



دائرة العطاءات الحكومية
Government Tenders Department



No. A-4-2 / 1296
Date. 2024/04/21

ADDENDUM No. (1)
Central Tender No. (13/2024)
Al Kafrein Wells Assessment and Rehabilitation Project

Dear Sirs,

All participating bidders in the tender referenced must adhere to the following instructions:

1. Enclosed are (4) pages containing the employer's responses to the requests for clarification received from the participating bidders.
2. The tender documents have been modified as follows. The bidders must use the attached modified pages in preparing their proposals.
 - 2.1) Section 000470 Bill of Quantities, Page Numbered (2) of the document shall be nullified and replaced by Modified Page Numbered (2).
 - 2.2) Bill No. G01 – General Requirements, Page Numbered (1) shall be nullified and replaced by Modified Page Numbered (1).
 - 2.3) Bill No. (1) Up to Bill No. (8), Pages Numbered (2), (3), (4), (5), (6), (7), (8) and (9) shall be nullified and replaced by Modified Pages Numbered (2), (3), (4), (5), (6), (7), (8) and (9) respectively.
 - 2.4) Grand Summary, Page Numbered (10) shall be nullified and replaced by Modified Page Numbered (10).
 - 2.5) New Page Numbered (11) to be added to the Bill of Quantities.
3. In the event that any item mentioned in the modified pages is priced on the original table but not on the modified pages, the item is to be considered charged to the bid prices, even if the description or quantity of the item has not been changed (all such items must be priced on the modified pages).

المملكة الأردنية الهاشمية

هاتف: ١٤-٥٨٥٨٣١١ ص.ب ١٢٢٠ الرمز البريدي ١١١١٨ فاكس: ٥٨٥٧٥٨٣ - ٥٨٥٧٦٣٩

Tel.: 5858311 - 14 P.O.Box 1220 Post Code 11118 Facsimile 5857583 - 5857639 E-mail : gtd@gtd.gov.jo



دائرة العطاءات الحكومية
Government Tenders Department



No. A-4-2 / 1296
Date. 2024/04/21

4. Extension of the deadline of Proposals submission date to be on Wednesday 1/5/2024, 12:00 p.m. (Amman local time) instead of Wednesday 24/4/2024. Technical Proposals will be opened at 1:00 p.m. (Amman local time) at the same date of submission.
5. Tender Security issued at the date of the original submission date of the Proposals is accepted.

• This addendum shall be considered an integral part of the tender documents.

Best Regards,

Director General
Eng. Mahmoud Hashim Khlifat

C.C:H.E. W.A.J. Secretary General
Directorate of Specialized Central Procurement Support
Director of Biddings Directorate
Internal Monitoring Unit
Tender File No. (13/2024)

الملكية الأردنية الهاشمية

هاتف: ١٤ - ٥٨٥٨٣١١ ص.ب ١٢٢٠ الرمز البريدي ١١١١٨ فاكس: ٥٨٥٧٥٨٣ - ٥٨٥٧٦٣٩

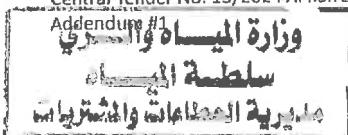
Tel.: 5858311 - 14 P.O.Box 1220 Post Code 11118 Facsimile 5857583 - 5857639 E-mail : gtd@gtd.gov.jo

USAID Water Engineering Services Activity
Task 6.4: Design Water Networks in South Shouneh

Subject: Central Tender No. 13/2024 Al Kafrein Wells Assessment and Rehabilitation Project

Clarifications and Responses

Clarification No.	Clarification	Response
1	Well JRV 11 B (artesian) has been affected by slope erosion, exposing it to the wadi and requiring significant protection before any inspection. Please incorporate the design of slope protection and a corresponding pay item into the related bill of quantities.	The Contractor is responsible to design and implement all necessary works and supports to safeguard their equipment. The cost shall be deemed to be covered by item no. 1.1- Mobilization.
2	Some valves, particularly those serving artesian wells, have been identified as damaged and possibly malfunctioning. Does the Owner/Employer possess spare valves for these instances? If not, please add a provisional sum for this work	The Contractor is requested to reinstall the valves as per their original conditions. If the Engineer decide that replacement with new valves is necessary, the Contractor is responsible for procuring and installing them. A provisional sum has been allocated in bill No. 8 (Provisional sum) for the procurement of these valves. Please see bill No. 8 item no. 3 for further details.
3	It appears that some or all of the riser pipes are aging and may not be safely usable after rehabilitation/inspection. Does the Owner/Employer possess spare pipes for replacement? If not, please include a provisional sum for this work.	The Contractor is requested to reinstall the riser pipes as per their original conditions. If the Engineer decide that replacement with new pipes is necessary, the Contractor is responsible for procuring and installing them. An annex is attached to the bill of quantities detailing the provision of riser pipes matching the material and diameter of the existing ones. The Contractor should indicate the price per linear meter for these pipes. The Contractor is obliged to follow these prices when requested. For pumps, a provisional item is added to supply new pumps subjected to Engineer request. See item 4-bill No. 8



Clarification No.	Clarification	Response
4	While the specifications mention removal of physical foreign materials, such as plastic, wires, and ropes, the presence of obstructive pump and riser pipes may require a separate and major fishing operation. Kindly add a pump and riser pipe fishing item to the relevant bill of quantities.	<p>1. For the equipment that are already present in the non-operating wells, an optional lump sum item is added to the BoQ: Fishing Job up to 10 working days (excluding the preparation period) subject to the Engineer decision.</p> <p>Please see the revised bills No. 4,5,6 and 7 item 2.11.</p> <p>2. For the operational wells, the contractor will pull out the submersible pumps, dip pipes, cables, and riser pipes. If he failed in pulling it out due to neglecting and or failure of machine and equipment, he will be responsible on fishing job up to 10 working days and or drilling a replacement well on his own cost, subject to Engineer decision. See item 6.10 in bills No. 1,2 and 3.</p> <p>The Contractor bears full responsibility for ensuring the uninterrupted operation of the operating wells.</p>
5	Please provide us with the dimensions of the required V-notch weir tank.	The Contractor is responsible for using a suitable tank size, as the dimensions of the tank vary for each well based on the step test requirements and the available space.
6	Please provide the following data for each well: a. Drilling bit size b. Casing specification, dimensions, installed levels and date. c. Screen specification, dimensions, installed levels and date. d. Model and size of existing pumps.	The available data is attached on page 4 of 4. <u>جدول معلومات ابار الكفرين</u>

Clarification No.	Clarification	Response
7	Upon the site visit, it was observed that access to most wells is obstructed, necessitating wadi crossings and access upgrades. Kindly include a pay item in the bill of quantities for the construction of access roads.	The access roads don't need upgrading at this stage. For wadi crossings, the Contractor is requested to implement all necessary temporary works enabling the him to access all the wells sites, the cost shall be deemed to be covered by item no. 1.1- Mobilization.
8	The presence of trees in the well sites has been noted, potentially necessitating their removal. Please include a provisional item in the bill of quantities for tree removal.	All the required site works shall be included in the item no. 1.1 Mobilization.
9.	Coordinates of Well No. JRV11B during the site visit is different than mentioned in table (1), section 01010	Change the coordinates of well Kafrein 2 (JRV11B) as below: Palestine: 1142075 Palestine 1: 215500
10.	For Bills No.4 to No.7, it appears that no item for the Camera survey is included. Please clarify.	Bills No. 4,5,6 and 7 - Item 2, (Well Rehabilitation and Development Works), including its sub-items are modified, please refer to the attached revised BoQ.
11.	Kindly note that during the last site visit that took place on 25/3/2024, due to weather conditions, we were not able to reach all wells locations, therefore, we are kindly asking you to arrange for another site visit to enable us to evaluate the project precisely in order to make our quotation correctly.	A second site visit is scheduled on 24/4/2024
12.	Section 00470 page no. 2, the BoQ and Annex to BOQ, has been updated, please find attached.	

معلومات ابار الكفرين

الانتاج	عمق البئر (م)	اسم البئر
80 م ³ /ساعه عام 2013	500 170-0 "13 3/8 190-170 "10 3/4 500 -188 "9 5/8 220-190 "6 5/8 لا بئر	الكفرين 4 ب
	500 200-0 "13 3/8 500 -188 "9 5/8	الكفرين 8 أ
30 م ³ /ساعه عام 2003 وكان عمق المضخه 200م	750 303-0 "13 3/8 400-293 "10 3/4 750 -400 "9 5/8 مصافي	الكفرين 11 أ
	13 3/8 "396-0 9 5/8 "464 – 378 6 5/8 " 620 – 450 مصافي	الكفرين 12
120 م ³ /ساعه	600 "18 5/8 250-0 "14600-239	الكفرين 13

Unless otherwise described, descriptions shall be deemed to include all sundry labors required by the Technical Specifications for the execution of the Work, and the Contractor shall include for these sundry labors in its rates.

The rates inserted in the Bill of Quantities by the Tenderer shall be deemed to include any method of working, subject to the Engineer's approval, found to be necessary in order to produce the finished Works.

The rates inserted in the Bill of Quantities by the Tenderer shall be deemed to include all sampling and testing of all materials and workmanship during manufacturing, construction and upon completion, for quality control tests, all as necessary or required to ascertain conformity of the Works or any part thereof to the Contract Documents.

The Tenderer shall allow in its rates for protecting all works against damage by whatever method is deemed necessary. Any work damaged before the Works are handed-over is to be replaced or made good at the Tenderer's expense and to the entire satisfaction of the Engineer.

The Tenderer shall satisfy himself as to the meaning of every item in the Bill of Quantities. The rates and prices inserted in the Bill of Quantities by the Tenderer shall be deemed to cover all costs, expenses, risks, liabilities and obligations set forth or implied in the Contract Documents. The prices shall include all matters and things necessary for the proper construction, start-up, pre-commissioning, completion and maintenance of the Works including, but not by way of limitation, for all labor and material including samples, sampling and testing; for all temporary work of every description required (including any that may be required by sub-contractors); and for the provision and use of all plant of every kind, whether mechanical or non-mechanical, required for the expeditious performing of the Works in their proper sequence. The prices shall also include any shifting, altering and adapting temporary works and plant as may be required during the progress of the Works and removing at completion and making good any surfaces disturbed; for cooperation and coordination of its work; for the guarantees and bonds required; for all necessary temporary services for the Works; for the costs of preparing a Tender; for the work in connection with measurements and the final account, for profit; and for all other establishment charges and all costs of whatever nature. No claim for additional payment will be allowed for any error or misunderstanding by the Tenderer in these respects.

The rates and prices inserted by the Tenderer shall apply throughout the Contract and to any additional work ordered by the Engineer subject to the requirements of the Conditions of Contract.

Rates shall include the full coordination needed with all authorities and agencies, including but not limited to Ministry of Agriculture to get the requested permits, Water Directorate of South Shouneh, etc.

The accuracy of the quantities given in the Bill of Quantities is not guaranteed. Notwithstanding the quantities given in the Bill of Quantities, all works itemized therein will be subject to re-measurement. Such re-measurement will be in the unit of measurement shown and at the rate inserted against each item stated in the Bill of Quantities and payment will be made on the remeasured quantities, all as requested and approved by the Engineer.

Any item of work included in the Bill of Quantities which is not performed shall be omitted from the interim and final statements. Any additional item of work performed on the Engineer's instructions shall be included in the relevant interim and final statements.

Provisional Work and Provisional Sum items are the items for which the Employer has reserved his right to order to be executed or canceled in whole or in part(s).

Optional items are those items that the Employer has the right to use fully or partially or cancel during the project's execution, and the Contractor shall not be entitled to ask for any financial claim or ask for any time extension. Tenderers must price these items.

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Bill No. G01 - GENERAL REQUIREMENTS

Item No.	Description	Unit	EST. Quantity	Unit Rate (USD)	Amount (USD)	Taxes and Unit Price (USD)	Customs Amount (USD)	Total (USD)
1	Supply one vehicle for the exclusive use of the Employer, as specified, including registration, insurance, running costs like (but not limited to) fuel, maintenance, etc.	Month	5					
2	Supply temporary site offices for the exclusive use of the Employer and the Engineer, as specified, including all furniture, equipment, appliances, services, maintenance, etc.	Month	5					
Total Bill No. G01 to be Carried to Grand Summary								

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BILL No. 1: Wells Rehabilitation of Well No. 12

Item No.	Description	Unit	EST. Quantity	Unit Rate (USD)	Amount (USD)	Taxes and Unit Price (USD)	Customs Amount (USD)	Total (USD)
1	Al Kafrein Well No. 12							
1.1	Mobilization and Preparation							
1.2	Mobilization and demobilization of manpower, Rig and Equipment for Rehabilitation Works	L.S	L.S					
1.3	Mobilization for Camera Survey and Geophysical Logging	L.S	L.S					
1.3	Mobilization for Equipment Required for Riser Pipe and Pump Removal and Reinstallation	L.S	L.S					
2	Riser Pipe and Pump Removal, Inspection and Storage	L.S	L.S					
3	Downhole Camera Surveys	Meter	620					
4	Borehole Geophysical logging (OPTIONAL ITEMS)							
4.1	4-arm Caliper	Run	1					
4.2	Fluid Conductivity and Temperature	Run	1					
4.3	Natural Gamma	Run	1					
4.4	Focused Resistivity (Open hole section)	Run	1					
4.5	Full Wave Sonic	Run	1					
5	Report Submittal	L.S	L.S					
6	Well Rehabilitation and Development Works (OPTIONAL ITEMS)							
6.1	Physical Removal of Sediment (Bailers, Air Surging)	hrs	10					
6.2	Removing Foreign Materials	hrs	10					
6.3	Block Surging (Swabbing)	Meter	620					
6.4	Mechanical Brushing of Screens or Casing Slots	Meter	620					
6.5	Air- or Water-Jetting of Screens or Casing Slots	hrs	8					
6.6	Chemical Treatment with HCL with inhibitor (10-30%)	m ³	8					
6.7	Chemical Treatment with Sodium TriPoly	Kg	500					
6.8	Well Development by Airlifting/ Air surging	hrs	36					
6.9	Well Development by Pumping	hrs	12					
6.10	Fishing Job up to 10 days	L.S	L.S					
7	Post-Rehab Camera Survey (OPTIONAL ITEM)	Meter	620					
8	Well Performance Testing (OPTIONAL ITEMS)							
8.1	Equipment Installations	L.S	L.S					
8.2	Pretest Monitoring	L.S	L.S					
8.3	Pretest Pumping	L.S	L.S					
8.4	Pretest Recovery Monitoring	L.S	L.S					
8.5	Step Drawdown Pumping	hrs	8					
8.6	Step Drawdown Recovery Monitoring	hrs	12					
8.7	Equipment Removal	L.S	L.S					
9	96-hour Constant Rate Test (OPTIONAL ITEMS)							
9.1	Pretest Monitoring	L.S	L.S					
9.2	96-Hour Constant Rate Test	hrs	96					
9.3	Recovery Monitoring	hrs	12					
9.4	Equipment Removal	L.S	L.S					
10	Well Head Completion							
10.1	Reinstallation of Pump and Riser	L.S	L.S					
10.2	Well Pad Construction	L.S	L.S					
10.3	Well Steel Cap	L.S	L.S					
11	Well Water Quality Sampling and Testing (Physico-chemical and Bacteriological water quality analysis)	L.S	L.S					
Total Bill No. 1 to be Carried to Grand Summary								

وزارة المياه والري
سلطة المياه
مديرية المطاع والمشتريات

عبدالله
محمد

BILL No. 2: Wells Rehabilitation of Well No. 13

Item No.	Description	Unit	EST. Quantity	Unit Rate (USD)	Amount (USD)	Taxes and Unit Price (USD)	Customs Amount (USD)	Total (USD)
1	Al Kafrein Well No. 13							
1.1	Mobilization and Preparation							
1.1	Mobilization and demobilization of manpower, Rig and Equipment for Rehabilitation Works	L.S	L.S					
1.2	Mobilization for Camera Survey and Geophysical Logging	L.S	L.S					
1.3	Mobilization for Equipment Required for Riser Pipe and Pump Removal and Reinstallation	L.S	L.S					
2	Riser Pipe and Pump Removal, Inspection and Storage	L.S	L.S					
3	Downhole Camera Surveys	Meter	600					
4	Borehole Geophysical logging (OPTIONAL ITEMS)							
4.1	4-arm Caliper	Run	1					
4.2	Fluid Conductivity and Temperature	Run	1					
4.3	Natural Gamma	Run	1					
4.4	Focused Resistivity (Open hole section)	Run	1					
4.5	Full Wave Sonic	Run	1					
5	Report Submittal	L.S	L.S					
6	Well Rehabilitation and Development Works (OPTIONAL ITEMS)							
6.1	Physical Removal of Sediment (Bailers, Air Surging)	hrs	10					
6.2	Removing Foreign Materials	hrs	10					
6.3	Block Surging (Swabbing)	Meter	600					
6.4	Mechanical Brushing of Screens or Casing Slots	Meter	600					
6.5	Air- or Water-Jetting of Screens or Casing Slots	hrs	8					
6.6	Chemical Treatment with HCL with inhibitor (10-30%)	m ³	8					
6.7	Chemical Treatment with Sodlum TriPoly	Kg	500					
6.8	Well Development by Airlifting/ Air surging	hrs	36					
6.9	Well Development by Pumping	hrs	12					
6.10	Fishing Job up to 10 days	L.S	L.S					
7	Post-Rehab Camera Survey (OPTIONAL)	Meter	600					
8	Well Performance Testing (OPTIONAL ITEMS)							
8.1	Equipment Installations	L.S	L.S					
8.2	Pretest Monitoring	L.S	L.S					
8.3	Pretest Pumping	L.S	L.S					
8.4	Pretest Recovery Monitoring	L.S	L.S					
8.5	Step Drawdown Pumping	hrs	8					
8.6	Step Drawdown Recovery Monitoring	hrs	12					
8.7	Equipment Removal	L.S	L.S					
9	96-hour Constant Rate Test (OPTIONAL ITEMS)							
9.1	Pretest Monitoring	L.S	L.S					
9.2	96-Hour Constant Rate Test	hrs	96					
9.3	Recovery Monitoring	hrs	12					
9.4	Equipment Removal	L.S	L.S					
10	Well Head Completion							
10.1	Reinstallation of Pump and Riser	L.S	L.S					
10.2	Well Pad Construction	L.S	L.S					
10.3	Well Steel Cap	L.S	L.S					
11	Well Water Quality Sampling and Testing (Physico-chemical and Bacteriological water quality analysis)	L.S	L.S					
Total Bill No. 2 to be Carried to Grand Summary								

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سلطة المياه
مديرية العطاءات والمشتريات

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BILL No. 3: Wells Rehabilitation of Well No. 8A

Item No.	Description	Unit	EST. Quantity	Unit Rate (USD)	Amount (USD)	Taxes and Unit Price (USD)	Customs Amount (USD)	Total (USD)
1	Al Kafrein Well No. 8A							
1.1	Mobilization and Preparation							
1.1	Mobilization and demobilization of manpower, Rig and Equipment for Rehabilitation Works	L.S	L.S					
1.2	Mobilization for Camera Survey and Geophysical Logging	L.S	L.S					
1.3	Mobilization for Equipment Required for Riser Pipe and Pump Removal and Reinstallation	L.S	L.S					
2	Riser Pipe and Pump Removal, Inspection and Storage	L.S	L.S					
3	Downhole Camera Surveys	Meter	530					
4	Borehole Geophysical logging (OPTIONAL ITEMS)							
4.1	4-arm Caliper	Run	1					
4.2	Fluid Conductivity and Temperature	Run	1					
4.3	Natural Gamma	Run	1					
4.4	Focused Resistivity (Open hole section)	Run	1					
4.5	Full Wave Sonic	Run	1					
5	Report Submittal	L.S	L.S					
6	Well Rehabilitation and Development Works (OPTIONAL ITEMS)							
6.1	Physical Removal of Sediment (Bailers, Air Surging)	hrs	10					
6.2	Removing Foreign Materials	hrs	10					
6.3	Block Surging (Swabbing)	Meter	530					
6.4	Mechanical Brushing of Screens or Casing Slots	Meter	530					
6.5	Air- or Water-Jetting of Screens or Casing Slots	hrs	8					
6.6	Chemical Treatment with HCL with inhibitor (10-30%)	m ³	8					
6.7	Chemical Treatment with Sodium TriPoly	Kg	500					
6.8	Well Development by Airlifting/ Air surging	hrs	36					
6.9	Well Development by Pumping	hrs	12					
6.10	Fishing Job up to 10 days	L.S	L.S					
7	Post-Rehab Camera Survey (OPTIONAL)	Meter	530					
8	Well Performance Testing (OPTIONAL ITEMS)							
8.1	Equipment Installations	L.S	L.S					
8.2	Pretest Monitoring	L.S	L.S					
8.3	Pretest Pumping	L.S	L.S					
8.4	Pretest Recovery Monitoring	L.S	L.S					
8.5	Step Drawdown Pumping	hrs	8					
8.6	Step Drawdown Recovery Monitoring	hrs	12					
8.7	Equipment Removal	L.S	L.S					
9	96-hour Constant Rate Test (OPTIONAL ITEMS)							
9.1	Pretest Monitoring	L.S	L.S					
9.2	96-Hour Constant Rate Test	hrs	96					
9.3	Recovery Monitoring	hrs	12					
9.4	Equipment Removal	L.S	L.S					
10	Well Head Completion							
10.1	Reinstallation of Pump and Riser	L.S	L.S					
10.2	Well Pad Construction	L.S	L.S					
10.3	Well Steel Cap	L.S	L.S					
11	Well Water Quality Sampling and Testing (Physico-chemical and Bacteriological water quality analysis)	L.S	L.S					
Total Bill No. 3 to be Carried to Grand Summary								

BILL No. 4: Wells Rehabilitation of Well No. 10A

Item No.	Description	Unit	EST. Quantity	Unit Rate (USD)	Amount (USD)	Taxes and Unit Price (USD)	Customs Amount (USD)	Total (USD)
1	Al Kafrein Well No. 10A							
1.1	Mobilization and Preparation							
1.1	Mobilization and demobilization of manpower, Rig and Equipment for Rehabilitation Works	L.S	L.S					
1.2	Mobilization for Camera Survey and Geophysical Logging	L.S	L.S					
2	Well Rehabilitation and Development Works (OPTIONAL ITEMS)							
2.1	Downhole Camera Survey	Meter	500					
2.2	Physical Removal of Sediment (Bailers, Air Surging)	hrs	10					
2.3	Removing Foreign Materials	hrs	10					
2.4	Block Surging (Swabbing)	Meter	500					
2.5	Mechanical Brushing of Screens or Casing Slots	Meter	500					
2.6	Air- or Water-Jetting of Screens or Casing Slots	hrs	8					
2.7	Chemical Treatment with HCL with inhibitor (10-30%)	m ³	8					
2.8	Chemical Treatment with Sodium TriPoly	Kg	500					
2.9	Well Development by Airlifting/ Air surging	hrs	36					
2.10	Well Development by Pumping	hrs	12					
2.11	Fishing Job up to 10 days	L.S	L.S					
3	Post-Rehab Camera Survey based on the results of items under 2 above	Meter	500					
4	Borehole Geophysical logging (OPTIONAL ITEMS)							
4.1	4-arm Caliper	Run	1					
4.2	Fluid Conductivity and Temperature	Run	1					
4.3	Natural Gamma	Run	1					
4.4	Focused Resistivity (Open hole section)	Run	1					
4.5	Full Wave Sonic	Run	1					
5	Report Submittal	L.S	L.S					
6	Well Performance Testing (OPTIONAL ITEMS)							
6.1	Equipment Installations	L.S	L.S					
6.2	Pretest Monitoring	L.S	L.S					
6.3	Pretest Pumping	L.S	L.S					
6.4	Pretest Recovery Monitoring	L.S	L.S					
6.5	Step Drawdown Pumping	hrs	8					
6.6	Step Drawdown Recovery Monitoring	hrs	12					
6.7	Equipment Removal	L.S	L.S					
7	96-hour Constant Rate Test (OPTIONAL ITEMS)							
7.1	Pretest Monitoring	L.S	L.S					
7.2	96-Hour Constant Rate Test	hrs	96					
7.3	Recovery Monitoring	hrs	12					
7.4	Equipment Removal	L.S	L.S					
8	Well Head Completion							
8.1	Well Pad Construction	L.S	L.S					
8.2	Well Steel Cap	L.S	L.S					
9	Well Water Quality Sampling and Testing (Physico-chemical and Bacteriological water quality analysis) (OPTIONAL)	L.S	L.S					
Total Bill No. 4 to be Carried to Grand Summary								

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سلطة المياه
مديرية المعطيات والمشتريات

BILL No.5 : Wells Rehabilitation of Well No. 11A

Item No.	Description	Unit	EST. Quantity	Unit Rate (USD)	Amount (USD)	Taxes and Unit Price (USD)	Customs Amount (USD)	Total (USD)
1	Al Kafrein Well No. 11A							
1.1	Mobilization and Preparation							
	Mobilization and demobilization of manpower, Rig and Equipment for Rehabilitation Works	L.S	L.S					
1.2	Mobilization for Camera Survey and Geophysical Logging	L.S	L.S					
2	Well Rehabilitation and Development Works (OPTIONAL ITEMS)							
2.1	Downhole Camera Survey	Meter	750					
2.2	Physical Removal of Sediment (Ballers, Air Surging)	hrs	10					
2.3	Removing Foreign Materials	hrs	10					
2.4	Block Surging (Swabbing)	Meter	750					
2.5	Mechanical Brushing of Screens or Casing Slots	Meter	750					
2.6	Air- or Water-Jetting of Screens or Casing Slots	hrs	8					
2.7	Chemical Treatment with HCL with inhibitor (10-30%)	m ³	8					
2.8	Chemical Treatment with Sodium TriPoly	Kg	500					
2.9	Well Development by Airlifting/ Air surging	hrs	36					
2.10	Well Development by Pumping	hrs	12					
2.11	Fishing Job up to 10 days	L.S	L.S					
3	Post-Rehab Camera Survey based on the results of Items under 2 above	Meter	750					
4	Borehole Geophysical logging (OPTIONAL ITEMS)							
4.1	4-arm Caliper	Run	1					
4.2	Fluid Conductivity and Temperature	Run	1					
4.3	Natural Gamma	Run	1					
4.4	Focused Resistivity (Open hole section)	Run	1					
4.5	Full Wave Sonic	Run	1					
5	Report Submittal	L.S	L.S					
6	Well Performance Testing (OPTIONAL ITEMS)							
6.1	Equipment Installations	L.S	L.S					
6.2	Pretest Monitoring	L.S	L.S					
6.3	Pretest Pumping	L.S	L.S					
6.4	Pretest Recovery Monitoring	L.S	L.S					
6.5	Step Drawdown Pumping	hrs	8					
6.6	Step Drawdown Recovery Monitoring	hrs	12					
6.7	Equipment Removal	L.S	L.S					
7	96-hour Constant Rate Test (OPTIONAL ITEMS)							
7.1	Pretest Monitoring	L.S	L.S					
7.2	96-Hour Constant Rate Test	hrs	96					
7.3	Recovery Monitoring	hrs	12					
7.4	Equipment Removal	L.S	L.S					
8	Well Head Completion							
8.1	Well Pad Construction	L.S	L.S					
8.2	Well Steel Cap	L.S	L.S					
9	Well Water Quality Sampling and Testing (Physico-chemical and Bacteriological water quality analysis) (OPTIONAL)	L.S	L.S					
Total Bill No. 5 to be Carried to Grand Summary								

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BILL No. 6: Wells Rehabilitation of Well No. 4B

Item No.	Description	Unit	EST. Quantity	Unit Rate (USD)	Amount (USD)	Taxes and Unit Price (USD)	Customs Amount (USD)	Total (USD)
1	Al Kafrein Well No. 4B							
1.1	Mobilization and Preparation							
	Rehabilitation Works	L.S	L.S					
1.2	Mobilization for Camera Survey and Geophysical Logging	L.S	L.S					
2	Well Rehabilitation and Development Works (OPTIONAL ITEMS)							
2.1	Downhole Camera Survey	Meter	500					
2.2	Physical Removal of Sediment (Ballers, Air Surging)	hrs	10					
2.3	Removing Foreign Materials	hrs	10					
2.4	Block Surging (Swabbing)	Meter	500					
2.5	Mechanical Brushing of Screens or Casing Slots	Meter	500					
2.6	Air- or Water-Jetting of Screens or Casing Slots	hrs	8					
2.7	Chemical Treatment with HCL with inhibitor (10-30%)	m ³	8					
2.8	Chemical Treatment with Sodium TriPoly	Kg	500					
2.9	Well Development by Airlifting/ Air surging	hrs	36					
2.10	Well Development by Pumping	hrs	12					
2.11	Fishing Job up to 10 days	L.S	L.S					
3	Post-Rehab Camera Survey based on the results of items under 2 above	Meter	500					
4	Borehole Geophysical logging (OPTIONAL ITEMS)							
4.1	4-arm Caliper	Run	1					
4.2	Fluid Conductivity and Temperature	Run	1					
4.3	Natural Gamma	Run	1					
4.4	Focused Resistivity (Open hole section)	Run	1					
4.5	Full Wave Sonic	Run	1					
5	Report Submittal	L.S	L.S					
6	Well Performance Testing (OPTIONAL ITEMS)							
6.1	Equipment Installations	L.S	L.S					
6.2	Pretest Monitoring	L.S	L.S					
6.3	Pretest Pumping	L.S	L.S					
6.4	Pretest Recovery Monitoring	L.S	L.S					
6.5	Step Drawdown Pumping	hrs	8					
6.6	Step Drawdown Recovery Monitoring	hrs	12					
6.7	Equipment Removal	L.S	L.S					
7	96-hour Constant Rate Test (OPTIONAL ITEMS)							
7.1	Pretest Monitoring	L.S	L.S					
7.2	96-Hour Constant Rate Test	hrs	96					
7.3	Recovery Monitoring	hrs	12					
7.4	Equipment Removal	L.S	L.S					
8	Well Head Completion							
8.1	Well Pad Construction	L.S	L.S					
8.2	Well Steel Cap	L.S	L.S					
9	Well Water Quality Sampling and Testing (Physico-chemical, Bacteriological and Radioactive water quality analysis) (OPTIONAL)	L.S	L.S					
Total Bill No. 6 to be Carried to Grand Summary								

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BILL No. 7: Wells Rehabilitation of Well No. JRV11B

Item No.	Description	Unit	EST. Quantity	Unit Rate (USD)	Amount (USD)	Taxes and Unit Price (USD)	Customs Amount (USD)	Total (USD)
Al Kafrein Well No. JRV11B								
1 Mobilization and Preparation								
1.1	Mobilization and demobilization of manpower, Rig and Equipment for Rehabilitation Works	L.S	L.S					
1.2	Mobilization for Camera Survey and Geophysical Logging	L.S	L.S					
2 Well Rehabilitation and Development Works (OPTIONAL ITEMS)								
2.1	Downhole Camera Survey	Meter	561					
2.2	Physical Removal of Sediment (Ballers, Air Surging)	hrs	10					
2.3	Removing Foreign Materials	hrs	10					
2.4	Block Surging (Swabbing)	Meter	561					
2.5	Mechanical Brushing of Screens or Casing Slots	Meter	561					
2.6	Air- or Water-Jetting of Screens or Casing Slots	hrs	8					
2.7	Chemical Treatment with HCL with inhibitor (10-30%)	m ³	8					
2.8	Chemical Treatment with Sodium TriPoly	Kg	500					
2.9	Well Development by Airlifting/ Air surging	hrs	36					
2.10	Well Development by Pumping	hrs	12					
2.11	Fishing Job up to 10 days	L.S	L.S					
3	Post-Rehab Camera Survey based on the results of items under 2 above	Meter	561					
4 Borehole Geophysical logging (OPTIONAL ITEMS)								
4.1	4-arm Caliper	Run	1					
4.2	Fluid Conductivity and Temperature	Run	1					
4.3	Natural Gamma	Run	1					
4.4	Focused Resistivity (Open hole section)	Run	1					
4.5	Full Wave Sonic	Run	1					
5	Report Submittal	L.S	L.S					
6 Well Performance Testing (OPTIONAL ITEMS)								
6.1	Equipment Installations	L.S	L.S					
6.2	Pretest Monitoring	L.S	L.S					
6.3	Pretest Pumping	L.S	L.S					
6.4	Pretest Recovery Monitoring	L.S	L.S					
6.5	Step Drawdown Pumping	hrs	8					
6.6	Step Drawdown Recovery Monitoring	hrs	12					
6.7	Equipment Removal	L.S	L.S					
7 96-hour Constant Rate Test (OPTIONAL ITEMS)								
7.1	Pretest Monitoring	L.S	L.S					
7.2	96-Hour Constant Rate Test	hrs	96					
7.3	Recovery Monitoring	hrs	12					
7.4	Equipment Removal	L.S	L.S					
8 Well Head Completion								
8.1	Well Pad Construction	L.S	L.S					
8.2	Well Steel Cap	L.S	L.S					
9 Well Water Quality Sampling and Testing (Physico-chemical and Bacteriological water quality analysis) (OPTIONAL)								
		L.S	L.S					
Total Bill No. 7 to be Carried to Grand Summary								

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BILL No. 8: Provisional Sum

Item No.	Description	Unit	Quantity	Unit Rate (USD)	Total (USD)
1	Include a provisional sum of USD 100,000 (One Hundred Thousand American Dollars), to account for unforeseen and unexpected conditions.	P.S	P.S	100,000	100,000
2	Include a provisional sum of USD 10,000 (Ten Thousand American Dollars), to account for fees to be paid by WAJ to the DAB	P.S	P.S	10,000	10,000
3	Supply of valves with different types and diameters similar to existing size and type, to be installed instead of the damaged valves (if required) based on the Engineer decision.	P.S	P.S	30,000	30,000
4	Supply of boreholes pumps similar to the existing - if required- upon Engineer decision	P.S	P.S	30,000	30,000
5	5% of the exact amount of the previous item to be paid to the Contractor to cover all his expenses and duties for Items 3 & 4.	P.S	P.S	5% of above (3&4 Items)	3,000
Total Bill No. 8 to be Carried to Grand Summary					173,000

Grand Summary

Bill No.	Bill	Amount (USD)
G01	General Requirements	
1	Well No. 12	
2	Well No. 13	
3	Well No. 8A	
4	Well No. 10A	
5	Well No. 11A	
6	Well No. 4B	
7	Well No. JRV11B	
8	Provisional Sum	173,000
	Tax and Customs (will be reimbursed upon proof of payment by the actual value after submitting evidences and receipts by Contractor within 90 days (refer to circular 101)	
	Sum (G01-8)	
9	Addition	
10	Discount	
	Total Amount	

Name of Company / Contractor:

Address:

Date:

Signature and stamp:

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Riser pipes					
Item	Description	Unit	Unit Rate (USD)		
			4 inch	6 inch	8 inch
1	Optional Item Supply and deliver to the site riser pipes including overheads and profit				
a.	Black Steel	L.M			
b.	Galvanized Steel	L.M			

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