REVISED ON 04-06-2024

# GOVERNMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

OF SRI LANKA
MINISTRY OF
NATIONAL WATER SUPPLY AND DRAINAGE BOARD
SUPPLY AND INSTALLATION OF WATER PUMPING SETS, MOTOR CONTRO CENTRE (MCC) AND ACCESSORIES (Above 30kW: LC opens by Supplier)
CONTRACT No.:

REVISED ON 04-06-2024

NATIONAL WATER SUPPLY AND DRAINAGE BOARD

GALLE ROAD,

RATMALANA.

SRI LANKA

(MONTH & YEAR)

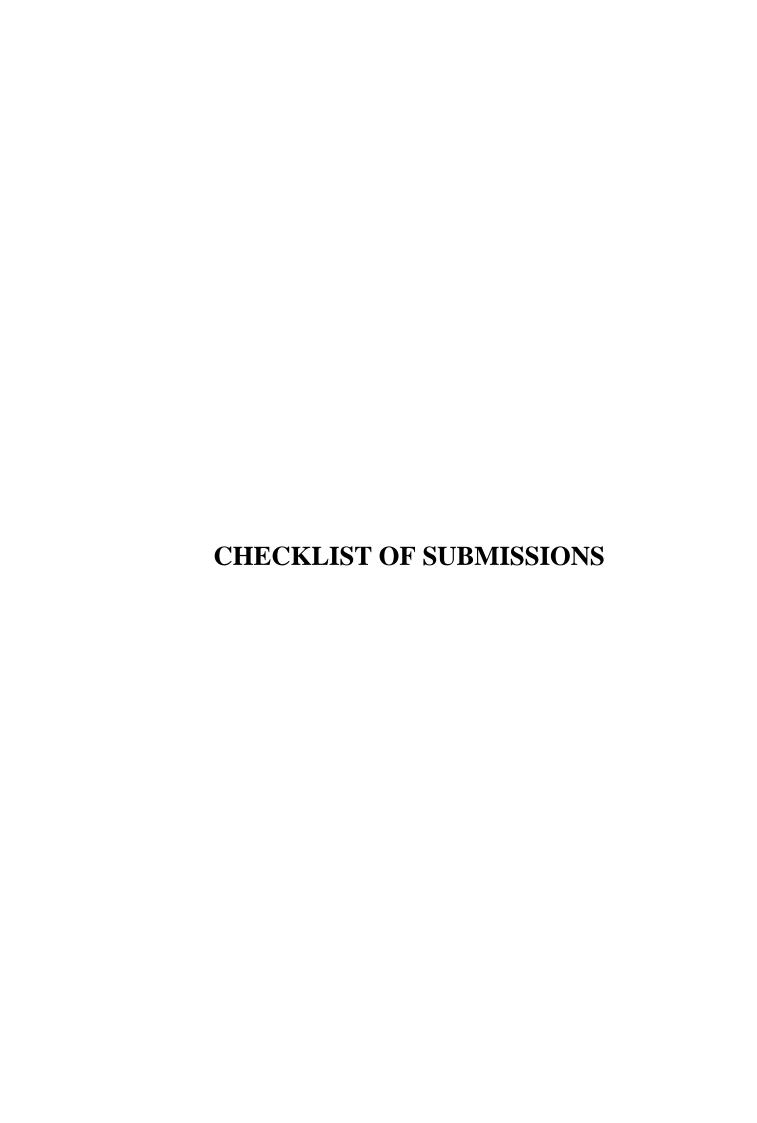
<u>DOCUMENT ISSUANCE CERTIFICATE</u>
(To be filled at the time of issue by the authorized issuing officer)

1.	STAN	DARD DOCUMEN	T REFE	ERENCE	NUMBER: NWSDB/SBD/S&I/Water Pump/FC/Ver1
2.	CONT	TRACT NUMBER	:		
3.	a)	ISSUED TO	:		
	b)	ADDRESS	:		
	c)	TELEPHONE NUM	MBER	:	
	d)	FACSIMILE NUM	BER	:	
4.	a)	NON REFUNDABL TENDER FEE	Æ :		RECEIVED/NOT RECEIVED ASH/BANK DRAFT
	b)	RECEIPT/BANK I	ORAFT	NUMBI	ER :
5.	NUMI	BER OF COPIES IS	SUED	:	
6.	NUMI	BER OF CANCELLI	ED COI	PIES ISS	UED :
7.		CELLED COPY FEE ASH/BANK DRAFT		Rs	RECEIVED/NOT RECEIVED
8	BUSI	NESS REGISTRATI	ON NU	MBER	:
9.	a)	ISSUING OFFICE	R	:	
	b)	DESIGNATION		:	
	c)	SIGNATURE		:	
10.	PLAC	E OF ISSUE		:	
11.	SEAL	:			
12.	DATE	:			TIME:

## **Table of Contents**

SECTION		PAGE NU	MBER
		From	To
	Document Issuance Certificate	(i)	
	Table of contents	(ii)	(iii)
	Checklist of Submissions	(iv	v)
	Invitation for Bids	(v	<i>i</i> )
1.	Instructions to Bidders	1 – 1	1 - 27
2.	General Conditions of Contract	2 - 1	2 - 49
3.	Form of Bid	3 - 1	3 - 2
4.	Bidding Data	4 - 1	4 - 5
5.	Contract Data		
	* General	5 - 1	5 - 4
	* Delivery Schedule	5 -	- 5
	* Payment Schedule	5 -	- 6
6.	Specifications	6y - 1	6ad - 18
7.	Schedule of Particulars	7- 1	7 - 26
8.	Deviation from Specifications	8 -	- 1
9.	List of Drawings	9-	-1
10	Bills of Quantities	10-1	10 -9

11	Specimen Forms  1 Bid Security 2 Contract Agreement 3 Performance Guarantee 4 Advance Payment Security 5 Letter of Acceptance 6 Retention Money Guarantee	11 -1 11-2 - 11 -5 11 -6 11 - 7 11 - 8 - 11 - 9 11 - 10
12	Appendices Appendix 1A– Detail of Similar Supplies Completed within The last five years and ongoing.	12 -1
	Appendix 1B – Details of Similar Installations Completed Within the last five years and ongoing.	12-2
	Appendix 2 – Schedule of Technical Persons & Facilities	12 - 3
	Appendix 3 –. Financial Statement	12 - 4
	Appendix 3A – Authorization for Bank references	12 - 5
	Appendix 4 Confirmation of capability of Production and Supply according to delivery schedule	12 – 6
	Appendix 5 - Manufacturer's Authorization to sign the Contract.	12 – 7
	Appendix 6 - Schedule of Plant and Equipment Proposed for Pumps, Installations	12 -8 - 12–10
	Appendix 7 - Bidder's authorization to sign the contract	12 – 11
	Appendix 8 - TOR for Independent Inspection Agency Inspection of Pump Motor Assemblies	12 –12 12 - 13
	Appendix 9 - Manufacturer's awareness of the TOR for Independent Inspection Agency and checklist for Pre-Shipment Inspections	12 –14
	Appendix 10 - Manufacturer's Warranty for the goods supplied under the contract	12 –15
	Appendix 11 - Pre-Shipment Inspection of Pump and Motor Assemblies by Team of NWSDB Engineers	12 - 16 $12 - 17$
	Appendix 12 - Guidelines for the acceptance of Pump and Motor Assemblies at NWSDB site by Inspection Team.	12 – 18 12 – 19
	Appendix 13 – Affidavit by the Bidder	12 - 20
	Appendix 14 - Entitle allowances on foreign travels & related expenses	12 – 21



#### **CHECKLIST OF SUBMISSIONS**

\* Note: Please mark 'Y' in the cages under the 'Remarks' column if submissions are made.

'N' or 'N/A' should be marked for cases of 'No submissions' and 'Not applicable' respectively.

No	Check list		Reference ns to Bidders	Remarks *
(a)	Documentary evidence to establish eligibility of bidder.	Page No 1 -5, 1- 6	Clause No. 4 .1	
(b)	Certified copy of business registration.	Page No.	Clause No. 4.1 (vii)	
(c)	The Bidder's technical and production capability necessary to perform the Contract.	Page No. 1 - 6	Clause No 4.2 (iii)	
(d)	Documentary evidence to establish qualifications for the performance of the Contract.	Page No. 1 - 6, 1-7	Clause No. 4.2	
(e)	The agreement of the manufacturer or producer to confirm that the supply will be made in accordance with the Delivery Schedule.	Page No. 1 - 7	Clause No. 4.2 (v)	
(f)	In the case of a bidder offering to supply Goods under the Contract which the bidder does not manufacture or otherwise produce, authorisation by the manufacturer or producer of Goods as his accredited agent.	Page No. 1 - 7	Clause No. 4.2 (vi)	
(g)	Documentary evidence to establish that goods and related services offered are from an eligible source and origin.	Page No. 1 - 7	Clause No. 5	
(h)	Duly completed all sections of Bidding Documents. (Bidder shall fill the Schedule of Particulars, BOQ etc., indicating any deviations to specifications under the corresponding schedule of particulars)	Page No. 1 -9, 1-10, 1 - 11	Clause No. 11.1 (a)	
(i)	Subsequent Addendum/Addenda. (if any)	Page No. 1 - 10	Clause No. 11.1 (h)	
(j)	Product Conformity Certificates and Quality Management System Certificate.	Page No. 1- 10	Clause No. 11.1(k)	
(k)	Company Registration.	Page No. 1 - 10	Clause No. 11.1 (m)	
(l)	Other document comprising the bid.	Page No. 1 - 10	Clause No. 11.1	
(m)	Certified Copy of the VAT Registration Certificate.	Page No. 1 - 12	Clause No. 14.4	
(n)	Bid Security.	Page No. 1 - 15	Clause No. 20	
(0)	Certificates of registration of the contract with the registrar of public contracts as per the Act No. 3 of 1987.	Page No. 1 - 27	Clause No. 47	
	Any other document as given below:	Page No. 1 – 11	Clause No. 11.1 (p)	

NWSDB/SBD/S&I/Water Pump/FC : Checklist of Submissions CAPC:MPC:DPC: January 2024– Version 1



N	IINISTRY OF
	NATIONAL WATER SUPPLY AND DRAINAGE BOARD
	INVITATION FOR BIDS
	SUPPLY AND INSTALLATION OF WATER PUMPING SETS, MOTOR CONTROL CENTRE (MCC) AND ACCESSORIESWATER SUPPLY SCHEME
	CONTRACT No.:
1.	The Chairman, Cabinet Appointed Procurement Committee, Ministry of
2.	Bidding Documents are available at the office of the Assistant General Manager (Tenders and Contracts), National Water Supply & Drainage Board (NWSDB), Galle Road, Ratmalana between 09:00 hours to 15:00 hours on normal working days up to, upon payment of a nonrefundable fee of Rs
3.	Bidding Documents may be inspected free of charge at the office of the Assistant General Manager (Tenders and Contracts), NWSDB, Galle Road, Ratmalana.
4.	Bidding Documents will be issued only to those who submit a written application on the bidder's official letter head to the address indicated in the bid notice and a proof of payment of the non-refundable document fee as specified in the Bid notice.
5.	To be eligible for contract award, the successful bidder shall not have been blacklisted
6.	Alternative bids shall not be accepted.
7.	Sealed bids may be either dispatched by registered post or hand delivered to the Procurement Division, Ministry of
8.	All Bids shall be accompanied by a bid security of Rupees
9.	Bids will be opened immediately after the closing of bids, at the office of the Procurement Division, Ministry of

10. For further details, please contact the Assistant General Manager (Tenders and

94 - 11-2605328 or 94 -11-2638999, Extension 1750 or facsimile number

Ratmalana

#### Chairman, NATIONAL WATER SUPPLY AND DRAINAGE BOARD

Contracts), NWSDB, Galle Road,

94 -11-2635885.

on telephone

]	MINISTRY OF
	INVITATION FOR BIDS
	SUPPLY AND INSTALLATION OF WATER PUMPING SETS, MOTOR CONTROL CENTRE (MCC) AND ACCESSORIESWATER SUPPLY SCHEME
	CONTRACT No.:
1.	The Chairman , Ministry Procurement Committee, Ministry of
	Parliament Road, Pelawatta, Battaramulla, Sri Lanka will receive sealed bids for the supply and Installation of
	on
2.	Bidding documents are available at the office of the Assistant General Manager (Tenders and Contracts), National Water Supply & Drainage Board (NWSDB), Galle Road, Ratmalana, Sri Lanka between 09:00 hours to 15:00 hours on normal working days up to, upon payment of a non-refundable fee of Rsplus applicable VAT.
3.	Bidding Documents may be inspected free of charge at the office of the Assistant General Manager (Tenders and Contracts), NWSDB, Galle Road, Ratmalana.
4.	Bidding Documents will be issued only to those who submit a written application on the bidder's official letter head to the address indicated in the bid notice and a proof of payment of the non-refundable document fee as specified in the Bid notice.
5.	To be eligible for contract award, the successful bidder shall not have been blacklisted
6.	Alternative bids shall not be accepted.
7.	Sealed bids may be either dispatched by registered post or hand delivered to the Procurement Division, Ministry of, No. 35, "Lakdiya Medura", New Parliament Road, Pelawatta, Battaramulla, Sri Lanka
	to receive on or before the closing time. Late Bids will be rejected.
8	All Rids shall be accompanied by a bid security of Rupees and the

- 9. Bids will be opened immediately after the closing of bids, at the office of the Procurement Division, Ministry of ......,
  No. 35, "Lakdiya Medura", New Parliament Road, Pelawatta, Battaramulla, Sri Lanka. Bidders or their authorised representatives may be present at the opening of bids.
- 10. For further details, please contact the Assistant General Manager (Tenders and Contracts), NWSDB, Galle Road, Ratmalana on telephone number 94 -11-2605328 or 94 -11-2638999 Extension 1750 or facsimile number 94 -11-2635885.

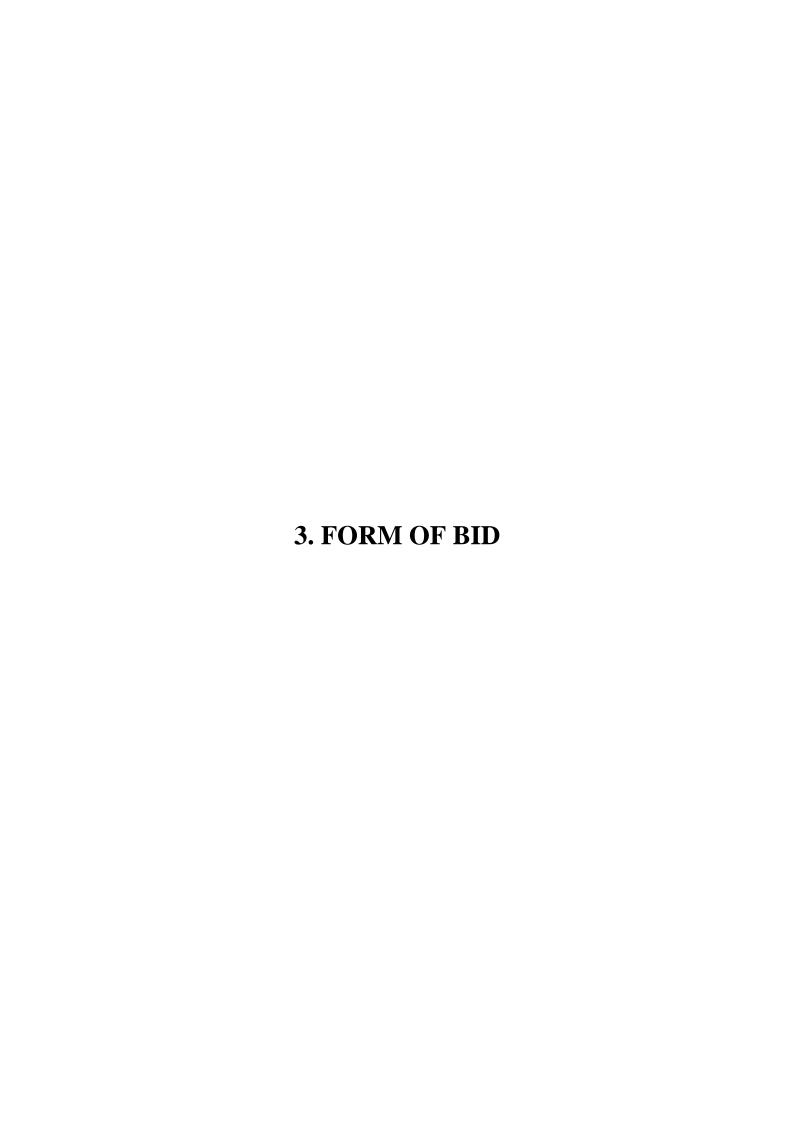
Chairman,
NATIONAL WATER SUPPLY AND DRAINAGE BOARD

	MINISTRY OF
	INVITATION FOR BIDS
	SUPPLY AND INSTALLATION OF WATER PUMPING SETS, MOTOR CONTROL CENTRE (MCC) AND ACCESSORIES
	WATER SUPPLY SCHEME
	CONTRACT No.:
1.	The Chairman, Department Procurement Committee, National Water Supply and Drainage Board (NWSDB), Galle Road, Ratmalana, Sri Lanka on behalf of NWSDB will receive sealed bids for the supply and Installation of
	bids at hours on
2.	Biddings documents are available at the office of the Assistant General Manager (Tenders and Contracts), National Water Supply & Drainage Board (NWSDB), Galle Road, Ratmalana, Sri Lanka between 09:00 hours to 15:00 hours on normal working days up to, upon payment of a non refundable fee of Rsplus applicable VAT.
3.	Bidding Documents may be inspected free of charge at the office of the Assistant General Manager (Tenders and Contracts), NWSDB, Galle Road, Ratmalana, Sri Lanka.
4	Bidding Documents will be issued only to those who submit a written application on the bidder's official letter head to the address indicated in the bid notice and a proof of payment of the non-refundable document fee as specified in the Bid notice.
5.	To be eligible for contract award, the successful bidder shall not have been blacklisted
6.	Alternative bids shall not be accepted.
7.	Sealed bids may be either dispatched by registered post or hand delivered to the Assistant General Manager (Tenders and Contracts), NWSDB, Galle Road, Ratmalana, Sri Lanka to receive on or before the closing time. Late Bids will be rejected.
8.	All Bids shall be accompanied by a bid security of Rupees

- bid security should be valid up to.....(Specify the Date).
- Bids will be opened immediately after the closing of Bids, at the office of the 9. Assistant General Manager (Tenders and Contracts), NWSDB, Galle Road, Ratmalana, Sri Lanka. Bidders or their authorised representatives may be present at the opening of bids.
- 10. For further details, please contact the Assistant General Manager (Tenders Contracts), NWSDB, Galle Road, Ratmalana, Sri Lanka on telephone number 94-11-2605328 or 94-11-2638999 Extension 1750 or facsimile number 94 -11-2635885.

#### Chairman, NATIONAL WATER SUPPLY AND DRAINAGE BOARD

DPC - January 2024 - Version 1 Revised on 22-02-2024



#### THE GOVERNMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA MINISTRY OF ..... NATIONAL WATER SUPPLY AND DRAINAGE BOARD SUPPLY AND INSTALLATION OF WATER PUMPING SETS, MOTOR CONTROL CENTRE (MCC) AND ACCESSORIES ...... WATER SUPPLY SCHEME CONTRACT No.: ..... FORM OF BID The Chairman, Cabinet Appointed Procurement Committee, Ministry of ..... No. 35, "Lakdiya Medura" New Parliament Road, Pelawatta Battaramulla I/We, the undersigned, having authority to sign this Bid and having read and fully acquainted myself/ourselves with the contents of the Information and Instructions to Bidders and Terms and Conditions of Bid and Delivery Schedule pertaining to the above Bid, along with Bills thereto, do hereby undertake to supply the Goods and Services referred to therein, in accordance with the aforesaid Instructions, Terms and Conditions for a total Bid price of foreign currency in United States Dollars (US\$)......(in Lanka Rupees ..... (in words) RS. ....(in figures) (excluding VAT) The make up of the aforesaid total Bid Price is given in the accompanying Bills of Quantities. I/We confirm that this offer shall be open for acceptance until as given in the Bidding Data and that it will not be withdrawn or revoked prior to that date. I/We attach hereto the following documents as part of my/our Bid. 1. Duly completed sections 1 to 12 of Bidding Documents. 2. Documentary evidence to establish eligibility of bid. Documentary evidence to establish that goods and related services are offered from an 3. eligible source and origin. Documentary evidence to establish eligibility of goods offered. 4. 5. Bid Security. 6. Documentary evidence to establish qualifications for the performance of the Contract. 7. Contract Data.

NWSDB/SBD/S&I/Water Pump/FC : Form of Bid

Any other document.

Bidding Data.

8.

9.

CAPC- January 2024– Version 1

I/We declare that the photostat copies of documents and certificates submitted as part of my/our Bid are true copies of such documents and certificates. Also in case of ISO 9001:2015 certificate, I/we confirm that I/we have verified that the certificate issuing authority has accreditation to issue same and materials offered conform to the ISO series certificates and the specified product standard certificates.

I/We further agree to the right of the Board to debar me/us from participating in its future bids in the event that my/our submitted copies or documents are found to be forged or tampered with.

I/We understand that you are not bound to accept the lowest bid and that you reserve the right to reject any or all bids or to accept any part of a bid without assigning any reasons thereto.

I/We undertake to adhere to the Delivery Schedule given in Contract Data.

My/Our Bank Reference is as follows: ..... Signature of Bidder . Name of Bidder • Address • • ····· Telephone Number • Facsimile Number . Date · Witnesses 1. Name • Capacity · Address Signature . ..... 2. Name : Capacity . Address . . ..... Signature .

### THE GOVERNMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA MINISTRY OF ..... NATIONAL WATER SUPPLY AND DRAINAGE BOARD SUPPLY AND INSTALLATION OF WATER PUMPING SETS, MOTOR CONTROL CENTRE (MCC) AND ACCESSORIES ...... WATER SUUPLY SCHEME CONTRACT No.: FORM OF BID The Chairman, Ministry Procurement Committee, Ministry of ....., No. 35, "Lakdiya Medura" New Parliament Road, Pelawatta Battaramulla I/We, the undersigned, having authority to sign this Bid and having read and fully acquainted myself/ourselves with the contents of the Information and Instructions to Bidders and Terms and Conditions of Bid and Delivery Schedule pertaining to the above Bid, along with Bills thereto, do hereby undertake to supply the Goods and Services referred to therein, in accordance with the aforesaid Instructions, Terms and Conditions for a total Bid price of foreign currency in United States Dollars (US\$)......(in words) US \$......(in figures) and Sri ..... (in words) RS. ..... (in figures) (excluding VAT) The make up of the aforesaid total Bid Price is given in the accompanying Bills of Quantities. I/We confirm that this offer shall be open for acceptance until as given in the Bidding Data

and that it will not be withdrawn or revoked prior to that date.

I/We attach hereto the following documents as part of my/our Bid.

- 1. Duly completed sections 1 to 12 of Bidding Documents.
- 2. Documentary evidence to establish eligibility of bid.
- Documentary evidence to establish that goods and related services are offered from an 3. eligible source and origin.
- Documentary evidence to establish eligibility of goods offered. 4.
- 5. Bid Security.
- 6. Documentary evidence to establish qualifications for the performance of the Contract.
- 7. Contract Data.
- 8. Bidding Data.
- Any other document. 9.

NWSDB/SBD/S&I/Water Pump/FC: Form of Bid

MPC - January 2024- Version 1

I/We declare that the Photostat copies of documents and certificates submitted as part of my/our Bid are true copies of such documents and certificates. Also in case of ISO 9001: 2015 certificate, I/we confirm that I/we have verified that the certificate issuing authority has accreditation to issue same and materials offered conform to the ISO series certificates and the specified product standard certificates.

I/We further agree to the right of the Board to debar me/us from participating in its future bids in the event that my/our submitted copies or documents are found to be forged or tampered with.

I/We understand that you are not bound to accept the lowest bid and that you reserve the right to reject any or all bids or to accept any part of a bid without assigning any reasons thereto.

I/We undertake to adhere to the Delivery Schedule given in Contract Data

My/Our Bank Reference is as follows:		
Signature of Bidder	······································	
Name of Bidder	:	
Address	:	
Telephone Number	:	
Facsimile Number	:	
Date	:	
	Witnesses	
1. Name	:	
Capacity	:	
Address	:	
Signature	:	
2. Name	:	
Capacity	:	
Address	:	
Signature	:	

### THE GOVERNMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA MINISTRY OF ..... NATIONAL WATER SUPPLY AND DRAINAGE BOARD SUPPLY AND INSTALLATION OF WATER PUMPING SETS. MOTOR CONTROL CENTRE (MCC) AND ACCESSORIES .....WATER SUPPLY SCHEME CONTRACT No.: ..... **FORM OF BID** The Chairman, Department Procurement Committee, National Water Supply and Drainage Board, Galle Road. Ratmalana. I/We, the undersigned, having authority to sign this Bid and having read and fully acquainted myself/ourselves with the contents of the Information and Instructions to Bidders and Terms and Conditions of Bid and Delivery Schedule pertaining to the above Bid, along with Bills thereto, do hereby undertake to supply the Goods and Services referred to therein, in accordance with the aforesaid Instructions, Terms and Conditions for a total Bid price of foreign currency in United States Dollars (US\$)......(in Lanka Rupees ..... (in words) RS. .....(in figures) (excluding VAT) The make up of the aforesaid total Bid Price is given in the accompanying Bills of Quantities. I/We confirm that this offer shall be open for acceptance until as given in the Bidding Data and that it will not be withdrawn or revoked prior to that date. I/We attach hereto the following documents as part of my/our Bid. Duly completed sections 1 to 12 of Bidding Documents 1. Documentary evidence to establish eligibility of bid. 2. 3. Documentary evidence to establish that goods and related services are offered from an eligible source and origin. Documentary evidence to establish eligibility of goods offered. 4. 5. **Bid Security** Documentary evidence to establish qualifications for the performance of the Contract. 6.

NWSDB/SBD/S&I/Water Pump/FC: Form of Bid

Any other document.

Contract Data

Bidding Data

7. 8.

9.

DPC - January 2024- Version 1

I/We declare that the photostat copies of documents and certificates submitted as part of my/our Bid are true copies of such documents and certificates. Also in case of ISO 9001: 2015 certificate, I/we confirm that I/we have verified that the certificate issuing authority has accreditation to issue same and materials offered conform to the ISO series certificates and the specified product standard certificates.

I/We further agree to the right of the Board to debar me/us from participating in its future bids in the event that my/our submitted copies or documents are found to be forged or tampered with.

I/We understand that you are not bound to accept the lowest bid and that you reserve the right to reject any or all bids or to accept any part of a bid without assigning any reasons thereto.

I/We undertake to adhere to the Delivery Schedule given in Contract Data.

My/Our Bank Reference is as follows..... Signature of Bidder . Name of Bidder • Address Telephone Number • Facsimile Number • ..... Date • Witnesses 1. Name . ...... Capacity . Address Signature . 2. Name . Capacity · Address , . ..... Signature •

### 4. BIDDING DATA

The Bidding Data is a part of Instructions to Bidders and should be read in conjunction with the Instructions to Bidders.

If there is a discrepancy found in the Instructions to Bidders and the Bidding Data, the Content in the Bidding Data shall supersede the Content in the Instructions to Bidders.

(Note: What is typed in italic letters are guide lines to prepare the Bidding Data and they shall be removed after preparation of the Bidding Data.)

#### **Bidding Data**

(Please note that the clause numbers given here under are that of Instruction to Bidder)

The following specific data for the goods and related services to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

ITB Clause Reference	A. General						
1.1	The Purchaser / Employer is						
	Name : National Water Supply and Drainage Board Address : Galle Road - Ratmalana Sri Lanka						
	Name of authorized Representative :						
	The Chairman, National Water Supply and Drainage Board Galle Road - Ratmalana Sri Lanka						
	The Works consist of						
	located at						
	Intended Completion Date is						
	Name of the Contract :						
	Contract No.						
	The office for collection of bid forms is  Assistant General Manager (Tenders & Contracts)  NWSDB, Galle Road,  Ratmalana.						
	The non-refundable fee is Rupees						
	The Bid forms will be issued until						
2.1	The source of funding is:						

- **4.1** (**x**) Add to Clause Joint Ventures are not acceptable.
- **4.2 (i)** Minimum qualification to qualify for the award of the Contract is: Experience in Supply and Installation works of at least one contract of a similar nature and complexity equivalent to the supply and Installation works of ....... kW (indicate figure) over the last 5 years.

Total monetary value of the supply/ supply & installation works performed for the last five years is Rs ......Mn

- **4.2 (iv)** Working Capital \*1 + present available credit facilities for the company\*2 + credit facilities exclusively for this contract 0.1 x current work commitments\*3>Rs.....\*4
  - \*1 Working Capital = Current Assets Current Liabilities
  - \*2 A letter to prove the availability of credit facilities issued by a Bank within a month prior to date of closing of Bids.
  - \*3 current work commitment = work remaining uncompleted (Documentary evidence to justify shall be submitted)
  - \*4 15% of estimated cost of the Bid.

#### **B.** Contents of Bidding Documents

**7.1** For <u>Clarification of bid purposes</u> only, the Employer's address is:

Assistant General Manager (Tenders and Contracts),

National Water Supply and Drainage Board,

Galle Road, Ratmalana.

Fax . 011 – 2635885 Tel:011-2605328

#### C. Preparation of Bids

11.1 (o) The Bidder shall submit the following additional documents:

The information listed below shall be submitted with the offer to the Engineer for review. The submittals shall include:

- 1. Dimensioned cross sectional drawing of the pump complete with materials of manufacture.
- 2. Pump performance curves showing
  - Head (m) Vs flow (m<sup>3</sup>/h or l/s)
  - Pump efficiency Vs flow (m<sup>3</sup>/h or l/s)
  - Power required to drive pump (kW) Vs flow (m<sup>3</sup>/h or l/s)
  - NPSH Required (m) Vs flow (m<sup>3</sup>/h or l/s)
- 3. All motor information.

- 4. Proposed panel layout (indicators, meters, switches etc.)
- 5. Specification for MCCB's, MCB's, Busbars, Drives etc.
- 6. Specification for transducers, sensors etc.
- 7. Printed literature supporting details given in the questionnaire.

17.3	Period of time the Goods are expected to be functioning (for the purpose of spare parts):
19.1	The Bid shall be valid for
20.1	Bid shall include a Bid Security in the format included in Section 11 Specimen Forms
20.2	The amount of the Bid Security shall be: Rs.
20.3	The validity period of the bid security shall be until(give a Date) [This shall be filled by T&C Section]
	D. Submission and Opening of Bids
22.2 (ii)	The inner and outer envelopes shall be addressed to the following address.
	The Chairman, Cabinet Appointed Procurement Committee, Procurement Division, Ministry of, No. 35, "Lakdiya Medura" New Parliament Road, Pelawatta Battaramulla Sri Lanka.
22.2 (iii)	Name of the Contract :
	Contract no
23.1	The Procurement Committee's Address for the submission (on behalf of the Board) and Bid opening is;
	The Chairman, Cabinet Appointed Procurement Committee, Procurement Division, Ministry of, No. 35, "Lakdiya Medura" New Parliament Road, Pelawatta Battaramulla Sri Lanka.  The deadline for the submission of bids is as specified in the IFB
	Date Time

26.1	The place for opening of bids,				
	Cabinet Appointed Procurement Committee, Procurement Division, Ministry of, No. 35, "Lakdiya Medura" New Parliament Road,				
	Pelawatta Battaramulla Sri Lanka.				
	Date Time: Immediately after closing of bids				
35 .2(xii)	<ul> <li>i. Economic life of Pumping Unit Years.</li> <li>ii. Discounting Rate%.</li> <li>iii. Power Cost Rs/ kWh.</li> <li>iv. Annual Operation as mentioned in the particular specification</li> </ul>				
37.3	Add the Clause 37.3				
	If the procurement is within the authority limit of a CAPC.				
	After evaluation of Bids in accordance with the procedures described under Clauses 25, 26, 27, 28, 29, and 30, the Employer will inform to all the bidders in writing the selection of the successful bidder and the intention of contract award to such bidder. The unsuccessful bidders if they so wish, within one week of such notice may make representation to the Secretary to the Ministry of				
	Address: The Secretary Appeal Board, Ministry of, No. 35, "Lakdiya Medura" New Parliament Road, Pelawatta Battaramulla				
	Cash Deposit: Rs. 100,000.00				
	E. Evaluation and Comparison of Bids				
42.1	Prevailing rate of stamp duty is nil.				
43.1	The amount of performance security shall be% of the contract Price				

The amount of Advance payment is 20% of the contract value. Advance payment Guarantee shall be obtained at the contractor's cost. 48.1 The equipment to be provided under this contract shall be suitable for installation and operation at elevations of about ...... m above sea level inside weather protected structures. Outside ambient temperatures range between ...... and ....... <sup>0</sup>C and water

temperature varies between ...... and ......<sup>0</sup>C.

Relative Humidity is expected to range between ...... and 100%. Atmosphere is dusty.

45.1

#### **Bidding Data**

(Please note that the clause numbers given here under are that of Instruction to Bidder)

The following specific data for the goods and related services to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

ITB Clause	A. General
Reference	

#### **1.1** The Purchaser / Employer is

The Works consist of

Name : National Water Supply and Drainage Board

Address : Galle Road - Ratmalana

Sri Lanka

Name of authorized Representative:

The Chairman, National Water Supply and Drainage Board Galle Road - Ratmalana Sri Lanka

		Located at
		located at
Intended Comp	letion Date is	Days from the Start Date.
Name of the Co	ontract :	
Contract No.: .		
The office for o	collection of bid forms is	
	Assistant General Manage	r (Tenders & Contracts)
	NWSDB, Galle Road,	(Tenders & Contracts)
r	Ratmalana.	
The non-refundin cash	lable fee is Rupees	Plus VAT, payable
The Bid forms	will be issued until	
The source of f	unding is:	

 $NWSDB/SBD/S\&I/Water\ Pump/FC: Bidding\ Data$ 

2.1

MPC : January 2024– Version 1 4-1

- **4.1 (x)** Add to Clause Joint Ventures are not acceptable.
- **4.2 (i)** Minimum qualification to qualify for the award of the Contract is: Experience in Supply and Installation works of at least one contract of a similar nature and complexity equivalent to the supply and Installation works of ....... kW (indicate figure) over the last 5 years.

Total monetary value of the supply/supply & installation works performed for the last five years is Rs.....Mn

- **4.2 (iv)** Working Capital \*1 + present available credit facilities for the company\*2 + credit facilities exclusively for this contract 0.1 x current work commitments\*3>Rs.....\*4
  - \*1 Working Capital = Current Assets Current Liabilities
  - \*2 A letter to prove the availability of credit facilities issued by a Bank within a month prior to date of closing of Bids.
  - \*3 current work commitment = work remaining uncompleted (Documentary evidence to justify shall be submitted)
  - \*4 15% of estimated cost of the Bid.

#### **B.** Contents of Bidding Documents

7.1 For Clarification of bid purposes only, the Employer's address is:

Assistant General Manager (Tenders and Contracts),

National Water Supply and Drainage Board,

Galle Road, Ratmalana.

Fax . 011 – 2635885 Tel:011-2605328

#### C. Preparation of Bids

**11.1** (o) The Bidder shall submit the following additional documents:

The information listed below shall be submitted with the offer to the Engineer for review. The submittals shall include:

- 1. Dimensioned cross sectional drawing of the pump complete with materials of manufacture.
- 2. Pump performance curves showing
  - Head (m) Vs flow (m<sup>3</sup>/h or l/s)
  - Pump efficiency Vs flow (m³/h or l/s)
  - Power required to drive pump (kW) Vs flow (m<sup>3</sup>/h or l/s)
  - NPSH Required (m) Vs flow (m<sup>3</sup>/h or l/s)
- 3. All motor information.

- 4. Proposed panel layout (indicators, meters, switches etc.)
- 5. Specification for MCCB's, MCB's, Busbars, Drives etc.
- 6. Specification for transducers, sensors etc.
- 7. Printed literature supporting details given in the questionnaire.

17.3	Period of time the Goods are expected to be functioning (for the purpose of spare parts):
19.1	The Bid shall be valid for
20.1	Bid shall include a Bid Security in the format included in Section 11 Specimen Forms
20.2	The amount of the Bid Security shall be: Rs.
20.3	The validity period of the bid security shall be until(give a Date) [This shall be filled by T&C Section]
	D. Submission and Opening of Bids
22.2 (ii)	The inner and outer envelopes shall be addressed to the following address.
	The Chairman, Ministry Procurement Committee, Procurement Division, Ministry of, No. 35, "Lakdiya Medura" New Parliament Road, Pelawatta Battaramulla Sri Lanka.
22.2 (iii)	Name of the Contract :
	Contract no.
23.1	The Procurement Committee's Address for the submission (on behalf of the Board) and Bid opening is;
	The Chairman, Procurement Committee, Procurement Division, Ministry of, No. 35, "Lakdiya Medura" New Parliament Road, Pelawatta Battaramulla Sri Lanka.
	The deadline for the submission of bids is as specified in the IFB
	Date Time

NWSDB/SBD/S&I/Water Pump/FC : Bidding Data

MPC: January 2024– Version 1 4-3

26.1	The place for opening of bids,		
	Ministry Procurement Committee,		
	Procurement Division,		
	Ministry of,		
	No. 35, "Lakdiya Medura" New Parliament Road,		
	Pelawatta		
	Battaramulla		
	Sri Lanka.		
	Date Time: Immediately after closing of bids		
35.2 (xii)	i. Economic life of Pumping Unit Years.		
,	ii. Discounting Rate%.		
	iii. Power Cost Rs/ kWh.		
	iv. Annual Operation as mentioned in the particular specification		
37.3	Add the Clause 37.3		
	If the procurement is within the authority limit of a MPC.		
	After evaluation of Bids in accordance with the procedures described under Clauses 25, 26, 27, 28, 29, and 30, the Employer will inform to all the bidders in writing the selection of the successful bidder and the intention of contract award to such bidder. The unsuccessful bidders if they so wish, within one week of such notice may make representation to the Secretary to the Ministry of		
	Address: The Secretary Appeal Board, Ministry of, No. 35, "Lakdiya Medura" New Parliament Road, Pelawatta Battaramulla		

#### E. Evaluation and Comparison of Bids

**42.1** Prevailing rate of stamp duty is nil.

The amount of performance security shall be ......% of the contract Price.

Cash Deposit: Rs. 25,000.00

MPC: January 2024– Version 1 4-4

45.1	The amount of Advance payment is 20% of the contract value.
	Advance payment Guarantee shall be obtained at the contractor's cost.
48.1	The equipment to be provided under this contract shall be suitable for installation and operation at elevations of about
	Relative Humidity is expected to range between

NWSDB/SBD/S&I/Water Pump/FC : Bidding Data

MPC : January 2024- Version 1

#### **Bidding Data**

(Please note that the clause numbers given here under are that of Instruction to Bidder) The following specific data for the goods and related services to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

# ITB Clause A. General Reference

1.1

The Purchaser / Employer is

The Works consist of

Name : National Water Supply and Drainage Board

Address : Galle Road - Ratmalana

Sri Lanka

Name of authorized Representative:

The Chairman, National Water Supply and Drainage Board Galle Road - Ratmalana Sri Lanka

	located at
	Completion Date is
Name of	he Contract:
Contract	10
The office	e for collection of bid forms is
	Assistant General Manager (Tenders & Contracts)
	NWSDB, Galle Road,
	Ratmalana.
The non-in cash	efundable fee is Rupees
Th. D:16	orms will be issued until

DPC - January 2024- Version 1

2.1

- **4.1 (x)** Add to Clause Joint Ventures are not acceptable.
- **4.2 (i)** Minimum qualification to qualify for the award of the Contract is: Experience in Supply and Installation works of at least one contract of a similar nature and complexity equivalent to the supply and Installation works of ....... kW (indicate figure) over the last 5 years.

Total monetary value of the supply/supply & installation works performed for the last five years is Rs...... Mn

- **4.2 (iv)** Working Capital \*1 + present available credit facilities for the company\*2 + credit facilities exclusively for this contract 0.1 x current work commitments\*3>Rs......\*4
  - \*1 Working Capital = Current Assets Current Liabilities
  - \*2 A letter to prove the availability of credit facilities issued by a Bank within a month prior to date of closing of Bids.
  - \*3 current work commitment = work remaining uncompleted (Documentary evidence to justify shall be submitted)
  - \*4 15% of estimated cost of the Bid.

#### **B.** Contents of Bidding Documents

7.1 For Clarification of bid purposes only, the Employer's address is:

Assistant General Manager (Tenders and Contracts), National Water Supply and Drainage Board,

Galle Road, Ratmalana.

Fax . 011 – 2635885 Tel:011-2605328

#### C. Preparation of Bids

11.1 (o) The Bidder shall submit the following additional documents:

The information listed below shall be submitted with the offer to the Engineer for review. The submittals shall include:

- 1. Dimensioned cross sectional drawing of the pump complete with materials of manufacture.
- 2. Pump performance curves showing
  - Head (m) Vs flow (m<sup>3</sup>/h or l/s)
  - Pump efficiency Vs flow (m<sup>3</sup>/h or l/s)
  - Power required to drive pump (kW) Vs flow (m<sup>3</sup>/h or l/s)
  - NPSH Required (m) Vs flow (m<sup>3</sup>/h or l/s)
- 3. All motor information.

- 4. Proposed panel layout (indicators, meters, switches etc.)
- 5. Specification for MCCB's, MCB's, Busbars, Drives etc.
- 6. Specification for transducers, sensors etc.
- 7. Printed literature supporting details given in the questionnaire.

17.3	Period of time the Goods are expected to be functioning (for the purpose of spare parts):
19.1	The Bid shall be valid for
20.1	Bid shall include a Bid Security in the format included in Section 11 Specimen Forms
20.2	The amount of the Bid Security shall be: Rs.
20.3	The validity period of the bid security shall be until(give a Date) [This shall be filled by T&C Section]
	D. Submission and Opening of Bids
22.2 (ii)	The inner and outer envelopes shall be addressed to the following address.
	Assistant General Manager (Tenders & Contracts) National Water Supply & Drainage Board, Galle road, Ratmalana
22.2 (iii)	Name of the Contract :
	Contract no.
23.1	The Procurement Committee's Address for the submission (on behalf of the Board) and Bid opening is;
	Assistant General Manager (Tenders & Contracts Section), National Water Supply & Drainage Board, Galle Road, Ratmalana
	The deadline for the submission of bids is as specified in the IFB
	Date Time

DPC - January 2024– Version 1

26.1	The place for opening of bids,  Assistant General Manager (Tenders & Contracts)  National Water Supply & Drainage Board,  Galle Road,  Ratmalana	
	Date Time: Immediately after closing of bids	
35.2 (xii)	<ul> <li>i. Economic life of Pumping Unit Years.</li> <li>ii. Discounting Rate%.</li> <li>iii. Power Cost Rs/ kWh.</li> <li>iv. Annual Operation as mentioned in the particular specification</li> <li>E. Evaluation and Comparison of Bids</li> </ul>	
42.1	Prevailing rate of stamp duty is nil.	
43.1	The amount of performance security shall be% of the contract Price	
45.1	•	
45.1	The amount of Advance payment is 20% of the contract value.  Advance payment Guarantee shall be obtained at the contractor's cost.	
48.1	The equipment to be provided under this contract shall be suitable for installation and operation at elevations of about	
	Relative Humidity is expected to range between	

DPC - January 2024– Version 1

## **5. CONTRACT DATA**

The Contract Data is a part of General Conditions of Contract and should be read in conjunction with the General Conditions of Contract.

If there is a discrepancy found in the General Conditions of Contract and the Contract Data, the Content in the Contract Data shall supersede the Content in the General Conditions of Contract.

(Note: What is typed in italic letters are guide lines to prepare the Contract Data and they shall be removed after preparation of the Contract Data.)

#### **Contract Data**

(Please note that the Clause nos. given hereunder are that of Conditions of Contract)

The following Contract Data shall supplement and / or amend the Conditions of Contract (CC). Whenever there is a conflict, the provisions herein shall prevail over those in the CC.

[The Purchaser shall select insert the appropriate wording using the samples below or other acceptable wording, and delete the text in italics]

<b>1.1</b> (g)	Defects Liability Period is 365 Days.		
1.1(i)	The Engineer is General Manager, National Water Supply and Drainage Board, Galle Road, Ratmalana.		
1.1(k)	The Purchaser / Employer is		
	Name: National Water Supply and Drainage Board,		
	Address: Galle Road, Ratmalana		
	Name of Authorized Representative: The Chairman, National Water Supply & Drainage Board,:		
1.1 (o)	The Project Site(s)/Final Destination(s) is/are:		
	(Insert the location		
1.1 (u)	The Start Date shall be 14 Days from the Letter of Acceptance.		
1.2	Name of Engineer's Representative :		
	(Fill the Name of Project Director / Deputy General Manager of relevant RSC and Designation)		
8	For <u>notices</u> , the Purchaser's address shall be:		
	Attention:		
	Address:		
	Telephone:		
	Facsimile number:		
	Electronic mail address:		

11.1	The	Works consist of	
11.4	Cont	tract period is	
12	Deta	ils of Shipping and other Documents to be furnished by the Supplier are,	
	Work programme including Procurement of Pumps & Motor and Accessories Installation drawings Testing procedures Technical literatures Operation & Maintenance Manual As Built Drawings Technical details required for Training of Operation Staff All documents requested for payment in Clause 15 hereof All Technical details for Automation (if applicable only) Surge calculation (if applicable) Technical literatures of Surge Protection System (Electrical/Hydraulic) Any other document requested by the Employer/ Engineer		
13.27.1	Contractor shall supply operation and maintenance manuals before the testing of pumps at site and as built drawing within two weeks from the date of completion of the work.		
13.27.2	The Engineer shall with hold 5% of the Initial Contract price.		
22.3	Contractor shall not produce or sell any items under the name of National Water Supply & Drainage Board to a third party.		
23	The	minimum insurance covers shall be:	
	(a)	The minimum cover for insurance of the Works and of Plant and Materials is 110% of the Initial Contract Price.	
		The maximum deductible for insurance of the Works and of Plant and Materials is 5% of the Initial Contract Price.	
	(b)	The minimum cover for loss or damage to Equipment is the replacement cost of equipment.	
		The maximum deductible for insurance of Equipment is 5% of the replacement cost of the equipment.	

- (c) The minimum cover for personal injury or death, for third party and employees of the Employer and other persons engaged by the Employer in the Works is Rs 1,000,000 per event, **number of events are unlimited**
- (d) The minimum cover for personal injury or death,
  - for the Contractor's workmen is Rs 1,000,000 per event, number of events are unlimited.
  - Contractor's employees other than workmen is Rs 1,000,000 per event, number of events are unlimited.
- Marine Insurance shall be in an amount equal to 110% of the CIF value of the goods from "warehouse to warehouse" on "all risk" Basis.
- 25.1 Tests to be performed

Material

Performance

Assembling

Any other test which affect for the durability and the trouble free operation of the good

Inspections to be done

Manufacture's test -

Comprehensive

Independent Inspection Agency - Comprehensive

Pre-shipment inspection by NWSDB Officers .....[State whether comprehensive or not ].

26 Liquidated damages is Rs..... per Day

The maximum amount of liquidated damages shall be:10% of the Contract Price

27.3 The comprehensive warranty shall be valid up to three years from the date of taking over for trouble free operation.

The warranty shall cover following items/ parts (Generally Pumps and Motors, Panel boards and other equipment)

- The contractor shall provide the following in three copies at least 14 Days before handing over of the equipment.
  - 1 Certified copies of all performance test results of pumps and motors.
  - 2 Manufacturer's Certification that all pumping units, motor control equipment is fully in conformance with the specification along with shipping documents.
  - 3 Operation and Maintenance manuals of Pumps and Motors.
  - 4 Control wiring diagrams for Electrical Panels. (Including Automatic Controls).
  - 5 Spare Parts Manuals.

#### **DELIVERY SCHEDULE**

Item No.	Description of Goods	Quantity [As per BOQ]	Unit	Final Destination [Insert place of Delivery]	Delivery Date Purchaser's delivery date as per the contract
01	Pumps				
02	Motor				
03	Accessories				

#### PAYMENT SCHEDULE

Letter of Credit will be opened by the Supplier / Contractor. An Advance payment will be made.

	AGE OF YMENT	STAGE OF CONTRACT	DOCUMENT TO BE SUBMITTED	AMOUNT OF PAYMENT	REMARKS
(A)	Advance Pay	yment			
1	Mobilization Advance Payment	After signing of Contract Agreement	<ul> <li>A written request for payment in the form of an invoice.</li> <li>A bank guarantee for the equivalent amount.</li> <li>A performance bond.</li> </ul>	20% of the initial contract price.	Refer Clause 15.2 of GCC
<b>(B</b>	) Foreign Pay	ment	*		
2	Subsequent Payments	On shipping the items part or fully	<ul> <li>Copies of the Supplier's invoice showing description of Goods, quantity, unit price, total amount and HS Code Number;</li> <li>3 copies of clean on-board bill of lading marked freight prepaid.</li> <li>Copies of packing list identifying contents of each package and measurements</li> <li>Manufacturer's warranty certificate as per Clause 15 hereof.</li> <li>Inspection certificates, issued by the nominated inspection agency.</li> <li>Manufacturer's Inspection and Test Certificate</li> <li>Certificate of origin</li> <li>Certificate of conformity to the requirements specified in the specifications.</li> <li>Inspection and test certificate by the NWSDB pre-shipment Inspection team.</li> </ul>	55% of foreign component of the items shipped on Letter of Credit.	Refer Clause 15.4 of GCC
3	Balance Payment on taking over	Taking over certificate by the Engineer based on the delivery, installation, testing and fulfillment of other's obligations	<ul> <li>A written request for final (balance) payment in the form of an invoice based on the BOQ</li> <li>on production of a taking over certificate issued by the Engineer.</li> <li>Engineer's Representative's approval for the balance payment of Foreign Component.</li> <li>Submission of Bank guarantee for 5% of Contract Price as a retention money.</li> </ul>	Balance 25% of the foreign component shall be paid.	Refer Clause 15.4 of GCC

NWSDB/SBD/S&I/Water Pump/FC : Payment Schedule CAPC: MPC: DPC -January 2024– Version 1

((	() Local Paym	ent				
4	First Payment of supply	On delivery and stacking of the Goods at site	Document providing the delivered Goods and passed in test performed are in compliance with the specifications.	70% of the Local component of the supply bills	Refer Clause 15.4 of GCC	
5	bill Balance	Taking over certificate by	On production of a Taking Over Certificate issued by the	10% of the Local	Refer Clause 15.4 of GCC	
	Local Payment of supply bill	the Engineer for the delivery and other obligations		component of the supply bill		
6	Installation Bill (Local) payment	On Taking over certificate after testing & commissioning	A written request for the Engineer's Representative's approval for the payment.  On production of a Taking Over Certificate issued by the Engineer.	80% of the Installation bill	Refer Clause 15.4 of GCC	
(Γ	(D) Final Payment					
7	Final Payment (Release of retention)	On final acceptance by the Engineer.	<ul><li>a). Written request for the release of retention guarantee.</li><li>b) On production of a Final Acceptance Certificate issued by the Engineer.</li></ul>	Release the retention guarantee.	Refer Clause 15.6 of GCC	

5-7

# 6. SPECIFICATIONS

•	SPECIFICATIONS FOR MOTOR	6y-1 to 6y-18
	DRIVEN SELF LUBRICATED	
	VERTICAL TURBINE PUMPING	
	SETS AND ACCESSORIES	
•	SPECIFICATIONS FOR BORE	6z-1 to 6z-15
	HOLE TYPE SUBMERSIBLE	
	PUMPING SETS AND	
	ACCESSORIES	
•	SPECIFICATIONS FOR	6aa-1 to 6aa-19
	HORIZONTAL SHAFT DRIVEN	
	DOUBLE SUCTION	
	CENTRIFUGAL PUMPING SETS	
	AND ACCESSORIES	
•	SPECIFICATIONS FOR END	6ab-1 to 6ab-18
	SUCTION VERTICAL DELIVERY	
	BACK PULL – OUT	
	CENTRIFUGAL PUMPING SETS	
	AND ACCESSORIES	
	111,2 1100200 0 11220	
•	SPECIFICATIONS FOR VERTICAL	6ac-1 to 6ac-18
	SHAFT DRIVEN DOUBLE	
	SUCTION CENTRIFUGAL	
	PUMPING SETS AND	
	ACCESSORIES	
•	SPECIFICATIONS FOR	6ad-1 to 6ad-18
	VERTICALLY/HORIZONTALLY	oud I to oud-10
	MOUNTED IN LINE BOOSTER	
	PUMPING SETS AND	
	ACCESSORIES	
	ACCESSURIES	

# 7. SCHEDULE OF PARTICULARS

(Select the Specification and Schedule of Particulars Which are applicable to the particular contact)

# SCHEDULE OF PARTICULARS

## TABLE OF CONTENTS

		PAGE NUMBER
1	Vertical Turbine Centrifugal Pumping Set	7 - 2
2	Bore hole type submersible Pumping Sets and Accessories	7 - 6
3	Horizontal shaft driven double suction Centrifugal Pumping Sets and Accessories	7 - 10
4.	End Suction Vertical delivery back pull – out Centrifugal Pumping Sets and Accessories	7 – 14
5.	Vertical shaft driven double suction Centrifugal Pumps Sets and Accessories	7 - 18
6.	Vertically / Horizontally Mounted In Line Booster Pumps	7 - 23

NWSDB/SBD/S&I/Water Pump/FC : Schedule of Particulars CAPC: MPC: DPC - January 2024 – Version 1 7 - 1

## 1.0 VERTICAL TURBINE CENTRIFUGAL PUMPING SETS

# 1.1 Pump

No.	Description	NWSDB requirement (to be filled by the Engineer)	Bidder's Proposal
1.1.1	Make and country of origin		
1.1.2	Туре		
1.1.3	Model		
1.1.4	Number of stages		
1.1.5	Speed (RPM)		
1.1.6	Capacity at specified head (m³/hr)		
1.1.7	Efficiency at duty point		
1.1.8	Minimum submergence required		
1.1.9	Pump casing materials:		
1.1.10	Impeller material		
1.1.11	Pump shaft material		
1.1.12	Wear ring material		
1.1.13	Column pipe material:		
1.1.14	Column shaft (Drive shaft) material:		
1.1.15	Spider bush material:		
1.1.16	Type of column pipe joint :		
1.1.17	Type of coupling:		_
1.1.18	Type of thrust bearing:		_
1.1.19	Silt handling capacity:		
1.1.20	Shut off head:		_

NWSDB/SBD/S&I/Water Pump/FC : Schedule of Particulars CAPC: MPC: DPC - January 2024 – Version 1

No.	Description	NWSDB requirement	Bidder's Proposal
		(to be filled by the Engineer)	
1.1.21	Max. power absorbed by the pump:		

## 1.2 Motor

No.	Description	NWSDB requirement	Bidder's Proposal
		(to be filled by the Engineer)	
1.2.1	Make and Country of Origin:		
1.2.2	Model:		
1.2.3	Type:		
1.2.4	Nominal Supply voltage, frequency and number of phases:		
1.2.5	Allowable voltage fluctuations:		
1.2.6	Synchronous speed;		
1.2.7	Full load output power:		
1.2.8	Full load current;		
1.2.9	Power factor at 100%: at 75%: at 50%: Of full load		
1.2.10	Class of insulation:		
1.2.11	Enclosure protection class (IP No.)		
1.2.12	Motor operation rating:		
1.2.13	Motor Bearing No. :  a. Drive end :  b. Non drive end :		
1.2.14	Design life of bearings:		
1.2.15	Motor efficiency at 100%; at 75%: at 50%:		

No.	Description	NWSDB requirement	Bidder's Proposal
		(to be filled by the Engineer)	
1.2.16	Overall efficiency of pumping set at duty point:		
1.2.17	Temperature rise after 6 hrs. at 400V		

# 1.3 L.T. Panel and Starters:

No.	Description	NWSDB requirement	Bidder's Proposal
		(to be filled by the Engineer)	
1.3.1	Make and country of origin:		
1.3.2	Make of Main MCCB:  Whether earth fault trip available Whether adjustable thermal trip available:		
1.3.3	Rating of Main MCCB:		
1.3.4	Make of MCBB:		
1.3.5	Rating of MCBB:		
1.3.6	Make of supply voltage monitor Whether U/V or O/V adjustable Whether supply imbalance protection available:  Whether phase reversal protection available:		
1.3.7	Make of surge diverters:		
1.3.8	Rated voltage of surge diverters:		
1.3.9	Type of starter:		
1.3.10	Make of starter:		
1.3.11	AC3 rating of contactors: 1. 2. 3.		

No.	Description	NWSDB requirement	Bidder's Proposal
		(to be filled by the Engineer)	
1.3.12	Make of water level switch:		
1.3.13	Type/Operation of water level switch		
1.3.14	Rating of Auto Transformers (if applicable):		

#### 1.4 Cables

\*(**NWSDB requirement** *to be filled by the Engineer*)

		Make	<u> </u>	Size		Туре	e	Mater	ial	Length	
No.	Description	NWSDB Requirement	Bidder's Proposal	NWSDB Requirement *	Bidder's Proposal	NWSDB Requirement *	Bidder's Proposal	NWSDB Requirement *	Bidder's Proposal	NWSDB Requirement *	Bidder's Proposal
1.4.1	CEB to change over										
1.4.2	Generator to change over (if applicable)										
1.4.3											
1.4.4	CEB to Incoming MCCB (if applicable)										
1.4.5	Incoming to LT panel										
1.4.6	LT panel to motor starter										
1.4.7	Motor starter to motors										
1.4.8	Control cables in LT panel										

# 2.0 SCHEDULE OF PARTICULARS OF BORE- HOLE TYPE SUBMERSIBLE PUMPING SETS AND ACCESSORIES

#### 2.1 Pump

No.	Description	NWSDB requirement (to be filled by the Engineer)	Bidder's Proposal
2.1.1	Make and country of origin		
2.1.2	Туре		
2.1.3	Model		
2.1.4	Speed (RPM)		
2.1.5	Capacity at specified head (m3/hr)		
2.1.6	Efficiency at duty point		
2.1.7	Number of stages :		
2.1.8	Overall efficiency		
2.1.9	Pump casing materials :		
2.1.10	Impeller material		
2.1.11	Pump shaft material		
2.1.12	Casing wearing material:		
2.1.13	Max. external diameter of pump assembly		
2.1.14	Impeller wearing material:		
2.1.15	Impeller diameter (mm):		
2.1.16	Max. impeller diameter (mm):		
2.1.17	Shut – off head (m):		
2.1.18	Pump bearing nos. a) Drive end:		
2.1.19	Designed life of pump bearings:		
2.1.20	Power absorbed by the pump at duty point:		
2.1.21	Max. power absorbed by the pump		
2.1.22	Shaft Intermediate Bearing Nos. :		
2.1.23	Type of the Drive Shaft Bearings:		
2.1.24	Designed life of Drive Shaft Bearings:		
2.1.25	Critical Speed of Drive Shaft:		

#### 2.2 Motor

No.	Description	NWSDB requirement	Bidder's Proposal
		(to be filled by the Engineer)	
2.2.1	Make and Country of Origin:		
2.2.2	Model:		
2.2.3	Type:		
2.2.4	Nominal Supply voltage, frequency and number of phases:		
2.2.5	Allowable voltage fluctuations:		
2.2.6	Synchronous speed ;		
2.2.7	Full load output power:		
2.2.8	Full load current;		
2.2.9	Power factor at 100%:  at 75%:  at 50%:  Of full load		
2.2.10	Class of insulation:		
2.2.11	Enclosure protection class (IP No.):		
2.2.12	Motor operation rating:		
2.2.13	Motor Bearing No. :  a. Drive end :  b. Non drive end :		
2.2.14	Design life of bearings:		
2.2.15	Motor efficiency at 100%  a. at 75%:  b. at 50%:		
2.2.16	Overall efficiency of pumping set at duty point:		
2.2.17	Temperature rise after 6 hrs. at 400 V.		

#### 2.3 L.T. Panel and Starters:

No.	Description	NWSDB requirement	Bidder's Proposal
		(to be filled by the Engineer)	
2.3.1	Make and country of origin:		
2.3.2	Make of Main MCCB:		
	Whether earth fault trip available Whether adjustable thermal trip available :		
2.3.3	Rating of Main MCCB:		
2.3.4	Make of MCB's:		
2.3.5	Rating of MCB's:		
2.3.6	Make of supply voltage monitor:		
	Whether U/V or O/V adjustable Whether supply imbalance protection available :		
	Whether phase reversal protection available		
2.3.7	Make of surge diverters:		
2.3.8	Rated voltage of surge diverters:		
2.3.9	Type of starter:		
2.3.10	Make of starter:		
2.3.11	AC3 rating of contactors :		
	1.		
	2.		
	3.		
2.3.12	Make of water level switch:		
2.3.13	Type/Operation of water level switch		
2.3.14	Rating of Auto Transformers (if applicable):		

# 2.4 Water level guard

No.	Description	NWSDB requirement (to be filled by the Engineer)	Bidder's Proposal
2.4.1	Make and country of origin		
2.4.2	type		

2.5 Cables
\*(NWSDB requirement to be filled by the Engineer)

		Make		Size		Туре		Material		Length	
No.	Description	NWSDB Requirement	Bidder's Proposal	NWSDB Requirement *	Bidder's Proposal	NWSDB Requirement	Bidder's	NWSDB Requirement *	Bidder's Proposal	NWSDB Requirement	Bidder's Proposal
2.5.1	CEB to change over										
2.5.2	Generator to change over (if applicable)										
2.5.3	Change over to incoming MCCB (if applicable)										
2.5.4	CEB to Incoming MCCB (if applicable)										
2.5.5	Incoming to LT panel										
2.5.6	LT panel to motor starter										
2.5.7	Motor starter to motors										
2.5.8	Control cables in LT panel										

# 3.0 SCHEDULE OF PARTICULARS FOR HORIZONTAL SHAFT DRIVEN DOUBLE SUCTION CENTRIFUGAL PUMPING SETS & ACCESSORIES

## 3.1 Pump

No.	Description	NWSDB requirement	Bidder's Proposal
		(to be filled by the Engineer)	
3.1.1	Make and country of origin		
3.1.2	Type		
3.1.3	Model		
3.1.4	Number of stages		
3.1.5	Speed (RPM)		
3.1.6	Capacity at specified head (m3/hr)		
3.1.7	Efficiency at duty point		
3.1.8	NPSH required at duty point(m)		
3.1.9	Safety margin required for over and above NPSHR (m):		
3.1.10	Pump casing materials :		
3.1.11	Impeller material		
3.1.12	Pump shaft material		
3.1.13	Shaft sleeve material		
3.1.14	Casing wearing material:		
3.1.15	Impeller wearing material:		
3.1.16	Impeller diameter (mm):		
3.1.17	Max. impeller diameter (mm):		
3.1.18	Shut – off head (m):		
3.1.19	Pump bearing nos.  a) Drive end:		
3.1.20	Designed life of pump bearings:		
3.1.21	Power absorbed by the pump at duty point:		
3.1.22	Max. power absorbed by the pump:		
3.1.23	Shaft Intermediate Bearing Nos. :		

No.	Description	NWSDB requirement	Bidder's Proposal
		(to be filled by the Engineer)	
3.1.24	Type of the Drive Shaft Bearings:		
3.1.25	Designed life of Drive Shaft Bearings		
3.1.26	Critical Speed of Drive Shaft:		

# 3.2 Motor

No.	Description	NWSDB requirement (to be filled by the Engineer)	Bidder's Proposal
3.2.1	Make and Country of Origin:		
3.2.2	Model:		
3.2.3	Type:		
3.2.4	Nominal Supply voltage, frequency and number of phases:		
3.2.5	Allowable voltage fluctuations:		
3.2.6	Synchronous speed ;		
3.2.7	Full load output power:		
3.2.8	Full load current;		
3.2.9	Power factor at 100%:  at 75%:  at 50%:  Of full load		
3.2.10	Class of insulation:		
3.2.11	Enclosure protection class (IP No.):		
3.2.12	Motor operation rating:		
3.2.13	Motor Bearing No. :  a. Drive end :  b. Non drive end :  Design life of bearings :		
3.2.15	Motor efficiency at 100%:  at 75%:  at 50%:		
3.2.16	Overall efficiency of pumping set at		

No.	Description	NWSDB requirement	Bidder's Proposal
		(to be filled by the Engineer)	
	duty point:		
3.2.17	Temperature rise after 6 hrs. at 400 V.		

# 3.3 L.T. Panel and Starters:

No.	Description	NWSDB requirement (to be filled by the Engineer)	Bidder's Proposal
3.3.1	Make and country of origin:		
3.3.2	Make of Main MCCB:		
	Whether earth fault trip available:		
	Whether adjustable thermal trip available:		
3.3.3	Rating of Main MCCB:		
3.3.4	Make of MCB's :		
3.3.5	Rating of MCB's:		
3.3.6	Make of supply voltage monitor Whether U/V or O/V adjustable Whether supply imbalance protection available:		
	Whether phase reversal protection available		
3.3.7	Make of surge diverters:		
3.3.8	Rated voltage of surge diverters		
3.3.9	Type of starter:		
3.3.10	Make of starter:		
3.3.11	AC3 rating of contactors:		
3.3.12	Make of water level switch:		
3.3.13	Type/Operation of water level switch:		_
3.3.14	Rating of Auto Transformers (if applicable):		

#### 3.4 Cables

\*(NWSDB requirement to be filled by the Engineer)

		Mak	•	Size	•	Турс	e	Mater	ial	Lengt	th
No.	Description	NWSDB Requirement *	Bidder's Proposal	NWSDB Requirement *	Bidder's Proposal	NWSDB Requirement	Bidder's Proposal	NWSDB Requirement *	Bidder's Proposal	NWSDB	Bidder's Proposal
3.4.1	CEB to change over										
3.4.2	Generator to change over (if applicable)										
3.4.3	Change over to incoming MCCB (if applicable)										
3.4.4	CEB to Incoming MCCB (if applicable)										
3.4.5	Incoming to LT panel										
3.4.6	LT panel to motor starter										
3.4.7	Motor starter to motors										
3.4.8	Control cables in LT panel										

# 4.0 SCHEDULE OF PARTICULARS OF END SUCTION VERTICAL DELIVERY BACK PULL – OUT CENTRIFUGAL PUMPING SETS AND ACCESSORIES

#### **4.1** Pump

No.	Description	NWSDB requirement	Bidder's Proposal		
		(to be filled by the Engineer)			
4.1.1	Make and country of origin				
4.1.2	Туре				
4.1.3	Model				
4.1.4	Number of stages				
4.1.5	Speed (RPM)				
4.1.6	Capacity at specified head (m <sup>3</sup> /hr)				
4.1.7	Efficiency at duty point				
4.1.8	NPSH required at duty point(m)				
4.1.9	Safety margin required for over and above NPSHR (m)				
4.1.10	Pump casing materials:				
4.1.11	Impeller material				
4.1.12	Pump shaft material				
4.1.13	Shaft sleeve material				
4.1.14	Casing wearing material:				
4.1.15	Impeller wearing material:				
4.1.16	Impeller diameter (mm):				
4.1.17	Max. impeller diameter (mm):				
4.1.18	Shut – off head (m):				
4.1.19	Pump bearing nos.				
	a) Drive end :				
4.1.20	Designed life of pump bearings:				
4.1.21	Power absorbed by the pump at duty point:				
4.1.22	Max. power absorbed by the pump:				
4.1.23	Shaft Intermediate Bearing Nos. :				
4.1.24	4 Type of the Drive Shaft Bearings:				
4.1.25	Designed life of Drive Shaft Bearings				
4.1.26	Critical Speed of Drive Shaft:				

NWSDB/SBD/S&I/Water Pump /FC : Schedule of Particulars CAPC: MPC: DPC - January 2024– Version 1

#### 4.2 Motor

No.	Description	NWSDB requirement	Bidder's Proposal
		(to be filled by the Engineer)	
4.2.1	Make and Country of Origin:		
4.2.2	Model:		
4.2.3	Type:		
4.2.4	Nominal Supply voltage, frequency and number of phases :		
4.2.5	Allowable voltage fluctuations:		
4.2.6	Synchronous speed;		
4.2.7	Full load output power:		
4.2.8	Full load current;		
4.2.9	Power factor at 100%:  at 75%:  at 50%:  Of full load		
4.2.10	Class of insulation:		
4.2.11	Enclosure protection class (IP No.):		
4.2.12	Motor operation rating:		
4.2.13	Motor Bearing No. :  a. Drive end :  b. Non drive end :		
4.2.14	Design life of bearings:		
4.2.15	Motor efficiency at 100%:  at 75%:  at 50%:		
4.2.16	Overall efficiency of pumping set at duty point:		
4.2.17	Temperature rise after 6 hrs. at 400 V.		

## 4.3 L.T. Panel and Starters:

No.	Description	NWSDB requirement (to be filled by the Engineer)	Bidder's Proposal
4.3.1	Make and country of origin:		
4.3.2	Make of Main MCCB:  Whether earth fault trip available Whether adjustable thermal trip available:		
4.3.3	Rating of Main MCCB:		
4.3.4	Make of MCB's:		
4.3.5	Rating of MCB's:		
4.3.6	Make of supply voltage monitor Whether U/V or O/V adjustable Whether supply imbalance protection available:  Whether phase reversal protection available:		
4.3.7	Make of surge diverters:		
4.3.8	Rated voltage of surge diverters:		
4.3.9	Type of starter:		
4.3.10	Make of starter:		
4.3.11	AC3 rating of contactors: 1. 2. 3.		
4.3.12	Make of water level switch:		
4.3.13	Type/Operation of water level switch:		
4.3.14	Rating of Auto Transformers (if applicable) :		

**4.4 Cables**\*(**NWSDB requirement** to be filled by the Engineer)

		Mak	e	Size		Тур	e	Mater	ial	Leng	th
No.	Description	NWSDB Requirement *	Bidder's Proposal	NWSDB Requirement *	Bidder's Proposal	NWSDB Requirement *	Bidder's Proposal	NWSDB Requirement	Bidder's Proposal	NWSDB Requirement	Bidder's Proposal
4.4.1	CEB to change over										
4.4.2	Generator to change over (if applicable)										
4.4.3	Change over to incoming MCCB (if applicable)										
4.4.4	CEB to Incoming MCCB (if applicable)										
4.5.5	Incoming to LT panel										
4.5.6	LT panel to motor starter										
4.5.7	Motor starter to motors										
4.5.8	Control cables in LT panel										

NWSDB/SBD/S&I/Water Pump /FC : Schedule of Particulars CAPC: MPC: DPC - January 2024– Version 1

# 5.0 SCHEDULE OF PARTICULARS OF VERTICAL SHAFT DRIVEN DOUBLE SUCTION CENTRIFUGAL PUMPS SETS AND ACCESSORIES

## 5.1 Pump and Drive Shafts

No.	Description	NWSDB requirement	Bidder's Proposal
		(to be filled by the Engineer)	
5.1.1	Make and Country of Origin:-		
5.1.2	Type:-		
5.1.3	Model:-		
5.1.4	Number of stages:-		
5.1.5	Speed (RPM):-		
5.1.6	Capacity at specified head (m³/hr):-		
5.1.7	Efficiency at duty point (%):-		
5.1.8	NPSH required at duty point (m):-		
5.1.9	Safety margin required for over and above NPSHR (m):-		
5.1.10	Pump casing material:-		
5.1.11	Impeller material:-		
5.1.12	Pump shaft material:-		
5.1.13	Shaft sleeve material:-		
5.1.14	Casing wearing material:-		
5.1.15	Impeller wearing material:-		
5.1.16	Impeller diameter (mm):-		
5.1.17	Max. Impeller diameter (mm):-		
5.1.18	Shut-off head (m):-		
5.1.19	Pump Bearing Nos.		
	a) Drive end:- b) Non drive end:-		
5.1.20	Designed life of pump bearings:-		
5.1.21	Power absorbed by the pump at duty point :-		
5.1.22	Max. Power absorbed by the pump		
5.1.23	Make and country of origin of drive shaft:-		

 $NWSDB/SBD/S\&I/Water\ Pump/FC: Schedule\ of\ Particulars$ 

CAPC: MPC: DPC - January 2024- Version1

No.	Description	NWSDB requirement	Bidder's Proposal
		(to be filled by the Engineer)	
5.1.24	Length of each drive shaft:-		
5.1.25	Drive shaft intermediate bearing		
	Nos.:-		
5.1.26	Type of the drive shaft bearings :-		
5.1.27	Designed life of drive shaft		
	bearings :-		
5.1.28	Critical speed of drive shaft :-		
5.1.29	Length of drive shafts :-		
5.1.30	Total Number of drive shafts :-		

#### 5.2 Motor:-

No.	Description	NWSDB requirement	Bidder's Proposal
		(to be filled by the Engineer)	
5.2.1	Make and country of origin:-		
5.2.2	Model:-		
5.2.3	Type:-		
5.2.4	Nominal supply voltage frequency and		
	number of phase:-		
5.2.5	Allowable voltage fluctuation:-		
5.2.6	Synchronous speed:-		
5.2.7	Full load out put power:-		
5.2.8	Full load current:-		
5.2.9	Power factor at 100%:-		
	at 75% :-		
	at 50% :-		
	Full Load.		
5.2.10	Class of insulation:-		
5.2.11	Enclosure protection class (IP No):-		
5.2.12	Motor operation rating :-		
5.2.13	Motor bearing No:		
	a) Drive end:-		
	b) Non drive end:-		
5.2.14	Designed life of bearings :-		

NWSDB/SBD/S&I/Water Pump/FC : Schedule of Particulars CAPC: MPC: DPC - January 2024– Version1

No.	Description	NWSDB requirement	Bidder's Proposal
		(to be filled by the Engineer)	
5.2.15	Motor efficiency at 100% :- at 75% :- at 50% :- Full Load :-		
5.2.16	Overall efficiency of pumping set at duty point:-		
5.2.17	Temperature rise after 6 Hrs. at 400V:-		

# 5.3 L.T Panel and Starters:-

No.	Description	NWSDB requirement	Bidder's Proposal
		(to be filled by the Engineer)	
5.3.1	Make and Country of Origin:-		
5.3.2	Make of main MCCB:-		
5.3.3	Indicate		
	(a) Whether earth fault trip is available:-		
	(b) Whether adjustable thermal trip is available:-		
5.3.4	Rating of Main MCCB:-		
5.3.5	Rating of starter MCCB :-		
5.3.6	Make of MCB's :-		
5.3.7	Rating's of MCBs :-		
5.3.8	Make of supply voltage monitor :-		
5.3.9	Indicate whether U/V or O/V and		
	adjustable :-		
5.3.10	Indicate whether supply Imbalance		
	protection is available		
5.3.11	Indicate whether phase reversal		
	protection is available :-		
5.3.12	Make of surge diverters :-		
5.3.13	Rated Voltage of surge diverters :-		
5.3.14	Type of starter:-		

CAPC: MPC: DPC - January 2024- Version1

No.	Description	NWSDB requirement	Bidder's Proposal
		(to be filled by the Engineer)	
5.3.15	Make of starter:-		
5.3.16	AC-3 Rating of Contactors :-		
	1.		
	2.		
	3.		
5.3.17	Make of water level switch :-		
5.3.18	Type/Operation of water level switch :-		
5.3.19	Rating of Auto transformers (if		
	applicable) :-		
5.3.20	Indicate whether thermal sensors		
	provided in the auto transformer :-		
5.3.21	Indicate whether all control wires in the		
	starter and LT panel are lugged and		
	connected :-		
5.3.22	Indicate whether all control wires are		
	lugged and connected :-		
5.3.23	Indicate whether power factor correction		
	capacitors are mounted		

5.4 Cables

\*(NWSDB requirement to be filled by the Engineer)

	(11112222	Mak		Size		Туре	e	Mater	ial	Lengt	th
No.	Description	NWSDB Requirement *	Bidder's Proposal	NWSDB Requirement *	Bidder's Proposal	NWSDB Requirement	Bidder's	NWSDB Requirement	Bidder's Proposal	NWSDB Requirement	Bidder's Proposal
5.4.1	CEB to change over										
5.4.2	change over (if applicable)										
5.4.3	Change over to incoming MCCB (if applicable)										
5.4.4	CEB to Incoming MCCB (if applicable)										
5.4.5	Incoming to LT panel										
5.4.6	LT panel to motor starter										
5.4.7	Motor starter to motors										
5.4.8	Control cables in LT panel										

NWSDB/SBD/S&I/Water Pump/FC : Schedule of Particulars

CAPC: MPC: DPC - January 2024- Version1

# 7.0 SCHEDULE OF PARTICULARS OF VERTICALLY/HORIZONTALLY MOUNTED IN LINE BOOSTER PUMPS

#### 6.1 Pump

No.	Description	NWSDB requirement	Bidder's Proposal
		(to be filled by the Engineer)	
6.1.1	Make and country of origin		
6.1.2	Туре		
6.1.3	Model		
6.1.4	Number of stages		
6.1.5	Speed (RPM)		
6.1.6	Capacity at specified head (m³/hr)		
6.1.7	Efficiency at duty point		
6.1.8	NPSH required at duty point(m)		
6.1.9	Safety margin required for over and above NPSHR (m):		
6.1.10	Pump casing materials:		
6.1.11	Impeller material		
6.1.12	Pump shaft material		
6.1.13	Shaft sleeve material		
6.1.14	Casing wearing material:		
6.1.15	Impeller wearing material:		
6.1.16	Impeller diameter (mm):		
6.1.17	Max. impeller diameter (mm):		
6.1.18	Shut – off head (m):		
6.1.19	Pump bearing nos.  a) Drive end:		
6.1.20	Designed life of pump bearings:		
6.1.21	Power absorbed by the pump at duty point:		

7 - 24

No.	Description	NWSDB requirement	Bidder's Proposal
		(to be filled by the Engineer)	
6.1.22	Max. power absorbed by the pump :		
6.1.23	Shaft Intermediate Bearing Nos. :		
6.1.24	Type of the Drive Shaft Bearings:		
6.1.25	Designed life of Drive Shaft Bearings:		
6.1.26	Critical Speed of Drive Shaft:		

#### 6.2 Motor

No.	Description	NWSDB requirement	Bidder's Proposal
		(to be filled by the Engineer)	
6.2.1	Make and Country of Origin:		
6.2.2	Model:		
6.2.3	Type:		
6.2.4	Nominal Supply voltage, frequency and number of phases:		
6.2.5	Allowable voltage fluctuations:		
6.2.6	Synchronous speed ;		
6.2.7	Full load output power:		
6.2.8	Full load current ;		
6.2.9	Power factor at 100%:		
	at 75% :		
	at 50%:		
	Of full load		
6.2.10	Class of insulation:		
6.2.11	Enclosure protection class (IP No.):		
6.2.12	Motor operation rating:		
6.2.13	Motor Bearing No. :		
	a. Drive end :		
	b. Non drive end:		

No.	Description	NWSDB requirement	Bidder's Proposal
		(to be filled by the Engineer)	
6.2.14	Design life of bearings:		
6.2.15	Motor efficiency at 100%:		
	at 75%:		
	at 50% :		
6.2.16	Overall efficiency of pumping set at duty point:		
6.2.17	Temperature rise after 6 hrs. at 400 V.:		

## 6.3 L.T. Panel and Starters:

No.	Description	NWSDB requirement	Bidder's Proposal
		(to be filled by the Engineer)	
6.3.1	Make and country of origin:		
6.3.2	Make of Main MCCB:  Whether earth fault trip available Whether adjustable thermal trip available:		
6.3.3	Rating of Main MCCB:		
6.3.4	Make of MCB's:		
6.3.5	Rating of MCB's:		
6.3.6	Make of supply voltage monitor Whether U/V or O/V adjustable Whether supply imbalance protection available :  Whether phase reversal protection available :		
6.3.7	Make of surge diverters:		
6.3.8	Rated voltage of surge diverters:		
6.3.9	Type of starter:		
6.3.10	Make of starter:		
6.3.11	AC3 rating of contactors: 1. 2. 3.		

No.	Description	NWSDB requirement (to be filled by the Engineer)	Bidder's Proposal
		(to be juice by the Brighteer)	
6.3.12	Make of water level switch:		
6.3.13	Type/Operation of water level switch:		
6.3.14	Rating of Auto Transformers (if applicable):		

**6.4 Cables** 

\*(NWSDB requirement to be filled by the Engineer)

	`	Make		Size		Туре	9	Mater	ial	Length		
No.	Description	NWSDB	Bidder's									
		Requirement *	Proposal									
C 1 1	CED 4-	*		*		*		*		*		
6.4.1												
6.4.2	change over Generator to											
0.4.2	change over											
	(if											
	applicable)											
6.4.3												
	to incoming											
	MCCB											
	(if											
C 1 1	applicable)											
6.4.4												
	Incoming MCCB											
	(if											
	applicable)											
6.4.5												
	LT panel											
	1											
6.4.6	LT panel to											
	motor											
	starter											
6.4.7												
	starter to											
5.4.0	motors											
6.4.8												
	cables in LT											
	panel											

8.	DEVIATIONS FROM SPECIFICATION

#### **DEVIATIONS FROM SPECIFICATIONS**

#### **Preamble**

The Bidder is required to list any deviations of materials workmanship etc. from the Specifications including such information as has already been given elsewhere in the Bidding Documents. The information shall be in sufficient detail to enable the Engineer to make a realistic assessment of the effect of such deviations on the performance or life of the materials to be supplied and also such deviation if any shall be subject to **Clause 29** of Instructions to Bidders.

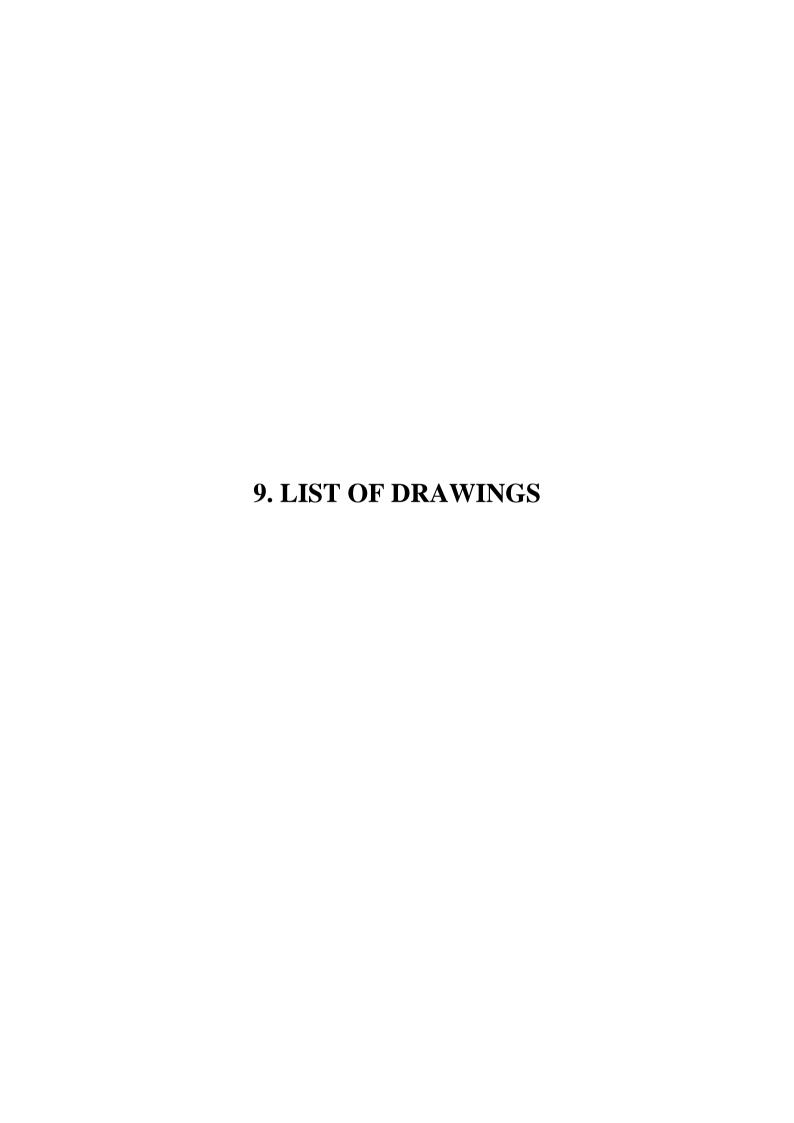
The list shall also include deviations from the Specifications relating to the mode of operation and/or control of any item of equipment, and any deviations from the specified design requirements for plant components.

#### **Deviations**

Bidder shall	mention	any	deviation	in	Bidder	'S ]	proposal	with	respect to	the	NWSI	DΒ
requirement.	(Scope	of th	ne work,	Coı	ndition	of	Contrac	t, Sp	ecification	, Scl	nedule	of
Particulars et	tc	)										

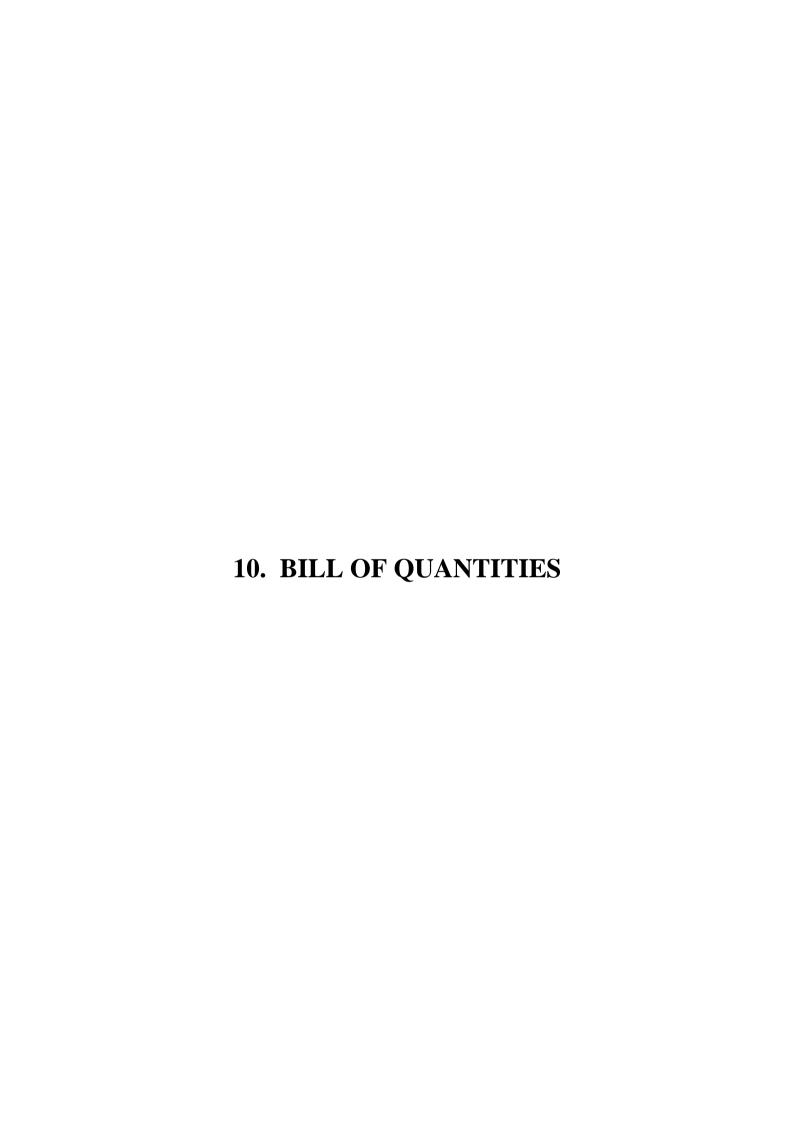
Note:

Additional sheets should be attached as necessary



#### LIST OF DRAWINGS

Drg. No.	Description



#### WATER PUMPING SETS, MOTOR CONTROL CENTRE (MCC) AND ACCESSORIES

#### **BILL OF QUANTITIES**

#### NOTES

#### 1. Documents to be read in conjunction with the Bill of Quantities

1.1 Attention is directed to the Form of Bid, Notice to Bidders, Instructions to Bidders, Conditions of Contract, Specifications and Appendices, which are to be read in conjunction with the Bill of Quantities.

#### 2. **Description of Items**

- 2.1 General obligations and general descriptions of work and material given in the Conditions of Contract and the Specifications are not necessarily repeated in the Bill of Quantities.
- 2.2 Descriptions attached to the items in the Bills of Quantities are only sufficient detail to ensure identification of the work described in the Specification.
- 2.3 Reference is to be made to the Conditions of Contract, Specifications and the Appendices for detailed information.

#### 3. Contracts to be priced completely

3.1 The Bidders may price one or more of the Bills in the Bill of Quantities. Each priced bill must be complete by itself and the final summary, covering all bills, must be completed.

#### 4. Rates and Prices to be fully inclusive

- 4.1 In pricing the items of the Bills, the Bidder shall cover himself and will be deemed to have covered himself for: -
- a) All services and materials which according to the true intent and meaning of the contract may be reasonably inferred as necessary for completion of delivery/installation of the materials and equipment in sound condition to the site as indicated in the schedule of requirements.
- b) All obligations, liabilities and responsibilities that the Contract Documents place upon the Bidders in connection with or in relation to the Contract.
- 4.2 The Bidder shall include in his Bided prices, unless itemized separately for :-
  - (a) All costs arising out of inspection and testing at the place of manufacture.

- (b) All costs of packing as specified or as required for export overseas and storage.
- (c) All costs and insurances of delivering the materials to the site/stores as indicated in the Schedule of Requirements.
- (d) All costs incurred in the installation of pumps/control panels and all necessary accessories according to the drawings and specifications.
- 5. Bids with unit prices which are so unbalanced as to be detrimental to the Employer's interests may be rejected or cause rejection, at the discretion of the Employer.
- 6. Unit rates accepted by the Employer shall be held good and effective until the work is completed and accepted by the Employer.
- 7. A rate and/or price is to be entered against each item in the Bill of Quantities whether quantities are stated or not. The cost of any item against which a rate has not been entered shall be deemed to be covered by other rates in the corresponding bill.
- 8. All bends, tees & reducers shall be from a single source of manufacture. Fittings from different sources of manufactures shall not be accepted. ISO 9001:2015 for quality assurance issued by a accredited body should be forwarded along with the Bid for all items offered.
- 9. Cost of combined allowance for pre-shipment inspection for two Engineers by the Employer shall be for the entire duration as per the **Clause 25.10** of the Conditions of Contract. If any shortage is found, the supplier shall bear the additional cost.
- 10. Cost of Inspection and Testing by the Independent Inspection and Testing Agency shall be as per the **Clause 25** of the Conditions of Contract.

10-2

	• • • • • • • • • •	•••••
WATER PUMPING SETS, MOTOR CONTROL CENTE	RE (MC	C)

**AND ACCESSORIES** 

CONTRACTNO	
CONTRACT NO.	***************************************

#### **BILL OF QUANTITIES**

**BILL No 01: General Bill** 

Item	Description	Qty.	Unit	Rate	Amount
No.				Local (LKR)	Local (LKR)
1	Allow for all insurance works to be provided during Installation period for the items in this bill.				
2					
3					
4					
	Total of page No. 10- 3 carried to Summary in page 10 –				

# SUPPLY & INSTALLATION OF WATER PUMPING SETS, MOTOR CONTROL CENTRE (MCC) AND ACCESSORIES CONTRACT No.

#### **SUMMARY OF BILL NO. 01**

	Amount
Page Number	Local (LKR)
Page No. 10	
Total of Page No.10 Carried to Summary of Bills in Page No. 10	

WATER PUMPING SETS, MOTOR CONTROL CENTRE (MCC)
AND ACCESSORIES

CONTRACT No.

#### BILL No 02: Supply Bill

Item	Description	Qty. Unit Rate						
No.				Foreign (FOB) USD	Local LKR	Foreign (FOB) USD	Local LKR	
1								
2								
3								
4								
	Total of page No. 10 carried to Summary in page 10 –							

## SUPPLY & INSTALLATION OF WATER PUMPING SETS, MOTOR CONTROL CENTRE (MCC) AND ACCESSORIES

CONTED A CE NI-	
CUNTRACT NO.	

#### **SUMMARY OF BILL NO. 02**

		Amount							
Page Number	Unit	Foreign (USD)	Local (LKR)						
Page No 10	-								
Page No 10	-								
Freight	Sum								
Insurance	Sum								
Provision for variation of Freight charges as per Clause 46 of ITB.	P. Sum								
Cost of Inspection and Testing by Independent Testing & Inspection Agency as per Clause No. 25	Sum								
Cost of Pre – Shipment Inspection as per Clause No 25.10 of Conditions of Contract.	Sum								
No. of Pre-shipment inspection									
Total of Page No Carried to Summary of Bills in Page No	-								

Nar	ne	of	ftl	ne	ins	spe	ecti	ion	Α	ge	nc	y:																			
• • • • •												• • •	 	• • •	 • • •	• • •				 • • •	 			 	 • • •	• • •	• • •	 • • • •	• • •	 • • • •	
• • • •											• • •	• • •	 	• • •	 • • •	• • •	• • •	• • •	• • •	 • • •	 • • •	• • •	• • •								

## WATER PUMPING SETS, MOTOR CONTROL CENTRE (MCC) AND ACCESSORIES

CONTRACT No
-------------

#### **BILL No 03: Installation Bill**

Item No.	Description	Qty.	Unit	Rate	Amount
110.				Local LKR	Local LKR
1		-	Item		
2		-	Item		
3		-	Item		
	Total of page No. 10 carried to Summary in page 10 –				

	• • •
WATER PUMPING SETS, MOTOR CONTROL CENTRE (MCC)	
AND ACCESSORIES	

CONTRACT No	<b>CONTRACT</b>	No	• • • • • • • • • • • • • • • • • • • •
-------------	-----------------	----	---

#### **SUMMARY OF BILL NO. 03**

Page Number	Amount  Local (LKR)
Page No. 10	
Total of Page No.10 – Carried to Summary of Bills in Page No. 10	

••••••

## WATER PUMPING SETS, MOTOR CONTROL CENTRE (MCC) AND ACCESSORIES

CONTRACT No.	
--------------	--

#### **SUMMARY OF BILLS**

Bill	Description	Amount				
No.	Description	Foreign (USD)	Local (LKR)			
01	General Bill					
02	Supply Bill					
03	Installation Bill					
04						
A	Sub Total (1)					
В	Less: Provisional Sums					
С	<b>Sub Total</b> (2) (A – B)					
D	Less: Discount (if any)					
Е	<b>Sub Total</b> ( <b>3</b> ) (C – D)					
F	Add: Provisional Sums					
G	<b>Sub Total (4)</b> (E + F)					
Н	Add: Contingencies [Sub Total 4x10%]					
	Total of Bid (G + H) carried to Form of Bid (excluding VAT) in page 3-1					

VAT (applicable rate%)	Rs. (LKR)
VAT Registration Number:	
(A copy of the VAT Registration Certificate	shall be annexed.)

Note: - The NWSDB VAT Registration No: - 4090 31820 7000

#### 11. SPECIMEN FORMS

- BID SECURITY
- CONTRACT AGREEMENT
- PERFORMANCE GUARANTEE
- ADVANCE PAYMENT SECURITY
- LETTER OF ACCEPTANCE
- RETENTION MONEY GUARANTEE

#### FORM OF BID SECURITY (Unconditional)

[issuing agency's name, and address of issuing branch or office]
Beneficiary : Chairman National Water Supply and Drainage Board Galle Road, Ratmalana
Date
We have been informed that
.[name of contract] under Contract No.
Furthermore, we understand that, according to your conditions, Bids must be supported by a Bid Guarantee.
At the request of the Bidder, we
<ul> <li>(a). has withdrawn its Bid during the period of bid validity specified; or</li> <li>(b). does not accept the correction of errors in accordance with the Instructions to Bidders (hereinafter "the ITB") or</li> <li>(c). having been notified of the acceptance of its Bid by the Employer/ Purchaser during the period of Bid validity, (i) fails or refuses to execute the Contract Form, if required or (ii) fails or refuses to furnish the Performance Security, in accordance with the ITB.</li> </ul>
This Guarantee shall expire: (a) if the Bidder is the successful bidder, upon our receipt of copies of the Contract signed by the Bidder and of the Performance Security issued to you by the Bidder, or (b) if the Bidder is not the successful bidder, upon the earlier of (i) our receipt of a copy of your notification to the Bidder that the Bidder was unsuccessful, otherwise it will remain in force up to
Consequently, any demand of payment under this Guarantee must be received by us the office on or before that date
[Signature (s) of authorized representative (s)]

#### THE GOVERNMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

MINISTRY OF
NATIONAL WATER SUPPLY AND DRAINAGE BOARD
SUPPLY & INSTALLATION OF
WATER PUMPING SETS,
MOTOR CONTROL CENTRE (MCC) AND ACCESSORIES
WATER SUPPLY SCHEME
CONTRACT No.:
CONTRACT AGREEMENT
Contract Agreement made and entered into between the National Water Supply and Drainage Board, a corporate body duly established under the provisions of the National Water Supply and Drainage Board Law No. 2 of 1974 and having its Head Office at Ratmalana in Sri Lanka (hereinafter sometimes referred to as "the Board") of the one part and Messrs:
which duly incorporated under the laws of Democratic Socialist Republic of Sri Lanka and having registered It's office at
WHEREAS the Board is desirous of entering into a contract with the Contractor for the supply and installation of
Schedule and has accepted a Bid by the Contractor for the execution and completion of such works.
AND WHEREAS the Bills of Quantities or Schedule of Rates and Specifications and General Conditions of Contract describing the Works to be done have been prepared by the Board and the same have been signed by the parties hereto.
NOW it is hereby agreed as follows:
1. For the consideration hereinafter mentioned the Contractor shall, upon and subject to the conditions hereto annexed, complete the Works referred to in the said Bills of Quantities or Schedule of Rates and in the said Specifications and Conditions of Contract to the entire satisfaction of the Board on or before the

......subject to extras, omissions and variations to be determined by the Engineer as hereinafter provided.

- 2. The said General Conditions of Contract, the said Specifications, the said Bills of Quantities or Schedule of Rates, (a detailed list whereof is annexed hereto,) Instructions to Bidders, Contract Data, Bidding Data and Schedule of Particulars and Form of Bid, all duly signed by the Board and the Contractor shall for all purposes whatsoever be read, regarded and construed as part and parcel of the Agreement.
- 4. As security for the due and proper performance and fulfillment of this contract and for the due payment of all claims to which the Board may be entitled hereunder, the Contractor hereby undertakes to maintain to the Board with a Guarantee in favor of the Board from a Bank approved by the Engineer, as surety..... .....(Rs......) which said Performance Guarantee shall remain in force and shall not be discharged until the Engineer shall have granted a Final Certificate to the effect that the Contractor has duly discharged and completed all his obligations under this contract and that there is no sum whatever due to the Board at the date of such Final Acceptance Certificate under this Contract.
- 5. The following terms used in this Agreement and or in the Specifications shall be understood as having the meanings hereby ascribed to them, namely;

"The Procurement Committee" shall mean the Procurement Committee appointed for the purpose of determining the Tender.

"The Contractor" or "The Supplier" shall mean the person or persons, firm or firms, company or companies who have contracted for the supply and delivery of the materials, equipment and installation herein specified and includes its successors and permitted assigns.

"The Chairman" shall mean the officer for the time being holding the office of or acting as the Chairman, National Water Supply and Drainage Board.

"The Engineer" shall mean the Officer for the time being holding the Office of or acting to the General Manager, National Water Supply and Drainage Board.

"The Engineer's Representative" shall mean the authorized Representative of the Engineer immediately responsible for the supervision of the Works or any other person appointed from time to time by the Engineer to act as Engineer and notified in writing to the Contractor.

"The Government" shall mean the Government of the Democratic Socialist Republic of Sri Lanka.

"The Purchaser" or "The Board" shall mean the National Water Supply and Drainage Board.

"Months" shall mean calendar months.

"The Contract Documents" shall mean the Instructions to Bidders, Contract Data, Bidding Data, Schedule of Particulars, the General Conditions of Contract, the Form of Bid, the Specifications, Bill of Quantities, Addenda, Articles of Agreement and their annexure.

"The Contract Price" shall mean the sum stated in the Letter of Acceptance payable to the Contractor for the supply of Goods and Services in accordance with the provisions of the Contract.

"The Works" shall mean the supply, delivery and Installation of Goods and the Services.

"Variation" shall mean any alteration of the description of any item in the Bill of Quantities or of the Specifications which in the opinion of the Engineer, is required for the perfect completion of the Works outlined in the Agreement.

"RS or SL Rs." shall mean Sri Lanka Rupees.

IN WITNESS WHEREOF the parties hereto have set their hands and seal to these presents at the places and dates hereinafter mentioned.

Signed by the said	•••••	Chairman, National
Water Supply and Drainage Board and		
Water Supply and Drainage Board at		on
the		
ofin the presence of the	Two Thousa	and and
Chairman	Board Memb	er
NATIONAL WATER SUPPLY AND DRA	AINAGE BOA	RD
WITNESSES		
Signature 1:	Signature 2 :	
Name :	Name	i
Address	Address	·

Signed	by	the	said	 						in	the	capaci	ty of
of													
Witness									•				J
								Signa	ature o	f Co	ntrac	tor	
WITNE	SSE	S											
Q:4	1.				G:	.4	٠.						
Signatur	e 1:	••••	• • • • • • • • • • • • • • • • • • • •	 • • • •	Signa	ature 2	2 :						
Name	•				Nam	ne.							
1 (dillo	•	•••		 	1 (611)					••••			
Address				 	Add	ress							
Capacity	√ .			 	Capa	acity							

#### FORM OF PERFORMANCE SECURITY (Unconditional)

[Issuing Agency's Name and Address of issuing Branch or Office]
Beneficiary : Chairman National Water Supply and Drainage Board Galle Road, Ratmalana
Date
PERFORMANCE GUARANTEE No.:
We have been informed that
[name of Contractor/Supplier] (hereinafter called "the Contractor") has entered into Contractor No
contract and brief description of Works] (hereinafter called "the Contract").
Furthermore, we understand that according to the conditions of the Contract, a performance guarantee is required.
At the request of the Contractor, we
[in words], such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation (s) under the Contract, without your needing to prove or to show grounds for your demand of the sums specified therein.
This shall expire, no later than the
[Signature (s)]
Signature and seal of the guarantor
Witness Name:
Signature:

#### FORM OF ADVANCE PAYMENT SECURITY

[Issuing Agency's Name and Address of issuing Branch or Office]
Beneficiary : Chairman National Water Supply and Drainage Board Galle Road, Ratmalana
Date
ADVANCE PAYMENT GUARANTEE No.
We have been informed that  [name of Contractor/Supplier] (hereinafter called "the Contractor" ) has entered in to Contract No
Furthermore, we understand that according to the conditions of Contract an advance payment in the sum
At the request of the Contractor, we
)[amount in words] upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation under the Contract.
The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Contractor.
This guarantee shall expire on [28 Days beyond the Completion Date]
Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.
[Signature (s)]
Signature and seal of the guarantor
Name :

20 
Ms
Dear Sirs,
SUPPLY & INSTALLATION OF
PUMPING SETS, MOTOR
CONTROL CENTRE (MCC) AND ACCESSORIES
CONTRACT NO:
T -44
Letter of Acceptance
We are pleased to inform you that your offer submitted on
above tender, amounting to United States Dollars
(US\$/=) Plus Sri Lanka Rupees
(LVD
(LKR) has been accepted.
• Applicable VAT will be payable on production of Tax Invoices. The Registered No. for NWSDB for VAT is 4090318207000.
• Pumps & Accessories
should be from
Inspection and Testing of goods should be carried as per Clause 25 of General Conditions of Contract with respect to quantity, quality and loading prior to shipment and certificates should be forwarded to Deputy General manager ()
All Pumps & Accessories under this contract shall be delivered at such places, in such quantities as specified in the Delivery Schedule and Contract Period is
The liquidated damages for any delay beyond the above period shall be LKR/= per day not exceeding 10% of the total Contract Price.

. . .

Performance Security in the form of demand guarantee in the prescribed format (a copy annexed) from a recognized bank operating in Sri Lanka approved by the Central Bank of Sri Lanka for an amount of 10% of the total Contract Price valid for a period of 28 Days beyond the Defects Liability Period from the date hereof shall be submitted within 14 Days from the date hereof. Performance security shall be denominated in the currency of contract and proportionate to the each currency.

Please acknowledge receipt of this letter by a return fax and make arrangements to sign the Agreement by prior appointment with the Asst. General Manager (Tenders & Contracts) within 28 Days.

Engineer's Representative of this contract is	
Please contact Deputy General Manager () on Tele No	for

Yours faithfully,

National Water Supply & Drainage Board

Chief Engineer (.....)

#### **General Manager**

Cc:	1.	Secretary, Ministry of
		Auditor General – Duplicate offer and a copy of the Tender Board decision attached.
	3.	Addl. General Manager ()
	4.	Deputy General Manager ()
	5.	Deputy General Manager (Finance)
	6.	Deputy General Manager (IA)
	7.	Asst. General Manager ()

**Stores Copy** 

8.

#### FORM OF RETENTION MONEY GUARANTEE

[ Issuing Agency's Name, a	and Address of Issuing Branch or Office]	
	[Name and Address of Employer :insert relevant Address]	
Date :		
RETENTION MONEY G	GUARANTEE No.:	
	at	
No	pplier] (Hereinafter called "the Contractor") has entered into Con [Reference number of the cont with you, for the execution of	
		briej
description of works; (Her	emarter caried the Contract ).	
taken by the Board of Dir money when it reache sum	and that, according to the Government procurement Guideline and the decrectors of the National Water Supply & Drainage Board to release rete es 5% of Contract Price, the Employer would release to	ention the <i>ures</i> j
•	be made against and unconditional on demand guarantee acceptable to	
[name of agency] hereby is amount of	actor, we	tal an <i>ures</i> j
receipt by us of your first	st demand in writing accompanied by a written statement stating that the statement stating that the statement stating that is obligation under the Contract.	
This guarantee shall exp Notification Period/ Defect	pire, on	efects
Consequently, any demand before that date.	I for payment under this guarantee must be received by us at this office	on or
[Signature(s)] Signature and seal of the		
Witness		
Name:		
D151101010		

12. APPENDICES

#### APPENDIX 1A- DETAILS OF SIMILAR SUPPLIES COMPLETED WITHIN THE LAST FIVE YEARS AND ONGOING

Name and Address of Employer	Name and details of Contract	Value of Contract	Period of Contract Date		Remarks (Completed/ ongoing	Value of work remaining incomplete
			From	To	etc)	

## APPENDIX 1B -DETAILS OF SIMILAR INSTALLATION COMPLETED WITHIN THE LAST FIVE YEARS AND ONGOING

Name and Address of Employer	Name and details of Contract	Value of Contract	Period of Contract Date		ct Contract	ntract Contract (Completed/	Value of work remaining incomplete
			From	To	etc)	_	

#### APPENDIX 2 - SCHEDULE OF TECHNICAL PERSONS & FACILITIES

#### 1. Details of Workshops

Location	Minimum Facilities Required	Available facilities	Remarks
	- General Engineering tools - Hydraulic pressure - Precision measuring tools - Power factor - Clipon meter - Power analyzer - Flow meter - Pressure gauges - Motor starters - Meggar		

#### 2. Stocks of Spare Parts

Item	Minimum No required	Availability	Remarks
Bearings			
Packings			
Circlips & similar specials fasteners			
Lantern rings			
Wear rings			

#### **Technical Staff**

Mechanical Engineer /or	01
Electrical Engineer	01
Technical officer (Mechanical/Electrical)	01
Mechanic	01
Electrician	01

NWSDB/SBD/S&I/Water Pump/FC : Appendices CAPC: MPC: DPC - January 2024– Version 1

#### APPENDIX 3 - FINANCIAL STATEMENT

Summary of assets and liabilities based on the audited financial statements for the last three financial years (Current statement may be unaudited) together with the Financial Performance as indicated in the following schedule shall be submitted.

If the business has not been in operation for three years following schedule shall be submitted for the period that the business has been in operation together with the aforesaid financial statements.

Bidders whose financial capability is marginally less to undertake this bid may show credit facilities available to them from a Banks.

Financial performance for the last 3 years

•			
Year	XXXX	XXXX	XXXX
Turnover from Contracting			
Fixed Assets (FA)			
Current Assets (CA)			
Current Liabilities (CL)			
Long Term Liabilities (LL)			
Net Worth =Total Assets - Total Liabilities			
Current Ratio = Current Assets Current Liability			
Liquidity Ratio = Current Assets(except stock) Current Liability			
Gearing Ratio = Debt Capital x 100 Total Capital Employed			
Turnover x 100 Total Operating Assets			
Net Profit x 100 Total Assets			

#### APPENDIX 3A – AUTHORIZATION FOR BANK REFERENCES

#### BIDDER SHALL FILL THIS FORM AND PROVIDE WITH THE BID

[Bidder's Name]	
[Address]	
Manager[Name of Bank][Address]	
Dear sir,	
We hereby Authorize the National Water Supp procurement Committee, to seek reference of Ban statues of our company M/s	k details in order to evaluate the financia
	[Bidder's Name & Address]
in Connections with the	[Contrac
Yours faithfully,	
Authorized office of the Bidder.	

Note:- If there are more than one bank, separate letters should be submitted for each Bank

## APPENDIX 4 - CONFIRMATION OF CAPABILITY OF PRODUCTION AND SUPPLY ACCORDING TO DELIVERY SCHEDULE.

	[Address of the Manufacturer]
Chairman,	
Procurement Committee,	
Supply & Installation of	Water Pumping Sets, Motor Control Centre Water Supply Scheme
Contract No	••••
	[Name of Manufacturer]
we have sufficient production capacity to pro-	[Address of Manufacturer]confirm that oduce the quantity of Pumps and Accessories cording to the delivery schedule indicated in the
Authorised Officer of the Manufacturer.	Seal of the Company.
Name:	
Certified by	
Authorized officer of the Bidder	Seal of the Company
Name:	

## APPENDIX 5 - MANUFACTURER'S AUTHORIZATION TO SIGN THE CONTRACT

[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letter head of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer. The bidder shall include it in its bid].

Date : [insert date (as day, month and year) of Bid Submission]

No. : [insert contract number]

Supply & Installation of Water Pumping Sets, Motor Control Centrol				
(MCC) and Accessories Water Supply Scheme				
Contract No				
We				
factories], do hereby authorize				
We hereby extend our full guarantee and warranty in accordance with <b>Clause 27</b> of th General Conditions of Contract, with respect to the Goods offered by the above firm.				
Signed:[insert signature(s) of authorized representative(s of the Manufacturer]				
Name:[insert complete name(s) of authorized representative(s) of the Manufacturer]				
Title: [insert title]				
Duly authorized to sign this Authorization on behalf of:				
Dated on				

To:

Chairman,

Procurement Committee,

## APPENDIX 6 - SCHEDULE OF PLANT AND EQUIPMENT PROPOSED FOR PUMPS, INSTALLATIONS

#### Note:

1. The categories indicated below are only the minimum requirement proposed by NWSDB for information. The Bidder should declare the actual plant and equipment that he proposes to use for the execution of the works. These plant and equipment should be in usage for not more than five years after their first purchase/use.

Item	Description	Minimum No. Proposed by NWSDB	Minimum No. Provide by the contractor	Minimum Period Proposed	Remarks (hired/own)
	Mechanical				
1	Dial gauge				
2.	Complete tool box				
3.	Allen Key set (Standard sizes)				
4.	Hand Roller 2 – 3 ton				
5.	Disc Grinding machine				
6.	Drilling machine (Both steel and concrete)				
7.	Welding Plant (Arc)				
8.	Gas Welding Plant (Oxy Estelline)				
9.	3 Jaw Puller				

Item	Description	Minimum No. Proposed by NWSDB	Minimum No. Provide by the contractor	Minimum Period Proposed	Remarks (hired/own)
10	Grease gun				
11.	Vernier, micro screw gauge, outside/inside caliper				
12	Measuring tape (steel)				
13	Level gauge				
14	Slip gauge				
15.	General Pliers, Nose pliers, hammer etc				
16.	Tripod				
17	Mobile Crane (up to 5 tons)				
18.	Air Compressor with all painting accessories.				
19.	Decibel meter				
20	Vibration pen				
21.	Thermo meter				
22.	Tacho meter				
23	Filing set				
24.	Safety Equipments when handling chemicals and others				

Item	Description	Minimum No. Proposed by NWSDB	Minimum No. Provide by the contractor	Minimum Period Proposed	Remarks (hired/own)
	Electrical				
25.	Clip-on meter				
26.	Power analyzer				
27.	Hydraulic Crimping tool				
28.	Single Phase up to 5 KVA Generators.				
29.	Three phase 5 – 50 KVA Generators.				
30	Three Phase 50 – 100 KVA Generators.				
31	Three Phase 100 – 200 KVA Generators.				
32.	Necessary instruments & items for site lighting.				
33.	Insulation resistance tester				
34.	Earth resistance tester				

#### APPENDIX 7 - BIDDER'S AUTHORIZATION TO SIGN THE CONTRACT

[The Bidder shall require to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letter head of the Bidder and should be signed by a person with the proper authority to sign documents that are binding on the Bidder. The bidder shall include it in its bid].

Date: [insert date (as day, month and year) of Bid Submission]

No.: [insert contract r	number]
To: Chairman,	
Procurement Committee	
Supply & Installation of	Water Pumping Sets, Motor Control Centre
(MCC) and Accessories	Water Supply Scheme
Contract No	
authorize officer who signs the contract] to sub	
Specimen Signature	
Signed:of the Bidder]	[insert signature(s) of authorized representative(s)
Name :authorized representative(s) of the Bu	[insert complete name(s) of idder]
Title:	[insert title]
Duly authorized to sign this Authoriz complete name of Bidder]	zation on behalf of:[insert
This is to certify that the seal and saffixed to power of attorney attached	signatures of legal representative and authorized person hereto are found to be authentic.
Signature of Attorney at Law	
Seal of Attorney at Law	
In the place of (address)	

## APPENDIX 8 - TOR FOR THE INDEPENDENT INSPECTION AGENCY INSPECTION OF PUMP MOTOR ASSEMBLIES

	Test	Measurement Value / Observation Comments
01.	Visual Tests Casting, Machining, Welding,	
	Dimensions, finish data like fillets, corners etc.	
	Surface finish, surface preparation, painting.	
	Alignment of the whole assembly.	
02.	Test Set – up / facilities	
	Suitability of the factory test set – up for the specified pump tests.	
	Suitability of the instrumentation for measurements, data transfer / storage / processing ,report generation, including acceptable calibration.	
03.	Status of the tested equipment, whole set -up,	
	<u>Instrumentation etc after running for an adequate time stabilization.</u>	
	Temperature at various points. noises	
	Vibrations	
	Leakages	
	Distortions	
	Cavitations	
	Others	
04.	Measurements ( General)	
	Voltage	
	Currant	
	Power	
	Power Factor	
	Insulation Resistance	
	(others specific to the particular contract)	

	Test	Measurement Value /
		Observation Comments
05.	Operational Measurements	
	Flow rate	
	Delivery pressure	
	Suction pressure	
	Power drawn by motor	
06.	Hydrostatic Test	
	For pumps between $20 - 75$ kw.	
	Test the components at 150% of the pump shut off head for 10 minutes.	
	For pumps larger than 75 kw.	
	Test the components at 150% of the pump shut off head for 30 minutes.	

## APPENDIX 9 - MANUFACTURER'S AWARENESS OF THE TOR FOR INDEPENDENT INSPECTION AGENCY AND CHECKLIST FOR PRE-SHIPMENT INSPECTIONS

	[Address of the Manufacture	
Chairman,		
Procurement Committee,		
Supply & Installation of Wa	ter Pumping Sets, Motor Control Centre	
(MCC) and Accessories		
Contract No	11 7	
We,	[name of manufacturer] of	
[address of man		
a) Appendix 8 – TOR for Indeper	ndent Inspection Agency.	
b) Appendix 10 – Checklist for Pre	e-Shipment Inspection of pump and motor	
assemblies by team of	NWSDB engineers	
c) Clause 25 of Conditions of Co	entract.	
Authorised Officer of the Manufacturer.	Seal of the Company.	
Name:		
Certified by		
Certified by		
Authorized officer of the Bidder	Seal of the Company	
Authorized officer of the Bidder	Scar of the Company	
Name :		
1 19444		

## APPENDIX 10 - MANUFACTURER'S WARRANTY FOR THE GOODS SUPPLIED UNDER THE CONTRACT

	[Address of the Manufacturer]
Chairman, National Water Supply and Drainage	
Galle Road, Ratmalana, Sri Lanka.	
Supply & Installation of V	<b>Vater Pumping Sets, Motor Control Centre</b>
(MCC) and Accessories	Water Supply Scheme
Contract No	
We,	[name of manufacturer] of
that the goods supplied under this contract ar models and have incorporated all recent impledesign, material or workmanship from any act supplied goods.	re new, unused, of the most recent or current rovements, and no defects arising out of the
If there are any defects during the warranty pe Conditions of Contract, we shall attend to re reasonable speed without any cost to the Purcha Also we enclose further details in the given tab	epair or replace the defective goods with all aser.
Part/ Section	Warranty period
Authorised Officer of the Manufacturer.	Seal of the Company.
Name :	
Certified by	
Authorized officer of the Bidder	Seal of the Company
Name :	

## APPENDIX 11– PRE-SHIPMENT INSPECTION OF PUMP AND MOTOR ASSEMBLIES BY TEAM OF NWSDB ENGINEERS

	Test/Activity	Measurement Value/Observations & Comments
01	<u>Visual Tests</u>	
	Comments on castings	
	Comments on machining	
	Comments on welding, fillets, corners and similar features	
	Comments on surface finish and painting	
	Comments all drillings, positioning etc.	
	Comments on assembly	
02	Operational status of the equipment under test (after operation until stabilisation)	
	Observation on temperature at various points	
	Observations on excessive noise emissions	
	Observations on excessive shaking or vibration	
	Observations on excessive leakages	
	Observations of any distortions of parts	
	Observations of possible cavitation	
	Observations on the measuring equipment	

	Test/Activity	Measurement Value/Observations & Comments
03	Measurements (General)	
	Voltage	
	Current	
	Power	
	Power factor	
	Insulation resistance	
04	Operational Measurements	
	Flow rate	
	Delivery pressure	
	Suction pressure	
	Power drawn by motor	
05	Hydrostatic Test	
	For pumps between 20 – 75 kw.	
	Test the components at 150% of the pump shut off head for 10 minutes.	
	For pumps larger than 75 kw.	
	Test the components at 150% of the pump shut off head for 30 minutes.	

## APPENDIX 12 - GUIDELINES FOR THE ACCEPTANCE OF PUMP AND MOTOR ASSEMBLIES AT NWSDB SITES BY INSPECTION TEAM

	Activity / Test	Measurements / Value / observation Comments.
01.	Preparation of list of finalised and agreed list of parameters, delivery scope, submittals etc. of parameters, after PC –Procurement Committee approval, any subsequent amendments.	Commence
02.	Manufacturer	
	Country of Origin	
	Make	
	Model	
	Delivery of Test reports ( 3 <sup>rd</sup> party / Manuf./ client.)	
03.	Compliance of the whole delivery scope with finalised client's requirements.	
04.	Compliance of the specification of equipment, spare, tools, submittals etc.	
05.	Compliance of the installation with the manufacturer's recommendations.	
06.	Compliance of the test instruments with properly carried out calibration.	
07.	Suitability of the instrumentation for measurement, logging, processing etc of the test data with regard to range, accuracy, least count etc.	
08.	Observation of the whole set-up after running the assembly until stabilisation.	

	Activity / Test	Measurements / Value / observation
00		Comments.
09.	Get the measurements for 05 operating	
	points.	
	1 Shut off 2 Oper Boint 2 May	
	1. Shut off 2. Oper. Point 3. Max. recommended Point 4. a point	
	between (1) & (2) above 5. a point	
	between (1) & (2) above 3. a point between	
	(2) & (3) above	
	1. Currant	
	2. Voltage	
	3. Power drawn by motor	
	4. Flow rate	
	5. Suction pressure	
	6. Delivery pressure	
10.	Tabulate measurements, calculations	
	Flow rate	
	Pressure	
	Power drawn by pump	
	Power drawn by motor	
	Pump efficiency	
	Overall efficiency	
	( any other particular to this contract)	
1.1		
11.	Any deviations of the test results from	
	the submitted test reports (3 <sup>rd</sup> party / manuf./ client)	
	(5 party / manur./ chent)	
12.	Observations / Comments on the	
	deviations.	
13.	Acceptance / rejection of the	
	equipment with justifications.	

#### APPENDIX 13 – AFFIDAVIT BY THE BIDDEER

	of			_
	declare and affirm as follows.	igioilist),	, do hereby s	oleminy sincerery and
01.	I am the Affirmant above named.			
02.	I hereby declare that I have applied for to Drainage Board bearing No:			and my spouse or
over name conte his u on the	foregoing affidavit having been read r and explained to the affirmant above ned who having understood its nature tent and context affirmed hereto and set usual signature hereto in	Before	me	Declarant
			Justice o	f the Peace /
			Commissi	oner for oaths

## APPENDIX 14 - ENTITLED ALLOWANCES ON FOREIGN TRAVELS & RELATED EXPENSES

**Category of Countries** 

Category	Countries					Combine
No.						& Incidenta Allowanc
	Afganistan	Burundi	Guam	Nambia	Tanzania	
	Albania	Cambodia	Kiribati	Nauru	Swaziland	
	Algeria	Canary Island	Lao Peoples Dem.Rep.	Netherlands Anti	Tajikistan	
	Azerbaijan	Capevrde	Lesothe	Nicaragua	Tunisia	
	Bahamas	Cooks Island	Liechtenstein	Palau	Uganda	
222 07	Balarus	Domenica	Nacedonia Rep.	Paraguay	Uzbekistan	US\$ 140
1st category	Barbados	El Salvador	Malawi	Samoa		+
	Belize	Etihiyopiya	Malta	Sao Tome & Prince		US\$ 40
	Bhutan	Equatorial	Mauritania	Serbia		2,773
	Bolivia	Gabon	Mongolia	Sierra Leon		
	Bosnia	Gambia	Montenegro	Soloman Island		
	Botswana	Gibraltar	Myanmar	Somalia		
	Antigue Barbuda	Ecuador	Guinea Bissaw	Liberia	Yogoslavia	
	Armenia	Fiji	Hawai	Mexico	Tahiti	
	Argentina	French Guiana	Haiti	Micronesia Fed.	Tonga	
	Bulgaria	Guyana	Honduras	Monaco	Vanuatu	17 mil 19 bio and 17 mil 19 bio and 18 bio a
	Bangaldesh	Grenada	Ireland	Mozambique		US\$ 182
2 <sup>nd</sup> category	Brunei	Gerogia	Iraq	Papua new Guinea		+
	Cameroon	Guatemala	Jamaica	Suriname		US\$ 40
	Coted Ivoria	Greenland	Korea Dem.Rep.	Yeman Rep.		
	Costa Rica					
			Tours of the			
	Baharain	Kuwait	Pakistan	Sriyan Arab Rep.	Vietnam	
	Chile	Lithuania	Panama	South Africa	Zaire	
	Cyprus	Madagascar	Peru	St.Lucia	Zambia	
	Egypt Arab Rep.	Mauritius	Pholippines	Sudan	Zimbabwe	2.9
10011 <b>a</b> 01	Estonia	Malayasia	Poland	Thailand		US\$ 231
3 <sup>rd</sup> category	Guinea	Maldives	Quarter	Togo		+
	Hungary	Morocco	Romania	Trinidad & Tobago		US\$ 40
	Indinesia	Macedonia Rep	Ruwada	Uruguay		
	Iran Islamic Rep.	Nepal	Saudi Arabia	Ukrain		
	Kenya	Oman	Solvenia	Venezuela		
	Belgium	Croatia	India	Mali	Turkey	
	Benin	Cuba	Ivory Coast	New Caledonia	United Arab Emirates	
	Burkina Faso	Czech Republic	Jordan	Nigeria		2024000440000
- 4	Comoros	Dem.Rep.of Congo	Kazakhastan	Portugal		US\$ 280
4th category	Central African Rep.	Djibouti	Latvia	Slovak Rep.		+
	Colombia	Greece	Lebanon	Spain		US\$ 40
	Congo	Iceland	Luxemburg	Taiwan		
	Angola	China (Beijin)	Israel	Niger	Singapore	
our management and present	Australia	Denmark	Italy	Norway	South Korea	04500000140344 NOV
5th category	Austria	France	Japan	Russia	Switzerland	US\$ 371
	Brazil	Germany	Libiya	Senagal	United Kingdom	+
	Canada	Finland	Netherland	Swedan	USA	US\$ 40
	Chad	Hongkong	New Zealand	Seychelles	1	1