127,269.80
1448-54 · Cap Interest, Kyle Series 2017B	116,100.88
1448-55 · Cap Interest, SM Series 2017C	65,904.35
1448-56 · Cap Interest, Buda Series 2017D	9,576.21
<b>Total 1448 · Capitalized Interest</b>	<b>693,363.55</b>
<b>Total Fixed Assets</b>	<b>91,713,561.71</b>

## Alliance Regional Water Authority

## Balance Sheet

01/23/22

As of December 31, 2021

Accrual Basis

	Dec 31, 21
Other Assets	
1900 · Deferred Outflow	42,509.25
<b>Total Other Assets</b>	<b>42,509.25</b>
<b>TOTAL ASSETS</b>	<b>306,612,282.68</b>
<b>LIABILITIES &amp; EQUITY</b>	
Liabilities	
Current Liabilities	
Accounts Payable	
2000 · Accounts Payable	855,022.91
<b>Total Accounts Payable</b>	<b>855,022.91</b>
Credit Cards	
2006 · Chase Bank VISA Card	3,384.06
<b>Total Credit Cards</b>	<b>3,384.06</b>
Other Current Liabilities	
2100 · Payroll Liabilities	2.51
2102 · 401(a) Liability	3,313.98
2103 · Net Pension Liability	9,067.00
2104 · Pension Deferred Inflows	2,473.00
2106 · Accrued Vacation	42,151.49
2300 · Accrued Costs	330,643.18
2350 · Accrued Interest Payable	
2351 · Accrued Int Payable, CRWA 2015A	22,146.75
2352 · Accrued Int Payable, Kyle 2015B	31,848.21
2353 · Accrued Int Payable, CRWA 2017A	86,631.57
2354 · Accrued Int Payable, Kyle 2017B	79,009.29
2355 · Accrued Int Payable, SM 2017C	63,819.47
2356 · Accrued Int Payable, Buda 2017D	9,020.25
2357 · Accrued Int Payable, CRWA 2019A	202,473.90
2358 · Accrued Int Payable, Kyle 2019B	184,742.46
2359 · Accrued Int Payable, SM 2019C	149,936.67
2360 · Accrued Int Payable, Buda 2019D	21,268.89
2361 · Accrued Int Payable, CRWA 2020A	231,888.60
2362 · Accrued Int Payable, Kyle 2020B	211,458.96
2363 · Accrued Int Payable, SM 2020C	147,866.40
2364 · Accrued Int Payable, Buda 2020D	20,940.75
<b>Total 2350 · Accrued Interest Payable</b>	<b>1,463,052.17</b>
<b>Total Other Current Liabilities</b>	<b>1,850,703.33</b>
<b>Total Current Liabilities</b>	<b>2,709,110.30</b>
Long Term Liabilities	
2501 · Bond Payable, CRWA Series 2015A	3,030,000.00
2502 · Bond Payable, Kyle Series 2015B	3,075,000.00
2503 · Bond Payable, CRWA Series 2017A	9,075,000.00
2504 · Bond Payable, Kyle Series 2017B	8,275,000.00
2505 · Bond Payable, SM Series 2017C	9,815,000.00
2506 · Bond Payable, Buda Series 2017D	1,395,000.00
2507 · Bond Payable, CRWA Series 2019A	25,790,000.00
2508 · Bond Payable, Kyle Series 2019B	23,525,000.00
2509 · Bond Payable, SM Series 2019C	29,315,000.00
2510 · Bond Payable, Buda Series 2019D	4,160,000.00
2511 · Bond Payable, CRWA Series 2020A	37,865,000.00
2512 · Bond Payable, Kyle Series 2020B	34,530,000.00
2513 · Bond Payable, SM Series 2020C	43,955,000.00
2514 · Bond Payable, Buda Series 2020D	6,225,000.00
<b>Total Long Term Liabilities</b>	<b>240,030,000.00</b>
<b>Total Liabilities</b>	<b>242,739,110.30</b>



**Alliance Regional Water Authority**

**Balance Sheet**

As of December 31, 2021

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	<u>Dec 31, 21</u>
Equity	
2925 · Net Investment in Capital Asset	7,521,343.98
2950 · Retained Earnings	26,983,295.40
Net Income	29,368,533.00
	<hr/>
Total Equity	63,873,172.38
	<hr/>
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<b>306,612,282.68</b>
	<hr/> <hr/>

**Alliance Regional Water Authority**  
**Profit Loss / Budget vs. Actual**  
**For the One Month and Three Months Ended December 31, 2021**

	December 2021	October 2021 December 2021	Annual Budget	Over/Under Budget	% of Annual Budget
<b>Ordinary Income/Expense</b>					
<b>Income</b>					
<b>4010 - Project Contribution</b>					
4011 - City of San Marcos	1,456,236.71	1,456,236.71	6,135,730.00	-4,679,493.29	23.73%
4012 - City of Kyle	0.00	967,609.27	4,114,580.00	-3,146,970.73	23.52%
4013 - City of Buda	207,416.58	207,416.58	873,690.00	-666,273.42	23.74%
4014 - Canyon Regional Water Authority	0.00	1,075,950.56	4,571,520.00	-3,495,569.44	23.54%
4015 - GBRA	27,022,998.30	27,022,998.30	0.00	27,022,998.30	100.0%
<b>Total 4010 - Project Contribution</b>	<b>28,686,651.59</b>	<b>30,730,211.42</b>	<b>15,695,520.00</b>	<b>15,034,691.42</b>	<b>195.79%</b>
<b>4200 - Shared Water</b>					
4210 - Shared Water, City of Buda	36,359.00	108,555.00	0.00	108,555.00	100.0%
4211 - Shared Water, County Line SUD	0.00	7,745.00	0.00	7,745.00	100.0%
<b>Total 4200 - Shared Water</b>	<b>36,359.00</b>	<b>116,300.00</b>	<b>0.00</b>	<b>116,300.00</b>	<b>100.0%</b>
4250 - Non Potable Water Sales	3,156.51	6,316.26	31,600.00	-25,283.74	19.99%
<b>4300 - Broadway Interest Income</b>					
4311 - City of San Marcos	289.68	429.95	550.00	-120.05	78.17%
4312 - City of Kyle	249.05	359.85	425.00	-65.15	84.67%
4313 - City of Buda	38.49	53.69	75.00	-21.31	71.59%
4314 - Canyon Regional Water Authority	279.69	413.40	450.00	-36.60	91.87%
<b>Total 4300 - Broadway Interest Income</b>	<b>856.91</b>	<b>1,256.89</b>	<b>1,500.00</b>	<b>-243.11</b>	<b>83.79%</b>
<b>4350 - Escrow Accounts Income</b>					
4351 - BOKF, CRWA Series 2015A	4.88	15.98	0.00	15.98	100.0%
4352 - BOKF, Kyle Series 2015B	3.23	10.58	0.00	10.58	100.0%
4353 - BOKF, CRWA Series 2017A	3.88	12.69	0.00	12.69	100.0%
4354 - BOKF, Kyle Series 2017B	3.53	11.56	0.00	11.56	100.0%
4355 - BOKF, SM Series 2017C	4.86	15.92	0.00	15.92	100.0%
4356 - BOKF, Buda Series 2017D	0.63	2.06	0.00	2.06	100.0%
4357 - BOKF, CRWA Series 2019A	188.57	687.66	0.00	687.66	100.0%
4358 - BOKF, Kyle Series 2019B	171.97	627.11	0.00	627.11	100.0%
4359 - BOKF, SM Series 2019C	219.41	799.95	0.00	799.95	100.0%
4360 - BOKF, Buda Series 2019D	29.95	109.60	0.00	109.60	100.0%
4361 - BOKF, CRWA Series 2020A	423.34	1,386.11	0.00	1,386.11	100.0%
4362 - BOKF, CRWA Series 2020A-LM67	121.55	397.98	0.00	397.98	100.0%
4363 - BOKF, Kyle Series 2020B	386.04	1,264.00	0.00	1,264.00	100.0%
4364 - BOKF, Kyle Series 2020B-LM68	110.77	362.67	0.00	362.67	100.0%
4365 - BOKF, SM Series 2020C	491.93	1,610.69	0.00	1,610.69	100.0%
4366 - BOKF, SM Series 2020C-LM69	141.06	461.87	0.00	461.87	100.0%
4367 - BOKF, Buda Series 2020D	68.26	223.49	0.00	223.49	100.0%
4368 - BOKF, Buda Series 2020D-LM70	19.88	65.10	0.00	65.10	100.0%
<b>Total 4350 - Escrow Accounts Income</b>	<b>2,393.74</b>	<b>8,065.02</b>	<b>0.00</b>	<b>2,361.15</b>	<b>100.0%</b>
<b>4370 - TexStar Interest Income</b>					
4371 - City of San Marcos	205.08	342.63	4,300.00	-3,957.37	7.97%
4372 - City of Kyle	161.10	269.14	3,400.00	-3,130.86	7.92%
4373 - City of Buda	29.05	48.53	600.00	-551.47	8.09%
4374 - Canyon Regional Water Authority	176.66	295.14	3,700.00	-3,404.86	7.98%
<b>Total 4370 - TexStar Interest Income</b>	<b>571.89</b>	<b>955.44</b>	<b>12,000.00</b>	<b>-11,044.56</b>	<b>7.96%</b>
4901 - Miscellaneous Income	5,542.84	5,542.84			
<b>Total Income</b>	<b>28,735,532.48</b>	<b>30,868,647.87</b>	<b>15,740,620.00</b>	<b>15,116,781.16</b>	<b>196.11%</b>
<b>Expenses</b>					
<b>6000 - Groundwater Reservation Costs</b>					
6000 - Groundwater Reservation Costs	55,231.11	221,283.00	1,437,600.00	-1,216,317.00	15.39%
<b>6010 - Shared Water Costs</b>					
6015 - Shared Water, City of Kyle	22,147.13	44,276.49	0.00	44,276.49	100.0%
6020 - Shared Water, City of San Marcos	21,989.00	43,978.00	0.00	43,978.00	100.0%
<b>Total 6010 - Shared Water Costs</b>	<b>44,136.13</b>	<b>88,254.49</b>	<b>0.00</b>	<b>88,254.49</b>	<b>100.0%</b>
<b>6200 - Plant Operations &amp; Maintenance</b>					
6201 - O&M, General	337.04	2,399.49	9,000.00	-6,600.51	26.66%
6240 - O&M, Buda BPS	137.10	530.10	19,510.00	-18,979.90	2.72%
<b>Total 6200 - Plant Operations &amp; Maintenance</b>	<b>474.14</b>	<b>2,929.59</b>	<b>28,510.00</b>	<b>-25,580.41</b>	<b>10.28%</b>
7125 - Auditing fees	0.00	0.00	13,000.00	-13,000.00	0.0%
7210 - Bank Fees	369.63	1,017.99	2,500.00	-1,482.01	40.72%
<b>7250 - Interest Expense</b>					
7250-51 - Interest Expense - CRWA 2015A	4,921.50	14,764.50	59,058.00	-44,293.50	25.0%
7250-52 - Interest Expense - Kyle 2015B	7,077.38	21,232.14	84,928.50	-63,696.36	25.0%
7250-53 - Interest Expense - CRWA 2017A	19,251.46	57,754.38	231,017.50	-173,263.12	25.0%
7250-54 - Interest Expense - Kyle 2017B	17,557.62	52,672.86	210,691.50	-158,018.64	25.0%
7250-55 - Interest Expense - SM 2017C	14,102.66	42,307.98	169,232.00	-126,924.02	25.0%
7250-56 - Interest Expense - Buda 2017D	2,004.50	6,013.50	24,054.00	-18,040.50	25.0%
7250-57 - Interest Expense - CRWA 2019A	44,994.20	134,982.60	539,930.50	-404,947.90	25.0%
7250-58 - Interest Expense - Kyle 2019B	41,053.88	123,161.64	492,646.50	-369,484.86	25.0%
7250-59 - Interest Expense - SM 2019C	33,319.26	99,957.78	399,831.00	-299,873.22	25.0%
7250-60 - Interest Expense - Buda 2019D	4,726.42	14,179.26	56,717.00	-42,537.74	25.0%
7250-61 - Interest Expense - CRWA 2020A	51,530.80	154,592.40	618,369.50	-463,777.10	25.0%
7250-62 - Interest Expense - Kyle 2020B	46,990.88	140,972.64	563,890.50	-422,917.86	25.0%
7250-63 - Interest Expense - SM 2020C	32,859.20	98,577.60	394,310.50	-295,732.90	25.0%
7250-64 - Interest Expense - Buda 2020D	4,653.50	13,960.50	55,842.00	-41,881.50	25.0%
<b>Total 7250 - Interest Expense</b>	<b>325,043.26</b>	<b>975,129.78</b>	<b>3,900,519.00</b>	<b>-2,925,389.22</b>	<b>25.0%</b>

**Alliance Regional Water Authority**  
**Profit Loss / Budget vs. Actual**  
**For the One Month and Three Months Ended December 31, 2021**

	December 2021	October 2021 December 2021	Annual Budget	Over/Under Budget	% of Annual Budget
7325 · Dues	0.00	5,480.00	7,500.00	-2,020.00	73.07%
7350 · Insurance - Liability, E&O	0.00	3,073.28	7,000.00	-3,926.72	43.9%
7400 · Legal Fees	6,795.07	6,795.07	115,000.00	-108,204.93	5.91%
7410 · Newspaper Public Notices	0.00	0.00	3,500.00	-3,500.00	0.0%
7425 · Contract Services-Lobbyist	0.00	0.00	72,000.00	-72,000.00	0.0%
7430 · Agency Mgmt Public Relations	0.00	0.00	50,000.00	-50,000.00	0.0%
7440 · Region L Contributions	0.00	0.00	2,500.00	-2,500.00	0.0%
7450 · Permit & Fees	0.00	81,899.87	0.00	81,899.87	100.0%
7500 · Supplies	1,288.70	13,734.67	19,500.00	-5,765.33	70.43%
7600 · Telephone, Telecommunications	126.31	505.34	3,800.00	-3,294.66	13.3%
7700 · Travel, Conferences & Meetings	191.11	442.63	5,000.00	-4,557.37	8.85%
7800 · Employee Expenses					
7810 · Salaries and wages	26,858.96	78,482.24	389,225.19	-310,742.95	20.16%
7820 · Auto Allowance	969.24	2,907.72	12,600.00	-9,692.28	23.08%
7821 · Phone Allowance	207.70	623.10	2,700.00	-2,076.90	23.08%
7830 · Payroll taxes	1,247.19	4,157.59	27,760.61	-23,603.02	14.98%
7840 · Employee Insurance	2,593.52	7,694.08	47,637.50	-39,943.42	16.15%
7850 · Retirement	1,912.19	5,593.43	33,267.70	-27,674.27	16.81%
7860 · Licenses & Permits	0.00	111.00	2,700.00	-2,589.00	4.11%
7865 · Mileage Reimbursement	0.00	0.00	3,150.00	-3,150.00	0.0%
7870 · Employee Expenses, Other	0.00	0.00	6,000.00	-6,000.00	0.0%
<b>Total 7800 · Employee Expenses</b>	<b>33,788.80</b>	<b>99,569.16</b>	<b>525,041.00</b>	<b>-425,471.84</b>	<b>18.96%</b>
<b>Total Expenses</b>	<b>467,444.26</b>	<b>1,500,114.87</b>	<b>6,192,970.00</b>	<b>-4,692,855.13</b>	<b>24.22%</b>
<b>Net Ordinary Income</b>	<b>28,268,088.22</b>	<b>29,368,533.00</b>	<b>9,547,650.00</b>	<b>19,809,636.29</b>	<b>307.6%</b>
<b>Other Income/Expense</b>					
<b>Other Expense</b>					
8550 · Bond Principal					
8550-51 · Bond Principal - CRWA 2015A	0.00	0.00	190,000.00	-190,000.00	0.0%
8550-52 · Bond Principal - Kyle 2015	0.00	0.00	95,000.00	-95,000.00	0.0%
8550-53 · Bond Principal - CRWA 2017A	0.00	0.00	270,000.00	-270,000.00	0.0%
8550-54 · Bond Principal - Kyle 2017B	0.00	0.00	245,000.00	-245,000.00	0.0%
8550-55 · Bond Principal - SM 2017C	0.00	0.00	550,000.00	-550,000.00	0.0%
8550-56 · Bond Principal - Buda 2017D	0.00	0.00	80,000.00	-80,000.00	0.0%
8550-57 · Bond Principal - CRWA 2019A	0.00	0.00	750,000.00	-750,000.00	0.0%
8550-58 · Bond Principal - Kyle 2019B	0.00	0.00	680,000.00	-680,000.00	0.0%
8550-59 · Bond Principal - SM 2019C	0.00	0.00	1,500,000.00	-1,500,000.00	0.0%
8550-60 · Bond Principal - Buda 2019D	0.00	0.00	215,000.00	-215,000.00	0.0%
8550-61 · Bond Principal - CRWA 2020A	0.00	0.00	1,110,000.00	-1,110,000.00	0.0%
8550-62 · Bond Principal - Kyle 2020B	0.00	0.00	1,010,000.00	-1,010,000.00	0.0%
8550-63 · Bond Principal - SM 2020C	0.00	0.00	2,190,000.00	-2,190,000.00	0.0%
8550-64 · Bond Principal - Buda 2020D	0.00	0.00	310,000.00	-310,000.00	0.0%
<b>Total 8550 · Bond Principal</b>	<b>0.00</b>	<b>0.00</b>	<b>9,195,000.00</b>	<b>-9,195,000.00</b>	<b>0.0%</b>
<b>Total Other Expense</b>	<b>0.00</b>	<b>0.00</b>	<b>9,195,000.00</b>	<b>-9,195,000.00</b>	<b>0.0%</b>
<b>Net Other Income</b>	<b>0.00</b>	<b>0.00</b>	<b>-9,195,000.00</b>	<b>9,195,000.00</b>	<b>0.0%</b>
<b>Net Income</b>	<b>28,268,088.22</b>	<b>29,368,533.00</b>	<b>352,650.00</b>	<b>27,915,438.22</b>	<b>8,327.95%</b>

**Alliance Regional Water Authority**  
**Chase VISA Credit Card Transactions**  
**December 31, 2021**

Type	Date	Name	Split	Amount	Balance
<b>2006 · Chase Bank VISA Card</b>					5,055.95
Credit Card Charge	11/25/2021	Adobo Acropro	7500 · Supplies	16.99	5,072.94
Credit Card Charge	11/26/2021	Squarespace Inc	7500 · Supplies	28.15	5,101.09
Credit Card Charge	11/28/2021	Solve Networks	7500 · Supplies	205.00	5,306.09
Credit Card Charge	11/29/2021	Fluid Meter Service	6201 · O&M, General	690.00	5,996.09
Credit Card Charge	11/30/2021	Verizon	7600 · Telephone, Telecom...	252.66	6,248.75
Credit Card Charge	11/30/2021	TCEQ	7860 · Licenses & Permits	111.00	6,359.75
Credit Card Charge	12/01/2021	Stamps Com	7500 · Supplies	18.17	6,377.92
Credit Card Charge	12/01/2021	UPS Store	7500 · Supplies	6.00	6,383.92
Credit Card Charge	12/02/2021	ARC Lakeside Blueprint	7500 · Supplies	515.16	6,899.08
Credit Card Charge	12/03/2021	Pedernales Electric	6201 · O&M, General	157.87	7,056.95
Credit Card Charge	12/08/2021	El Alma Cafe	7700 · Travel, Conferences ...	46.23	7,103.18
Credit Card Charge	12/08/2021	UPS Store	7500 · Supplies	12.00	7,115.18
Credit Card Charge	12/08/2021	Grainger	7500 · Supplies	19.58	7,134.76
Credit Card Charge	12/09/2021	Fedex	7500 · Supplies	24.28	7,159.04
Credit Card Charge	12/09/2021	Zoom.US	7500 · Supplies	29.98	7,189.02
Check	12/10/2021	Chase	1005 · Broadway Checking ...	-5,055.95	2,133.07
Credit Card Charge	12/10/2021	Jersey Mikes	7700 · Travel, Conferences ...	28.33	2,161.40
Credit Card Charge	12/10/2021	Rackspace	7500 · Supplies	215.00	2,376.40
Credit Card Charge	12/12/2021	Fedex	7500 · Supplies	27.33	2,403.73
Credit Card Charge	12/15/2021	Verizon	7600 · Telephone, Telecom...	126.31	2,530.04
Credit Card Charge	12/16/2021	Adobo Acropro	7500 · Supplies	16.23	2,546.27
Credit Card Charge	12/16/2021	Rackspace	7500 · Supplies	115.01	2,661.28
Credit Card Charge	12/16/2021	Kreuz Market	7700 · Travel, Conferences ...	35.58	2,696.86
Credit Card Charge	12/16/2021	Kreuz Market	7700 · Travel, Conferences ...	9.81	2,706.67
Credit Card Charge	12/17/2021	Schmidt & Sons	6240 · O&M, Buda BPS	137.10	2,843.77
Credit Card Charge	12/18/2021	Amtek Information	7500 · Supplies	199.98	3,043.75
Credit Card Charge	12/20/2021	Office Depot	7500 · Supplies	89.98	3,133.73
Credit Card Charge	12/20/2021	A-Line Auto Parts	6201 · O&M, General	125.25	3,258.98
Credit Card Charge	12/21/2021	Logan's	7700 · Travel, Conferences ...	71.16	3,330.14
Credit Card Charge	12/22/2021	A-Line Auto Parts	6201 · O&M, General	53.92	3,384.06
Total 2006 · Chase Bank VISA Card				-1,671.89	3,384.06
<b>TOTAL</b>				<b>-1,671.89</b>	<b>3,384.06</b>

**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, February 23, 2022 at 3:00 P.M.  
County Line SUD Offices, 8870 Camino Real, Kyle, TX 78640

**F.1** Report on Technical Committee activities. ~ *Graham Moore, P.E., Executive Director*

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Background/Information

The following items were discussed by the Committee at its 2/9 meeting:

- Received an update on construction of the Phase 1B projects (Item H.2).
- Received an update on the Phase 1B program (Item H.3).
- Reviewed and recommended the Board approve Work Orders #10 and #11 with Blanton and Associates, Inc. for additional environmental investigation work. (Item H.4).
- Received an update on the Phase 1B Cost and Schedule. (Item H.6).
- Received an update on timing and financing of project cost increases (Item H.7).
- Reviewed and recommended the Board approve Work Orders #6 with Kimley-Horn and Associates, Inc. for Owner's Representative Services for March 1, 2022 through February 28, 2023. (Item H.8).
- Discussed and recommended the Authority join the Texas 811 System. Will be brought to a future Board meeting for possible action.
- Received an update on area water meetings (Item F.2).

**Board Decision(s) Needed:**

- None.

**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, February 23, 2022 at 3:00 P.M.  
County Line SUD Offices, 8870 Camino Real, Kyle, TX 78640

- F.2** 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 Capital Area Planning Group activities.

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Gonzales County Underground Water Conservation District (GCUWCD)

The GCUWCD met on February 8th. No items affecting the Authority were discussed.

Plum Creek Conservation District (PCCD)

The PCCD met on February 15th. No items directly impacting the Authority were discussed.

Groundwater Management Area 13

No update.

Region L Planning Group

Region L met on February 17th.

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

No update.

**Board Decision(s) Needed:**

- None.

**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, February 23, 2022 at 3:00 P.M.  
County Line SUD Offices, 8870 Camino Real, Kyle, TX 78640

- G. EXECUTIVE DIRECTOR AND LEGAL COUNSEL REPORTS** - Update on future meeting dates, locations, status of Authority procurements, Executive Director activities, other operational activities and the status of legal issues, where no action is required. ~ *Graham Moore, P.E., Executive Director / Mike Gershon, Lloyd Gosselink Rochelle & Townsend, P.C.*

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**EXECUTIVE DIRECTOR**

- The Leaseholder Update meeting is tentatively scheduled for April 9, 2022.
- Responses to the RFP for Operations and Maintenance of the Carrizo Water Project are due on Thursday, February 25<sup>th</sup>.

**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, February 23, 2022 at 3:00 P.M.  
County Line SUD Offices, 8870 Camino Real, Kyle, TX 78640

- H.1** Update and discussion regarding the Authority's public relations activities possible direction to staff and consultants. ~ *CD&P*
- 

Background/Information

Representatives of CD&P will update the Board on their recent public relations activities.

Attachment(s)

- Public Relations Highlights – November 2021 to January 2022

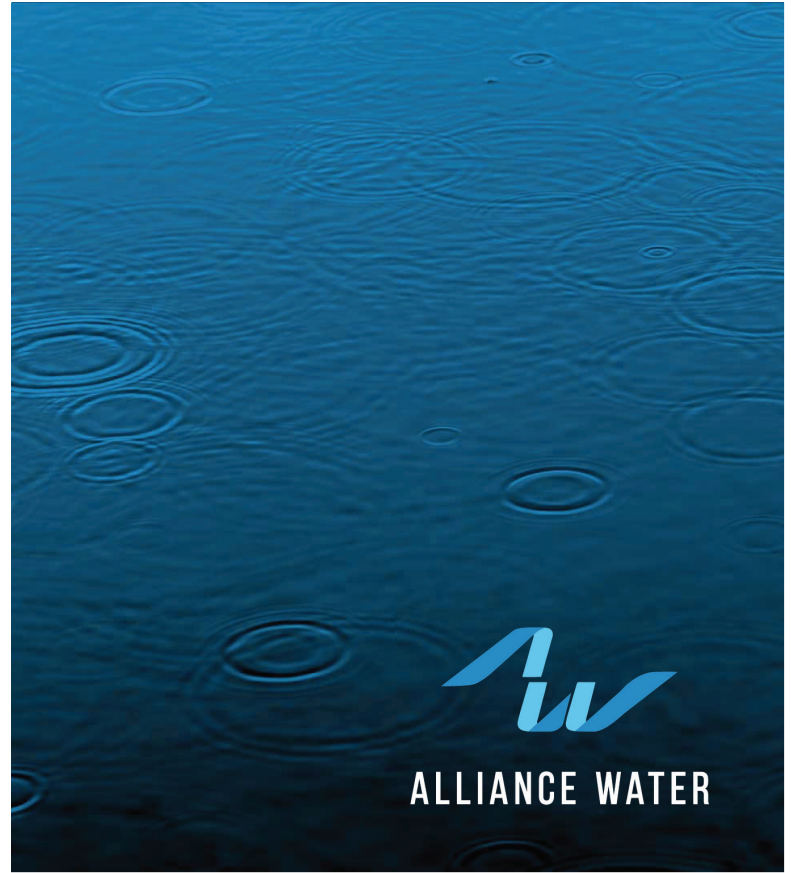
**Board Decision(s) Needed:**

- None.

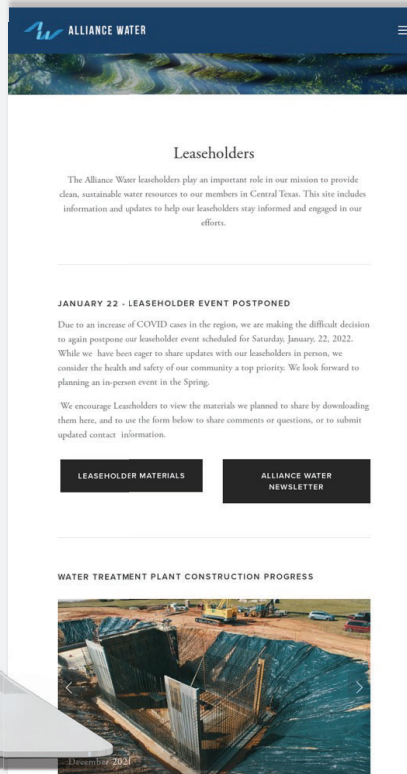
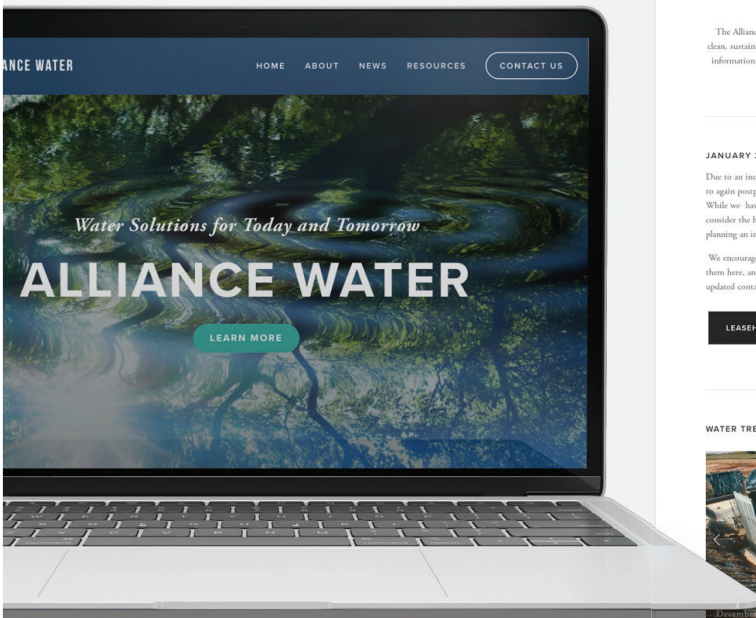


# Public Relations Highlights

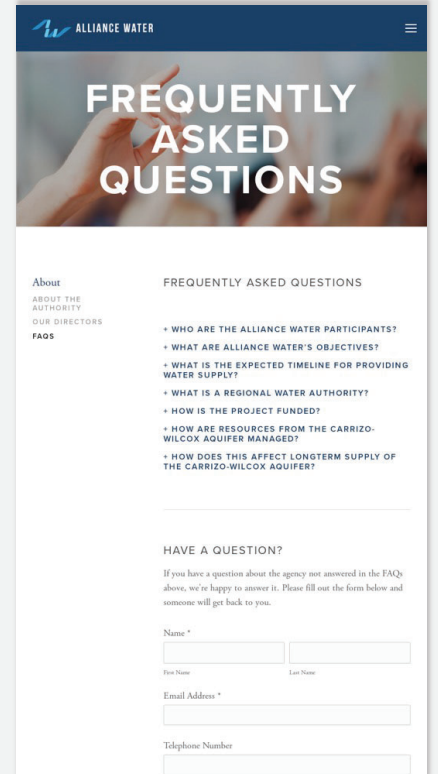
Nov. 2021 – Jan. 2022



## Online Presence



Leaseholder Resource Page



Updated FAQ's

## Nov. 2021 – Jan. 2022 Increased Website Visits

1.5K VISITS

**+25%**

Compared to 2021

1K UNIQUE VISITORS

**+17%**

Compared to 2021

3.2K PAGEVIEWS

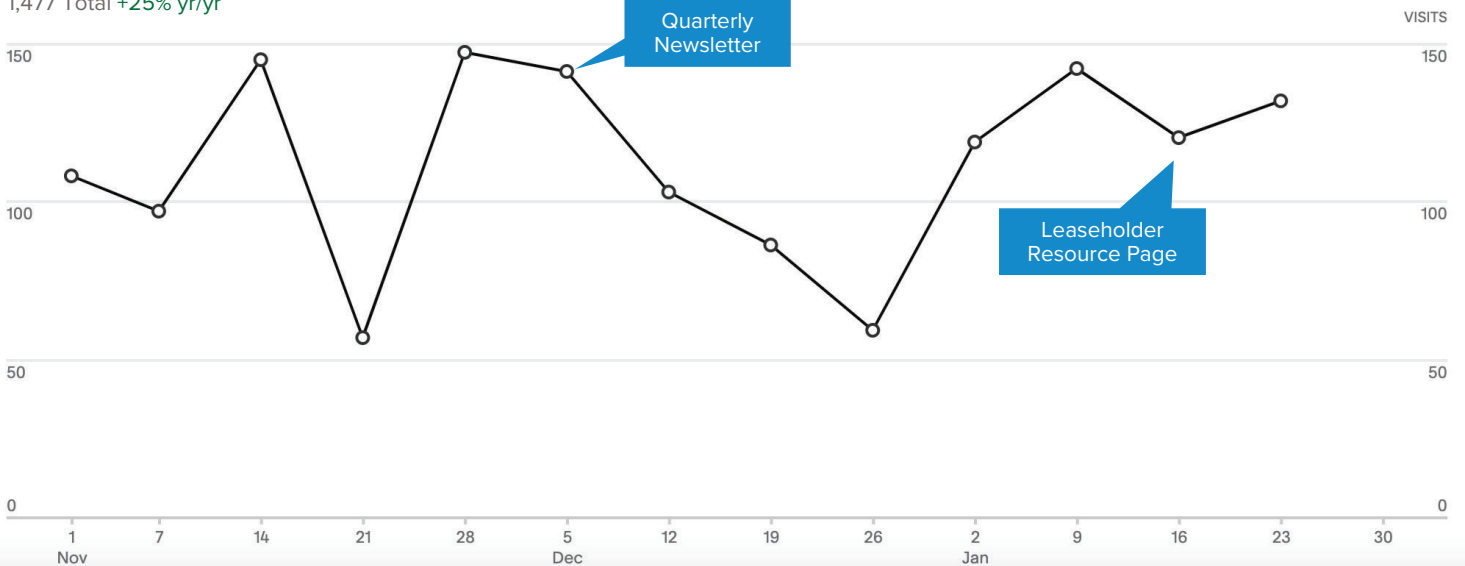
**+22%**

Compared to 2021

### Visits

Nov. 1, 2021– Jan. 31, 2022

1,477 Total +25% yr/yr



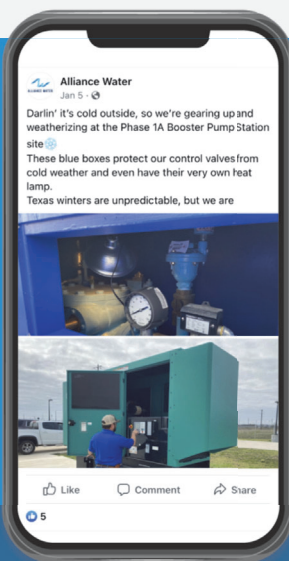
## Social Media Highlights



FACEBOOK

**+123%**  
Impressions

**+96%**  
Engagement



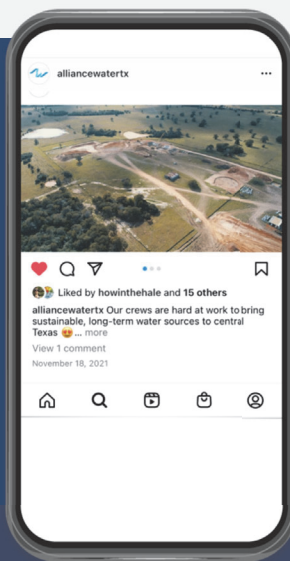
MISSION AND VALUES



INSTAGRAM

**+2.5%**  
New Followers

**+17%**  
Engagement



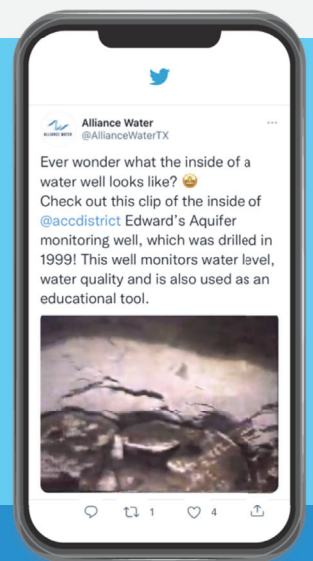
CONSTRUCTION MILESTONES



TWITTER

**2K**  
Impressions

**42K**  
Reach



EDUCATIONAL

# Social Media Policy

Updated Dec. 2021

## GOALS

1. To **inform** the community, members, and stakeholders of relevant updates, news, educational content, and information related to efforts to bring long-term sustainable water resources to the Central Texas region and its members.
2. Provide opportunities for the public to **learn about and engage** with Alliance Water through comments, likes, shares, or direct messages.

## CONTENT RULES

Comments that are considered inflammatory, profane, off-topic or aimed as personal attacks on individuals or member entities will be removed or hidden based on the discretion of Alliance Water and the individuals responsible to post content and moderate public comments.

When comments include misinformation, efforts will be made to communicate with the individual responsible for the comment to provide accurate information. Comments may be removed based on discussions with the individual.

## MODERATION



Only staff and contracted consultants are authorized to post on Alliance Water’s social media channel. This includes Facebook, Twitter, Instagram, YouTube, LinkedIn, and other platforms for which a public profile is created, and content is posted.

# E-Newsletter


Nov. 2021 – Quarterly Newsletter

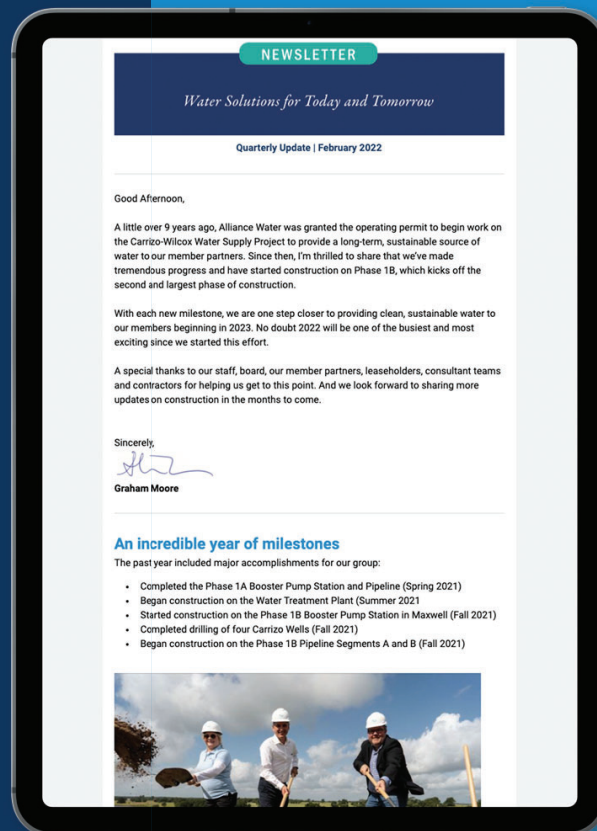
 **81** recipients  
 **65%** open rate

Jan. 2022 – Leaseholder Email Update

 **85** recipients  
 **73%** open rate

Feb. 2022 – Quarterly Newsletter

 **124** recipients  
 **65%** open rate

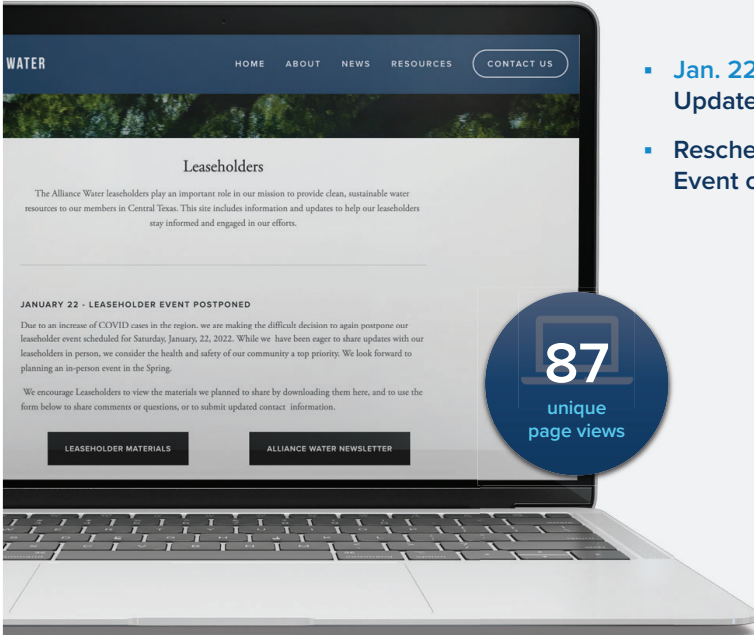


February 2022  
Newsletter

**43**  
New  
Subscribers



# Leaseholder Updates



Leaseholder Resource Page

- Jan. 22: Leaseholder Update Postponed
- Rescheduled Leaseholder Event on April 9.

## Purpose

- Provide a brief overview of the primary chemicals used at the Alliance Water treatment facility
- Review measures to ensure all chemicals are handled and stored safely



## Sodium Hypochlorite

### Purpose: Disinfection

Sodium Hypochlorite is a disinfectant used to inactivate pathogens in drinking water.

Sodium Hypochlorite is commonly referred to as bleach.

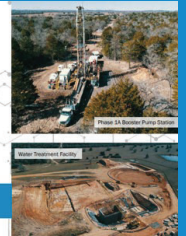
Similar to bleach for home use found in grocery stores

Sodium Hypochlorite used at the treatment plant is approx. 12.5% active chlorine, while bleach used in the home is approx. 6% active chlorine by weight.

## Progress to Date

- Last leaseholder update – April 2019
- Phase 1A Booster Pump Station - Completed
- Drilled the four Carrizo wells – Completed
- Water Treatment Plant, Maxwell Booster Pump Station – Construction Started
- Pipelines – Construction starting soon

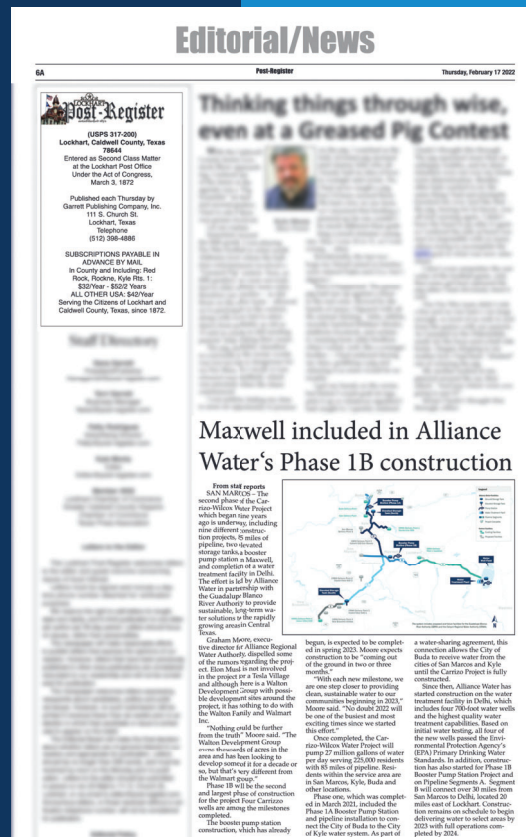
We are on schedule to begin delivering water by Summer 2023.



Leaseholder Updates Presentation

# Alliance Water in the News

Lockhart Post-Register – Feb. 2022



Thank You



**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, February 23, 2022 at 3:00 P.M.  
County Line SUD Offices, 8870 Camino Real, Kyle, TX 78640

**H.2** Update and possible direction to Staff regarding construction of the Authority's Phase 1B program. ~ *Chris Noe, P.E., Pape-Dawson Engineers*

---

Background/Information

Chris Noe with Pape Dawson will update the Board on recent construction activities associated with the Phase 1B program.

Attachment(s)

- Phase 1B Construction Update – February 23, 2022

**Board Decision(s) Needed:**

- None.





# PHASE 1B CONSTRUCTION UPDATE

## BOARD OF DIRECTORS MEETING

CMI Progress

February 23, 2021

Water Resources | Transportation | Land Development | Surveying | Environmental

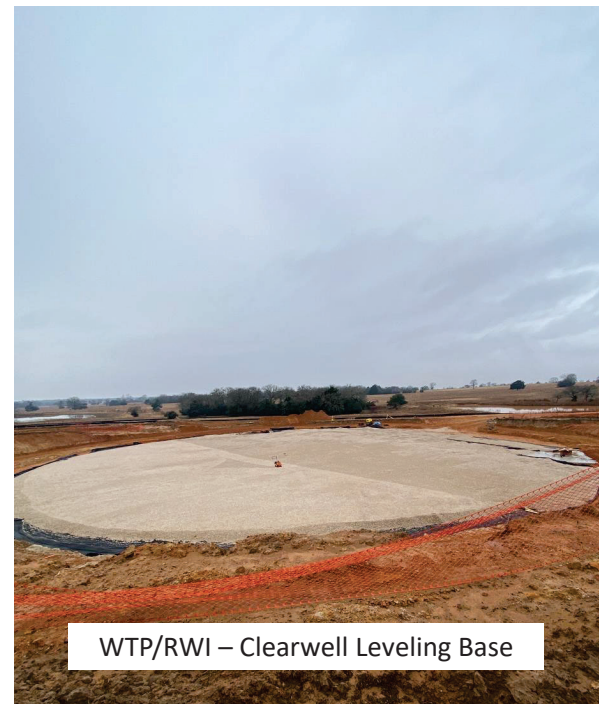


## Water Treatment Plant / Raw Water Infrastructure (Archer Western / Walker Partners)



### Construction Status

- Flow EQ Basin walls have been completed
- Recycle Pump Station walls are being formed and placed
- Clearwell foundation complete, inlet/outlet piping installed
- Raw Water Tanks sub grade complete, select fill being placed, inlet/outlet piping installed
- Filter Complex excavation for piping trenches and footings in progress
- Site grading and excavation north of Filter Complex Building
- Alterman continued to tie duct bank conduit and reinforcing steel cages
- Construction crew headcount up to 16

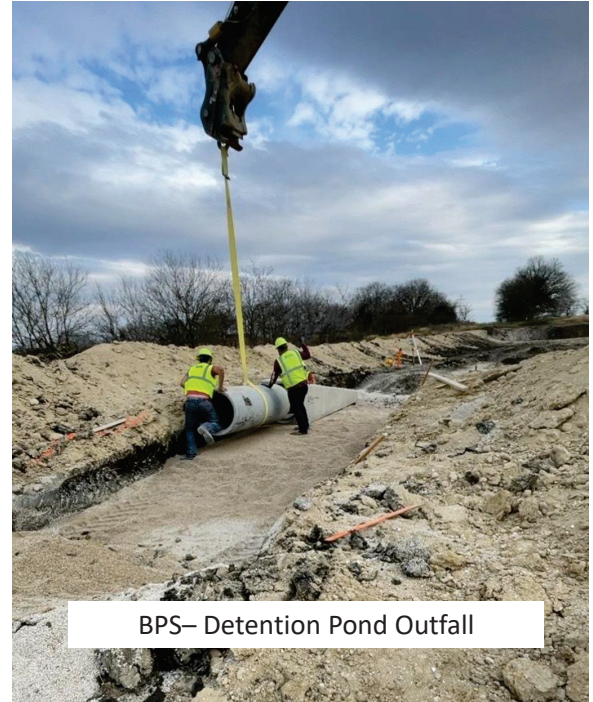


WTP/RWI – Clearwell Leveling Base

## Booster Pump Station (MWH / Friese and Nichols)

### Construction Status

- Power and Internet connected to office trailers
- Ground Storage Tank select fill being placed
- Detention pond berms, swales, and trickle channel construction in progress
- Reviewed and provided comments to HVJ testing proposal



BPS– Detention Pond Outfall

## Segment A (Garney Construction / LAN)

### Construction Status

- Began landowner notification
- Began placing access gates and locks
- Began easement survey and staking
- Began clearing
- Conducted site visit to Parcel 0035C to determine if trees can be preserved
- Reviewed and provided comments to HVJ testing proposal
- Conducting WOUS documentation
- Began field observation reporting



Seg A – Access Gate Installation



## Segment B (Garney Construction / K Friese)

### Construction Status

- Agreement executed, awaiting NTP approval from TWDB



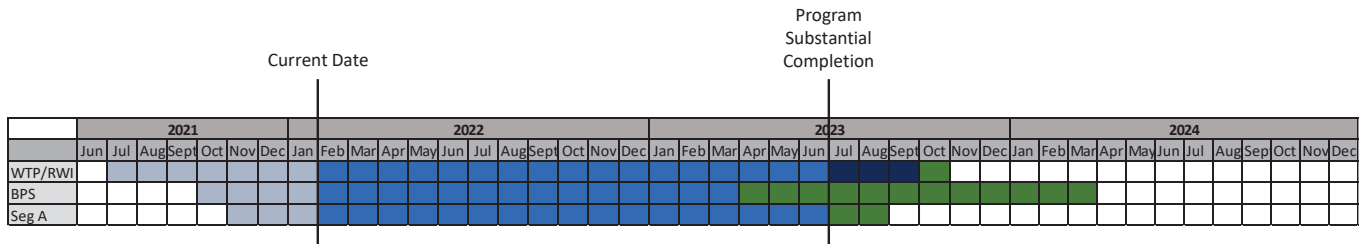
## OVERSIGHT RECAP

PROJECT	RFIs		Submittals		Test Reports	
	This Period	To Date	This Period	To Date	This Period	To Date
WTP/RWI	8	40	14	143	43	82
BPS	6	11	19	41	23	45
Seg A	4	7	3	9		

# CONTRACT VALUES

PROJECT	CONTRACT VALUE	BILLED TO DATE	REMAINING	% COMPLETE
WTP/RWI	\$54,599,281.00	\$5,124,697.30	\$49,474,583.70	9.39%
BPS	\$19,759,331.00	\$1,437,902.00	\$18,321,429.00	7.28%
EST	\$0.00	\$0.00	\$0.00	0.00%
Seg A	\$49,471,384.71	\$0.00	\$49,471,384.71	0.00%
Seg B	\$37,629,104.42	\$0.00	\$37,629,104.42	0.00%
Seg D	\$0.00	\$0.00	\$0.00	0.00%
Seg C	\$0.00	\$0.00	\$0.00	0.00%
Seg E	\$0.00	\$0.00	\$0.00	0.00%

# SCHEDULE DURATIONS



Project	Notice to Proceed	Contract Dates			Program Sub Completion Status
		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	3/18/2024	On Time
Seg A	11/16/2021		6/9/2023	8/8/2023	On Time

# PROGRESS PHOTOS



WTP/RWI – Recycle Pump Station



WTP/RWI – Tank Piping Encasement



WTP/RWI – Clearwell Leveling Base

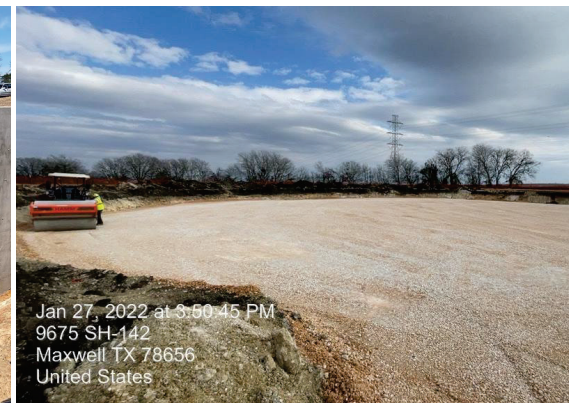
# PROGRESS PHOTOS



WTP/RWI – Filter Complex  
Excavation



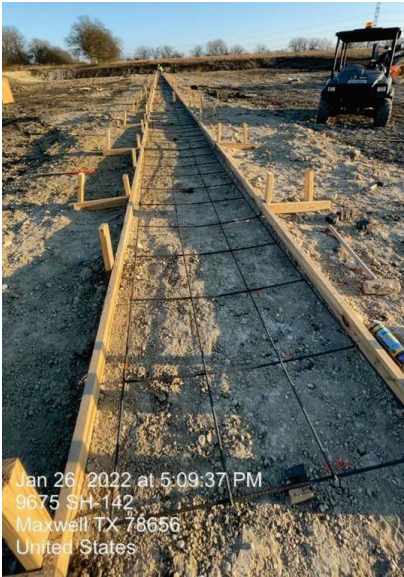
WTP/RWI – Flow EQ Basin Walls



BPS – Ground Storage Tank Base



# PROGRESS PHOTOS



BPS – Detention Pond Trickle Channel



BPS – Grading Swale #1



Seg A – LOC Fencing

11

# QUESTIONS?

12

**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, February 23, 2022 at 3:00 P.M.  
County Line SUD Offices, 8870 Camino Real, Kyle, TX 78640

- H.3** Update and discussion regarding the status of the Authority’s Phase 1B program, and direction to staff and consultants. ~ *Ryan Sowa, P.E., Kimley-Horn & Associates*
- 

Background/Information

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

Attachment(s)

- Phase 1B Program Update – February 23, 2022
- Kimley-Horn Monthly Summary of Activities for January 2022

**Board Decision(s) Needed:**

- None.



# Phase 1B Program Update

Board of Directors Meeting  
February 23, 2022



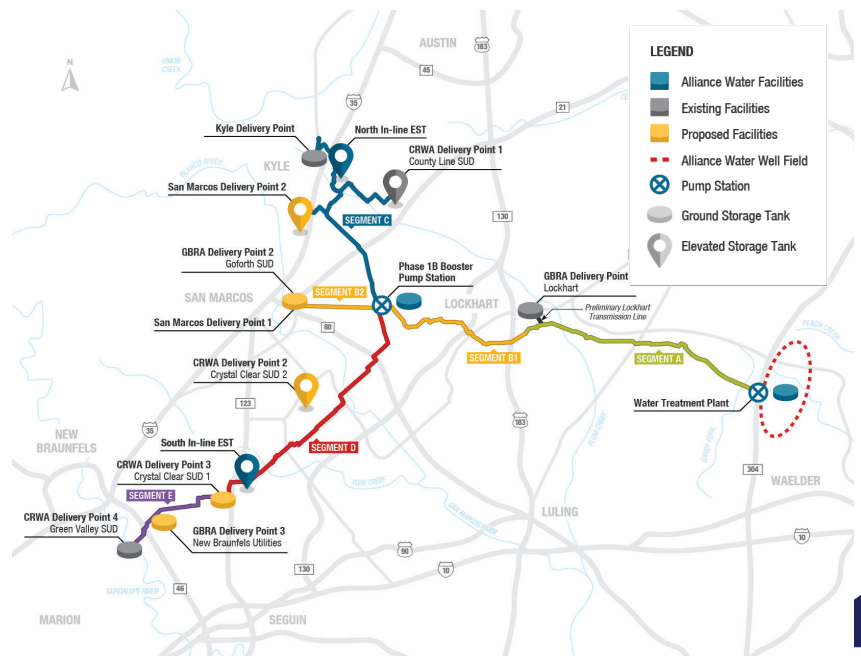
**ALLIANCE WATER**

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

## Ongoing Progress

### ► Design Milestone Status

- Design Submittals
  - Segment E – 100% submittals anticipated in March
  - Segment C – 100% submittals anticipated in March
- TWDB Reviews
  - Segment A
    - Land Acquisition Release in Preparation
  - Segment B
    - Construction Approval Submittal Under Review
    - Final Design, Procurement Funding Release in Preparation
- Pipeline Segment B
  - NTP to Contractor: February 15<sup>th</sup>



# Permitting Update

## ▶ Permitting Entities Include:

- Cities
  - ARWA Sponsors
  - Multiple Others
- Counties
  - Caldwell, Guadalupe, Hays
- Utilities
  - LCRA
  - GBRA
  - Oil & Gas Transmission
  - Franchise
- Others
  - TxDOT
  - Union Pacific Railroad
  - Conservation Districts
  - General Land Office

## ▶ Owner’s Representative Roles:

- For Some Entities
  - Coordination Lead
  - Permit Submittal Assembly
- Monitor Design Consultant Progress
  - Permit Log Review
  - Anticipated Durations of Reviews
  - Owner vs Contractor Permits
- Track Expiration Dates



# Pipeline Easement Acquisition Status

Pipeline Segment	Number of Parcels	STATUS						
		(A) Appraisal/Offer in Development	(B) Negotiation (Initial Offer)	(C) Negotiation (Final Offer)	(D) = (A+B+C) Appraisal / Negotiation	(E) Condemnation in Process	(F) = (D+E) Possession Still Needed	(G) Purchase Agreement Signed / Possession Obtained
A	39	0	0	0	0	0	0	39
B	51	0	0	0	0	2	2	49
D	59	0	2	0	2	20	22	37
C	73	9	18	1	28	27	55	18
E	36	0	9	0	9	20	29	7
Well Field	16	0	10	0	10	0	10	6
<b>Total</b>	<b>274</b>						<b>118</b>	<b>156</b>





# Future Updates

## Water Quality

- Ongoing Coordination with TCEQ
- Awaiting Corrosion Report Feedback
- Update in March/April Meeting



Questions?



ALLIANCE REGIONAL WATER AUTHORITY  
 ATTN: GRAHAM MOORE  
 1040 HIGHWAY 123  
 SAN MARCOS, TX 78666

Please send payments to:  
 KIMLEY-HORN AND ASSOCIATES, INC.  
 P.O. BOX 951640  
 DALLAS, TX 75395-1640

Invoice No: 068706604-1221  
 Invoice Date: Dec 31, 2021  
 Invoice Amount: \$ 211,425.27  
 Project No: 068706604  
 Project Name: ARWA PROGRAM YEAR 4  
 Project Manager: SOWA, RYAN

Work Order No. 4  
 Duration: March 2021 - Feb. 2022

Invoice Duration: Dec. 1, 2021 to Dec. 31, 2021

Federal Tax Id: 56-0885615

**COST PLUS MAX**

KHA Ref # 068706604.3-20423381

Description	Contract Value	Amount Billed to Date	Previous Amount Billed	Current Amount Due
PROGRAM MANAGEMENT PLAN UPDATES	32,262.00	5,670.45	5,670.45	0.00
STAKEHOLDER COORDINATION	279,683.00	221,258.11	198,565.51	22,692.60
BUDGETING	110,861.00	103,781.74	103,422.04	359.70
SCHEDULE	81,192.00	66,980.17	63,637.27	3,342.90
REPORTING	47,110.00	49,780.00	46,540.00	3,240.00
DATA MANAGEMENT	91,576.00	95,277.22	81,612.12	13,665.10
ENVIRONMENTAL MANAGEMENT	84,390.00	90,619.38	83,198.50	7,420.88
LAND ACQUISITION MANAGEMENT	509,587.00	621,074.83	515,168.84	105,905.99
TWDB MANAGEMENT	83,558.00	77,864.71	72,219.30	5,645.41
DESIGN STANDARDS	84,403.00	61,881.63	58,119.83	3,761.80
ENGINEERING DESIGN MANAGEMENT	361,276.00	340,510.75	318,817.00	21,693.75
QUALITY ASSURANCE	17,966.00	9,892.75	9,892.75	0.00
ELECTRICAL POWER PLANNING	51,073.00	24,035.00	24,035.00	0.00
PERMIT COORDINATION/TRACKING	50,094.00	44,540.70	39,274.45	5,266.25
PROCUREMENT AND CONSTRUCTION PHASE SERVICES	408,057.00	229,130.67	214,823.52	14,307.15
PROJECT ADMINISTRATION	52,870.00	32,168.39	28,303.14	3,865.25
OTHER SERVICES	78,995.00	34,556.76	34,298.26	258.50
ENVIRONMENTAL CONSTRUCTION PHASE SERVICES	260,480.00	6,199.49	6,199.49	0.00
<b>Subtotal</b>	<b>2,685,433.00</b>	<b>2,115,222.73</b>	<b>1,903,797.45</b>	<b>211,425.27</b>
<b>Total COST PLUS MAX</b>				<b>211,425.27</b>

**Total Invoice: \$ 211,425.27**

If you have questions regarding this invoice, please call Cecile Wells at (281) 612-9031.

February 16, 2022

## Project Monthly Summary

### January 2022 Tasks Performed:

- Task 2 – Stakeholder Coordination
  - Coordination and/or meetings with entities including: Caldwell County, Guadalupe County, Bluebonnet Electric Coop, TxDOT, TCEQ, and TWDB.
  - Continued weekly task coordination with Alliance Water.
  - Prepared and presented Technical Committee Meeting Update.
  - Prepared and presented the Board Meeting Update.
  - Prepared and presented the Project Advisory Committee Meeting Update.
  - Prepared for and held Monthly Status Meeting with Alliance Water.
  
- Task 3 – Budgeting
  - Prepared 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 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
  - Coordinated with Ardurra to transfer Phase 1A GIS WebMap Data and incorporated the Phase 1A Data within the Phase 1B WebMap Application.
  - Ongoing maintenance of Microsoft SharePoint Online program.
  - Continued updating of web-based GIS for easement acquisition process and alignment changes.
  
- Task 7 – Environmental Management
  - Continued coordination with Program Environmental Consultant concerning the comment responses to the United States Army Corps of Engineers.
  - Continued coordination with the Program Environmental Consultant regarding additional hazmat studies for Segments C and E.
  - Performed coordination between Program Environmental Consultant and Land Acquisition Consultant to clarify environmental field work to be done on properties as part of right-of-entry process.
  - Monthly progress meeting and ongoing coordination with Program Environmental Consultant.

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

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

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

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- Segment E
      - Continued coordination with Design Consultant for final design.
  - Wellfield:
    - Continued coordination regarding the completion of construction for Wells 6-9.
  - Raw Water Infrastructure:
    - Continued coordination with Design Consultant for construction phase services.
  - Water Treatment Plant:
    - Continued coordination with Design Consultant concerning Hydraulics/Surge development.
    - Continued coordination with Design Consultant for construction phase services.
  - Booster Pump Station:
    - Coordinated with Design Consultant for construction phase services.
  - Inline Elevated Storage Tanks:
    - Continued coordination with Design Consultant for 90% design development.
  - Other:
    - Monthly progress meetings with all Design Consultants (pipelines, water treatment plant, raw water infrastructure, wellfield, booster pump station).
    - Review invoices, schedules, and risk logs for consultants.
- Task 13 - Electrical Power Planning
  - Continued coordination with ARWA and GVEC to develop agreement language for service to the well field.
  - Continued coordination with GVEC regarding electric service to the WTP and wellfield.
- Task 14 - Permit Coordination/Tracking
  - Continued Permit coordination with Pipeline Consultants.
  - Continued coordination with Caldwell, Guadalupe, and Hays County TxDOT offices concerning roadway crossings.
  - Continued coordination with Caldwell, Guadalupe, and Hays Counties regarding on going permit reviews.
  - Continued General Coordination with GVEC and BBEC.
  - On-going Permit Tracking Log Updates.
- Task 15 - Procurement and Construction Phase Services
  - On-going coordination with the Construction Management & Inspection team.
  - Continued coordinated with Segment A and BPS Design Consultants during the construction phase.

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

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- Continued coordination with Segment B during procurement phase.
- On-going coordination with WTP and RWI Design Consultants during the construction phase.

**February 2022 Projection:**

- Task 2 – Stakeholder Coordination
  - Coordination and/or meetings with entities including: Caldwell County, Guadalupe County, GVEC, Bluebonnet Electric Coop, TxDOT, TCEQ, and TWDB.
  - Continue weekly task coordination with Alliance Water.
  - Prepare and present the Technical Committee Update.
  - Prepare and present Project Advisory Committee Meeting Update.
  - Prepare and present Board Meeting Update.
  - Prepare for and hold Monthly Status Meeting with Alliance Water.
  
- Task 3 – Budgeting
  - Prepare and present the monthly Budget Update for the February Board meeting.
  - Continue updates to Budget Workbook to include monthly tracking of actual costs for ARWA review.
  
- Task 4 – Schedule
  - Prepare and present the quarterly Schedule Update for the February Board meeting.
  - 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
  - Coordinate with ARWA and Construction Management & Inspection Team to transfer GIS WebMap to prepare for construction data collection.
  - Ongoing maintenance of Microsoft SharePoint Online program.
  - Continued updating of web-based GIS for easement acquisition process and alignment changes.
  
- Task 7 – Environmental Management
  - Review the Segment D cultural report prepared by the Environmental Consultant.
  - Review the Segment E Hazmat Phase II and Technical Documents report prepared by the Environmental Consultant.
  - Continue coordination with Program Environmental Consultant concerning the comment responses to the United States Army Corps of Engineers.

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

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- Continued coordination with the Program Environmental Consultant regarding additional hazmat studies for Segment C and E.
- Perform coordination between Program Environmental Consultant and Land Acquisition Consultant to clarify environmental field work to be done on properties as part of right-of-entry process.
- Monthly progress meeting and ongoing coordination with Program Environmental Consultant.
- Continue coordination between Program Environmental Consultant and Design Engineers.
- Review Program Environmental invoices, schedule, and risk log.
  
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  - Perform weekly QC of parcel files in SharePoint, provide comments to Land Acquisition team.
  - Weekly coordination meeting with land agents to discuss status of rights-of-entry and to provide Program clarification on any questions/requests that have come from landowners.
  - Review Program Land Acquisition team, Program Appraiser, and Program Survey invoices.
  - Continue field work coordination to notify landowners of upcoming field work by consultants.
  
- Task 9 – Texas Water Development Board Management
  - Continue coordination with TWDB Staff to track all EFRs, environmental reports, and bid documents currently under review.
  
- Task 10 – Design Standards
  - Review and update the Construction Standards for ARWA’s review respective of the Pipeline Manufacturers and Contractor recommendations for cost savings.
  
- Task 11 – Engineering Design Management
  - Pipelines:
    - Segment A
      - Continue coordination with Design Consultant for construction phase services.
    - Segment B
      - Continue coordination with Design Consultant for procurement phase services.
    - Segment C

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

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- 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 final design and preparation for procurement.
    - Segment E
      - Continue coordination with Design Consultant for final design.
  - Wellfield:
    - Continue coordination regarding the completion of construction of Wells 6-9.
  - Raw Water Infrastructure:
    - Continued coordination with Design Consultant for construction phase services.
  - Water Treatment Plant:
    - Continue coordination with Design Consultant concerning Hydraulics/Surge development.
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  - Booster Pump Station:
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    - Review invoices, schedules, and risk logs for consultants.
- Task 13 – Electrical Power Planning
    - Continue coordination with ARWA and GVEC to develop agreement language for service to the well field.
    - Continue coordination with GVEC regarding electric service to the WTP and wellfield.
  - Task 14 – Permit Coordination/Tracking
    - Continue Permit coordination with Pipeline consultants
    - Coordinate with Hays County concerning the Site Development Permit.
    - General Coordination with TxDOT.
    - Coordinate with Caldwell, Guadalupe, and Hays County TxDOT offices concerning roadway crossings.
    - Continue General Coordination with GVEC and BBEC.
    - On-going Permit Tracking Log Updates.



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

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- Task 15 - Procurement and Construction Phase Services
  - On-going coordination with Segment A and BPS Design Consultants during the construction phase.
  - Coordination with Segment B during procurement phase and the construction phase.
  - On-going coordination with WTP and RWI Design Consultants during the construction phase.
  
- Task 16 - Other Services
  - Finalize and submit the City of San Marcos Watershed Protection Plan for the Booster Pump Station Plat.

**Scope Elements Added/Removed:**

None at this time.

**Outstanding Issues/Concerns:**

None at this time.

**HUB Participation:**

59.9 % allotted by Contract (based on contract total fee)

54.3% to date of Billing

Design Consultant Certifications: N/A

Sub Consultant	Sub Consultant Certifications	Task Description	Contract Value (\$)	Percent Complete to Date (%)	Amount Billed to Date (\$)	Amount Paid to Date (\$)
Foster CM Croup, Inc.	DBE; AABE; MBE; SBE	Budgeting, Schedule, and Data Management	\$169,105.50	92.7%	\$156,765.83	\$151,823.83
CP&Y, an STV Company	N/A*	Program Standards, Compliance, and Project Management	\$768,448.80	66.0%	\$506,833.05	\$472,476.79
Grubb Engineering, Inc.	ESBE; SBE; WBE	Electrical Power Planning	\$43,758.00	50.2%	\$21,984.97	\$21,984.97
Spitzer and Associates, Inc.	SBE; WBE	Land Acquisition Management	\$590,327.10	88.2%	\$520,447.10	\$425,986.02
V&A Consulting Engineers, Inc.	SBE; HABE; MBE	Cathodic Protection Standards	\$21,795.30	0.0%	\$-	\$2,680.00
		Subtotal	\$1,593,434.70	75.7%	\$1,206,030.95	\$1,074,951.61

\*Given recent ownership changes, CP&Y, an STV Company is no longer HUB Certified.



**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, February 23, 2022 at 3:00 P.M.  
County Line SUD Offices, 8870 Camino Real, Kyle, TX 78640

- H.4** Consider adoption of Resolution 2022-02-23-001 approving Work Order #10 and #11 with Blanton and Associates, Inc. for additional environmental work on the Phase 1B Program, as recommended by the Technical Committee. ~ *Graham Moore, P.E., Executive Director*

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Background/Information

Staff and the Owner's Representative team have negotiated two different work orders with Blanton & Associates for what is expected to be the final environmental investigation work on the Phase 1B Program.

Work Order #10 deals with comments from the Corps of Engineers on previous work conducted and changes to the Waters of the US that were recently adopted by the Corps of Engineers that requires investigation of additional water crossings for Segments C, D and E. The work includes additional mobilizations for field investigation, revised reports and agency coordination and project management.

Work Order #11 deals with relocation of human remains found in Segment E investigation. Blanton recently wrapped up this field work and located two burials that must be relocated out of the easement area. The attached work order deals with the environmental aspects and reporting only. The work includes coordination with the Texas Historical Commission and with the District Court along with the actual relocation field work.

Below are some of the key facts regarding the proposals:

	<b>Work Order #10</b>	<b>Work Order #11</b>
<b>Firm:</b>	Blanton & Associates, Inc.	Blanton & Associates, Inc.
<b>Fee:</b>	\$381,418	\$79,915
<b>Work Order Type:</b>	Hourly, Not-to-Exceed	Hourly, Not-to-Exceed
<b>Duration:</b>	Thru 12/2022	Thru 12/2022
<b>Project Manager:</b>	Velma Danielson	Velma Danielson

The Environmental services currently exceeds the budgeted amount. However when all consultant services are considered (engineering, environmental and surveying) the total for consultants is expected to be approximately \$2 million below budget.

**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, February 23, 2022 at 3:00 P.M.  
County Line SUD Offices, 8870 Camino Real, Kyle, TX 78640

Attachment(s)

- Resolution 2022-02-23-001
- Blanton Work Order #10
- Blanton Work Order #11

**Board Decision(s) Needed:**

- Adoption of Resolution 2022-02-23-001 approving Work Orders #10 and #11 for additional environmental work on the Phase 1B Program.



## ALLIANCE WATER

### RESOLUTION NO. 20220223-001

**A RESOLUTION OF THE ALLIANCE REGIONAL WATER AUTHORITY BOARD OF DIRECTORS APPROVING WORK ORDER #10 AND WORK ORDER #11 BETWEEN THE AUTHORITY AND BLANTON & ASSOCIATES, INC. FOR ADDITIONAL ENVIRONMENTAL SERVICES ASSOCIATED WITH THE AUTHORITY'S PHASE 1B PROGRAM AND RELATED MATTERS, AND DECLARING AN EFFECTIVE DATE**

#### **RECITALS:**

1. Alliance Regional Water Authority (the "Authority") entered into a master agreement with Blanton & Associates, Inc. for professional environmental services and related matters in May 2018.

2. The Authority hired Kimley-Horn & Associates to serve as the Owner's Representative for the Authority's Phase 1B Program. The Owner's Representative role is to assist the Authority with development of the Phase 1B Program as a whole, including coordination with all design firms after selection through completion of the Program.

3. The Authority entered into a work order with Blanton & Associates, Inc. for environmental investigations for the Authority's Phase 1B Projects in May 2018.

4. Work Order #10 includes investigation of additional water crossings for Pipeline Segments C, D and E related to changes in the definition of Waters of the United States.

5. Work Order #11 includes additional environmental effort associated with reinterment of two burials identified on the Segment E Pipeline project.

6. The scope of services and fee for the attached work orders were negotiated by the Executive Director and the Owner's Representative on behalf of the Authority. The work order references terms and conditions in the approved Master Agreement between the Authority and Walker Partners.

#### **BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE ALLIANCE REGIONAL WATER AUTHORITY:**

**SECTION 1.** The attached Work Order #10 for additional Environmental Investigation between the Authority and Blanton & Associates, Inc. is approved with a fee not-to-exceed \$381,418.

**SECTION 2.** The attached Work Order #11 for additional Environmental Investigation between the Authority and Blanton & Associates, Inc. is approved with a fee not-to-exceed \$79,915.

**SECTION 2.** The Authority's Executive Director, Graham Moore, is authorized to execute the two work orders on behalf of the Authority.

Resolution 20210825-005  
Phase 1B Additional Environmental Investigation

**SECTION 3.** This Resolution shall be in full force and effect immediately upon its passage.

**ADOPTED: February 23, 2022.**

**ATTEST:**

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Chris Betz  
Chair, Board of Directors

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James Earp  
Secretary, Board of Directors

**Work Order No. 010**

Pursuant and subject to the Master Service Agreement between the Alliance Regional Water Authority (Alliance Water) and Blanton & Associates, Inc. (Consultant), Alliance Water requests the Consultant to perform the services described below:

Work Site: <u>Hays, Caldwell and Guadalupe counties</u>
Work to Be Performed: <u>Environmental Scope as noted in the scope of services dated January 27, 2022.</u>
Date to Commence: <u>February 24, 2022</u>
Date to Complete: <u>December 31, 2022.</u>
Cost Proposal to be: <u>Time and material not-to-exceed \$381,418.00</u>
Other Information/Requirements: <u>Supplemental services must be authorized by a separate work order, should the need arise.</u>

**Acceptance:**

Alliance Regional Water Authority

Blanton & Associates, Inc.

By: \_\_\_\_\_  
Signature  
Graham Moore, Executive Director

By: \_\_\_\_\_  
Signature  
Don Blanton

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**Blanton & Associates, Inc. - Environmental Scope for Alliance Water Phase 1B Program**

**Pursuant to Master Services Agreement Between Alliance Regional Water Authority and  
Blanton & Associates, Inc., Dated May 23, 2018**

**Work Order No. 010**

**January 27, 2022**

**WORK ORDER NO. 010 - DEFINITION AND BACKGROUND**

The Environmental Consultant (B&A) was given notice to commence work on Work Order No. 001 (dated May 17, 2018) on June 11, 2018, and work on the project has proceeded as authorized. Recently, the U.S. Army Corps of Engineers (USACE) submitted comments on the draft cultural resources survey report for Segment D and the Navigable Waters Protection Rule (NWPR) was vacated, such that it no longer applies to Segments C, D, and E. As a result of these developments, the schedules to complete environmental work on these three segments have been delayed. The Owner's Representative requested B&A prepare this Work Order No. 010 to address the following:

1. An additional twelve months (January – December 2022) of project management efforts due to the added time to complete the project.
2. Additional cultural resources field work, USACE coordination, and report revisions related to parcels C009, C010, C012, D021, D023, and D024 resulting from USACE comments requesting additional shovel tests to delineate sites. This additional work was authorized by Graham Moore on July 17, 2021.
3. Additional work related to the NWPR being vacated. This work includes: 1) desktop review, including significant nexus research, of stream crossings and other potential waters of the U.S. (WOTUS) along Segments C, D, and E; 2) cultural resources review and surveys of impacted WOTUS crossings along Segments C and D conducted to comply with USACE comments on the draft Segment D Cultural Resources Survey Report v2 as described in item 3 above; 3) USACE and Texas Historical Commission (THC) coordination and 4) revising the Segment C, D, and E waters reports and USACE coordination letter and attachments, and Segments C and D cultural resources survey reports. This assumes no WOTUS will be impacted on Segment E.

Some of the services addressed in Work Order No, 010 have already been provided as authorized by Alliance Water on July 7<sup>th</sup>, and as reflected in notes from the August 27<sup>th</sup>, September 30<sup>th</sup>, and October 29<sup>th</sup> monthly meetings between the Owner's Rep and the environmental consultant. B&A agreed to proceed with completing this work prior to having an approved work order in place to ensure the project kept moving forward. and the Owners' Rep. Work Order No. 010 consists of this Scope of Work (SOW) document and the associated costs provided in the attached Level of Effort (LOE) spreadsheet.

In this Environmental Consultant's Work Order No. 010, SOW amendments incorporate the changes indicated below (with reference to tasks and section numbers included in previously authorized work orders) and in the attached LOE spreadsheet

Compensation for all tasks that are part of Work Order No. 010 will be on a time and materials basis.

The scope items discussed in this Work Order No. 010 are additive to the tasks (with the same identifying task numbers) listed in B&A's original and previously authorized Work Orders.

## SCOPE OF WORK

### 1. Project Management

- B&A added 12 more months in Work Order No. 010 to the contract period (January 1, 2022, through December 31, 2022) as an estimate, in response to continuing changes to the Program's schedule. The estimated schedule changes resulted from delays associated with the USACE comments on Segment D, the NWPR being vacated, and engineering design changes for Segments C and E.

#### Project Management

##### 1.1. Prepare Monthly Summary Reports/Invoicing

###### **Assumption(s) for 1.1.:**

- Invoice format and due date will be the same as required in the Project Management Plan (PMP) in effect at time of Work Order No. 010 approval and will not be revised for the duration of Work Order No. 010.

##### 1.4. Schedule Development and Monthly Updates

###### **Assumption(s) for 1.4:**

- Environmental Consultant will provide the project schedule utilizing Microsoft™ Project software for the project.
- Environmental Consultant will provide schedule updates no more than twelve times for the duration of Work Order No. 010.
- Environmental Consultant will provide abbreviated schedule updates during the monthly progress meetings.

##### 1.5. Meetings

###### 1.5.1. Monthly Progress Meetings with Owner's Rep Env Staff

###### **Assumption(s) for 1.5.1:**

- Attendance at these meetings will be by conference call.

###### 1.5.2. Internal Blanton Meetings

###### 1.5.3. Additional Meetings – Owner's Representative, Segment Engineers

###### **Assumptions(s) for 1.5.3:**

- Up to two meetings may be held with the Owner's Representative, Segment C, D and E Engineers by conference call, for a total of eight meetings.
- Up to four meetings may be held by conference call.

##### 1.6. Deliverables

###### 1.6.5. Meeting Notes and Agenda

###### **Assumption(s) for 1.6.5:**

- Owner's Representative's meeting notes and agenda template will be used.
- Environmental Consultant will be responsible for initial development, compilation of changes, and distribution of final meeting agendas and notes for each meeting.

### 3. Desktop Constraint Analysis

- #### 3.4. Complete desktop review of Segments D, C and E to assess impacts and jurisdictional waters on these segments due to the NWPR being vacated.

**Assumption(s) for 3.4:**

- Engineering files or other GIS data will be submitted in a georeferenced coordinates system to the Environmental Consultant. Throughout Phase 1B Program project development, engineering teams will coordinate with the Environmental Consultant in a timely manner regarding any changes to project design.
- 3.4.1. Constraints evaluation should include identifying and then a significant nexus analysis of stream crossings and other potential WOTUS along Segments C, D, and E. Specific work includes:
- 3.4.1.1. Researching potential WOTUS by means of interpreting aerial photographs and topographic maps and reviewing notes, GPS data, and photos taken during previous field events;
  - 3.4.1.2. Reviewing past research and correspondence with the USACE on Segment D;
  - 3.4.1.3. Conducting a significant nexus analysis;
  - 3.4.1.4. Coordinating with the engineers for the latest alignment, easement, and bore locations to determine which mapped potential WOTUS will be temporarily or permanently impacted. Then entering that data into our GIS system; and
  - 3.4.1.5. Cultural resource review to determine which mapped potential WOTUS will require additional archeological survey based on USACE standards for said survey, i.e., additional shovel testing and mechanical trenching.

3.5. Meetings

- 3.5.1. Team meetings with each engineering team and Owners Representative/Program Manager/Owner to troubleshoot, determine alternatives, and evaluate alignments. Anticipate up to two (2) virtual meetings per engineering team, for a total of six meetings.

**Assumption(s) for 3.5.1:**

- Environmental Consultant's Project Manager and Deputy Project Manager will attend each meeting and will provide meeting notes. Additional staff will also attend, as needed

3.6. Deliverables

- 3.6.1. Summary email with B&A's assessment of potential WOTUS for each segment under *Rapanos*.
- 3.6.2. Draft kmz with potential WOTUS under *Rapanos*.

**Assumption(s) for 3.6:**

- Environmental Consultant will generate up to three summary assessments and sets of kmz's for the deliverables listed in Task 3.6.



#### 4. Field Surveys

##### 4.2. Land Acquisition Coordination

4.2.1. Complete and submit Property Access Request Forms (PARFs).

4.2.2. Coordinate with landowners to arrange for property access when directed by the land acquisition agent(s).

4.2.3. Additional work required to verify right-of-entry (ROE) property specific requirements.

##### **Assumption(s) for 4.2:**

- The Owner's Rep will issue ROE and notice to proceed (NTP) to the Environmental Consultant in order to begin field work.
- Receipt of ROE will be provided to the Environmental Consultant prior to field surveys being conducted, as required by the Owner's Rep's Field Work Site Visit Protocol.
- B&A will submit PARFs to complete field work once B&A receives NTP for enough parcels to ensure efficient field crew deployment and confirms the most recent segment alignment.
- B&A will conduct this field work contingent upon receipt of the completed PARFs, and provided that the Program does not make changes to survey area requirements and landowners do not either revoke access or add last minute restrictions severely limiting B&A's ability to access these parcels or prohibiting B&A from conducting planned field work within the two-week PARF window. Should these issues arise, B&A will assess any impacts to planned field work to determine whether we are able to move forward as scheduled or will need to postpone field work due to circumstances beyond either the Program's or B&A's control.

##### 4.3 Survey Transmission lines, Administration/Operations Facility and Booster Pump Station, delivery points:

4.3.13 Conduct additional intensive archeological resources survey-phase subsurface investigations in USACE jurisdictional areas of Alliance Water's Phase 1B Program Segments C and D in response to USACE comments requiring additional shovel tests along Segment D, and USACE comments on the draft Segment D Cultural Resources Survey Report v2 regarding NWPR being vacated and additional cultural resources review and surveys of impacted WOTUS crossings along Segments C and D needed.

##### **Assumption(s) for 4.3.13:**

- USACE jurisdictional areas are defined within the area of potential effects (APE) based on applicable WOTUS under the current *Rapanos* definition. B&A followed this definition to make assessments of the jurisdictional status of mapped water features. However, only the USACE and Environmental Protection Agency (EPA) can make official jurisdictional determinations. If the USACE disagrees with B&A's WOTUS assessment, a supplemental service agreement will be requested.
- Three Seg C crossings (Concrete-lined basin/Intermittent braiding channel/Wetland adjacent to Stream-n side [extends Crossing 10], P C02f/ST C0 2 F [Porter Creek] [extends Crossing 5], and PD C01F) were not jurisdictional under NWPR but since NWPR was vacated on August 30, 2021, now are USACE jurisdictional areas not previously scoped under USACE survey requirements.
- Six Seg D crossings (OW01WD, ST 47 W D, ST D 01 Z, ST D 02 M/ STD01M, ST D 02 Z, and ST D 04 Z/ ST D 05 Z/ ST D 06 Z) were not jurisdictional under

NWPR but since NWPR was vacated on August 30, 2021, now are USACE jurisdictional areas not previously scoped under USACE survey requirements.

- Assumes reduction in the width of the project corridor within these USACE jurisdictional areas to 98 feet or less, limiting survey to 1 transect.
- Pursuant to the April 2020 revised state terrestrial archeological survey standards for near-surface deposits, B&A proposes to excavate up to 40 total additional shovel tests within newly identified USACE jurisdictional areas of Segments C and D in response to USACE comments and the NWPR vacatur.
- Pursuant to the April 2020 revised state terrestrial archeological survey standards for deeply buried deposits, portions of the newly identified USACE jurisdictional areas of Segments C and D are characterized as deep high probability areas, which would necessitate mechanical backhoe trenching. B&A will excavate 8 total additional trenches within USACE jurisdictional areas of Segments C and D in response to USACE comments and the NWPR vacatur.
- All survey work will be conducted under existing antiquities permits for each segment.
- Survey will be non-collection of artifacts.
- Identified archeological sites within the APE will be documented via a State of Texas Archeological Site Data Form, which will be submitted to the Texas Archeological Research Laboratory and a site trinomial will be obtained.
- If NRHP-eligible archeological resources are recorded during the survey and recommended for avoidance, site boundaries within the APE would be delineated and mapped for effective project design.
- All project-related archeological materials including field notes, photographs, and a copy of the final survey report shall be curated in accordance with terms and conditions of the Texas Antiquities Permit.
- Construction monitoring, NRHP testing at any site other than Sites 41CW200 or 41CW201, Mitigation/Data Recovery, and human burial excavation are not included as part of this SOW. These services would be provided as a Supplemental Service if required.
- No more than three multiple-field-day mobilizations for combined Segments C and D will be necessary to complete the field work required to respond to USACE comments and the NWPR vacatur. These mobilizations will be conducted in the manner outlined in B&A's memorandum to the Owner's Representative dated November 5, 2019.
- All potential WOTUS on Segment E will be bored. Since no temporary or permanent impacts to WOTUS will occur on Segment E, it is assumed no further field surveys will be required.
- No biological or hazardous materials field work will be required due to the NWPR being vacated.
- This does not include any additional field work that might be requested from the USACE on subsequent reviews.

#### 4.4. Deliverables

Deliverables changed or added to the SOW:

- 4.4.1 GIS data uploads/updates including survey corridor status shapefiles and excel file with status are required to be submitted within two weeks of field survey event.
- 4.4.3 Field Checklists (required to be submitted within two weeks of field survey event) and weekly field work emails.

6. Environmental Documents and Permitting Requirements (Transmission lines, Administration/ Operations Facility and Booster Pump Station)

6.11 Revisions needed for Segment C and D cultural resources reports after additional intensive archeological survey-phase subsurface investigations in USACE jurisdictional areas of Alliance Water's Phase 1B Program Segments C, and D in response to USACE comments requiring additional shovel tests along Segment D, and USACE comments on the draft Segment D Cultural Resources Survey Report v2 regarding the NWPR being vacated and resulting in additional cultural resources review and surveys of impacted WOTUS crossings along Segments C and D (*Note: This sub-task does not include efforts related to Task 18 - (Phase II testing along Segment D, below.)*)

6.11.1 USACE and THC coordination

6.11.1.1. Meetings

Meetings with THC and USACE to discuss comments and determine next steps for waters and cultural resources, and follow-up activities

**Assumption(s) for 6.11.1.1:**

- Meetings will be via telephone conference. No more than two 1-hour meetings per agency.

6.11.1.2. Deliverables

6.11.1.2.1. Meeting agendas

6.11.1.2.2. Meeting notes or email summaries

6.12 Segment C, D, and E Waters Reports - Revised for USACE Clearance

6.12.1. Revise the draft jurisdictional delineation reports for water resources including anticipated jurisdiction and impacts for project. This task also includes the USACE coordination letter and required attachments.

**Assumption(s) for 6.12.1:**

- B&A is using the final version of *Rapanos*, which redefines WOTUS and became effective when the NWPR was vacated on August 30, 2021, to assess the jurisdictional status of mapped water features. Only the USACE and EPA can make official jurisdictional determinations. If the USACE disagrees with B&A's assessment, a supplemental service agreement will be requested.
- Should a Preconstruction Notification (PCN) be required for Segments C - E, it will be considered a supplemental service.
- For the draft and final reports, Environmental Consultant will provide one PDF copy in searchable Adobe Acrobat™ (.pdf) format, unless another format is specified.

6.12.2. Meetings

6.12.2.1. If necessary, meetings with the USACE's Project Manager will be held to determine and coordinate on next steps and to discuss questions/comments.

**Assumption(s) for 6.12.2:**

- Meetings will be via telephone conference. No more than ten meetings will be held with the USACE for one-hour each.

6.12.2.2. Deliverables

6.12.2.2.1. Meeting agendas

6.12.2.2.2. Meeting notes or email summaries

6.12.3 Deliverables

6.12.3.1 Revised Draft Jurisdictional Determination Reports with anticipated permitting requirements

6.12.3.2 Final Jurisdictional Determination Reports with anticipated permitting requirements

**Assumption(s) for 6.12.3:**

- This assumes no WOTUS will be impacted on Segment E and the USACE would only be asked for a no permit needed letter.

6.13. Segment C and D Revised Archeological Survey SOWs and Reports– Revised THC and USACE Compliance and Clearance

6.13.1 Meetings

6.13.1.1 If necessary, meetings with USACE to determine and coordinate on next steps due to areas to be re-surveyed. Meetings with the THC may also be necessary.

**Assumption(s) for 6.13.1.1:**

- Meetings will be via telephone conference. No more than four meetings with USACE for one-hour each, and no more than four meetings with the THC for one hour each.

6.13.1.2. Deliverables

6.13.1.2.1. Meeting agendas

6.13.1.2.2. Meeting notes or email summaries

6.13.2 Prepared revised cultural resources survey scopes of work and submit for approval by the THC and USACE.

6.13.2.1 Deliverables

6.13.2.1.1 Draft Revised Intensive Cultural Resources Survey SOW

6.13.2.2.2 Final Intensive Cultural Resources Survey SOW

**Assumption(s) for 6.13.2.:**

- This assumes all fieldwork will be conducted under existing antiquities permits for survey of Segments C and D.
- This assumes a revised USACE jurisdictional areas SOW will be required for further cultural survey of these areas along Segment C.
- This assumes no revision of a Segment D USACE SOW per meeting with Jimmy Barrera (USACE) November 4, 2021.
- There will be only two rounds of comments from, and coordination with, USACE to complete the Segment C cultural resources survey scope of work. Additional rounds of comments, requests for additional field work, and responses will require an additional scope and fee.
- For the draft and final scopes of work, Environmental Consultant will provide one PDF copy in searchable Adobe Acrobat™ (.pdf) format, unless another format is specified. Each electronic deliverable will be a single, searchable .pdf file that mirrors the layout and appearance of the hard copy

- 6.13.3 Prepare revised reports documenting field investigations, findings, and recommendations on Segment C and D. Shall be suitable for THC review and approval, and for USACE review and approval for jurisdictional areas.

**Assumption(s) for 6.13.3:**

- All efforts to avoid effects to identified cultural resources should be made.

6.13.4 Deliverables

6.13.4.1 Draft Revised Intensive Cultural Resources Survey Reports

6.13.4.2 Final Intensive Cultural Resources Survey Reports

**Assumption(s) for 6.13.4.2:**

- There will only two rounds of comments from, and coordination with, USACE to complete the cultural resources survey reports. Additional rounds of comments and responses will require an additional scope and fee.
- The draft cultural resources survey report will only be revised twice, with the final report being generated as the revised report. Additional drafts will require an additional scope and fee.
- For the draft and final reports, Environmental Consultant will provide one PDF copy in searchable Adobe Acrobat™ (.pdf) format, unless another format is specified. Each electronic deliverable will be a single, searchable .pdf file that mirrors the layout and appearance of the hard copy.

7. Supplemental Services

7.6 Re-Alignment and Limited Alignment/Parcel Field Work Requests from Owner's Representative

- 7.6.2 Field Work – B&A anticipates that additional field surveys based upon re-alignments to segments received from design engineers based upon adjustments needed regarding potential WOTUS stream crossings and/or environmental reports are/were submitted to agencies for review and approval.

No more than ten re-alignment field survey mobilizations for ten individual parcels (i.e., beyond the protocol outlined in B&A's memorandum dated November 5, 2019) will be requested by the Owner's Representative. Additional requests beyond this number may result in an amendment to this Work Order scope and fee.

- 7.6.3 Reporting – B&A anticipates that revisions to the environmental reports may be requested after the draft environmental reports have been submitted to the Owner's Representative for review and comment. No more than eight report revisions as follows are included in this SOW and fee: one each for the Segment C, D and E waters reports; one each for the Segment C, D and E cultural resources reports; and one each for the Segment C and E protected species reports. Additional revisions beyond this number may result in an amendment to this Work Order scope and fee.

**Assumption(s) for 7.6:**

- The Owner's Representative and/or the design engineers will continue to request B&A conduct field surveys on certain areas for the purposes of evaluating pipeline re-alignment parcels that will add field mobilizations scope and costs beyond those included in B&A's Task 7.6.1.
- B&A assumes these requests will continue for the duration of the project in the same manner that they occurred in 2021 related to B&A's work on Task 7.6.1. As such, any

requests for re-alignment on parcels where B&A has already completed field work and/or environmental reports were submitted.

- Additional re-alignment field work beyond that required for these ten re-alignment parcels noted in this work order will be included in a subsequent scope and fee.

**WORK ORDER NO. 008 FOR PROFESSIONAL SERVICES**  
**TASK 7 – SUPPLEMENTAL SERVICES**  
**RE-ALIGNMENT AND LIMITED ALIGNMENT/PARCEL FIELD WORK & REPORTING**  
**SEGMENTS C, D, E**  
**ALLIANCE WATER PROPOSED TRANSMISSION PIPELINE**

This Work Order constitutes authorization by **Blanton & Associates, Inc.** (otherwise referred to as Client or B&A) for **Braun Intertec Corporation** (Braun Intertec, otherwise referred to as Consultant) to provide additional environmental services for the proposed Alliance Regional Water Authority (Alliance Water) water transmission pipeline in central Texas. Braun Intertec has provided desktop constraints reviews, field reconnaissance for hazardous materials, and environmental reports related to the five proposed pipeline segments (Segments A through E) of the Alliance Water Phase 1B Program (Program).

As described below, the proposed scope of work includes additional field surveys for hazardous materials on up to 10 individual parcels within Segment C, D, and E due to anticipated re-alignments and additional environmental reporting associated with those re-alignments.

**Scope of Services**

**1. Field Work (Task 7.6.2).**

Braun Intertec anticipates that up to 10 mobilizations may be requested to conduct field surveys for hazardous materials on up to 10 individual parcels based on re-alignments to Segments C, D, and/or E received from Client. Braun Intertec field staff will observe for the presence of hazardous materials in the area of the re-alignment by foot or by vehicle. Braun Intertec will work with Client representatives to gain access to the parcels associated with the pipeline re-alignments but will not be responsible for obtaining landowner right of entry agreements or Property Access Request Forms (PARFs) for the proposed field surveys. The field survey for each parcel is assumed to take two Braun Intertec staff 4 to 8 hours to complete. Property access notifications as required by the PARF and travel are included in the estimated costs. Braun Intertec will provide Client with a field checklist, preliminary summary of findings, and GIS deliverable following completion of each mobilization.

**2. Reporting (Task 7.6.3).**

Braun Intertec anticipates that revisions to Hazardous Materials Assessment Reports may be requested after the draft reports have been submitted to the Client for review and comment. This task allows for the preparation of revised Hazardous Materials Assessment Reports (Revised Report) due to anticipated re-alignments on up to 10 parcels occurring after original reports have been prepared and submitted to B&A. One Revised Report for each segment (C, D, E) is anticipated. Braun Intertec will coordinate with the Client regarding due dates for the revised environmental reports associated with anticipated pipeline re-alignments.

**Assumptions**

Additional re-alignment field work beyond that required for these 10 re-alignment parcels noted in this Work Order will be included in a subsequent scope and fee.

**Payment**

The fees for these professional consulting services will be billed on a time and material basis for **\$29,951** based on the attached worksheets and fee schedule. Braun Intertec will not exceed \$29,951 in billings without prior written consent from Client. Work shall be performed under the terms and conditions set forth in the Assignment, Assumption, and Consent effective September 30, 2018.

**Schedule**

Braun Intertec will proceed with the proposed tasks upon receipt of written authorization and re-alignment information from the Client.

**BILLING INFORMATION:**

**BLANTON & ASSOCIATES, INC.**  
5 Lakeway Centre Court, Suite 200  
Austin, Texas 78734

Don Blanton  
(512) 264-1095  
[dblanton@blantonassociates.com](mailto:dblanton@blantonassociates.com)

Authorized:

SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_

**REMIT PAYMENT TO:**

**BRAUN INTERTEC CORPORATION**  
Lockbox 446035  
PO Box 64384  
St Paul, MN 55164-0384

PIC: Diana Rader, P.G.  
PCC: Trudy Hasan, P.G.  
[thasan@braunintertec.com](mailto:thasan@braunintertec.com)  
512-721-0005 Office

Accepted:

SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_



<b>Braun Intertec</b>													
<b>Pipeline Consultant - Work Order #008 1/27/2022</b>												<b>Work Order #008 Summary</b>	
<b>Detailed Overall Env Consultant Cost Breakdown</b>												<b>Braun Intertec</b>	\$ 29,951
												<b>Sub-contractor</b>	
												<b>Total W.O. #008</b>	<b>\$ 29,951</b>

Task	Project Role	Principal Consultant II	Senior Consultant II	Project Consultant III	Project Consultant I	Staff Consultant III	GIS Technician	Staff Consultant II	Staff Consultant I	Project Coordinator	Total Hours	Total Labor Effort	Total Expense Effort	Total Effort	Assumptions
Hourly Bill Rate		\$250.00	\$202.00	\$165.00	\$142.00	\$125.00	\$118.00	\$105.00	\$95.00	\$93.00					
<b>Basic Services</b>															
<b>7</b>	<b>Task 7 - Supplemental Services</b>										222	28,726	1,225	29,951	
7.6	Re-Alignment and Limited Alignment/Parcel Field Work														
7.6.2	Field Work	5		40		40	10	80			175	22,430	1,225	23,655	See Discussion/Assumptions - Task 7.6.2 Scope of Work
7.6.3	Reporting	3		12		10	6	10		6	47	6,296		6,296	See Discussion/Assumptions - Task 7.6.3 Scope of Work
											<b>222</b>	<b>28,726</b>	<b>1,225</b>	<b>29,951</b>	

OTHER DIRECT COST		TASK 7		TOTAL COST
Item	Per Unit	TASK 7	TASK 7	TOTAL COST
Lodging	\$ 120.00		\$ -	\$ -
ATV	\$ 75.00		\$ -	\$ -
GPS	\$ 100.00		\$ -	\$ -
Camera	\$ 45.00		\$ -	\$ -
Vehicle Mileage	\$ 0.585		\$ -	\$ -
Vehicle Rental	\$ 100.00	10	\$ 1,000.00	\$ 1,000.00
4X4 Vehicle Rental	\$ 125.00		\$ -	\$ -
Vehicle Fuel	\$ 30.00		\$ -	\$ -
Per Diem - Meals	\$ 45.00	5	\$ 225.00	\$ 225.00
Misc. (Tolls, Parking)	\$ 10.00		\$ -	\$ -
Field Supplies	\$ 20.00		\$ -	\$ -
Facility Rental	\$ 800.00		\$ -	\$ -
Backhoe Rental	\$ 1,000.00		\$ -	\$ -
Trackhoe Rental	\$ 2,000.00		\$ -	\$ -
Overnight Mail	\$ 40.00		\$ -	\$ -
Mail	\$ 0.50		\$ -	\$ -
Color Plot (sq.ft.)	\$ 1.50		\$ -	\$ -
Color Copies (per 8.5x11 sheet)	\$ 0.35		\$ -	\$ -
Color Copies (per 11x17 sheet)	\$ 0.50		\$ -	\$ -
Copies (per 8.5x11 sheet)	\$ 0.10		\$ -	\$ -
Copies (per 11x17 sheet)	\$ 0.10		\$ -	\$ -
Radiocarbon Dating Samples	\$ 600.00		\$ -	\$ -
Curation of Archeological Materials	\$ 230.00		\$ -	\$ -
Newspaper Ads	\$ 1,200.00		\$ -	\$ -
Archeological Site Form TARL Processing Fee	\$ 96.00		\$ -	\$ -
<b>TOTAL OTHER DIRECT COST</b>			\$ 1,225.00	\$ 1,225.00



OTHER DIRECT COST		# OF UNITS					COST BY TASK							TOTAL
Item	Per Unit	TASK 1	TASK 3	TASK 4	TASK 6	TASK 7	TASK 1	TASK 3	TASK 4	TASK 6	TASK 7	TASK 7	TOTAL COST	
Lodging	\$ 120.00						\$ -	\$ -	\$ 360.00	\$ -	\$ -	\$ -	\$ 360.00	
ATV	\$ 75.00						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
GPS	\$ 100.00			10		21	\$ -	\$ -	\$ 1,000.00	\$ -	\$ 2,100.00	\$ -	\$ 3,100.00	
Camera	\$ 45.00						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Vehicle Mileage	\$ 0.58						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Vehicle Rental	\$ 100.00			6		10	\$ -	\$ -	\$ 600.00	\$ -	\$ 1,000.00	\$ -	\$ 1,600.00	
4X4 Vehicle Rental	\$ 125.00						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Vehicle Fuel	\$ 30.00			7		5	\$ -	\$ -	\$ 210.00	\$ -	\$ 150.00	\$ -	\$ 360.00	
Per Diem - Meals	\$ 45.00			3			\$ -	\$ -	\$ 135.00	\$ -	\$ -	\$ -	\$ 135.00	
Misc. (Tolls, Parking)	\$ 10.00						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Field Supplies	\$ 20.00						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Facility Rental	\$ 800.00						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Backhoe Rental	\$ 1,000.00			3			\$ -	\$ -	\$ 3,000.00	\$ -	\$ -	\$ -	\$ 3,000.00	
Trackhoe Rental	\$ 2,000.00						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Overnight Mail	\$ 40.00						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Mail	\$ 0.50						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Color Plot (sq.ft.)	\$ 1.50						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Color Copies (per 8.5x11 sheet)	\$ 0.35						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Color Copies (per 11x17 sheet)	\$ 0.50						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Copies (per 8.5x11 sheet)	\$ 0.10						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Copies (per 11x17 sheet)	\$ 0.10						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Radiocarbon Dating Samples	\$ 600.00						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Curation of Archeological Materials	\$ 230.00						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Newspaper Ads	\$ 1,200.00						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Archeological Site Form TARL Processing Fee	\$ 96.00			2			\$ -	\$ -	\$ 192.00	\$ -	\$ -	\$ -	\$ 192.00	
<b>TOTAL OTHER DIRECT COST</b>							\$ -	\$ -	\$ 5,497.00	\$ -	\$ 3,250.00	\$ -	\$ 8,747.00	

**Work Order No. 011**

Pursuant and subject to the Master Service Agreement between the Alliance Regional Water Authority (Alliance Water) and Blanton & Associates, Inc. (Consultant), Alliance Water requests the Consultant to perform the services described below:

Work Site: <u>Guadalupe County</u>
Work to Be Performed: <u>Environmental Scope as noted in the scope of services dated January 27, 2022.</u>
Date to Commence: <u>February 24, 2022</u>
Date to Complete: <u>December 31, 2022.</u>
Cost Proposal to be: <u>Time and material not-to-exceed \$79,915.00</u>
Other Information/Requirements: <u>Supplemental services must be authorized by a separate work order, should the need arise.</u>

**Acceptance:**

Alliance Regional Water Authority

Blanton & Associates, Inc.

By: \_\_\_\_\_  
Signature  
Graham Moore, Executive Director

By: \_\_\_\_\_  
Signature  
Don Blanton

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**Blanton & Associates, Inc. - Environmental Scope for Alliance Water Phase 1B Program****Pursuant to Master Services Agreement Between Alliance Regional Water Authority and  
Blanton & Associates, Inc., Dated May 23, 2018****Work Order No. 011****January 27, 2022****WORK ORDER NO. 011 - DEFINITION AND BACKGROUND**

The Environmental Consultant (B&A) was given notice to commence work on Work Order No. 001 (dated May 17, 2018) on June 11, 2018, and work on the project has proceeded as authorized. In response to B&A's identification of two human burials on Parcel E010 through work authorized under Work Order No. 009, the Owner's Representative requested B&A prepare this Work Order No. 011 to address the relocation of this partial cemetery.

Work Order No. 011 consists of this Scope of Work (SOW) document and the associated costs provided in the attached Level of Effort (LOE) spreadsheet. In this Environmental Consultant's Work Order No. 011, SOW amendments incorporate the changes indicated below (with reference to tasks and section numbers included in previously authorized work orders) and in the attached LOE spreadsheet.

Compensation for all tasks that are part of Work Order No. 011 will be on a time and materials basis. The scope items discussed in this Work Order No. 011 are additive to the tasks (with the same identifying task numbers) listed in B&A's original and previously authorized Work Orders.

**SCOPE OF WORK**

## 19. Parcel E010 Cemetery Relocation

## 19.1. Project Management

**Assumption(s) for 19.1:**

- This SOW presumes that the work on this task will be completed within the time period of January 27, 2022, through December 31, 2022. Therefore, general project management services related to this task are included in Work Order No. 010. If this task extends beyond December 31, 2022, that extended timeframe would result in additional project management services scope and fee. Specific project management activities related to this new task are included in the SOW below.

## 19.1.1. Meetings

## 19.1.1.1. Monthly Progress Meetings with Owner's Rep Env Staff

**Assumption(s) for 19.1.1.1:**

- Attendance at these meetings will be by conference call.
- An item related to Task 19 will be added to the monthly progress meeting agenda for the duration of work on Task 19.

19.1.1.2. Additional Meetings – Owner’s Representative, Segment E Engineers

**Assumptions(s) for 19.1.1.2:**

- Up to two meetings may be held with the Owner’s Representative or the Program by conference call.

19.1.1.3. Internal Environmental Consultant Team Meetings

**Assumptions(s) for 19.1.1.3:**

- Up to four meetings may be held by conference call.

19.1.1.4 Additional Meetings – Alliance Legal Counsel

**Assumption(s) for 19.1.1.4:**

- B&A assumes two meetings (conference calls) with Alliance’s legal counsel to provide information.

19.1.1.5 Additional Meetings — THC

**Assumption(s) for 19.1.1.5:**

- B&A assumes two meetings (conference calls) with THC to provide information.

19.1.2. Deliverables

19.1.2.1 Meeting Agenda and Notes/Summary

**Assumption(s) for 19.1.2.1:**

- Owner’s Representative’s meeting notes template will be used.
- Environmental Consultant will be responsible for initial development, compilation of changes, and distribution of final meeting notes for each meeting.

19.2 District Court Coordination

19.2.1 Alliance legal counsel coordination

**Assumption(s) for 19.2.1:**

- B&A will not be coordinating filing of a Petition to Abate/Cemetery Dedication Removal with the district court.
- If requested, B&A will provide information and advisory coordination to Alliance’s legal counsel.
- Up to two meetings may be held by conference call.
- Up to two responses to emailed requests for information.

19.2.2 THC Coordination

**Assumption(s) for 19.2.2:**

- If requested, B&A will provide information to the THC in conjunction with the filing of a Petition to Abate/Cemetery Dedication Removal with the district court.
- Up to two responses to emailed requests for information.

19.2.3 Disinterment Permits

**Assumption(s) for 19.2.3:**

- After the Petition to Abate/Cemetery Dedication Removal is granted by the district court, B&A will file two disinterment permit applications with the State Registrar.

### 19.3 Texas Antiquities Permit

#### 19.3.1 Texas Antiquities Permit and SOW

**Assumption(s) for 19.3.1:**

- As this project is subject to compliance with the Texas Antiquities Code, an antiquities permit for burial exhumation as defined in 13 TAC 26.15 will be required.

#### 19.3.2 THC Coordination

**Assumption(s) for 19.3.2:**

- If requested, B&A will provide information to the THC in conjunction with review of the antiquities permit and SOW.
- Up to two responses to emailed requests for information.

#### 19.3.3 Deliverables

##### 19.3.3.1 Draft TAC Permit and SOW

##### 19.3.3.2 Final TAC Permit and SOW

### 19.4. Cemetery Relocation Field Work

#### 19.4.1. Land Acquisition Coordination

##### 19.4.1.1. Complete and submit PARF.

##### 19.4.1.2. Coordinate with landowner to arrange for property access when directed by the land acquisition agent(s).

##### 19.4.1.3. Additional work required to verify ROE property specific requirements.

**Assumption(s) for 19.4.1:**

- The Owner's Rep will issue ROE and NTP to the Environmental Consultant in order to begin field work.
- Receipt of ROE will be provided to the Environmental Consultant prior to field work being conducted, as required by the Owner's Rep's Field Work Site Visit Protocol.
- B&A will submit PARF to complete field work once B&A receives NTP to ensure efficient field crew deployment.
- B&A will conduct this field work contingent upon receipt of the completed PARF, and provided that landowner does not either revoke access or add last minute restrictions severely limiting B&A's ability to access the parcel or prohibiting B&A from conducting planned field work within the two-week PARF window. Should these issues arise, B&A will assess any impacts to planned field work to determine whether we are able to move forward as scheduled or will need to postpone field work due to circumstances beyond either the Program's or B&A's control.

#### 19.4.2. Cemetery Relocation

**Assumption(s) for 19.4.2:**

- All cemetery relocation field work will be conducted under a new antiquities permit.
- Assumes mechanical scraping, hand excavation of two unmarked human graves, and mechanical backfilling will be required.



- The services of a physical anthropologist may be required per 13 TAC 22.5 (c)(2). If needed, these services will be subcontracted.
- B&A will maintain temporary custody of the human remains and associated funerary objects for secure storage at B&A's archeology laboratory in Austin, Texas.
- Relocation/reburial will be carried out by a licensed professional funeral director or other appropriate designee per Texas law. B&A will coordinate only custodial handover of the human remains and associated funerary objects to said individual for purposes of reinterment.
- B&A will attend the reburial to document the event to be included in the cemetery relocation report.
- Construction monitoring is not included as part of this SOW. These services would be provided as a Supplemental Service if required.

#### 19.4.3. Deliverables

- 19.4.3.1 Field Checklists (required to be submitted within two weeks of field survey event) and weekly field work email.

### 19.5 Cemetery Relocation Reporting

- 19.5.1. Prepare cemetery relocation report documenting field investigations, findings, and documentation of reburial. Shall be suitable for THC review and approval.

#### **Assumption(s) for 19.5.1:**

- Exhumations and relocations will be documented in report for submittal to the THC per antiquities permit terms and conditions.
- Per 13 TAC 22, casket morphology, casket hardware, and any funerary objects will be examined and identified in the report.
- Findings of the physical anthropologist will be included in the draft report.
- All project-related archeological materials including field notes, photographs, and a copy of the final cemetery relocation report shall be curated in accordance with terms and conditions of the Texas Antiquities Permit.
- A site revisit form for the cemetery will be submitted to Texas Archeological Research Laboratory in accordance with state protocols.

#### 19.5.2. Deliverables

#### **Assumption(s) for 19.5.2:**

- There will only be one round of comments from, and coordination with, the THC to complete the report. Additional rounds of comments and responses will require an additional scope and fee.
- The draft report will only be revised once, with the final report being generated as the revised report. Additional drafts will require an additional scope and fee.
- For the draft and final reports, Environmental Consultant will provide one PDF copy in searchable Adobe Acrobat™ (.pdf) format, unless another format is specified. Each electronic deliverable will be a single, searchable .pdf file that mirrors the layout and appearance of the hard copy.

#### 19.5.2.1 Draft Cemetery Relocation Report

#### 19.5.2.2 Final Cemetery Relocation Report

Alliance Regional Water Authority - Work Order #11

Prepared: January 27, 2022

Detailed Overall Env Consultant Cost Breakdown

Project Fee Summary

	\$	79,915
Total Effort	\$	79,915

Task #	Project Role	Principal	PM	DPM	TPD (Jason)	ENV Professional	Endangered Species Lead	Endangered Species Scientist	ENV Tech II	ENV Tech I	USACE Permit Lead	USACE Permit Scientist I	ENV Tech II	ENV Tech I	CR Lead	CR Scientist II	CR Scientist I	TWDB Lead	Scientist I	Env Tech II - Waters	Env Tech I - Waters	Senior GIS Analyst	GIS Analyst	GIS Technician	Admin	Total Hours	Total B&A Labor Effort	Total B&A Expense Effort	Total Effort	Assumptions	
Hourly Bill Rate	\$225.00	\$180.00	\$170.00	\$160.00	\$150.00	\$160.00	\$130.00	\$110.00	\$90.00	\$160.00	\$130.00	\$120.00	\$160.00	\$120.00	\$110.00	\$90.00	\$140.00	\$110.00	\$95.00	\$70.00											
<b>Task 19 - Parcel E010 Cemetary Relocation</b>																															
<b>Basic Services</b>																															
19.1	Project management, schedule and meetings for the NEPA process																											\$ 7,220	\$ -	\$ 7,220	
19.1.1	Meetings																														
19.1.1.1	Monthly Progress Meetings w/ Owners Rep Env Staff														4											4	\$ 640	\$ -	\$ 640		
19.1.1.2	Additional Meetings - Owners Rep, Segment E Engineers		2	2											2											6	\$ 1,020	\$ -	\$ 1,020		
19.1.1.3	Internal Environmental Consultant Team Meetings		2	4						2					4											12	\$ 1,860	\$ -	\$ 1,860	See Discussion/Assumptions in Attached Scope of Work	
19.1.1.4	Additional Meetings - Alliance Legal Counsel		2												2											4	\$ 680	\$ -	\$ 680		
19.1.1.5	Additional Meetings - THC		2	2											2											6	\$ 1,020	\$ -	\$ 1,020		
19.1.2	Deliverables																														
19.1.2.1	Meeting Agenda and Notes/Summary		2	4											6											12	\$ 2,000	\$ -	\$ 2,000	See Discussion/Assumptions in Attached Scope of Work	
19.2	District Court Coordination																											\$ 4,320	\$ -	\$ 4,320	
19.2.1	Alliance legal counsel coordination														8											8	\$ 1,280	\$ -	\$ 1,280		
19.2.2	THC Coordination														4											4	\$ 640	\$ -	\$ 640	See Discussion/Assumptions in Attached Scope of Work	
19.2.3	Disinterment Permits		1	2		4									8											15	\$ 2,400	\$ -	\$ 2,400		
19.3	Texas Antiquities Permit																											\$ 12,190	\$ -	\$ 12,190	
19.3.1	Texas Antiquities Permit and SOW		2	4		6									32											44	\$ 7,060	\$ -	\$ 7,060	See Discussion/Assumptions in Attached Scope of Work	
19.3.2	THC Coordination		1	2											4											7	\$ 1,160	\$ -	\$ 1,160		
19.3.3	Deliverables																														
19.3.3.1	Draft TAC Permit and SOW		1	2		4									8											17	\$ 2,540	\$ -	\$ 2,540	See Discussion/Assumptions in Attached Scope of Work	
19.3.3.2	Final TAC Permit and SOW		1	1		2									4										2	10	\$ 1,430	\$ -	\$ 1,430		
19.4	Cemetery Relocation Field Work																											\$ 20,140	\$ 11,970	\$ 32,110	
19.4.1	Land Acquisition Coordination																														
19.4.1.1	Complete and submit PARF		1	1											2											4	\$ 530	\$ -	\$ 530		
19.4.1.2	Coordinate with landowner for property access		1	1											2											4	\$ 530	\$ -	\$ 530	See Discussion/Assumptions in Attached Scope of Work	
19.4.1.3	Additional work required to verify ROE		1	1											2											4	\$ 530	\$ -	\$ 530		
19.4.2	Cemetery Relocation		2	4											32	50	40						4			136	\$ 18,200	\$ 11,970	\$ 30,170		
19.4.3	Deliverables																														
19.4.3.1	Field Checklists			1						2																3	\$ 350	\$ -	\$ 350	See Discussion/Assumptions in Attached Scope of Work	
19.5	Cemetery Relocation Reporting																											\$ 24,075	\$ -	\$ 24,075	
19.5.1	Prepare Cemetery Relocation Report		2	4		6									60	36							2	13	6	129	\$ 18,095	\$ -	\$ 18,095	See Discussion/Assumptions in Attached Scope of Work	
19.5.2	Deliverables																														
19.5.2.1	Draft Cemetery Relocation Report		2	4		6									8										2	2	24	\$ 3,550	\$ -	\$ 3,550	See Discussion/Assumptions in Attached Scope of Work
19.5.2.2	Final Cemetery Relocation Report		1	2		2									8										2	2	17	\$ 2,430	\$ -	\$ 2,430	

OTHER DIRECT COST			# OF UNITS	COST BY TASK		TOTAL COST
Item	Unit	Per Unit	TASK 19	TASK 19		
Lodging	daily	\$ 120.00	7	\$ 840.00	\$	840.00
ATV	daily	\$ 75.00		\$ -	\$	-
GPS	daily	\$ 100.00		\$ -	\$	-
Camera	daily	\$ 45.00	5	\$ 225.00	\$	225.00
Vehicle Mileage	per mile	\$ 0.58	250	\$ 143.75	\$	143.75
Vehicle Rental	daily	\$ 100.00		\$ -	\$	-
4X4 Vehicle Rental	daily	\$ 125.00		\$ -	\$	-
Vehicle Fuel	daily	\$ 30.00	3	\$ 90.00	\$	90.00
Per Diem - Meals	daily	\$ 45.00	7	\$ 315.00	\$	315.00
Misc. (Tolls, Parking)	daily	\$ 10.00	3	\$ 30.00	\$	30.00
Field Supplies	daily	\$ 20.00		\$ -	\$	-
Facility Rental	daily	\$ 800.00		\$ -	\$	-
Backhoe Rental	each	\$ 1,500.00	2	\$ 3,000.00	\$	3,000.00
Trackhoe Rental	each	\$ 2,000.00		\$ -	\$	-
Overnight Mail	each	\$ 40.00		\$ -	\$	-
Mail	piece	\$ 0.50		\$ -	\$	-
Color Plot (sq.ft.)	piece	\$ 1.50		\$ -	\$	-
Color Copies (per 8.5x11 sheet)	sheet	\$ 0.35		\$ -	\$	-
Color Copies (per 11x17 sheet)	sheet	\$ 0.50		\$ -	\$	-
Copies (per 8.5x11 sheet)	sheet	\$ 0.10		\$ -	\$	-
Copies (per 11x17 sheet)	sheet	\$ 0.10		\$ -	\$	-
Court Report	each	\$ 500.00		\$ -	\$	-
Curation of Archeological Materials	each	\$ 230.00	1	\$ 230.00	\$	230.00
Newspaper Ads	each	\$ 1,200.00		\$ -	\$	-
Physical Anthropologist	hourly	\$ 130.00	50	\$ 6,500.00	\$	6,500.00
Total Data Station Unit	daily	\$ 100.00	5	\$ 500.00	\$	500.00
TARL Site Form Filing Fee	each	\$ 96.00	1	\$ 96.00	\$	96.00
Other				\$ -	\$	-
Other				\$ -	\$	-
Other				\$ -	\$	-
Other				\$ -	\$	-
<b>TOTAL OTHER DIRECT COST</b>				\$ 11,969.75	\$	11,969.75

**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, February 23, 2022 at 3:00 P.M.  
County Line SUD Offices, 8870 Camino Real, Kyle, TX 78640

- H.5** Consider adoption of Resolution 2022-02-23-002 approving Supplemental Amendment #2 to Work Order #5 with Walker Partners, LLC for additional hydraulic evaluation of the Phase 1B transmission system. ~ *Graham Moore, P.E., Executive Director*
- 

Background/Information

The Authority entered into a Work Order for design of the Water Treatment Plant with Walker Partners, LLC in January 2020. As part of the design effort, the Walker Partners team conducted a hydraulic surge and transient analysis for the High Service Pump Station that included Pipeline Segments A and B1 to the Maxwell Booster Pump Station.

The surge and transient analysis needs to be updated to reflect the change in size for the Segment A pipeline to 48-inches along with accounting for the characteristics of the actual pumps purchased by the contractor for the High Service Pump Station. The analysis will help to confirm that the protective features (combination air valves and surge control tank) are properly sized and configured. Transient pressure gradients are one of the leading causes for pipe failure in a transmission system.

Below are some of the key facts regarding the proposal:

**Firm:** Walker Partners, LLC  
**Fee:** \$56,338  
**Work Order Type:** Lump Sum  
**Anticipated Duration:** 3 months  
**Project Manager:** Joe Jenkins, P.E.  
**Key Subconsultants:** Northwest Hydraulics Consultants

Staff is requesting Board approval of the Supplemental #2 to Work Order #5 in a lump sum amount of \$56,338.

Attachment(s)

- Resolution 2022-02-23-002
- ARWA Phase 1B CM&I Proposal for 2022 revised January 12, 2022

**Board Decision(s) Needed:**

- Adoption of Resolution 2022-02-23-002 approving Supplemental Amendment #2 to Work Order #5 with Walker Partners, LLC for Hydraulic Surge and Transient Analysis of the High Service Pump Station for the Phase 1B Water Treatment Plant.



## ALLIANCE WATER

### RESOLUTION NO. 20220223-002

**A RESOLUTION OF THE ALLIANCE REGIONAL WATER AUTHORITY BOARD OF DIRECTORS APPROVING SUPPLEMENTAL AMENDMENT #2 TO WORK ORDER #5 BETWEEN THE AUTHORITY AND WALKER PARTNERS, LLC FOR SURGE AND TRANSIENT ANALYSIS OF THE HIGH SERVICE PUMP STATION FOR THE AUTHORITY'S PHASE 1B WATER TREATMENT PLANT PROJECT AND RELATED MATTERS, AND DECLARING AN EFFECTIVE DATE**

#### **RECITALS:**

1. Alliance Regional Water Authority (the "Authority") entered into Work Order #3 with Walker Partners, LLC ("Walker Partners") for final design services of the Phase 1B Water Treatment Plant project in January 2020.
2. The Authority entered into Work Order #5 with Walker Partners for construction administration services of the Phase 1B Water Treatment Plant project in May 2021.
3. Supplemental Amendment #2 provides final hydraulic surge and transient analysis for the Phase 1B Water Treatment Plant High Service Pump Station to incorporate data from the selected pumps.
4. The Authority Board of Directors required that any supplemental amendment that exceeds \$50,000 would require Board approval.
5. The scope of services and fee for the supplemental amendment was negotiated by the Executive Director and the Owner's Representative on behalf of the Authority.

#### **BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE ALLIANCE REGIONAL WATER AUTHORITY:**

**SECTION 1.** The attached supplemental amendment for Surge and Transient Analysis of the High Service Pump Station at the Phase 1B Water Treatment Plant between the Authority and Walker Partners is approved with a total fee of \$56,338.00.

**SECTION 2.** The Authority's Executive Director, Graham Moore, is authorized to execute the supplemental amendment on behalf of the Authority.

**SECTION 3.** This Resolution shall be in full force and effect immediately upon its passage.

Resolution 20220223-002  
Walker Partners Supplemental #2 to Work Order #5

**ADOPTED:** February 23, 2022.

**ATTEST:**

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Chris Betz  
Chair, Board of Directors

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James Earp  
Secretary, Board of Directors

**Work Order No. 005-Supplemental #2**

Pursuant and subject to the Master Service Agreement between the Alliance Regional Water Authority (Alliance Water) and Walker Partners, LLC (Engineer), Alliance Water requests the Engineer to perform the services described below:

Work Site: <u>Caldwell County</u>
Work to Be Performed: <u>Update the surge and transient analysis for the Phase 1B Water Treatment Plant High Service Pump Station to account for the procured pumps and final pipeline sizes and materials.</u>
Date to Commence: <u>February 24, 2022</u>
Date to Complete: <u>May 31, 2022</u>
Cost Proposal to be: <u>Lump Sum of \$56,338.00.</u>
Other Information/Requirements: <u>Additional supplemental services must be authorized by a separate work order, should the need arise.</u>

**Acceptance:**

Alliance Regional Water Authority

Walker Partners, LLC

By: \_\_\_\_\_  
Signature  
Graham Moore, Executive Director

By: \_\_\_\_\_  
Signature  
Joseph Jenkins

Date: \_\_\_\_\_

Date: \_\_\_\_\_



ALLIANCE WATER  
PHASE 1B PROGRAM  
PROGRAM MANAGEMENT PLAN



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**PROPOSAL FOR SUPPLEMENTAL WORK**

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**TO:** GRAHAM MOORE, P.E.; RYAN SOWA, P.E.  
**FROM:** JOSEPH JENKINS, P.E. *JWJ*  
**SUBJECT:** WORK ORDER No. 3 – ADDITIONAL DESIGN EFFORTS AND PROCUREMENT  
SUPPLEMENTAL SERVICES REQUEST No. 7 – SURGE & TRANSIENT ANALYSIS  
**DATE:** 12/20/2021  
**CC:** MARISA VERGARA, P.E.

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Work Order No. 3 includes the following supplemental task(s) for which additional scope and fee are being requested. The following describes new scope items not included in Walker Partners current approved tasks or scope items that are in addition to and build on existing scope items:

**12.11 Surge and Transient Analysis:**

**Background**

Walker Partners is pleased to present the following scope of work and corresponding budget to perform additional hydraulic surge transient analyses for the Alliance Regional Water Authority (ARWA) Water Treatment Plant. The previous hydraulic transient analysis was provided, and the results were documented, providing recommendations for surge control in a report titled, "Alliance Regional Water Authority Water Treatment Plant High Service Pump Station Hydraulic Transient Analysis" dated April 9, 2021.

It is our understanding that ARWA is requesting that the hydraulic transient analysis model be updated using the recent pump performance curve submittals for the pumps proposed for installation at the WTP HSPS and using the following drawing sets:

1. WTP HSPS 100 percent design submittal drawings,
2. Segment A conformed 100 percent submittal drawings dated March 2021,
3. Segment B 100 percent submittal drawings dated October 2021,
4. Lockhart Pipeline issued for bid drawings dated November 2021, and



5. Ground Storage Tank (GST) at the Maxwell Booster Pump Station (BPS) 100 Percent drawings.

It is our understanding that Segment A and the piping from the WTP HSPS to the beginning of Segment A will be 48-inch diameter pipe (in place of 42-inch pipe, which was the diameter used in the transient analysis documented in the April 9, 2021 report). It is also understood that Segment B and the Lockhart Pipeline will have diameters of 42 inches and 16 inches, which is unchanged from the transient analysis documented in the April 9, 2021 report.

This proposal was developed based on the following assumptions:

1. Surge control Strategy 1 (i.e., pressurized surge tank protection) in the April 9, 2021 report is the preferred surge control strategy (i.e., it will not be necessary to further evaluate Strategies 2 and 3).
2. Walker Partners will provide NHC with the submittal pump performance curves for the pumps at the WTP HSPS.
3. The maximum (Phase 1E Program) flow rate is unchanged from that documented in the April 9, 2021 report (i.e., 33.47 MGD).
4. The maximum flow rate to the Lockhart Tank is unchanged from that documented in the April 9, 2021 report (i.e., 1860 gpm per Table 4-17 in the November 2019 Water System Master Plan).

### **Scope of Work**

This scope of work was developed assuming that the transient analyses would be performed once with the information provided by ARWA and that physical attendance at workshops and meetings would not be required. Each task necessary to complete the hydraulic transient analyses is discussed below.

#### **Task 12.11.1 – Update transient model using 100 Percent Design Submittal Drawings**

- 12.11.1.1 Coordination with Program to obtain drawings for the WTP HSPS Segment A, Segment B, the GST at the Maxwell BPS, and for other necessary additional information to perform the hydraulic transient analysis at 100 percent design. Obtain submittal pump performance curves for the pumps proposed for installation at the WTP HSPS, and proposed revisions to the diameters of Segment A (and, if necessary, Segment B) and the piping from the WTP HSPS to the beginning of Segment A (i.e., upsizing to 48-inch pipe from 42-inch pipe).
- 12.11.1.2 Extract lengths, diameters, and elevations from the 100 Percent Design Submittal Drawings for and the WTP HSPS, Segment A, Segment B, Lockhart Pipeline, and the GST at the Maxwell BPS. Revise pipe diameters, and recalculate friction factors and acoustic wavespeeds for Segment A (and if necessary, Segment B) and the piping from the WTP HSPS to the beginning of Segment A.
- 12.11.1.3 Revise transient analysis computer model of the system to include the 100 percent design of the WTP HSPS, Segment A, Segment B, Lockhart Pipeline and the GST at the BPS. Also, revise the transient analysis computer model to include the performance characteristics for the WTP HSPS submittal pumps.

- 12.11.1.4 Establish hydraulic grade line (HGL) elevations for the 100 percent design pipelines under steady state operation and static conditions for the Phase 1E Program operating scenario (i.e., maximum flow rate of 33.47 MGD) with the submittal pumps at the WTP HSPS in place. Lockhart high and zero demands will be included as necessary.
- 12.11.1.5 NHC will use the above initial HGL elevations to perform hydraulic transient analysis simulations for the operation of the submittal pumps at the WTP HSPS and the 100 percent design pipelines under the Phase 1E Program (33.47 MGD). Lockhart high and zero demands will be included as necessary to evaluate worst-case surge conditions. Transient simulations will include
  - a) pump power failure,
  - b) planned pump shutdown, and
  - c) pump startup.
- 12.11.1.6 Evaluate the results (i.e., predicted maximum and minimum pressures) of the transient analysis simulations and check whether additional surge control measures (i.e., measures in addition to Strategy 1 and/or modifications to Strategy 1) are required to protect the 100 percent design system from adverse pressure transients created by the loss of power, planned shutdown and startup of the submittal pumps at the WTP HSPS under the Phase 1E Program (33.47 MGD).
- 12.11.1.7 If additional surge control measures are deemed necessary with Strategy 1 in place, NHC will determine additional surge control measures for Strategy 1 (e.g., additional/larger pressurized surge tank, additional/larger controlled venting vacuum relief valves, additional/larger surge/pressure relief valves, etc.) for Segment A, Segment B, Lockhart Line, the GST at the Maxwell BPS, and the WTP HSPS under Phase 1E (33.47 MGD). The results of the hydraulic transient analyses with the recommended additional surge protection improvements in place will be provide. In addition, the recommendations for safely starting and stopping the pumps will be checked and, if necessary, modified.
- 12.11.1.8 Prepare a draft technical memorandum (intended to be an addendum to the April 9, 2021 report) that includes 1) a description of the modifications to the transient computer model, 2) necessary revisions to component data and assumptions used for the analyses, 3) the results of the hydraulic transient analyses, including graphical plots of the maximum and minimum HGL envelopes and maximum allowable pressure along the pipelines, and plots of pressure head at the WTP high service pump station and significant locations in the system, etc., 4) recommendations for surge control measures in addition to Strategy 1 and/or modifications to surge control Strategy 1, and 5) if necessary, revisions to the recommendations for safe startup and shutdown of the pumps. Following internal NHC QA/QC, the draft memo will be provided to Walker Partners in portable document format (PDF).
- 12.11.1.9 Following receipt of a consolidated set of comments on the revised draft technical memorandum from Walker Partners and the Program, NHC will address the comments and finalize the technical memoranda. The final memo will be provided as a PDF.
- 12.11.1.10 NHC will participate in one conference call (up to 2 hours in duration) to discuss the findings and recommendations presented in the draft addendum prior to finalizing the addendum. This task does not include a presentation (e.g.,

PowerPoint slides) of the findings and recommendations from the transient analysis.

A detailed breakdown of the level of effort for completing the work described above is shown in the Fee Table below. The Task 1 draft memorandum will be completed within 12 weeks of receiving a fully executed contract, notice to proceed, and the requested data. The final memo will be provided within 2 weeks of receiving comments on the draft memo. A list of data required to complete the work will be provided upon receipt of an executed contract.

Upon approval we will invoice this task as a lump sum fee based on percent of completion. We appreciate the opportunity to serve you on this important work, please contact me if you have any questions.

<b>Task 12 – Supplemental</b>		<b>Requested Amount</b>
12.11 Surge and Transient Analysis		
12.11.1 Update transient model using 100 Percent Design Submittal Drawings (Lump Sum)		
12.11.1.1	Coordination with Program to obtain drawings for the WTP HSPS Segment A, Segment B, the GST at the Maxwell BPS, and for other necessary additional information to perform the hydraulic transient analysis at 100 percent design. Obtain submittal pump performance curves for the pumps proposed for installation at the WTP HSPS, and proposed revisions to the diameters of Segment A (and, if necessary, Segment B) and the piping from the WTP HSPS to the beginning of Segment A (i.e., upsizing to 48-inch pipe from 42-inch pipe).	\$932.00
12.11.1.2	Extract lengths, diameters, and elevations from the 100 Percent Design Submittal Drawings for and the WTP HSPS, Segment A, Segment B, Lockhart Pipeline, and the GST at the Maxwell BPS. Revise pipe diameters, and re- calculate friction factors and acoustic wavespeeds for Segment A (and if necessary, Segment B) and the piping from the WTP HSPS to the beginning of Segment A.	\$0.00
12.11.1.3	Revise transient analysis computer model of the system to include the 100 percent design of the WTP HSPS, Segment A, Segment B, Lockhart Pipeline and the GST at the BPS. Also, revise the transient analysis computer model to include the performance characteristics for the WTP HSPS submittal pumps.	\$0.00
12.11.1.4	Establish hydraulic grade line (HGL) elevations for the 100 percent design pipelines under steady state operation and static conditions for the Phase 1E Program operating scenario (i.e., maximum flow rate of 33.47 MGD) with the submittal pumps at the WTP HSPS in place. Lockhart high and zero demands will be included as necessary.	\$0.00

12.11.1.5	<p>NHC will use the above initial HGL elevations to perform hydraulic transient analysis simulations for the operation of the submittal pumps at the WTP HSPS and the 100 percent design pipelines under the Phase 1E Program (33.47 MGD). Lockhart high and zero demands will be included as necessary to evaluate worst-case surge conditions. Transient simulations will include</p> <ul style="list-style-type: none"> <li>a) pump power failure,</li> <li>b) planned pump shutdown, and</li> <li>c) pump startup.</li> </ul>	\$633.00
12.11.1.6	<p>Evaluate the results (i.e., predicted maximum and minimum pressures) of the transient analysis simulations and check whether additional surge control measures (i.e., measures in addition to Strategy 1 and/or modifications to Strategy 1) are required to protect the 100 percent design system from adverse pressure transients created by the loss of power, planned shutdown and startup of the submittal pumps at the WTP HSPS under the Phase 1E Program (33.47 MGD).</p>	\$0.00
12.11.1.7	<p>If additional surge control measures are deemed necessary with Strategy 1 in place, NHC will determine additional surge control measures for Strategy 1 (e.g., additional/larger pressurized surge tank, additional/larger controlled venting vacuum relief valves, additional/larger surge/pressure relief valves, etc.) for Segment A, Segment B, Lockhart Line, the GST at the Maxwell BPS, and the WTP HSPS under Phase 1E (33.47 MGD). The results of the hydraulic transient analyses with the recommended additional surge protection improvements in place will be provide. In addition, the recommendations for safely starting and stopping the pumps will be checked and, if necessary, modified.</p>	\$699.00
12.11.1.8	<p>Prepare a draft technical memorandum (intended to be an addendum to the April 9, 2021 report) that includes 1) a description of the modifications to the transient computer model, 2) necessary revisions to component data and assumptions used for the analyses, 3) the results of the hydraulic transient analyses, including graphical plots of the maximum and minimum HGL envelopes and maximum allowable pressure along the pipelines, and plots of pressure head at the WTP high service pump station and significant locations in the system, etc., 4) recommendations for surge control measures in addition to Strategy 1 and/or modifications to surge control Strategy 1, and 5) if necessary, revisions to the recommendations for safe startup and shutdown of the pumps. Following internal NHC QA/QC, the draft memo will be provided to Walker Partners in portable document format (PDF).</p>	\$615.00

12.11.1.9	Following receipt of a consolidated set of comments on the revised draft technical memorandum from Walker Partners and the Program, NHC will address the comments and finalize the technical memoranda. The final memo will be provided as a PDF.	\$0.00
12.11.1.10	NHC will participate in one conference call (up to 2 hours in duration) to discuss the findings and recommendations presented in the draft addendum prior to finalizing the addendum. This task does not include a presentation (e.g., PowerPoint slides) of the findings and recommendations from the transient analysis.	\$615.00
<b>Total Walker Partners Task 12.11.1 (Lump Sum)</b>		<b>\$3,494</b>
NHC Fee for Supplemental Hydraulic Transient Analysis (see attached scope & fee proposal)		
<b>Total NHC Task 12.11.1 (Task 2 – Lump Sum)</b>		<b>\$48,040.00</b>
<b>Sub-consultant 10% Supplemental Markup – Lump Sum</b>		<b>\$4,804.00</b>

**Total (Lump Sum):      \$56,338.00**

<b>Alliance Water Phase 1B Program</b>										<b>Project Fee Summary</b>	
<b>Water Treatment Plant Consultant - Supplemental Request No. 7</b>										Basic Effort \$ -	
<b>12/21/2021</b>										Supplemental \$ 56,338	
<b>Detailed Overall Consultant Cost Breakdown</b>										Total Effort \$ 56,338	

Task	Project Role	Jenkins	Mike	Yen	WP Total Hours	WP Total Labor Effort	WP Total Expense Effort	NHC	Total Sub Effort	Total Effort
		Manager III	Senior Engineer I	Project Engineer I (EIT)						
	<b>Hourly Bill Rate</b>	<b>\$298.70</b>	<b>\$200.00</b>	<b>\$116.70</b>						
<b>Supplemental Services</b>										
	<b>Task 12 - Supplemental</b>	4	8	6	18	\$ 3,494	\$ -	\$ 48,040	\$ 48,040	\$ 51,534
12.11	Surge and Transient Analysis									
12.11.1	Update transient model using 100 Percent Design Submittal Drawings				18	\$ 3,494	\$ -	\$ 48,040	\$ 48,040	\$ 51,534
12.11.1.1	Coordination with Program to obtain drawings for the WTP HSPS Segment A, Segment B, the GST at the Maxwell BPS, and for other necessary additional information to perform the hydraulic transient analysis at 100 percent design. Obtain submittal pump performance curves for the pumps proposed for installation at the WTP HSPS, and proposed revisions to the diameters of Segment A (and, if necessary, Segment B) and the piping from the WTP HSPS to the beginning of Segment A (i.e., upsizing to 48 inch pipe from 42 inch pipe).	1	2	2	5	\$ 932	\$ -	\$ -	\$ -	\$ 932
12.11.1.2	Extract lengths, diameters, and elevations from the 100 Percent Design Submittal Drawings for and the WTP HSPS, Segment A, Segment B, Lockhart Pipeline, and the GST at the Maxwell BPS. Revise pipe diameters, and re calculate friction factors and acoustic wavespeeds for Segment A (and if necessary, Segment B) and the piping from the WTP HSPS to the beginning of Segment A.	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -
12.11.1.3	Revise transient analysis computer model of the system to include the 100 percent design of the WTP HSPS, Segment A, Segment B, Lockhart Pipeline and the GST at the BPS. Also, revise the transient analysis computer model to include the performance characteristics for the WTP HSPS submittal pumps.	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -
12.11.1.4	Establish hydraulic grade line (HGL) elevations for the 100 percent design pipelines under steady state operation and static conditions for the Phase 1E Program operating scenario (i.e., maximum flow rate of 33.47 MGD) with the submittal pumps at the WTP HSPS in place. Lockhart high and zero demands will be included as necessary.	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -
12.11.1.5	NHC will use the above initial HGL elevations to perform hydraulic transient analysis simulations for the operation of the submittal pumps at the WTP HSPS and the 100 percent design pipelines under the Phase 1E Program (33.47 MGD). Lockhart high and zero demands will be included as necessary to evaluate worst case surge conditions. Transient simulations will include a) pump power failure, b) planned pump shutdown, and c) pump startup.	0	2	2	4	\$ 633	\$ -	\$ -	\$ -	\$ 633
12.11.1.6	Evaluate the results (i.e., predicted maximum and minimum pressures) of the transient analysis simulations and check whether additional surge control measures (i.e., measures in addition to Strategy 1 and/or modifications to Strategy 1) are required to protect the 100 percent design system from adverse pressure transients created by the loss of power, planned shutdown and startup of the submittal pumps at the WTP HSPS under the Phase 1E Program (33.47 MGD).	0	0	0	0.0	\$ -	\$ -	\$ -	\$ -	\$ -
12.11.1.7	If additional surge control measures are deemed necessary with Strategy 1 in place, NHC will determine additional surge control measures for Strategy 1 (e.g., additional/larger pressurized surge tank, additional/larger controlled venting vacuum relief valves, additional/larger surge/pressure relief valves, etc.) for Segment A, Segment B, Lockhart Line, the GST at the Maxwell BPS, and the WTP HSPS under Phase 1E (33.47 MGD). The results of the hydraulic transient analyses with the recommended additional surge protection improvements in place will be provide. In addition, the recommendations for safely starting and stopping the pumps will be checked and, if necessary, modified.	1	2	0	3.0	\$ 699	\$ -	\$ -	\$ -	\$ 699
12.11.1.8	Prepare a draft technical memorandum (intended to be an addendum to the April 9, 2021 report) that includes 1) a description of the modifications to the transient computer model, 2) necessary revisions to component data and assumptions used for the analyses, 3) the results of the hydraulic transient analyses, including graphical plots of the maximum and minimum HGL envelopes and maximum allowable pressure along the pipelines, and plots of pressure head at the WTP high service pump station and significant locations in the system, etc., 4) recommendations for surge control measures in addition to Strategy 1 and/or modifications to surge control Strategy 1, and 5) if necessary, revisions to the recommendations for safe startup and shutdown of the pumps. Following internal NHC QA/QC, the draft memo will be provided to Walker Partners in portable document format (PDF).	1	1	1	3	\$ 615	\$ -	\$ -	\$ -	\$ 615
12.11.1.9	Following receipt of a consolidated set of comments on the revised draft technical memorandum from Walker Partners and the Program, NHC will address the comments and finalize the technical memoranda. The final memo will be provided as a PDF.	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -
12.11.1.10	NHC will participate in one conference call (up to 2 hours in duration) to discuss the findings and recommendations presented in the draft addendum prior to finalizing the addendum. This task does not include a presentation (e.g., PowerPoint slides) of the findings and recommendations from the transient analysis.	1	1	1	3	\$ 615	\$ -	\$ -	\$ -	\$ 615
<b>Total Hours by Role:</b>		4	8	6	<b>Grand Total</b>	<b>\$ 3,494</b>	<b>\$ -</b>	<b>\$ 48,040</b>	<b>\$ 48,040</b>	<b>\$ 51,534</b>



December 13, 2021

Walker Partners  
804 Las Cimas Pkwy, Suite 150  
Austin, TX 78746

**Attention: Mr. Joseph W. Jenkins, P.E.**  
**Senior Client Manager**

**Subject: Proposal to Perform Hydraulic Transient Analyses for the 100 Percent Design of the Alliance Regional Water Authority WTP High Service Pump Station Project**  
NHC Ref. No.: P05006843

Dear Mr. Jenkins:

Northwest Hydraulic Consultants (NHC) is pleased to submit the following scope of work and budget to perform additional hydraulic transient surge analyses for the Alliance Regional Water Authority (ARWA) Water Treatment Plant (WTP) High Service Pump Station (HSPS) Project. NHC previously performed a hydraulic transient analysis for this project and documented the results of the analysis and recommendations for surge control in a report entitled "Alliance Regional Water Authority Water Treatment Plant High Service Pump Station Hydraulic Transient Analysis" that was dated April 9, 2021.

## Project Understanding

It is our understanding that ARWA is requesting that the hydraulic transient analysis model be updated using the recent pump performance curve submittals for the pumps proposed for installation at the WTP HSPS and using the following drawing sets:

1. WTP HSPS 100 percent design submittal drawings,
2. Segment A conformed 100 percent submittal drawings dated March 2021,
3. Segment B 100 percent submittal drawings dated October 2021,
4. Lockhart Pipeline issued for bid drawings dated November 2021, and
5. Ground Storage Tank (GST) at the Maxwell Booster Pump Station (BPS) 100 Percent drawings<sup>1</sup>.

It is our understanding that Segment A and the piping from the WTP HSPS to the beginning of Segment A will be 48-inch diameter pipe (in place of 42-inch pipe, which was the diameter used in the transient analysis documented in the April 9, 2021 report). It is also understood that Segment B and the Lockhart Pipeline will have diameters of 42 inches and 16 inches, which is unchanged from the transient analysis documented in the April 9, 2021 report.

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<sup>1</sup> Please note that the results of the analyses and recommendations for surge control that are documented in the April 9, 2021 report were developed using the 60 Percent Design Submittal Drawings for Segment A, Segment B, Lockhart Pipeline Line, and the Ground Storage Tank (GST) at the Maxwell BPS, and the 90 percent Design Submittal Drawings for the WTP HSPS.



Mr. Joseph W. Jenkins, P.E., Walker Partners  
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This proposal was developed based on the following assumptions:

1. Surge control Strategy 1 (i.e., pressurized surge tank protection) in the April 9, 2021 report is the preferred surge control strategy (i.e., it will not be necessary to further evaluate Strategies 2 and 3).
2. Walker Partners will provide NHC with the submittal pump performance curves for the pumps at the WTP HSPS.
3. The maximum (Phase 1E Program) flow rate is unchanged from that documented in the April 9, 2021 report (i.e., 33.47 MGD).
4. The maximum flow rate to the Lockhart Tank is unchanged from that documented in the April 9, 2021 report (i.e., 1860 gpm per Table 4-17 in the November 2019 Water System Master Plan).

## Scope of Work

This scope of work was developed assuming that the transient analyses would be performed once with the information provided by Walker Partners and ARWA and that physical attendance at workshops and meetings would not be required. Each task necessary to complete the hydraulic transient analyses is discussed below.

1. Co-ordinate with Walker Partners to obtain drawings for the WTP HSPS Segment A, Segment B, the GST at the Maxwell BPS, and for other necessary additional information to perform the hydraulic transient analysis at 100 percent design. Obtain submittal pump performance curves for the pumps proposed for installation at the WTP HSPS, and proposed revisions to the diameters of Segment A (and, if necessary, Segment B) and the piping from the WTP HSPS to the beginning of Segment A (i.e., upsizing to 48-inch pipe from 42-inch pipe).
2. Extract lengths, diameters, and elevations from the 100 Percent Design Submittal Drawings for and the WTP HSPS, Segment A, Segment B, Lockhart Pipeline, and the GST at the Maxwell BPS. Revise pipe diameters, and re-calculate friction factors and acoustic wavespeeds for Segment A (and if necessary, Segment B) and the piping from the WTP HSPS to the beginning of Segment A.
3. Revise transient analysis computer model of the system<sup>2</sup> to include the 100 percent design of the WTP HSPS, Segment A, Segment B, Lockhart Pipeline and the GST at the BPS. Also, revise the transient analysis computer model to include the performance characteristics for the WTP HSPS submittal pumps.
4. Establish hydraulic grade line (HGL) elevations for the 100 percent design pipelines under steady state operation and static conditions for the Phase 1E Program operating scenario (i.e., maximum flow rate of 33.47 MGD) with the submittal pumps at the WTP HSPS in place. Lockhart high and zero demands will be included as necessary.

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<sup>2</sup> Please note that the existing transient analysis model was developed using the 60 Percent Design Submittal Drawings for Segment A, Segment B, Lockhart Pipeline Line, and the GST at the Maxwell BPS, and the 90 percent Design Submittal Drawings for the WTP HSPS.





Mr. Joseph W. Jenkins, P.E., Walker Partners  
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5. NHC will use the above initial HGL elevations to perform hydraulic transient analysis simulations for the operation of the submittal pumps at the WTP HSPS and the 100 percent design pipelines under the Phase 1E Program (33.47 MGD). Lockhart high and zero demands will be included as necessary to evaluate worst-case surge conditions. Transient simulations will include
  - a) pump power failure,
  - b) planned pump shutdown, and
  - c) pump startup.
6. Evaluate the results (i.e., predicted maximum and minimum pressures) of the transient analysis simulations and check whether additional surge control measures (i.e., measures in addition to Strategy 1 and/or modifications to Strategy 1) are required to protect the 100 percent design system from adverse pressure transients created by the loss of power, planned shutdown and startup of the submittal pumps at the WTP HSPS under the Phase 1E Program (33.47 MGD).
7. If additional surge control measures are deemed necessary with Strategy 1 in place, NHC will determine additional surge control measures for Strategy 1 (e.g., additional/larger pressurized surge tank, additional/larger controlled venting vacuum relief valves, additional/larger surge/pressure relief valves, etc.) for Segment A, Segment B, Lockhart Line, the GST at the Maxwell BPS, and the WTP HSPS under Phase 1E (33.47 MGD). The results of the hydraulic transient analyses with the recommended additional surge protection improvements in place will be provided. In addition, the recommendations for safely starting and stopping the pumps will be checked and, if necessary, modified.
8. Prepare a draft technical memorandum (intended to be an addendum to the April 9, 2021 report) that includes 1) a description of the modifications to the transient computer model, 2) necessary revisions to component data and assumptions used for the analyses, 3) the results of the hydraulic transient analyses, including graphical plots of the maximum and minimum HGL envelopes and maximum allowable pressure along the pipelines, and plots of pressure head at the WTP high service pump station and significant locations in the system, etc., 4) recommendations for surge control measures in addition to Strategy 1 and/or modifications to surge control Strategy 1, and 5) if necessary, revisions to the recommendations for safe startup and shutdown of the pumps. Following internal NHC QA/QC, the draft memo will be provided to Walker Partners in portable document format (PDF).
9. Following receipt of a consolidated set of comments on the revised draft technical memorandum from Walker Partners and the Program, NHC will address the comments and finalize the technical memoranda. The final memo will be provided as a PDF.
10. NHC will participate in one conference call (up to 2 hours in duration) to discuss the findings and recommendations presented in the draft addendum prior to finalizing the addendum. This task does not include a presentation (e.g., PowerPoint slides) of the findings and recommendations from the transient analysis.

## Cost Estimate and Schedule

Table 1 provides our cost estimate (time and materials) for completing the work described above. NHC's fee schedule is also enclosed. We will submit monthly invoices for work conducted in the previous month. The Task 1 draft memorandum will be completed within about 12 weeks of receiving a fully executed contract, notice to proceed, and the requested data. The final memo will be provided within 2 weeks of receiving



Mr. Joseph W. Jenkins, P.E., Walker Partners  
 December 13, 2021  
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comments on the draft memo. A list of data required to complete the work will be provided upon receipt of an executed contract.

**Table 1. Cost Estimate**

Task Number	Task Description	Number of Hours per Employee				Cost
		D. Axworthy/ H. Fehlman Principal \$255/hr	Engineer 1 \$145/hr	Junior Engineer \$115/hr	M. Nissim Tech. Editor \$115/hr	
1	100 Percent Design Transient Analysis Direct Cost	70	96	136	2	\$ 47,640 \$ 400
<b>Task Totals</b>		70	96	136	2	\$ 48,040

**Closure**

The Principal-in-Charge for NHC will be available immediately after selection to complete project management tasks necessary to start the project. NHC will commit the key individuals to be available to begin work with a notice to proceed from Walker Partners and will also commit these individuals to the level of involvement necessary to maintain the project schedule.

If you have any questions or need further information, please do not hesitate to contact me at (626) 440-0080 or by email at [dAxworthy@nhcweb.com](mailto:dAxworthy@nhcweb.com). We look forward to again working with Walker Partners on this interesting project.

Yours truly,  
 Northwest Hydraulic Consultants Inc.

David H. Axworthy, Ph.D., P.E.  
 Principal-in-Charge for NHC

**SCHEDULE OF STANDARD CHARGES**  
(Effective April 2021)

<b>Labor Category</b>	<b>Fee Rate (\$US/hour)</b>
Principal .....	255
Principal T3 .....	235
Sr. Project Engineer/Scientist .....	215
Sr. Engineer/Scientist 1 .....	190
Sr. Engineer/Scientist 2 .....	165
Engineer/Scientist 1 .....	145
Engineer/Scientist 2 .....	125
Jr. Engineer/Scientist .....	115
GIS Analyst 1 .....	145
GIS Analyst 2 .....	110
Sr. Engineering Technician .....	145
Engineering Technician .....	115
Jr. Engineering Technician .....	90
Sr. Engineering Lab Technician .....	135
Sr. Contract Administrator .....	170
Sr. Technical Editor .....	150
Technical Editor .....	115
Office Administrator .....	90

**Handling Charges /**

**Fees**

Markup on Subconsultants.....	10%
Markup on Reimbursables .....	10%
Markup on Travel/Subsistence	10%

**Photocopies \$/sheet**

B&W 8½ x 11 .....	\$0.10
B&W 11 x 17 .....	\$0.15
Color 8½ x 11 .....	\$1.00
Color 11 x 17 .....	\$2.00

**Plotting \$/sheet**

Plots, bond, 11 x 17 .....	\$2.00
Plots, bond, D size .....	\$4.00
Plots, oversize (running foot)	\$2.00

**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, February 23, 2022 at 3:00 P.M.  
County Line SUD Offices, 8870 Camino Real, Kyle, TX 78640

**H.6** Update, discussion and possible direction to Staff regarding the Authority's Phase 1B Cost and Schedule Updates. ~ *Ryan Sowa, P.E., Kimley-Horn & Associates*

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Background/Information

Ryan Sowa with Kimley-Horn will update the Committee on the Phase 1B Cost and Schedule Updates.

Attachment(s)

- Phase 1B Cost and Schedule Update – February 23, 2022

**Board Decision(s) Needed:**

- Possible direction to Staff.



# Phase 1B Program Schedule & Budget Update

Board of Directors Meeting  
February 23, 2022



**ALLIANCE WATER**

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

## Schedule Update – Pipeline Critical Path



### Segment C

- *Alignment Confirmation* – proposed development conflicts on a few parcels under evaluation
- *Environmental Completion* – pending alignment confirmation

### Segment D

- *Agency Review* – USACE – report resubmittal to address agency comments
- *TWDB Review* – pending USACE approval

### Segment E

- *Environmental Completion* – remaining field work completed and approved by THC
- *Agency Review* – THC – submittal being finalized



**ALLIANCE WATER**

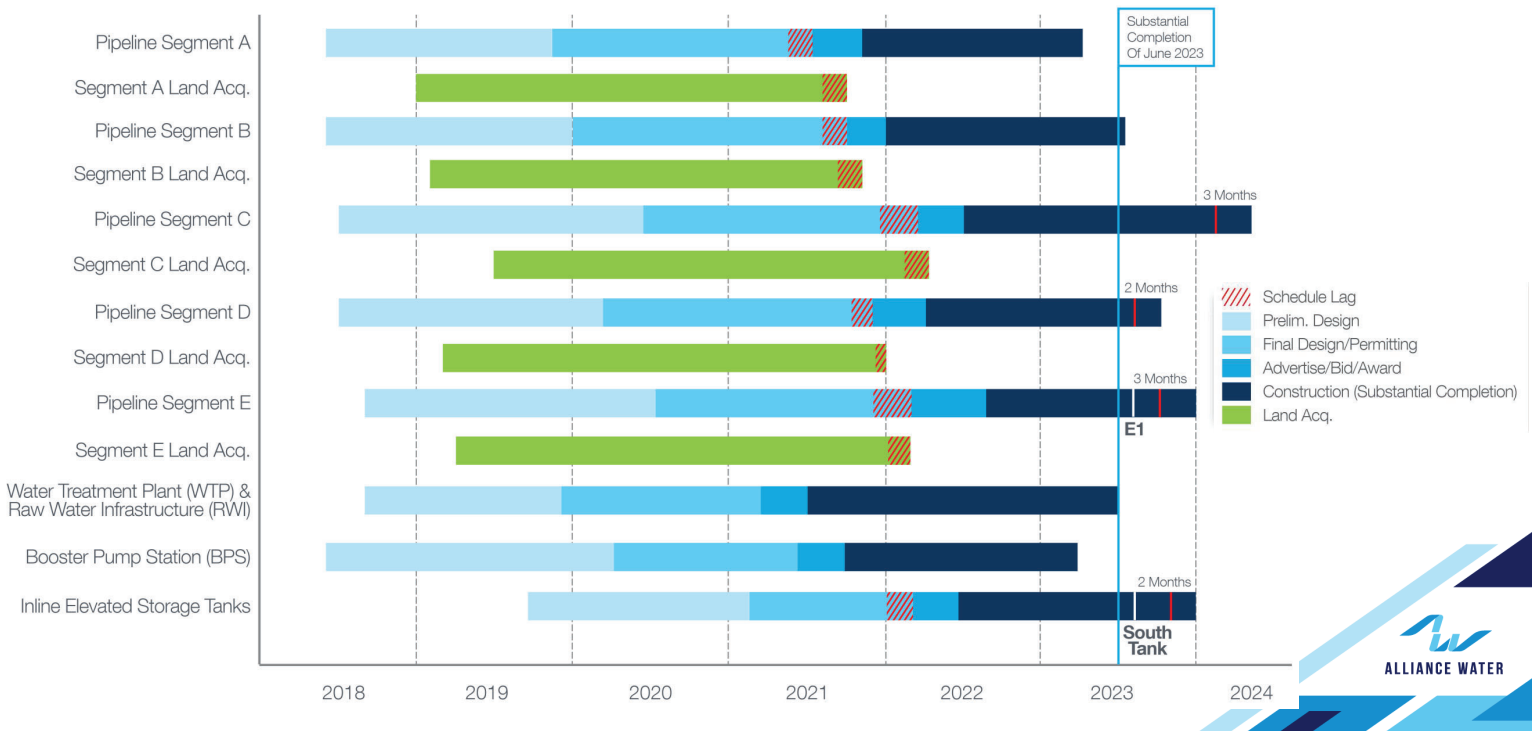
# Schedule Update

## Other Developments Since Last Update

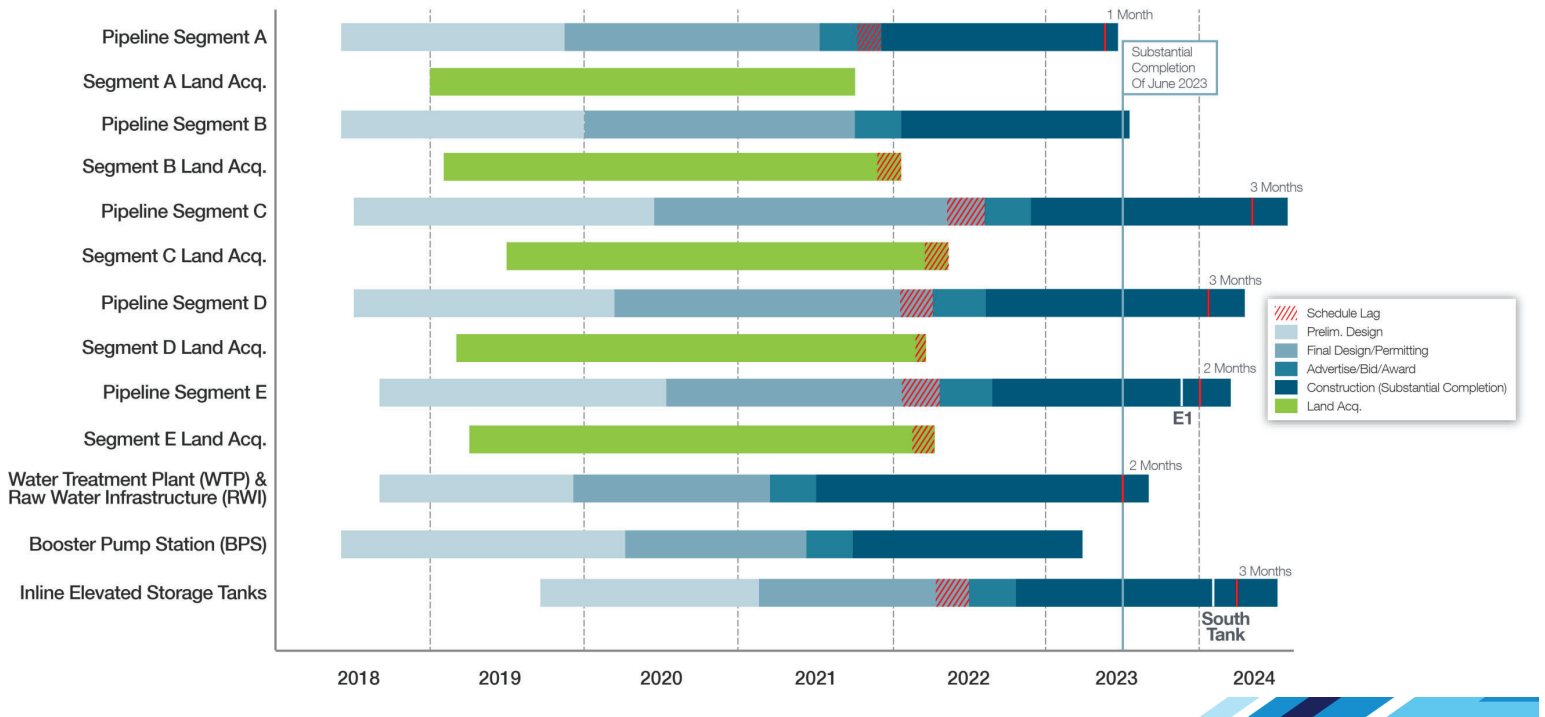
- Pipeline Design
  - No critical path concerns
  
- Easement Acquisition (Pipelines)
  - Commissioners Hearing Scheduling
    - Caldwell County – nearly complete
    - Guadalupe County
      - Segment D – mostly complete
      - Segment E – ongoing
    - Hays County – underway



# Schedule Update – October 2021



# Schedule Update – February 2022



## Schedule Update

### Transmission Pipelines – Segment B

- **No Significant Change**
  - Substantial Completion – 07/12/23
- **Current Key Risks:**
  - Land acquisition – final agreements on remaining parcels
- **Mitigation**
  - Expedited coordination with remaining landowners’ representatives to finalize agreements

### Transmission Pipelines – Segment C

- **Net Delay of 3 Months**
  - Substantial Completion – 08/20/24
- **Current Key Risks:**
  - Alignment Confirmation – landowner realignment requests
  - USACE – Waters of the US
- **Mitigation**
  - Intermediate schedule milestones for key delivery points (County Line SUD, Kyle)
  - Further consideration of construction schedule reduction
  - Continual landowner coordination



# Schedule Update

## Transmission Pipelines – Segment D

- **Delay of 3 Months**
  - Substantial Completion – 03/20/24
- **Key Risks:**
  - USACE jurisdictional determinations and resolution
  - TWDB review durations
  - Land acquisition – scheduling of hearings
- **Mitigation**
  - Release for procurement ahead of TWDB EDF review completion
  - Further consideration of construction schedule reduction
  - Continual check-ins with USACE, TWDB

## Transmission Pipelines – Segment E

- **Delay of 2 Months**
  - Substantial Completion (Segment E1) – 12/07/23
  - Substantial Completion (Segment E2) – 02/08/24
- **Current Key Risks:**
  - Environmental – relocation of remains
  - TWDB review durations
  - Land acquisition – land sales/subdividing, scheduling of hearings
- **Mitigation**
  - Consideration of contractual split from E2



# Schedule Update

## Inline Elevated Storage Tanks

- **Total Adjustment of 3 Months**
  - Substantial Completion (South Tank) – 01/24/24
  - Substantial Completion (North Tank) – 04/17/24
- **Current Key Risks:**
  - Environmental – each tank included in corresponding pipe segment reports
- **Mitigation**
  - Potential separate bidding of South Tank to align schedule with Segment D







## Budget Update

## Budget Update

### ► Summary of Changes in Last 3 Months:

- Net Increase of \$100,000
- Pipeline Segment B
  - Updated for approved construction award amount
  - Addition of construction contingency
- San Marcos Water Treatment Plant Improvements Project
  - Includes piping improvements for an emergency connection to ARWA Segment B
  - Updated for approved construction award amount
  - Addition of construction contingency
- Inline Elevated Storage Tanks
  - 60% Submittal received, which included updated construction cost projection



## COST UPDATES BASED ON DECEMBER MILESTONE SUBMITTALS

		ORIGINAL (FEB. 2019)	REVISED	
	Construction Package	ARWA Total Projected Cost	ARWA Total Projected Cost	DIFFERENCE
<b>Submittal (%) Combined Program Infrastructure</b>				
Const.	Water Treatment Plant	\$ 25,200,000	\$ 29,500,000	\$ 4,300,000
Const.	Booster Pump Station & GBRA Meter Stations	\$ 12,100,000	\$ 13,400,000	\$ 1,300,000
60	Inline EST (South)	\$ 3,600,000	\$ 4,100,000	\$ 500,000
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
100	Pipeline Segment D	\$ 36,300,000	\$ 43,700,000	\$ 7,400,000
90	Pipeline Segment E	\$ 9,500,000	\$ 10,900,000	\$ 1,400,000
	<b>Subtotal</b>	<b>\$141,000,000</b>	<b>\$164,000,000</b>	<b>\$ 23,000,000</b>
<b>ARWA-Only Infrastructure</b>				
Const.	Well Drilling	\$ 3,800,000	\$ 3,300,000	(\$ 500,000)
Const.	Raw Water Infrastructure	\$ 7,000,000	\$ 10,600,000	\$ 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)
	<b>Subtotal</b>	<b>\$ 99,400,000</b>	<b>\$110,600,000</b>	<b>\$ 11,200,000</b>
<b>Total</b>		<b>\$240,400,000</b>	<b>\$274,600,000</b>	<b>\$34,200,000</b>

FEBRUARY 2021 UPDATE

NO CHANGE FROM JANUARY UPDATE

## Budget Update

### ► Additional Notes:

- Continued Pipeline Cost Reduction Evaluation
- Construction Materials Market Volatility
- Land Acquisition & Real Estate





**Questions?**

**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, February 23, 2022 at 3:00 P.M.  
County Line SUD Offices, 8870 Camino Real, Kyle, TX 78640

**H.7** Update, discussion and possible direction to Staff regarding timing and financing of project cost increases. ~ *Graham Moore, P.E., Executive Director*

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Background/Information

Following the discussion from the previous Board meetings regarding cost increases in the physical infrastructure and easements associated with the Phase 1B Program, Staff has worked with the Authority's Financial Advisors, Specialized Public Finance, to determine what interest rates and debt service paybacks may be required if additional funding is garnered through the Texas Water Development Board (TWDB) State Water Implementation Fund of Texas (SWIFT). Below are the results:

<b>Entity</b>	<b>Amount to be Financed</b>	<b>Annual Debt Service</b>	<b>Payback Term</b>	<b>Average Interest Rate</b>
CRWA	\$ 14,460,000	\$732,000	30-years	2.787%
Kyle	\$ 13,195,000	\$670,000	30-years	2.787%
San Marcos	\$ 16,760,000	\$1,070,000	20-years	1.996%
Buda	\$ 2,410,000	\$157,000	20-years	1.994%
<b>TOTAL</b>	<b>\$ 46,825,000</b>	<b>\$2,629,000</b>		

The listed interest rates are the October 2021 SWIFT interest rates with an additional 50-basis points of cushion. It is also important to note that in 2021 the TWDB reduced the subsidy amounts offered on the 20-year notes from 35% to 20% and for the 30-year notes from 20% to 14%.

Staff submitted an Abridged Application for SWIFT funding to the TWDB by the deadline of February 1, 2022 to preserve the right to utilize this funding source.

Staff is continuing to review other options for financing.

**Board decision needed:**

- Possible direction to Staff.

**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, February 23, 2022 at 3:00 P.M.  
 County Line SUD Offices, 8870 Camino Real, Kyle, TX 78640

- H.8** Consider adoption of Resolution 2022-02-23-004 approving Work Order #6 with Kimley-Horn & Associates, Inc. for Owner’s Representative Services for March 2022 through February 2023 for the Authority’s Phase 1B Program, as recommended by the Technical Committee. ~ *Graham Moore, P.E., Executive Director*

The Authority entered into a work order with Kimley-Horn & Associates, Inc. in February 2018 for the first year of Owner’s Representative Services for the Phase 1B Program and entered into work orders in February 2019, 2020 and 2021 for the second, third and fourth years. The current work order is set to expire on February 28, 2022.

The table below outlines the contracted fees for Owner’s Representative services for the first two work orders and the actual/projected total expenditure for each:

<b>Work Order / Period</b>	<b>Contract Value</b>	<b>Total Expenditure</b>
#1 (3/18 – 2/19)	\$2,609,966	\$1,984,280
#2 (3/19 – 2/20)	\$2,877,103	\$2,815,225
#3 (3/20 – 2/21)	\$3,110,422	\$3,110,422
#4 (3/21 – 2/22)	\$2,685,433	\$2,400,000*

\* Projected

The Executive Director negotiated a new work order with Kimley-Horn to begin on March 1, 2022 and extend through February 28, 2023. Below is a summary of the scope of work.

Scope of Work

A detailed scope of work is attached with summary costs listed below. Due to the scale of the effort it is difficult to get a definitive list of all activities that will be required. It will be incumbent upon the Executive Director to closely monitor the activities and expenditures.

<b>Task</b>	<b>Anticipated Fee</b>
1 – Program Management Plan Updates	\$9,550
2 – Stakeholder Coordination	\$219,391
3 - Budgeting	\$91,175
4 - Schedule	\$38,838
5 – Reporting	\$44,890
6 – Data Management	\$87,965
7 – Environmental Management	\$62,796
8 – Land Acquisition Management	\$459,289
9 – TWDB Management	\$70,355
10 – Design Standards Updates	\$41,994

**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, February 23, 2022 at 3:00 P.M.  
County Line SUD Offices, 8870 Camino Real, Kyle, TX 78640

11 – Engineering Design Management	\$209,034
12 – Quality Assurance	\$8,140
13 – Electrical Power Planning	\$30,183
14 – Permit Coordination/Tracking	\$48,510
15 – Procurement & Construction Phase	\$300,483
16 – Project Administration	\$38,166
17 – Other Services	\$16,200
18 – Environmental Const Phase Svcs	\$212,142
<b>Maximum Fee</b>	<b>\$1,989,091</b>

Fee Schedule

The work is proposed to be contracted on an hourly rate basis. Kimley-Horn's subconsultants account for 60.4% of the total anticipated effort, with 59.4% of the total effort contracted to Historically Underutilized Businesses. The costs include a 10% markup by Kimley-Horn on all subconsultants work.

Contract

The work order will be issued under the terms and conditions of the Master Agreement entered into between Kimley-Horn and Alliance Water in May 2016.

Attachment(s)

- Resolution 2022-02-23-003
- Proposal dated February 4, 2022 from Kimley-Horn for Phase 1B – Owner's Representative Services

Recommendation(s)

- The Technical Committee unanimously recommended approval of the Work Order at their February meeting.

**Board decision needed:**

- Adoption of Resolution 2022-02-23-004 approving Work Order #6 with Kimley-Horn and Associates for continued Owner's Representative Services for the Phase 1B Program from March 1, 2022 through February 28, 2023.



**ALLIANCE WATER**

**RESOLUTION NO. 20220223-004**

**A RESOLUTION OF THE ALLIANCE REGIONAL WATER AUTHORITY BOARD OF DIRECTORS APPROVING WORK ORDER #6 BETWEEN THE AUTHORITY AND KIMLEY-HORN & ASSOCIATES, INC. FOR OWNER’S REPRESENTATIVE SERVICES FOR MARCH 2021 THROUGH FEBRUARY 2022 RELATED TO THE AUTHORITY’S PHASE 1B PROGRAM AND RELATED MATTERS, AND DECLARING AN EFFECTIVE DATE**

**RECITALS:**

1. The Alliance Regional Water Authority (the “Authority”) through the adoption of Resolution 20180228-003 entered into a work order with Kimley-Horn & Associates, Inc. (“Kimley-Horn”) for Owner’s Representative Services for the Authority’s Phase 1B Program. The scope of services was for the time period beginning March 1, 2018 and ending February 28, 2019. Separate work orders for three subsequent years running from March through February were later approved by the Board.

2. The Hays Caldwell Public Utility Agency, the predecessor to the Authority entered into a master agreement with Kimley-Horn for engineering services and related matters in August 2015.

3. The scope of services and fee for the attached work order was negotiated by the Executive Director on behalf of the Authority. The scope of services covers the period from March 1, 2022 through February 28, 2023. The work order references terms and conditions in the approved Master Agreement between the Authority and Kimley-Horn.

**BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE ALLIANCE REGIONAL WATER AUTHORITY:**

**SECTION 1.** The attached work order for Owner’s Representative services between the Authority and Kimley-Horn is approved.

**SECTION 2.** The Executive Director of Alliance Regional Water Authority, Graham Moore, is authorized to execute the attached agreement on behalf of the Authority.

**SECTION 3.** This Resolution shall be in full force and effect immediately upon its passage.

**ADOPTED: February 23, 2022.**

**ATTEST:**

\_\_\_\_\_  
Chris Betz  
Chair, Board of Directors

\_\_\_\_\_  
James Earp  
Secretary, Board of Directors



# ALLIANCE WATER

**Work Order No. 6**

Pursuant and subject to the Master Service Agreement between the Alliance Regional Water Authority (Authority) and Kimley-Horn & Associates, Inc. (Engineer), the Authority requests the Engineer to perform the services described below:

<p>Work Site: <u>Desktop study and analysis</u></p> <p>Work to Be Performed: <u>Serve as an Owner's Representative to Alliance Regional Water Authority by assisting in the overall project delivery of Phase 1B Program as detailed in the Scope of Services letter dated February 4, 2022.</u></p> <hr/> <p>Date to Commence: <u>March 1, 2022</u></p> <p>Date to Complete: <u>February 28, 2023</u></p> <p>Cost Proposal to be: <u>    </u> Fixed Fee                      <u>  X  </u> Hourly Rate</p> <p>Maximum Fee Not-to-Exceed: <b><u>\$1,989,091</u></b></p> <p>Other Information/Requirements: _____</p> <hr/>
---

**Acceptance:**

Alliance Regional Water Authority

Kimley-Horn & Associates, Inc.

By: \_\_\_\_\_  
Signature  
Graham Moore, Executive Director

By: \_\_\_\_\_  
Signature  
Glenn Gary

Date: \_\_\_\_\_

Date: \_\_\_\_\_





February 4, 2022

Mr. Graham Moore, P.E.  
Executive Director  
Alliance Regional Water Authority  
1040 Highway 123  
San Marcos, TX 78666

**RE:    *Scope of Services – Work Order No. 6***  
***Phase 1B Infrastructure – Owner’s Representative***

## **PROJECT DEFINITION AND BACKGROUND**

The Alliance Regional Water Authority (Alliance Water) has developed a Capital Improvements Plan (CIP) per Resolution 20160525-008 that identifies anticipated infrastructure requirements over the several decades. This CIP is divided into multiple project delivery phases. Phase 1A is scheduled to be completed in 2018. Phase 1B consists of infrastructure to be delivered by the end of 2023 and includes groundwater wells, water treatment plant, transmission mains, booster pump station, and eight (8) delivery points. Alliance Water and Guadalupe Blanco River Authority (GBRA) have entered into an agreement to oversize a portion of the proposed Phase 1B infrastructure to accommodate delivery of water to both Alliance Water as well as GBRA customers (three additional delivery points). The infrastructure to be oversized includes: water treatment plant, a significant portion of the transmission mains, and booster pump station.

Alliance Water has obtained a State Water Implementation Fund for Texas (SWIFT) loan from the Texas Water Development Board (TWDB) for the proposed Phase 1B Program.

The Scope of Services for this agreement consists of Kimley-Horn and Associates, Inc. (“Kimley-Horn” or “Owner’s Representative”) serving Alliance Water as an Owner’s Representative by assisting in the management of the overall project delivery of Phase 1B Program through the completion and startup of the infrastructure in 2023. In performing the services, the Owner’s Representative will endeavor to operate as an extension of Alliance Water’s staff. The Owner’s Representative will function as the representative and not the agent of Alliance Water. The Owner’s Representative will exercise independent judgment and will operate without extensive oversight and direction. The Owner’s Representative will commit the personnel and resources required to perform the services throughout the term of this Agreement.

Work Order No. 6 will extend for a duration of 12 months. Attachment A identifies the key phases that each infrastructure contract is anticipated to complete within this 12-month period.

## KEY TERMINOLOGY

- **Consultants** – refers collectively to consultants (design, environmental, and land acquisition) that will be procured by and contracted directly with Alliance Water for the Phase 1B Program.
- **Land Acquisition Consultant Team** – refers to consultants (legal, land agent / appraisal, and survey) that will be procured by and contracted directly with Alliance Water for the land acquisition process for the Phase 1B Program.
- **Environmental Consultant** – refers to the consultant that will be procured by and contracted directly with Alliance Water to perform environmental services for the Phase 1B Program.
- **Combined Program** – refers to the infrastructure that will be shared between Alliance Water and GBRA.

## SCOPE OF WORK

### 1. Program Management Plan Updates

This task consists of the ongoing implementation and maintenance of the Phase 1B Program Management Plan (PMP) that was developed in Work Order No. 2. The PMP defines the policies and procedures to be implemented by Phase 1B Program personnel. Tasks to be performed may include the development of additional PMP components as well as the maintenance of the following components already developed:

- 1.1. Communication Protocol
- 1.2. Document Control / Data Management Protocol
- 1.3. Quality Assurance Plan
- 1.4. Milestone Review Process Protocol
- 1.5. Risk Management Plan
- 1.6. Land Acquisition Protocol
- 1.7. Environmental Management Protocol
- 1.8. Texas Water Development Board (TWDB) Protocol
- 1.9. Design Management Protocol
- 1.10. Budget and Funding Protocol
- 1.11. Schedule Protocol
- 1.12. Reporting Protocol
- 1.13. Permit Management Protocol
- 1.14. GBRA & Project Advisory Committee (PAC) Protocol
- 1.15. Procurement Protocol
- 1.16. Construction Protocol, including integration of the Construction Management & Inspection (CM&I) team
- 1.17. PMP Appendices

#### **Task Meetings:**

- None

**2. Stakeholder Coordination**

This task consists of the coordination that will be required by the Owner’s Representative in performance of the management of the Phase 1B program. Perform stakeholder coordination in accordance with the protocol established in the PMP. This task consists of:

- 2.1. Stakeholder identification – Not Used
- 2.2. Initial and/or Ongoing Coordination
  - 2.2.1. Executive Director
  - 2.2.2. Technical Committee and Board Meetings – attend and present status updates
  - 2.2.3. Project Advisory Committee (PAC) Meetings – attend and present status updates
  - 2.2.4. Other Alliance Water Consulting Services (Public Relations, Accounting, Legal)
  - 2.2.5. Texas Commission on Environmental Quality (TCEQ)
  - 2.2.6. Texas Department of Transportation (TxDOT)
  - 2.2.7. Union Pacific Railroad (UPRR)
  - 2.2.8. Counties (Hays, Caldwell, Guadalupe)
  - 2.2.9. Cities (Kyle, San Marcos, Umland, Lockhart, Maxwell, others)
  - 2.2.10. GBRA and/or its consultants
  - 2.2.11. Other utilities, entities

**Task Meetings:**

- Alliance Water Executive Director coordination meetings
- Alliance Water Executive Committee and Board Meetings
- PAC Meetings
- Other Alliance Water Consulting Services – as part of coordination meetings with Executive Director
- Texas Commission on Environmental Quality
- Texas Department of Transportation
- Union Pacific Railroad
- Counties
- Cities
- Other utilities, entities
- Design consultants will be required to meet with agencies separately on project specific issues.

**3. Budgeting**

Maintain the budget tracking protocol developed in the PMP for the Phase 1B Program. It is assumed that the budget will be maintained in Microsoft Excel and linked to the schedule. The format of the budget will be in accordance with TWDB requirements. Monthly Budget updates are anticipated with monthly review sessions as established in the PMP. This task consists of:

- 3.1. Perform monthly budget updates:
  - 3.1.1. Track costs to the Phase 1B Program versus the anticipated budget. Costs associated with the Combined Program will be tracked separately.

- 3.1.2. Coordinate with applicable parties to receive current opinion of probable construction cost (OPCC) data for projects as identified in PMP.
- 3.1.3. Identify budget deviations and coordinate with applicable parties for potential corrective measures. Summarize budget deviations within monthly updates.
- 3.2. Prepare budget updates for the following parties at the frequency identified:
  - 3.2.1. Executive Director – monthly
  - 3.2.2. Alliance Water Board and Technical Committee – quarterly
  - 3.2.3. PAC – quarterly
  - 3.2.4. TWDB – quarterly
  - 3.2.5. Public – quarterly
- 3.3. Program Cost Analysis and Review – perform cost analyses, which may include: evaluating proposed design standards and specifications, obtaining contractor input, and comparing cost projections prepared by Design Consultants to look for potential options for controlling projected program costs.

**Task Meetings:**

- None.

**4. Schedule**

Maintain the schedule as Identified in the PMP for the Phase 1B Program. The schedule management will be performed monthly using Microsoft Project with schedule review sessions as established in the PMP (concurrent with budget review sessions). This task consists of:

- 4.1. Perform monthly schedule updates:
  - 4.1.1. Coordinate with applicable parties to obtain current schedules for projects
  - 4.1.2. Identify schedule deviations and coordinate with applicable parties for potential corrective measures. Schedules for projects in construction will be evaluated by others and for the purposes of the monthly update these schedules will be condensed into only the primary construction tasks.
  - 4.1.3. Special updates will be performed when critical information becomes known
- 4.2. Prepare schedule updates for the following parties at the frequency identified:
  - 4.2.1. Executive Director – monthly
  - 4.2.2. Alliance Water Board and Technical Committee – quarterly
  - 4.2.3. PAC – quarterly
  - 4.2.4. TWDB – quarterly
  - 4.2.5. Public – quarterly
- 4.3. Program Schedule Analysis and Review – perform overall program schedule analysis, which may include: obtaining contractor input and comparing schedules prepared by Design Consultants to look for potential options for controlling projected program schedule.

**Task Meetings:**

- None.

**5. Reporting**

Prepare routine progress reports as identified in the PMP for the Phase 1B Program. This task consists of:

- 5.1. Prepare monthly progress reports:
    - 5.1.1. Coordinate with applicable parties to obtain status for project tasks
    - 5.1.2. Provide Board and Technical Committee a detailed report identifying what was worked on during the previous month and what is anticipated for the following month
  - 5.2. Prepare progress updates for the following parties at the frequency identified:
    - 5.2.1. Executive Director – weekly summary and monthly report
    - 5.2.2. Alliance Water Board and Technical Committee – monthly
    - 5.2.3. PAC – monthly
    - 5.2.4. TWDB – quarterly
    - 5.2.5. Public – quarterly
- Progress reports for projects in construction will be prepared by the CM&I team.

**Task Meetings:**

- None.

**6. Data Management**

Manage record keeping as established in the PMP. Data storage will continue to be performed utilizing Microsoft SharePoint as well as Esri ArcGIS. This task consists of:

- 6.1. Overall data management:
  - 6.1.1. Perform administrative support functions for overall project record keeping and implementing the data management system;
  - 6.1.2. Enter information into applicable data management system;
  - 6.1.3. Distribute updated contract documents ensuring program team maintain current version of project documents;
  - 6.1.4. Prepare, manage, record, distribute and archive documentation of project activities, progress, and related communications;
  - 6.1.5. Log receipt of documents and inquiries requiring a response, provide delivery of documents to appropriate parties, track documents, and monitor timely response;
  - 6.1.6. Review supporting documents for conformance with PMP guidelines;
  - 6.1.7. Maintain project records;
  - 6.1.8. Maintain change management logs, RFI logs, RFPs logs, submittal logs;
  - 6.1.9. Perform internal audits for quality assurance of overall documents.
- 6.2. Microsoft SharePoint:
  - 6.2.1. Perform ongoing data management of documents within SharePoint,
- 6.3. Interactive Web-based GIS:
  - 6.3.1. Perform data updates for the following data to be hosted in ArcGIS application, assumed to occur at the frequencies identified:
    - Background Imagery (provided by Esri basemapping) – annually;
    - Parcel data (right-of-entry and land acquisition status) – weekly;

- City / County / District boundaries – annually;
- Alliance Water proposed infrastructure – monthly;
- FEMA 100-year floodplain (from FEMA map service) – annually;
- United States Geological Service (USGS) National Hydrography Dataset (from USGS hosted map service) – annually;
- United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (from USFWS hosted map service) – annually;
- Desktop/Field Environmental data provided by Environmental Consultant – monthly;
- Topographical data – annually;
- Existing utility data – monthly;
- Construction progress tracking - monthly

Updates/edits will be performed in an ArcGIS Desktop environment prior to being viewable in the web-based application. Data and application support and hosting will be provided for the duration of this this Work Order.

- 6.4. Coordination with Construction Management and Inspection (CMI) Team regarding GPS Collected Data:
  - 6.4.1. Coordinate with CMI Team regarding setting up Web-Based GIS site to accept their collected field data.
  - 6.4.2. Review data loaded to the Web-Based GIS by the CMI Team on a monthly basis to confirm construction data is being collected as each project progresses and confirm naming convention is being followed by the CMI Team. CMI Team responsible for their own internal QA/QC, Kimley-Horn to spot check for conformance.

**Task Meetings:**

- None.

**Deliverables:**

- Hard copy deliverables to be provided to Alliance Water and other parties as part of the Owner’s Representative services are included in this task. Deliverables may include:
  - Meeting agendas;
  - Program status reports;
  - Copies of the PMP;
  - Exhibits.

**7. Environmental Management**

Perform environmental management and coordination for the Phase 1B Program in accordance with the PMP. This task consists of:

- 7.1. Perform regular coordination with Environmental Consultant to discuss ongoing activities, schedule, potential issues, deliverables, and other items related to their scope of work.
- 7.2. In conjunction with the Environmental Consultant, perform ongoing coordination with key agencies, including:
  - 7.2.1. United States Army Corps of Engineers (USACE)

- 7.2.2. Texas Parks and Wildlife Department (TPWD)
- 7.2.3. Local floodplain administrators.
- 7.3. Assist with the review of Environmental Consultant monthly invoices.
- 7.4. Perform continuous tracking of Environmental Consultant's project scope and assist with the development and review of potential amendments.
- 7.5. Perform as-needed site visits with Environmental Consultant during their field studies.
- 7.6. To the extent reasonably possible, site visits will be coordinated with those identified in Task 8 and 11.
- 7.7. Review and comment on environmental permitting documents (prepared by Environmental Consultant) for the following agencies:
  - 7.7.1. USACE
  - 7.7.2. TPWD
  - 7.7.3. United States Fish and Wildlife Service (USFWS)
  - 7.7.4. Texas Historical Commission (THC).
- 7.8. Review and comment on TWDB environmental deliverables prepared by Environmental Consultant.
- 7.9. Other Environmental Services as identified and assigned by Alliance Water.

**Task Meetings:**

- Environmental agency (USACE, USFWS, TPWD, THC) meetings
- Environmental Consultant Team progress meetings

**8. Land Acquisition Management**

Perform management and coordination for the Phase 1B Program land acquisition process in accordance with the PMP and the RAMP. This task consists of:

- 8.1. Perform regular coordination with Land Acquisition Consultant Team (including weekly progress meetings) to discuss ongoing activities, schedule, potential issues, deliverables, and other items related to their scope of work.
- 8.2. Assist with the review of Land Acquisition Consultant Team monthly invoices.
- 8.3. Perform continuous tracking of Land Acquisition Consultant's project scope and assist with the development and review of potential amendments.
- 8.4. Review land acquisition data for conformance to the PMP/RAMP requirements and provide comments to the Land Acquisition Consultant Team.
- 8.5. Perform as-needed site visits with Land Acquisition Consultant Team.
- 8.6. To the extent reasonably possible, site visits will be coordinated with those identified in Task 7 and 11.
- 8.7. Review and comment on TWDB land acquisition deliverables prepared by Land Acquisition Consultant Team.
- 8.8. Coordination with landowners to facilitate access for Consultants for field work,
- 8.9. Assist in the resolution of title issues (such as recent landowner transactions) by contacting/visiting County appraisal districts and other offices as needed to obtain relevant deeds, plats, and similar documents.
- 8.10. Weekly meetings with Alliance Water and Special Counsel as well as biweekly meetings with the Program Surveyor.
- 8.11. Other Land Acquisition Services as identified and assigned by Alliance Water.

**Task Meetings:**

- Land Acquisition Team progress meetings

## 9. Texas Water Development Board Management

Perform management and coordination with the TWDB for the Phase 1B Program in accordance with the PMP. This task consists of:

- 9.1. Identify milestone deliverables and provide feedback on critical path schedule.
- 9.2. Review TWDB deliverables for conformance to TWDB requirements and provide comments to the Consultants.
- 9.3. Perform regular coordination with the TWDB to discuss ongoing activities, schedule, potential issues, status of deliverables, and other items related to the TWDB SWIFT loan.
- 9.4. Prepare fund release request letters for submission to the TWDB, including required backup information.

**Task Meetings:**

- TWDB progress meetings

## 10. Design Standards Updates

This task shall include the revising and updating of design standards documents already prepared in prior Work Orders. Categories may consist of:

- 10.1. Revisions/Updates to Design Standards, Specifications and Details (develop and/or update as needed):
  - 10.1.1. Transmission Pipelines and Delivery Points Design Standards
  - 10.1.2. Standard Specifications for Construction
  - 10.1.3. Standard Details
  - 10.1.4. Pipeline Corrosion Protection Standards
  - 10.1.5. Telemetry, Instrumentation & Controls, SCADA, and Security Standards – Development of Design Standards, Specifications and Details for the following:
    - 10.1.5.1. Fiber Optic Design Standards, Specifications and Details
    - 10.1.5.2. SCADA Communication Standards, Specifications and Details
    - 10.1.5.3. Instrumentation Standards, Specifications and Details
    - 10.1.5.4. Security Standards, Specifications and Details
  - 10.1.6. Facility General Electrical Standards – to be developed by the Water Treatment Plant Consultant as part of their specification development. The Owner's Representative will review and comment and coordinate with other applicable Consultants to promote consistency.
- 10.2. Master Specifications – develop and/or update as needed
- 10.3. Record Drawings (Plans & GIS)
- 10.4. Address comments from Design Consultant Teams and finalize

**Task Meetings:**

- Specifications and Details Review Meeting (1 total).



## 11. Engineering Design Management

Perform engineering design management and coordination for the Phase 1B Program in accordance with the PMP. Manage the following proposed design contracts:

- 11.1. Hydrogeology / Well Drilling
- 11.2. Raw Water Infrastructure
- 11.3. Water Treatment Plant and High Service Pump Station
- 11.4. Transmission Pipelines (5 contracts)
- 11.5. Administration Building and Operations Center
- 11.6. Booster Pump Station and Delivery Points
- 11.7. Elevated Storage Tanks
- 11.8. Program Survey

The following tasks may be performed, as applicable to the current status of the contract:

- Identify early actions required.
  - Assist with the development and review of project scope (new contracts and/or contract amendments) for the Design Consultants.
  - Assist with the review of proposed LOE developed by the Design Consultants.
  - Review and provide comments on the Project Management Plans prepared by the Design Consultants.
  - Assist with the review of Design Consultant monthly invoices.
  - Perform regular coordination with the Design Consultants to discuss ongoing activities, schedule, potential issues, deliverables, and other items related to their scope of work.
  - Perform as-needed site visits with Design Consultants.
  - To the extent reasonably possible, site visits will be coordinated with those identified in Task 7 and 8.
  - Review and comment on TWDB Engineering Feasibility Report (EFR) deliverables prepared by Design Consultants.
  - Review and comment on milestone submittals (60%, 90%, final) prepared by Design Consultants.
  - Review/Provide comments on Consultant OPCCs at milestones.
  - Other Design-related services as assigned by Alliance Water.
- 11.9. Commissioning Planning – This task includes evaluating potential options for start-up and commissioning of the Phase 1B infrastructure, including coordination with Alliance Water members (sponsors) and other water utilities in the vicinity of the Phase 1B infrastructure.

### **Task Meetings:**

- Consultant Design Teams progress meetings

## 12. Quality Assurance

Perform Quality Assurance protocol for the Phase 1B Program in accordance with the PMP. This task includes:

- 12.1. Review the Quality Assurance / Quality Control (QA/QC) Plans prepared by the Consultants for conformance to the PMP and provide comments.

- 12.2. Perform regular coordination with Consultants to confirm implementation of QA/QC in project activities.
- 12.3. At each milestone submittal, receive QA/QC documentation from Consultants and review for adherence to QA/QC Plan.

**Task Meetings:**

- None.

**13. Electrical Power Planning**

Perform ongoing planning and coordination support associated with the electrical power required for the Phase 1B Program infrastructure, which may include the following:

- Well Pumps and Raw Water Infrastructure
- Water Treatment Plant and High Service Pump Station
- Booster Pump Station, Administration Building and Operations Center
- Potential Corrosion Protection Systems for Transmission Pipelines

The following tasks shall be performed:

- 13.1. Perform preliminary analyses and coordinate with Design Consultants to determine approximate demand and energy associated with each of the potential service locations.
- 13.2. Develop a strategy for contacting, gathering system quality and reliability data, and discussing rates with each of the electrical service providers.
- 13.3. Coordinate with the electrical service providers to evaluate potential cost and reliability of service options for each location.
- 13.4. Assist Alliance Water with negotiations of the electrical supply agreements.
- 13.5. Assist the Alliance by defining special equipment needs such as power factor correction, motor starting equipment to mitigate voltage dips, etc.

**Task Meetings:**

- Alliance Water and Electrical Service Providers coordination meetings

**14. Permit Coordination/Tracking**

Perform permit coordination and tracking associated with the Phase 1B Program in accordance with the PMP. The following tasks shall be performed:

- 14.1. Perform regular coordination with the Consultants to discuss ongoing activities, schedule, potential issues, and other items related to permitting.
- 14.2. Incorporate permit updates from Consultants into master permit tracking list. The master permit tracking list will maintain linkage to the master schedule.
- 14.3. The following list identifies the anticipated entities that will require approvals and/or permits in the performance of the Phase 1B Program. The Consultant will provide design documents and exhibits required as part of the permit submittal.

14.3.1. TCEQ – includes the following tasks:

- Permitting and Public Water Supply coordination for delivery points,
- Corrosion Report coordination,
- Exception Request submittal and coordination.

14.3.2. TxDOT

14.3.3. UPRR

14.3.4. Counties (Hays, Caldwell, Guadalupe)

14.3.5. Cities (Kyle, San Marcos, Umland, Lockhart, Maxwell, others)

14.3.6. Private utilities

**Task Meetings:**

- As already defined in Task 2 – Stakeholder Coordination.

**15. Procurement and Construction Phase Services**

Perform Procurement and Construction Phase Services associated with the Phase 1B Program in accordance with the PMP.

Throughout the duration of Procurement and Construction Phase Services, the Consultant for each respective project will provide professional opinions, render engineering judgement, and make final decisions for any adjustment to design intent or revisions to construction documents. The CM&I will lead the development and implementation of the construction management plan and perform inspections for the projects. The Owner’s Representative team will function as an administrative liaison between the parties but will not direct the Consultants to make changes to the design.

The following tasks are anticipated:

**15.1. Procurement Services**

15.1.1. Pre-Proposal Meeting

15.1.1.1. Prepare agenda and lead meeting

15.1.1.2. Collect questions and provide to Design Consultant for review and response

15.1.2. Addenda Review

15.1.2.1. Review administratively

15.1.3. Proposal Evaluation and Recommendation

15.1.3.1. Review and participate in scoring proposals submitted for construction packages and provide formal recommendation to Owner

15.1.4. Committee and Board Items

15.1.4.1. Present Proposal Summary and formal recommendation to PAC and Board as well as the Technical Committee, if time permits

15.1.5. Execution of Contract

15.1.5.1. Coordinate construction contract execution

15.2. Construction Phase Services

15.2.1. Administration

- 15.2.1.1. Prepare and present at workshop on administrative construction procedures
- 15.2.1.2. Review and comment on Construction Administrative Data Management Plan (prepared by the CM&I)
- 15.2.1.3. Coordination with design consultant, CM&I and Alliance Water for general management tasks

15.2.2. Preconstruction Meetings

- 15.2.2.1. Attend

15.2.3. Monthly Construction Meetings

- 15.2.3.1. One (1) member of the Owner’s Representative team will attend monthly construction meetings for all projects, scheduled on the same 1 to 2-day span each month.

15.2.4. Construction Activities – Review and comment on applicable items, and attend meetings as needed:

- 15.2.4.1. Submittals (review of Program-wide elements only)
- 15.2.4.2. Substitutions (Consultant provides recommendation, Owner’s Representative reviews and advises Owner)
- 15.2.4.3. Request for Information (only if RFI has contractual implications)
- 15.2.4.4. Pay Request (review for administrative completeness only)
- 15.2.4.5. Defective Work (Consultant provides recommendation, Owner’s Representative reviews and advises Owner)
- 15.2.4.6. Change Orders (Consultant provides recommendation, Owner’s Representative reviews and advises Owner)
- 15.2.4.7. Record Drawings (review for administrative completeness only)
- 15.2.4.8. Commissioning (attend and coordinate ARWA sponsors as needed)
- 15.2.4.9. Substantial Completion
- 15.2.4.10. Final Walkthrough
- 15.2.4.11. Warranty Walkthrough

**Note:** the Owner’s Representative will perform procurement and construction phase services associated with the SCADA and Security elements to be included under the Water Treatment Plant and High Service Pump Station contract. The Owner’s Representative shall lead the effort for these elements under Task 15, while coordinating with the design consultant.

**Task Meetings:**

- As already defined in Task 15 – Procurement and Construction Phase Services.

**16. Project Administration**

For this task, “Project” refers to the contract between the Owner’s Representative and Alliance Water. The following tasks shall be performed:

- 16.1. Invoicing – the Owner’s Representative shall submit invoices monthly in the approved format for Alliance Water review and approval. Each monthly invoice package shall include the invoice and project status report.

- 16.2. Project Management – the Owner’s Representative shall perform miscellaneous administrative tasks, including management of manpower and budgets, subconsultant management, and other activities associated with managing the overall Owner’s Representative contract.

**Task Meetings:**

- None.

**17. Other Services**

Perform services on an as-directed basis as directed by Alliance Water. These tasks could include:

- 17.1. Water Quality Testing and Coordination – This task consists of sampling and testing of the raw water source and customer treated water sources. This task will include testing protocols, on-site testing, lab coordination and review, summary reporting and coordination with the Water Treatment Plant Design Consultant. Sampling will occur at the raw water wells for Alliance Water and GBRA for evaluating chlorine decay, trihalomethane (THM) formation, and/or other constituents. Treated water quality sampling will be near the locations of the Alliance Water delivery points and will be performed for water blending analyses. Water quality sampling and testing will be approved in advance by Alliance Water based on the outcomes of water quality workshops and related coordination. Lab and equipment fees will be paid separately by Alliance Water.
- 17.2. TCEQ Exception Request and Interconnect Submittals – Not Used – refer to Task 14.3.1.
- 17.3. Other Tasks as Assigned by Alliance Water – These tasks may include items such as: desktop-level analyses of specific technical topics (such as water quality), preparation of presentations related to technical or risk topics, and other services as requested by Alliance Water.

**Task Meetings:**

- None

**18. Environmental Construction Phase Services**

Perform services on an as-directed basis as directed by Alliance Water. These tasks could include:

- 18.1. Pre-Construction Meeting with Contractor – Prepare presentation or talking points reflective of environmental conditions that must be adhered to during the construction of the facility and present information to the contractor. The environmental team will provide necessary contact information to the contractor and when it would be necessary to stop work and contact the environmental team.
- 18.2. Migratory Bird Nest Survey – This task consists of completing a survey for migratory bird nests prior to vegetation clearing if it will occur between March 15 and September 15. The easement and any temporary construction easements would be surveyed for migratory bird nests. The survey would consist of a field survey of vegetation that would be cleared within five (5) days of the survey. Survey schedule would be required based on the five-day clearing

schedule that the contractor is able to accomplish. Any nests that are found would be marked with flagging along with a buffer around the nest and would be monitored until the birds leave the nest. Any abandoned nests that do not appear to have active nesting use would be removed to prevent use of the nest. A short memorandum will be prepared following the survey for each facility documenting survey results and compliance with regulations.

- 18.3. Cultural Resources – On-call services will be provided in the event that cultural resources are encountered, or excavation reveals sites of potential cultural importance, unmarked graves, or human remains, work will stop, and the Owner’s Representative will be contacted to assess the situation, conduct a site visit if needed, determine the need for further investigation following THC protocol, and complete disposition of any identified features. If cultural resource features are encountered, the THC will be contacted for further consultation and guidance as to the need for further investigations or surveys. Coordination with the U.S. Army Corps of Engineers (USACE) will also occur if the site is within jurisdictional areas. This Scope of Services does not include an archeological survey. A report will be prepared and submitted documenting the results of any investigations or consultations which have occurred.
- 18.4. Encounter protected species – On-call services will be provided in the event state or federally listed threatened or endangered species or potential habitats are encountered by construction workers during the construction period. Upon notification by Alliance Water and its construction contractor, the Owner’s Representative will conduct a site visit, consult with federal and state agencies as needed or required, and develop avoidance and/or mitigation measures including relocation of the species if necessary.
- 18.5. USACE Compliance and Reporting – This task includes tasks associated with USACE compliance. This includes updated photos of water crossings pre-construction, ensuring easement boundaries are clearly marked within jurisdictional areas, photos of post-construction once vegetation is reestablished, and report preparation. The report would include confirmation that the work was performed in accordance with USACE requirements, a summary of the work that was performed, a comparison of pre-construction and post-construction conditions of jurisdictional areas, a description of all impacts to waters of the U.S., documentation that disturbed areas have been revegetated, and any associated exhibits necessary.
- 18.6. Hazardous Materials On-Call – This task consists of a subconsultant to Kimley-Horn providing on-call hazardous material investigations during the construction phase of the project. The following activities are anticipated to be conducted:
  - 18.6.1. Upon notification of discovery of potentially hazardous materials during construction, Owner’s Representative will mobilize a subconsultant to the location to evaluate and document site conditions and, if warranted, collect samples for environmental laboratory analyses. The subconsultant will determine the appropriate laboratory analyses for the material encountered and will submit the samples on a requested turn-around time agreeable to the Client. Standard analyses (in accordance with the Resource Conservation Recovery Act) appropriate for evaluation of construction worker safety and waste characterization will be selected. Excavation, transport, and disposal of material is not included in this scope of work.
  - 18.6.2. Owner’s Representative will provide the analytical results and recommendations after receiving and reviewing final analytical reports from the laboratory and provide this information to Alliance Water and the construction contractor. The contractor will be responsible for developing a contractor safety plan.

- 18.6.3. For each on-call incident, a brief written summary will be provided via email communication to document activities associated site evaluation, analytical testing, and waste management.

Assumptions:

- Each site visit would consist of a 12-hour day for two staff members.
- For migratory bird surveys, it is anticipated that the following number of days would be needed per facility/segment:
  - Two (2) days would be required for BPS survey.
  - Fifteen (15) days for Segment A.
  - Fifteen (15) days for Segment B.
  - Segments C, D and E would not require nest surveys since the construction site clearing would start and conclude outside of nesting season.
- Updated photos of jurisdictional areas will be taken during nest survey work, for the purposes of estimating fee. If nest surveys are not required at the beginning of construction for a segment, such as Segment D, two (2) days would be required per segment to take photos for jurisdictional crossings. This excludes Segments B and E as there are no impacts to jurisdictional waters for the segment. If feasible, photos could also be taken by the Program Construction Managers, Pape-Dawson, in lieu of the environmental team mobilizing should it be necessary.
- For cultural resources, two site visits by two staff members are anticipated to be required.
- For threatened/endangered species or habitats, one site visit for the water treatment plant and booster pump station by two staff members and one visit by two staff members for the pipelines are assumed. A report will be prepared and submitted documenting the results of any investigations or consultations which have occurred (see deliverables below).
- USACE reporting would only be required for Segment A, C, and D in this Work Order as Segments B and E avoid USACE impacts.
- Actual report deliverable would not be required as construction is not anticipated to be complete during the work order period. Only work to document existing conditions and organize data and reports would be accomplished during this work order.



## FEE AND EXPENSES

Kimley-Horn will perform the services in Tasks 1 – 18 on a labor fee plus expense basis until the maximum fee is reached. The budgets for each task are shown below.

Task 1	Program Management Plan	\$ 9,550.00
Task 2	Stakeholder Coordination	\$ 219,391.00
Task 3	Budgeting	\$ 91,175.00
Task 4	Schedule	\$ 38,828.00
Task 5	Reporting	\$ 44,890.00
Task 6	Data Management	\$ 87,965.00
Task 7	Environmental Management	\$ 62,796.00
Task 8	Land Acquisition Management	\$ 459,289.00
Task 9	TWDB Management	\$ 70,355.00
Task 10	Design Standards	\$ 41,994.00
Task 11	Engineering Design Management	\$ 209,034.00
Task 12	Quality Assurance	\$ 8,140.00
Task 13	Electrical Power Planning	\$ 30,183.00
Task 14	Permit Coordination/Tracking	\$ 48,510.00
Task 15	Procurement and Construction Phase Services	\$ 300,483.00
Task 16	Project Administration	\$ 38,166.00
Task 17	Other Services	\$ 16,200.00
Task 18	Environmental Construction Phase Services	\$ 212,142.00
	<b>Maximum Fee</b>	<b>\$1,989,091.00</b>

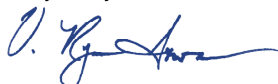
Kimley-Horn will not exceed the total maximum fee shown without authorization from Alliance Water. Individual task amounts are provided for budgeting purposes only. Kimley-Horn reserves the right to reallocate amounts among tasks as necessary. Labor fee will be billed on an hourly basis according to our then-current rates. As to these tasks, direct reimbursable expenses such as subconsultants, express delivery services, fees, air travel, and other direct expenses will be billed at 1.10 times cost. Administrative time related to the project may be billed hourly. All permitting, application, and similar project fees will be paid directly by Alliance Water.

Kimley-Horn agrees that Alliance Water may reduce the scope of services for any (or all) of the tasks included in the work order. Kimley-Horn will be notified of any such reductions via a written directive describing the effort to be reduced. Kimley-Horn shall be paid for all services rendered and expenses incurred to the effective date of reduced scope.

Payment will be due within 25 days of your receipt of the invoice and should include the invoice number and Engineer project number.

Please contact me at (210) 321-3414 or [ryan.sowa@kimley-horn.com](mailto:ryan.sowa@kimley-horn.com) should you have questions.

Very Truly Yours,



V. Ryan Sowa, P.E.  
Project Manager



Glenn Gary, P.E.  
Senior Vice President



ATTACHMENT A – ANTICIPATED TASKS FOR PHASE 1B CONTRACTS DURING WORK ORDER NO. 6

CONTRACT	CONTRACT PHASE									
	CONSULTANT PROCUREMENT	CONSULTANT CONTRACT EXECUTION	DESKTOP ANALYSES & SITE/ROUTE SELECTION	RIGHTS-OF-ENTRY OBTAINED	FIELD VISITS & ANALYSES	PRELIMINARY ENGINEERING REPORT COMPLETED	TWDB FINAL DESIGN/LAND ACQ. FUNDING RELEASES	FINAL DESIGN	PROCUREMENT FOR CONSTRUCTION	CONSTRUCTION PHASE
PIPELINE SEGMENT A										X
PIPELINE SEGMENT B										X
PIPELINE SEGMENT C							X	X	X	X
PIPELINE SEGMENT D							X		X	X
PIPELINE SEGMENT E							X	X	X	X
WELL DRILLING										
OPS. CENTER & ADMIN. BUILDING										
RAW WATER INFRASTRUCTURE										X
WATER TREATMENT PLANT										X
BOOSTER PUMP STATION & DELIVERY POINTS										X
ELEVATED STORAGE TANKS							X	X	X	

**Alliance Regional Water Authority Owner's Representative  
 Work Order No. 6 Rate Schedule  
 (Hourly Rate)**

QA/QC Engineer / Senior Project Manager / Principal	\$285
Senior Technical Advisor / Deputy Project Manager	\$235
Senior Instrumentation / Electrical Engineer	\$225
Property Acquisition Manager	\$235
Senior Scheduler	\$220
Senior Architect	\$215
Senior Environmental Manager	\$200
Senior Engineer	\$195
GIS Specialist	\$180
Instrumentation / Electrical Engineer	\$170
Senior Biologist	\$165
Civil Engineer	\$175
GIS Developer	\$170
IT Professional	\$155
Engineer-in-Training II	\$150
Architectural Project Manager	\$145
CADD Operator / Senior Technician	\$145
Engineer-in-Training I	\$130
GIS Analyst	\$135
Biologist	\$120
Acquisition / Title Specialist	\$140
Senior Historian	\$110
Document Control Specialist	\$125
Administrative Staff / Technician	\$95
Archeologist	\$85





Alliance Regional Water Authority																			Project Fee Summary						
Owner's Representative / Program Management (Work Order No. 6)																			Total Effort	\$ 1,989,091					
2/4/2022																									
Detailed Overall Kimley-Horn Cost Breakdown																									
Scope of Services																									
Task	Project Role	QA/QC / Senior Mgr / Principal	Senior Tech. Adv. / Deputy Pr. Mgr	Senior Engineer	GIS Specialist	Civil Engineer	IT Professional	GIS Developer	CADD Operator / Senior Technician	Engineer-in-Training II	Engineer-in-Training I	GIS Analyst	Administrative Staff / Technician	Total Hours	Total Labor Effort	Total Expense Effort	Foster CM Group	CP&Y	Grubb	Spitzer	RVK	V&A	Total Sub Effort	Total Effort	Assumptions
	Hourly Bill Rate	\$285.00	\$235.00	\$195.00	\$180.00	\$175.00	\$155.00	\$170.00	\$145.00	\$150.00	\$130.00	\$135.00	\$95.00												
11.3	Management and Coordination of WTP and HSPS													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Identify early actions required													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Assist with the development and review of project scope for the DC													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Assist with the review of proposed LOE developed by the DC													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Assist with the review of Design Consultants monthly invoices	12								4				16	\$ 4,020	\$ -	\$ 1,551	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,551	\$ 5,571	
	Perform regular coordination with the DC to discuss ongoing tasks	6												6	\$ 1,710	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,710
	Perform as-needed site visits with Design Consultants													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Review/Comment on TWDB EFR deliverables prepared by DC													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Review/Comment on milestone submittals prepared by DC													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Review/Comment on OPCC's prepared by DC													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Other Design-related services as assigned by Alliance Water													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11.4	Management and Coordination of Transmission Pipeline (5 Contracts)													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Identify early actions required													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Assist with the development and review of project scope for the DC	4		9										13	\$ 2,895	\$ -	\$ 1,716	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,716	\$ 4,611	
	Assist with the review of proposed LOE developed by the DC	4		9										13	\$ 2,895	\$ -	\$ 858	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 858	\$ 3,753	
	Assist with the review of Design Consultants monthly invoices	36		48										84	\$ 19,620	\$ -	\$ 2,574	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,574	\$ 22,194	
	Perform regular coordination with the DC to discuss ongoing tasks	10		40										50	\$ 10,650	\$ -	\$ 39,171	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 39,171	\$ 49,821	
	Perform as-needed site visits with Design Consultants													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Review/Comment on TWDB EFR deliverables prepared by DC													0	\$ -	\$ -	\$ 3,432	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,432	\$ 3,432	
	Review/Comment on milestone submittals prepared by DC	6		6										12	\$ 2,880	\$ -	\$ 8,580	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,580	\$ 11,460	
	Review/Comment on OPCC's prepared by DC	2		2										4	\$ 960	\$ -	\$ 1,716	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,716	\$ 2,676	
	Other Design-related services as assigned by Alliance Water	12		24										36	\$ 8,100	\$ -	\$ 5,324	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,324	\$ 13,424	
11.5	Management and Coordination of Admin. Building and Ops. Center													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Identify early actions required													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Assist with the development and review of project scope for the DC													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Assist with the review of proposed LOE developed by the DC													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Review and provide comments on the PMP prepared by the DC													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Assist with the review of Design Consultants monthly invoices													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Perform regular coordination with the DC to discuss ongoing tasks													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Perform initial windshield survey to review the overall Phase 1B projects													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Perform as-needed site visits with Design Consultants													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Review/Comment on TWDB EFR deliverables prepared by DC													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Review/Comment on milestone submittals prepared by DC													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Review/Comment on OPCC's prepared by DC													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Other Design-related services as assigned by Alliance Water													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11.6	Management and Coordination of BPS & Delivery Points													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Identify early actions required													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Assist with the development and review of project scope for the DC													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Assist with the review of proposed LOE developed by the DC													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Assist with the review of Design Consultants monthly invoices	12												18	\$ 4,320	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,320
	Perform regular coordination with the DC to discuss ongoing tasks	6												6	\$ 1,710	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,710
	Perform as-needed site visits with Design Consultants													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Review/Comment on TWDB EFR deliverables prepared by DC													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Review/Comment on milestone submittals prepared by DC													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Review/Comment on OPCC's prepared by DC													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Other Design-related services as assigned by Alliance Water													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11.7	Management and Coordination of Elevated Storage Tanks													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Identify early actions required													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Assist with the development and review of project scope for the DC	2		4										6	\$ 1,350	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,350
	Assist with the review of proposed LOE developed by the DC	2		4										6	\$ 1,350	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,350
	Assist with the review of Design Consultants monthly invoices	12		24										36	\$ 8,100	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,100
	Perform regular coordination with the DC to discuss ongoing tasks			24										24	\$ 4,680	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,680
	Perform as-needed site visits with Design Consultants			5										5	\$ 975	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 975
	Review/Comment on TWDB EFR deliverables prepared by DC													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Review/Comment on milestone submittals prepared by DC	8		12										20	\$ 4,620	\$ -	\$ 3,960	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,960	\$ 8,580	
	Review/Comment on OPCC's prepared by DC	2		2										4	\$ 960	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 960
	Other Design-related services as assigned by Alliance Water	12		12										24	\$ 5,760	\$ -	\$ 3,960	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,960	\$ 9,720	
11.8	Management and Coordination of Program Survey													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Identify early actions required													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Assist with the development and review of project scope for the DC													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Assist with the review of proposed LOE developed by the DC													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Assist with the review of Design Consultants monthly invoices	6		6										12	\$ 2,880	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,880
	Perform regular coordination with the DC to discuss ongoing tasks	3		3										6	\$ 1,440	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,440
	Perform as-needed site visits with Design Consultants													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Review/Comment on TWDB EFR deliverables prepared by DC													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Review/Comment on milestone submittals prepared by DC	2		2		4																			

Alliance Regional Water Authority																			Project Fee Summary							
Owner's Representative / Program Management (Work Order No. 6)																			Total Effort	\$ 1,989,091						
2/4/2022																										
Detailed Overall Kimley-Horn Cost Breakdown																										
Scope of Services																										
Task	Project Role	QA/QC / Senior Mgr / Principal	Senior Tech. Adv. / Deputy Pr. Mgr	Senior Engineer	GIS Specialist	Civil Engineer	IT Professional	GIS Developer	CADD Operator / Senior Technician	Engineer-in-Training II	Engineer-in-Training I	GIS Analyst	Administrative Staff / Technician	Total Hours	Total Labor Effort	Total Expense Effort	Foster CM Group	CP&Y	Grubb	Spitzer	RVK	V&A	Total Sub Effort	Total Effort	Assumptions	
	Hourly Bill Rate	\$285.00	\$235.00	\$195.00	\$180.00	\$175.00	\$155.00	\$170.00	\$145.00	\$150.00	\$130.00	\$135.00	\$95.00													
<b>Task 14 - Permit Coordination/Tracking</b>																										
14.1	Perform regular coordination with Consultants	2												2	\$ 570	\$ -	\$ -	\$ 43,560	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 43,560	\$ 48,510	
14.2	Incorporate permit updates from Consultants into master tracking list	2												2	\$ 570	\$ -	\$ -	\$ 3,960	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,960	\$ 4,530	
14.3	Management of Permit Submittal	6				12								18	\$ 3,810	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,810	\$ 3,810	
14.3.1	TCEQ													0	\$ -	\$ -	\$ -	\$ 29,304	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 29,304	\$ 29,304	
14.3.2	TxDOT - Design Consultants													0	\$ -	\$ -	\$ -	\$ 5,148	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,148	\$ 5,148	
14.3.3	UPRR													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
14.3.4	Counties (Hays, Caldwell, Guadalupe)													0	\$ -	\$ -	\$ -	\$ 1,716	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,716	\$ 1,716	
14.3.5	Cities (Kyle, San Marcos, Unland, Lockhart, Maxwell, others)													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
14.3.6	Private utilities													0	\$ -	\$ -	\$ -	\$ 1,716	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,716	\$ 1,716	
<b>Task 15 - Procurement and Construction Phase Services</b>																										
15.1	Management and Coordination of Hydrogeology/Well Drilling													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Procurement Services													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Pre-Proposal Meeting													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Addenda Review													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Proposal Evaluation and Recommendation													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Committee and Board Items													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Execution of Contract													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Construction Phase Services													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Administration													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Preconstruction Meetings													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Monthly Construction Meetings													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Construction Activities													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Submittals													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Substitutions													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Request for Information													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Pay Request													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Defective Work													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Change Orders													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Record Drawings													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Commissioning													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Substantial Completion													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Final Walkthrough													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Warranty Walkthrough													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
15.2	Management and Coordination of Well Pumps and Raw Water Inf.													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Procurement Services													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Pre-Proposal Meeting													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Addenda Review													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Proposal Evaluation and Recommendation													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Committee and Board Items													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Execution of Contract													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Construction Phase Services													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Administration	5												5	\$ 1,425	\$ -	\$ 1,716	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,716	\$ 3,141	
	Preconstruction Meetings													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Monthly Construction Meetings	2												2	\$ 570	\$ -	\$ 2,574	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,574	\$ 3,144	
	Construction Activities													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Submittals	3												3	\$ 855	\$ -	\$ 13,651	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,651	\$ 14,506	
	Substitutions													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Request for Information	3												3	\$ 855	\$ -	\$ 4,290	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,290	\$ 5,145	
	Pay Request	3												3	\$ 855	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Defective Work													0	\$ -	\$ -	\$ 4,070	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,070	\$ 4,070	
	Change Orders	3												3	\$ 855	\$ -	\$ 5,412	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,412	\$ 6,267	
	Record Drawings													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Commissioning													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Substantial Completion													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Final Walkthrough													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Warranty Walkthrough													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
15.3	Management and Coordination of WTP and HSPS													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Procurement Services													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Pre-Proposal Meeting													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Addenda Review													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Proposal Evaluation and Recommendation													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Committee and Board Items													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Execution of Contract													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Construction Phase Services													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Administration	10												10	\$ 2,850	\$ -	\$ 3,861	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,861	\$ 6,711	
	Preconstruction Meetings													0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	Monthly Construction Meetings	2												2	\$ 570	\$ -	\$ 3,861	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,861</		









<b>Alliance Water</b>						<b>Project Fee Summary</b>		
<b>Owners Representative</b>						<b>Total Effort</b>	\$	117,890
<b>2/4/2022</b>								
<b>Detailed Overall Foster CM Group Cost Breakdown</b>								

<b>Basic Services</b>									
Task	Project Role	Senior Scheduler	Document Control Specialist		Total Hours	Total Labor Effort	Total Expense Effort	Total Effort	Assumptions
	<b>Hourly Bill Rate</b>	\$220.00	\$125.00						
<b>Task 1 - Program Management Plan Updates</b>									
1.10	Budget and Funding Protocol	4			4	\$ 880	\$ 20	\$ 900	
1.11	Schedule Protocol	4			4	\$ 880	\$ 20	\$ 900	
<b>Task 2 - Stakeholder Coordination</b>									
2.13	Internal Program Monthly Meetings	30			30	\$ 6,600	\$ 100	\$ 6,700	
<b>Task 3 - Budgeting</b>									
3.1	Perform Monthly Budget Updates	240			240	\$ 52,800		\$ 52,800	
3.1.1	Track costs to the Phase 1B Program vs. the anticipated budget				0	\$ -		\$ -	
3.1.2	Coordinate with applicable parties to receive current OPCC data				0	\$ -		\$ -	
3.1.3	Identify budget deviations and coordinate with applicable parties				0	\$ -		\$ -	
3.2	Prepare Budget Updates				0	\$ -		\$ -	
3.2.1	Executive Director (Monthly)	22			22	\$ 4,840	\$ 210	\$ 5,050	
3.2.2	Alliance Water Board and Technical Committee (Quarterly)				0	\$ -		\$ -	
3.2.3	PAC (Quarterly)				0	\$ -		\$ -	
3.2.4	TWDB (Quarterly)				0	\$ -		\$ -	
3.2.5	Public (Quarterly)				0	\$ -		\$ -	
3.3	Program Cost Evaluation				0	\$ -		\$ -	
<b>Task 4 - Schedule</b>									
4.1	Perform Monthly Schedule Updates	114			114	\$ 25,080	\$ -	\$ 25,080	
4.1.1	Coordinate with applicable parties to obtain current schedules				0	\$ -		\$ -	
4.1.2	Identify schedule deviations and coordinate with applicable parties				0	\$ -		\$ -	
4.1.3	Special updates will be performed when critical info becomes known				0	\$ -		\$ -	
<b>Task 5 - Reporting</b>									
<b>Task 6 - Data Management</b>									
6.1	Overall Data Management		180		180	\$ 22,500		\$ 22,500	
6.1.1	Perform admin. Support functions for overall project record keeping				0	\$ -		\$ -	
6.1.2	Enter information into applicable data management system				0	\$ -		\$ -	
6.1.3	Distribute updated contract documents				0	\$ -		\$ -	
6.1.4	Prepare, manage, record, distribute and archive documentation				0	\$ -		\$ -	
6.1.5	Log receipt of all documents and inquiries requiring a response				0	\$ -		\$ -	
6.1.6	Review supporting documents for conformance with PMP				0	\$ -		\$ -	
6.1.7	Maintain project records				0	\$ -		\$ -	
6.1.8	Maintain change management logs, RFI logs, RFP logs, Submittal logs				0	\$ -		\$ -	
6.1.9	Perform internal audits for quality assurance of overall documents				0	\$ -		\$ -	
<b>Task 7 - Environmental Management</b>									
<b>Task 8 - Land Acquisition Management</b>									
<b>Task 9 - Texas Water Development Board Management</b>									
<b>Task 10 - Design Standards Updates</b>									
<b>Task 11 - Engineering Design Management</b>									

<b>Alliance Water</b>				<b>Project Fee Summary</b>			
Owners Representative 2/4/2022				<b>Total Effort</b>	\$ 117,890		
<b>Detailed Overall Foster CM Group Cost Breakdown</b>							

Basic Services								Assumptions
Task	Project Role	Senior Scheduler	Document Control Specialist	Total Hours	Total Labor Effort	Total Expense Effort	Total Effort	
	<b>Hourly Bill Rate</b>	\$220.00	\$125.00					
	<b>Task 12 - Quality Assurance</b>				\$ -	\$ -	\$ -	
	<b>Task 13 - Electrical Power Planning</b>				\$ -	\$ -	\$ -	
	<b>Task 14 - Permit Coordination/Tracking</b>				\$ -	\$ -	\$ -	
	<b>Task 15 - Procurement and Construction Phase Services</b>				\$ -	\$ -	\$ -	
	<b>Task 16 - Project Administration</b>				\$ 3,960	\$ -	\$ 3,960	
16.1	Invoicing	18		18	\$ 3,960		\$ 3,960	
16.2	Project Management			0	\$ -		\$ -	
	<b>Task 17 - Other Services</b>				\$ -	\$ -	\$ -	
	<b>Task 18 - Environmental Construction Phase Services</b>				\$ -	\$ -	\$ -	
<b>Grand Total</b>					\$ 117,540	\$ 350	\$ 117,890	

<b>Alliance Water</b> <b>Owners Representative</b> <b>2/4/2022</b> <b>Detailed Overall CPY Group Cost Breakdown</b>	<b>Project Fee Summary</b> Total Effort \$ 636,536
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Basic Services																			
Task	Project Role	Senior Tech. Avis / Deputy Prj Mngr	Senior Instrumentation / Electrical Engineer	Senior Engineer	GIS Specialist	Civil Engineer	Senior Biologist	Instrumentation / Electrical Engineer	CADD Operator / Senior Technician	Engineer-in-Training II	Engineer-in-Training I	Biologist	GIS Analyst	Administrative Staff / Technician	Total Hours	Total Labor Effort	Total Expense Effort	Total Effort	Assumptions
	Hourly Bill Rate	\$235.00	\$225.00	\$195.00	\$180.00	\$175.00	\$165.00	\$170.00	\$145.00	\$150.00	\$130.00	\$120.00	\$135.00	\$95.00					
<b>Task 1 - Program Management Plan Updates</b>																			
<b>Task 2 - Stakeholder Coordination</b>																			
2.1	Stakeholder Identification														0	\$ -	\$ -	\$ -	
2.2	Initial and/or Ongoing Coordination														0	\$ -	\$ -	\$ -	
2.2.1	Executive Director														0	\$ -	\$ -	\$ -	
2.2.2	Technical Committee and Board	4													4	\$ 940	\$ -	\$ 940	
2.2.3	PAC	4													4	\$ 940	\$ -	\$ 940	
2.2.4	Other Alliance Water Consulting Services														0	\$ -	\$ -	\$ -	
2.2.5	Texas Commission on Environmental Quality														0	\$ -	\$ -	\$ -	
2.2.6	Texas Department of Transportation														0	\$ -	\$ -	\$ -	
2.2.7	Union Pacific Railroad														0	\$ -	\$ -	\$ -	
2.2.8	Counties (Hays, Caldwell, Guadalupe)														0	\$ -	\$ -	\$ -	
2.2.9	Cities (Kyle, San Marcos, Umland, Lockhart, Maxwell, others)														0	\$ -	\$ -	\$ -	
2.2.10	GBRA and/or its Consultants														0	\$ -	\$ -	\$ -	
2.2.11	Other Utilities/Entities														0	\$ -	\$ -	\$ -	
2.3	Alliance Water Executive Director coordination meetings	24		24		24	24								96	\$ 18,480	\$ -	\$ 18,480	
2.4	Alliance Water Technical Committee and Board Meetings														0	\$ -	\$ -	\$ -	
2.5	PAC Meetings	4													4	\$ 940	\$ -	\$ 940	
2.6	Other ARWA Consulting Services - as part of Coord. Mtg. with ED.														0	\$ -	\$ -	\$ -	
2.7	Texas Commission on Environmental Quality - Meetings	8				8									16	\$ 3,280	\$ -	\$ 3,280	
2.8	Texas Department of Transportation - Meetings														0	\$ -	\$ -	\$ -	
2.9	Union Pacific Railroad - Meetings														0	\$ -	\$ -	\$ -	
2.10	Counties - Meetings			4											4	\$ 780	\$ -	\$ 780	
2.11	Cities - Meetings														0	\$ -	\$ -	\$ -	
2.12	Other Utilities/Entities - Meetings														0	\$ -	\$ -	\$ -	
2.13	Internal Program Monthly Meetings	36		36		36	36								144	\$ 27,720	\$ -	\$ 27,720	
<b>Task 3 - Budgeting</b>																			
<b>Task 4 - Schedule</b>																			
<b>Task 5 - Reporting</b>																			
<b>Task 6 - Data Management</b>																			
<b>Task 7 - Environmental Management</b>																			
7.1	Perform regular coordination with Env. Cons.						100								100	\$ 16,500	\$ -	\$ 16,500	
7.2	Ongoing agency coordination														0	\$ -	\$ -	\$ -	
7.2.1	United States Army Corps of Engineers (USACE)						16								16	\$ 2,640	\$ -	\$ 2,640	
7.2.2	Texas Parks and Wildlife Department (TPWD)						2								2	\$ 330	\$ -	\$ 330	
7.2.3	Local floodplain administrators						0								0	\$ -	\$ -	\$ -	
7.3	Assist with the review of Env. Cons. monthly invoices						12								12	\$ 1,980	\$ -	\$ 1,980	
7.4	Continuous tracking of Env. Cons. Scope of work & amendments						16								16	\$ 2,640	\$ -	\$ 2,640	
7.5	Perform as-needed site visits with Env. Cons. during Field Study						8								8	\$ 1,320	\$ -	\$ 1,320	
7.6	Coordinated site visits with those identified in Task 8 and 11						2								2	\$ 330	\$ -	\$ 330	
7.7	Review and comment on Environmental Permitting Documents														0	\$ -	\$ -	\$ -	
7.7.1	USACE						24								24	\$ 3,960	\$ -	\$ 3,960	
7.7.2	TPWD						4								4	\$ 660	\$ -	\$ 660	
7.7.3	United States Fish and Wildlife Service (USFWS)						4								4	\$ 660	\$ -	\$ 660	
7.7.4	Texas Historical Commission (THC)						12								12	\$ 1,980	\$ -	\$ 1,980	
7.8	Review and comment on TWDB deliverables by Env. Cons.						48								48	\$ 7,920	\$ -	\$ 7,920	
7.9	Other Environmental Services as defined by Alliance Water						40								40	\$ 6,600	\$ -	\$ 6,600	
7.10	Environmental Agency meetings (USACE, USFWS, TPWD, THC)						6								6	\$ 990	\$ -	\$ 990	
7.11	Environmental Consultant Team progress meetings						10								10	\$ 1,650	\$ -	\$ 1,650	
<b>Task 8 - Land Acquisition Management</b>																			
<b>Task 9 - Texas Water Development Board Management</b>																			
9.1	Identify milestone deliverables and provide feedback on CP schedule					30					12				42	\$ 7,050	\$ -	\$ 7,050	
9.2	Review TWDB deliverables for conformance to TWDB requirements					75					55				130	\$ 21,375	\$ -	\$ 21,375	
9.3	Perform regular coordination with the TWDB to discuss ongoing actions					55					8				63	\$ 10,825	\$ -	\$ 10,825	
9.4	Prepare fund release request letters for submission to TWDB					36					10				46	\$ 7,800	\$ -	\$ 7,800	
9.5	TWDB progress meeting					36					12				48	\$ 8,100	\$ -	\$ 8,100	
<b>Task 10 - Design Standards Updates</b>																			
<b>Task 11 - Engineering Design Management</b>																			
11.1	Management and Coordination of Hydrogeology/Well Drilling														0	\$ -	\$ -	\$ -	
	Identify early actions required														0	\$ -	\$ -	\$ -	
	Assist with the development and review of project scope for the DC														0	\$ -	\$ -	\$ -	
	Assist with the review of proposed LOE developed by the DC														0	\$ -	\$ -	\$ -	
	Assist with the review of Design Consultants monthly invoices														0	\$ -	\$ -	\$ -	
	Perform regular coordination with the DC to discuss ongoing tasks														0	\$ -	\$ -	\$ -	
	Perform as-needed site visits with Design Consultants														0	\$ -	\$ -	\$ -	
	Review/Comment on TWDB EFR deliverables prepared by DC														0	\$ -	\$ -	\$ -	
	Review/Comment on milestone submittals prepared by DC														0	\$ -	\$ -	\$ -	
	Review/Comment on OPCC's prepared by DC														0	\$ -	\$ -	\$ -	

Alliance Water Owners Representative 2/4/2022 Detailed Overall CPY Group Cost Breakdown	Project Fee Summary	
	Total Effort	\$ 636,536

Basic Services																				
Task	Project Role	Senior Tech. / Avis / Deputy Prj Mngr	Senior Instrumentation / Electrical Engineer	Senior Engineer	GIS Specialist	Civil Engineer	Senior Biologist	Instrumentati on / Electrical Engineer	CADD Operator / Senior Technician	Engineer-in- Training II	Engineer-in- Training I	Biologist	GIS Analyst	Administrativ e Staff / Technician		Total Hours	Total Labor Effort	Total Expense Effort	Total Effort	Assumptions
		Hourly Bill Rate	\$235.00	\$225.00	\$195.00	\$180.00	\$175.00	\$165.00	\$170.00	\$145.00	\$150.00	\$130.00	\$120.00	\$135.00	\$95.00					
	Other Design-related services as assigned by Alliance Water															0	\$ -		\$ -	
11.2	Management and Coordination of Well Pumps and Raw Water Inf.															0	\$ -		\$ -	
	Identify early actions required															0	\$ -		\$ -	
	Assist with the development and review of project scope for the DC															0	\$ -		\$ -	
	Assist with the review of proposed LOE developed by the DC															0	\$ -		\$ -	
	Assist with the review of Design Consultants monthly invoices			6												6	\$ 1,170		\$ 1,170	
	Perform regular coordination with the DC to discuss ongoing tasks															0	\$ -		\$ -	
	Perform as-needed site visits with Design Consultants															0	\$ -		\$ -	
	Review/Comment on TWDB EFR deliverables prepared by DC															0	\$ -		\$ -	
	Review/Comment on milestone submittals prepared by DC															0	\$ -		\$ -	
	Review/Comment on OPCC's prepared by DC															0	\$ -		\$ -	
	Other Design-related services as assigned by Alliance Water															0	\$ -		\$ -	
11.3	Management and Coordination of WTP and HSPS															0	\$ -		\$ -	
	Identify early actions required															0	\$ -		\$ -	
	Assist with the development and review of project scope for the DC															0	\$ -		\$ -	
	Assist with the review of proposed LOE developed by the DC															0	\$ -		\$ -	
	Assist with the review of Design Consultants monthly invoices	6														6	\$ 1,410		\$ 1,410	
	Perform regular coordination with the DC to discuss ongoing tasks															0	\$ -		\$ -	
	Perform as-needed site visits with Design Consultants															0	\$ -		\$ -	
	Review/Comment on TWDB EFR deliverables prepared by DC															0	\$ -		\$ -	
	Review/Comment on milestone submittals prepared by DC															0	\$ -		\$ -	
	Review/Comment on OPCC's prepared by DC															0	\$ -		\$ -	
	Other Design-related services as assigned by Alliance Water															0	\$ -		\$ -	
11.4	Management and Coordination of Transmission Pipeline (5 Contracts)															0	\$ -		\$ -	
	Identify early actions required															0	\$ -		\$ -	
	Assist with the development and review of project scope for the DC			8												8	\$ 1,560		\$ 1,560	
	Assist with the review of proposed LOE developed by the DC			4												4	\$ 780		\$ 780	
	Assist with the review of Design Consultants monthly invoices			12												12	\$ 2,340		\$ 2,340	
	Perform regular coordination with the DC to discuss ongoing tasks	6		160						20						186	\$ 35,610		\$ 35,610	
	Perform as-needed site visits with Design Consultants															0	\$ -		\$ -	
	Review/Comment on TWDB EFR deliverables prepared by DC			16												16	\$ 3,120		\$ 3,120	
	Review/Comment on milestone submittals prepared by DC			40												40	\$ 7,800		\$ 7,800	
	Review/Comment on OPCC's prepared by DC			8												8	\$ 1,560		\$ 1,560	
	Other Design-related services as assigned by Alliance Water	4		20												24	\$ 4,840		\$ 4,840	
11.5	Management and Coordination of Admin. Building and Ops. Center															0	\$ -		\$ -	
	Identify early actions required															0	\$ -		\$ -	
	Assist with the development and review of project scope for the DC															0	\$ -		\$ -	
	Assist with the review of proposed LOE developed by the DC															0	\$ -		\$ -	
	Review and provide comments on the PMP prepared by the DC															0	\$ -		\$ -	
	Assist with the review of Design Consultants monthly invoices															0	\$ -		\$ -	
	Perform regular coordination with the DC to discuss ongoing tasks															0	\$ -		\$ -	
	Perform initial windshield survey to review the overall Phase 1B projects															0	\$ -		\$ -	
	Perform as-needed site visits with Design Consultants															0	\$ -		\$ -	
	Review/Comment on TWDB EFR deliverables prepared by DC															0	\$ -		\$ -	
	Review/Comment on milestone submittals prepared by DC															0	\$ -		\$ -	
	Review/Comment on OPCC's prepared by DC															0	\$ -		\$ -	
	Other Design-related services as assigned by Alliance Water															0	\$ -		\$ -	
11.6	Management and Coordination of BPS & Delivery Points															0	\$ -		\$ -	
	Identify early actions required															0	\$ -		\$ -	
	Assist with the development and review of project scope for the DC															0	\$ -		\$ -	
	Assist with the review of proposed LOE developed by the DC															0	\$ -		\$ -	
	Assist with the review of Design Consultants monthly invoices															0	\$ -		\$ -	
	Perform regular coordination with the DC to discuss ongoing tasks															0	\$ -		\$ -	
	Perform as-needed site visits with Design Consultants															0	\$ -		\$ -	
	Review/Comment on TWDB EFR deliverables prepared by DC															0	\$ -		\$ -	
	Review/Comment on milestone submittals prepared by DC															0	\$ -		\$ -	
	Review/Comment on OPCC's prepared by DC															0	\$ -		\$ -	
	Other Design-related services as assigned by Alliance Water															0	\$ -		\$ -	
11.7	Management and Coordination of Elevated Storage Tanks															0	\$ -		\$ -	
	Identify early actions required															0	\$ -		\$ -	
	Assist with the development and review of project scope for the DC															0	\$ -		\$ -	
	Assist with the review of proposed LOE developed by the DC															0	\$ -		\$ -	
	Assist with the review of Design Consultants monthly invoices															0	\$ -		\$ -	
	Perform regular coordination with the DC to discuss ongoing tasks															0	\$ -		\$ -	
	Perform as-needed site visits with Design Consultants															0	\$ -		\$ -	
	Review/Comment on TWDB EFR deliverables prepared by DC															0	\$ -		\$ -	
	Review/Comment on milestone submittals prepared by DC			16												16	\$ 3,600		\$ 3,600	
	Review/Comment on OPCC's prepared by DC															0	\$ -		\$ -	
	Other Design-related services as assigned by Alliance Water			16												16	\$ 3,600		\$ 3,600	

<b>Alliance Water</b> <b>Owners Representative</b> <b>2/4/2022</b> <b>Detailed Overall CPY Group Cost Breakdown</b>	<b>Total Effort</b>	<b>Project Fee Summary</b> \$ 636,536
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Basic Services																				
Task	Project Role	Senior Tech. / Avis / Deputy Prj Mngr	Senior Instrumentation / Electrical Engineer	Senior Engineer	GIS Specialist	Civil Engineer	Senior Biologist	Instrumentati on / Electrical Engineer	CADD Operator / Senior Technician	Engineer-in- Training II	Engineer-in- Training I	Biologist	GIS Analyst	Administrativ e Staff / Technician		Total Hours	Total Labor Effort	Total Expense Effort	Total Effort	Assumptions
	Hourly Bill Rate	\$235.00	\$225.00	\$195.00	\$180.00	\$175.00	\$165.00	\$170.00	\$145.00	\$150.00	\$130.00	\$120.00	\$135.00	\$95.00						
11.8	Management and Coordination of Program Survey															0	\$ -	\$ -	\$ -	
	Identify early actions required															0	\$ -	\$ -	\$ -	
	Assist with the development and review of project scope for the DC															0	\$ -	\$ -	\$ -	
	Assist with the review of proposed LOE developed by the DC															0	\$ -	\$ -	\$ -	
	Assist with the review of Design Consultants monthly invoices															0	\$ -	\$ -	\$ -	
	Perform regular coordination with the DC to discuss ongoing tasks															0	\$ -	\$ -	\$ -	
	Perform as-needed site visits with Design Consultants															0	\$ -	\$ -	\$ -	
	Review/Comment on TWDB EFR deliverables prepared by DC															0	\$ -	\$ -	\$ -	
	Review/Comment on milestone submittals prepared by DC															0	\$ -	\$ -	\$ -	
	Review/Comment on OPCC's prepared by DC															0	\$ -	\$ -	\$ -	
	Other Design-related services as assigned by Alliance Water															0	\$ -	\$ -	\$ -	
11.9	Commissioning Planning															0	\$ -	\$ -	\$ -	
11.10	Consultant Design Teams progress meetings															0	\$ -	\$ -	\$ -	
11.10.1	Hydrogeology / Well Drilling															0	\$ -	\$ -	\$ -	
11.10.2	Raw Water Facilities															0	\$ -	\$ -	\$ -	
11.10.3	WTP / HSPS															0	\$ -	\$ -	\$ -	
11.10.4	Pipelines			10												10	\$ 1,950	\$ -	\$ 1,950	
11.10.5	Administrative Building and Operations Center															0	\$ -	\$ -	\$ -	
11.10.6	BPS & Delivery Points															0	\$ -	\$ -	\$ -	
11.10.7	Elevated Storage Tanks															0	\$ -	\$ -	\$ -	
11.10.8	Program Survey															0	\$ -	\$ -	\$ -	
	<b>Task 12 - Quality Assurance</b>																\$ 1,400	\$ -	\$ 1,400	
12.1	Review the QA/QC Plans prepared by the Consultants based on PMP															0	\$ -	\$ -	\$ -	
12.2	Perform regular coordination with all Consultants on QA/QC imp.					4										4	\$ 700	\$ -	\$ 700	
12.3	Review/Receive QA/QC documentation from Consultants					4										4	\$ 700	\$ -	\$ 700	
	<b>Task 13 - Electrical Power Planning</b>																\$ -	\$ -	\$ -	
13.1	Perform Prelim. Analyses to determine approx. demand and energy															0	\$ -	\$ -	\$ -	
13.2	Develop a strategy for cont., gathering system quality, and reliability data															0	\$ -	\$ -	\$ -	
13.3	Coordination with Electrical Service Providers to evaluate costs															0	\$ -	\$ -	\$ -	
13.4	Assist Alliance Water with negotiations on the electrical supply agr.															0	\$ -	\$ -	\$ -	
13.5	Assist Alliance Water by defining special equipment needs															0	\$ -	\$ -	\$ -	
13.6	Alliance Water and Electrical Service Providers Coord. Meetings															0	\$ -	\$ -	\$ -	
	<b>Task 14 - Permit Coordination/Tracking</b>																\$ 39,600	\$ -	\$ 39,600	
14.1	Perform regular coordination with Consultants			8												8	\$ 1,560	\$ -	\$ 1,560	
14.2	Incorporate permit updates from Consultants into master tracking list									24						24	\$ 3,600	\$ -	\$ 3,600	
14.3	Management of Permit Submittal															0	\$ -	\$ -	\$ -	
14.3.1	TCEQ	24		0						140						164	\$ 26,640	\$ -	\$ 26,640	Permit, PWS coord. For Deliv. Points, Corrosion Report
14.3.2	TxDOT – Design Consultants			24												24	\$ 4,680	\$ -	\$ 4,680	Segments C, D, and E
14.3.3	UPRR															0	\$ -	\$ -	\$ -	
14.3.4	Counties (Hays, Caldwell, Guadalupe)				8											8	\$ 1,560	\$ -	\$ 1,560	Floodplain permits (Morrison Creek, others)
14.3.5	Cities (Kyle, San Marcos, Umland, Lockhart, Maxwell, others)															0	\$ -	\$ -	\$ -	
14.3.6	Private utilities				8											8	\$ 1,560	\$ -	\$ 1,560	Segments C and D LCRA gas main
	<b>Task 15 - Procurement and Construction Phase Services</b>																\$ 165,330	\$ -	\$ 165,330	
15.1	Management and Coordination of Hydrogeology/Well Drilling															0	\$ -	\$ -	\$ -	
	Procurement Services															0	\$ -	\$ -	\$ -	
	Pre-Proposal Meeting															0	\$ -	\$ -	\$ -	
	Addenda Review															0	\$ -	\$ -	\$ -	
	Proposal Evaluation and Recommendation															0	\$ -	\$ -	\$ -	
	Committee and Board Items															0	\$ -	\$ -	\$ -	
	Execution of Contract															0	\$ -	\$ -	\$ -	
	Construction Phase Services															0	\$ -	\$ -	\$ -	
	Administration															0	\$ -	\$ -	\$ -	
	Preconstruction Meetings															0	\$ -	\$ -	\$ -	
	Monthly Construction Meetings															0	\$ -	\$ -	\$ -	
	Construction Activities															0	\$ -	\$ -	\$ -	
	Submittals															0	\$ -	\$ -	\$ -	
	Substitutions															0	\$ -	\$ -	\$ -	
	Request for Information															0	\$ -	\$ -	\$ -	
	Pay Request															0	\$ -	\$ -	\$ -	
	Defective Work															0	\$ -	\$ -	\$ -	
	Change Orders															0	\$ -	\$ -	\$ -	
	Record Drawings															0	\$ -	\$ -	\$ -	
	Commissioning															0	\$ -	\$ -	\$ -	
	Substantial Completion															0	\$ -	\$ -	\$ -	
	Final Walkthrough															0	\$ -	\$ -	\$ -	

<b>Alliance Water</b> <b>Owners Representative</b> <b>2/4/2022</b> <b>Detailed Overall CPY Group Cost Breakdown</b>	<b>Project Fee Summary</b> Total Effort      \$      636,536
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Task		Basic Services														Total Hours	Total Labor Effort	Total Expense Effort	Total Effort	Assumptions
		Project Role	Senior Tech. / Avis / Deputy Prj Mngr	Senior Instrumentation / Electrical Engineer	Senior Engineer	GIS Specialist	Civil Engineer	Senior Biologist	Instrumentation/ Electrical Engineer	CADD Operator / Senior Technician	Engineer-in- Training II	Engineer-in- Training I	Biologist	GIS Analyst	Administrative Staff / Technician					
Hourly Bill Rate		\$235.00	\$225.00	\$195.00	\$180.00	\$175.00	\$165.00	\$170.00	\$145.00	\$150.00	\$130.00	\$120.00	\$135.00	\$95.00						
	Warranty Walkthrough															0	\$ -	\$ -	\$ -	
15.2	Management and Coordination of Well Pumps and Raw Water Inf.															0	\$ -	\$ -	\$ -	
	Procurement Services															0	\$ -	\$ -	\$ -	
	Pre-Proposal Meeting															0	\$ -	\$ -	\$ -	
	Addenda Review															0	\$ -	\$ -	\$ -	
	Proposal Evaluation and Recommendation															0	\$ -	\$ -	\$ -	
	Committee and Board Items															0	\$ -	\$ -	\$ -	
	Execution of Contract															0	\$ -	\$ -	\$ -	
	Construction Phase Services															0	\$ -	\$ -	\$ -	
	Administration			8												8	\$ 1,560	\$ 1,560	\$ 1,560	
	Preconstruction Meetings															0	\$ -	\$ -	\$ -	
	Monthly Construction Meetings			12												12	\$ 2,340	\$ 2,340	\$ 2,340	
	Construction Activities															0	\$ -	\$ -	\$ -	
	Submittals	6	16	24				16		0						62	\$ 12,410	\$ 12,410	\$ 12,410	
	Substitutions															0	\$ -	\$ -	\$ -	
	Request for Information			20												20	\$ 3,900	\$ 3,900	\$ 3,900	
	Pay Request															0	\$ -	\$ -	\$ -	
	Defective Work	4		8					8							20	\$ 3,700	\$ 3,700	\$ 3,700	
	Change Orders		8	16												24	\$ 4,920	\$ 4,920	\$ 4,920	
	Record Drawings															0	\$ -	\$ -	\$ -	
	Commissioning															0	\$ -	\$ -	\$ -	
	Substantial Completion															0	\$ -	\$ -	\$ -	
	Final Walkthrough															0	\$ -	\$ -	\$ -	
	Warranty Walkthrough															0	\$ -	\$ -	\$ -	
15.3	Management and Coordination of WTP and HSPS															0	\$ -	\$ -	\$ -	
	Procurement Services															0	\$ -	\$ -	\$ -	
	Pre-Proposal Meeting															0	\$ -	\$ -	\$ -	
	Addenda Review															0	\$ -	\$ -	\$ -	
	Proposal Evaluation and Recommendation															0	\$ -	\$ -	\$ -	
	Committee and Board Items															0	\$ -	\$ -	\$ -	
	Execution of Contract															0	\$ -	\$ -	\$ -	
	Construction Phase Services															0	\$ -	\$ -	\$ -	
	Administration	6				12										18	\$ 3,510	\$ 3,510	\$ 3,510	
	Preconstruction Meetings															0	\$ -	\$ -	\$ -	
	Monthly Construction Meetings	6				12										18	\$ 3,510	\$ 3,510	\$ 3,510	
	Construction Activities															0	\$ -	\$ -	\$ -	
	Submittals	8	40			24		40								112	\$ 21,880	\$ 21,880	\$ 21,880	
	Substitutions	8				16										24	\$ 4,680	\$ 4,680	\$ 4,680	
	Request for Information	8				24										32	\$ 6,080	\$ 6,080	\$ 6,080	
	Pay Request															0	\$ -	\$ -	\$ -	
	Defective Work															0	\$ -	\$ -	\$ -	
	Change Orders	4	16			8										28	\$ 5,940	\$ 5,940	\$ 5,940	
	Record Drawings		0					0								0	\$ -	\$ -	\$ -	
	Commissioning															0	\$ -	\$ -	\$ -	
	Substantial Completion															0	\$ -	\$ -	\$ -	
	Final Walkthrough															0	\$ -	\$ -	\$ -	
	Warranty Walkthrough															0	\$ -	\$ -	\$ -	
15.4	Management and Coordination of Transmission Pipeline (5 Contracts)															0	\$ -	\$ -	\$ -	
	Procurement Services															0	\$ -	\$ -	\$ -	
	Pre-Proposal Meeting			8												8	\$ 1,560	\$ 1,560	\$ 1,560	
	Addenda Review			16												16	\$ 3,120	\$ 3,120	\$ 3,120	
	Proposal Evaluation and Recommendation			4												4	\$ 780	\$ 780	\$ 780	
	Committee and Board Items			4												4	\$ 780	\$ 780	\$ 780	
	Execution of Contract			8												8	\$ 1,560	\$ 1,560	\$ 1,560	
	Construction Phase Services															0	\$ -	\$ -	\$ -	
	Administration		16	16												32	\$ 6,720	\$ 6,720	\$ 6,720	
	Preconstruction Meetings			8												8	\$ 1,560	\$ 1,560	\$ 1,560	
	Monthly Construction Meetings			12												12	\$ 2,340	\$ 2,340	\$ 2,340	
	Construction Activities															0	\$ -	\$ -	\$ -	
	Submittals	0	80	16				20	8							124	\$ 25,720	\$ 25,720	\$ 25,720	
	Substitutions															0	\$ -	\$ -	\$ -	
	Request for Information			20	4			20								44	\$ 8,680	\$ 8,680	\$ 8,680	
	Pay Request															0	\$ -	\$ -	\$ -	
	Defective Work	0		0					0							0	\$ -	\$ -	\$ -	
	Change Orders		16	0												16	\$ 3,600	\$ 3,600	\$ 3,600	
	Record Drawings		0					0								0	\$ -	\$ -	\$ -	
	Commissioning															0	\$ -	\$ -	\$ -	
	Substantial Completion															0	\$ -	\$ -	\$ -	
	Final Walkthrough															0	\$ -	\$ -	\$ -	
	Warranty Walkthrough															0	\$ -	\$ -	\$ -	
15.5	Management and Coordination of Admin. Building and Ops. Center															0	\$ -	\$ -	\$ -	

<b>Alliance Water</b> <b>Owners Representative</b> <b>2/4/2022</b> <b>Detailed Overall CPY Group Cost Breakdown</b>	<b>Project Fee Summary</b> Total Effort      \$      636,536
--	---

Basic Services																			
Task	Project Role	Senior Tech. / Avis / Deputy Prj Mngr	Senior Instrumentation / Electrical Engineer	Senior Engineer	GIS Specialist	Civil Engineer	Senior Biologist	Instrumentati on / Electrical Engineer	CADD Operator / Senior Technician	Engineer-in- Training II	Engineer-in- Training I	Biologist	GIS Analyst	Administrativ e Staff / Technician	Total Hours	Total Labor Effort	Total Expense Effort	Total Effort	Assumptions
	Hourly Bill Rate	\$235.00	\$225.00	\$195.00	\$180.00	\$175.00	\$165.00	\$170.00	\$145.00	\$150.00	\$130.00	\$120.00	\$135.00	\$95.00					
	Procurement Services														0	\$ -		\$ -	
	Pre-Proposal Meeting														0	\$ -		\$ -	
	Addenda Review														0	\$ -		\$ -	
	Proposal Evaluation and Recommendation														0	\$ -		\$ -	
	Committee and Board Items														0	\$ -		\$ -	
	Execution of Contract														0	\$ -		\$ -	
	Construction Phase Services														0	\$ -		\$ -	
	Administration														0	\$ -		\$ -	
	Preconstruction Meetings														0	\$ -		\$ -	
	Monthly Construction Meetings														0	\$ -		\$ -	
	Construction Activities														0	\$ -		\$ -	
	Submittals														0	\$ -		\$ -	
	Substitutions														0	\$ -		\$ -	
	Request for Information														0	\$ -		\$ -	
	Pay Request														0	\$ -		\$ -	
	Defective Work														0	\$ -		\$ -	
	Change Orders														0	\$ -		\$ -	
	Record Drawings														0	\$ -		\$ -	
	Commissioning														0	\$ -		\$ -	
	Substantial Completion														0	\$ -		\$ -	
	Final Walkthrough														0	\$ -		\$ -	
	Warranty Walkthrough														0	\$ -		\$ -	
15.6	Management and Coordination of BPS & Delivery Points														0	\$ -		\$ -	
	Procurement Services														0	\$ -		\$ -	
	Pre-Proposal Meeting														0	\$ -		\$ -	
	Addenda Review														0	\$ -		\$ -	
	Proposal Evaluation and Recommendation														0	\$ -		\$ -	
	Committee and Board Items														0	\$ -		\$ -	
	Execution of Contract														0	\$ -		\$ -	
	Construction Phase Services														0	\$ -		\$ -	
	Administration		16												16	\$ 3,600		\$ 3,600	
	Preconstruction Meetings														0	\$ -		\$ -	
	Monthly Construction Meetings														0	\$ -		\$ -	
	Construction Activities														0	\$ -		\$ -	
	Submittals		80					32							112	\$ 23,440		\$ 23,440	
	Substitutions														0	\$ -		\$ -	
	Request for Information														0	\$ -		\$ -	
	Pay Request														0	\$ -		\$ -	
	Defective Work														0	\$ -		\$ -	
	Change Orders														0	\$ -		\$ -	
	Record Drawings		4					4							8	\$ 1,580		\$ 1,580	
	Commissioning														0	\$ -		\$ -	
	Substantial Completion														0	\$ -		\$ -	
	Final Walkthrough														0	\$ -		\$ -	
	Warranty Walkthrough														0	\$ -		\$ -	
15.7	Management and Coordination of Elevated Storage Tanks														0	\$ -		\$ -	
	Procurement Services														0	\$ -		\$ -	
	Pre-Proposal Meeting														0	\$ -		\$ -	
	Addenda Review		4												4	\$ 900		\$ 900	
	Proposal Evaluation and Recommendation														0	\$ -		\$ -	
	Committee and Board Items														0	\$ -		\$ -	
	Execution of Contract														0	\$ -		\$ -	
	Construction Phase Services														0	\$ -		\$ -	
	Administration														0	\$ -		\$ -	
	Preconstruction Meetings														0	\$ -		\$ -	
	Monthly Construction Meetings														0	\$ -		\$ -	
	Construction Activities														0	\$ -		\$ -	
	Submittals		16					8							24	\$ 4,960		\$ 4,960	
	Substitutions														0	\$ -		\$ -	
	Request for Information														0	\$ -		\$ -	
	Pay Request														0	\$ -		\$ -	
	Defective Work														0	\$ -		\$ -	
	Change Orders														0	\$ -		\$ -	
	Record Drawings														0	\$ -		\$ -	
	Commissioning														0	\$ -		\$ -	
	Substantial Completion		0												0	\$ -		\$ -	
	Final Walkthrough														0	\$ -		\$ -	
	Warranty Walkthrough														0	\$ -		\$ -	
15.8	Management and Coordination of Program Survey														0	\$ -		\$ -	
	Procurement Services														0	\$ -		\$ -	
	Pre-Proposal Meeting														0	\$ -		\$ -	

<b>Alliance Water</b> <b>Owners Representative</b> <b>2/4/2022</b> <b>Detailed Overall CPY Group Cost Breakdown</b>	<b>Total Effort</b>	\$	636,536
<b>Project Fee Summary</b>			

Basic Services																				
Task	Project Role	Senior Tech. / Avis / Deputy Prj Mngr	Senior Instrumentation / Electrical Engineer	Senior Engineer	GIS Specialist	Civil Engineer	Senior Biologist	Instrumentati on / Electrical Engineer	CADD Operator / Senior Technician	Engineer-in- Training II	Engineer-in- Training I	Biologist	GIS Analyst	Administrativ e Staff / Technician		Total Hours	Total Labor Effort	Total Expense Effort	Total Effort	Assumptions
	Hourly Bill Rate	\$235.00	\$225.00	\$195.00	\$180.00	\$175.00	\$165.00	\$170.00	\$145.00	\$150.00	\$130.00	\$120.00	\$135.00	\$95.00						
Addenda Review																0	\$ -		\$ -	
Proposal Evaluation and Recommendation																0	\$ -		\$ -	
Committee and Board Items																0	\$ -		\$ -	
Execution of Contract																0	\$ -		\$ -	
Construction Phase Services																0	\$ -		\$ -	
Administration																0	\$ -		\$ -	
Preconstruction Meetings																0	\$ -		\$ -	
Monthly Construction Meetings																0	\$ -		\$ -	
Construction Activities																0	\$ -		\$ -	
Submittals																0	\$ -		\$ -	
Substitutions																0	\$ -		\$ -	
Request for Information																0	\$ -		\$ -	
Pay Request																0	\$ -		\$ -	
Defective Work																0	\$ -		\$ -	
Change Orders																0	\$ -		\$ -	
Record Drawings																0	\$ -		\$ -	
Commissioning																0	\$ -		\$ -	
Substantial Completion																0	\$ -		\$ -	
Final Walkthrough																0	\$ -		\$ -	
Warranty Walkthrough																0	\$ -		\$ -	
<b>Task 16 - Project Administration</b>																				
16.1	Invoicing	4		12										24		40	\$ 5,560	\$ -	\$ 5,560	
16.2	Project Management	4		16												20	\$ 4,060		\$ 4,060	
<b>Task 17 - Other Services</b>																				
17.1	Water Quality Testing and Coordination															0	\$ -		\$ -	
17.2	TCEQ Exception Request and Interconnect Submittals															0	\$ -		\$ -	
17.3	Other design tasks as assigned by Alliance Water															0	\$ -		\$ -	
<b>Task 18 - Environmental Construction Phase Services</b>																				
18.1	Pre-Construction Meeting with Contractor						24									24	\$ 3,960		\$ 3,960	CP&Y effort
18.2	Migratory Bird Nest Survey						390				400	12				802	\$ 113,970	\$ 12,000	\$ 125,970	Hicks is shown in Expense. CPY hours for Agency Coord/Sub Mgmt.
18.3	Cultural Resources						16									16	\$ 2,640		\$ 2,640	CP&Y effort
18.4	Encountered Protected Species						24									24	\$ 3,960	\$ 18,965	\$ 22,925	Hicks is shown in Expense. CPY hours for Agency Coord/Sub Mgmt.
18.5	USACE Compliance and Reporting						40				60	24				124	\$ 17,040		\$ 17,040	CP&Y effort
18.6	Hazardous Material On-Call						12									12	\$ 1,980	\$ 18,341	\$ 20,321	Braun shown in Expense. CPY hours for sub management.
<b>Grand Total</b>																				
\$ 587,230    \$ 49,306    \$ 636,536																				



<b>Alliance Water</b> <b>Owners Representative</b> <b>2/4/2022</b> <b>Detailed Overall Grubb Cost Breakdown</b>	<b>Project Fee Summary</b>	
	<b>Total Effort</b>	\$ 25,850

Basic Services										
Task	Project Role	QA/QC / Senior Mgr / Principal	Senior Engineer	Administrative Staff / Technician		Total Hours	Total Labor Effort	Total Expense Effort	Total Effort	Assumptions
	<b>Hourly Bill Rate</b>	\$285.00	\$195.00	\$95.00						
<b>Task 13 - Electrical Power Planning</b>										
13.1	Perform Prelim. Analyses to determine approx. demand and energy	8	4	0		12	\$ 3,060	-	\$ 3,060	
13.2	Develop a strategy for cont., gathering system quality, and reliability data	4	5	0		9	\$ 2,115	-	\$ 2,115	
13.3	Coordination with Electrical Service Providers to evaluate costs	12	9	0		21	\$ 5,175	-	\$ 5,175	
13.4	Assist Alliance Water with negotiations on the electrical supply agr.	20	8	0		28	\$ 7,260	-	\$ 7,260	
13.5	Assist Alliance Water by defining special equipment needs	4	4	0		8	\$ 1,920	-	\$ 1,920	
13.6	Alliance Water and Electrical Service Providers Coord. Meetings	10	10	0		20	\$ 4,800	-	\$ 4,800	
<b>Task 16 - Project Administration</b>										
16.1	Invoicing	0	0	16		16	\$ 1,520	-	\$ 1,520	
16.2	Project Management					0	\$ -	-	\$ -	
<b>Grand Total</b>							\$ 25,850	\$ -	\$ 25,850	

<b>Alliance Water</b> <b>Owners Representative</b> <b>2/4/2022</b> <b>Detailed Overall Spitzer Cost Breakdown</b>	<b>Project Fee Summary</b>	
	<b>Total Effort</b>	\$ 399,180

Basic Services										
Task	Project Role	Property Acquisition Manager	Acquisition / Title Specialist	Document Control Specialist		Total Hours	Total Labor Effort	Total Expense Effort	Total Effort	Assumptions
	Hourly Bill Rate	\$235.00	\$140.00	\$125.00						
	<b>Task 1 - Program Management Plan Updates</b>									
1.6	Land Acquisition Protocol	5		5		10	\$ 1,800	\$ -	\$ 1,800	
	<b>Task 2 - Stakeholder Coordination</b>									
2.3	Alliance Water Executive Director coordination meetings	48				48	\$ 11,280	\$ -	\$ 11,280	
2.13	Internal Program Monthly Meetings	40				40	\$ 9,400	\$ -	\$ 9,400	
	<b>Task 3 - Budgeting</b>									
	<b>Task 4 - Schedule</b>									
	<b>Task 5 - Reporting</b>									
	<b>Task 6 - Data Management</b>									
	<b>Task 7 - Environmental Management</b>									
	<b>Task 8 - Land Acquisition Management</b>									
8.1	Perform regular coordination with Ld. Acq. Cons.	500		1,000		1,500	\$ 242,500	\$ -	\$ 242,500	
8.2	Assist with the review of Ld. Acq. Cons. monthly invoices	10		12		22	\$ 3,850	\$ -	\$ 3,850	
8.3	Continuous tracking of Land Acq. Scope of work & amendments	10				10	\$ 2,350	\$ -	\$ 2,350	
8.4	Review land acquisition data for conformance to the PMP/RAMP	24		40		64	\$ 10,640	\$ -	\$ 10,640	
8.5	Perform as-needed site visits with Ld. Acq. Cons.	5				5	\$ 1,175	\$ -	\$ 1,175	
8.6	Coordinated site visits with those identified in Task 7 and 11	5	5			10	\$ 1,875	\$ -	\$ 1,875	
8.7	Review and comment on TWDB land acquisition deliverables	5		40		45	\$ 6,175	\$ -	\$ 6,175	
8.8	Coord. with landowners to facilitate access for Consultants for field work	5	40			45	\$ 6,775	\$ -	\$ 6,775	
8.9	Assist in resolution of title issues		500	72		572	\$ 79,000	\$ -	\$ 79,000	
8.10	Weekly Mtg with Alliance Water and Special Counsel	52				52	\$ 12,220	\$ -	\$ 12,220	
8.11	Other Ld. Acq. services as identified and assigned by Alliance Water					0	\$ -	\$ -	\$ -	
8.12	Land Acq. Team progress meetings	6	6	6		18	\$ 3,000	\$ -	\$ 3,000	
	<b>Task 9 - Texas Water Development Board Management</b>									
	<b>Task 10 - Design Standards Updates</b>									
	<b>Task 11 - Engineering Design Management</b>									
	<b>Task 12 - Quality Assurance</b>									
	<b>Task 13 - Electrical Power Planning</b>									
	<b>Task 14 - Permit Coordination/Tracking</b>									
	<b>Task 15 - Procurement and Construction Phase Services</b>									
	<b>Task 16 - Project Administration</b>									
16.1	Invoicing	6		12		18	\$ 2,910	\$ -	\$ 2,910	
16.2	Project Management					0	\$ -	\$ -	\$ -	
	<b>Task 17 - Other Services</b>									
	<b>Task 18 - Environmental Construction Phase Services</b>									
						<b>Grand Total</b>	<b>\$ 399,180</b>	<b>\$ -</b>	<b>\$ 399,180</b>	

<b>Alliance Water</b>										<b>Project Fee Summary</b>		
Owners Representative 2/4/2022 Detailed Overall V&A Cost Breakdown										Total Effort	\$	18,999

Basic Services															
Task	Project Role	QA/QC / Senior Mngr / Principal	Senior Tech. Avis / Deputy Prj Mngr	Senior Engineer	Civil Engineer	CADD Operator / Senior Technician	Engineer-in-Training I	Administrative Staff / Technician		Total Hours	Total Labor Effort	Total Expense Effort	Total Effort	Assumptions	
	Hourly Bill Rate	\$285.00	\$235.00	\$195.00	\$175.00	\$145.00	\$130.00	\$95.00							
<b>Task 10 - Design Standards Updates</b>															
10.1	Development of Design Standards, Specifications, and Details									0	\$ -	\$ -	\$ -		
10.1.1	Transmission Pipelines and Delivery Points Design Stds. - Finalize									0	\$ -	\$ -	\$ -		
10.1.2	Preparation of Standard Specifications for Const. - Finalize									0	\$ -	\$ -	\$ -		
10.1.3	Preparation of Standard Details - Finalize									0	\$ -	\$ -	\$ -		
10.1.4	Pipeline Corrosion Protection Standards	2	18	20	14	4	24	4	86	\$ 15,230	\$ 174	\$ 15,404	300 miles of travel		
<b>Task 16 - Project Administration</b>															
16.1	Invoicing							10	10	\$ 950	\$ -	\$ 950			
16.2	Project Management	2	8	1					11	\$ 2,645	\$ -	\$ 2,645			
<b>Grand Total</b>										\$	18,825	\$	174	\$	18,999

**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, February 23, 2022 at 3:00 P.M.  
County Line SUD Offices, 8870 Camino Real, Kyle, TX 78640

- H.9** Consider adoption of Resolution 2022-02-23-005 approving Work Order #2 and Work Order #3 with HVJ Associates for material testing on the Booster Pump Station and Delivery Points Project and the Segment A Pipeline project. ~ *Graham Moore, P.E., Executive Director*
- 

Background/Information

The Authority entered into a Master Agreement with HVJ Associates for material testing on the Phase 1B Program after a Request for Qualifications process was followed. Work Order #1 was issued to HVJ in July 2021 for the Water Treatment Plant Project.

The Executive Director negotiated the scope and fee for the materials testing for the Booster Pump Station and the Segment A projects with HVJ. The effort was reviewed by the both the Owner’s Representative and the Construction Management and Inspection teams to help ensure that all anticipated materials testing needs are included.

Staff anticipates additional work orders with HVJ for the material testing associated with the other Phase 1B projects.

Below are some of the key facts regarding the proposal:

	<b>Work Order #2</b>	<b>Work Order #3</b>
<b>Firm:</b>	HVJ, Inc.	HVJ, Inc.
<b>Project:</b>	Booster Pump Station	Segment A
<b>Fee:</b>	\$131,259	\$730,665
<b>Work Order Type:</b>	Hourly, Not-to-Exceed	Hourly, Not-to-Exceed
<b>Duration:</b>	Thru 9/2023	Thru 6/2023
<b>Project Manager:</b>	Pat Lee	Pat Lee

Attachment(s)

- Resolution 2022-02-22-005
- ARWA Booster Pump Station Proposal dated February 8, 2022.
- ARWA Segment A Proposal dated February 8, 2022

**Board decision needed:**

- Adoption of Resolution 2022-02-23-005 approving Work Orders #2 and #3 with HVJ South Central Texas – M&J, Inc. for Materials Testing of the Booster Pump Station and Segment A projects, respectively.



**ALLIANCE WATER**

**RESOLUTION NO. 20220223-005**

**A RESOLUTION OF THE ALLIANCE REGIONAL WATER AUTHORITY BOARD OF DIRECTORS APPROVING WORK ORDER #2 AND WORK ORDER #3 BETWEEN THE AUTHORITY AND HVJ SOUTH CENTRAL TEXAS – M&J, INC. FOR MATERIAL TESTING SERVICES RELATED TO THE AUTHORITY’S PHASE 1B PROGRAM AND RELATED MATTERS, AND DECLARING AN EFFECTIVE DATE**

**RECITALS:**

1. The Alliance Regional Water Authority (the “Authority”) entered into a Master Agreement with HVJ South Central Texas – M&J, Inc. (HVJ) in July 2021 for material testing services after having conducted a request for qualifications process.
2. The Authority is in need of material testing services for both its Booster Pump Station and Delivery Points Project and the Segment A Pipeline Project.
3. The Executive Director negotiated Work Order #2 and Work Order #3 for with HVJ for the material testing necessary for the Booster Pump Station and Delivery Points Project and the Segment A Pipeline Project, respectively.
4. The work orders reference terms and conditions in the Master Agreement.

**BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE ALLIANCE REGIONAL WATER AUTHORITY:**

**SECTION 1.** The attached Work Order #2 for Material Testing Services for the Phase 1B Booster Pump Station and Delivery Points Project between the Authority and HVJ is approved.

**SECTION 2.** The attached Work Order #3 for Material Testing Services for the Phase 1B Segment A Project between the Authority and HVJ is approved.

**SECTION 3.** The Authority’s Executive Director, Graham Moore, is authorized to execute the attached Work Order #2 and Work Order #3 on behalf of the Authority.

**SECTION 4.** This Resolution shall be in full force and effect immediately upon its passage.

**ADOPTED: February 23, 2022.**

**ATTEST:**

\_\_\_\_\_  
Chris Betz  
Chair, Board of Directors

\_\_\_\_\_  
James Earp  
Secretary, Board of Directors



4201 Freidrich Lane, Suite 110

Austin, Texas 78744

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[www.hvj.com](http://www.hvj.com)

January 21, 2022 (*Revised February 8, 2022*)

Mr. Graham Moore, PE  
Executive Director  
Alliance Regional Water Authority  
630 E. Hopkins  
San Marcos, Texas 78666

Re: ARWA Phase 1B - Booster Pump Station and Delivery Points  
Construction Phase Materials Testing Proposal  
San Marcos, Texas  
HVJ Project No. AC2110020.2.

Dear Mr. Moore:

Pursuant to your request, HVJ South Central Texas – M&J, Inc. (HVJ) is pleased to submit this revised proposal to provide Owner quality assurance testing for the above referenced project. This proposal includes brief scope and fee for construction phase materials testing services following a brief review of the project documents.

### **Project Description**

It is understood the proposed Booster Pump Station consists of but is not limited to the following structures and related utility lines: yard piping, ground storage tank, pump station, electrical building, generator and transformer pads, various delivery points located at San Marcos #1 & #2, CRWA #1, #3 & #4, and associated site work.

### **Scope of Services**

The general scope of material testing services anticipated for this project is as follows.

- Soils and Base Lab/Field Testing
- Concrete Field/Lab Testing
- Welding Inspections

It is understood that materials testing services were estimated on a call-out basis, where personnel will not be present full time during performance of the work. ***However, HVJ-SCTx will work with the contractor to combine testing activities in an effort to reduce the number of site visits .***

### **Cost Estimate**

We recommend allocating a budget of **\$131,259** for construction materials testing for the proposed Phase 1B Booster Pump Station. Summary of the materials testing budget fee is shown below

## ARWA Phase 1B – Booster Pump Station and Delivery Points

AC2110020.2 (Revised)

February 8, 2022

<b>ARWA Phase 1B - Materials Testing for Booster Pump Station and Delivery Points (Field Services)</b>				
<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate</b>	<b>Total</b>
Tech Time for Soil Monitoring and Compaction Testing	hrs	504	\$84	\$42,336
Tech Time for Concrete Testing	hrs	280	\$84	\$23,520
Tech Overtime for Soils and Concrete Testing	hrs	40	\$126	\$5,040
Nuclear Gauge Charge	trip	84	\$55	\$4,620
Vehicle Charge	trip	150	\$80	\$12,000
			<b>Subtotal</b>	<b>\$87,516</b>
<b>ARWA Phase 1B - Materials Testing for Booster Pump Station and Delivery Points (Laboratory Services)</b>				
<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate</b>	<b>Total</b>
Sample Preparation	each	10	\$75	\$750
Atterberg Limits	each	20	\$75	\$1,500
Sieve Analyses	each	20	\$72	\$1,440
Proctors	each	20	\$275	\$5,500
Concrete Cylinder Compressive Strengths	each	250	\$24	\$6,000
			<b>Subtotal</b>	<b>\$15,190</b>
<b>ARWA Phase 1B - Weld Inspection for Booster Pump</b>				
<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate</b>	<b>Total</b>
Pipeline Inspector (CWI)	hour	35	115	\$4,025
Pipeline Inspector - Overtime	hour	5	172.5	\$863
Magnetic Particle Equipment	trip	5	\$125	\$625
Vehicle Charge	trip	5	\$80	\$400
Reporting - Welding Inspection	each	5	\$100	\$500
			<b>Subtotal</b>	<b>\$6,413</b>
<b>ARWA Phase 1B - Materials Testing for Booster Pump Sta &amp; Delivery Points (Project Management and Administration)</b>				
<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate</b>	<b>Total</b>
Project Manager (PM), PE	hrs	60	\$179	\$10,740
Task Leader (Deputy PM)	hrs	60	\$125	\$7,500
Administrative	hrs	60	\$65	\$3,900
			<b>Subtotal</b>	<b>\$22,140</b>
			<b>Total</b>	<b>\$131,259</b>

This estimate was prepared based on a **17 month** construction schedule. The cost estimate is based on our projections for both the construction schedule and the frequency of service requests from the Client. As the schedule and frequency of service requests are beyond our control, we cannot guarantee that the estimate provided herein will be adequate for the services needed through the entire duration of the construction of this project. We understand that advance authorization will be required if additional funds are needed to complete the testing per project specifications. HVJ will monitor the budget as the work proceeds and will keep you or your designated representative informed.

Scheduling of our personnel for this project will be at the request of you or your designated representatives. To ensure proper scheduling of the work, we require a minimum 24 hour notice (1 full business day, Monday-Friday) to provide on-call personnel.

Services will be invoiced on a unit fee basis in accordance with the attached Construction Phase Services Fee Schedule. Overtime rates of 1.5 times the regular hourly rates will be charged for time

ARWA Phase 1B – Booster Pump Station and Delivery Points

AC2110020.2 (Revised)

February 8, 2022

worked over 8 hours per day, hours worked before 6:00 AM or after 6:00 PM Monday through Friday, and all hours worked on Saturdays, Sundays and holidays.

**Limitations**

Our work will be performed in a manner consistent with that level of care and skill ordinarily exercised by other members of HVJ's profession practicing in the same locality, under similar conditions and on the date the services are provided. Our conclusions, opinions and recommendations will be based on a limited number of observations and data. It is possible that conditions could vary between or

beyond the data evaluated. HVJ makes no guarantee or warranty, express or implied, regarding the services, communication (oral or written), report, opinion, or instrument of service provided.

This proposal was prepared specifically for the client and its designated representatives and may not be provided to others without HVJ's expressed permission.

HVJ Associates® is pleased to submit this revised proposal for the proposed improvements. Should you have any questions regarding the contents of this proposal, please contact us at 512-447-9081.

Sincerely,

**HVJ South Central Texas – M&J, Inc.**

TBPE F-18091



Syed Jafar, P.E.  
Executive Vice President

Enclosures:

Attachment A: Standard Fee Schedule (4 pages)



**HVJ SOUTH CENTRAL TEXAS  
CONSTRUCTION MATERIALS ENGINEERING AND TESTING SERVICES  
STANDARD FEE SCHEDULE**

Attachment A

**ALLIANCE REGIONAL WATER AUTHORITY MASTER FEE  
SCHEDULE**

CODE	DESCRIPTION	HOURLY RATES
1	Project Manager (PE)	\$ 179.00
2	Sr. Project Engineer(PE)	\$ 179.00
3	Project Engineer (PE)	\$ 150.00
4	Staff Engineer (EIT)	\$ 125.00
5	Certified Engineering Technician	\$ 84.00
6	Welding Inspector (CWI)	\$ 115.00
7	NDT Inspector (ASNT Level II)	\$ 125.00
8	NDT Inspector (ASNT Level III)	\$ 145.00
9	NACE Inspector Level I Coatings Inspector	\$ 115.00
10	Administrative	\$ 65.00
11	Vehicle Charge (per trip)	\$ 80.00
12	Nuclear Gauge (per trip)	\$ 55.00
13	Traffic Control	Cost + 10%

**MATERIAL TESTING**

**UNIT PRICE**

**100 Concrete Aggregates:**

101	Screen or Sieve Analysis (ASTM C-136 or Tex-110)	\$ 72.00
102	Specific Gravity (ASTM C-127 or C128)	\$ 51.00
103	Unit Weight (ASTM C-29)	\$ 45.00
104	Absorption (ASTM C-127 or C-128)	\$ 44.00
105	Finer than 200 Mesh (ASTM C-117)	\$ 49.00
106	Organic Impurities (ASTM C-40)	\$ 45.00
107	Scratch Hardness (ASTM C-851)	\$ 45.00
108	Abrasion Tests (ASTM C-131 or C-535)	\$ 215.00
109	Clay Lumps (ASTM C-142)	\$ 55.00
110	Light Weight Pieces (ASTM C-123)	\$ 61.00
111	Sand Equivalent (ASTM D-2419)	\$ 65.00
112	Sodium/Magnesium Sulfate Soundness (5 Cycles)	\$ 390.00
113	Sodium/Magnesium Sulfate Soundness Additional Cycles	\$ 175.00
114	Petrographic Examination of Concrete Aggregates (ASTM C-295)	By Quotation

**200 Concrete Mix Design Inspection and Testing**

201	Mix Design Review (using previously determined aggregate properties and other design factors) Excluding Test Costs	\$ 179.00
202	Trial Batch Tests (ASTM C-192) (Using aggregate admixtures and cement proposed for use in the project) each batch or each curve point	\$ 450.00
203	Cylinders (ASTM C-39) test or hold, each	\$ 24.00
204	Beam Test (ASTM C-78, C-293) or Hold, Each	\$ 55.00

**HVJ SOUTH CENTRAL TEXAS  
CONSTRUCTION MATERIALS ENGINEERING AND TESTING SERVICES  
STANDARD FEE SCHEDULE**

Attachment A

CODE	DESCRIPTION	UNIT PRICE
205	Concrete Coring (4" Dia Up to 6" Thickness) ASTM C-42 includes Personnel, Vehicle and Patching Holes	\$ 90.00
206	Measuring Thickness of Concrete Cores (ASTM C-174)	\$ 22.00
207	Additional Thickness (6" to 12")/ (Inch)	\$ 8.00
208	Additional Thickness (Over 12")/ (Inch)	\$ 10.00
209	Concrete Coring, Minimum Charge (Min. 3 Cores)/ (LS)	\$ 290.00
210	Preparation of Cores, Capping & Test (ASTM C42, C-39)	\$ 67.00
211	Cement Compressive Strength, one age (ASTM C-109)/(Set)	\$ 120.00
212	Cement Compressive Strength, two age (ASTM C-109)/ (Set)	\$ 127.00
213	Mortar/Grout Compressive Strength Cubes (ASTM C-109)	\$ 27.00
214	Mortar/Grout Compressive Strength 3" x 6" (ASTM C-495)	\$ 24.00
215	Mortar/Grout Compressive Strength Grout Prisms (ASTM C-1019)	\$ 55.00
216	Structural Coring	By Quotation
217	Windsor Probes (ASTM C-803)	\$ 79.00
218	Bar Linear Shrinkage/ (Set)	\$ 282.00
219	Unit Weight of Lightweight Cylinders/ (Set)	\$ 70.00
220	Split Tensile Strength including preparation (ASTM C-496)	\$ 94.00
221	Petrographic Examination of Hardened Concrete (ASTM C-856)	By Quotation
222	Concrete Shrinkage Test (ASTM C-157, C-490)/ (Test)	\$ 138.00

**800 Asphalt Concrete Mix Design & Inspection**

801	Mix Design Review (using previously determined aggregates properties and other design factors) Excluding Test Costs	\$ 187.00
802	Trial Batch Test (up to 5 curve points)	\$ 1,403.00
803	Additional Curve Points for item 802, Per Point	\$ 202.00
804	Extraction & Gradation Test (ASTM D-2172, ASTM C-136 or TEX - 210F)	\$ 174.00
805	Specific Gravity (ASTM D-2041 TEX 201F)	\$ 75.00
806	Stability: Hveem (3 Per Set) (ASTM D-1559)	\$ 125.00
807	Bulk Density of Lab Molded or Field Specimen (Core), (TEX - 207F)/(Set)	\$ 75.00
808	Molding Specimens (3 Per Set) for 806 & 807 (ASTM D-1560, TEX-208F)/(Set)	\$ 125.00
809	Penetration (ASTM D-5)	\$ 74.00
810	Ductility (ASTM D-113)	\$ 99.00
811	Viscosity (ASTM D-2170)	\$ 82.00
812	Asphalt Coring (4" Dia Up to 6" Thickness) includes Personnel, Vehicles and Patching Holes	\$ 80.00
813	Asphalt Coring Minimum Charge/ (LS)	\$ 290.00
814	Additional Thickness over 6"/ (Inch)	\$ 7.00

**HVJ SOUTH CENTRAL TEXAS  
CONSTRUCTION MATERIALS ENGINEERING AND TESTING SERVICES  
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816	Measuring Thickness of Asphalt Cores	\$ 8.00
817	Maximum Theoretical Specific Gravity (TEX 227F)	\$ 115.00
818	Hot Mix In-Place Asphalt Design	\$ 1,870.00
819	Apparent Specific Gravity (TEX 227F)	\$ 58.00
820	Moisture Susceptibility Test (TEX 531C)	\$ 409.00
821	PMA Extraction/Gradation (ASTM D-2172)	\$ 234.00
822	PMA Extraction/Gradation by Ignition (ASTM D-2928)	\$ 145.00

**1000 Soils Tests:**

	Liquid and Plastic Limits: (Atterberg Limits) (ASTM D-4318, Tex 104E, 105E, 106E)	
1001		\$ 75.00
1002	Moisture Content Only (ASTM D-2216)	\$ 15.00
1003	Mechanical Sieve Analysis, Through #200 Sieve (ASTM D-422)	\$ 72.00
1004	Percent Passing #200 Sieve (ASTM D-1120)	\$ 65.00
1005	Specific Gravity (ASTM D-854 & D-204)	\$ 51.00
1006	OMD Standard Compaction (ASTM D-698, Tex-114E)	\$ 275.00
1007	OMD Modified Compaction (ASTM D-1557, Tex-113E)	\$ 275.00
1008	OMD Lime or Cement Stabilized Soil (ASTM D-698, D-558, D-1557, Tex121E)	\$ 275.00
1009	California Bearing Ratio (ASTM D-1883)	\$ 185.00
1010	Percent Solids in Lime Slurry / (Test)	\$ 37.00
1011	Four Point Lime Content Recommendation Series (Pl)/(Set)	\$ 250.00
1012	Cement Content of Freshly Mixed CSS Mixture (ASTM D-806)	\$ 269.00
1014	Comp. Strength of CSS Sample, Including Molding (ASTM D-1632 & D-1633)	\$ 61.00
1015	Maximum & Minimum Density (Sands) (ASTM D-4254)/ (Test)	\$ 275.00
1016	Density and Moisture of Soil Sample	\$ 19.00
1017	Unconfined Compression (ASTM D-2166)	\$ 39.00
1018	Unconsolidated Undrained (ASTM D-2850)	\$ 54.00
1019	Consolidation (One cycle) (ASTM D-2435)	\$ 310.00
1020	Consolidation - Additional Increments	\$ 44.00
1021	Ph of Soil (ASTM D-4972)	\$ 45.00
1022	Optimum Lime Content Ph Method	\$ 225.00
1023	Sieve Analysis - Base Materials (ASTM C-136)	\$ 85.00
1024	Compressive Strength of Cement Stabilized Base Materials, (TEX-120E, ASTM D-2166)	\$ 275.00
1025	Soil Shrinkage Factor (ASTM D-427)	\$ 54.00
1026	One Dimensional Swell Cohesive Soils	\$ 251.00
1027	Triaxial Testing	By Quotation

**HVJ SOUTH CENTRAL TEXAS  
CONSTRUCTION MATERIALS ENGINEERING AND TESTING SERVICES  
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1028	Permeability Test, Constant Head Method (ASTM D-2434)	\$	225.00
1029	Pinhole Test	\$	246.00
1030	Crumb Test (ASTM D-4647)	\$	33.00
1031	Double Hydrometer (ASTM D-4221)	\$	152.00
1032	Free Swell (FHA)	\$	75.00
1033	Soil Suction - Filter Paper Method	\$	49.00

**1300 Reimbursable Expenses:**

1301	Reimb Expenses Including Outside Testing, Equipment and Supplies		Cost + 10%
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**General Notes**

\*Services on an hourly basis will be invoiced based on unit rates presented above. Overtime rates of 1.5 times the regular hourly rates will be charged for time worked over 8 hours or before 6:00 AM or after 6:00 PM on Monday through Friday, and all hours worked on Saturdays, Sundays, or holidays.

\*A minimum charge of four (4) hours applies to time worked less than four hours in any service call. HVJ, when possible will combine inspection and testing activities to minimize trip charges and labor expenses.

\*Services will be invoiced from portal to portal including on-site time.



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January 21, 2022 (*Revised February 8, 2022*)

Mr. Graham Moore, PE  
Executive Director  
Alliance Regional Water Authority  
630 E. Hopkins  
San Marcos, Texas 78666

Re: ARWA Phase 1B – Pipeline Segment A  
Construction Phase Materials Engineering and Testing Proposal  
San Marcos, Texas  
HVJ Project No. AC2110020.3

Dear Mr. Moore:

Pursuant to your request, HVJ South Central Texas – M&J, Inc. (HVJ) is pleased to submit this proposal to provide Owner quality assurance testing for the above referenced project. This proposal reflects brief scope and fee for construction phase materials engineering and testing services following a brief review of project documents.

### **Project Description**

It is understood that the project includes complete construction of approximately 89,000 LF of 42-/48-inch water line and appurtenances. We understand that the treated Pipeline Segment A begins at the future ARWA Water Treatment Plant near SH-304 and Wolf Run Rd (CR 156). The project continues west crossing multiple county roads, state highways, and Plum Creek. The project includes a connection to a future Lockhart Delivery Point and terminates near FM 1322, where Segment B begins. Project also includes approximately 1,500 LF of trenchless construction, including the crossing of Plum Creek.

### **Scope of Services**

The general scope of material testing and inspection services anticipated for this project is as follows.

- Soils, Base, Concrete and Grout Lab/Field Testing
- Steel Pipe – Weld Inspection & Testing

It is understood that materials testing and observations services were estimated on a call-out basis, where personnel will not be present full time during performance of the work unless requested to be present. ***However, where possible, HVJ-SCTx will work with the CM team to combine testing and inspection activities in an attempt to reduce the number of site visits needed.***

### **Cost Estimate**

We recommend allocating a budget of **\$730,665** for construction materials testing and inspection for the proposed Phase 1B Pipeline Segment A. Summary of the materials testing and inspection budget fee is shown below.

<b>ARWA - Phase 1B Treated Pipeline Segment A - Materials Testing (Field Services - soils, concrete/grout)</b>				
<i>Description</i>	<i>Unit</i>	<i>Quantity</i>	<i>Rate</i>	<i>Total</i>
Tech Time - Soil Compaction, Concrete/Grout Testing	hour	2647	\$84	\$222,348
Overtime - Soil Compaction, Concrete/Grout Testing	hour	139	\$126	\$17,514
Nuclear Gauge	trip	398	\$55	\$21,890
Vehicle Charge	trip	398	\$80	\$31,840
			<b>Subtotal</b>	<b>\$293,592</b>
<b>ARWA - Phase 1B Treated Pipeline Segment A - Materials Testing (Lab Services - soils, aggregates &amp; concrete/grout)</b>				
<i>Description</i>	<i>Unit</i>	<i>Quantity</i>	<i>Rate</i>	<i>Total</i>
Soil/Base Sample Preparation	each	45	\$75	\$3,375
Atterberg Limits	each	45	\$75	\$3,375
Sieve Analysis (soils)	each	45	\$72	\$3,240
Proctors	each	45	\$275	\$12,375
Sieve Analysis (bedding & rip rap)	each	20	\$95	\$1,900
Resistivity Test (soils)	each	20	\$125	\$2,500
Concrete & Grout Cylinder Compressive Strength	each	900	\$24	\$21,600
			<b>Subtotal</b>	<b>\$48,365</b>
<b>ARWA - Phase 1B Treated Pipeline Segment A - Weld Inspection</b>				
<i>Description</i>	<i>Unit</i>	<i>Quantity</i>	<i>Rate</i>	<i>Total</i>
Pipeline Inspector (CWI)	hour	1272	115	\$146,280
Pipeline Inspector - Overtime	hour	465	172.5	\$80,213
Magnetic Particle Equipment	trip	155	\$125	\$19,375
Vehicle Charge	trip	159	\$80	\$12,720
Reporting - Welding Inspection	each	159	\$100	\$15,900
			<b>Subtotal</b>	<b>\$274,488</b>
<b>ARWA - Phase 1B Treated Pipeline Segment A - Project Administration</b>				
<i>Description</i>	<i>Unit</i>	<i>Quantity</i>	<i>Rate</i>	<i>Total</i>
Project Manager, PE	hour	280	\$179	\$50,120
Task Leader (Deputy Project Manager)	hour	315	\$125	\$39,375
Admin	hour	315	\$65	\$20,475
			<b>Subtotal</b>	<b>\$109,970</b>
<b>ARWA - Phase 1B Treated Pipeline Segment A - Other Direct Expenses</b>				
<i>Description</i>	<i>Unit</i>	<i>Quantity</i>	<i>Rate</i>	<i>Total</i>
Air Quality Meter	each	3	\$1,000	\$3,000
Extension Cord	feet	500	\$2.50	\$1,250
Other Reimbursable Expenses (cost + 10%)	-	-	-	-
			<b>Subtotal</b>	<b>\$4,250</b>
			<b>Total</b>	<b>\$730,665</b>

## **Assumptions**

The following assumptions were used in the preparation of this proposal:

- For soils and concrete/grout testing, 320 days for one tech and 78 days for second tech at 7 hrs/day are assumed.
- For welding inspections, 105 days for one inspector and 50 days for second inspector at 11 hrs/day are assumed.
- Inspection of O Ring Connections will be performed by others.
- Field inspection of mortar lining and polyurethane coating is not included in this scope. The CWIs will be certified to measure polyurethane coating thickness of field repairs. When scheduled the previous day, the CWIs will perform thickness measurements of polyurethane coating and the only extra fees will be for equipment and reporting.
- 100% visual and 100% testing is assumed for field welds.
- All welds will be tested using the Magnetic Particle method.
- Retest and reinspection costs are not included in the estimate. We will reinspect/retest inside the daily fee as long as it doesn't cause the need to add more service days. As requested, reinspection/retest costs will be separated on invoices to ARWA.
- 1 business day advance notice will be required to schedule services.

This estimate was prepared based on a **12 month** pipe installation schedule. The cost estimate is based on our projections for both the construction schedule and the frequency of service requests from the Client. As the schedule and frequency of service requests are beyond our control, we cannot guarantee that the estimate provided herein will be adequate for the services needed through the entire duration of the construction of this project. We understand that advance authorization will be required if additional funds are needed to complete the testing per project specifications. HVJ will monitor the budget as the work proceeds and will keep you or your designated representative informed.

Scheduling of our personnel for this project will be at the request of you or your designated representatives. To ensure proper scheduling of the work, we require a minimum 24 hour notice (1 full business day, Monday-Friday) to provide on-call personnel.

Services will be invoiced on a unit fee basis in accordance with the attached Construction Phase Services Fee Schedule. Overtime rates of 1.5 times the regular hourly rates will be charged for time worked over 8 hours per day, hours worked before 6:00 AM or after 6:00 PM Monday through Friday, and all hours worked on Saturdays, Sundays and holidays.

## **Limitations**

Our work will be performed in a manner consistent with that level of care and skill ordinarily exercised by other members of HVJ's profession practicing in the same locality, under similar conditions and on the date the services are provided. Our conclusions, opinions and recommendations will be based on a limited number of observations and data. It is possible that conditions could vary between or beyond the data evaluated. HVJ makes no guarantee or warranty, express or implied, regarding the services, communication (oral or written), report, opinion, or instrument of service provided.

This proposal was prepared specifically for the client and its designated representatives and may not be provided to others without HVJ's expressed permission.

ARWA Phase 1B – Pipeline Segment A  
AC2110020.3 (Revised)  
February 8, 2022

HVJ Associates® is pleased to submit this revised proposal for the proposed improvements. Should you have any questions regarding the contents of this proposal, please contact us at 512-447-9081.

Sincerely,

**HVJ South Central Texas – M&J, Inc.**  
TBPE F-18091

A handwritten signature in blue ink, appearing to read 'Syed Jafar', with a long horizontal flourish extending to the right.

Syed Jafar, P.E.  
Executive Vice President

Enclosures:

Attachment A: Standard Fee Schedule (4 pages)



**HVJ SOUTH CENTRAL TEXAS  
CONSTRUCTION MATERIALS ENGINEERING AND TESTING SERVICES  
STANDARD FEE SCHEDULE**

Attachment A

**ALLIANCE REGIONAL WATER AUTHORITY MASTER FEE  
SCHEDULE**

CODE	DESCRIPTION	HOURLY RATES
1	Project Manager (PE)	\$ 179.00
2	Sr. Project Engineer(PE)	\$ 179.00
3	Project Engineer (PE)	\$ 150.00
4	Staff Engineer (EIT)	\$ 125.00
5	Certified Engineering Technician	\$ 84.00
6	Welding Inspector (CWI)	\$ 115.00
7	NDT Inspector (ASNT Level II)	\$ 125.00
8	NDT Inspector (ASNT Level III)	\$ 145.00
9	NACE Inspector Level I Coatings Inspector	\$ 115.00
10	Administrative	\$ 65.00
11	Vehicle Charge (per trip)	\$ 80.00
12	Nuclear Gauge (per trip)	\$ 55.00
13	Magnetic Particle Equipment (per trip)	\$ 125.00
14	Traffic Control	Cost + 10%

**MATERIAL TESTING**

**UNIT PRICE**

**100 Concrete Aggregates:**

101	Screen or Sieve Analysis (ASTM C-136 or Tex-110)	\$ 72.00
102	Specific Gravity (ASTM C-127 or C128)	\$ 51.00
103	Unit Weight (ASTM C-29)	\$ 45.00
104	Absorption (ASTM C-127 or C-128)	\$ 44.00
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1301	Reimb Expenses Including Outside Testing, Equipment and Supplies		Cost + 10%
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**General Notes**

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**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, February 23, 2022 at 3:00 P.M.  
County Line SUD Offices, 8870 Camino Real, Kyle, TX 78640

**H.10** Consider adoption of Resolution 2022-02-23-006 approving the process for mediation on land acquisition efforts. ~ *Graham Moore, P.E., Executive Director*

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Background/Information

The Board provided some general direction to Staff as to how it wished to handle mediation for land acquisition efforts at the last meeting. Attached is a resolution to formalize the process, which includes the following key elements:

1. Preference for virtual mediation over in-person.
2. Minimum of two Board members participating along with the Executive Director.
3. The allowable parameters for settlement will be provided as direction by the full Board of Directors as part of discussions that occur during Executive Session.

Staff is seeking approval of the resolution to codify this process. The first mediation is scheduled for March 2<sup>nd</sup> and the two Board members have already been identified.

**Board decision needed:**

- Possible adoption of Resolution 2022-02-23-006 approving the process for mediation utilized on land acquisition efforts for the Phase 1B Program.



## ALLIANCE WATER

### RESOLUTION NO. 20220223-006

**A RESOLUTION OF THE ALLIANCE REGIONAL WATER AUTHORITY BOARD OF DIRECTORS APPROVING THE PROCESS FOR MEDIATION UTILIZED ON LAND ACQUISITION EFFORTS RELATED TO THE AUTHORITY'S PHASE 1B PROGRAM AND RELATED MATTERS, AND DECLARING AN EFFECTIVE DATE**

**RECITALS:**

1. The Alliance Regional Water Authority (the "Authority") is in the process of acquiring easements from landowners for its Phase 1B Program. In some cases the landowners prefer to enter into mediation to resolve any details of the easement, including its value.

2. The Authority has determined that it is typically more efficient to enter into formal mediation with the landowners than to continue forward through litigation in a court of law to resolve any details of the easement.

3. The Authority Board of Directors desires to have mediations occur virtually as opposed to in-person, whenever possible.

4. The Authority Board of Directors further desires to have at least two of its members, along with the Executive Director, to participate in any mediation along with the Authority's legal counsel and/or special legal counsel.

5. When the Executive Director is made aware of a scheduled mediation, the Executive Director is to e-mail the entire Board of Directors to ask for volunteers to participate in the mediation. The Executive Director will then coordinate the details of the meeting with the Directors selected to participate in the mediation.

6. The delegated Directors and Executive Director shall have the authority to settle the mediation disputes based on direction from the Board on allowable parameters.

**BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE ALLIANCE REGIONAL WATER AUTHORITY:**

**SECTION 1.** The mediation process noted above is approved by the Board of Directors for acquisition of easements related to the Phase 1B Program.

**SECTION 4.** This Resolution shall be in full force and effect immediately upon its passage.

Resolution 20220223-006  
Mediation Process

**ADOPTED: February 23, 2022.**

**ATTEST:**

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Chris Betz  
Chair, Board of Directors

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James Earp  
Secretary, Board of Directors

**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, February 23, 2022 at 3:00 P.M.  
County Line SUD Offices, 8870 Camino Real, Kyle, TX 78640

- I. BOARD MEMBER ITEMS OR FUTURE AGENDA ITEMS – Possible acknowledgement by Board 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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Background/Information

The Board 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 Board of Directors**

**BOARD MEMBER PACKETS**

Wednesday, February 23, 2022 at 3:00 P.M.  
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- J.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*
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**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

**BOARD MEMBER PACKETS**  
Wednesday, February 23, 2022 at 3:00 P.M.  
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**J.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*
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**REGULAR MEETING**  
**Alliance Regional Water Authority Board of Directors**

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**K. ADJOURNMENT**

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