

Job No. 1

SCHEDULE OF QUANTITY

Nature of Work:- Providing LWSS to PC habitation in census village Majra G.P. Dabhota in Tehsil Nalagarh, Distt. Solan HP. (SH:- Laying,jointing,testing and commissioning of distribution system.Dismantelling and relaying of pipe of various dia.)

Estimated 498859.00 /-only
Earnest M 10000.00 /-only
Time : Three months

SCHEDULE OF WORKS

Sl. No.	Description of work	No.or Qty.	Unit	RATE in		AMOUNT
				Figures	Words	
1.00	Excavation in drains and channels etc. in all kinds of soil such as pick work, jumper work, blasting, soft and hard rock and through conglomerate rock upto all leads and lifts stacking the excavated soil not more than 3 meters clear from the edge of excavation and then returning the stacked soil in trenches consolidating each deposited layers by ramming and watering and then disposing of all surplus excavated material within all leads and lifts and like as directed by the Engineer-in-Charge including jungle clearance.	2998.00	Cum	Per Cum		
2.00	Laying, jointing and testing in trenches galvanised mild steel tube of medium grade complete including providing and fixing tube fitting such as union, tees, socket etc (excluding cost of bends and valves) for the following dia as per direction and to the entire satisfaction of Engineer-in-charge.					
2.10	15 mm dia (Light grade)	317.00	Rmt.	Per Rmt		
2.20	20 mm dia (Light grade)	1622.00	Rmt.	Per Rmt		
2.30	25 mm dia (Light grade)	1051.00	Rmt.	Per Rmt		
2.40	32 mm dia (Light grade)	4891.00	Rmt.	Per Rmt		
2.50	40 mm dia (Light grade)	550.00	Rmt.	Per Rmt		
3.00	Dismantelling of old GMS pipe of following dia as per direction of Engineer in charge with all leads and lifts.					
3.10	15 mm dia	180.00	Rmt	Per Rmt.		
3.20	50 mm dia	150.00	Rmt	Per Rmt.		
4.00	Re-laying of dismantled GMS pipe of following dia with cutting ,threading with all leads and lifts as per direction of Engineer in charge and to the entire satisfaction of Engineer-in-Charge.					
4.10	15 mm dia	108.00	Rmt	Per Rmt.		
5.00	Providing and fixing Gun Metal wheel valve of following dia screwed type as per ISI.778-ISI. Marked complete in all respect as per direction and to the entire satisfaction of Engineer-in-Charge.					
	25 mm dia	1.00	No	Each		
	32 mm dia	3.00	No	Each		
	40 mm dia	2.00	No	Each		
Total in Figures						
Total in Words						

TERMS AND CONDITIONS: -

- The work will be got executed as per IPH specifications.
- Security, GST, income tax, labour cess and other statutory deduction will be deducted as applicable.
- The contractor is fully responsible for watch and ward of the material at site of work.
- Nothing shall be paid for rejected work/material.
- Although Cement, GI pipe & steel will be issued free of cost from Divisional store Nalagarh, but in case of loss or theft from the custody of contractor the same shall be recovered at double the store issue rates which are as under:-
 - Cement @ Rs. 255/-per bag.
 - Reinforcement Steel @ Rs. 3890/- Per Qtl.

Executive Engineer,
I&PH Divn., Nalagarh.

Job No. 2

SCHEDULE OF QUANTITY

Name of Work:- C/O 7 Nos T/Well in Nalagarh area (T/Well Rajpura, Mianpur Baglehar, Kalyanpur harizan basti, Bhodpur, Gharodi (bye pass), 6., Nagarp Khillan, Plasra Kalu.) in Tehsil Nalagarh , Distt. Solan HP. (SH: Providing, laying, jointing and testing of HDPE pipe 200 mm dia in distribution system of FIS Ram Kuhl in village Tibbiwal RD 400 to 800 mtr)	Estimated Cos 132506.00 /-only
	Earnest Money 2650.00 /-only
	Time :- Three Months

SCHEDULE OF WORKS

Sr. No.	Description of work	No.or Qty.	Unit	RATES		AMOU NT
				Figures	Words	
1.00	Excavation in foundation trenches etc. in all kinds of soil such as pick work,jumper work blasting work in soft or hard rook or by cum chiselling soft/ hard rock where blasting is prchibited in all leads and lif-ts including trimming and dewatering where ever required dressing of sides and bed stacking the excavated soil clear from the edge of excavaton and then returning the excavated soil after completion of work in 15cm layers when required into plinths, side of foundation etc. Consolidating each deposited layers by remming and watering and then disposing of all surplus excavated earth as direction within a lead of 20 mtrs. pick jumper work 50% each as per direction and to the entire satisfaction of Engineer-in-Charge upto all lead and lifts.	10.01	Cum	Per Cum		
2.00	Excavation in drains and channels etc. in all kinds of soil such as pick work, jumper work, blasting, soft and hard rock and through conglomerate rock upto all lelads and lifts stacking the excavated soil not more than 3 meters clear from the edge of excavation and then returning the stacked soil in trenches consolidatig each deposited layers by ramming and watering and then disposing of all surlus excavated material within all leads and lifts and like as directed by the Engineer-in-Charge including jungle clearance.	288.00	Cum	Per Cum		
3.00	Providing and laying cement concrete 1:4:8 (1 cement :4 sand :8 graded stone agg. 40mm nominal size) and curing complete excluding cost of form work and cement in foundation and plinth in all lead and lifts as per the direction and to the entire satisfaction of Engineer-in-Charge.	1.38	Cum	Per Cum		
4.00	Brick work using common burnt clay 1st class building bricks in foundation and plinth in cement mortar 1:4 (1 cement :4 sand) including curing complete excluding cost of cement.	6.51	Cum	Per Cum		
5.00	Cement concrete flooring 1:2:4(1 cement : 2 sand :4 graded stone aggregate 20 mm nominal size laid in one layer finished with a floating coat of neat cement excluding cost of cement, 40 mm thick.	2.43	Sqm.	Per Sqm.		
6.00	15mm thick cement plaster in single coat on rough side of brick /stone /concrete walls for interior plastering upto floor two level I/c arrises, internal rounded angles, chambers and/or rounded angles not exceeding 80mm in girth and finished even and smooth in cement mortar1:3 (1 cement :3 sand) and curing complete excluding cost of cement.	22.71	Sqm.	Per Sqm		
7.00	Providing and laying following dia HDPE pipe grade PE-80 high density pipe pressure rating PN-4.00, minimum thickness not less than 4.90 mm conforming to IS 4984- 1995 complete with fitting. as directed by Engineer- in - charge.					
7.1	200 mm dia PE-80 PN-4.00	400.00	Rmt	Per Rmt.		
8.00	Providing and fixing Alfa valve 200 mm dia including fitting complete as directed by Engineer- in - charge.	3.00	Nos.	Each		
Total in Figures						
Total in Words						

TERMS AND CONDITIONS: -

- 1 The work shall be carried out as per HPPWD/IPH specification and to the entire satisfaction of Engineer -in -Charge.
- 2 Security, GST, income tax, labour cess and other statutory deduction will be deducted as applicable.
- 3 Nothing shall be paid for rejected work/material.
- 4 The contractor shall be responsible for watch and word of material at site of work.
- 5 Material should be used of approved quarry.
- 6 Although Cement will be issued free of cost from Divisional store Nalagarh, but in case of loss or theft from the custody of contractor the same shall be recovered at double the store issue rate which is Rs. 255/- Per bag.

Executive Engineer,
I&PH Divn., Nalagarh.

Job No. 3

SCHEDULE OF QUANTITY

Nature of Work: Construction of 7 Nos Tube well 1. T/Well Kharuni Riya. 2. Kalyanpur Gujran. 3. Andrell Bhatoli. 4. Kalbari. 5. Abhipur, 6. Taprian Gujran. 7. Kotla Phalaht in Tehsil Nalagarh District Solan (HP) (SH: Distempering, priming coat and painting in Tubewells)

Estimated Cost: 259449.00 /-only
 Earnest Money: 5200.00 /-only
 Time: Three months

Sr. No.	Description of work	No. or Qty.	Unit	RATE		AMOUNT
				Figures	Words	
1.00	Applying priming coat over new steel and other metal surfaces after and including preparing the surface by thoroughly cleaning oil grease dirt, and other foreign matter and scoured with wire brushes fine steel wool scrapers and sand paper complete with ready mixed paint brushing red lead -oxide /zinc oxide chrome with all leads and lifts.	295.05	Sqm.	Per Sqm.		
2.00	Painting two coats(excluding priming coat)on new steel and other metal surfaces under coat with ready mixed paint,brushing to give an even shade including cleaning the surface all dirt,dust and other foreign matter with ready mixed paint other than white.	295.05	Sqmt.	Per Sqmt.		
3.00	Applying Birla white wall care putty over plaster surface after thoroughly brushig the surface free from mortar drop dust loose matrials and other forigin matter sand paperd smooth to give final matter finish to the surface complete.	1623.65	Sqm.	Per Sqm.		
4.00	Applying one coat acrylic washable emulsion spectrum quartz king or equivalent finish for interior painting with brushes plain smooth finish composed of acrylic polymere in emulsion inorganic /special pigment siliceous aggregate anti fungicides anti-rusting & foaming in two coat including necessary putty to give smooth even surface sand papered smooth complete.	1623.65	Sqm.	Per Sqm.		
5.00	Distempering two coats with oil bond washable distemper of approved brand and manufacture (Two coats) and of required shade on undecorated wall surface to given an even shade over and including primer coat of whitening after thoroughly brushing the surface free from mortar dropping and other foreign matter including preparing the surface even and sand papered smooth.	1623.65	Sqm.	Per Sqm.		
Total in Figures						
Total in Words						

TERMS AND CONDITIONS: -

1. The work will be got executed as per IPH specifications.
2. Security, GST, income tax, labour cess and other statutory deduction will be deducted as applicable.
3. The contractor is fully responsible for watch and ward of the material at site of work.
4. Nothing shall be paid for rejected work/material.

Executive Engineer,
I&PH Divn., Nalagarh.

Job No. 4

*** SCHEDULE OF QUANTITY ***

Name of Work :- Augmentation & Improvement of LWSS Chamba Jukhari Trail in Tehsil Nalagarh Distt. Solan (HP).(SH:-C/O OHSR
65000 Liters Cap of 10 Mtr staging height at village Behli)

Estimated cost :- 325000 /-only
Earnest money :- 6500 /-only
Time Limit :- 6 (Six) months

S.No	Description of item.	Quantity.	Rate	Unit	Amount.
1	Construction of Over Head storage Tank 65000 litrs capacity with 10.00 mtrs, staging height (excluding cost of cement) column type at village Behli)	65000.00 liters		per liters	
<i>Total=Rs.</i>					

The Reservoir shall comprise of the following:-

- (a) Laying and jointing of inlet pipe, outlet pipe, scour pipe and over flow pipe (Medium class) with flange of above mention diameter after every three meter complete with all pipe fittings
- (b) Providing and fixing of cast iron manhole cover conforming to IS-1725-1991 with upto date ammendements minimum two number of 500 mm internal diameter including frame of
- (c) Cast iron ventilating pipe with cowl and mosquito proof cover of sufficient(length) suitable for over head tank as per standard Engineering practice and subject to approval of the
- (d) All other required accessories such as bell mouth, control valves for inlet and outlet of cast iron class PN 1.6 lightening conductor and water level guard (indicator) shall be provided by
- (e) Suitable RCC spiral stair case 100 cm wide with waist slab for RCC steps rising spirally around the outer face of staging columns followed by landings supported on cantilever of
- (f) There shall be 1.00 mtr.wide gallery all around the container with provision of GMS pipe railing 1.00 mtr supported with M.S angle 50x50x 6mm .The railing on both sides of stair case &
- (g) The tank shall be painted with water proofing cement paint out side complete in all respect.
- (h) Miniumum wall thickness shall be 20cm.
- (i) The depth of foundation shall be minimum 1.50 mtrs. below ground level.
- (j) Minimum two coats of water proofing cement paint(outside the tank) & white washing(inside of tank) shall be provided.

TERMS AND CONDITIONS FOR OHSR:-

- 1 All the fittings shall be embedded in the structure while the work is in progress and all connections shall be left outside the structures with sluice valve, control valves and other
 - 2 The work shall be completed within stipulated period.
 - 3 All the special/ fittings/ valves shall be confirm to relevant BIS standard with upto date ammendments.
 - 4 Bearing capacity of soil shall be tested by the tenderer at his own cost, and design envolved accordingly. For tendering purposes the bearing capacity may be taken as 10MT/m 2.
 - 5 The work shall executed as per HPIPH/PWD specification and instruction of the Engineer-in-charge.
 - 6 Security, sale tax, income tax, labour cess and other statuary deduction will be deducted as applicable.
 - 7 Cement and steel will be issued free of cost from Divisional store Nalagarh.
 - 8 Royalty certificate in respect of stone aggregate sand etc. shall be produced by the contractor.
 - 9 The outlet pipe shall be placed 0.15cm above the floor level of reservoir to provide the space for sediments to settle and outlet pipe to be provide with stainer. The capacity of tank shall
 - 10 The site shall necessarily be inspected by the tenderer to access the nature of starta and other relevant data required for the design of structure.
 - 11 Nothing extra shall be payable on account of any unforeseen difficulties what so ever.
 - 12 The work shall be started only after the approval of the structural design & drawing of the reservoir as supplied by the contractor by competent authority of the department which shall be
 - 13 The excavation shall cover all types of soil and rocks involved at site including cutting by chiselling where involved. No blasting shall be permitted.
 - 14 The structural design shall be evolved taking minimum safe bearing capacity of soil as 10.00 tonne/m2 even if safe bearing capacity as per field tests works out to be more than 10
 - 15 The complete structural design shall be based of IS code 456 & 3370 (Part-1 to IV) latest edition and IS-1893.Structural design be analysed for effect of wind. Also since area falls under
 - 16 The position of expansion joints,control valves & chambers for valves shall be shown & marked clearly on drawings.
 - 17 The free board shall not be less than 0.15mtrs.
 - 18 The crushed stone aggregate of specified grading shall only be used.
 - 19 The RCC work shall be carried out with mechanical mixer and with the help of power driven Vibrator,Hand mixed concreteshall not be permitted.
 - 20 Shuttering used for RCC work shall be of steel plates.
 - 21 Minimum clear cover to steel reinforcement in case of various structural members i.e. liquid retaining structure & members in contact with soil etc. shall be as specified in relevant IS code
 - 22 The design Mix of RCC for construction of reservoir container shall be of mix M-30(design mix) and staging M-25(design mix) respectively. PCC 1:3:6 shall be provided as base concrete.
 - 23 To ascertain the quality and strength of concrete mix test cubes for every structural components shall be taken as per PWD specifications in the presence of Engineer-in-charge and the
 - 24 Necessary brick/concrete supports shall be provided for pipes/valves etc. brick masonry/stone masonry chamber with precast RCC covers shall be provided for housing the valves
 - 25 All clause of work, other than those not other described herein shall be executed in accordance with the principls laid down in Punjab PWD specification/HP PWD specification/ relevant
 - 26 No rendering or plastering will be done. The joints shall however be rubbed off with carbide stone.
 - 27 The execution/construction joints shall be provided as per relevant IS codes.
 - 28 Design mix for all concrete work shall be got tested/designed from Govt. approved laboratory by the firm at his own cost & expense and report submitted to Engineer-in-Charge before
 - 29 All G.I pipes shall be issued by the department free of cost from IPH store Nalagarh, however fittings, bends,flanges, gasket,rubber sheet,union,clamps etc. of specified make as per
 - 30 The plinth protection shall consists in P.C.C. 1:3:6 laid over an under layer of 75mm thick dry bed stone aggregate 40mm nominal size. The plinth protection shall be done in an entire
 - 31 Distempering and painting of the whole structure including staging,pipe work,railing & valves etc. will be done as per I&PH/PWD specifications.
 - 32 Specification of lightening conductor shall be as per relevant code with proper earthing arrangements with copper strips.
 - 33 Earthing of elevated tank will be done with copper strips as per HPSEB specifications.
 - 34 All sluice/control valves shall be of Kirloskar marked & class shall be minimum PN-1.6 .
 - 35 All GMS pipes shall be of minimum 4.0mm thickness.
 - 36 The M.S. plate flanges to be provided for jointing of Inlet/Outlet, scour & overflow pipes shall be of Fitness Table-5 confirming to IS 6392-1971 latest with upto date ammendments.
 - 37 The tender forms shall be issued to those contractors who have experience to construct the OHSR and presently are working in this department and performance is found satisfactory.
 - 38 Payments schedule shall be as under :-
- | | |
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| a) After casting footing upto ground level . | 12.50% of L.S |
| b) After casting staging (colmn/shaft) half. | amount. |
| c) After casting full staging. | 12.50% |
| d) After casting vertical walls,bottom dome and gallery. | 15% |
| e) After casting top dome. | 20% |
| f) After fixing all accessories and pipes etc. | 20% |
| g) Balance amount will be released after sucesful testing of tank against leakage. | 7.50% |

**Executive Engineer,
IPH Division Nalagarh.**