Irrigation Department
Government of Sindh, Pakistan

World Bank

SINDH BARRAGES IMPROVEMENT PROJECT

RFB No: PK-AFOF SBIP-494022-CW-RFB

Contract: SBIP/K2

Construction of Gauge Wells at Kotri Barrage

Bidding Documents

Volume 1
Bill of Quantities

November 2026

Standard Procurement Document
Summary

Bidding Document: Request for Bids – Small Works (One-Envelope Bidding Process)

PART 1 – BIDDING PROCEDURES

VOLUME 0 – BIDDING PROCEDURES

Section I - Instructions to Bidders (ITB)

This Section provides information to help Bidders prepare their Bids. It is based on a one-envelope Bidding process. Information is also provided on the submission, opening, and evaluation of Bids and on the award of Contracts. **Section I contains provisions that are to be used without modification.**

Section II - Bid Data Sheet (BDS)

This Section includes of provisions that are specific to each procurement and that supplement Section I, Instructions to Bidders.

Section III - Evaluation and Qualification Criteria

This Section specifies the criteria to determine the Most Advantageous Bid.

Section IV - Bidding Forms

This Section includes the forms for the Bid submission, Bill of Quantities or Activity Schedule to be completed by the Bidder and submitted as part of its Bid.

Section V - Eligible Countries

This Section contains information regarding eligible countries.

Section VI - Fraud and Corruption

This section includes the Fraud and Corruption provisions which apply to this Bidding process.

VOLUME 1 – BILL OF QUANTITIES

PART 2 – WORKS' REQUIREMENTS (INCLUDED WITHIN VOLUMES 2 AND 3)

Section VII - Works' Requirements

This Section contains the Specification, the Drawings, and supplementary information that describe the Works to be procured. The Works' Requirements also include the environmental and social (ES) requirements (including requirements relating to Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH)) which are to be satisfied by the Contractor in executing the Works.

VOLUME 2 – SPECIFICATION

VOLUME 3 – DRAWINGS

PART 3 – CONDITIONS OF CONTRACT AND CONTRACT FORMS

VOLUME 4 – CONDITIONS OF CONTRACT AND CONTRACT FORMS

Section VIII - General Conditions of Contract (GCC)

This Section contains the general clauses to be applied in all contracts. **The text of the clauses in this Section shall not be modified.**

Section IX - Particular Conditions of Contract (PCC)

This Section consists the Particular Conditions of Contract which contains provisions specific to the contract. The contents of this Section modify or supplement the General Conditions and shall be prepared by the Employer.

Section X - Contract Forms

This Section contains the Letter of Acceptance, Contract Agreement and other relevant forms.

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1 Preamble

PRE 1.1 The Bill of Quantities shall be read in conjunction with the General and Particular Conditions of Contract, the Specifications, and the Drawings. General directions and descriptions of work and material set out in the Specification or on the Drawings are not necessarily repeated in the Bill of Quantities. The Bill of Quantities refers to specific Clauses in the Specifications. The prices entered for each item shall include provision to satisfy all relevant Clauses from the Specification, even if not referred to in the Bill of Quantities

PRE 1.2 The quantities given in the Bill of Quantities are estimated and provisional, and are given to provide a common basis for bidding. The basis of payment shall be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Project Manager and valued at the rates and prices bid in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Project Manager may fix within the terms of the Contract.

PRE 1.3 A rate or price shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. The cost of Items against which the Contractor has failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.

PRE 1.4 The following work shall not be measured for payment and the cost thereof shall be deemed to be distributed amongst the rates and prices for the various items in the Bill of Quantities.

- Survey and setting out
- Design and construction of all Temporary Works

PRE 1.5 The rates and prices tendered in the priced Bill of Quantities shall include without limitation the following:

- All general risks, liabilities and obligations set out in or reasonably implied from the Contract.
- Complying in every respect with the requirements and the consideration of the Specifications and the Drawings.
- All labour required for work and its associated cost.
- All materials and goods and the associated cost.
- All Contractor’s Equipment including scaffolding, shuttering.
- Equipment and tools, fuel, lubricants and maintenance.
- Provision of water and power.
- Fitting, erection, fixing material and goods in any position and at any height.
- Transportation of equipment and material.
- Production of records and reports
- All necessary protection of the works, removing all temporary installations and making good and clearing away upon completion.
- All applicable taxes, duties, charges, government levies royalties, landing charges and transport.
- Shifting of equipment from one location to another location.
- Supervision

- Overheads and profit.

PRE 1.6 The rates shall also include for performing all tests (field & laboratory) required by the Specification, for which specific rates are not provided in the Bill of Quantities. The Contractor shall carry out tests at an alternative facility approved by the Project Manager. This service shall also be included in the Contractor's rates.

PRE 1.7 The rates shall include for all reporting required associated with a particular item unless a specific item for reporting is provided.

PRE 1.8 The rates shall also include for all dewatering required due to any reason, during execution of Work, except any items for which such dewatering is included in Bill of Quantities.

PRE 1.9 'Rock' is defined as all materials that, in the opinion of the Project Manager requires blasting, or the use of compressed air drilling for their removal, and that cannot be extracted by ripping with a dozer or rear-mounted, heavy-duty ripper with a power output of 200 kW.

PRE 1.10 For items of work where the unit for measurement is given as 'Sum' and the quantity of work is given as 'Item', the proportions of payments in interim certificate shall be made either according to components of work completed or in instalments defined by the period covered by the interim payment certificates to the total period of the work covered by the item.

PRE 1.11 Provisional Sums included and so designated in the Bill of Quantities shall be expended in whole or in part at the direction and discretion of the Project Manager.

2 Abbreviations

Length	in	inch
	ft	foot
	rft	running foot = linear foot
	RD	Reduced Distance (1 RD = 1,000 ft)
Area	sft	Square foot
Volume	cft	cubic foot
Discharge	cusecs	cubic feet per second ft^3/s)
Mass	lb	pound
	kg	kilogram
	t	metric ton = 1,000 kg
Force	N	Newton
Other	dia	diameter
	nr	number
	GC	General Conditions of Contract
	$\pm$	plus or minus

3 Measurement and Payment

MP.1	Introduction
(i)	The Permanent Works shall be measured net notwithstanding any general or local custom except where otherwise specifically described or prescribed in the Contract.
(ii)	The total quantity included in the final measurement of each item shall be measured to the nearest integer relative to that item, or to one decimal place if so, indicated in the Bill of Quantities.
(iii)	Where in the Bill of Quantities there is a schedule or subsidiary bill setting out the quantities of component materials and work which comprise a unit of work measured under a single item in a Part of the Bill of Quantities, the said quantities shall be subject to admeasurement and valued at the rates and prices therein and the total value thereof shall be the rate for the item.

MP.2	Provisional Quantities, Provisional items and Provisional Sums
(i)	Items in the Bill of Quantities marked “Provisional Quantity” or “Provisional Item” shall only be executed if they are the subject of a written instruction from the Project Manager. The rates set out for such items shall be used for the valuation of works so ordered by the Project Manager in writing whether the quantities shown are used wholly or in part. If the amount of work ordered by the Project Manager to be executed under a Provisional Quantity item or quantity exceeds the quantity shown in the Bill of Quantities, the rate for that item set out in the Contract shall not necessarily be deemed applicable to the excess and shall be determined in accordance with the Conditions of Contract.
(ii)	Where in the Bill of Quantities there is an item having the words “Provisional Sum” in the Unit column, the work shall be carried out when ordered and as directed by the Project Manager. For items shown as ‘Prime Cost’ the Contractor shall provide evidence of the exact amount of the direct cost paid for the item by the Contractor and that the item has been procured at a competitive market price. This amount, without addition of overhead or profit, shall be paid by the Employer. The Provisional Sum shown for these items is indicative only.

MP.3	Dayworks
(i)	Work shall not be executed on a daywork basis except by written order of the Project Manager. Rates for daywork items shall apply to the quantity of daywork ordered by the Project Manager. Nominal quantities have been indicated against each item of daywork, and the extended total shall be carried forward as a Provisional Sum to the summary of total tender amount. The Contractor shall prepare a daily report on the format as approved by the Project Manager showing the labour, material and equipment utilized on a particular date for execution of dayworks. The daily report containing the supporting photographs shall be jointly signed by the site representative of the Project Manager and Contractor. In the event the Contactor’s site representative refuses to sign the daily report, the daily report submitted by the Project Manager’s site representative shall be considered as final.

(ii)	In calculating payments due to the Contractor for the execution of daywork, the hours for labour shall be reckoned from the time of arrival of the labour at the job site to execute the particular item of daywork to the time of return to the original place of departure, but excluding meal breaks and rest periods. Only the time of classes of labour directly doing work ordered by the Project Manager and for which they are competent to perform shall be measured. The time of gangers (charge hands) actually doing work with the gangs will also be measured but not the time of foremen or other supervisory personnel.
(iii)	The Contractor shall be entitled to payment in respect of the total time that labour is employed on daywork, calculated at the basic rates in the Schedule of Daywork Rates in the Bill of Quantities together with an additional percentage payment on basic rates representing the Contractor's profit and overheads as described below: a) The basic rates for labour shall cover all direct costs to the Contractor, including but not limited to the amount of wages paid to such labour, transportation time, overtime, subsistence allowances and any sums paid to or on behalf of such labour for social benefits in accordance with the law in the Islamic Republic of Pakistan. b) The additional percentage payment in the Schedule of Daywork Rates shall be applied to costs incurred under (a) above and shall be deemed to cover the Contractor's profit, overheads, superintendence, liabilities, insurances and allowances to labour, timekeeping and clerical and office work, the use of consumable stores, water, lighting and power, the use and repair of stagings, scaffolding, workshops and stores, portable power tools, manual plant and tools, supervision by the Contractor's staff, foremen and other supervisory personnel, and charges incidental to the foregoing.
(iv)	The Contractor shall be entitled to payment in respect of materials used for daywork, except for materials for which the cost is included in the percentage addition to labour costs as detailed heretofore, at the basic rates in the Schedule of Daywork Rates together with an additional percentage payment on the basic rates to cover overheads and profit as follows: a) The basic rates for materials shall be calculated on the basis of the invoiced price, freight, and insurance, handling expenses, damage and losses and shall provide for delivery to store for stockpiling at the Site. b) The additional percentage payment in the Schedule of Daywork Rates shall cover all additions costs, overheads and profit of the Contractor. c) The cost of hauling materials for use on work ordered to be carried out as daywork from the store or stockpile on the Site to the place where it is to be used shall be paid in accordance with the terms for daywork labour and daywork construction equipment.
(v)	The Contractor shall be entitled to payments in respect of Construction Equipment already on Site and employed on daywork at the basic rental rates in the Schedule of Dayworks Rates. The said rates shall be deemed to include due and complete allowance for depreciation, interest, indemnity and insurance, repairs, maintenance, supplies, fuel, lubricants, and other consumables, and all overheads, profit and administration costs related to the use of such equipment. The cost of drivers, operators and assistants shall be paid for separately as daywork labour.

(vi)	In calculating the payment due to the Contractor for Construction Equipment employed on daywork, only the actual number of working hours shall be eligible for payment, except that where applicable and agreed with the Project Manager, the travelling time from the part of the Site where Construction Equipment was located when ordered by the Project Manager to be employed on daywork and the time for return journey thereto shall be included for payment.

MP.4	**General**
(i)	No separate payment shall be made for complying with the requirements of Chapter 1 of the Specification except where otherwise detailed in the Bill of Quantities.
(ii)	Item 1.01 Mobilisation for construction of the Works will cover the Contractor's costs relating to Clause 1.4 of the Specification. The lump sum amount shall not exceed 10 percent of the total tender price. Payment for this item shall be made on completion of items (a) to (g) in Clause 1.4 of the Specification.
(iii)	No separate payment shall be made for demobilisation
(iv)	The measurement for compliance with the Health and Safety Plan shall be made on a monthly basis.
(v)	The measurement for compliance with the Environmental and Social Management Plan shall be made on a monthly basis.

MP.5	**The Site and Working Constraints**
(i)	No separate payment shall be made for complying with the requirements of Chapter 2 of the Specification.

MP.6	**Materials and Workmanship**
(i)	No separate payment shall be made for complying with the requirements of Chapter 3 of the Specification.
(ii)	Except where otherwise provided for in the Bill of Quantities no separate payment shall be made, inter alia, for taking samples, delivery of samples to the Project Manager's laboratory or alternative laboratory, making slump tests, testing of aggregates and making moisture content tests, making concrete cubes, supply of instruments for, and recording of temperatures of concrete and concrete materials, preparation and submission of Site records, trials and proving of alternative Construction Equipment, materials and methods of working suggested by the Contractor.
(iii)	For tests on materials for incorporation in the Permanent Works or tests on the Permanent Works, no payment shall be made for delivery of any sample to a laboratory if such sample or test shall fail to meet the requirements of the Specification, where such tests are ordered or normally required to demonstrate compliance with the Specification.
(iv)	For tests on materials before selection and approval of sources of materials for incorporation in the Permanent Works and for trials of Construction Equipment and methods of working for approval for use in constructing the Permanent Works including tests for resulting workmanship where not provided for in the Bill of Quantities, no separate payment shall be made.

MP.7	Earthwork
MP.7a	**General**
(i)	No separate payment shall be made for complying with the requirements of Chapter 4 of the Specification except where otherwise detailed in the Bill of Quantities.
(ii)	Jungle clearance shall be measured in plan area. The rate shall include for reed or bush disposal.
(iii)	Earth work shall be measured in the following categories: (a) Earthworks in embankment and channel, etc.; and (b) Earthworks in structures.
(iv)	For purposes of measurement and where earthworks in embankment / channel etc. and earthworks in structure share a common boundary, such boundary shall be represented as a continuous series of vertical planes following the plan perimeter of the structure. Such perimeter shall be defined by the limits of concrete, masonry, block work etc. and pitching (but not earth) associated with the structure.
(v)	The rates for earthworks shall be deemed to cover earthworks in any material except those otherwise described (e.g. unsound material) and for which separate items are provided.
(vi)	The cost of dealing with unsound material in any part of the Works shall be borne by the Contractor if in the opinion of the Project Manager the unsoundness is due to failure of the Contractor to comply with the Specification including keeping the excavation free of water.
(vii)	No separate payment shall be made inter alia for surveying and making records of ground levels and topography within earthwork and structure reservation limits; supporting excavations; making good slips and falls; excess excavations, for working space or any other reason; trimming surface of excavation and embankments; additional material placed on account of or in anticipation of settlement; compaction (other than special compaction of fill); compaction trials, control of moisture content, preparation and restoration of borrow pits; scarification; double handling; location and shaping of disposal heaps and embankments, and delays due to testing of in-situ materials and Permanent Works.
(viii)	For the purposes of measurement, it shall be assumed that one cubic foot of material excavated forms one cubic foot of material transported and occupies a volume of one cubic foot in backfill, fill or embankment. The Contractor shall be deemed to have covered in his rates for the disposal of surplus or make up of shortfall resulting from bulking or shrinkage in the case of work measured under items which include for both excavation of material and construction of formations and embankment.
(ix)	No account shall be taken of any tolerance allowed in the specification when identifying for the purposes of measurement the dimensions shown on the drawings or ordered by the Project Manager.

MP.7b	Earthwork in Embankment and Channel, etc.
(i)	For purposes of measurement, earthworks in embankment/channel, etc. shall be taken to include earthworks in the river, canals, embankments, watercourses, roads and drains.
(ii)	Excavation in embankment / channel shall be measured as the net volume of material below ground surface to the limits shown on the Drawings or ordered by the Project Manager. Where an existing embankment / channel is to be remodelled, the original embankment / channel profile is deemed to be the ground level. Rate shall include for excavation below the water table. Where the item is stated to include the formation of an embankment the rate shall include for the formation of that embankment. Where

	jungle clearance has been carried out the ground level shall be deemed to be the level six inches below the original ground level.
(iii)	In the case of embankment or formation constructed to the dimensions shown on the Drawings or ordered by the Project Manager, the volume of material therein shall be measured as the net volume above ground surface to the minimum applicable dimensions so shown or ordered.
(iv)	Excavation in approved borrow areas for construction of embankments or formation shall be measured as the balance required to make up the volume of material in embankment or formation to the value calculated as above after taking into account incorporation of the surplus volume of suitable material (if any) available from material excavated in canal or drain etc, less such amount as may have been disposed of as spoil on the direction of the Project Manager.
(v)	Volumes of excavation in embankment / channel and of material in embankment or formation shall be measured as the product of cross-sectional area and length.
(vi)	For new sections of canal and drain channels, embankments and inspection routes, a cross-sectional area shall be calculated with reference to a ground surface level taken on the centreline of the earthworks as shown on the Drawings or as ordered by the Project Manager, such level being deemed to extend indefinitely on each side of, and at right angles to, the said centreline. Where two or more embankments / channels run side by side the point at which the ground level appertaining to one channel changes to that appertaining to another shall be fixed by agreement, or in the absence of agreement, as ordered by the Project Manager. Where in the opinion of the Project Manager the above method will not give a representative value for the cross section, whether through excessive slope of the surface of the ground or otherwise, further ground surface levels shall be taken at fixed intervals from the centreline and at right angles to it, so that a more representative value for the cross section may be obtained.
(vii)	Cross sections so determined shall be taken at 300 ft intervals along the centreline of the earthworks as shown on the Drawings or as ordered by the Project Manager and the cross sectional area shall be deemed to apply for 150 ft along the centreline on each side of the point thereon at which the cross section was taken. If in the Project Manager's opinion cross sections taken at these intervals will not give volumes representative of the actual volumes of channel or embankment, cross sections shall be taken at closer intervals.
(viii)	For remodelled channels, cross sectional areas shall be calculated from sections of ground surface taken at right angles to the channel centreline. Ground level should be taken at a sufficiently close interval such that, in the Project Manager's opinion, they will give an adequate representation of the existing channel cross section. Cross sections so determined shall be taken at 200 ft intervals along the centreline of the earthworks and the cross-sectional area shall be deemed to apply for 100 ft along the centreline on each side of the point thereon at which the cross section was taken. If in the Project Manager's opinion cross sections taken at these intervals will not give volumes representative of the actual volume of the channel, cross sections shall be taken at closer intervals.
(ix)	Where earth movement has been undertaken in accordance with mass haul diagrams the positions of balancing lines on these mass haul diagrams shall be a straight line between the earthwork excavation and placement irrespective of the haul distance at site.
(x)	Rates for excavation shall include for haul distances up to 750ft. Material hauled further shall be measured under only one haulage item, namely, the one which gives the limits within which the haul distances falls. The haul distance shall be measured as the straight-line distance between the centres of gravity of excavation and deposition.
(xi)	Notwithstanding the above, where mass haul diagrams are used, the measurement of the volumes of excavated material moved within limits of haul shall be effected by

	dividing each peak or trough on the diagrams by horizontal lines of length equivalent to the haul distance limits given in the Bill of Quantities, the vertical intercepts between such lines representing the quantities hauled between said haul distance limits.

MP.8	**Diversion and Care of Water**
	Measurement No measurement or payment shall be made for diversion, drainage, dewatering or care of water, except as specified herein and included in the Bill of Quantities. The lump sum price included in the priced Bill of Quantities shall be deemed to cover all costs of diverting the flows, conveying flows through and/or past the site of the Permanent Works, keeping each part of the Works protected against inundation, well drained and properly dewatered during construction; and of constructing, maintaining, operating and removing all Temporary Works in connection therewith. Any costs resulting from accidental inundation of any working areas, whether due to breakdown, failure or overtopping of the Temporary Works, shall be to the account of the Contractor except as outlined in the Conditions of Contract. The lump sum price shall be deemed to include all measures for the diversion and care of water required for the proper completion of the Permanent Works, whether or not they are specifically mentioned in the Contract. The lump sum price shall be deemed to take account of any effects of the measures for the diversion and care of water on any surfaces, including such effects as erosion and deposition due to the flow of water. The lump sum price shall be deemed to include all costs resulting from the reinstatement of such surfaces. **Payment** Payment shall be made at the appropriate lump sum price for the pay item. No separate measurement for care and handling of water shall be made for rains, flooding and protection of works against water due to any other reason.

MP.9	**Concrete Work**
(i)	Concrete work shall be measured in terms of two categories of work, namely; concrete and reinforcement, as described below and set out in the Bill of Quantities. Fixings to and in concrete shall be measured separately under the headings to which the fixings relate.

MP.10	**Concrete**
(i)	Concrete shall be measured as the net volume of the concrete to the dimensions specified in the Permanent Works, but no deduction shall be made in respect of the volume occupied by reinforcement or in respect of small openings, recesses, chases and embedded fixtures having a cross sectional area less than 1 square foot.
(ii)	Concrete in each class shall be measured separately in each of the following circumstances irrespective otherwise of location in the Permanent Works: (a) Mass concrete in-situ (b) Reinforced concrete in situ; and (c) Precast concrete

(iii)	Where in the Bill of Quantities separate items are provided in particular locations or for particular types of work, it shall not be deemed to prejudice the generality of the above rules.
(iv)	No separate measurement shall be made for the formwork and cost thereof shall be deemed to be included in the rate for concrete.
(v)	No separate measurement shall be made for the finishes specified in of the specification and the cost thereof shall be deemed to be included in the item for concrete.
(vi)	No separate measurement shall be made for curing specified in the specification and the cost thereof shall be deemed to be included in the item for concrete.
(vii)	No separate payment shall be made for bituminous protection provided in accordance with the Specification and cost thereof shall be deemed to be included in the item of the concrete
(viii)	No separate payment shall be made, inter alia, for supply and testing of concrete ingredients; storage of materials; determination of mix proportions; making and testing of trial mixes; control and mixing of concrete; transporting, placing and compacting concrete; construction joints (whether shown on the Drawings or not except that where a waterstop is specified or ordered by the Project Manager to be incorporated in construction joints it shall be measured by length for each type and size required); moulds for transporting and fixing precast work; precautions for concreting in unfavourable weather; curing; ascertaining requirements for reinforcement, bending, cutting and fixing reinforcement or working space for erection and handling of back formwork.

MP.11	**Reinforcement**
(i)	Reinforcement shall be measured by mass as calculated from the approved Bar Bending Schedules on the basis of the theoretical unit weight, taken from ASTM A615/A615M, of the reinforcement actually placed in the concrete including laps indicated on the Drawings and as specified.
(ii)	No measurement shall be made for supports, chairs, wastage or additional steel in laps which are authorized for convenience of the Contractor.

MP.12	**Floor**
(i)	Flooring works covered by this section of Specifications, complete and approved, shall be measured and paid for per square feet, including preparations, cement sand screed, grouting, pointing etc. at the individual item rates entered in the Bill of Quantities and generally in accordance with the applicable terms and Conditions of the Contract.
(ii)	Skirting shall be measured and paid for per running feet at the individual item rates entered in the Bill of Quantities, as per terms stated above.
(iii)	Wall tiling work covered under this section of Specifications, complete and approved, shall be measured and paid for per square feet including preparations, rendered backing, tile adhesive, grouting, pointing, etc. as per rates entered in the Bill of Quantities and generally in accordance with the applicable terms and Conditions of the Contract
(iv)	No extra payment shall be made, against cost of samples, cartage etc. submitted for approval, to the Contractor, Sub-contractor, supplier or vendor

MP.13	**Painting and Decorating**
(i)	All the painting and finishing on all surfaces, other than timber and steelworks which shall

	be deemed to be inclusive of painting and finishing in their own items of works, shall be measured per square feet in accordance with standard method of measurement and paid for at the unit rates entered in the Bill of Quantities and in accordance with the terms and conditions of this Contract. Where separate quantities are not shown in the Bill of Quantities, these shall be deemed to have been included in the rate of the relevant items to be finished and painted and no separate payment shall be made for painting/finishing works of such items
(ii)	No extra payment shall be made to the Contractor, Sub-contractor Supplier or vendor against cost & cartage or sample submitted for approval

MP.14	**Stone Protection Works**
(i)	Pitching work and gravel backing shall be measured by surface area of each type and size of pitching and backing. The rates under the appropriate items in the Bill of Quantities shall include for all works described in the Specification. No separate payment shall be made, inter alia, for preparing the formation or haul of material. Filter cloth shall be measured by surface area of the finished works. The rate shall include for all laps.

4 Bill of Quantities

KOTRI BARRAGE GAUGE WELLS

BILL SUMMARY

Bill Nr	Description of Bill	Amount (PKR)
1	Construction of Gauge Wells and allied works in head reach of off-taking canals of Kotri Barrage	0
A-	**TOTAL OF BILLS**	**0**
B-	**SINDH SALES TAX (5% of A)**	**0**
C-	**TOTAL OF BILLS INCLUDING SST = (A+B)**	**0**

Bill No.1 -Construction of Gauge Wells and allied works in head reach of off-taking canals of Kotri Barrage (Five Gauge wells)

Item No.	Description	Unit	Quantity	Rate in figures (PKR)	Rate in words (PKR)	Amount (PKR)
1.01	Mobilization for the construction of work	sum				
1.02	Excavation (unclassified, all types of soil in dry and wet conditions) in foundation of buildings, trenches and other structures etc, complete in all respect as per specifications and Drawings or as directed by the Project Manager.	cft	164,676			
1.03	Provide and lay 3-inch crushed stone to a depth of one foot (1') with compacted thickness, and fill the voids with sand etc, complete in all respect as per specifications and Drawings or as directed by the Project Manager.	cft	1454.635			
1.04	Backfill with selected earth obtained from suitable excavated material or Borrow material complete in all respect as per specifications and Drawings or as directed by the Project Manager.	cft	157,049			
1.05	Common excavation in approved borrow areas and form embankments including compection to not less than 90% dry density, haul not exceding 01 miles.complete in all respect as per specifications and Drawings or as directed by the Project Manager.(Provisional Quantity)	cft	54,967			
1.06	Cement concrete plain including placing compacting, finishing and curing (including screening, formwork and washing of stone .aggregate).etc complete in all respects as per specifiaction and drawings or as directed by the Project Manager.					
	a) Class 'E' Ratio (1:4:8) with SRC	cft	610.31			
	b) Class 'C' Ratio (1:2:4) with SRC	cft	544.50			
1.07	Providing & Placing reinforced concrete Class 'C' (3000Psi) using ordinary portland cement as per drawings and specification or as directed by the the Project Manager including all kinds of forms,moulds,lifting, shuttering,curing,rendering and finishing the exposed surface (including screening and washing of aggregate) etc complete in all respects as per specifiaction and drawings or as directed by the Project Manager.					
	a) R.C. work in roof slab, beams, columns, raft, lintels and other structural members laid in situ or precast laid in position complete in all respects. (Ratio 1:2:4)	cft	5,499.21			
1.08	Supplying and fabrication of intermedia.te grade deformed reinforcement for R.C.C in beams columns including cutting, bending, laying in position, including cost of binding wire (also includes removal of rust from bars & cost of binding wire):- Grade 60 etc complete in all respects as per specifiaction and drawings or as directed by the Project Manager.	ton	19.25			
					Carried to Bill Part Summary	

Bill No.1 -Construction of Gauge Wells and allied works in head reach of off-taking canals of Kotri Barrage (Five Gauge wells)

Item No.	Description	Unit	Quantity	Rate in figures (PKR)	Rate in words (PKR)	Amount (PKR)
1.09	Providing and laying and jointing High Density Polyethylene (H.D.P.E) Pipes of 12 in dia (Class B), in proper position including all accessories etc complete in all respects as per specifiaction and drawings or as directed by the Project Manager.	rft	563			
1.10	Providing and fixing MS pipe railing 2" dia. 2 rows of pipe (with horizonal and verticle post)on top of gauge well opening with all fixtures, pedestals and fittings including all accessories, galvanized painting etc complete in all respects as per specifiaction and drawings or as directed by the Project Manager.	rft	79			
1.11	Providing and fixing galvanized stainless steel ladder rungs, 3/4" in diameter, including all necessary accessories etc complete in all respects as per specifiaction and drawings or as directed by the Project Manager.(the size shall be as per drawing.)	nr	196			
1.12	Supplying and dumping stone for apron, including handling of materials etc complete in all respect as shown on the Drawings or directed by the Project Manager including carriage of all material from source/quarry to the site of work. (Provisonal Quantity)	cft	1,500			
1.13	Providing and laying stone pitching of 12 inch thick on slopes & bed laid over prepared filter media (gravel backing) complete in all respects as per specifiaction and drawings or as directed by the Project Manager. including carriage of all material from source/quarry to the site of work.	cft	9,572			
1.14	Providing and laying 6-inch thick filter media (gravel backing) on prepared and compacted slopes and beds under stone pitching complete in all respects as per specifiaction and drawings or as directed by the Project Manager. including carriage of all material from source/quarry to the site of work.	cft	5,324			
1.15	Providing and installation of approved Approved geotextile filter cloth under stone pitching complete in all respects as per specifiaction and drawings or as directed by the Project Manager	sft	11,284			
1.16	Construction of single room for the guage well as shown on Drawings	sft	980			
1.17	Care and handling Water Including Dewatering whenever required.	sum				
1.18	Arrangement for flow measurement for ADCP complete with repect to all steel posts, removable stainless steel wire arrangement, pulleys, rops and hooks including all accessories etc complete in all respects as per specifiaction and drawings or as directed by the Project Manager.	set	5			
					Carried to Bill Part Summary	

Bill No.1 -Construction of Gauge Wells and allied works in head reach of off-taking canals of Kotri Barrage (Five Gauge wells)

Item No.	Description	Unit	Quantity	Rate in figures (PKR)	Rate in words (PKR)	Amount (PKR)
1.19	Providing and Installation of staff gauges of approved height etc,complete in all respect, as per drawings and specifications or as directed by the Project Manager.(Provisional Qty)	nr	5			
1.20	Supply and installation of electrical works, including all material like lights, fans, light plugs, internal wiring, switches, and cable connections with approved cable from the power source, complete in all respects as per drawings, specifications, or as directed by the Project Manager.(Provisional Qty)	Provisioanl Sum		2,500,000.00		2,500,000.00
					Carried to Bill Part Summary	

Bill No.1 -Construction of Gauge Wells and allied works in head reach of off-taking canals of Kotri Barrage (Five Gauge wells)

Item No.	Description	Unit	Quantity	Rate in figures (PKR)	Rate in words (PKR)	Amount (PKR)
	BILL PART SUMMARY					
	Total for Page 1-1					-
	Total for Page 1-2					-
	Total for Page 1-3					
					Carried to Bill Part Summary	-