

Issued to Sh.....Contractor

**GOVERNMENT OF HIMACHAL PRADESH
IRRIGATION CUM PUBLIC HEALTH DEPARTMENT
(C.P.W.D. Code, Paragraphs 94-95)**

Division: - Paonta Sahib.

Sub-Division: - Paonta Sahib

- 1 Tender is hereby invited on behalf of the Governor of HP for the work:- **Providing LWSS Rudana in G.P. Shiva Sanog in Tehsil Paonta Sahib, District Sirmour (HP) (SH:-Providing and fixing of complete Solar Pump Set with all accessories for water lifting scheme and its automation)**
- 2 The estimated cost of **₹3,00,000/-** only.
- 3 Contract documents consisting of the detailed plans complete specification, the schedule of quantity of the various clauses of work to be done and the set of conditions of contract to be complied with by the persons whose e-tender may be accepted which will also be found printed in the form of tender, can be seen on line and uploaded on the website <http://hptenders.gov.in>. The tender document can be seen/purchased in the divisional office between the hours of 11.00 AM and 3.00 P.M. up to **24.03.2019** except on Sunday and the Public Holiday.
- 4 The site for the works is available/ or the site for the work shall be made available in parts.
- 5 Tenders which should always be placed in sealed covers, with the name of work written on the envelopes, will be received by the Executive Engineer IPH Division, Paonta Sahib up to **02:30 NOON** on **26.03.2019** to be opened by him in his office on the same day at **03:00 PM**.
- 6 Tender are to be on PWD form No.6 & 8 which can be obtained from the office of Divisional Officers IPH Division, Paonta Sahib on payment of a sum of **Rs.250/-** in cash or can be downloaded from www.hpiph.org however cost of form shall have to be deposited by the contractor at the time of submitting of tender. The time allowed for carrying out of the work will be **Three Month(s)** to be reckoned from the fifteenth day after the date of written orders to commencement of work.
- 7 The contractors should quote rates in figures as well as in words the rate and amount tendered by them. The amount for each item should be worked out and the requisite total be given.
- 8 When a contractor signs a tender in an Indian language, the percentage above or below of the tendered amount in the case of PWD Form No.7 and the total amount tender in the case of PWD Form No.8 & 12 should also be written in the same language. In case of illiterate contractors, the rates or the amount tendered should be attested by a witness.
- 9 Issue of tender form will be stopped one day before the time fixed for the opening of tenders.
- 10 Earnest money **₹6,000/- (unless exempted)** shall be submitted in the shape of DD/FDR/SS of Nationalized bank/P.O. saving account in any of the post office in HP duly pledged in the favour of Executive Engineer, IPH Division, Paonta Sahib. Tenders of contractors who fail to deposit the earnest money in prescribe manner will summarily rejected.
- 11 The tenders of those contractors who do not deposit the earnest money/ security bond in the prescribed manners will summarily be rejected.
- 12 The contractor whose tender is accepted (unless exempted) will be required to furnish by way of security deposit for the due fulfillment of his contract such sum
 - i) In case of works costing upto Rs. 2,00,000/- @ 10% of the tenders amount of the work.
 - ii) In case of work costing more than of Rs. 2,00,000/- to 5,00,000/- = (i) + 7½ %.
 - iii) In the case of work costing more than Rs.5,00,000/- to 50,00,000/-=(ii) + 5%.
 - iv) In the case of work costing above 50 lac =(iii) +2½% (without any limit)
 which may be either deposited in the shape of FDR or a nationalized bank.
- 13 The acceptance of tender will rest with the Executive Engineer, who does not bind himself to accept the lowest tender and reserves to himself the authority to reject any or all the tender received without assignment of reason. All tender in which any of the prescribed conditions are not fulfilled or are incomplete in any respect are liable to be rejected.
- 14 Canvassing in connection with tender is strictly prohibited & the tenders submitted by the contractors, who resort to canvassing will be liable to rejection.
- 15 All rates shall be quoted on the proper form of the tender alone.
- 16 Item rate tender containing percentage below/ above will summarily be rejected however when a tenderer voluntarily offers a rebate for award within a stipulated period this may be considered.
- 17 On acceptance of the tender, the name of the authorized representative (s) of the contractor who would be responsible for taking instructions from the Engineer-in-charge shall be communicated to the Engineer-in-charge.
- 18 The special care should be taken in writing the rates in figures as well as in words and the amount in figures

- only in such a way that interpolation is not possible. The total amount should be written both in figures as well as in words. In case of figures, the word 'Rs' should be written before the figure of 'Rs.' and words 'P' after the decimal, i.e. Word 'Rs.' And words 'P' after the decimal, i.e. Rs.2.15 P and in case of words, the word Rs. Should precede by the word only. It should invariably be up to decimal place.
- 19 The Governor of Himachal Pradesh does not bind himself to accept the lowest or any tenders and reserves to himself the right of accepting the whole and any part of the tender and the tenderer shall be bound to perform the same at the rates quoted.
 - 20 Sales Tax or any other tax on material in respect of this contract shall be payable by the contractor and Govt. will not entertain any claim whatsoever in this respect.
 - 21 The contractor must produce income tax clearance certificate before the tender can be sold to him.
 - 22 The contractor shall not be permitted to tender for work in H.P. I&PH Circle, (responsible for award and execution of contracts) in which his near relative is posted as divisional Accountant or as an officer in any capacity between the grade of S.E. and A.E. (both inclusive). He shall also intimate the name of persons who are working with him in any capacity or are subsequently employed by him who are near relative to any Gazetted officer in HP I&PH in the Ministry of works, housing and rehabilitation. Any breach of this condition by the contractor would render him liable to be removed from the approved list of the contractors of this department.
 - 23 The contractor shall give a list of non-gazetted H.P. I&PH employees related to him. No Engineer of gazetted rank or other Gazetted Officer employed in Engineering or Administrative duties in the engineering department of the Govt. of H.P. is allowed to works as a contractor for a period of two years of his retirement from Govt. service, without the prior permission of the Govt. of H.P. The contract is liable to be cancelled if either the contractor or any of his employees is found at any time to be such a persons who had not obtained the permission of the Govt. of Himachal Pradesh as aforesaid before submission of tender or Engagement in the contractor's service.
 - 24 Tender for a work in H.P. shall remain open for acceptance for a period of 120 days from the date of opening of tender.
 - 25 The contractors exempted from payment of earnest money/Security deposit in individual cases should attach with the tenders an attested copy of the letter exempting them from the payment of Earnest Money and security deposit and should produce the original whenever called upon to do so. **He shall also submit an affidavit regarding not to utilized his exempted limit.**
 - 26 The tender for the work shall not be witnessed by a contractor (s) who himself/ themselves has/ have tendered or who may tender for the same work. Failure to observe this condition could render tenders of the contractors tendering as well as witnessing the tender level to summarily rejected.
 - 27 While quoting the rate in the schedule of quantities the word "only" should be written cost following the amount and it should not be written in the next line.
 - 28 In case refuses to commence the work after a written order of competent authority or the award letter by the Executive Engineer concerned, the earnest money so deposited by the e-tender shall be forfeited and credited to the account of HP Govt. by Executive Engineer, IPH Division, Paonta Sahib.
 - 29 The contractor shall submit a list of works which are in hand or in progress.
 - 30 Over writing in the tender is strictly forbidden and correction if any should be initialed. Tender containing doubtful figure shall be rejected.
 - 31 The tenderer shall sign each page of the tender form.

Contractor

Executive Engineer,
IPH Division,
Paonta Sahib (H.P.)

SCHEDULE OF QUANTITY

Name of Work : C/O LWSS Gawali in G.P. Gawali Tehsil Shillai Distt. Sirmour(HP) (SH:- Providing and fixing of complete solar pump set with all accessories for water lifting scheme and its automation)

**Estimated Cost :-Rs.450000/-
Earnest Money :-Rs.9000/-
Time:- Three months.**

Sr.No. 1	Description 2	Qty. 3	Rate 4	Unit 5	Amount 6.
<u>PUMPING MACHINERY</u>					
1	Design, Engineering, Providing and fixing of complete solar pump set with all accessories as per direction of Engineer-in-Charge including testing, commissioning complete including providing M.S. sheet 16 SWG steel fabricated floor mounted closed almirah type switch board including angle iron post of suitable height and size ISA 40x40x6mm duly painted comprising and capable of mounting the allied accessories with all internal connections. The drawing of panel board shall be subject to approval of Engineer in charge, including with locking arrangement.	1.00		P/Job	
i)	<u>PV ARRAY:</u> The SPV water pumping system should be operated with a PV array .Sufficient number of modules in series and parallel could be used to obtain the required PV array power output. Use of PV modules with higher power output is preferred. a). Indigenously produced PV module (s) containing mono/ multi crystalline silicon solar cells should be used in the PV array for the SPV Water Pumping systems. b). Modules supplied with the SPV water pumping systems should have certificate as per IEC 61215 specifications or equivalent National or International/ Standards. c). Modules must qualify to IEC 61730 Part I and II for safety qualification testing. d). The efficiency of the PV modules should be minimum 14% and fill factor should be more than 70%. e). The terminal box on the module should have a provision for "Opening" for replacing the cable, if required. f). There should be a Name Plate fixed inside the module which will give: Name of the Manufacturer or Distinctive Logo, Model Number , Serial Number, Year of manufacture				
ii)	<u>MOTOR PUMP-SET:</u> Submersible solar AC Pump to meet required discharge and head and should have the following features. a. MNRE approved Solar AC pump of reputed make i.e KSB/Lubi/ Kirloskar/or equivalent. b. The manufacturers of pumps should self-certify that, the pump and all external parts of motor used in submersible pump which are in contact with water, are of stainless steel.				
	i) Head: 265.00 mtr.				
	ii) Discharge: 0.85 LPS				
	iii) Dia of Rising main:- 40 mm dia				
iii)	<u>MOUNTING STRUCTURES AND TRACKING SYSTEM:</u> a. The PV modules should be mounted on metallic structures of adequate strength and appropriate design, which can withstand load of modules and high wind velocities up to 150 km per hour. The support structure used in the pumping system should be hot dip galvanized iron with minimum 80 micron thickness. b. To enhance the performance of SPV water pumping systems, manual or passive tracking system must be used.				

1	2	3	4	5	6.
iv)	<p><u>ELECTRONICS AND PROTECTIONS:</u></p> <p>a. Maximum Power Point Tracker (MPPT) should be included to optimally use the Solar panel and maximize the water discharge.</p> <p>b. The inverter must have IP 54 protection or must be housed in a cabinet having at least IP54 protection.</p> <p>c. Adequate protections should be incorporated against dry operation of motor pump set, lightning, hails and storms.</p> <p>d. Full protection against open circuit, accidental short circuit and reverse polarity should be provided.</p>				
v)	<p><u>OTHER ASSESSORIES:</u></p> <p>a. A good reliable switch suitable for DC / AC use is to be provided with the motor pump set.</p> <p>b. Sufficient length of cable should be provided for inter-connection between the PV array and the motor pump set.</p>				
2	<p>Providing and fixing of GSM based remote submersible pump auto operation control cum protection device for solar pump as per item no. 1, complete in all respects with in all leads and lifts as per direction of Engineer-in-Charge including testing, commissioning complete with following features:-</p> <p>i) Remote start / stop operation of pump with Call /SMS.</p> <p>ii) Pump start / stop feedback through call /SMS with reason of stop / trip.</p> <p>iii) Pump start / stop feedback for unauthorized local start / stop through starter.</p> <p>iv) Auto / Manual mode for auto pump start post grid supply resumption.</p> <p>v) Remotely settable timer for scheduling pump start / stop on Hourly / daily / Weekly / Monthly basis.</p> <p>vi) Remotely settable timer for scheduling pump starter / stop for fixed hours in a day.</p> <p>vii) Inbuilt Protection against over run, phase reversal, Single phasing . With user configurable remotely settable voltage and current limits for these protections.</p> <p>viii) Inbuilt GPS tracker for prevention of loss / theft.</p> <p>ix) Controlled operation access through authenticated mobile numbers only which can be added for removed by main user remotely.</p>				
				Total:-	

TERMS AND CONDITIONS:-

- 1 The work shall be executed as per IPH/PWD specification and instructions of the Engineer-in-charge.
- 2 Security, GST and Income tax will be deducted from each bill as per latest Govt. Amendments.
- 3 The PV Modules must be warranted for output wattage, which should not be less than 90% at the end of 10 years and 80% at the end of 25 years. The whole system including submersible pumps shall be warranted for 1 years and after sale service should be 10 years at least.
- 4 The device shall be manufactured by reputed company having ISO certification.
- 5 The Mobile SIM and operation changes shall be borne by department.
- 6 The Make, Model and specifications of the Equipment being supplied should be clearly mentioned by the bidder in the offer.

- 7 All accessories required to make the system fully functional shall be part of the original equipment nothing extra shall be paid on this account.
- 8 The Contractor/bidder should submit Manufacturers or system integrators Authorization with the offer.
- 9 The equipment supplied should be compatible to the HPSEB Norms. The wiring and installation of electric equipment shall be as per HPSEB rules and regulations and subject to the approval of the Chief Electrical Inspector and or his authorized ,Officer.
- 10 Any defect pointed out shall be rectified by the firm without any extra cost.
- 11 All statutory deductions as applicable from time to time shall be deducted from running bills of contractor on the total amount of work done including cost of material supplied by the Department.
- 12 Royalty toll taxes and other local taxes will be paid by the contractor himself.
- 13 The contractor will show their enlistment/renewal in IPH Department at the time of obtaining of tender forms.
- 14 Tender forms shall not be issued to contractors/firms who are not registered under GST.
- 15 The Contractors/Firms must quote their rates in words as well as in figures.
- 16 The tenders of those contractors/firms will not be considered whose previous performance is found not satisfactory and who has not done such type of work.

- 17 In case of sudden holiday on the date of opening of tenders the same will be opened on the next working day.
- 18 Comprehensive Warranty and Guarantee of the complete system:-12 Months from the date of completion and acceptance of the work. In case any defect is found within Warranty period the same will be rectified by the contractor free of cost at the site of work with a down time of less than 36 Hours will be released after expiry of the warranty and the AMC period.
- 19 The down time due to failure of the system should not exceed more than 36 hours otherwise a penalty of 1% of total amount of the award shall be charged for each day for which the system is not fully functional. In case the fault due to which the scheme is idle /partly functional beyond three days the penalty shall be charged @ 2% per day.
- 20 Electrical power supply shall be provided by the department. The contractor shall not use the electricity for any other purpose except for the bonafied use of the running and repair of scheme.
- 21 Item to be dismantled after installation of automation system shall be handed over to the J.E. Concerned for proper record.
- 22 Watch and ward shall be provided by the department
- 23 The bidder shall provide manual of operation and also train the departmental worker to operate the system.

Executive Engineer,
I&PH Division,
Paonta Sahib (HP)

SCHEDULE OF QUANTITY

Name of Work : Providing LWSS Rudana in G.P. Shiva Sanog in Tehsil Paonta Sahib Distt. Sirmour(HP) (SH:- C/O M.S. Collection Tank 7000 ltr. capacity , laying ,Jointing & Testing of HDPE Pipes for Rising main)

Estimated Cost :-Rs.212906/-
Earnest Money :-Rs.4260/-
Time:- Three months.

Sr.No. 1	Description 2	Qty. 3	Rate 4	Unit 5	Amount 6.
COLLECTION TANK					
1	Providing and fixing M.S. Sheet Collection Tank of 3.15 mm thickness welded all around complete with 40mm nominal bore galvanised mild steel scour tube fittings 40mm nominal bore galvanised mild steel over flow tubes fitting and mosquito proof galvanised coupling of approved design & 15mm ball valve and mosquito proof galvanised mild steel cover with locking arrangement including providing pade of sizes required for inlet and outlet tubes and inside painting with a priming coat of red lead and three coats of bitumens paint including housting upto a height of 1.00 mtr. above G.L. with plateform made of M.S. angle of required size and fixing of fencing panel with G.I./M.S. Pipe duly grouted in ground of pit size 30x30x45 Cm duly grouted in Cemen concrete . 1:2:4 complete in all respect as per direction of the Engineer-in-charge of the following capacity. i) 7000 ltr. Capacity.	7000.00	Ltr.	P/Ltr.	
RISING MAIN					
2	Excavation in drains and channels etc. in earth work for pipes upto all depths in all classification of earth work such as Pick work, Jumper work, saturated spoil including bailing or pumping out water blkasting soft/hard rock or chiseling soft/hard rock where blasting is prohibited in all lifts including jungle clearance where required, trimming & dressing of sides, levelling of beds to correct grade including shoring/struting , planking , timbering & dewatering wherever required stacking the useable/unuseable material/soil seperately and after laying , jointing & testing of pipes , returning the unuseable soil in trenches in 15 cm layers including consolidating of such deposited layer by ramming & watering & then disposing of all surplus excavated soil/unuseable material as directed with in all leads & lifts including restoration of un-metalled surfaces to its original condition & including cost of diversion for traffic night signals, fixing caution boards , crossing over trenches for access to houses, fencing etc. complete in all respects within all leads lifts and as per direction of Engineer-in-charge..	187.50	Cum	P/Cum	
3	Providing , Laying, jointing & testing of Hight Denisity Polythylene pipes use for buried water and services . The jointing of Pipe shall be done by butt fusion welding which shall confirm to clause 3.2.1.2 of IS-7634 (Part-II) - 2012 etc. each Pipe shall be BIS marked IS-4984-2016 or latest with upto date ammendments of PE 63 of folloiwng nominal & dia of pressure rating complete in all respect and as per direction of Engineer-in-charge.				
	i) Pressure Rating PN 12.5 Grade PE-80 of 40 mm nominal dia	1250	Rmt	P/Rmt.	
					Total:-

TERMS AND CONDITIONS:-

- The work shall be executed as per IPH/PWD specification and instructions of the Engineer-in-charge.
- Security, GST and Income tax will be deducted from each bill as per latest Govt. Amendments.

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- 3 Cement shall be issued @Rs.315/-P.bag & steel @Rs.53/- P.kg.at IPH Store Bhatanwali Paonta Sahib.
 - 4 Empty cement bags shall be returned to the Deptt.otherwise Rs.2/-per bag shall be deducted from the bill.
 - 5 G.I. Pipes shall be issued by the Deptt. Free of cost at IPH Store Bhatanwali Paonta Sahib
 - 6 Fencing Pannel shall be issued by the Deptt. Free of cost at IPH Store Bhatanwali Paonta Sahib
 - 7 The contractor shall be responsible for Watch & ward of the material at site of work.
 - 8 The contractor shall be responsible for all leakage in jointing system which shall be set right by the contractor at his own cost and nothing shall be paid extra.

Executive Engineer,
I&PH Division,
Paonta Sahib (HP)

SCHEDULE OF QUANTITY

Name of Work : C/O LWSS Gawali in G.P. Gawali Tehsil Shillai Distt. Sirmour(HP) (SH:- C/O M.S. Sump Well 12600
ltr. capacity , laying ,Jointing & Testing of G.I. Pipes for Rising main)

Estimated Cost :-Rs.192074/-

Earnest Money :-Rs.3850/-

Time:- Three months.

Sr.No.	Description	Qty.	Rate	Unit	Amount
1	2	3	4	5	6.
SUMP WELL					
1	Providing and fixing M.S. Sheet Sump well of 3.15 mm thickness welded all around complete with 40mm nominal bore galvanised mild steel scour tube fittings 40mm nominal bore galvanised mild steel over flow tubes fitting and mosquito proof galvanised coupling of approved design & 15mm ball valve and mosquito proof galvanised mild steel cover with locking arrangement including providing pade of sizes required for inlet and outlet tubes and inside painting with a priming coat of red lead and three coats of bitumens paint including housting upto a height of 1.00 mtr. above G.L. with plateform made of M.S. angle of required size and fixing of fencing panel with G.I./M.S. Pipe duly grouted in ground of pit size 30x30x45 Cm duly grouted in Cemen concrete . 1:2:4 complete in all respect as per direction of the Engineer-in-charge of the following capacity.	12600.00	Ltr.	P/Ltr.	
RISING MAIN					
2	Excavation in drains and channels etc. in earth work for pipes upto all depths in all classification of earth work such as Pick work, Jumper work, saturated spoil including bailing or pumping out water blkastig soft/hard rock or chiseling soft/hard rock where blasting is prohibited in all lifts including jungle clearance where required, trimming & dressing of sides, levelling of beds to correct grade including shoring/struting , planking , timbering & dewatering wherever required stacking the useable/unuseable material/soil seperately and after laying , jointing & testing of pipes , returning the unuseable soil in trenches in 15 cm layers including consolidating of such deposited layer by ramming & watering & then disposing of all surplus excavated soil/unuseable material as directed with in all leads & lifts including restoration of un-metalled surfaces to its original condition & including cost of diversion for traffic night signals, fixing caution boards , crossing over trenches for access to houses, fencing etc. complete in all respects within all leads lifts and as per direction of Engineer-in-charge..	192.37	Cum	P/Cum	
3	Laying , jointing & commissioning at site in trenches following plain ended GMS pipes of various dia of medium grade as under confirming to BIS 1239 (Part-1)- 1990 or latest with upto date ammendments, capable of withstanding required test pressure as prescribed in BIS code in randum lengths of 5.5 to 6.5 mtr. . The pipe's ends shall bevelled suitable for butt weld, including cost of jointing with butt welding confirming to IS 816-1969 or latest as applicable (leak proof) in three layers at site of work with welding rods of standard make & all allied accessories whatever required for welding at site, tail pieces ,tees, bends manufactured from parent pipes etc. and cutting of pipes wherever required as per site requirement including carriage in all leads lifts and as directed by Engineer-in-charge (Earth work shall be measured & paid seperately)				
	i) G.I. Pipe 40mm dia (Medium)	450	Rmt.	P/Rmt.	
	ii) G.I. Pipe 40mm dia (Heavy)	500	Rmt.	P/Rmt.	

1	2	3	4	5	6.
4	Providing , welding and fixing M.S. Plate flanges of following Flange Tables confirming to IS code 6392-1971 or latest with upto date ammendments to MSERW/GI Pipes after every 90 metres or as per siter requirement including cutting of pipes wherever required , welding in three layers (leak proof) confirming to specifications as prescribed in relevent IS Code i.e. IS: 816-1969 or latest as applicable with upto date ammendmdents with nuts , bolts & washers & specials etc. confirming to IS: 1963 or latest upto date ammendments including packing sheets i.e. abestos fibre sheet minimum 3mm and painting with anticrossive paints complete in all respect including all leads lifts and carriage of material at site and as direted by the Engineer incharge.				
	Nominal dia	Length (in mtr.)	FlangeTable		
	40mm dia (Medium)	450 mtr.	28	5 Pairs	P/Pair
	40mm dia (Heavy)	500 mtr.	23	6 Pairs	P/Pair
					Total:-

TERMS AND CONDITIONS:-

- 1 The work shall be executed as per IPH/PWD specification and instructions of the Engineer-in-charge.
- 2 Security, GST and Income tax will be deducted from each bill as per latest Govt. Ammendments.
- 3 Cement shall be issued @Rs.315/-P.bag & steel @Rs.53/- P.kg.at IPH Store Bhatanwali Paonta Sahib.
- 4 Empty cement bags shall be returned to the Deptt.otherwise Rs.2/-per bag shall be deducted from the bill.
- 5 G.I. Pipes shall be issued by the Deptt. Free of cost at IPH Store Bhatanwali Paonta Sahib
- 6 Fencing Pannel shall be issued by the Deptt. Free of cost at IPH Store Bhatanwali Paonta Sahib
- 7 The contractor shall be responsible for Watch & ward of the material at site of work.
- 8 The contractor shall be responsible for all leakage in jointing system which shall be set right by the contractor at his own cost and nothing shall be paid extra.

Executive Engineer,
I&PH Division,
Paonta Sahib (HP)

SCHEDULE OF QUANTITY.

Name of work:- Prov. CAD work LIS Singhpura(Phase-II)nd) in Tehsil Paonta Sahib Distt. Sirmour (HP)
(SH:C/O 16 Nos Outlets & Laying jointing & testing of HDPE Pipe in distribution system) Tubewell No.2 Phase-II

Estimated Cost:468623/-
Earnest Money: 9400/-
Time: Six Months.

S.No	Sub-Head and item of work.	Qty.		Rates,	Unit	Amount.
1	2	3		4	5	6
1	Excavation in drains & channel etc.in earth work in all kinds of soil such as pick work ,jumper work blasting work, decomposed conglomerate saturated soil soft and hard rock including dressing of sides and beds and preparation of sub grade to level or slope including refilling the trenches and disposing of surplus earth upto all leads,lifts disposed earth to be levelled and neatly dressed including jungle clearance and as per directions of the Engineer-incharge	2050.95	Cum		P/Cum	
2	Excavation in foundation and trenches etc.in earth work in all kinds of soil such as pick work ,jumper work decomposed conglomerate saturated soil soft and hard rock upto all leads lifts stacking the excavated soil not more than 3mtr.clear from the edge of excavation and then returning the stacked soil in 15cm layers when required in to plinth sides of foundation etc. consolidating each deposited layers by ramming and watering and then disposing of all surplus excavated earth as directed with in all leads lifts and as per directions of the Engineer-incharge	40.96	Cum.		P/Cum	
3	Providing and laying cement concrete 1:4:8(1cement:4sand:8 graded stone agg.40mm nominal size)and curing complete excluding the cost of form work in foundation & plinth including all leads lifts and carriage of material and as per the directions of Engineer-in-charge.	6.08	Cum		P/Cum	
4	Providing Mild Steel/Tor steel reinforcement including bending binding & placing in positing l/c all leads lifts and carriage of material and as per direction of the Engineer-in-charge.	960.00	Kg.		P/kg	
5	Providing Cement concrete flooring 1:2:4(1cement :2sand:4 graded stone aggregate 20mm nominal size) and curing complete but excluding the cost of form m laid in one layer finished even a coat of neat cement 40mm thick including carriage of material and as per the directions of Engineer-in-charge.	256.00	Sqm.		P/Sqm.	
6	Providing form work with steel sheets 3.15mm thick welded with angle iron 30x30x5 mm so as to give rough finish i/c centring shuttering structing and propping etc. with wooden bettens & Ballies, height or propping & centering below supporting floor to ceiling not exceeding 4 mtr.and removal of the same for insitu RCC work and PCC work.including all leads lifts and carriage of material at site & as per direction of Engineer in charge in:-					
	i) In vertical walls any thickness but not less than 0.10 Metres.	147.20	Sqm.		P/Sqm.	
7	Providing and laying cement concrete 1:2:4(1cement:2app.sand: 4 app. graded stone agg. 20mm nominal size)and curing complete excluding cost of form work & reinforcement for reinforced work inVertical surfaces such as walls of any thickness but not than 0.1 mtr. thick including attached pillasters buttresses plinth and string courses etc. from top of foundation upto floor two level including all leads,lifts and carriage at site and as directed by the Engineer-in-charge.	12.00	Cum		P/Cum	

1	2	3	4	5	6
8	Laying & jointing & testing of High Density Polythene pipes for use for buried water main and services jointing of pipe shall be done by butt welding which shall confirm to clause 2.4.2.1 of IS -7634 (Part-II) -1975 etc. each pipe shall be BIS marked (IS-4984-1995 or latest with upto date ammendments of various class of following nominal dia of pressure rating complete in all respect and as per direction of the Engineer in charge. (Earth work to be measured & paid for separately)				
	i) PE-63 PN 2.5 of 180mm outer dia.	240.00	Mtr.		P/Mtr.
	ii) PE-63 PN 2.5 of 125mm outer dia.	1455.00	Mtr.		P/Mtr.
					Total:

TERMS & CONDITIONS

- 1 The work shall be executed as per IPH/PWD specification and instructions of the Engineer-in-charge.
- 2 Security, Sale tax & Income tax & labour cess shall be deducted as per rules.
- 3 Cement will be issued @ 315/- per bag & steel @ 53/- per Kg. at IPH store Bhatanwali Paonta Sahib.
- 4 Empty cement bags shall be returned to the deptt. Otherwise Rs. 2/- per bag shall be deducted from the earch bill of
- 5 Royalty certificate in respect of stone agg. Sand etc. shall be produced by the contractor
- 6 HDPE Pipe shall be issued free of cost from IPH store Bhatanwali Paonta Sahib.

Executive Engineer,
I&PH Division,
Paonta Sahib.