**SCHEDULE – B**

**CONSTRUCTION OF WATER RURAL WATER SUPPLY SCHEME AT SHADI KHAN BHANOJO TALUKA SHAHDADPUR DISTRICT SANGHAR**.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S.N | Description | Qty | Rate | Unit | Amount |

PART-A. BORING OF TUBE WELL.

1. Boring for all water bearing soil from depth 70 to 100 Rft below ground level i/c sinking and with drawing of cussing pipe etc complete (Market Rate).

6”dia. 40.0 Rft. Rs.414/- P/Rft. Rs.16560/-

2. Supplying and installing PVC stainer B class of approved design (P.H.S.I No: 9 (a) P-43).

4” 30.0 Rft. Rs.209/95 P/Rft. Rs.6299/-

3. Supplying and Installing PVC blind pipe B class of approved designed quality and make i/c necessary sockets etc complete (PHSI No: 12 p-44)

10.0 Rft Rs.179/10 P/Rft. Rs.1791/-

4. Surroundings with grated Bajri size 3/8” to 1/8” or 9” to 3mm in between bare and bind pipe for the following dia meter of strainer (P.H.S.I.No: 17, P-23).

30.0 Rft Rs.46/- P/Rft. Rs.1380/-

5. Providing G.I Pipes of approved quality to be tested 4” with pressure head of 200 ft (SSI N-5

4” dia. 35.0 Rft. Rs.431/93 P/Rft. Rs.15118/-

2”dia. 25.0 Rft. Rs.187/58 P/Rft. Rs.4689/-

6. laying of C.I / M.S pipe ( ) flanged & special (P.S.I.No: P-78)

35.0 Rft Rs.7/76 P/Rft. Rs.272/-

6. Providing & laying (main or submain) PVC insulated with size 2-3ft copper conductor in ¾ dia PVC conduct on surface (S.S.I No: 4P-!)

36.0 Rft. Rs.60/95 P/Rft. Rs.2194/-

7. Supplying & installing C.I dead end (SMI No: 13 p-17)

1.0 No Rs.425/- Each Rs.425/-

8. Providing & laying main or submain Pvc insulated size 2-7/0.36 (4mm2)copper conductor in ¾ “ dia pvc donduct (S.E.I No: 4 P-1)

400.0 Rft @Rs. 200/- P/Rft Rs.80000/-

Total:- Rs.124039/-

For 02 Nos: 124039 × 2 = **Rs. 248078/-**

***PART-B.*** ***PUMPING MACHINERY 3.0 BHP DEEP WELL TURBINE.***

Providing Installing in pimp house of fine shaft drive deep well 2.0 BHP grand fosse pump Type HSP 17-3 + 3 HP (FELM (I TELI) 1E2 EFF class 1 motor 400 volts 50 HZ made complete with direct driven hollow shaft electric motor 2.0 BHP (2900 RPM) Siemens make for out door location and cited 40' ft setting depth pump set shall be completed with line shaft screwed pipe discharge head suction strainer basket and all fitting required to give fully operational pump and columns pipe 5” dia meters shall not be accessed 5” at any columns at any point pump duty discharge 40 gallons per minute against a head of 70 ft i/c installing 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 Siemens made or equivalent i/c accommodation accessed on wall with locking arrangements i/c providing internal electric wiring for main with & 3.7/0.36 (4mm2) PVC insulated wire 660 volts grade in (6” to thick) PVC Patti conduit on surface as required i/c providing and fixing earthling (R.A approved also attached).

2.0 Sets. Rs.363990/- P/Set. Rs.727980/-

***Inter Connection***

1. Manufacturing and installing M.S pipe 3” dia made out of M.S sheet 3/16” thick cutting folding to curvature and shape i/c welding etc complete.(Based on schedule rates.)

***For Delivery.***

65.00 Rft. Rs.385/89 P/Rft. Rs.25083/-

2. Manufacturing and installing 3” dia M.S flanges 3/8” thick made out M.S sheet 3/8” thick cutting drilling holes etc complete. (Based on schedule rates.)

22.0 Nos: Rs.500/89 Each. Rs.11020/-

3. Reflex valve heavy pattern test pressure 21.0 kg / sq: cm or 300 lbs sq inch (P.H.S.M.I.No:6,P-11)

2.0 No: Rs.1543/75 Each. Rs.3088/-

4. C.I Sluice valve heavy pattern test pressure 300 lbs /sq inch (S.O.M.I.No:2,P-9).

3”dia. 2.0 Nos: Rs.4290/- Each. Rs.8580/-

5. C.I Bend with flanged ends with holes i/c turning & facing of flanged for all sizes (S.O.M.I.No:8, P-11).

0.393 Cwt. Rs.6096/- P/Cwt. Rs.2396/-

6. C.I Jibault joint (P.H.S.I.No: 14,P-17).

6” dia

4.0 Nos: Rs.1062/50 Each. Rs.4250/-

7. Jointing C.I M.S flanged pipe and specials flanged and inside a trenches nuts and bolts with washer etc and other is required for jointing and testing joints to the specified pressure etc complete. (P.H.S.I.No: 1 P/35)

3”dia 13.0 Joints Rs.499/- P/Joint. Rs. 6487/-

**Total:- Rs.788884/-**

PART-C PVC PIPE 3”DIA.

1.. Excavation for pipeline in trenches pits in Soft soil i/c trimming dressing sides to true alignment and shape leveling of beds of trenches to correct level and grade Cutting joint holes and disposal of surplus earth within one chain as directed by Engineer in charge providing fence guards lights, flags and temporary crossing For non-vehicular traffic wherever required lift up to 5’ and lead up to one chain (P.H.S.I.No: 1,P/46).

14000.0 Cft. Rs.3600/- P%0Cft. Rs.50400/-

2. Excavation for pipeline in trenches pits in Wet soil i/c trimming dressing sides to true alignment and shape leveling of beds of trenches to correct level and grade cutting joint holes and disposal of surplus earth within one chain as directed by Engineer in charge providing fence guards lights, flags and temporary crossing For non-vehicular traffic wherever required lift up to 5’ and lead up to one chain (P.H.S.I.No: 15,P/49).

2800.0 Cft. Rs.5400/- P%0Cft. Rs.15120/-

3. Providing laying uPVC pressure pipes of class-B (equivalent made) fixing in trench i/c cutting fitting and jointing with “Z” joint with one rubber ring i/c testing with water to a head of 61 meter or 200’ ft ( P.H.S.I No: 1 (E) P- 22).

3”dia 2800.0 Rft. Rs.90/- P/Rft. Rs.252000/-

4. Providing PVC specials (S.M.I.No: 6,P-B).

i) C.I Bend 45 3”dia. 4 Nos: Rs.731/- Each. Rs.2924/-

ii) C.I Bend 90 3”dia.4Nos: Rs.731/- Each. Rs.2924/-

iii) C.I. Tail piece 3”dia. 2 Nos: Rs.375/- Each. Rs.750/-

iv) Air Valve double acting 1. No: Rs.4000/- Each Rs. 4000/-

5. Supplying C.I Sluice valve heavy pattern test pressure 21 kg sq cm or 300 lbs sq inch (SOMI No:2,P-9).

3”dia. 1 Nos: Rs.4290/- Each. Rs.4290/-

6. Providing chamber 21/2x2 ½ (750x750 mm) inside dimension 4 ½’(1372mm) deep as per approved design for sluice valve 3” to 12” dia with 18”(457mm) dia inside cost iron cover and frame (wt=1 cwt 3 qr.)Fixed in RCC 1:2:4 (102mm) thick (with 5 lbs steel per Cft)9” (299mm)thick brick masonry walls set in 1:6 cement mortar 6”(1152mm) thick cement concrete 1:3:6 in foundation 1” thick cement concrete 1:2:4 flooring ½” thick cement plast 1:3 to all inside wall surface and to top i/c providing and fixing M.S foot rest at every 1 foot beyond 2 ½’ depth curing excavation back filling and disposal of surplus earth etc complete. (PHSI No: 4 P/40).

2.0 Nos: Rs.18820/- Each. Rs.37640/-

7. Jointing C.I /M.S flanged pipes and specials flanged and inside a trenches i/c supplying rubber packing of the required thick ness 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).

03”dia. 2.0 Nos: Rs.499/- Each. Rs.998/-

8. Making joint PVC Special fitting i/c laying of required diameter and testing the joint along with A.C pressure pipe line to the specified pressure and making good to all leaky joint complete (PHSI No: P-56).

3”dia. 10 Joints. Rs.59/- Each. Rs. 590/-

9. Refilling the excavated stuff in trenches in 6” thick layers i/c watering and ramming to full compaction etc complete (PHSI No: 24,P-53).

15120.0 Cft. Rs.2760/- P%0Cft. Rs.41731/-

Total:- Rs.41367/-

***PART-D. PUMP HOUSE (8’x8’).***

1. Excavation in foundation of building bridges & other structure i/c dug belling dressing refilling around structure with excavation stuff earth watering & ramming to full compaction lead up to one chain and lift up to 5’ ft: (in ordinary soil) (GSI No: 18 P/4 )

145.0 Cft. Rs.3176/25/- P%0 Cft. Rs.461/-

2. Cement concrete brick or stone ballast 1 ½” to 2”gauge Ratio 1:4:8 (GSI No: 4 P/17)

58.0 Cft. Rs.9416/28 P% Cft. Rs.5461/-

3. Cement concrete plain i/c placing compacting finishing curing complete i/c screening & washing of stone aggregate without shuttering Ratio (1:3:6). (GSI No: 5 P/18)

122.0 Cft. Rs.12595/- P% Cft. Rs.15429/-

4. Erection & removing centering for RCC in plain cement concrete work. (GSI No: 18 P/21)

220.50 Cft. Rs.3127/41/- P% Cft. Rs.6896/-

5. Pacca brick work in ground floor in cement sand mortar (1:6). (GSI No: 5 P/26)

219.0 Cft. Rs.12674/36 P% Cft. Rs.27757/-

6. Pucca brick work in Foundation and plinth in cement sand mortar (1:6). (GSI No: 5 P/24)

15.0 Cft. Rs.11948/36 P% Cft. Rs.1792/-

7. Fabrication of mild steel reinforcement cement concrete i/c cutting bending laying in position and fastening i/c cost of binding wire etc. (GSI No: 7 P/20)

2.83 Cwt. Rs.5001/70 P/ Cwt. Rs.14155/-

8. RCC work i/c all labour and material except the cost of steel reinforcement and its labour for bending & binding, which will be paid separately. This rate also i/c all kind of forms moulds lifting shuttering curing etc complete (GSI No: 6 P/19)

70.49 Cwt. Rs.337/ P/ Cft. Rs.23755/-

9. Filling Water and remaining earth in floor with surplus from foundation lead up to one chain and lift up to 5 ft ( GSI No: 21 P/ 5)

87.32 Cwt. Rs.1512/50 P% Cft. Rs.1321/-

10. Providing and laying 1” thick topping cement concrete (1:2:4) i/c surface finishing & dividing into panel etc complete (3” thick) (GSI No: 16 P/ 47)

58.22 Sft. Rs.3275/50 P% Sft. Rs.1907/-

11. S/F steel grated doors complete with locking arrangement angle iron frame 2”x2”x1/18” and ¾” Sq: bars 4” center to center (GSI No: 23 P/97)

28.0 Sft. Rs.726/72 P/ Sft. Rs.20348-

12. Fabrication of heavy steel work with angle tees flat iron round iron & sheet iron for making trusses girders make etc i/c cutting reverting handling assembling and fixing but excluding erection in position. (GSI No: 2 P/96)

2.03 Cwt. Rs.4928/49 P/ Cwt. Rs.10005/-

13. Cement Plaster (1:4) up to 20’ height ½” thick (GSI No: 11 P/58)

268.0 Sft. Rs.2283/93 P% Sft. Rs.6121/-

14. S/F in position iron/steel grill of ¾” x ¾” size fiat iron of approved designed i/c painting 3 coat etc complete weight to be than 3.7 Lbs Sq: ft: of finished grill (GSI No: 26 P/97)

24.00 Sft. Rs.180/50 P% Sft. Rs.4332/-

15. Cement pointing struck joints 1:3 on wall (GSI No: 19 P/59)

328.0 Sft. Rs.1213/58 P% Sft. Rs.3981/-

16. White washing One coats (GSI No: 26 P/ 60)

398.00 Sft. Rs.829/95 P% Sft. Rs.3303/-

17 Colour washing two costs (GSI No: 25 /60 )

328.0 Sft. Rs.859/90 P% Sft. Rs.2820/-

18. Preparing surface & painting of doors & windows any type three coats (GSI No: 5 /77)

104.00 Sft. Rs.2116/41 P% Sft. Rs.2201/-

Total:- Rs. 153162/-

For 2. Nos: 153162 × 2 = Rs. 306324/-

***PART-E. L.S.R.***

1. Excavation in foundation of building and other structure i/c dag belling dressing refilling around the structure with excavated earth watering and ramming lead up to one chain and lift up to 5’ (In ordinary soil) (GSI No18,P/5)

**400.36 Cft. Rs.3176/25 P%0 Cft. Rs.1272/-**

2. Cement concrete brick or stone ballast 1 ½” to 2” guage Ratio 1:4:8. (GSI No:4,P-17).

**79.40 Cft Rs.9416/28 P% Cft. Rs.7477/-**

3. Pacca brick work in foundation & plinth cement sand mortar Ratio (1:6)(GSI No: 4, P-25).

**1510.77 Cft. Rs. 11948/36 P% Cft. Rs: 61029/-**

4. Cement plaster (1:4) up to 20 ft: height 1/2” thick.(GSI No: 11 P-55).

622.00 Sft. Rs: 2283/93 P%Sft. Rs: 14206/-

5. Puddlo (Market Rate).

16.0 kg. Rs.56/82 P/Kg Rs. 909/-

6. Errection and removal of centering for RCC or plain cement concrete work of partial wood vertical (GSI No: 18 (b) P/21).

19.50 Sft. Rs.3127/41 P% Sft. Rs.610/-

7. Cement concrete plain i/c placing compacting finishing and curing complete i/c screening and washing of stone aggregate without shuttering. Ratio 1:2:4. (GSI: 5,(i)P/-18).

72.50 Cft Rs. 14429/25 P% Cft Rs. 10461/-

8. RCC work i/c all labor and material except the cost of steel reinforcement and its labor for bending and binding which will be paid separately. This rate also includes all kinds of forms mould lifting shuttering curing rendering and finishing the exposed surface (i/c screening and washing of shingle)a RCC work in roofs slabs beams columns rafts lintels and other structural members laid in situ or precast laid in position complete the all respect (I) Ratio 1:2:4 90 lbs cement 2cft sand 4 cft shingle 1/8” to ¼”guage.(GSI No: 6 (a) P-19).

94.55 Cft. Rs: 337/- P/Cft. Rs: 31863/-

9. Fabrication of mild steel reinforcement cement concrete i/c cutting bending laying in position and fastening i/c cost of binding wire etc. (GSI No: 7 (b) P-19).

3.79Cwt. Rs: 5001/70 P/Cwt. Rs: 18956/-

10. P/F C.I manhole cover frame i/c cost of material etc (GSI No: F , P-23).

Manhole cover 2'x2'

0.43 Cwt. Rs.6985/- P/Cwt. Rs. 3018/-

11. Supplying and fixing G.I pipe (S.O.M.I.No: VOL: III P-III P-125).

2”dia. 1 x 20 =20.0 Rft. Rs.187/58 P/Rft. Rs.3752/-

1-½ ” Dia.1 x 5 =5.0 Rft. Rs.136/05 P/Rft. Rs.680/-

1”Dia. 1x10.0 =10 Rft. Rs.92/07 P/Rft. Rs.921/-

12. G.I . Specials.

(i) G.I Socket. 2"dia. 1x1=1 No: Rs.90/- Each. Rs. 90/-

(ii) G.I Socket. 1"dia. 1x4=4 Nos: Rs.37/- Each. Rs. 148/-

(iii) G.I. Nipple 1"dia 1x4=4 Nos: Rs.25/- Each. Rs.100/-

(iv) G.I Bend 2"dia 1x2=2 Nos: Rs.240/- Each. Rs. 480/-

(v) Bib cock stop cock (brass) 1"dia.

1x4= 4 Nos: Rs.490/- Each. Rs.1960/-

(vi) Handle valve 2"dia. 1 No: Rs.1250/- Each. Rs. 1250/-

(vii) M. S clamps with socket and servers.

3"dia 1x2=2 Nos: Rs.172/- Each. Rs.344/-

13. White washing two coats (G.S.I No: 26,P-60)

266.0 Sft Rs.425/84 P% Sft. Rs. 1133/-

14. Colour washing two coats (G.S.I.No: P- ).

266.0 Sft. Rs.859/90 P% Sft. Rs.2287/-

***TOTAL:-* Rs.162946/-**

Rs.162946 × 2 = **Rs.325892/-**

ABSTRACT.

PART-A. BORING OF TUBE WELL (02 Nos:) Rs. 248078/-

PART-B. PUMPING MACHINERY . Rs.788884/

PART-C. PVC PIPE 3" Ø Rs. 41367/-

PART-D PUMP HOUSE (2 Nos) Rs. 306324/-

PART-E L.S.R. (02 Nos) . Rs. 325892

**Grand Total:- Rs.1710545/-**

***CONDITIONS.***

*1. Any error omission in the specification quantity and unit will be governed by the relevant schedule items.*

*2. The rates should be inclusive of all taxes i.e. sales tax octori tax etc.*

*3. No separate carriage will be paid to the contractor.*

1. *No premium will be allowed for non-schedule items.*
2. *The decision of the Superintending Engineer, Public Health Engineering Circle Mirpurkhas will be final and binding the parties in any dispute.*

EXECUTIVE ENGINEER

CONTRACTOR. PUBLIC HEALTH ENGG: DIVISION

SANGHAR

***RATE ANYLYSIS.***

***PUMPING MACHINERY 2.0 BHP SUB-MEASUREABLE PUMP.***

1. Providing Installing in pimp house of fine shaft drive shallow well 2.0 BHP grand fosse pump Type HSP 17-10 + 10 HP (Submersible pump) 400 volts 50 HZ made complete with direct driven hollow shaft electric motor 2.0 BHP (2900 RPM) Siemens make for out door location and cited 40 ft setting depth pump set shall be completed with line shaft screwed pipe discharge head suction strainer basket and all fitting required to give fully operational pump and columns pipe 5” dia meters shall not be accessed 5” at any columns at any point pump duty discharge 70 gallons per minute against a head of 165/180 ft i/c installing 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 Siemens made or equivalent i/c accommodation accessed on wall with locking arrangements i/c providing internal electric wiring for main with & 3.7/.085 (7”36) PVC insulated wire 660 volts grade in 40 to 25 mm (6” to thick) PVC Patti conduit on surface as required i/c providing and fixing earthing (R.A approved also attached).

1.0 No: Rs.75000/- P/Set. Rs. 75000/-

2. Providing internal electric wiring from mains with 3-7/0.85 (7/0.36)PVC insulated wire 660 volts grade in 25 m (1”) PVC conduct on surface CC required (ESCI No: 30,P-5).

3 x 12=36.0 Rft. Rs.38/35 P/Rft. Rs.1377/-

3. Providing and fixing earth set with 2’x2’x1/4” copper plate buried in ground at a depth of 12” or less if water comes out from the ground level with salt and charcoal etc i/c making the pit 12” deep by excavation of all type of soil earth plate to be connected with No.8 S.W.G bare copper wire run in ½” G.I pipe straight from the earth plate ( ESI No:2, P-27)

1 Set. Rs.2600/- Each. Rs. 2600/-

4. Making foundation of cement concrete plain i/c placing compacting finishing and curing complete i/c screening and washing of stone aggregate without shuttering (1:2:4) (GSI No: 5,P-17).

4 x 2.50 x 2.0=20.0 Cft. Rs.5941/10 P% Cft. Rs.1188/-

5. Cement concrete brick or stone ballast 1 ½” to 2” gauge (Ratio (1:4:8) (G.S.I.No:4(b) P-17).

5 x 3.0 x 0.5=7.50 Cft. Rs.3584/10 P%Cft. Rs.269/-

6. Providing and fixing M.S foundation nuts and bolts of ¾” and 2.5’ ft long each in CC foundation (SOMI No: 6,P-18).

Size. 4x1.04x2.0=8.32 Lbs. Rs.112/61 P/Lbs Rs. 937/-

7. Labour charges for lowering the pumping set in side pump house in correct alignment and fixing etc.

i) Electrical 1 No: for one day. Rs.450/- P/Day.

ii) Helper 1 No: for one day. Rs.250/- P/Day.

Total:- Rs.700/- Rs.700/-

17. TESTING CHARGES FOR 72 HOURS.

i) P/Operator / Electrician 1.0 for No: 4 days.

4 Days. Rs.450/- P/Day. Rs. 1800/-

ii) Helper 1.0 No: for 4 days.

4 Days. Rs.250/- P/Day. Rs. 1000/-

iii) Mobil oil, grease and Cotton waste etc (L.S) Rs. 200/-

Total:- Rs.85165/-

Add:10% Contractor profit on I/No: 6. = 937/- Rs. 94/-

Total:- Rs. 85259/-

Say Rs. 85260/-

SUB-ENGINEER.ASSISTANT ENGINEER

PUBLIC HEALTH ENGG: SUB-DIVISION

TANDO ADAM.