



131/524

Government of Jammu and Kashmir
OFFICE OF THE SUPERINTENDING ENGINEER, HYDRAULIC CIRCLE, RAJOURI.
Telephone/Fax No.01962-263219, e-mail: sehydcirclerajouri@gmail.com

Sub: Accord of Administrative Approval

Order No.: SEHR/PHE/AA/02 of 2018.

Dated: 06-09-2018

Administrative Approval is accorded to the Water Supply Scheme "DAROON" of PHE Division Nowshera, District Rajouri for an amount of Rs. 234.10 lacs (Rupees Two Hundred Thirty Four Lacs and Ten Thousand only) under NRDWP by debit to Major Head 4215 subject to following terms and conditions:-

1. That the works/habitations mentioned in the detailed project report are not covered under any other programme/Head of execution.
2. That the Accord of Administrative Approval does not entitle the executing agency to incur any expenditure in absence of release of funds.
3. That the expenditure to be incurred against the AA shall be in accordance with the standing procedures which besides others include fulfillment of all the codal procedures as required under rules.
4. That there shall be no deviation in account of provision as contained in the AA.
5. That the expenditure shall be restricted within the approved cost of the project and expenditure shall be made in accordance with the norms of the programme

Superintending Engineer
Hydraulic Circle

Rajouri
Ho.

No: SEHR/PHE/W-1/807-09

Dated: 06-09-2018

Copy to the:

1. Accountant General, J&K Jammu for Information.
2. Chief Engineer, PHE Department, Jammu for Information.
3. Executive Engineer, PHE Division, Nowshera for information and n/a.

GOVERNMENT OF JAMMU & KASHMIR



PUBLIC HEALTH ENGINEERING DEPARTMENT, JAMMU

PROJECT REPORT

WATER SUPPLY SCHEME

DAROON UNDER NRDWP

Executive Engineer
PHE Division Nowshera

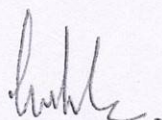
SALIENT FEATURES

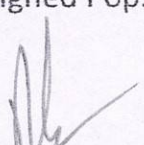
ACCORD OF ADMINISTRATIVE APPROVAL WATER SUPPLY SCHEME DAROON (NRDWP)

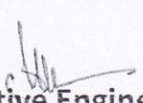
1. Name of Scheme : Water supply scheme Daroon
2. Name of District : Rajouri
3. Name of Tehsil : Sunderbani
4. Name of Block : Sunderbani
5. Name of Constituency : Nowshera
6. Type of Scheme : Lift
7. Type of Source of Scheme : Surface Water
8. Proposed Source : Filtration Plant
9. Name of Habitations benefited with population as on 2012

S. No	Name of Panchayat	Name of village	Name of Habitation	Population 2001 AD	Present Pop. 2012 AD	Design Pop. 2027 AD
1.	Daroon	Daroon	Daroon	822 Souls	1173 Souls	1905 Souls
2.	Daroon	Daroon	Lower Daroon , Upper Daroon	250 Souls	357 Souls	580 Souls
	Floating Population and New settlement				230 Souls	373 Souls
	Total				1760 Souls	2858 Souls

10. Present Population i.e. 2012 AD : 1760 Souls
11. Designed Population i.e. 2027 A.D : 2858 Souls
12. Proposed Rate of water supply : 09 GPD
13. Designed Water Requirement : 29580 GPD
14. Availability of Water : 50,000 GPD
15. Cost of Scheme : Rs. 234.10 lacs
16. Cost Per Capita on Present Pop. : Rs. 13301.00
17. Cost Per Capita on Designed Pop. : Rs. 8191.00


J.E.


Asstt. Executive Engineer
PHE Sub Division
Sunderbani


Executive Engineer
PHE Division
Nowshera

PROJECTED POPULATION, WATER REQUIREMENT AND FEASIBILITY REPORT FOR
WATER SUPPLY SCHEME DAROON

FEASIBILITY REPORT

Percentage decadal growth rate of district Rajouri

1991-2001 = 25.71%

2001-2011 = 32.93%

As per census 2001 Population of Habitation Daroon = 822 Souls

Habitation of Upper Daroon & Lower Daroon = 250 Souls

Total = 1072 Souls

POPULATION BASED ON GROWTH RATE

Present Population as on 2012 AD = $1072 \times (1 + 3.29/100)^{11}$ = 1530 Souls

Present Population as on 2027 AD = $1530 \times (1 + 3.29/100)^{15}$ = 2485 Souls

Floating Population @ 15% of designed Population = 373 Souls

Total = 2858 Souls

REQUIREMENT OF WATER

Total Designed Population of 2027 AD = 2858 Souls

Proposed rate of water supply/Capita/day = 09 GPD

Total requirement of water per day = 25722 GPD

Water available from source proposed source = 50,000 GPD

The scheme has been framed to cover the Main habitation of Daroon along with adjoining habitations of Upper Daroon and Lower Daroon which at present has no piped water supply. The Proposed source i.e. percolation well with an anticipation discharge of 50,000 Glns per day shall cater to the water requirement of the scheme. Hence the scheme is feasible.

STORAGE REQUIRED

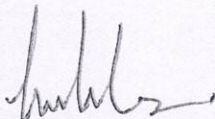
Total ultimate demand of water = 25722 GPD


Add 15% losses for wastage, leakage etc. = 3858 GPD


Total = 29580 GPD

Storage for half day demand = 14790 GPD

Hence Proposed storage 02 No's 10, 000 Gallons Ground Storage Reservoir


J.E.


Asstt. Executive Engineer
PHE Sub Division
Sunderbani


Executive Engineer
PHE Division
Nowshera

TECHNICAL REPORT

ACCORD OF ADMINISTRATIVE APPROVAL FOR WATER SUPPLY SCHEME DAROON NRDWP)

1. Name of the Scheme : Water Supply Scheme Daroon
2. Authority : Government of Jammu & Kashmir
3. Name of District : Rajouri
4. Name of Tehsil : Sunderbani
5. Name of Constituency : Nowshera
6. Scope of the Scheme : Daroon

S. No	Name of Panchayat	Name of village	Name of Habitatiion	Population 2001 AD	Present Pop. 2012 AD	Design Pop. 2027 AD
1.	Daroon	Daroon	Daroon	822 Souls	1173 Souls	1905 Souls
2.	Daroon	Daroon	Upper Daroon, Lower Daroon	250 Souls	357 Souls	580 Souls
	Floating Population and New settlement				87 Souls	373 Souls
	Total				1760 Souls	2858 Souls

7. Location : Water supply Scheme Daroon is located on North East of Sunderbani town and is about 28 kms from Sunderbani. It is further linked on right side of Rajouri National Highway by Pacca and Kachha Road.

8. History & Necessity : The village Daroon having population of 1760 souls at present is without tapped water supply as a result of which, the people are suffering a lot. At present, they are dependent on a local spring which is also not having sufficient water and cannot meet up the demand of the people.

Moreover, they have to carry the water from this source on foot for at least 1.50 Kms. The position becomes worse, particularly, in summer, when the spring water totally dries up

due to intensive heat. The people are approaching this department to formulate a water supply scheme so that they get sufficient water.

Keeping in view the above facts, it has become necessary to explore some perennial sources to provide adequate normal water supply to the public.

8. Requirement of Water

: Present population 2012 AD = 1760 souls

Designed population 2027 AD = 2858 souls

Design water requirement 2027 AD = 29580 gallons

To overcome the designed water requirement, it is necessary to explore some permanent/perennial source. Hence, a Rapid Sand Filtration Plant of 5000 GPH at Kalidub, Daroon is proposed with an expected discharge of 50000 gallons per day which meet up the requirement of water of this area.

9. Proposals

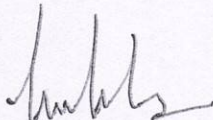
: To overcome the designed water requirement, it has been proposed to be construct a 5000 Gallons per hour capacity Rapid Sand Filtration Plant at Kalidab Daroon with an expected yield of about 50,000 gallons per day. It has been proposed to lift water for this scheme in two stages due to high static head. One number sump tank of 10,000 gallons capacity is proposed to be constructed near filtration plant from where the water shall be supplied to newly proposed sump tank 10,000 capacity at Stage-1 through well designed Rising Main. The water than shall be supplied to proposed Ground Storage Reserviors at Upper Daroon Lower Daroon of 10,000 gallons capacity each through well designed Rising main lines from where the water shall be supplied to the adjoining areas through well designed distribution system.


Creation of electric sub-stations of 100 KVA and 63 KVA capacities including laying of H.T lines and L.T line and near


filtration plant and Stage-1st have also been kept in the project. Provision for construction of Pump room near filtration plant and at Stage-1st have also been envisaged in the project. Provision for installation of Pumping machinery including Standby at Intake, Filtration plant and Stage-1st has also been kept in the Project. Provision for land compensation at filtration plant site and Stage -1st has also has also been kept in the project.

10. Estimated Cost : The total estimated cost works out to the tune of Rs. 234.10 lacs

11. Time Of Completion : The scheme shall be completed within two years subject to availability of funds and key construction material well in time.


J.E.


Asstt. Executive Engineer
PHE Sub Division
Sunderbani



Executive Engineer
PHE Division
Nowshera

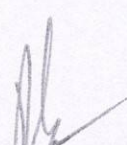
GENERAL ABSTRACT OF COST FOR WATER SUPPLY SCHEME DAROON UNDER NRDWP

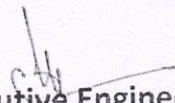
S. No.	Name of Work	Estimated Cost (Rs. In lacs)
1.	Cost for Construction of 5000 GPH Capacity Filtration plant including intake structure at Kali Dub. (L.S)	Rs. 35.00 lacs
2.	Cost for construction of Pump room at filtration plant site and at stage 1 st . 2No's @ Rs. 4.09 (Each)	Rs. 8.18 lacs
3.	Cost for Construction 01 No, 10,000 gallons capacity sump tank near filtration plant and stage 1 st . 2No's @ Rs. 3.71 (Each) 3.76	Rs. 7.42 lacs 7.52 lacs
4.	Cost for Construction of 10,000 Glns gallons capacity Ground Storage Reservoir at Upper Daroon and Lower Daroon. 2No's @ Rs. 3.81 (Each) 4.06	8.12 lacs Rs. 7.62 lacs
5.	Cost for providing and laying of Rising mains	Rs. 49.90 lacs
6.	Cost for providing and laying of Distribution system	Rs. 74.98 lacs 76.03 lacs
7.	Cost for creation Electric Sub-station including laying of LT and HT lines and transformer at filtration plant site and at stage 1 st	Rs. 10.00 lacs
8.	Cost for Providing and installation of Pumping machinery including standby at intake, base stage and at stage 1 st .	Rs. 30.75 lacs
9.	Cost for Land compensation	Rs. 6.00 lacs 3.70 lacs 229.20
	Total	Rs. 229.85 Lacs
	Add 2.5% work charge establishment and contingencies except item No. 8	Rs. 4.98 Lacs 4.96 lacs
	G.Total	Rs. 234.82 Lacs 234.16 lacs

234.10 lacs

Say 234.80 Lacs


J.E.


Asstt. Executive Engineer
PHE Sub Division
Sunderbani



Executive Engineer
PHE Division
Nowshera

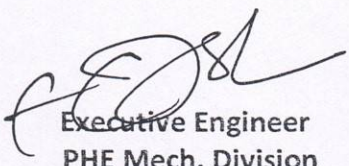
DETAILED ESTIMATE FOR PROVIDING AND INSALLATION OF PUMPING MACHINERY
FOR WATER SUPPLY SCHEME DAROON

S.No.	Particulars	Amount
1.	Providing and installation of submersible pump set along with standby having specifications of 5,000 GPH and 30 mtr head including installation of preventive devices and testing at intake .	3.00 Lac
2.	Providing and installation of horizontal pump set along with standby having specifications of 5,000 GPH discharge and head of 275 mtr including installation of preventive devices and testing at base stage.	12.00 Lac
3.	Providing and installation of horizontal pump set along with standby having specifications of 5,000 GPH discharge and head of 200 mtr including installation of preventive devices and testing at stage 1st.	10.00 Lac
4.	Providing and installation of Voltage stabilizer along with electromechanical accessories at Filtration Plant and at stage 1 st	5.00 Lac
	Total	30.00 Lac
	Add 2.5% for work charge and contingencies	0.75 Lac
		30.75 Lac

✓
Say Rs. 30.75 Lacs

A.E.


Asstt. Executive Engineer
PHE Mech. Sub Division
Nowshera


Executive Engineer
PHE Mech. Division
Rajouri


CERTIFICATE


1. Name of scheme : Water Supply Scheme Daroon.

Certified that:-

1. The Proposed source of scheme is free from any dispute.
2. Discharge of proposed source is adequate and will cater the need of the designed population proposed to be covered under this scheme.
3. The source tapped will not adversely affect the water supply scheme (In case the same has been tapped from the existing scheme).
4. The scheme has been properly investigated and proposals are viable from techno-economic consideration.


J.E.


Assistant Executive Engineer
P.H.E. Sub Division
Sunderbani.


Executive Engineer
PHE Division
Anda Nowshera

**DETAILED ESTIMATE FOR CONSTRUCTION OF PUMP ROOM NEAR FILTRATION
PLANT AND AT STAGE 1ST FOR WATER SUPPLY SCHEME DAROON**

S.No	Particulars	Unit	Rate in Rs	Qty	Amount in Rs
1	<p>Earth work in excavation in foundation trenches or drains (not exceeding 1.5m in width as well as 10sqm on plan lift upto 1.50m) including getting out the excavated soil for a lead of 50m (in all kinds of soil 90% and soft rock 10%).</p> <p>Long wall = $2 \times 7.47 \times 1.05 \times 1.05 = 16.47$ Cum Short wall = $2 \times 2.88 \times 1.05 \times 1.05 = 6.35$ Cum Drain = $2 \times 8.65 \times 0.90 \times 0.30 = 4.67$ Cum = $2 \times 4.15 \times 0.90 \times 0.30 = 2.24$ Cum Total = 29.73 Cum</p>	Cum	120.34	29.73	3578.00
2	<p>Providing and laying in position cement concrete 1:4:8 (1 cement: 4 coarse sand: 80 graded stone aggregate 40mm nominal size) excluding cost of centering and shuttering all works upto plinth level.</p> <p>Long wall = $2 \times 7.47 \times 1.05 \times 0.15 = 2.35$ Cum Short wall = $2 \times 2.88 \times 1.05 \times 0.15 = 0.91$ Cum Drain = $2 \times 8.65 \times 0.90 \times 0.10 = 1.56$ Cum = $2 \times 4.15 \times 0.90 \times 0.10 = 0.74$ Cum U/s floor = $1 \times 6.20 \times 3.70 \times 0.10 = 2.29$ Cum Total = 7.85 Cum</p>	Cum	2098.70	7.85	16475.00
3	<p>Providing and laying in position cement concrete 1:3:6 (1 cement: 3 coarse sand: 6 graded stone aggregate 20mm nominal size) excluding cost of centering and shuttering upto plinth level.</p> <p>Long wall = $2 \times 7.32 \times 0.90 \times 0.30 = 3.95$ Cum = $2 \times 7.17 \times 0.75 \times 0.30 = 3.23$ Cum = $2 \times 6.92 \times 0.60 \times 0.30 = 2.49$ cum = $2 \times 6.87 \times 0.45 \times 0.45 = 2.78$ cum Short wall = $2 \times 3.03 \times 0.90 \times 0.30 = 1.64$ cum = $2 \times 3.18 \times 0.75 \times 0.30 = 1.43$ cum = $2 \times 3.42 \times 0.60 \times 0.30 = 1.23$ cum = $2 \times 3.48 \times 0.45 \times 0.45 = 1.41$ cum Ramp = $1/2 \times 1.70 \times (0.60 \times 0.30) = 0.15$ cum Drain = $(2 \times 2) \times 8.65 \times 0.30 \times 0.45 = 4.67$ cum = $(2 \times 2) \times 4.15 \times 0.30 \times 0.45 = 2.24$ cum = 25.22 cum Deduct 20% boulders = (-) 5.04 cum Total = 20.18 cum</p>	Cum	2560.85	20.18	51678.00
4	<p>Providing and laying damp proof course 40mm thick with cement concrete 1:2:4 (1cement: 2 sand and 4 graded stone aggregate 12.5mm nominal size).</p> <p>Long wall = $2 \times 6.65 \times 0.23 = 3.06$ sqm</p>				

	Short wall = $2 \times 3.70 \times 0.23 = 1.70 \text{ sqm}$ D/d doors = $1 \times 1.20 \times 0.23 = 0.28 \text{ sqm}$ Total = 4.48 sqm	Sqm	149.10	4.48	668.00
5	Brick work with F.P.S Brick of class designation 75 in foundation and plinth in cement mortar 1:6 (1cement: 6 coarse sand). Long wall = $2 \times 6.65 \times 0.23 \times 3.00 = 9.18 \text{ cum}$ Short wall = $2 \times 3.70 \times 0.23 \times 3.00 = 5.11 \text{ cum}$ Parapet = $2 \times 7.55 \times 0.23 \times 0.30 = 1.04 \text{ cum}$ Parapet = $2 \times 5.05 \times 0.23 \times 0.30 = 0.70 \text{ cum}$ D/d Door = $1 \times 1.20 \times 2.10 \times 0.23 = (-)0.58 \text{ cum}$ Windows = $2 \times 0.90 \times 1.35 \times 0.23 = (-)0.56 \text{ cum}$ Lintels = Qty vide item No 9 (b) = $(-)0.20 \text{ cum}$ Total = 14.69 cum	Cum	2124.60	14.69	31210.00
6	Structural steel work welded in built up sections trusses and framed works etc. Doors & Windows = 20.50 Rm @ 3.5Kg/m 71.75 Kg	Kg	62.10 65.50	71.75	4456- 4700.00
7	Providing and fixing 1mm thick MS Steel door with frame of 40 x 40 x 6 mm angle iron and 3 mm M.S gusset plates at the junction and corners all necessary fitting complete, including applying a priming coat of approved steel primer using MS angles 40 x 40 x 6 for diagonal braces. Door = $1 \times 2.10 \times 1.20 = 2.52 \text{ sqm}$ Windows = $2 \times 0.90 \times 1.35 = 2.43 \text{ sqm}$	Sqm Sqm	2130.00 1965.00	2.52 2.43	5368.00 4775.00
8	Centering and shuttering including strutting, propping etc and removal of form work for shelves cost are:-				
a)	Slab = $6.20 \times 3.70 = 22.94 \text{ Sqm}$ Projection = $2 \times (7.55 + 4.15) \times 0.45 = 10.53 \text{ Sqm}$ = 33.47 Sqm	Sqm	178.75	33.47	5983.00
b)	Edges = $2 \times (7.55 + 5.05) = 25.20 \text{ RM}$	RM	50.10	25.20	1262.00
c)	Door = $1 \times (1.20 \times 0.23) = 0.28 \text{ Sqm}$ = $2 \times (1.50 \times 0.23) = 0.69 \text{ Sqm}$ Windows = $2 \times (0.90 \times 0.23) = 0.41 \text{ Sqm}$ = $2 \times 2 \times (1.20 \times 0.23) = 1.10 \text{ Sqm}$ = 2.48 Sqm	Sqm	137.60	2.48	341.00
d)	Foundation = $2 \times 2 \times 6.43 \times 1.50 = 38.58 \text{ sqm}$ = $2 \times 2 \times 3.92 \times 1.50 = 23.58 \text{ sqm}$ Drain L/wall = $2 \times 2 \times 8.95 \times 0.45 = 16.11 \text{ sqm}$ S/wall = $2 \times 2 \times 6.45 \times 0.45 = 11.61 \text{ sqm}$ Total = 89.88 sqm	Sqm	80.45	89.88	7231.00
9	Reinforced cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) work in beams, suspended floors, roofs having slope upto 15° , landings balconies, lintels, plain window sills, staircase and spiral stair cases upto floor five level excluding the cost of centering, shuttering, finishing and reinforcement				

	Slab = $7.55 \times 5.05 \times 0.125 = 4.76 \text{ cum} - (A)$ Lintels = $1 \times 1.50 \times 0.23 \times 0.23 = 0.07 \text{ cum}$ = $2 \times 1.20 \times 0.23 \times 0.23 = 0.13 \text{ cum}$ Total = $0.20 \text{ cum} - (B)$ Total = $4.76 + 0.20 = 4.96 \text{ cum}$	Cum	3656.00	4.96	18134.00
10	Reinforced for RCC work including straightening, cutting, bending, placing in position and binding all complete (cold twisted bars). Qty vide item No. 8 = $4.96 \text{ cum} @ 0.80 \text{ Kg/cum} = 400 \text{ Kg}$	Kg	55.80	400.00	22320.00
11	Extra for brick work in super structure above plinth level upto floor V Level Qty vide item No. 5 = 14.69 Cum	Cum	341.75	14.69	5020.00
12	12 mm thick cement plaster in 1:4 cement mix (1 cement : 4 sand) Ceiling = $6.20 \times 3.70 = 22.94 \text{ sqm}$ Projections = $2 \times (7.55 + 4.15) \times 0.45 = 10.53 \text{ sqm}$ Total = 33.47 sqm	Sqm	87.80 87.60	33.47	2939.00 2932.00
13.	15 mm thick cement plaster in 1:4 cement mix (1 cement : 4 sand) Inner sides = $2 \times (6.20 + 3.70) \times 3.00 = 59.40 \text{ sqm}$ Outer Sides = $2 \times (6.65 + 4.15) \times 3.40 = 73.44 \text{ sqm}$ Drain = $2 \times 8.95 \times 0.45 = 8.05 \text{ sqm}$ Drain = $2 \times 6.45 \times 0.45 = 5.80 \text{ sqm}$ Parapet = $2 \times (7.55 + 5.05) \times 0.45 = 11.34 \text{ sqm}$ = $2 \times (7.25 + 4.75) \times 0.30 = 7.20 \text{ sqm}$ = $2 \times (6.95 + 4.45) \times 0.30 = 6.84 \text{ sqm}$ D/d Win. = $2 \times 0.90 \times 1.20 = (-) 2.16 \text{ sqm}$ Doors = $1 \times 1.20 \times 2.10 = (-) 2.52 \text{ sqm}$ Net Qty = 167.39 sqm	Sqm	102.50 102.30	167.39	17157.00 17123.00
14	Cement concrete flooring 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate) finished with a floating coat of neat cement 40mm thick Floor = $6.20 \times 3.70 = 22.94 \text{ sqm}$	Sqm	196.75	22.94	4513.00
15	Making plinth protection 50mm thick cement concrete 1 : 3 : 6 over 75mm of dry brick blasts 50mm nominal size named and consolidated and graded with fine sand including finishing. = $2 \times 8.65 \times 0.70 = 12.11 \text{ sqm}$ = $2 \times 4.15 \times 0.70 = 5.81 \text{ sqm}$ Total = 17.92 sqm	Sqm	200.30 275.00	17.92	3589.00 4928.00
16	Dumping of stones including supply of stones Qty vide item No. ③ = 5.05 cum 5.04	Cum	202.30	5.04 5.05	1020.00 1022.00
17	White washing new work (three or more coats) with lime to give an even shade Room = $2 \times (6.20 + 3.70) \times 3.00 = 59.40 \text{ sqm}$				

	Ceiling = $6.20 \times 3.70 = 22.94 \text{ sqm}$ Projections = $2 \times (7.55+4.15) \times 0.45 = 10.53 \text{ sqm}$ Total = 92.87 sqm	Sqm	8.10 11.05	92.87	752.00 1026.00
18	Finishing wall with water proofing cement paints of approved Brand and manufacturing to give an even shade new with (two or more coats) Outer Side = $2 \times (6.65+4.15) \times 3.40 = 73.44 \text{ sqm}$ Parapet = $2 \times (7.55+5.05) \times 0.45 = 11.34 \text{ sqm}$ = $2 \times (7.25+4.75) \times 0.30 = 7.20 \text{ sqm}$ = $2 \times (6.95+4.45) \times 0.30 = 6.84 \text{ sqm}$ D/d Win. = $2 \times 0.90 \times 1.20 = (-)2.16 \text{ sqm}$ Doors = $1 \times 1.20 \times 2.10 = (-)2.52 \text{ sqm}$ Net Qty = 94.14 sqm	Sqm	34.55	94.14	3252.00
19	Providing and fixing plain grills on windows/ventilators frames cost of screws, nails and bolts etc 2 Nos @ 25 Kg/ per No. = 50 Kg	Kg	70.25 80.00	50.00	3512.00 4000.00
20	Painting new metallic surface with two or more coats of synthetic enamel of specified shade and brand to an even shade, excluding priming and preparation of surface but including propping and clearing Qty vide item No.7 = $4.95 \times (2+2) = 19.80 \text{ sqm}$	Sqm	40.15 52.00	19.80	795.00 1030.00
21	Filling available excavated (excluding rock) in trenches, plinth, sides of foundations etc in layers Inside plinth = $6.20 \times 3.70 \times 0.35 = 8.02 \text{ cum}$ Foundation 30% of Ist = $29.73 \times 0.30 = 8.91 \text{ cum}$ Total = 16.93 cum	Cum	39.15	16.93	663.00

216661.00

MATERIAL CONSUMPTION CHART										
Item No.	Detail	Qty	Rate	Cement	Rate	Sand	Rate	Aggregate		Bricks
								40mm	20mm	
2	C.Conc.1:4:8	7.85	170	1334.50	0.47	3.69	0.89	6.98		--
3	C.Conc.1:3:6	20.18	220	4439.60	0.47	9.48	0.89		17.96	--
4	C.Conc.1:2:4	4.48	16	71.68	0.023	0.10	0.01		0.04	--
5	Brick Work 1:6	14.69	60	881.40	0.26	3.82	-		-	7007
9	R.C.C 1:2:4	4.96	320	1587.20	0.45	2.23	0.89		4.41	-
12	Plaster 12mm	33.47	5.47	183.08	0.012	0.40	-		-	-
13	Plaster 15mm	167.39	6.54	1094.73	0.018	3.18	-		-	-
14	Flooring 1:2:4	22.94	15.00	344.10	0.022	0.50	0.04		0.92	-
15	Plinth Prot.	17.92	11.00	197.12	0.024	0.43	0.04		0.72	-
Total				10073.41 Kg = 201 bags		23.63 cum		6.98 cum	24.05 cum	7007 6977

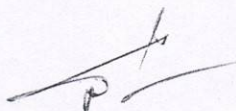
208 bags

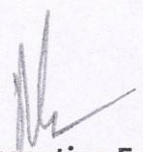
25.	Carriage of cement in all terrains through a lead of 55 km by MT and 1500 mts by head load including cost of loading, unloading and stacking. = 10.05 MT	MT	365.73	10.05	3693.00 3675.00
26.	Carriage of steel in all terrains through a lead of 55 km by MT and 1500 mts by head load including cost of loading, unloading and stacking. = 0.40 MT	MT	519.75	0.40	208.00

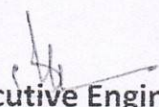
27.	Carriage of stone aggregate of max size up to 6 to 26.5 mm by MT in all terrains through average distance up to 35 kms and 1500 mts by head load including cost of loading, unloading and stacking. = 24.05 cum	Cum	511.55	24.05	12302.00
28.	Carriage of stone aggregate of max size up to 26.5 to 40mm by MT in all terrains through average distance up to 35 kms and 1500mts by head load including cost of loading, unloading and stacking. = 6.98 cum	Cum	554.15	6.98	3868.00
29.	Carriage of sand by MT in all terrains through average distance up to 75 kms and 1500 mts by head load including cost of loading, unloading and stacking. = 23.63 cum	Cum	654.35	23.63	15462.00
28.	Carriage of bricks for an average distance of 80 Km by MT from nearest brick kiln and 1500 mts by head load including cost of loading and stacking. = 7007 Nos	1000 Nos	1534.01	6977 7007	10702.00 10749.00
29.	Carriage of stones for an average distance of 30 km by MT and 1500 mts by head load including cost of loading, unloading and stacking. = 5.05 Cum	Cum	581.05	5.04 5.05	2928.00 2934.00
30.	Provision for electric fitting	L.S			10,000.00
Total				275854-	275859.00
Add 50% above SSR except item No 30 on Rs. 265854-				132927-	132929.00
					408788.00

408781-00

Say Rs. 4.09 Lacs


J.E.

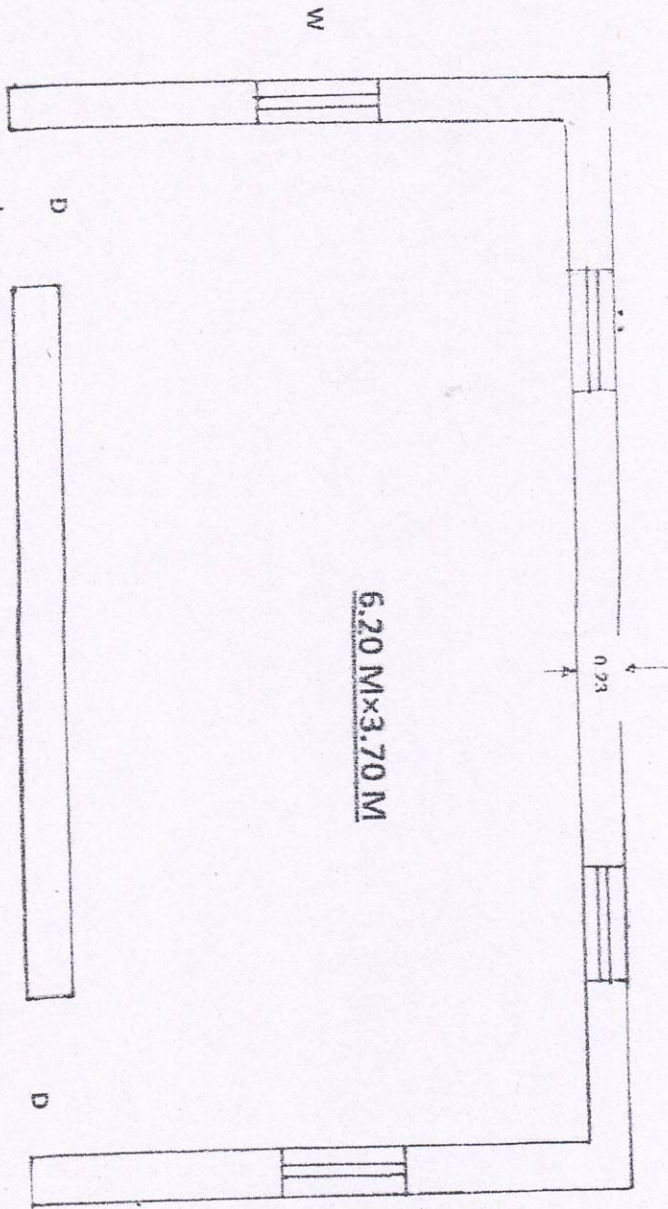

Asstt. Executive Engineer
PHE Sub Division
Sunderbani


Executive Engineer
PHE Division
Nowshera

DRAWING FOR PUMP ROOM NEAR FILTRATION PLANT AND STAGE 1ST UNDER W.S.S DAROON

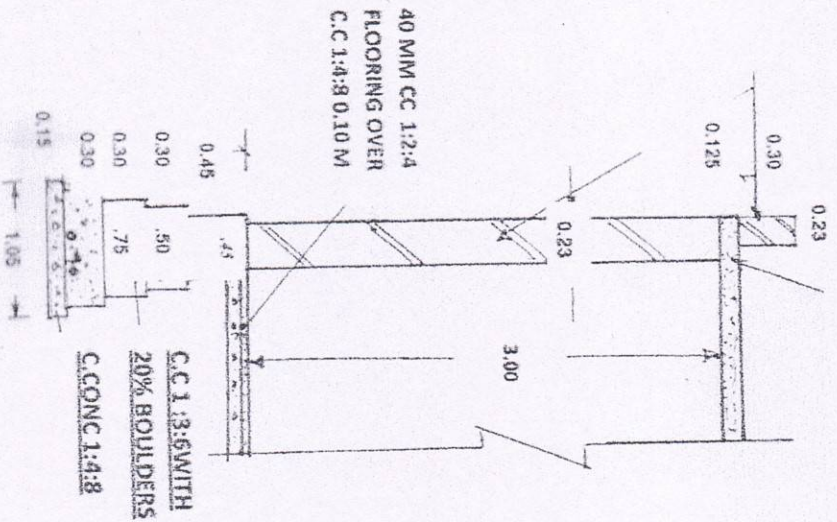
RCC 1:2:4 12.5 CM THICK

BRICK MASONRY IN 1:6 MIX



D = 1.20 x 2.10
W = 0.90 x 1.20

PLAN



SECTIONAL DETAILS

[Signature]
J.E.

Asstt. Executive Engineer
PHE Sub Division
Sunderban
Executive Engineer
PHE Division
Kolkata