







Subwork 18: Construction of Windrow Platform (25m x 12m) at Processing Site

S.N	Item Description	No	Length	Breadth	Height	Qty	Unit	Rate	Amount	Item Reference
1	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including getting out and disposal of excavated earth upto 50 m and lift upto 1.5 m, as directed by Engineer-in-Charge.	1	25	12	0.3	90.00	Sqm	92.55	8329.50	DSR Item No_2.1.1
2	200 mm THK Well compacted stone soling voids should be filled and compacted with stone chipping and sand filling 60-90 mm stone size	1	25	12	0.2	60.00	Cum	1873.00 1843	112380.00 110580.00	Unit Estimate
3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 1:3:6 (1 Cement : 3 coarse sand (zone-III) : 6 graded stone aggregate 40 mm nominal size).	1	25	12	0.1	30.00	Cum	6126.25	183787.50	DSR Item No_4.1.6
4	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 1:2:4 (1 cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size).	1	25	12	0.2	60.00	Sqm	6788.6	407316.00	DSR Item No_4.1.3
5	Providing and laying in position bitumen hot sealing compound for expansion joints. Using grade 'A' sealing compound.					120.00	per cm depth per cm width per m length	16.5	1980.00	DSR Item No_16.46.1
							Total		713793.00	

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Stone Soling

S.N	Item Description	No	Qty	Unit	Rate	Amount	Item Reference	
	Details of cost 3 m X6 m and 150 mm thick area							
1	Stone Boulder 50 mm to 200 mm	1	2.7	Cum	850	2295.00	DSR 16 7753	
2	Gravel 5 mm to 10 mm to fill voids	1	0.54	Cum	850	459.00	DSR 16 7754	
3	Sand Filling	1	0.27	Cum	1953.05	527.32	DSR 16 2.27	
4	Beldar to spread boulder & Gravel	1	2	Day	558	1116.00	DSR 16 0114	
				Total		4397.32		
	Add 15% CPOH			15%		659.60		
				Total		5056.92		
				Total per Cum		1873.00		

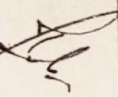
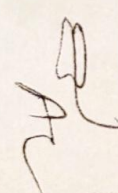
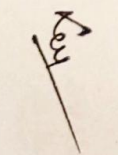
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1843.00



## Subwork 20: Construction of Leachate Tank at Processing Site

S. N	Item Description	N	Length	Breadth	Height/Dept	Qty	Unit	Rate	Amount	Item Reference
	Wall thick		1.5	1.5	1.5					
	Size		0.2							
1	Earth work in excavation by mechanical means (Hydraulic excavator/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge. Upto 1.5 meter depth	1	2.5	2.5	1.5	9.375	Cum	181.85	1704.844	DSR_Item No_2.6.1
2	Beyond 1.5 meter upto 3.0 meter	1	2.5	2.5	0.3	1.875	Cum	271.89	509.7938	DSR_Item No_2.6.1+2.26.1
3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 1:4:8 (1 Cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size)	1	2.5	2.5	0.1	0.625	Cum	5789.6	3618.5	DSR_Item No_4.1.8
4	Providing and laying in position machine batched and machine mixed design mix M-30 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge.	1	2.3	2.3	0.2	1.058				
	Bottom of tank									



Subwork 19: Construction of Windrow Platform (33m x 12m) at Processing Site

S.N	Item Description	No	Length	Breadth	Height	Qty	Unit	Rate	Amount	Item Reference
1	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including getting out and disposal of excavated earth upto 50 m and lift upto 1.5 m, as directed by Engineer-in-Charge.	1	33	12	0.3	118.80	Sqm	92.55	10994.94	DSR Item No_2.1.1
2	200 mm THK Well compacted stone soling voids should be filled and compacted with stone chipping and sand filling 60-90 mm stone size	1	33	12	0.2	79.20	Cum	1873.00	148341.60	Unit Estimate
3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level: 1.3.6 (1 Cement, 3 coarse sand (zone-III), 6 graded stone aggregate 40 mm nominal size).	1	33	12	0.1	39.60	Cum	6126.25	242599.50	DSR Item No_4.1.6
4	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level: 1.2.4 (1 cement, 2 coarse sand (zone-III), 4 graded stone aggregate 20 mm nominal size).	1	33	12	0.2	79.20	Sqm	6788.6	537657.12	DSR Item No_4.1.3
5	Providing and laying in position bitumen hot sealing compound for expansion joints etc. Using grade 'A' sealing compound.					100.00	per cm depth per cm width per m length	16.5	1650.00	DSR Item No_16.46.1
						Total			941243.16	938867.16

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S. N	Item Description	N	Lengt h	Breadt h	Height/Dept h	Qty	Unit	Rate	Amount	Item Reference
	Wall-1	2	1.7	0.2	1.5	0.51				
	Wall-2	2	1.7	0.2	1.5	0.51				
5	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level and above.					2.07	Cum	9470. 6	19679.9 1	DSR Item No_5.33.2 + 5.34.1
	Thermo-Mechanically Treated bars of grade Fe-500D or more.									
	Consider 1.5 % of Total volume					245	Kg	83.5	20431.1 6	DSR Item No_5.22.6
6	Centering and shuttering including strutting, propping etc. and removal of form for all heights :Foundations, footings, bases of columns, etc. for mass concrete									
	Sides of Foundation	2	4.6		0.2	1.84	Sqm	284.8 5	524.124	DSR Item No_5.9.1
7	Centering and shuttering including strutting, propping etc. and removal of form for all heights :Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.									
	Wall-1	4	1.7		1.5	10.2				
	Wall-2	4	1.7		1.5	10.2				
						20.4	Sqm	609.3	12429.7 2	DSR Item No_5.9.2
							Tota l		58898.0 4	

SI - R50.59699  
W51 - Nil

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**Subwork 21: Electrical Cost at Processing Site**

Sl. No.	Work Description	Unit	Qty.	Rate in Rs.		Amount in Rs		Item Reference
				DSR	NSI	DSR	NSI	
1	Supplying installation testing and commissioning of LT Panel, Automatic power factor corrector panel, Essential Panel i/c Earthing, inter connecting power cables in sub- station, safety equipments.	KVA	100	9000		900000		DSR E/M Plinth area rates 2019- sl. 1 <i>HSIC</i>
2	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required. Light Point/Fan Points - Group B							
		no.	280	863.1		241668		DSR 18_Item No_1.1.2
3	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	m	120	265		31800		DSR 18_Item No_1.5

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Sl. No.	Work Description	Unit	Qty.	Rate in Rs.		Amount in Rs		Item Reference
				DSR	NSI	DSR	NSI	
4	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.							
	5/6 A switch	No	20	85.00	/	1700		DSR 18 Item No. 1.24.1
	3 pin 5/6 A socket outlet	No.	20	111.00	/	2220		DSR 18 Item No. 1.24.4
	15A Switch	No.	10	132.00	/	1320		DSR 18 Item No. 1.24.5
	15A Socket	No	10	175.00	/	1750		DSR 18 Item No. 1.24.6
5	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	No	30	401.00	/	12030		DSR 18 Item No. 1.31
6	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.25mm	m	300	90.00	/	27000		DSR 18 Item No. 1.21.2
7	Supplying and drawing following sizes of FRLS PVC insulated copper conductor. single core cable in the existing surface/ recessed steel/ PVC conduit as required.							
	3 x 1.5 sq. mm	m	200	54.00	/	10800		DSR 18 Item No. 1.17.3

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Sl. No.	Work Description	Unit	Qty.	Rate in Rs.		Amount in Rs		Item Reference
				DSR	NSI	DSR	NSI	
	2x4 sqmm	m	100	86.00		8600		DSR 18_Item No_1.17.20
8	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required 4x2.5 Sq.mm.	m	50	339.00		16950		DSR 18_Item No_1.7.7
9	Providing and fixing following capacity TP&N disconnector fuse switch unit inside the existing panel board with ISI marked HRC fuses including drilling holes in cubicle panel, making connections, etc. as required 32A 63A	no.	4	2,075.00		8300		DSR 18_Item No_2.1.1
		no.	2	2,923.00		5846		DSR 18_Item No_2.1.2
10	Providing and fixing M.V. danger notice plate of 200 mm X 150 mm, made of mild steel, at least 2 mm thick, and vitreous enameled white on both sides, and with inscription in single red colour on front side as required.	no.	4	226.00		904		DSR 18_Item No_2.2.1
11	P&F of Heavy duty capacitor start 900/1400 RPM single phase ISI marked Exhaust fan, ISI.2312 marked including making connections testing etc. as required	no.	8		2,873.50		22988	NSI

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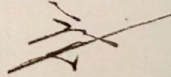
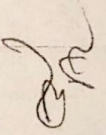
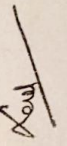
Sl. No.	Work Description	Unit	Qty.	Rate in Rs.		Amount in Rs		Item Reference
				DSR	NSI	DSR	NSI	
12	P & F of IP20 LED batten type light fixture made from CRCA sheet stile housing suitable for mounting LED tube system (integral driver), Power consumption of 18W/36W, 1500/3000 lumens, system lumen efficiency 80 lm/ watt output, life time of 50000 burning hours with 70% initial lumen maintained. CCT 3000° K, 4000° K and 6000° K. 2x18W	no.	280		1,027.00		287560	NSI
13	BULK HEAD -P & F of IP65 IK10 rated LED bulk head type ligh fixture made from CRCA sheet steel housing suitable for mounting LED tube system (integral driver), Powen consumption of 10-15W . 500-600 lumens system lumen efficiency 70 lm/ watt output suitable for 1x100 W GLS/ 9W CFL bulk head fixtures, life time of 50000 burning hours with 70% initial lumen maintained. CCT 3000° K, 4000° K and 6000° K. Fixture shall be in compliance with CE & KEMA standards.	no.	10		1,399.90		13999	NSI

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Sl. No.	Work Description	Unit	Qty.	Rate in Rs.		Amount in Rs		Item Reference
				DSR	NSI	DSR	NSI	
14	Supply and erection of Decorative Cast Iron pole as per approved design of following length with base plate on the cement concrete foundation of M-15 grade (1:1.5:3) with the help of anchor bolts of grade 6.8 (IS 1367 P III). The pole shall be made of Cast Iron as per IS 210:1993. precision machining and filling job to achieve good finish and a fine coat of primer on each element before assembling. After assembling of each element one coat of primer and two coats of P. U. paint are applied. Approved coloured UV resist coating of mat/ glossy/ metallic finish followed after air drying of pole. The pole shall have a weatherproof flush door and locking arrangements, two/ one arm bracket of length of 430/380mm complete in all respect. 8M	no.	6	43,462.00	260772	NSI		
15	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)	no.	6	3,068.00	18408.00	DSR 18_Item No_2_4_1		





Sl. No.	Work Description	Unit	Qty.	Rate in Rs.		Amount in Rs		Item Reference
				DSR	NSI	DSR	NSI	
16	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.	no.	29	826.00		23954.00		DSR 18_Item No_2_10.4
17	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.	no.	2	5,308.00		10616.00		DSR 18_Item No_5.2
18	Providing and fixing 6 SWG dia G.I wire on surface or in recess for loop earthing as required.	m	150	57.00		8550.00		DSR 18_Item No_5.16
	<b>Total of DSR Items</b>					1,332,416.00		4513 453108 . Co
	<b>Total of NSI Items</b>					585,319.00		1485319 . Co

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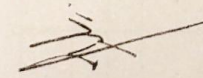
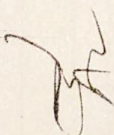
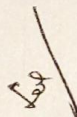
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 NSI RS 14.856es



**Subwork 22: Machineries, Vehicles and Equipment's at Processing Site**

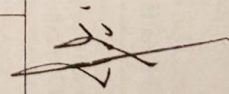


Sr.No.	Description	Unit	Quantity	Unit Rate	Amount INR lakh
1	Skid Steer Loader (JCB)	nos	1	1850000	18.50
2	Wet Waste Processing Machineries				156.97
3	Tipper Truck for Reject Disposal	nos	1	1800000	18.00
	<b>Total Cost (INR Lakhs)</b>				<b>193.47</b>



## Rate Analysis of Dry and Wet Waste Processing Machineries

Sr. No.	Description of Item	Unit	HP	Quantity	Rate (Rs) 2017	Rate (Rs) 2018	Rate (Rs) 2019	Amount	GST 18%	Insurance 2%	transportation 5%	Erection & Commissioning 2%	Amount
													Rs (Lakhs)
2.1	Feeder conveyor	Nos.	5	2	8,50,000	8,80,600	9,10,540	18,21,081	3,27,795	18,211	45,527	18,211	22.31
2.2	35 mm trommel	Nos.	15	1	16,00,000	16,57,600	17,13,958	17,13,958	3,08,513	34,279	85,698	34,279	21.77
2.3	Reject Conveyor	Nos.	5	1	6,00,000	6,21,600	6,42,734	6,42,734	1,15,692	12,855	32,137	12,855	8.16
2.4	Accept Conveyor	Nos.	7.5	1	8,50,000	8,80,600	9,10,540	9,10,540	1,63,897	18,211	45,527	18,211	11.56
2.5	16 mm trommel	Nos.	10	2	15,00,000	15,54,000	16,06,836	32,13,672	5,78,461	32,137	80,342	32,137	39.37
2.6	Reject Conveyor	Nos.	3	2	6,00,000	6,21,600	6,42,734	12,85,469	2,31,384	12,855	32,137	12,855	15.75
2.7	Accept Conveyor	Nos.	5	2	8,50,000	8,80,600	9,10,540	18,21,081	3,27,795	18,211	45,527	18,211	22.31
2.8	Electric Panel Board	Nos.		2	6,00,000	6,21,600	6,42,734	12,85,469	2,31,384	12,855	32,137	12,855	15.75
			73.5	HP									156.97



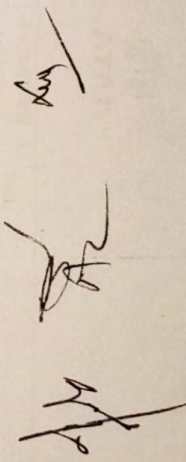
Subwork 23: IEC Activity in Doiwala

Sr. No	Activity	Activity Details	Unit	Estimated Quantity	Rate in INR.	Amount (in INR).	Remarks
<b>A) Visual/Audio Visual media</b>							
1	Production of Television spots	Design, script, shoot, edit, prepare 30-60 second television spots, shot on DigiBeta or DV Cam in HD format, in Hindi/local language, involving renowned local professional actors, based on a minimum of 7 different themes (i.e. ODF, handwashing, SWM awareness and good practices) as required by the Client/ULB, to be aired on national and local channels	No	X	300000.00	300000	Market Survey, agencies contacted, 1- Channel Mountain, Dehradun,
2	Short Films	Films (4 numbers) of minimum 2 minutes duration, shot on DigiBeta or DV Cam in HD format, with minimum 6 renowned actors, will be scripted, shot, edited by the Consultant in Hindi and also dubbed in local language, which will be screened using mobile vans and on other occasions within the target ULBs and elsewhere as desired by the client.	No		300000.00	300000	Market Survey, agencies contacted, 1- Channel Mountain, Dehradun,
<b>B) Audio Media</b>							
3	Production of Audio (success stories on SBM-U and awareness)	30 second Radio Jingles will be produced by the consultant, on the themes (i.e. ODF, handwashing, SWM awareness and good practices) to be identified by the client in Hindi/local language, to be aired through All India Radio local stations	No	X	300000.00	300000	Market Survey, agencies contacted, 1- Channel Mountain, Dehradun.
<b>C) Outdoor Media</b>							
4	Hoardings/ banners or other Out Of Home (OOH) advertising like hot air balloons/ other innovative ad spaces	Design, script the content in local languages, based on the theme as provided by the ULBs/Client. The Out-of-home (OOH) advertising will be printed in colour, in the form of hoardings, insizes, as required by the Client to be printed on cloth and installed/mounted by the Consultant on minimum 20 locations in each ULB, as directed by the Client	sq. ft		50000	400000	
<b>D) Print Media</b>							
5	Printing of	Coloured, (A3 size, 170 GSM GLOSSY/MATT LAMINATED) PAPER	Lot	500	50	25000	Local rates to be

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Sr. No	Activity	Activity Details	Unit	Estimated Quantity	Rate in INR.	Amount (in INR).	Remarks
	awareness posters	R)with photos, text regarding SWMBest Practices, Designing, Printing, Distribution among target groups in English, Hindi, based on the content supplied by the Client/ULBs as described by the consultant in lots of 100, for each ULB					collected
6	Printing of Newsletter	Coloured- 8 pages, (A4 size) in 300 GSM Glossy paper, with photos, text regarding SWMBest Practices and project information, Designing, Printing, Distribution among target groups in English, Hindi, based on the content supplied by the Client/ULBs as described by the consultant, at least once in each quarter for each ULB, in lots of minimum 500 copies.	No	12X 1000	15	180000	As per SPMG-NGCA
<b>F) Mass Contact Program</b>							
7	Cleanliness / Awareness drives in Govt. hospitals/unclean sites	To be conducted once in each ULB, consisting of "Walk of Shame" through unclean sites, lecture/training session with a cleaning drive involving Government staff, school children, Municipal employees, local community members, shopkeepers, volunteers, NGOs etc. with 02 event banners, 10 awareness cloth banners (not flex/PVC), all necessary Audio Visual equipment, Cleanliness equipment like brushes, brooms, brushes, cleaning materials, with a minimum of 200 people, refreshment for participants (usage of disposal items of plastic and thermocol is not allowed during the event), requisite manpower to execute the activity will be provided by the consultant.	No		200000.00	200000.00	
8	Swachhata Marathon (1/4th) in school/colleges	A Swachhata 1/4th Marathon with minimum 100 participants, covering a distance of 10.55 Km (Marathon Distance = 42.195 Km), will have to be organized once in each 24 ULBs, with Medical aid counter/Mobile Medical Unit, Water stations, Fruit/Snack stations (enroute at different locations), stage at the Start and End point (which will also act as an Award stage) of the marathon by the Consultant, as per Athletics Federation of India norms and guidelines. The required permits, approvals from all the concerned authorities will be taken by the Consultant, who will also be responsible for bringing in sponsors for such events. Registration counter, 10 event banners (cloth not flex/PVC of minimum size 8 x 3 feet), refreshment for participants (disposal thermocol and plastic items are not to be used in the event) and requisite	No				
				Lumpsum		300000	
				Lumpsum		300000	







Sr. No	Activity	Activity Details	Unit	Estimated Quantity	Rate in INR.	Amount (in INR).	Remarks
9	Street plays/ Nukkad Natak	manpower will be provided by the consultant. Utilising folk arts forms, songs, dramas, entertainment performance etc. to which the local populace are able to identify, of minimum 30 minutes duration (in Hindi/Local language) with at least 8-10 characters will be scripted by the agency focusing on different components of SBM and SWM. Good Practices as adopted by communities. The play will have to be performed in various crowded places of ULBs by professional actors employed by the Consultant, in front of minimum 50 persons, at least once in each month in each ULB. The Consultant will also be responsible for designing, printing/preparation and fixing in place of 2 event banners, 10 awareness cloth banners (not flex/PVC) for each play, as approved by the client.	No	6	10000	60000	
10	Seminar/ Workshop	ULB level seminars/workshops (Venue to be finalised and provided by Client/ULB free of cost), involving district/ block level officers concerned, NGOs, CBOs, researchers, academicians, prominent local people and public representatives, will be organized, by the consultant at least once in each ULB, focusing on "Good Practices" of SWM, with special focus on "Community Participation", (minimum 60-75 participant) with all necessary Audio Visual equipment, refreshment, manpower essential to execute the activity. Prominent National Specialists will be engaged as individual consultants to address the gathering. Plastic & Thermocol disposal items is prohibited in all events.	No	6	5000	30000	
11	Press Release	Finalising content and ensuring publicity by Press Release, as a tool of public awareness, as directed by the Client/ ULB	No	12	2500	30000	
12	Mobile based Outreach campaign:	Creation and execution of SMS/calling mobile outreach campaign reaching out to a minimum of 10,000 people in each campaign, once in each quarter, in 24 ULBs.	No	Lumpsum		100000	
<b>Total</b>						2225000	

16,25,000.00  
 or 16.25 lacs  
 81 - Nil  
 16.25 lacs

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## Rate Analysis for 4mm Sieve

Sieve is 1 m wide and 1.5m high

Sr. No.	Description	Value	Unit	Reference
1	Cross Section area of wire (4mm)	1.25714E-05	sq.m	
2	Length of wire	374.5	m	
3	Volume of wire	0.004708	cu.m	
4	Density of steel wire	7850	kg/cu.m	
5	Weight of wire	36.958	kg	
6	Length of Angle (25mm*25mm*4mm)	5	m	
7	Weight of angle	1.4	kg/m	IS 808:1989, Section 5 (equal leg angles) (Pg.8)
8	Total Weight of angle	7	kg	
9	Total weight of steel	43.958	kg	
10	Cost of steel	86.05	Rs./kg	CPWD DSR Volume 1, 2018: Subhead 10.0 Steel Work, 10.1 (Pg 183)
11	Cost of steel in 4 mm sieve	3782.57	Rs.	
12	Cost Index Rishikesh	0.00		
13	Cost	3782.57		
14	Fabrication cost (15% extra)	567.39	Rs.	
15	Half day blacksmith	257.50	Rs.	
16	Total cost of 4 mm sieve	4607.45	Rs.	






Rate Analysis for Mesh bins for segregated dry waste

Length of Bin	2000	mm
Width of Bin	1000	mm
Height of Bin	1000	mm

Sr. No.	Description	Value	Unit	Reference
1	Cross Section area of wire (4mm)	1.25714E-05	sq.m	
2	Length of wire	256	m	
3	Volume of wire	0.003218	cu.m	
4	Density of steel wire	7850	kg/cu.m	
5	Weight of wire	25.264	kg	
6	Length of Angle (50mm*50mm*4mm)	18	m	
7	Weight of angle	3	kg/m	IS 808:1989, Section 5 (equal leg angles) (Pg.8)
8	Total Weight of angle	54	kg	
9	Total weight of steel	79.264	kg	
10	Cost of steel	86.05	Rs./kg	CPWD DSR Volume 1, 2018: Subhead 10.0 Steel Work. 10.1 (Pg 183)
11	Total cost of steel	6820.63	Rs.	
12	Cost Index Rishikesh	0.00		
13	Total Cost	6820.63		
12	Fabrication cost (15% extra)	1023.09	Rs.	
13	Half day blacksmith	257.50	Rs.	
13	Total cost of Bin	8101.22	Rs.	

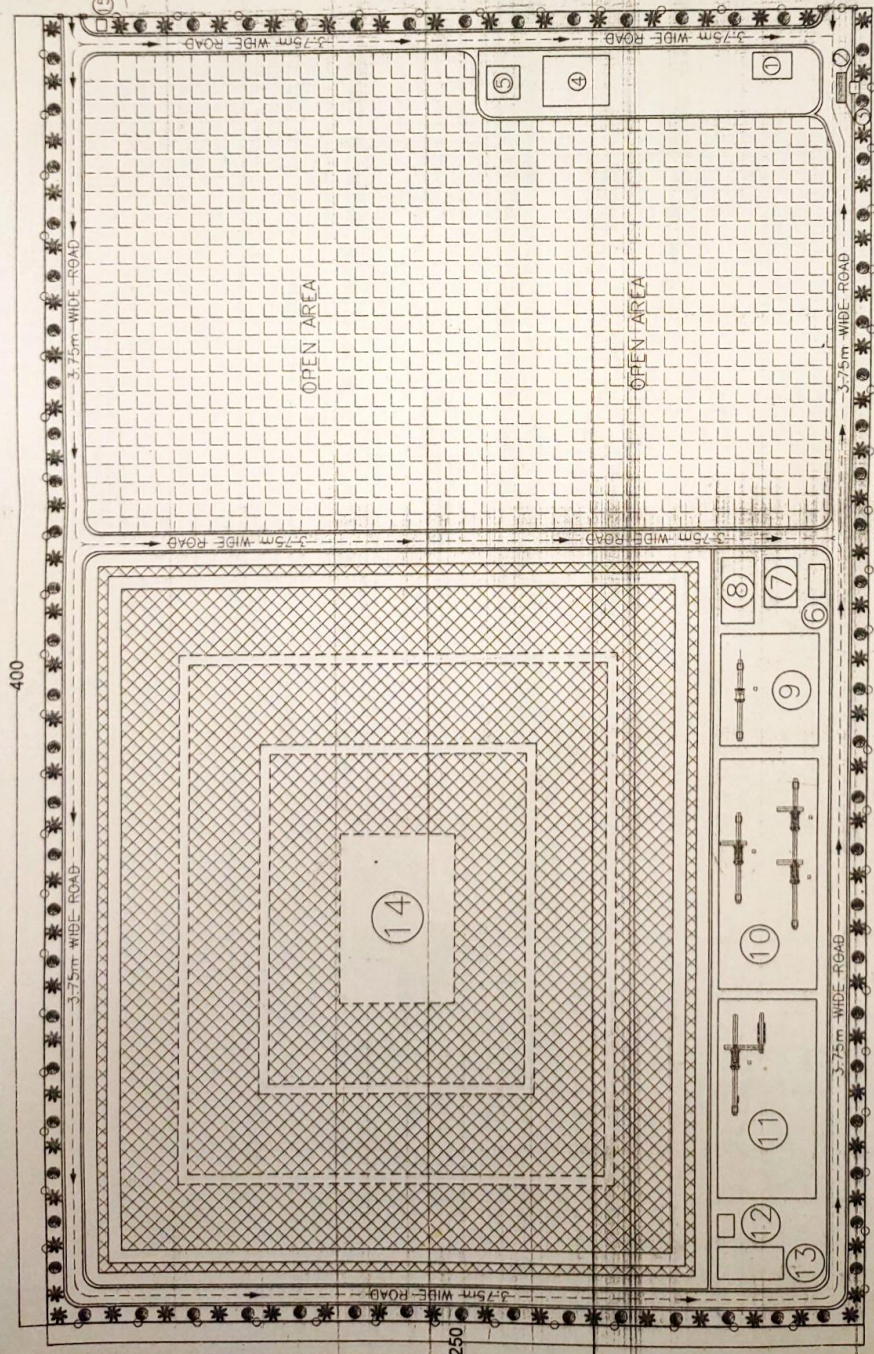
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NOTE - 1. ALL DIMENSIONS ARE IN METERS.  
 2. TOTAL AREA OF PLANT = 100000.0 Sq.m  
 3. TOTAL LENGTH OF 3.75m ROAD = 1465.0 m

LEGEND:  
 PROPOSED ROAD  
 BARBED WIRE FENCING  
 GREEN BELT



KEY PLAN

125 TPD ISWM PROCESSING FACILITY COMPONENT LIST

Sl. No.	COMPONENT NAME	50FT IN. METRES	(L)	(W)	(H/F)
01	ADMINISTRATION & OFFICE	5.70	2.84	3.50	
02	MESH BRIDGE PLANT-UM	3.50	3.0	3.50	
03	MESH BRIDGE CONTROL ROOM	3.50	20.0	6.00	
04	ELECTRICAL SUBSTATION	10.0	10.0	3.0	
05	STORAGE ROOM	10.0	10.0	3.0	
06	WASHING AREA	10.0	10.0	3.0	
07	VEHICLE WASHING AREA	10.0	10.0	3.0	
08	CABAGE	20.0	10.0	6.00	
09	1ST WASTE PROCESSING SHED	36.0	30.0	6.00	
10	2ND WASTE PROCESSING SHED	70.0	20.0	6.00	
11	WINDROW PLATFORM	60.0	30.0		
12	LEACHATE COLLECTION TANK	7.0	5.0	2.50	
13	LEACHATE TREATMENT PLANT	13.0	70.0		
14	SANITARY IN/OUT	22.5	19.0	10.00	
15	SECURITY CABIN	3.0	3.50	3.50	

Sl. No.	Description of Item	Unit	Qty	Rate
1	Excavation for Foundation	M <sup>3</sup>	10	1000
2	Concrete for Foundation	M <sup>3</sup>	10	1000
3	Reinforcement for Foundation	T	10	1000
4	Excavation for Floor	M <sup>3</sup>	10	1000
5	Concrete for Floor	M <sup>3</sup>	10	1000
6	Reinforcement for Floor	T	10	1000
7	Excavation for Wall	M <sup>3</sup>	10	1000
8	Concrete for Wall	M <sup>3</sup>	10	1000
9	Reinforcement for Wall	T	10	1000
10	Excavation for Roof	M <sup>3</sup>	10	1000
11	Concrete for Roof	M <sup>3</sup>	10	1000
12	Reinforcement for Roof	T	10	1000
13	Excavation for Drain	M <sup>3</sup>	10	1000
14	Concrete for Drain	M <sup>3</sup>	10	1000
15	Reinforcement for Drain	T	10	1000
16	Excavation for Pit	M <sup>3</sup>	10	1000
17	Concrete for Pit	M <sup>3</sup>	10	1000
18	Reinforcement for Pit	T	10	1000
19	Excavation for Foundation	M <sup>3</sup>	10	1000
20	Concrete for Foundation	M <sup>3</sup>	10	1000
21	Reinforcement for Foundation	T	10	1000
22	Excavation for Floor	M <sup>3</sup>	10	1000
23	Concrete for Floor	M <sup>3</sup>	10	1000
24	Reinforcement for Floor	T	10	1000
25	Excavation for Wall	M <sup>3</sup>	10	1000
26	Concrete for Wall	M <sup>3</sup>	10	1000
27	Reinforcement for Wall	T	10	1000
28	Excavation for Roof	M <sup>3</sup>	10	1000
29	Concrete for Roof	M <sup>3</sup>	10	1000
30	Reinforcement for Roof	T	10	1000
31	Excavation for Drain	M <sup>3</sup>	10	1000
32	Concrete for Drain	M <sup>3</sup>	10	1000
33	Reinforcement for Drain	T	10	1000
34	Excavation for Pit	M <sup>3</sup>	10	1000
35	Concrete for Pit	M <sup>3</sup>	10	1000
36	Reinforcement for Pit	T	10	1000
37	Excavation for Foundation	M <sup>3</sup>	10	1000
38	Concrete for Foundation	M <sup>3</sup>	10	1000
39	Reinforcement for Foundation	T	10	1000
40	Excavation for Floor	M <sup>3</sup>	10	1000
41	Concrete for Floor	M <sup>3</sup>	10	1000
42	Reinforcement for Floor	T	10	1000
43	Excavation for Wall	M <sup>3</sup>	10	1000
44	Concrete for Wall	M <sup>3</sup>	10	1000
45	Reinforcement for Wall	T	10	1000
46	Excavation for Roof	M <sup>3</sup>	10	1000
47	Concrete for Roof	M <sup>3</sup>	10	1000
48	Reinforcement for Roof	T	10	1000
49	Excavation for Drain	M <sup>3</sup>	10	1000
50	Concrete for Drain	M <sup>3</sup>	10	1000
51	Reinforcement for Drain	T	10	1000
52	Excavation for Pit	M <sup>3</sup>	10	1000
53	Concrete for Pit	M <sup>3</sup>	10	1000
54	Reinforcement for Pit	T	10	1000
55	Excavation for Foundation	M <sup>3</sup>	10	1000
56	Concrete for Foundation	M <sup>3</sup>	10	1000
57	Reinforcement for Foundation	T	10	1000
58	Excavation for Floor	M <sup>3</sup>	10	1000
59	Concrete for Floor	M <sup>3</sup>	10	1000
60	Reinforcement for Floor	T	10	1000
61	Excavation for Wall	M <sup>3</sup>	10	1000
62	Concrete for Wall	M <sup>3</sup>	10	1000
63	Reinforcement for Wall	T	10	1000
64	Excavation for Roof	M <sup>3</sup>	10	1000
65	Concrete for Roof	M <sup>3</sup>	10	1000
66	Reinforcement for Roof	T	10	1000
67	Excavation for Drain	M <sup>3</sup>	10	1000
68	Concrete for Drain	M <sup>3</sup>	10	1000
69	Reinforcement for Drain	T	10	1000
70	Excavation for Pit	M <sup>3</sup>	10	1000
71	Concrete for Pit	M <sup>3</sup>	10	1000
72	Reinforcement for Pit	T	10	1000
73	Excavation for Foundation	M <sup>3</sup>	10	1000
74	Concrete for Foundation	M <sup>3</sup>	10	1000
75	Reinforcement for Foundation	T	10	1000

DO NOT SCALE FOR TPER PURPOSE ONLY  
 PROPOSED LAYOUT OF 125 TPD ISWM PROCESSING FACILITY AT RISHKESH  
 DATE: 12/12/2020  
 DRAWN BY: JI  
 CHECKED BY: JI  
 SCALE: AS SHOWN  
 PROJECT: JHARKHAND STATE WASTE TO ENERGY PLANT  
 NO: ICE/10/2014-11-2020-RN-01

TATA CONSULTING ENGINEERS LIMITED  
 MUMBAI  
 IN ASSOCIATION WITH TATA CONSULTING ENGINEERS PVT. LTD.  
 CLIENT: UTTARAKHAND URBAN SECTOR DEVELOPMENT BOARD (USDB)  
 PROJECT: JHARKHAND STATE WASTE TO ENERGY PLANT

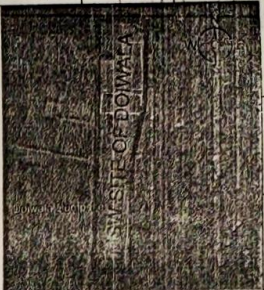
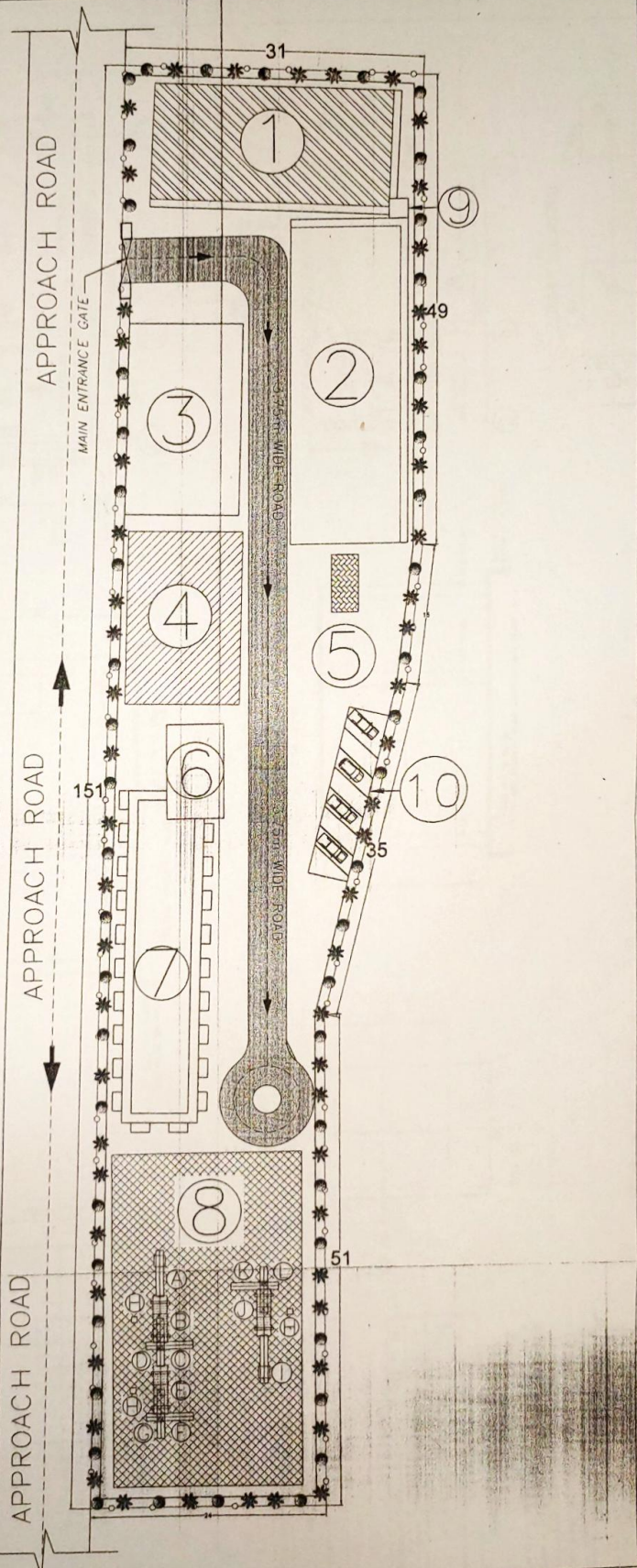
SCALE: AS SHOWN  
 DATE: 12/12/2020  
 DRAWN BY: JI  
 CHECKED BY: JI

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DESIGN		
ISSUED		

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**KEY PLAN**

**LEGEND:**  
 - - - - - PROPOSED ROAD  
 - - - - - BARBED WIRE FENCING  
 ●●●●● GREEN FEIL

**NOTE -**  
 ALL DIMENSIONS ARE IN METERS  
 2. TOTAL AREA OF PLAN = 42,110 SQ.M  
 3. TOTAL LENGTH OF 3.75m ROAD = 130.0m

**48 TPD MSW PROCESSING FACILITY COMPONENT LIST**

SR NO	COMPONENT NAME	SIZE IN METERS (L) (W)
01	RECEPTION PLATFORM-1	22.0 12.0
02	RECEPTION PLATFORM-2	33.0 21.0
03	EXISTING 5.00' TYP. FEEL	
04	RAILS - 10000 SQ.M	22.0 12.0 5.0
05	COMPACT CRUSHING & STORAGE	22.0 10.0 3.0
06	AGGREGATION & TIND	5.00 5.00 3.5
07	LOADING RAIL BRIDGE	10.0 5.0 3.0
08	ELECTRIC COMPACT UNIT	33.0 4.0 1.5
09	COMPACT COMPACT UNIT	40.0 10.0 5.0
10	10000 SQ.M TIND	1.50 50.0
11	PARKING AREA	

**WFT WASTE PROCESSING UNITS COMPONENT LIST**

SR NO	DESCRIPTION	HT	SLUICING POWER IN KW PER UNIT
1	FEEDER CONVEYOR	1.5	5.0
2	FEEDER CONVEYOR	1.5	10.0
3	REAR CONVEYOR	1.5	10.0
4	REAR CONVEYOR	1.5	10.0
5	REAR CONVEYOR	1.5	10.0
6	REAR CONVEYOR	1.5	10.0
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100	REAR CONVEYOR	1.5	10.0

**DO NOT SCALE**  
 PREPARED BY: YATA CONSULTING ENGINEERS LIMITED  
 PROJECT: LAYOUT OF 48 TPD MSW PROCESSING FACILITY AT DOWWALA  
 YATA CONSULTING ENGINEERS LIMITED  
 IN ASSOCIATION WITH PROCO CONSULTANTS PVT. LTD.

NO.	DATE	DESCRIPTION	BY	CHECKED	APPROVED
1	10/10/2010	PREPARED	YATA		
2	10/10/2010	CHECKED	YATA		
3	10/10/2010	APPROVED	YATA		
4	10/10/2010	REVISION	YATA		
5	10/10/2010	REVISION	YATA		
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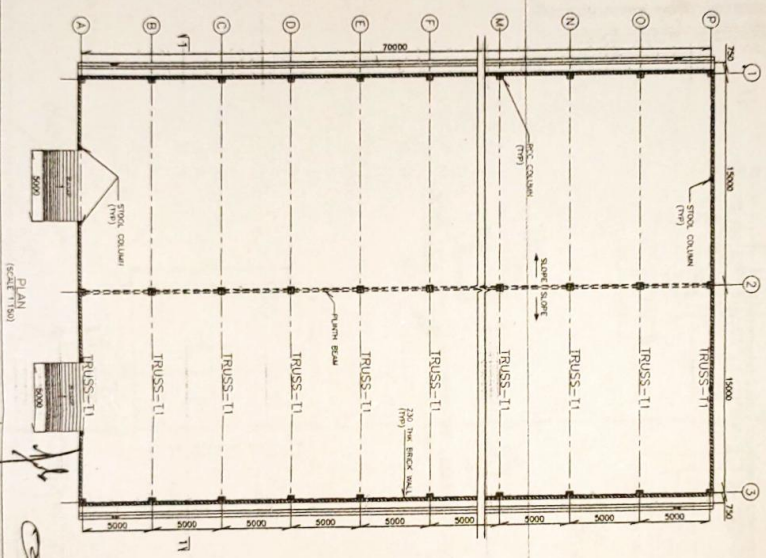
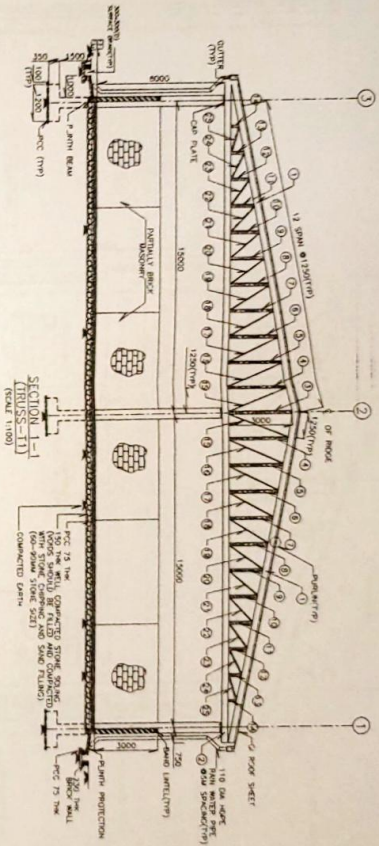
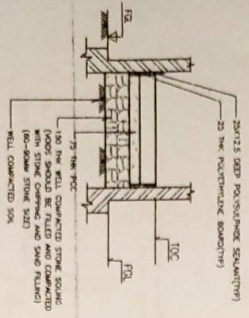
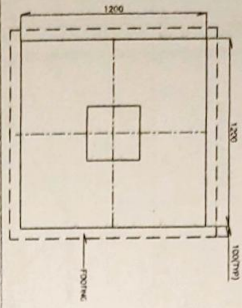
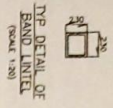
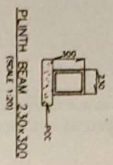
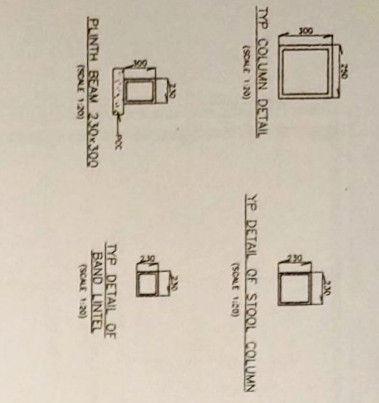


TABLE OF MEMBERS

MEMBER NO.	SECTION	LENGTH	MARKING
1.	ISMB 400	15000	TRUSS-T1
2.	ISMB 400	7500	TRUSS-T1
3 TO 6.	ISMB 400	15000	TRUSS-T1
7 TO 10.	ISMB 400	7500	TRUSS-T1
11 TO 15.	ISMB 400	15000	TRUSS-T1
16 TO 20.	ISMB 400	7500	TRUSS-T1
21 TO 25.	ISMB 400	15000	TRUSS-T1
TR. MEMBERS	ISMB 400	15000	TRUSS-T1
S&G RIBS	ISMB 400	15000	TRUSS-T1

FOR DMR PURPOSE ONLY  
 DO NOT SCALE  
 THIS DRAWING IS FOR INFORMATION ONLY AND IS NOT TO BE USED FOR CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE DIMENSIONS AND THE MATERIALS TO BE USED IN THE CONSTRUCTION OF THE SHED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE SHED FROM DAMAGE DURING CONSTRUCTION AND OPERATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE SHED AND FOR THE REPLACEMENT OF DAMAGED PARTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE SHED AND FOR THE SAFETY OF THE PEOPLE USING THE SHED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE SHED FROM FIRE AND FROM OTHER HAZARDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE SHED FROM VIBRATION AND FROM OTHER HAZARDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE SHED FROM POLLUTION AND FROM OTHER HAZARDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE SHED FROM ALL OTHER HAZARDS.

UTTARAKHAND URBAN SECTOR DEVELOPMENT AGENCY (USSDA)  
 TYPICAL GENERAL ARRANGEMENT OF PARTIALLY OPEN SHED AT RISHIKESH

TATA CONSULTING ENGINEERS LIMITED  
 MUMBAI

NO. 10375A-RK-2022-07  
 DATE: 10/05/2022  
 SCALE: AS SHOWN  
 SHEET NO. 01 OF 02

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 11  
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