**BILL OF QUANTITIES**

NAME OF WORK:- Supplying Installing & Testing Pumping Machinery 30 BHP (2 Sets) @ Source & 20 BHP (2 Sets) @ Water Works for Rural Water Supply Scheme Muhammad Khan Shoro (Daboo) Taluka Kotri District Jamshoro.

1. Description and rate of item based on Composite schedule of Rates

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| **Item No:** | **Quantity** | **Description of Item to be executed at site** | **Rate** | **Unit** | **Amount** |
| **01** | **02** | **03** | **04** | **05** | **06** |
|  |  | **GROUP ‘A’ SUPPLYING INSTALLING & TESTING PUMPING MACHINERY**  **30 BHP (2 SETS) @ SOURCE.** |  |  |  |
| 01 | 2 Sets | Supplying and installing i/c transportation to site of work at Muhammad Khan shoro  electric pumping set consisting of A.C. electric motor of 30 BHP 3 Phase 50 cycles Coupled 400/420 volts 2900 RPM (Siemens made) (Type ETA 80-260 Size 4” x 3” Coupled with centrifugal K.S.B Pump mounted on common steel frame or base plate (KSB Made) capable of discharging 180 gallons per minute against a head of 230’ ft i/c installation of pumping set on C.C. foundation Ratio 1:2:4 and Ratio 1:4:8 with ballast with M.S. nuts and bolts of 5/8” dia to be embedded in C.C. foundation i/c providing and fixing MCU (KSB made) all accessories consisting ASD (Automatic star delta starter )(circuit breaker MCO over load relay timer relay push button indicator sand internal wiring providing internal electric wiring from MCU to electric motor 3-7/0-52 PVC insulated wire 660 volts grade in 40 mm (1”) PVC conduit on surface as required i/c providing providing and fixing earthing set with size (2x2x1/4”)G.I. Plate buried in the ground at the ground at depth 7mm (12’ft) for base plate and testing of the pumping set against the required head for 72 hours etc: complete. | 569135/- | P/Set | 11,38,270/- |
| 02 |  | Manufacturing supplying M.S. pipe made out of M.S. Sheet cutting folding to curvature and shape i/c welding etc: complete (R.A. Based on schedule items) thick ) |  |  |  |
|  | 44.00 Rft | 4” DIA FOR SUCTION | 506/60 | P/Rft | 22,290/- |
|  | 21.0 Rft | Delivery main 6” dia | 749/34 | P/Rft | 15,736/- |

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| **Item No:** | **Quantity** | **Description of Item to be executed at site** | **Rate** | **Unit** | **Amount** |
|  | **02** | **03** | **04** | **05** | **06** |
| 03 |  | Manufacturing supplying M.S. flange 3”x4” of different dia made out of M.S. sheet of 3/8” various thickness i/c cutting drilling holes and welding Flange with M.S. Pipe etc: complete (R.A. Based on Sch:) |  |  |  |
|  | 06 Nos: | 6” dia | 804/77 | Each | 4,829/- |
|  | 08 Nos: | 4” dia | 596/75 | Each | 4,774/- |
| 04 |  | Supplying C.I. Sluice valve heavy pattern (Test pressure 21.kg: sq: cm or 300 lbs sq: inch (S.M.I.NO;06, P/9) |  |  |  |
|  | 2 Nos: | 3” Dia | 4290/- | Each | 8,580/- |
| 05 |  | Supplying C.I. Reflex valve heavy pattern (test pressure 21 kg: sq: cm or 300 lbs sq: inch (S.I.NO;5, P/12) |  |  |  |
|  | 2 Nos: | 3” Dia | 1543/75 | Each | 3,088/- |
| 06 |  | Foot valve heavy pattern with flang gate (Imported) (S.M.I.NO;4, P/10) |  |  |  |
|  | 2 Nos: | 4” dia | 893/75 | Each | 1,788/- |
| 07 | 74.93 Kg | Supplying C.I. Bend with flanged ends with holes i/c turning and facing of flanges for all size (S.M.I.NO;8, P/11) | 120/- | P/Kg: | 8,992/- |
| 08 | 13.36 Kg: | C.I.Tapper flat bottomed or central tapered flange end/tees bend with holesi/c turning and facing of flange for all size (P.H.S.(M)I-1, P/11) | 120/- | P/Kg: | 1,603/- |
| 09 | 20.52 Kg: | Supplying C.I. Tee flanged ends with holes i/c trimming facing of flange for all size  (Sch: of Mat: No:11, P/.11) | 120/- | P/Kg: | 2,462/- |
| 10 |  | C.I. Short Piece( S.O.M.I.NO;9, P/16) |  |  |  |
|  | 1 No: | 6” dia | 618/75 | Each | 619/- |
| 11 |  | Jointing C.I/M.S flanged pipe and specials flanged and inside a trenches i/c supplying rubber packing of the required thickness nuts, bolts with washers etc and other tools required for jointing and testing the joints to the specified pressure etc; complete (PHSI.NO;1, P/40) |  |  |  |
|  | 8 Joints | 4” dia | 513/- | P/Joint | 4,104/- |
|  | 7 Joints | 6” dia | 938/- | P/Joint | 6,566/- |
|  | 6 Joints | 3” dia | 499/- | P/Joint | 2,994/- |
| 12 | 3 Nos: | Cutting holes 4”x6” in stone masonary or brick wall with chisel repairing masonary dibries within one chain (G.S.INO;72, P/107) | 169/40 | Each | 508/- |
|  |  |  |  | **Total** | **12,27,203/-** |

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| **Item No:** | **Quantity** | **Description of Item to be executed at site** | **Rate** | **Unit** | **Amount** |
| **01** | **02** | **03** | **04** | **05** | **06** |
|  |  | **GROUP ‘B’ SUPPLYING INSTALLING & TESTING PUMPING MACHINERY**  **20 BHP (2 SETS) @ WATER WORKS** |  |  |  |
| 01 | 2 Sets | Supplying and installing i/c transportation to site of work at Muhammad Khan Shoro  electric pumping set 2900/2800 RPM (Siemens) 20 BHP electric 3 Phase 50 cycles 500 / 220 Volts with centrifugal pump (Type ETA Norm (65x200) Norm Size 3” x2½” mounted on common steel frame or base plate (capable) of discharge 180 GPM against the required head of 180’ft i/c installed on C.C. foundation Ratio 1:2:4 with M.S. nuts and bolts of 5/8” dia to be embedded in C.C. foundation i/c providing and fixing Automatic Delta Starter (made Twain) i/c Providing fixing & fuse with seywer type fuse link CC 500 volts 30 amp i/c Providing fixing volt meter 100 volt and main submission centre switch press in the wall (5”x4”) providing for main switch 3.7 PVC installed wire 500 volts grade 15 mm on the ground @ the depth 3.7 m (12) as per Pak PWD specification & testing pumping set against the required head for 72 hours etc: complete. | 398560/- | P/Set | 797,120/- |
| 02 |  | Manufacturing supplying M.S. pipe made out of M.S. Sheet cutting folding to curvature and shape i/c welding etc: complete (R.A. Based on schedule items) thick ) |  |  |  |
|  | 44.00 Rft | 3” DIA FOR SUCTION | 385/89 | P/Rft | 16,979/- |
|  | 21.0 Rft | Delivery main 4” dia | 506/60 | P/Rft | 10,639/- |
| 03 |  | Manufacturing supplying M.S. flange 3”x4” of different dia made out of M.S. sheet of 1/2” various thickness i/c cutting drilling holes and welding Flange with M.S. Pipe etc: complete (R.A. Based on Sch:) |  |  |  |
|  | 08 Nos: | 3” dia | 500/89 | Each | 4,007/- |
|  | 06 Nos: | 4” dia | 596/75 | Each | 3,581/- |
| 04 |  | Supplying C.I. Sluice valve heavy pattern (Test pressure 21.kg: sq: cm or 300 lbs sq: inch (S.M.I.NO;06, P/9) |  |  |  |
|  | 2 Nos: | 3” Dia | 4290/- | Each | 8,580/- |

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| **Item No:** | **Quantity** | **Description of Item to be executed at site** | **Rate** | **Unit** | **Amount** |
| **01** | **02** | **03** | **04** | **05** | **06** |
| 05 |  | Supplying C.I. Reflex valve heavy pattern (test pressure 21 kg: sq: cm or 300 lbs sq: inch (S.I.NO;5, P/12) |  |  |  |
|  | 2 Nos: | 3” Dia | 1543/75 | Each | 3,088/- |
| 06 |  | Foot valve heavy pattern with flang gate (Imported) (S.M.I.NO;4, P/10) |  |  |  |
|  | 2 Nos: | 3” dia | 731/25 | Each | 1,463/- |
| 07 | 42.01 Kg | Supplying C.I. Bend with flanged ends with holes i/c turning and facing of flanges for all size (S.M.I.NO;8, P/11) | 120/- | P/Kg: | 5,041/- |
| 08 | 30.55 Kg: | C.I.Tapper flat bottomed or central tapered flange end/tees bend with holesi/c turning and facing of flange for all size (P.H.S.(M)I-1, P/11) | 120/- | P/Kg: | 3,666/- |
| 09 | 11.45 Kg: | Supplying C.I. Tee flanged ends with holes i/c trimming facing of flange for all size  (Sch: of Mat: No:11, P/.11) | 120/- | P/Kg: | 1,374/- |
| 10 |  | C.I. Short Piece( S.O.M.I.NO;9, P/16) |  |  |  |
|  | 1 No: | 4” dia | 487/50 | Each | 488/- |
| 11 |  | Jointing C.I/M.S flanged pipe and specials flanged and inside a trenches i/c supplying rubber packing of the required thickness nuts, bolts with washers etc and other tools required for jointing and testing the joints to the specified pressure etc; complete  (PHSI.NO;1, P/40) |  |  |  |
|  | 16 Joints | 3” dia | 499/- | P/Joint | 7,984/- |
|  | 7 Joints | 4” dia | 513/- | P/Joint | 3,591/- |
| 12 | 3 Nos: | Cutting holes 4”x6” in stone masonary or brick wall with chisel repairing masonary dibries within one chain (G.S.INO;72, P/107) | 169/40 | Each | 508/- |
|  |  |  |  | **Total** | **8,68,109/-** |

**A B S T R A C T**

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| --- | --- | --- |
| Group ‘A’ Supplying & installing Pumping Machinery  30 BHP 2 sets @ Source |  | Rs: 12,27,203/- |
| Group ‘B’ Supplying & installing Pumping Machinery  20 BHP 2 sets Water works |  | Rs: 868,109/- |
| **Total** |  | **Rs:20,95,312/-** |

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**Amount Total (a) + (b) Rs:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

\_\_\_\_\_\_\_\_% above / below on the rates of CSR, Amount to be added / deducted on the basis

Total (b) of premium quoted \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Total (A) = a + b in works & Figures\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Contractor EXECUTIVE ENGINEER**

**PUBLIC HEALTH ENGG:DIVISION**

**JAMSHORO**