City of Tampa Addendum

ADDENDUM 4

DATE: October 26, 2026

Contract: 26-C-00029 Howard F. Curren AWTP Aquifer Recharge Wells Construction

Bidders on the above referenced project are hereby notified that the following addendum is made to the Contract Documents. BIDS TO BE SUBMITTED SHALL CONFORM THIS NOTICE.

Item 1: Replace proposal pages P-3 thru P-18 with the attached P-3R thru P-18R.

Item 2: Responses to Requests for Information (RFIs)

Question 1: Proposal Bid Form Table 02674-1 - Bid items I-25.a, II-23.a, II-57.a, II-91.a and II-125.a (MW 23-inch ream to 200 ft) carry 150 ft. Bid items I-4.a, II-4.a, II-38.a, II-72.a and II-106.a (RW 47-inch ream to 200 ft) carry 200 ft. Both wells have a pit casing of about 50 ft (Table 02674-1). Please confirm the correct estimated quantity for each, and whether the pit casing interval is included in the reaming footage.

Response: The pit casing depth is not included in the reaming footage for the next casing. Per the casing specification, the pit casing depth is at the discretion of the Drilling Contractor, subject to the Contract Documents. As such, the estimated bid quantities for Bid items I-4.a, II-4.a, II-38.a, II-72.a and II-106.a (RW 47-inch ream to 200 ft) will remain as shown in the Bid Form (200 feet). The estimated bid quantities for Bid Items I-25.a, II-23.a, II-57.a, II-91.a and II-125.a (MW 23-inch ream to 200 ft) will be changed to 200 linear feet. Payment will be based on the actual linear feet of borehole reamed below the pit casing. Replace proposal pages P-3 through P-18 with the attached Unit Price Bid Proposal pages 1-10

Question 2: Bid Form - The original Proposal's total was "Total Bid – PHASE I, PHASE II, and PHASE III w/ Contingency." The Addendum 2 Bid Form (page 14 of 14) calls Phase III an "[Add Alternate]," and its total is "Total Bid – Sum of PHASE I, PHASE II, AND CONTINGENCY." Please confirm whether the Phase III add alternate is to be included in the Total Bid price.

Response: Phase III (Well Acidization) shall be included in the Total Bid used for bid evaluation. The attached Unit Price Bid Proposal pages 1-10 have been revised to reflect this change.

Question 3: Contract Items

- Contract Item I-1 (page C-1) limits I-1 to 30% of "the total value of Phase I."
- Contract Item I-22 (page C-8) limits I-22 to 20% of "the total value of Phase I MW-1."
- Contract Items II-1, II-35, II-69 and II-103 (page C-13) limit only "Bid Item II-1" to 30% of "the total value of Phase II."
- Contract Items II-20, II-54, II-88 and II-122 (page C-19) limit "Bid Item I-22" to 20% of "the total value of Phase II MW-2."
  Please clarify the limit for each mobilization item. Specifically:

(a) Is the I-1 limit based on RW-1 only or on all of Phase I?

Response: The mobilization and demobilization amount for Bid Item I-1 shall not exceed 30% of the total bid amount for RW-1, excluding the associated monitor well.

(b) Does the 30% limit apply to each of II-1, II-35, II-69 and II-103, and on what value is it based?

Response: The 30% limitation applies individually to Bid Items II-1, II-35, II-69, and II-103. Each limitation is calculated using the total bid amount for the corresponding recharge well (RW-2, RW-3, RW-4, and RW-5).

(c) Please confirm the correct item reference and basis for the Phase II MW mobilization items.

Response: The mobilization and demobilization amount for each monitor well shall not exceed 20% of the total bid amount for the corresponding monitor well. Replace Contract Item I-1, Contract Item II-1, II-35, II-69, II-103, Contract Item II-20, II-54, II-88, II-122 with the following Contract Items:

- CONTRACT ITEM I-1: MOBILIZATION AND DEMOBILIZATION
  Description: The CONTRACTOR shall furnish all labor, materials, equipment and services to perform those operations necessary for the movement of personnel, equipment, supplies and incidentals to the project site. Includes all work as specified in Section 01505 Mobilization/Demobilization and Site Work and Section 01500 Construction Facilities and Temporary Controls. Includes installation and subsequent removal of the drilling containment pad, pad monitoring wells, and temporary facilities, as well as sampling of the pad monitoring wells in accordance with Section 02311 Water Quality Sampling and Testing. The costs of any bonds, maintenance of traffic, temporary utilities required for the work, and other pre-construction expenses necessary for the start of the Work is included under this Contract Item. The cost of all other work as shown, specified, directed or required for the expressed intent of the project that is not specifically included under other Contract Items shall also be included under this

Contract Item. The value of Bid Item I-1 shall not exceed 30 percent of the total value of Phase I RW-1.

Measurement and Payment for Mobilization: Shall be made at the Contract Lump Sum Bid Price.

- CONTRACT ITEM II-1, II-35, II-69, II-103: MOBILIZATION
  Description: The CONTRACTOR shall furnish all labor, materials, equipment and services to perform those operations necessary for the movement of personnel, equipment, supplies and incidentals to the next well site. Includes all work as specified in Section 01505 Mobilization/Demobilization and Site Work and Section 01500 Construction Facilities and Temporary Controls. Includes installation and plugging and abandonment of pad monitoring wells and sampling of pad wells as specified in Section 02311 Water Quality Sampling and Testing. The costs of any bonds, maintenance of traffic and other pre-construction expenses necessary for the start of the Work is included under this Contract Item. The cost of all other work as shown, specified, directed or required for the expressed intent of the project that is not specifically included under other Contract Items shall also be included under this Contract Item. The value of Bid Item II-1, II-35, II-69, II-103shall not exceed 30 percent of the total value of the corresponding recharge well under Phase II.

  Measurement and Payment for Mobilization: Shall be made at the Contract Lump Sum Bid Price in accordance with the Bid Proposal.

- CONTRACT ITEM II-20, II-54, II-88, II-122: MOBILIZATION AND DEMOBILIZATION
  Description: The CONTRACTO R shall furnish all labor, materials, equipment and services to perform those operations necessary for the movement of personnel, equipment, supplies and incidentals to the project site. Includes all work as specified in Section 01505 Mobilization/Demobilization and Site Work and Section 01500 Construction Facilities and Temporary Controls. Includes installation and plugging and abandonment of pad monitoring wells and sampling of pad wells as specified in Section 02311 Water Quality Sampling and Testing. The costs of any bonds, maintenance of traffic and other pre-construction expenses necessary for the start of the Work in Included under this Contract Item. The cost of all other work as shown, specified, directed or required for the expressed intent of the project that is not specifically included under other Contract Items shall also be included under this Contract Item. The value of Bid Item II-20, II-54, II-88, II-122 shall not exceed 20 percent of the total value of the corresponding recharge well under Phase II MW-2.

Measurement and Payment for Mobilization: Shall be made at the Contract Lump Sum Bid Price in accordance with the Bid Proposal.

Question 4: Section 02674, 2.02, B - This reference requires surface and intermediate casings to be "seamless, electric resistance welded, or double submerged arc welded with one longitudinal seam, and shall conform to the latest revision of ASTM A139, Grade B." Will spiral-weld ASTM A139 Grade B casing be acceptable for the surface and intermediate casings, as is commonly used for these strings?

Response: Spiral-weld ASTM A139 Grade B casing is acceptable for the 42-inch diameter surface casing on the RW wells. The 34-inch diameter intermediate casing (RW) and the 16-inch diameter steel casing for the monitor wells shall conform with the specifications in Section 02674.

Question 5: Section 02686, 1.01, B - This reference defines downtime as time "during which drilling could occur but does not... or CONTRACTOR elects not to drill." It then lists, as items 3 and 4, the time for the ENGINEER to review data and the time for the ENGINEER to generate and submit FDEP approvals. During those periods the Contractor can't proceed until the approval has been prepared, submitted and granted, which doesn't fit the definition. Will the City reclassify items 1.01.B.3 and 1.01.B.4 as standby time?

Response: The definition will not change. Items 3 and 4 will remain in the Downtime definition. As with all UIC permitted projects, reviewing and compiling data for FDEP approval is intrinsic to the drilling and testing process and should be accounted for in the Contractor's bid pricing.

Question 6: Extra Work & Force Account Markup - Section 02686, 1.01.C defines extra work as work "not specifically addressed" in the Contract Documents, and Agreement Article 10.01 says actual quantities may exceed those in the Proposal. Please confirm:
(a) Is work that exceeds an estimated bid quantity paid at the bid unit price, or is it handled as extra work under Article 7.02?

Response: Defined work that exceeds estimated bid quantities will be paid at the applicable unit price.

(b) Article 7.02(c)(1) allows a 25% markup on labor, but Article 7.02(c)(2) and (3) allow no markup on materials or equipment. Will the City revise Article 7.02 to allow a 25% markup on materials and equipment, consistent with the labor markup?

Response: The allowable markup for labor shall be as specified in the Agreement. No additional markup will be permitted for materials or equipment.

Question 7: Insurance - INS-1, Paragraph A requires, for agreements over $2M, “a general aggregate limit that equals or exceeds the Agreement’s value.” With an estimate of $32M and a contract value that could exceed $30M, General Liability coverage equal to the contract value is unreasonable and commercially unattainable for this type of work. Will the City accept General Liability of $1M per occurrence and $2M aggregate, together with a $10M Excess/Umbrella policy (INS-1, Paragraph D), as meeting the insurance requirements for this contract?

Response: No change to this requirement has been authorized.

Question 8: Bid Submission - Please confirm how many copies of the bid package are required to be turned in.

Response: One

Question 9: SLBE Goal - The DMI-90 sets an 11.4% SLBE goal, and DMI-50 includes a checkbox for “SLBE participation Goal is Not Fully Achieved.” Much of this work is specialized deep well drilling and testing that is typically self-performed. Please confirm that a bidder who submits complete DMI-10, DMI-20 and DMI-50 forms with documented good faith efforts, but doesn’t meet the 11.4% goal, will not be considered non-responsive or disqualified for that reason.

Response: Evidence of good-faith efforts and solicitation of the firms on the “contact list” may suffice.

Question 10: Instructions to Bidders I-1.07 - This reference states award may be made “on the basis of the total bid, base bid, alternate(s)... or any combination thereof,” and that “the City may, at its option, award to more than one bidder.” Is it the City’s intention to award the entire project (Phases I and II) to a single contractor who is the lowest responsive bidder?

Response: The City intent is to award to a single contractor.

Question 11: Instructions to Bidders I-1.14 (Article 11.07) - This reference sets the indemnification limit at “One Million Dollars or a sum equal to the total Contract price,

whichever shall be the greater." On a contract that could approach $30M, that number is excessive. Will the City consider limiting indemnification to $1,000,000?

Response: The City does not consider that limitation.

Question 12: Work Hours - Section 01010, 1.01.F says a 24-hour, 7-day schedule (excluding holidays) "will be permitted and is anticipated to be necessary." However: General Provisions G-10.04 prohibits work between 7:00 p.m. and 7:00 a.m. and on Sundays without the Engineer's written permission; Agreement Article 3.02 prohibits Sunday, holiday and after-hours work without the Engineer's express permission; and SP-1 says the General and Specific Provisions govern if they conflict with the Technical Specifications.
Please confirm that 24/7 drilling and testing operations are permitted, and that no additional Engineer approval or cost to the Contractor is required.

Response: The work schedule stated in Section 01010, 1.01.F 24-hour, 7-day schedule (excluding holidays) is permitted for this project. Replace SP-17 with the following:

- SP-17 Sequence of Operations
  The Contractor shall develop with the Engineer a complete schedule of operations that meets the requirements of the technical specifications and the time of completion for the project. Taking over of parts of the work for operation before completion of the entire project shall not relieve the Contractor of any responsibility for proper integrated operations of all parts of the work, nor shall it act to relieve him of any responsibilities under Article A-6.04 of the Agreement, for guaranty of all parts of the work, for one year after the date of acceptance of all the work on the project.

Question 13: Water Cost - Section 01500, 1.04.C.1 says the City will be responsible for the cost of water used for drilling operations; General Provisions G-7.01 says the Contractor shall provide water "at his own expense" and pay "for all water used at the established rates;" and the Addendum 1 response to Question 3 refers only to 01500, 1.04.C.
Please confirm that the City pays for all water used for drilling, development and testing.

Response: Add the following Specific Provision SP-68 and revisions to Section 01500-1.04C:

SP-68 Water. Delete Article G-7.01 Water from General Conditions. The City currently provides water to the site. Refer to section 01500-1.04 for additional information.

Revisions to Section 01500-1.04C:

- Water:

1. Water supply and transport for drilling operations is the responsibility of CONTACTOR. The City will pay for the cost of water supplied from City water sources used for drilling operations.
2. Water used by CONTRACTOR from the City must be accounted for. Contractor shall supply and install appropriate water meters on all water supplied to the site.

Question 14: Agreement, Article 10.05 - This reference allows payment of 90% of the invoice cost for materials "suitably stored at the site of the work." Will the successful Contractor be allowed to buy the steel casing and the 8-5/8" FRP tubing (identified as FRP casing in Section 02674) for all wells (Phases I and II) at the start of the project and be paid for them as stored materials? If Phase II isn't authorized, how will the City handle materials already bought for Phase II?

Response: Casing pipes for Phase II wells shall not be purchased prior to authorization by the City. Payment for stored materials shall be made in accordance with the contract documents.

Additional Addendum item:

Replace Section I-1.05 Time for Completion and Section 01010-1.01G with the following:

- I-1.05 TIME FOR COMPLETION
  The work shall be arranged to be completed in accordance with a progress schedule approved by the construction Engineer. The time for completion of this project, referred in Article 4.01 of the Agreement, shall be 300 consecutive calendar days for Phase I and 1,065 consecutive calendar days for Phase II for a total of 1,365 consecutive calendar days. Phase II work will not begin until the City has provided authorization to proceed with Phase II. This authorization will be provided within 5 working days after the completion of Phase I work and the completion of the injection testing for recharge well (RW-1). The time between completing Phase I work and time until the City provides authorization to proceed with Phase II work will be considered downtime as defined in Section 02686 1.01 B of the Technical Specifications. The City may authorize Phase II work in advance of the completion of Phase I work if acceptable geological conditions based on data collected from testing Phase I wells have been confirmed. Time for completion shall include time for mobilization, submittal and approval of shop drawings, and all other pre-construction activities. The period for performance shall start from the date indicated in the Notice To Proceed.

- 01010-1.01G

Following confirmation of appropriate geologic conditions during drilling and testing of RW-1 and MW-1, additional wells under Phase II of the project may be authorized by the City. Multiple rigs can be utilized to complete the remaining wells. The CONTRACTOR will be notified of authorization to construct additional wells within 5 working days after the completion of Phase I work and of the injection test at RW-1.

All other provisions of the Contract Documents and Specifications not in conflict with this Addendum shall remain in full force and effect. Questions are to be e-mailed to ContractAdministration@tampagov.net

Jim Greiner, P.E., Contract Management Supervisor

PHASE I - Recharge Well RW-1

Pay Item	Description	Unit	Est. QTY		Unit Cost	Unit Cost in Words		Total Cost
I-1.	MOBILIZATION AND DEMOBILIZATION - Mobilize and Demobilize All Equipment to Complete Drilling and Testing Activities	LS	1	$			$	
I-2.	SET PIT CASING - Set 48-inch Pit Casing	LS	1	$			$	
I-3.	DRILL PILOT HOLE - Drill Pilot Hole Using Mud Rotary or Reverse-Air Drilling Techniques to Depth of:							
	a. 200 feet (Mud Rotary)	FT	200	$			$	
	b. 450 feet (Reverse-air)	FT	250	$			$	
	c. 1,300 feet (Reverse-air)	FT	850	$			$	
I-4.	PILOT HOLE REAMING or OPEN HOLE to Depth of:							
	a. 47-inch Diameter to 200 feet (Mud Rotary)	FT	200	$			$	
	b. 41-inch Diameter to 450 feet (Reverse-air)	FT	250	$			$	
	c. 33-inch Diameter to 650 feet (Reverse-air)	FT	200	$			$	
	d. 23-inch Diameter Open Hole, 650 to 1,200 feet (Reverse-air)	FT	550	$			$	
I-5.	GEOPHYSICAL LOGGING - Conduct Geophysical Logs in Accordance with Table 1 of Section 02679							
	a. Pilot Hole to 200 feet	EA	1	$			$	
	b. Reamed Hole to 200 feet	EA	1	$			$	
	c. Pilot Hole to 450 feet	EA	1	$			$	
	d. Reamed Hole to 450 feet	EA	1	$			$	
	e. Pilot Hole to 1,300 feet	EA	1	$			$	
	f. Reamed Hole to 650 feet	EA	1	$			$	
	g. Completed Well to 1,200 feet, including MIT	EA	1	$			$	
I-6.	FURNISH AND INSTALL CASING:							
	a. 42-inch Dia. Carbon Steel	FT	200	$			$	
	b. 34-inch Dia. Carbon Steel	FT	450	$			$	
	c. 24-inch Dia. Carbon Steel	FT	650	$			$	
I-7.	GROUTING - Cement Casings from Bottom to Land Surface and Pilot Holes							
	a. Neat cement with up to 8% bentonite gel	FT3	7,800	$			$	
	b. Bridge Plug	LS	1	$			$	
I-8.	GRAVEL - Furnish and Emplace Clean Gravel Used to Plug Cavities	YD3	10	$			$	
I-9.	PRESSURE TEST CASING - Final Casing Prior to Drilling Out Cement Plug	LS	1	$			$	
I-10.	CORING - Provide 10-Foot Length, 4-Inch Diameter Cores at Selected Intervals	EA	5	$			$	
I-11.	PACKER TEST SETUP - Furnish, Setup, Operate, and Remove all Equip. Necessary to Run Packer Pumping Test, Complete	EA	8	$			$	
I-12.	PACKER TESTING PUMPING TIME	HR	120	$			$	
I-13.	PUMPING TEST SETUP	LS	1	$			$	
I-14.	PUMPING TEST PUMPING TIME	HR	4	$			$	
I-15.	WELL DEVELOPMENT	HR	24	$			$	
I-16.	INJECTION TEST SETUP	LS	1	$			$	
I-17.	INJECTION TEST PUMPING TIME	HR	12	$			$	
I-18.	WELLHEAD - Complete Wellhead in accordance with the Drawings	LS	1	$			$	
I-19.	STANDBY TIME	HR	48	$			$	

Pay Item	Description	Unit	Est. QTY		Unit Cost	Unit Cost in Words		Total Cost
I-20.	EXTRA WORK - Furnish Drilling Rig and Crew to Perform Extra Work Not Included in the Specifications When Directed by the ENGINEER	HR	20	$			$	
I-21.	WATER SAMPLING - Water Sampling in Accordance with Section 02311 for:							
	a. Exhibit 1, List A	EA	12	$			$	
	b. Exhibit 1, List B	EA	15	$			$	
	c. Exhibit 1, List C	EA	1	$			$	

TOTAL RW-1 $ _____

PHASE I - Monitor Well MW-1

Pay Item	Description	Unit	Est. QTY		Unit Cost	Unit Cost in Words		Total Cost
I-22.	MOBILIZATION AND DEMOBILIZATION - Mobilize and Demobilize All Equipment to Complete Drilling and Testing Activities	LS	1	$			$	
I-23.	SET PIT CASING - Set 24-inch Pit Casing	LS	1	$			$	
I-24.	DRILL PILOT HOLE - Drill Pilot Hole Using Mud Rotary or Reverse-Air Drilling Techniques to Depth of:							
	a. 200 feet (Mud Rotary)	FT	200	$			$	
	b. 400 feet (Reverse-air, 15-inch diameter)	FT	200	$			$	
I-25.	PILOT HOLE REAMING or OPEN HOLE to Depth of:							
	a. 23-inch Diameter to 200 feet (Mud Rotary)	FT	200	$			$	
I-26.	GEOPHYSICAL LOGGING - Conduct Geophysical Logs in Accordance with Table 1 of Section 02679							
	a. Pilot Hole to 200 feet	EA	1	$			$	
	b. Reamed Hole to 200 feet	EA	1	$			$	
	c. Pilot Hole to 400 feet	EA	1	$			$	
	d. Completed Well to 400 feet	EA	1	$			$	
I-27.	FURNISH AND INSTALL CASING:							
	a. 16-inch Dia. Carbon Steel	FT	200	$			$	
	a. 8 5/8-inch Dia. FRP	FT	350	$			$	
I-28.	GROUTING - Cement Casings from Bottom to Land Surface and Pilot Holes							
	a. Neat cement with up to 8% bentonite gel	FT3	1,000	$			$	
I-29.	GRAVEL - Furnish and Emplace Clean Gravel Used to Plug Cavities	YD3	5	$			$	
I-30.	PACKER TEST SETUP - Furnish, Setup, Operate, and Remove all Equip. Necessary to Run Packer Pumping Test, Complete	EA	2	$			$	
I-31.	PACKER TESTING PUMPING TIME	HR	24	$			$	
I-32.	WELL DEVELOPMENT	HR	16	$			$	
I-33.	WELLHEAD - Complete Wellhead in accordance with the Drawings	LS	1	$			$	
I-34.	STANDBY TIME	HR	24	$			$	
I-35.	EXTRA WORK - Furnish Drilling Rig and Crew to Perform Extra Work Not Included in the Specifications When Directed by the ENGINEER	HR	10	$			$	
I-36.	WATER SAMPLING - Water Sampling in Accordance with Section 02311 for:							
	a. Exhibit 1, List A	EA	5	$			$	
	b. Exhibit 1, List B	EA	2	$			$	
	c. Exhibit 1, List C	EA	1	$			$	

TOTAL MW-1 $ _____

PHASE II Recharge Well RW-2

Pay Item	Description	Unit	Est. QTY		Unit Cost	Unit Cost in Words		Total Cost
II-1.	MOBILIZATION AND DEMOBILIZATION - Mobilize and Demobilize All Equipment to Complete Drilling and Testing Activities	LS	1	$			$	
II-2.	SET PIT CASING - Set 48-inch Pit Casing	LS	1	$			$	
II-3.	DRILL PILOT HOLE - Drill Pilot Hole Using Mud Rotary or Reverse-Air Drilling Techniques to Depth of:							
	a. 200 feet (Mud Rotary)	FT	200	$			$	
	b. 450 feet (Reverse-air)	FT	250	$			$	
	c. 1,300 feet (Reverse-air)	FT	850	$			$	
II-4.	PILOT HOLE REAMING or OPEN HOLE to Depth of:							
	a. 47-inch Diameter to 200 feet (Mud Rotary)	FT	200	$			$	
	b. 41-inch Diameter to 450 feet (Reverse-air)	FT	250	$			$	
	c. 33-inch Diameter to 650 feet (Reverse-air)	FT	200	$			$	
	d. 23-inch Diameter Open Hole, 650 to 1,200 feet (Reverse-air)	FT	550	$			$	
II-5.	GEOPHYSICAL LOGGING - Conduct Geophysical Logs in Accordance with Table 1 of Section 02679							
	a. Pilot Hole to 200 feet	EA	1	$			$	
	b. Reamed Hole to 200 feet	EA	1	$			$	
	c. Pilot Hole to 450 feet	EA	1	$			$	
	d. Reamed Hole to 450 feet	EA	1	$			$	
	e. Pilot Hole to 1,300 feet	EA	1	$			$	
	f. Reamed Hole to 650 feet	EA	1	$			$	
	g. Completed Well to 1,200 feet, including MIT	EA	1	$			$	
II-6.	FURNISH AND INSTALL CASING:							
	a. 42-inch Dia. Carbon Steel	FT	200	$			$	
	b. 34-inch Dia. Carbon Steel	FT	450	$			$	
	c. 24-inch Dia. Carbon Steel	FT	650	$			$	
II-7.	GROUTING - Cement Casings from Bottom to Land Surface and Pilot Holes							
	a. Neat cement with up to 8% bentonite gel	FT3	7,800	$			$	
	b. Bridge Plug	LS	1	$			$	
II-8.	GRAVEL - Furnish and Emplace Clean Gravel Used to Plug Cavities	YD3	10	$			$	
II-9.	PRESSURE TEST CASING - Final Casing Prior to Drilling Out Cement Plug	LS	1	$			$	
II-10.	CORING - Provide 10-Foot Length, 4-Inch Diameter Cores at Selected Intervals	EA	5	$			$	
II-11.	PACKER TEST SETUP - Furnish, Setup, Operate, and Remove all Equip. Necessary to Run Packer Pumping Test, Complete	EA	8	$			$	
II-12.	PACKER TESTING PUMPING TIME	HR	120	$			$	
II-13.	PUMPING TEST SETUP	LS	1	$			$	
II-14.	PUMPING TEST PUMPING TIME	HR	4	$			$	
II-15.	WELL DEVELOPMENT	HR	24	$			$	
II-16.	WELLHEAD - Complete Wellhead in accordance with the Drawings	LS	1	$			$	

Pay Item	Description	Unit	Est. QTY		Unit Cost	Unit Cost in Words		Total Cost
II-17.	STANDBY TIME	HR	48	$			$	
II-18.	EXTRA WORK - Furnish Drilling Rig and Crew to Perform Extra Work Not Included in the Specifications When Directed by the ENGINEER	HR	20	$			$	
II-19.	WATER SAMPLING - Water Sampling in Accordance with Section 02311 for:							
	a. Exhibit 1, List A	EA	12	$			$	
	b. Exhibit 1, List B	EA	15	$			$	
	c. Exhibit 1, List C	EA	1	$			$	

TOTAL RW-2 $ _____

PHASE II - Monitor Well MW-2

Pay Item	Description	Unit	Est. QTY		Unit Cost	Unit Cost in Words		Total Cost
II-20.	MOBILIZATION AND DEMOBILIZATION - Mobilize and Demobilize All Equipment to Complete Drilling and Testing Activities	LS	1	$			$	
II-21.	SET PIT CASING - Set 24-inch Pit Casing	LS	1	$			$	
II-22.	DRILL PILOT HOLE - Drill Pilot Hole Using Mud Rotary or Reverse-Air Drilling Techniques to Depth of:							
	a. 200 feet (Mud Rotary)	FT	200	$			$	
	b. 400 feet (Reverse-air, 15-inch diameter)	FT	200	$			$	
II-23.	PILOT HOLE REAMING or OPEN HOLE to Depth of:							
	a. 23-inch Diameter to 200 feet (Mud Rotary)	FT	200	$			$	
II-24.	GEOPHYSICAL LOGGING - Conduct Geophysical Logs in Accordance with Table 1 of Section 02679							
	a. Pilot Hole to 200 feet	EA	1	$			$	
	b. Reamed Hole to 200 feet	EA	1	$			$	
	c. Pilot Hole to 400 feet	EA	1	$			$	
	d. Completed Well to 400 feet	EA	1	$			$	
II-25.	FURNISH AND INSTALL CASING:							
	a. 16-inch Dia. Carbon Steel	FT	200	$			$	
	a. 8 5/8-inch Dia. FRP	FT	350	$			$	
II-26.	GROUTING - Cement Casings from Bottom to Land Surface and Pilot Holes							
	a. Neat cement with up to 8% bentonite gel	FT3	1,000	$			$	
II-27.	GRAVEL - Furnish and Emplace Clean Gravel Used to Plug Cavities	YD3	5	$			$	
II-28.	PACKER TEST SETUP - Furnish, Setup, Operate, and Remove all Equip. Necessary to Run Packer Pumping Test, Complete	EA	2	$			$	
II-29.	PACKER TESTING PUMPING TIME	HR	24	$			$	
II-30.	WELL DEVELOPMENT	HR	16	$			$	
II-31.	WELLHEAD - Complete Wellhead in accordance with the Drawings	LS	1	$			$	
II-32.	STANDBY TIME	HR	24	$			$	
II-33.	EXTRA WORK - Furnish Drilling Rig and Crew to Perform Extra Work Not Included in the Specifications When Directed by the ENGINEER	HR	10	$			$	
II-34.	WATER SAMPLING - Water Sampling in Accordance with Section 02311 for:							
	a. Exhibit 1, List A	EA	5	$			$	
	b. Exhibit 1, List B	EA	2	$			$	
	c. Exhibit 1, List C	EA	1	$			$	

TOTAL MW-2 $ _____

PHASE II Recharge Well RW-3

Pay Item	Description	Unit	Est. QTY		Unit Cost	Unit Cost in Words		Total Cost
II-35.	MOBILIZATION AND DEMOBILIZATION - Mobilize and Demobilize All Equipment to Complete Drilling and Testing Activities	LS	1	$			$	
II-36.	SET PIT CASING - Set 48-inch Pit Casing	LS	1	$			$	
II-37.	DRILL PILOT HOLE - Drill Pilot Hole Using Mud Rotary or Reverse-Air Drilling Techniques to Depth of:							
	a. 200 feet (Mud Rotary)	FT	200	$			$	
	b. 450 feet (Reverse-air)	FT	250	$			$	
	c. 1,300 feet (Reverse-air)	FT	850	$			$	
II-38.	PILOT HOLE REAMING or OPEN HOLE to Depth of:							
	a. 47-inch Diameter to 200 feet (Mud Rotary)	FT	200	$			$	
	b. 41-inch Diameter to 450 feet (Reverse-air)	FT	250	$			$	
	c. 33-inch Diameter to 650 feet (Reverse-air)	FT	200	$			$	
	d. 23-inch Diameter Open Hole, 650 to 1,200 feet (Reverse-air)	FT	550	$			$	
II-39.	GEOPHYSICAL LOGGING - Conduct Geophysical Logs in Accordance with Table 1 of Section 02679							
	a. Pilot Hole to 200 feet	EA	1	$			$	
	b. Reamed Hole to 200 feet	EA	1	$			$	
	c. Pilot Hole to 450 feet	EA	1	$			$	
	d. Reamed Hole to 450 feet	EA	1	$			$	
	e. Pilot Hole to 1,300 feet	EA	1	$			$	
	f. Reamed Hole to 650 feet	EA	1	$			$	
	g. Completed Well to 1,200 feet, including MIT	EA	1	$			$	
II-40.	FURNISH AND INSTALL CASING:							
	a. 42-inch Dia. Carbon Steel	FT	200	$			$	
	b. 34-inch Dia. Carbon Steel	FT	450	$			$	
	c. 24-inch Dia. Carbon Steel	FT	650	$			$	
II-41.	GROUTING - Cement Casings from Bottom to Land Surface and Pilot Holes							
	a. Neat cement with up to 8% bentonite gel	FT3	7,800	$			$	
	b. Bridge Plug	LS	1	$			$	
II-42.	GRAVEL - Furnish and Emplace Clean Gravel Used to Plug Cavities	YD3	10	$			$	
II-43.	PRESSURE TEST CASING - Final Casing Prior to Drilling Out Cement Plug	LS	1	$			$	
II-44.	CORING - Provide 10-Foot Length, 4-Inch Diameter Cores at Selected Intervals	EA	5	$			$	
II-45.	PACKER TEST SETUP - Furnish, Setup, Operate, and Remove all Equip. Necessary to Run Packer Pumping Test, Complete	EA	8	$			$	
II-46.	PACKER TESTING PUMPING TIME	HR	120	$			$	
II-47.	PUMPING TEST SETUP	LS	1	$			$	
II-48.	PUMPING TEST PUMPING TIME	HR	4	$			$	
II-49.	WELL DEVELOPMENT	HR	24	$			$	
II-50.	WELLHEAD - Complete Wellhead in accordance with the Drawings	LS	1	$			$	

Pay Item	Description	Unit	Est. QTY		Unit Cost	Unit Cost in Words		Total Cost
II-51.	STANDBY TIME	HR	48	$			$	
II-52.	EXTRA WORK - Furnish Drilling Rig and Crew to Perform Extra Work Not Included in the Specifications When Directed by the ENGINEER	HR	20	$			$	
II-53.	WATER SAMPLING - Water Sampling in Accordance with Section 02311 for:							
	a. Exhibit 1, List A	EA	12	$			$	
	b. Exhibit 1, List B	EA	15	$			$	
	c. Exhibit 1, List C	EA	1	$			$	

TOTAL RW-3 $ _____

PHASE II - Monitor Well MW-3

Pay Item	Description	Unit	Est. QTY		Unit Cost	Unit Cost in Words		Total Cost
II-54.	MOBILIZATION AND DEMOBILIZATION - Mobilize and Demobilize All Equipment to Complete Drilling and Testing Activities	LS	1	$			$	
II-55.	SET PIT CASING - Set 24-inch Pit Casing	LS	1	$			$	
II-56.	DRILL PILOT HOLE - Drill Pilot Hole Using Mud Rotary or Reverse-Air Drilling Techniques to Depth of:							
	a. 200 feet (Mud Rotary)	FT	200	$			$	
	b. 400 feet (Reverse-air, 15-inch diameter)	FT	200	$			$	
II-57.	PILOT HOLE REAMING or OPEN HOLE to Depth of:							
	a. 23-inch Diameter to 200 feet (Mud Rotary)	FT	200	$			$	
II-58.	GEOPHYSICAL LOGGING - Conduct Geophysical Logs in Accordance with Table 1 of Section 02679							
	a. Pilot Hole to 200 feet	EA	1	$			$	
	b. Reamed Hole to 200 feet	EA	1	$			$	
	c. Pilot Hole to 400 feet	EA	1	$			$	
	d. Completed Well to 400 feet	EA	1	$			$	
II-59.	FURNISH AND INSTALL CASING:							
	a. 16-inch Dia. Carbon Steel	FT	200	$			$	
	a. 8 5/8-inch Dia. FRP	FT	350	$			$	
II-60.	GROUTING - Cement Casings from Bottom to Land Surface and Pilot Holes							
	a. Neat cement with up to 8% bentonite gel	FT3	1,000	$			$	
II-61.	GRAVEL - Furnish and Emplace Clean Gravel Used to Plug Cavities	YD3	5	$			$	
II-62.	PACKER TEST SETUP - Furnish, Setup, Operate, and Remove all Equip. Necessary to Run Packer Pumping Test, Complete	EA	2	$			$	
II-63.	PACKER TESTING PUMPING TIME	HR	24	$			$	
II-64.	WELL DEVELOPMENT	HR	16	$			$	
II-65.	WELLHEAD - Complete Wellhead in accordance with the Drawings	LS	1	$			$	
II-66.	STANDBY TIME	HR	24	$			$	
II-67.	EXTRA WORK - Furnish Drilling Rig and Crew to Perform Extra Work Not Included in the Specifications When Directed by the ENGINEER	HR	10	$			$	
II-68.	WATER SAMPLING - Water Sampling in Accordance with Section 02311 for:							
	a. Exhibit 1, List A	EA	5	$			$	
	b. Exhibit 1, List B	EA	2	$			$	
	c. Exhibit 1, List C	EA	1	$			$	

TOTAL MW-3 $ _____

PHASE II Recharge Well RW-4

Pay Item	Description	Unit	Est. QTY		Unit Cost	Unit Cost in Words		Total Cost
II-69.	MOBILIZATION AND DEMOBILIZATION - Mobilize and Demobilize All Equipment to Complete Drilling and Testing Activities	LS	1	$			$	
II-70.	SET PIT CASING - Set 48-inch Pit Casing	LS	1	$			$	
II-71.	DRILL PILOT HOLE - Drill Pilot Hole Using Mud Rotary or Reverse-Air Drilling Techniques to Depth of:							
	a. 200 feet (Mud Rotary)	FT	200	$			$	
	b. 450 feet (Reverse-air)	FT	250	$			$	
	c. 1,300 feet (Reverse-air)	FT	850	$			$	
II-72.	PILOT HOLE REAMING or OPEN HOLE to Depth of:							
	a. 47-inch Diameter to 200 feet (Mud Rotary)	FT	200	$			$	
	b. 41-inch Diameter to 450 feet (Reverse-air)	FT	250	$			$	
	c. 33-inch Diameter to 650 feet (Reverse-air)	FT	200	$			$	
	d. 23-inch Diameter Open Hole, 650 to 1,200 feet (Reverse-air)	FT	550	$			$	
II-73.	GEOPHYSICAL LOGGING - Conduct Geophysical Logs in Accordance with Table 1 of Section 02679							
	a. Pilot Hole to 200 feet	EA	1	$			$	
	b. Reamed Hole to 200 feet	EA	1	$			$	
	c. Pilot Hole to 450 feet	EA	1	$			$	
	d. Reamed Hole to 450 feet	EA	1	$			$	
	e. Pilot Hole to 1,300 feet	EA	1	$			$	
	f. Reamed Hole to 650 feet	EA	1	$			$	
	g. Completed Well to 1,200 feet, including MIT	EA	1	$			$	
II-74.	FURNISH AND INSTALL CASING:							
	a. 42-inch Dia. Carbon Steel	FT	200	$			$	
	b. 34-inch Dia. Carbon Steel	FT	450	$			$	
	c. 24-inch Dia. Carbon Steel	FT	650	$			$	
II-75.	GROUTING - Cement Casings from Bottom to Land Surface and Pilot Holes							
	a. Neat cement with up to 8% bentonite gel	FT3	7,800	$			$	
	b. Bridge Plug	LS	1	$			$	
II-76.	GRAVEL - Furnish and Emplace Clean Gravel Used to Plug Cavities	YD3	10	$			$	
II-77.	PRESSURE TEST CASING - Final Casing Prior to Drilling Out Cement Plug	LS	1	$			$	
II-78.	CORING - Provide 10-Foot Length, 4-Inch Diameter Cores at Selected Intervals	EA	5	$			$	
II-79.	PACKER TEST SETUP - Furnish, Setup, Operate, and Remove all Equip. Necessary to Run Packer Pumping Test, Complete	EA	8	$			$	
II-80.	PACKER TESTING PUMPING TIME	HR	120	$			$	
II-81.	PUMPING TEST SETUP	LS	1	$			$	
II-82.	PUMPING TEST PUMPING TIME	HR	4	$			$	
II-83.	WELL DEVELOPMENT	HR	24	$			$	
II-84.	WELLHEAD - Complete Wellhead in accordance with the Drawings	LS	1	$			$	

Pay Item	Description	Unit	Est. QTY		Unit Cost	Unit Cost in Words		Total Cost
II-85.	STANDBY TIME	HR	48	$			$	
II-86.	EXTRA WORK - Furnish Drilling Rig and Crew to Perform Extra Work Not Included in the Specifications When Directed by the ENGINEER	HR	20	$			$	
II-87.	WATER SAMPLING - Water Sampling in Accordance with Section 02311 for:							
	a. Exhibit 1, List A	EA	12	$			$	
	b. Exhibit 1, List B	EA	15	$			$	
	c. Exhibit 1, List C	EA	1	$			$	

TOTAL RW-4 $ _____

PHASE II - Monitor Well MW-4

Pay Item	Description	Unit	Est. QTY		Unit Cost	Unit Cost in Words		Total Cost
II-88.	MOBILIZATION AND DEMOBILIZATION - Mobilize and Demobilize All Equipment to Complete Drilling and Testing Activities	LS	1	$			$	
II-89.	SET PIT CASING - Set 24-inch Pit Casing	LS	1	$			$	
II-90.	DRILL PILOT HOLE - Drill Pilot Hole Using Mud Rotary or Reverse-Air Drilling Techniques to Depth of:							
	a. 200 feet (Mud Rotary)	FT	200	$			$	
	b. 400 feet (Reverse-air, 15-inch diameter)	FT	200	$			$	
II-91.	PILOT HOLE REAMING or OPEN HOLE to Depth of:							
	a. 23-inch Diameter to 200 feet (Mud Rotary)	FT	200	4			4	
II-92.	GEOPHYSICAL LOGGING - Conduct Geophysical Logs in Accordance with Table 1 of Section 02679							
	a. Pilot Hole to 200 feet	EA	1	$			$	
	b. Reamed Hole to 200 feet	EA	1	$			$	
	c. Pilot Hole to 400 feet	EA	1	$			$	
	d. Completed Well to 400 feet	EA	1	$			$	
II-93.	FURNISH AND INSTALL CASING:							
	a. 16-inch Dia. Carbon Steel	FT	200	$			$	
	a. 8 5/8-inch Dia. FRP	FT	350	$			$	
II-94.	GROUTING - Cement Casings from Bottom to Land Surface and Pilot Holes							
	a. Neat cement with up to 8% bentonite gel	FT3	1,000	$			$	
II-95.	GRAVEL - Furnish and Emplace Clean Gravel Used to Plug Cavities	YD3	5	$			$	
II-96.	PACKER TEST SETUP - Furnish, Setup, Operate, and Remove all Equip. Necessary to Run Packer Pumping Test, Complete	EA	2	$			$	
II-97.	PACKER TESTING PUMPING TIME	HR	24	$			$	
II-98.	WELL DEVELOPMENT	HR	16	$			$	
II-99.	WELLHEAD - Complete Wellhead in accordance with the Drawings	LS	1	$			$	
II-100.	STANDBY TIME	HR	24	$			$	
II-101.	EXTRA WORK - Furnish Drilling Rig and Crew to Perform Extra Work Not Included in the Specifications When Directed by the ENGINEER	HR	10	$			$	
II-102.	WATER SAMPLING - Water Sampling in Accordance with Section 02311 for:							
	a. Exhibit 1, List A	EA	5	$			$	
	b. Exhibit 1, List B	EA	2	$			$	
	c. Exhibit 1, List C	EA	1	$			$	

TOTAL MW-4 $ _____

PHASE II Recharge Well RW-5

Pay Item	Description	Unit	Est. QTY		Unit Cost	Unit Cost in Words		Total Cost
II-103.	MOBILIZATION AND DEMOBILIZATION - Mobilize and Demobilize All Equipment to Complete Drilling and Testing Activities	LS	1	$			$	
II-104.	SET PIT CASING - Set 48-inch Pit Casing	LS	1	$			$	
II-105.	DRILL PILOT HOLE - Drill Pilot Hole Using Mud Rotary or Reverse-Air Drilling Techniques to Depth of:							
	a. 200 feet (Mud Rotary)	FT	200	$			$	
	b. 450 feet (Reverse-air)	FT	250	$			$	
	c. 1,300 feet (Reverse-air)	FT	850	$			$	
II-106.	PILOT HOLE REAMING or OPEN HOLE to Depth of:							
	a. 47-inch Diameter to 200 feet (Mud Rotary)	FT	200	$			$	
	b. 41-inch Diameter to 450 feet (Reverse-air)	FT	250	$			$	
	c. 33-inch Diameter to 650 feet (Reverse-air)	FT	200	$			$	
	d. 23-inch Diameter Open Hole, 650 to 1,200 feet (Reverse-air)	FT	550	$			$	
II-107.	GEOPHYSICAL LOGGING - Conduct Geophysical Logs in Accordance with Table 1 of Section 02679							
	a. Pilot Hole to 200 feet	EA	1	$			$	
	b. Reamed Hole to 200 feet	EA	1	$			$	
	c. Pilot Hole to 450 feet	EA	1	$			$	
	d. Reamed Hole to 450 feet	EA	1	$			$	
	e. Pilot Hole to 1,300 feet	EA	1	$			$	
	f. Reamed Hole to 650 feet	EA	1	$			$	
	g. Completed Well to 1,200 feet, including MIT	EA	1	$			$	
II-108.	FURNISH AND INSTALL CASING:							
	a. 42-inch Dia. Carbon Steel	FT	200	$			$	
	b. 34-inch Dia. Carbon Steel	FT	450	$			$	
	c. 24-inch Dia. Carbon Steel	FT	650	$			$	
II-109.	GROUTING - Cement Casings from Bottom to Land Surface and Pilot Holes							
	a. Neat cement with up to 8% bentonite gel	FT3	7,800	$			$	
	b. Bridge Plug	LS	1	$			$	
II-110.	GRAVEL - Furnish and Emplace Clean Gravel Used to Plug Cavities	YD3	10	$			$	
II-111.	PRESSURE TEST CASING - Final Casing Prior to Drilling Out Cement Plug	LS	1	$			$	
II-112.	CORING - Provide 10-Foot Length, 4-Inch Diameter Cores at Selected Intervals	EA	5	$			$	
II-113.	PACKER TEST SETUP - Furnish, Setup, Operate, and Remove all Equip. Necessary to Run Packer Pumping Test, Complete	EA	8	$			$	
II-114.	PACKER TESTING PUMPING TIME	HR	120	$			$	
II-115.	PUMPING TEST SETUP	LS	1	$			$	
II-116.	PUMPING TEST PUMPING TIME	HR	4	$			$	
II-117.	WELL DEVELOPMENT	HR	24	$			$	
II-118.	WELLHEAD - Complete Wellhead in accordance with the Drawings	LS	1	$			$	
II-119.	STANDBY TIME	HR	48	$			$	

Pay Item	Description	Unit	Est. QTY		Unit Cost	Unit Cost in Words		Total Cost
II-120.	EXTRA WORK - Furnish Drilling Rig and Crew to Perform Extra Work Not Included in the Specifications When Directed by the ENGINEER	HR	20	$			$	
II-121.	WATER SAMPLING - Water Sampling in Accordance with Section 02311 for:							
	a. Exhibit 1, List A	EA	12	$			$	
	b. Exhibit 1, List B	EA	15	$			$	
	c. Exhibit 1, List C	EA	1	$			$	

TOTAL RW-5 $ _____

PHASE II - Monitor Well MW-5

Pay Item	Description	Unit	Est. QTY		Unit Cost	Unit Cost in Words		Total Cost
II-122.	MOBILIZATION AND DEMOBILIZATION - Mobilize and Demobilize All Equipment to Complete Drilling and Testing Activities	LS	1	$			$	
II-123.	SET PIT CASING - Set 24-inch Pit Casing	LS	1	$			$	
II-124.	DRILL PILOT HOLE - Drill Pilot Hole Using Mud Rotary or Reverse-Air Drilling Techniques to Depth of:							
	a. 200 feet (Mud Rotary)	FT	200	$			$	
	b. 400 feet (Reverse-air, 15-inch diameter)	FT	200	$			$	
II-125.	PILOT HOLE REAMING or OPEN HOLE to Depth of:							
	a. 23-inch Diameter to 200 feet (Mud Rotary)	FT	200	$			$	
II-126.	GEOPHYSICAL LOGGING - Conduct Geophysical Logs in Accordance with Table 1 of Section 02679							
	a. Pilot Hole to 200 feet	EA	1	$			$	
	b. Reamed Hole to 200 feet	EA	1	$			$	
	c. Pilot Hole to 400 feet	EA	1	$			$	
	d. Completed Well to 400 feet	EA	1	$			$	
II-127.	FURNISH AND INSTALL CASING:							
	a. 16-inch Dia. Carbon Steel	FT	200	$			$	
	a. 8 5/8-inch Dia. FRP	FT	350	$			$	
II-128.	GROUTING - Cement Casings from Bottom to Land Surface and Pilot Holes							
	a. Neat cement with up to 8% bentonite gel	FT3	1,000	$			$	
II-129.	GRAVEL - Furnish and Emplace Clean Gravel Used to Plug Cavities	YD3	5	$			$	
II-130.	PACKER TEST SETUP - Furnish, Setup, Operate, and Remove all Equip. Necessary to Run Packer Pumping Test, Complete	EA	2	$			$	
II-131.	PACKER TESTING PUMPING TIME	HR	24	$			$	
II-132.	WELL DEVELOPMENT	HR	16	$			$	
II-133.	WELLHEAD - Complete Wellhead in accordance with the Drawings	LS	1	$			$	
II-134.	STANDBY TIME	HR	24	$			$	
II-135.	EXTRA WORK - Furnish Drilling Rig and Crew to Perform Extra Work Not Included in the Specifications When Directed by the ENGINEER	HR	10	$			$	
II-136.	WATER SAMPLING - Water Sampling in Accordance with Section 02311 for:							
	a. Exhibit 1, List A	EA	5	$			$	
	b. Exhibit 1, List B	EA	2	$			$	
	c. Exhibit 1, List C	EA	1	$			$	

TOTAL MW-5 $ _____

PHASE III - WELL ACIDIZATION (all Recharge Wells)

Pay Item	Description	Unit	Est. QTY		Unit Cost	Unit Cost in Words		Total Cost
III-1.	ACIDIZATION SET UP - If Required, Mobilize all Equip. Necessary to Acidize Recharge Well	EA	5	$			$	
III-2.	FURNISH AND EMPLACE ACID -Furnish and Emplace 32% Inhibited HCL Acid	1000 GAL	50	$			$	

Well Acidization (5 wells) $ _____

Total PHASE I – RW-1 and MW-1 $ _____

Total PHASE II – RW-2, RW-3, RW-4, RW-5, MW-2, MW-3, MW-4, MW-5 $ _____

Total PHASE III [Add Alternate] – Well Acidization RW-1, RW-2, RW-3, RW-4, RW-5 $ _____

Contingency $ 250,000

Total Bid - Sum of PHASE I, PHASE II, PHASE III AND CONTINGENCY $ _____