



Tender Document

**for Construction of Rain Water Harvesting with recharge shaft (02 nos)
at Satya Bharti school in Tulesar & Surani village of Jodhpur District.**

BAIF Institute for Sustainable Livelihoods and Development
BAIF Bhavan, 18 G Block Hiran Magri, Sector 14, Udaipur, 313002. Rajasthan
Phone: 7073465513 (RO), 7488484469, (Field)

NOTICE INVITING TENDER

The duly sealed & signed Tender is invited in sealed envelope till **17.03.2025** up to 4.00 pm at our State head office – BAIF Bhawan, G-Block, Hiran Magri, Sector.14, Udaipur, Rajasthan, 313001. Each page of tender document must be sealed and signed. Your signature on the Tender document will be considered as your confirmation that you have read and accepted all the conditions laid down in the documents. Along with tender document the DD of earnest money must be submitted. Tender will not be accepted without earnest money. The tender will not be accepted after closing the time of submission as mentioned above. Before submitting a tender, the tendered shall also inspect the site of the work and acquaint him with the local conditions, means of access to the site of work, nature of work and all other matters pertaining thereto. The tendered will be deemed to have satisfied himself by actual inspection of the site and locality of the works.

Tender Details

Date of issue of tender	11.03.2025
Last date and time for submission of Tender Documents	17.03.2025 till 4.00 PM.
<i>Note: Tender form is given at the end of this document. Please use it for quoting your rate & cost, along with DD of Earnest money.</i>	

1. The tender document can be downloaded from the official website: <https://baif.org.in/tenders/>
2. The filled-up sealed tender document with the name of the work and the name of the tenderer written on the envelope will be submitted at BAIF Bhavan, G-Block, Hiran Magri, Sector.14, Udaipur, Rajasthan, till **17.03.2025** by hand/Registered Post/Courier and Password-protected pdf file on **tender.bisldrajasthan@baif.org.in**

Name of work: Construction of Rain Water Harvesting with Recharge Shaft

SN	Brief Description of work		Qntt	Place of work	Completion date of project
1	Rain Water Harvesting with recharge shaft	Construction of Rain Water Harvesting with recharge shaft 20,000 Lrt Capacity	02 nos	Satya Bharti school in Tulesar & Surani village in District Jodhpur	60 days from acceptance of work order.

(BOQ of Rain Water Harvesting with recharge shaft for one school)

Number of schools is two

S.NO.	DESCRIPTION	UNIT	QTY
1.0	<u>RAIN WATER GUTTER SYSTEM :</u>	Set	1
a)	Providing and installing UPVC gutter (160mm width, 100mm depth, 3mm thickness, 4kg/cm ² pressure rating) along the entire perimeter of all the buildings, complete with Centre fittings, Centre drop, elbows, clamps, corner elbows, leaf guard, end caps, and all necessary accessories for proper installation and functionality, including all required labor, materials, tools, and equipment to complete the work as specified. Considering 175 Mtr .	Mtr.	81.5
b)	Providing and installing UPVC downpipes (90-110mm diameter, 3mm thickness, 4kg/cm ² pressure rating) to be connected from the UPVC gutters, complete with bends, clamps, sockets, tees, rainwater outlets, and all necessary fittings and accessories, including proper alignment, sealing, and secure fixing to walls or columns as required, along with all labor, materials, tools, and equipment to complete the work as specified.	Mtr.	28

c)	Providing and laying underground UPVC pipes (110mm diameter, 3mm thickness, 4kg/cm ² pressure rating) for drainage, including construction of brick masonry manholes of size 450mm x 450mm x 450mm at regular intervals as per site conditions, specifications, and norms. The work includes excavation, bedding, jointing, proper alignment, haunching with 100mm (4 inches) thick concrete in 1:3:4 mix (cement: sand: aggregate), and connection of pipes to the de-silting chamber with all necessary fittings, accessories, sealing, backfilling, compaction, and disposal of surplus earth, along with all labor, materials, tools, and equipment required to complete the work as specified.		
	UPVC pipe haunching with 100mm Concrete (1:3:4)	Mtr	123
	brick masonry manholes of size 450mm x 450mm x 450mm	Nos	17
2.0	<u>RAIN WATER HARVESTING SYSTEM :</u>		
	Construction of rain water harvesting with storage capacity of 20000 litres considering effective depth for the re-charging of storm water including the civil work with following specification [Construction of Chamber].	Nos	1
3.0	<u>DE-SILTING CHAMBER:</u>		
	Providing and constructing masonry de-silting chamber 450mm x 450mm x 800mm with required depth inside (size can vary) with 75 class designated brick work in cement mortar 1:6 (1cement : 6 fine sand) with 500 mm dia. Perforated SFRC Manhole cover & Frame (1 Nos.). top slab 1:1:2 mix (1Cement : 1coarse sand : 2 graded stone aggregate 20mm nominal size) with perforation with minimum 1.5% reinforcement, foundation concrete 1:5:10 (1cement : 5 fine sand:10 grade stone aggregate 20mm nominal size including baffle wall, necessary excavation, back filling and disposal of surface earth. Complete with inlet, outlet and overflow arrangement and filled with boulders.(153-224)	Nos	1
4)	<u>DRILLING:</u>		
a)	Drilling percolation borehole 350 mm dia with reverse rotary method in all types of soil up to 40mm deputy including cost for mobilization of rig and making good the area upon completion of work. Contractor shall arrange for all necessary tools, water and consumable and laying for drilling.	Running Mtr	40
c)	Providing and laying pea gravel all around the casing pipe.	Cum	4
d)	180 mm dia slotted UPVC pipe of 6 Kg/cm ² - 35 m -40m or as per site sub-strata or set as per direction of Engineer- in charge.	Running Mtr	30
e)	180 mm dia UPVC blind pipe of 6 Kg/cm ² .	Running Mtr	10
5)	<u>RAIN WATER HARVESTING WELL FILTRATION CHAMBER:</u>		
	Providing and constructing rain water harvesting well/filtration with M10 RCC pipe of 1800mm dia x 2.5m length or construction of pit with brick masonry around with 3 m dia. with top slab 1:1:2 mix (1cement : 1 course sand :2 graded stone aggregate 20mm nominal size) with minimum 1.5% reinforcement. Boulder 5-10 cm,gravel 5-10mm size, coarse sand 1.5-2.0mm including necessary excavation, back filling and disposal of surface earth complete with inlet, outlet, overflow 100mm C.I vent pipe -2m height with cowls.	nos	1
6	P/F Barricading - 6 feet high with GI/MS Sheets - 0.35mm thick , supported by wooden Balli /MS Pole (c/c distance @ 10-12 feet ,grouted 2 feet in earth and clamp with J hooks , or required accessories, covered with green cloth facing towards school campus. After Completion of work removal of barricading & can take back. A separate entry and exit will be maintained for construction work till completion. Pit or borehole will be safely covered till completion of work and dedicated supervisor will be there to supervise and ensure the safety as per school norms.	SqM	72

Annexure:1 (RAIN WATER GUTTTER SYSTEM)

1.0	<u>RAIN WATER GUTTTER SYSTEM :</u>	Set	1
	-		
a)	Providing and installing UPVC gutter (160mm width, 100mm depth, 3mm thickness, 4kg/cm ² pressure rating) along the entire perimeter of all the buildings, complete with centre fittings, centre drop, elbows, clamps, corner elbows, leaf guard, end caps, and all necessary accessories for proper installation and functionality, including all required labor, materials, tools, and equipment to complete the work as specified. Considering 175 Mtr . (Photo Attached)	Mrt	81.5
b)	Providing and installing UPVC downpipes (90-110mm diameter, 3mm thickness, 4kg/cm ² pressure rating) to be connected from the UPVC gutters, complete with bends, clamps, sockets, tees, rainwater outlets, and all necessary fittings and accessories, including proper alignment, sealing, and secure fixing to walls or columns as required, along with all labor, materials, tools, and equipment to complete the work as specified.	Mrt	28
c)	Providing and laying underground UPVC pipes (110mm diameter, 3mm thickness, 4kg/cm ² pressure rating) for drainage, including construction of brick masonry manholes of size 450mm x 450mm x 450mm at regular intervals as per site conditions, specifications, and norms. The work includes excavation, bedding, jointing, proper alignment, haunching with 100mm (4 inches) thick concrete in 1:3:4 mix (cement: sand: aggregate), and connection of pipes to the de-silting chamber with all necessary fittings, accessories, sealing, backfilling, compaction, and disposal of surplus earth, along with all labor, materials, tools, and equipment required to complete the work as specified.		
	UPVC pipe haunching with 100mm Concrete (1:3:4)	Mtr	123
	brick masonry manholes (photo & Estimate attached) of size 450mm x 450mm x 450mm	Nos	17

Annexure 1.1 (Gutter System)



rainwater gutter is the revolution in the roofing industry. It is made of uPVC material which has a life of minimum 25 years. The patented design of the gutter blends in perfectly to any type of building making it aesthetically pleasing and have many other advantages. It sits closer to the building than any other round or corrugated designed gutters thereby reducing chance of spillovers. The water carrying capacity cannot be matched in any other design. Colors of the gutter are precisely selected to match the popular roofing tiles/sheets. Extensive quality check is done since we provide zero defect promise.

Width	: 160 MM
Depth	: 100 MM
Length	: 3 METERS, 5 METERS
Thickness	: 3 MM (u Kg/cm ² Gauge), Added rib for extra strength
Material	: UPVC (Unplasticized Poly Vinyl Chloride)
Colors	: Milky White, Brick Red, Blue, Dark Grey, Coffee Brown
Flow capacity	: 16 Liters/meter
Minimum life	: 25 years

GUTTER FITTINGS



Center joint fitting is used to connect one gutter to another. Also called 'COUPLING'. It provides an edge effect to the gutter. Also ensures the level of the gutter looks like a 'line' from point A to B. It locks the gutter inside the clip which prevents the edges from flipping out. Available in multiple colors to match your gutter color. Use silicone sealant inside the slot first and then slide the gutter inside it. Solvent cement is not required.

Width	: 160 MM
Depth	: 100 MM
Length	: 80 MM
Thickness	: 3 MM (u Kg/cm ² Gauge), Added rib for extra strength
Material	: UPVC (Unplasticized Poly Vinyl Chloride)
Colors	: Milky White, Brick Red, Blue, Dark Grey, Coffee Brown
Installation	: Silicone inside slot and screw in slot to gutter.
Minimum life	: 25 years

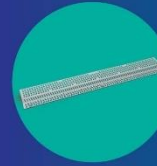
Center drop fitting is used to connect one gutter to another with an outlet for water. Also called 'RUNNING OUTLET'. Outlet size- 90 MM (3 inches) round. You could use Round X Square adaptor fitting to connect our HYSQUARE pipe as outlet for better aesthetics. It is made from best quality uPVC with glossy finish. It locks the gutter inside the clip which prevents the edges from flipping out. Available in multiple colors to match your gutter color. Use self-screws to fix the gutter. Use silicone sealant inside the slot first and then slide the gutter inside it.

Width	: 160 MM
Depth	: 100 MM
Length	: 230 MM
Outlet	: 90 MM (3 inches round)
Material	: UPVC (Unplasticized Poly Vinyl Chloride)
Colors	: Milky White, Brick Red, Blue, Dark Grey, Coffee Brown
Installation	: Silicone inside slot and screw in slot to gutter.
Minimum life	: 25 years



LEAF GUARD

LEAF GUARD is a revolution in the gutter industry. The major issue faced by gutters was the leaves and other particles falling inside the gutter that blocks the water flow. Since it falls inside the duct of the gutter, it won't fly away. With LEAF GUARD a UPVC net is fixed to the gutter in leaf prone areas whereby the leaf will not go inside the gutter. This has enabled a maintenance free gutter system.



Width	: 160 MM
Depth	: 100 MM
Length	: 1 meter
Thickness	: 3 MM (u Kg/cm ² Gauge)
Material	: UPVC (Unplasticized Poly Vinyl Chloride)
Colors	: Milky White
Installation	: Clip Lower side to inside for wall direction of gutter and upper side screw to gutter outside
Minimum life	: 25 years



CORNER DROP/ ELBOW DROP

CORNER DROP/ELBOW DROP fitting is used to turn the direction of the gutter in 90 degree along with an outlet. Lines running through the edges ensures strength along with aesthetics. It locks the gutter inside the clip which prevents the edges from flipping out. Outlet size is 90 MM (3 inches round). You could use Round X Square adaptor fitting to connect our HYSQUARE pipe as outlet for better aesthetics. Available in multiple colors to match your gutter color. Use self-screws to fix the gutter. Use silicone sealant inside the slot first and then slide the gutter inside it. Solvent cement is not required.

END CAP

END CAP fitting is used to close a side of gutter. It locks the gutter inside the clip which prevents the edges from flipping out. Available in multiple colors to match your gutter color. Use silicone sealant inside the slot first and then slide the gutter inside it. Solvent cement is not required.

Width	: 150 MM
Depth	: 100 MM
Length	: 43 MM
Thickness	: 3 MM (u Kg/cm ² Gauge)
Material	: UPVC (Unplasticized Poly Vinyl Chloride)
Colors	: Milky White, Brick Red, Blue, Dark Grey, Coffee Brown
Installation	: Silicone inside slot and screw in slot to gutter.
Minimum life	: 25 years



Width	: 160 MM
Depth	: 100 MM
Length	: 95 MM EACH SIDE
Outlet	: 90 MM (3 inches round)
Material	: UPVC (Unplasticized Poly Vinyl Chloride)
Colors	: Milky White, Brick Red, Blue, Dark Grey, Coffee Brown
Installation	: Silicone inside slot and screw in slot to gutter.
Minimum life	: 25 years

ELBOW 90°

CORNER/ELBOW 90° fitting is used to turn the direction of the gutter in 90 degree. Lines running through the edges ensures strength along with aesthetics. It locks the gutter inside the clip which prevents the edges from flipping out. Available in multiple colors to match your gutter color. Use self-screws to fix the gutter. Use silicone sealant inside the slot first and then slide the gutter inside it. Solvent cement is not required.



Width	: 160 MM
Depth	: 100 MM
Length	: 95 MM EACH SIDE
Thickness	: 3 MM (u Kg/cm ² Gauge), Added rib for extra strength
Material	: UPVC (Unplasticized Poly Vinyl Chloride)
Colors	: Milky White, Brick Red, Blue, Dark Grey, Coffee Brown
Installation	: Silicone inside slot and screw in slot to gutter.
Minimum life	: 25 years



END DROP

END DROP fitting is used to outlet the water with a stopper. Outlet size- 90 mm (3 inches) round. You could use Round X Square adaptor fitting to connect our HYSQUARE pipe as outlet for better aesthetics. It locks the gutter inside the clip which prevents the edges from flipping out. Available in multiple colors to match your gutter color. Use silicone sealant inside the slot first and then slide the gutter inside it. Solvent cement is not required.

Width	: 60 MM
Depth	: 100 MM
Length	: 192 MM
Outlet	: 90 MM (3 inches round)
Material	: UPVC (Unplasticized Poly Vinyl Chloride)
Colors	: Milky White, Brick Red, Blue, Dark Grey, Coffee Brown
Installation	: Silicone inside slot and screw in slot to gutter.
Minimum life	: 25 years

CLAMP

CLAMP is the most important fitting for any type of gutter. The stronger the clamp, better the life of the gutter. Also hanging system differ from type of clamps. There are three types of clamps. 1. UPVC CLAMP 2. GI CLAMP and 3. uPVC CLAMP with GI handle. GI clamp and uPVC clamp with GI handle can be used for walling to metal surfaces. uPVC clamp can be screwed to concrete flat surfaces. Stop must be provided when installing the clamps to avoid flow. It locks the gutter inside the clip which prevents the edges from flipping out. Available in multiple colors to match your gutter color. Minimum space between two clamps should not exceed 1 meter.

CORNER/ELBOW 45° fitting is used to turn the direction of the gutter in 45 degree. Lines running through the edges ensures strength along with aesthetics. It locks the gutter inside the clip which prevents the edges from flipping out. Available in multiple colors to match your gutter color. Use self-screws to fix the gutter. Use silicone sealant inside the slot first and then slide the gutter inside it. Solvent cement is not required.

Width	: 160 MM
Depth	: 100 MM
Length	: 180 MM
Thickness	: 3 MM (u Kg/cm ² Gauge), Added rib for extra strength
Material	: UPVC (Unplasticized Poly Vinyl Chloride)
Colors	: Milky White, Brick Red, Blue, Dark Grey, Coffee Brown
Installation	: Silicone inside slot and screw in slot to gutter.
Minimum life	: 25 years

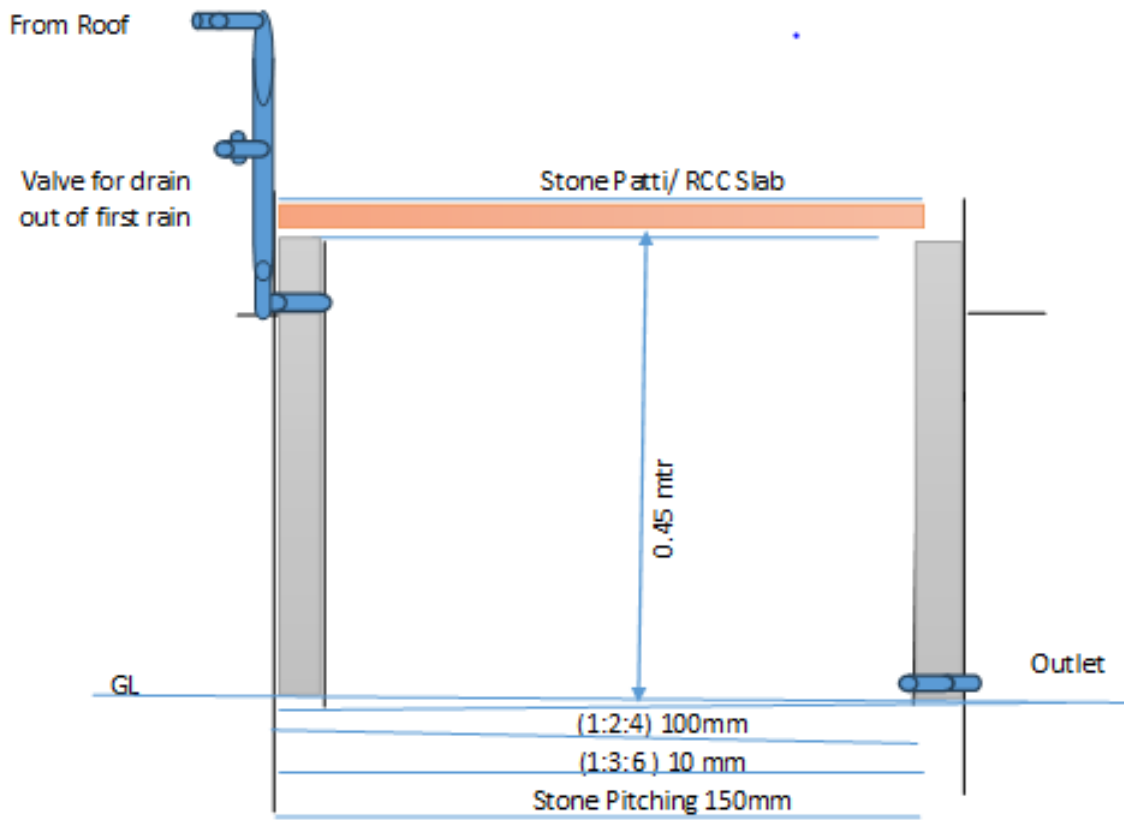
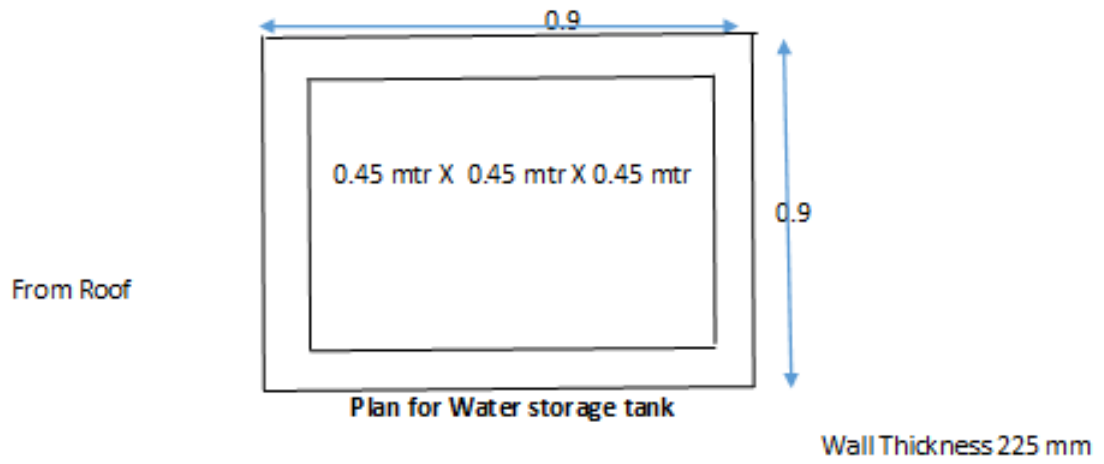


Width	: 100 MM
Depth	: 100 MM
Types	: uPVC, GI coated iron, uPVC with GI extension with stop adjustment
Thickness	: 3 MM (u Kg/cm ² Gauge)
Material	: UPVC (Unplasticized Poly Vinyl Chloride)
Colors	: Milky White, Brick Red, Blue, Dark Grey, Coffee Brown
Installation	: Walling for GI clamp, Walling and Horizontal screw for uPVC with GI clamp, Vertical screw system with multiple slots for uPVC Clamp.
Minimum life	: 25 years



Annexure 1.2 (Main Hall drawing)

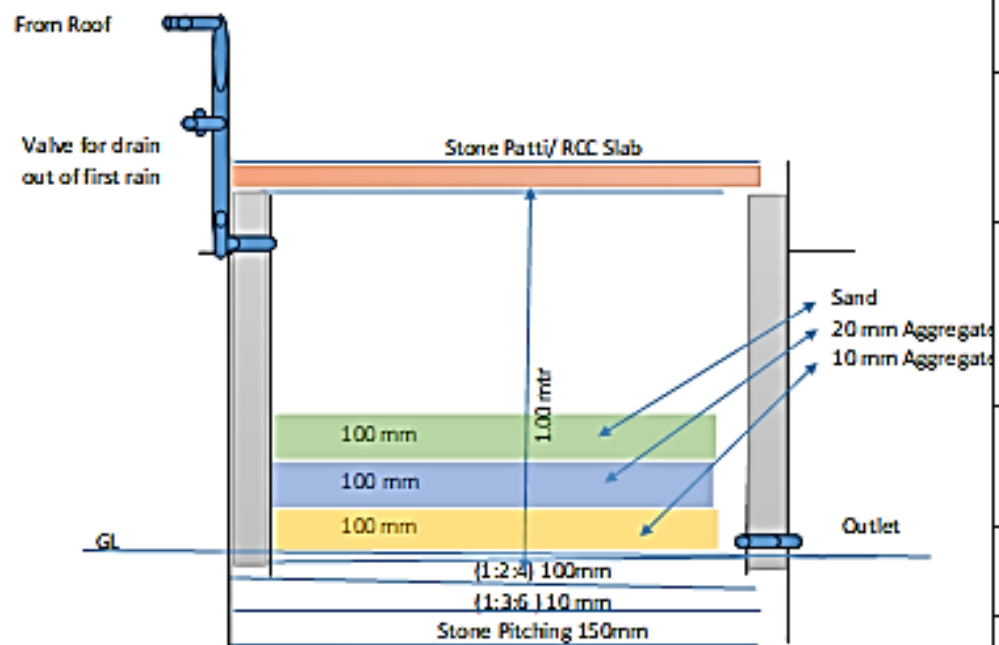
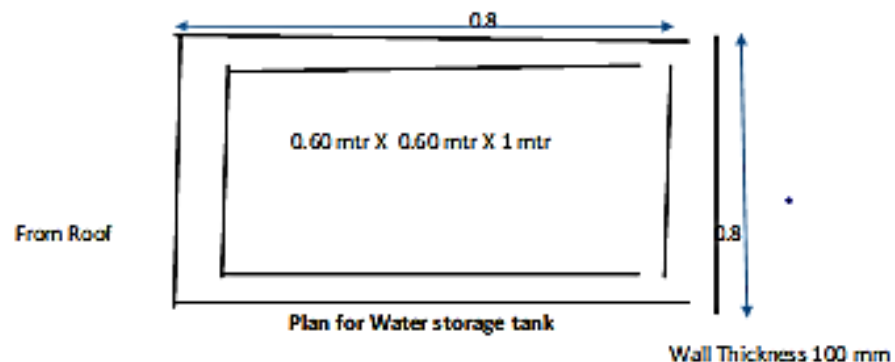
BAIF:Airtal Project
Drawing of Manhole



Cross section of Water storage tank

Annexure 3 (De siltation Chamber)

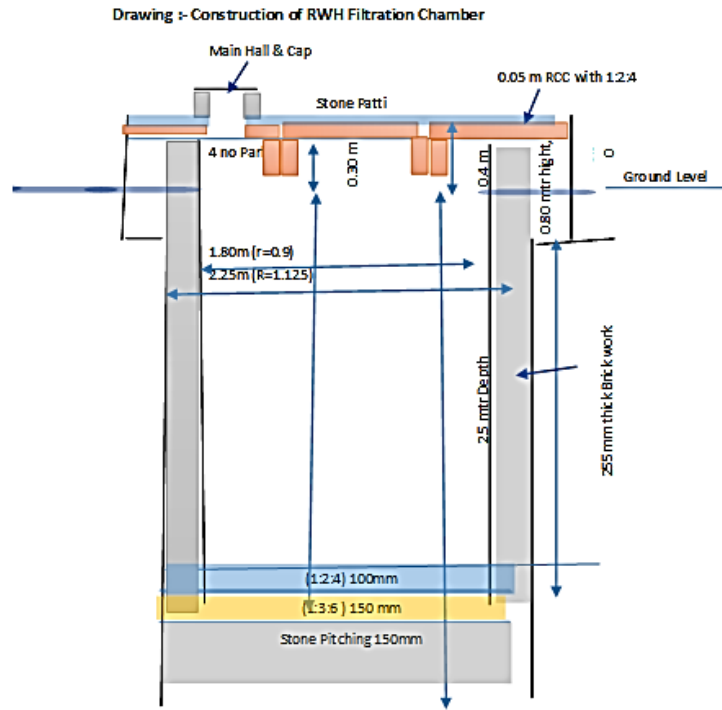
BAIF:Airtal Project
Drawing of De Siltation Chamber



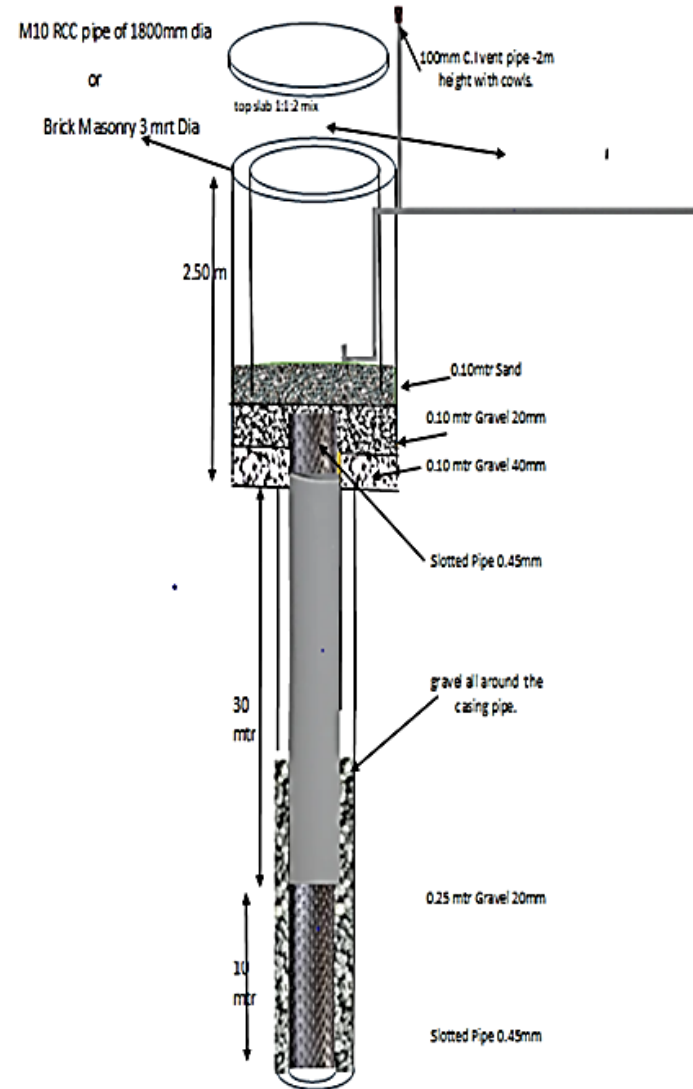
Bharti Airtel Foundation									
Estimation									
Name of the Work :- Construction of RWHT									
S/N	Particular	Description	no	Length	Width	Thickness	Q/mtt	Units	
1	Earth excavation	Water storage Tank	1	0.8	0.8	0.35	0.22	CuM	
							0.22	CuM	
							Say	0.20	Sum
2	RR stone Pitching below Floor	Water storage Tank	1	0.8	0.8	0.15	0.10		
							Say	0.10	CuM
3	PCC with 1:3:6	Water storage Tank	1	0.8	0.8	0.1	0.06		
							Say	0.10	CuM
4	RCC with 1:2:4	Bottom	1	0.8	0.8	0.1	0.06	CuM	
		Top	1	0.8	0.8	0.1	0.06	CuM	
								0.13	
								Say	0.15
5	Back Work with (1:6)	Wall	2	0.8	0.25	1	0.40	CuM	
		Wall	2	0.8	0.25	1	0.40	CuM	
							TTL	0.80	CuM
						Say	0.80	CuM	
6	Reinforcement 10 mm	Floor & Top	10	0.8			8.00	RM	
		Floor & Top	10	0.8			8.00	RM	
		Warrage					1.60	RM	
							17.60	RM	
							Wt. 0.62 KG/Mtr	10.91	KG
6	Shuttering	Outer Wall	2	0.8		1	1.60	SqM	
		Outer Wall	2	0.8		1	1.60	SqM	
		Internal Wall	2	0.6		1	1.20	SqM	
		Internal Wall	2	0.6		1	1.20	SqM	
		Roof (Double Taken)	1	0.8	1		0.80	SqM	
							Say	6.40	SqM
7	Plaster	Internal Wall	4	0.6		1	2.40	SqM	
		Outer Wall	4	0.8		1	3.20	SqM	
		Top	1	0.8	0.8		0.64	SqM	
							Say	6.24	SqM
8	Filter material	Aggregate 20mm							
		Aggregate 10mm							
		Aggregate Sand						-	LS
9	Zall filter	Band				Approx rate		LS	

Total Cost

Annexure RAIN WATER HARVESTING WELL FILTRATION CHAMBER:



RAIN WATER HARVESTING WELL FILTRATION CHAMBER:




Sushant Kumar
 Associate Development Engineer
 BISLD - Rajasthan

Term & conditions:

1. The contractor must have their registration, GST registration, PAN. The duly signed copy of each document shall be submitted along with tender.
2. Earnest money (1% of Tender value) shall be submitted along with tender through DD in favor of "BAIF INSTITUTE FOR SUSTAINABLE LIVELIHOODS DEVELOPMENT, Rajasthan." payable at Udaipur. Tender will not be accepted without earnest money. The Earnest Money will be returned to unsuccessful tenderers within reasonable time.
3. The rate will include excavation, back filling and all other operations required to complete the work, including p/f barricading -6 ft high with GI/MS sheets - 0.35 mm thick, supported by wooden batti/MS poles (c/c distance @ 10-12 ft), grouted 2 ft into the earth and clamped with J hooks, or necessary accessories, covered with green cloth towards the school premises. The barricading can be removed and taken back after the work is completed.
4. A separate entry and exit for the construction work will be maintained till completion. The pit or borehole will be securely covered till the work is completed and dedicated supervisor will be present there to monitor and ensure safety as per school norms.
5. Specification of Materials to be used:
6. Cement: Ultratech or Wonder – PPC, Sand: A Grade Quality, Stone Aggregates: A Grade Quality, Brick 75A Grade, Pipes & Gutters ISI mark and Others: As specified in BOQ and sample should be approved by our engineer.
7. Excess quantity of work will not be considered. So, keep the size of each activity as given in work order.
8. In case, if because of site conditions it requires to change the length, width and depth of Activity it may be done. But quantity of excavation work will not exceed the quantity of excavation work as mentioned in work order.
9. The payment will be made for actual quantity of work, but not more than the quantity of work as mentioned in work order.
10. The advance payment shall not be made. The running payment shall be made against (Running bills) i.e. the quantity of actual work done (which will be measured by our Engineer). The 70% amount of measured value shall be given after submission of bill by Contractor
11. Final payment for each structure will be made after satisfactory completion of the work.
12. Penalty for delay in completion of work: The organization may impose penalty for delay in completion of work except in case of natural calamities and law & order disturbances. The penalty amount shall be Rs. 500.00 per day. Tenderer must agree for bearing penalty amount for delay in completion of work.
13. The rates offered by the Bidder/ Tenderer will be inclusive of all Taxes, license fee, Royalty, Octroi etc. labour and construction Materials, all Tools & Plants, water & power required for satisfactory completion of the work.
14. In case of any mis-happening, injuries or damaged occurred at site, it will be responsibility of the Contractor.
15. Mention clearly that the rates are including GST or excluding GST and mention GST rate in %.
16. The organization reserves the right to change or amend the drawing as and when necessary and shall be notified in advance.
17. All works will be paid on the basis of actual measurements taken at site by our Engineer after satisfactory work completion.
18. The authority for the acceptance of the tender will rest with the organization. It shall not be obligatory on the said authority to accept the lowest tender or any other tender and no tenderer (s) shall demand neither any explanation for the cause of rejection of his /their tender nor the organization undertake to assign reasons for declining to consider or reject any particular tender or tenders.
19. The competent authority of organization for the acceptance of the tender reserves the right to divide the tender amongst more than one tenderer, if deemed necessary.
20. Defect liability period / Maintenance period: The maintenance period will be of 12 months for each unit from date of satisfactory completion of work. In case, if defects found after completion of work, the contractor shall immediately repair the defects free of cost up to 12 months after completion of work. Contractor shall not claim any amount for repairing work.
21. **SD Money:** In addition to earnest money, the 04% amount will be deducted from each bill as a Security deposit. 4% of cost of construction (excluding GST). This amount will be retained for 12 months i.e. maintenance period. This amount will be back after maintenance period if all the required maintenance is done by contractor.
22. The Work cannot be subcontracted. In such cases, the contract will be terminated and Earnest money will be forfeited.

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TENDER DECLARATION

1. I/We have read and examined all the tender documents.
2. We also undertake, if required, to provide evidence of the financial and economic standing and the technical and professional capacity according to the selection criteria for this call for tender. We also understand that if we fail to provide the proof/evidence required, within 7 calendar days after receiving the notification of award, or if the information provided is proved false, the award may be considered null and void.
3. I/We shall be debarred for tendering with BISLD-Rajasthan. Also, if such a violation comes to the notice of BISLD-Rajasthan before the date of start of work, BISLD-Rajasthan shall be free to forfeit the entire amount of earnest money deposit.
4. I/We hereby declare that I/We shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information derived therefrom to any person other than a person to whom I/We am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of BISLD-Rajasthan.

Yours faithfully

Name and Signature of Authorized Person.....

Date & Place.....

Seal of the firm/company/entity

Quotation /Tender value

1. :- Rain Water Harvesting at community level at four village

I am ready to do following items of work at the below-mentioned rates: (Give the rates).

S.NO.	DESCRIPTION	UNIT	QTY	RATE (Rs.)	AMOUNT (Rs.)
1.0	<u>RAIN WATER GUTTTER SYSTEM :</u>	Set	1		
	-				
a)	Providing and installing UPVC gutter (160mm width, 100mm depth, 3mm thickness, 4kg/cm ² pressure rating) along the entire perimeter of all the buildings, complete with centre fittings, centre drop, elbows, clamps, corner elbows, leaf guard, end caps, and all necessary accessories for proper installation and functionality, including all required labor, materials, tools, and equipment to complete the work as specified. (Note:- for Bill Measurement will only length of gutter)	Mtr	81.5		
b)	Providing and installing UPVC downpipes (90-110mm diameter, 3mm thickness, 4kg/cm ² pressure rating) to be connected from the UPVC gutters, complete with bends, clamps, sockets, tees, rainwater outlets, and all necessary fittings and accessories, including proper alignment, sealing, and secure fixing to walls or columns as required, along with all labor, materials, tools, and equipment to complete the work as specified.	UPVC downpipes (90 diameter,	Mtr	14	
		UPVC downpipes (110mm diameter,	Mtr	14	
c)	Providing and laying underground UPVC pipes (110mm diameter, 3mm thickness, 4kg/cm ² pressure rating) for drainage, including construction of brick masonry manholes of size 450mm x 450mm x 450mm at regular intervals as per site conditions, specifications, and norms. The work includes excavation, bedding, jointing, proper alignment, haunching with 100mm (4 inches) thick concrete in 1:3:4 mix (cement: sand: aggregate), and connection of pipes to the de-silting chamber with all necessary fittings, accessories, sealing, backfilling, compaction, and disposal of surplus earth, along with all labor, materials, tools, and equipment required to complete the work as specified.				
	UPVC pipe haunching with 100mm Concrete (1:3:4)	Mtr	123		
	brick masonry manholes of size 450mm x 450mm x 450mm	Nos	17		

2.0	<u>RAIN WATER HARVESTING SYSTEM :</u>				
	Construction of rain water harvesting with storage capacity of 20000 liters considering effective depth for the re-charging of storm water including the civil work with following specification [Construction of Chamber].	Nos	1		
a)	<u>DE-SILTING CHAMBER:</u>				
	-				
	Providing and constructing masonry de-silting chamber 450mm x 450mmx 800mm with required depth inside (size can vary) with 75 class designated brick work in cement mortar 1:6 (1cement : 6 fine sand) with 500 mm dia. Perforated SFRC Manhole cover & Frame (1 Nos.). top slab 1:1:2 mix (1cement : 1coarse sand : 2 graded stone aggregate 20mm nominal size) with perforation with minimum 1.5% reinforcement, foundation concrete 1:5:10 (1cement : 5 fine sand:10 grade stone aggregate 20mm nominal size including baffle wall, necessary excavation, back filling and disposal of surface earth. Complete with inlet, outlet and overflow arrangement and filled with boulders .(153-224)	Nos	1		
b)	<u>DRILLING:</u>				
	-				
	Drilling percolation borehole 350 mm dia with reverse rotary method in all types of soil up to 40mm deputy including cost for mobilization of rig and making good the area upon completion of work. Contractor shall arrange for all necessary tools, water and consumable and laying for drilling.	Running Mtr	40		
c)	Providing and laying pea gravel all around the casing pipe.	Cum	4		
d)	180 mm dia slotted UPVC pipe of 6 Kg/cm ² - 35 m -40m or as per site sub-strata or set as per direction of Engineer- in charge.	Running Mtr	30		
e)	180 mm dia UPVC blind pipe of 6 Kg/cm ² .	Running Mtr	10		

f)	RAIN WATER HARVESTING WELL FILTRATION CHAMBER:				
	Providing and constructing rain water harvesting well/filtration with M10 RCC pipe of 1800mm dia x 2.5m length or construction of pit with brick masonry around with 3 m dia. with top slab 1:1:2 mix (1cement : 1 course sand :2 graded stone aggregate 20mm nominal size) with minimum 1.5% reinforcement. Boulder 5-10 cm,gravel 5-10mm size, coarse sand 1.5-2.0mm including necessary excavation, back filling and disposal of surface earth complete with inlet, outlet, overflow 100mm C.I vent pipe -2m height with cowls.	nos	1	-	
	Rate shall include excavation, back filling and all other operations necessary for completing the job inclusive P/F Barricading - 6 feet high with GI/MS Sheets - 0.35mm thick , supported by wooden Balli /MS Pole (c/c distance @ 10-12 feet ,grouted 2 feet in earth and clamp with J hooks , or required accessories, covered with green cloth facing towards school campus. After Completion of work removal of barricading & can take back. A separate entry and exit will be maintained for construction work till completion. Pit or borehole will be safely covered till completion of work and dedicated supervisor will be there to supervise and ensure the safety as per school norms. A shop drawing will also required before start of work. Plaster admixed with waterproofing compound is included in scope wherever required.	SqM (Floor Area)	72		

Amount in words: Rs.....

Any additional information

Date:

Signature with Stamp:

XXXXXXXXXX