

## **GENERAL ABSTRACT OF COST**

Name of Work: Construction of Proposed Store and Maintenance Shed  
Structure at HPY

<b>Sl. No.</b>	<b>Particulars</b>	<b>Abstract of Cost Amount</b>
		(Rs)
1	Cost for Building Works	15,37,955.00
2	Cost for Ancillary Works, if any	50,000.00
4	Total Cost	15,87,955.00

Detailed Estimate & BOQ for Proposed Store and Maintenance Shed Structure at HPY - Civil Work

Sl. No	Description of Items	Qty.	Unit	Rate (Rs)	Amount (Rs)
1	2	3	4	5	6=3x5
	<u>1. Civil Work</u>				
1	Earthwork in excavation of foundation trenches or drains, in all sorts of soil (including mixed soil but excluding laterite or sandstone) including removing, spreading or stacking the spoils within a lead of 75 mtr. as directed. The item includes necessary trimming the sides of trenches, levelling, dressing and ramming the bottom, bailing out water as required complete.				
a	Depth of excavation average 1500 mm.	50	Cum.	119.27	5,963.50
2	Earth work in filling in foundation trenches or plinth in layers not exceeding 150 mm. Including watering and ramming etc. layer by layer complete.				
a	With earth obtained from excavation of foundation.	40	Cum.	77.54	3,101.60
3	Filling in foundation or plinth by silver sand in layers not exceeding 150 mm. as directed and consolidating same by thorough saturation with water ramming complete including cost of supply of silver sand. (Payment to be made on measurement of finished quantity).	40	Cum.	936.21	37,448.40
4	Single brick flat soling of picked jhama bricks including ramming and dressing bed to proper level and filling joints with powdered earth or local sand , in foundation, plinth and plinth protection.	150	Sqm.	358.00	53,700.00
5	Ordinary Cement Concrete (mix 1:2:4) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement, if any, in ground floor, as per relevant IS Codes.	15	Cum.	5262.54	78,938.10

<b>Sl. No</b>	<b>Description of Items</b>	<b>Qty.</b>	<b>Unit</b>	<b>Rate (Rs)</b>	<b>Amount (Rs)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6=3x5</b>
6	Controlled Cement concrete grade M 20 mix with well graded stone chips (20 mm grade) excluding shuttering and reinforcement with complete design of concrete as per ISI-456 and relevant special publications, submission of job mix formula after preliminary mix design after testing of concrete cubes as per direction of Engineer-in-charge. Consumption of cement will not be less than 6 bags/300 kg of cement with Super plasticiser per cubic meter of controlled concrete but actual consumption will be determined on the basis of preliminary test & job mix formula. In ground floor and foundation. Using concrete mixture M20 Grade ( Pakur Variety)				-
a	In ground floor.	15	Cum.	5968.14	89,522.10
7	Brick work with 1st class bricks in cement mortar (6:1).				-
a	In foundation and plinth.	10	Cum.	5306.00	53,060.00
8	Hire and labour charges for shuttering with centering and necessary staging upto 4 m. using approved stout props and 9 to 12 mm. thick approved quality Steel / Ply board shuttering with required bracing for concrete slabs, beams, columns, lintels etc.including fittings, fixing and striking out after completion of works.				-
a	In ground floor.	75	Sqm.	335.00	25,125.00

<b>Sl. No</b>	<b>Description of Items</b>	<b>Qty.</b>	<b>Unit</b>	<b>Rate (Rs)</b>	<b>Amount (Rs)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6=3x5</b>
9	Reinforcement for reinforced concrete work in all sorts of structures including distribution bars, stirrups, binders etc. including supply of rods, initial straightening and removal of loose rust (if necessary), cutting to requisite length, hooking and bending to correct shape, placing in proper position and welding (binding with 16 gauge annealed wire) at every intersection, complete as per drawing and direction.				-
a	For works in foundation, ground and first floor with Tor steel / mild steel. ( SAIL /TATA )	2.75	MT	58249.00	1,60,184.75
10	Plaster (to wall, floor, ceiling etc.) with sand and cement mortar including rounding off or chamfering corners as directed and raking out joints or roughening of concrete surface by chipping etc. including throating, nosing and drip course where necessary.				-
a	15 mm. thick wall plaster with cement mortar (6:1)	125	Sqm.	145.00	18,125.00
11	Artificial stone in floor, dado, staircase etc. with cement concrete (1:2:4) with stone chips, laid in panels as directed with topping made with ordinary or white cement (as necessary) and marble dust in proportion (1:2) including smooth finishing and rounding off corners and including raking out joints or roughening of concrete surface and application of cement slurry before flooring works, using cement @ 1.75 kg / sqm. all complete including all materials and labour.				-
	In ground floor.				-

<b>Sl. No</b>	<b>Description of Items</b>	<b>Qty.</b>	<b>Unit</b>	<b>Rate (Rs)</b>	<b>Amount (Rs)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6=3x5</b>
	3 mm. thick topping (High polishing grinding on this item is not permitted with ordinary cement).				-
a	25 mm thick.	135	Sqm.	269.00	36,315.00
<b>Total Amount of Civil Work</b>					<b>5,61,483.45</b>

Detailed Estimate & BOQ for Proposed Store and Maintenance Shed Structure at HPY -  
Fabrication & Shed Structural Work

Sl.No	Description of Items	Qty.	Unit	Rate (Rs)	Amount (Rs)
1	2	3	4	5	6=3x5
	<b><u>2. Fabrication &amp; Shed structural work</u></b>				
1	Galvanised corrugated iron sheet work (excluding the supporting frame work) fitted and fixed with 10 mm. dia J or L hook - bolts, limpet and bitumen washers and putty complete with 150 mm. end lap and one corrugation minimum side lap. (Payment should be made on area of finished work) (GCI sheet to be supplied by contractor).				
a	In roof.				
i	With 0.63 mm thick sheet.	170	Sqm.	644.00	1,09,480.00
b	In wall.				-
i	With 0.63 mm thick sheet.	200	Sqm.	630.00	1,26,000.00
2	Galvanised iron sheets valley gutter with perimeter not less than 750 mm. with 225 mm. lap each way fitted and fixed with necessary bolts, nuts, screws etc. complete. Valley gutter made of 0.63 mm. thick sheets. (300 mm. end lapping).	25	RM	543.00	13,575.00
3	Galvanized iron sheet ridging fitted with necessary bolts, screws, washers etc complete. (225 mm. end lapping).				-
a	300 mm. lapping each way.				-
i	With 0.60 mm sheet.	13	RM	380.00	4,940.00

<b>Sl.No</b>	<b>Description of Items</b>	<b>Qty.</b>	<b>Unit</b>	<b>Rate (Rs)</b>	<b>Amount (Rs)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6=3x5</b>
4	Supplying, fitting & fixing UPVC pipes A - type and fittings conforming to IS: 13592 - 1992 with all necessary clamps nails, including making holes in walls, floor etc. cutting trenches in any soil, through masonry, concrete structures etc. if necessary and mending good damages including joining with jointing materials (Spun Yarn, Valamoid / Bitumen / M - Seal etc.) complete.				-
a	110 mm. dia.	50	RM	251.00	12,550.00
b	110 mm. dia. Bend	10	Nos	140.00	1,400.00
5	Labour for hoisting and placing in proper position (upto 1st floor level) departmental R.S. joints, channels, angles, tees, plates etc. including fitting and fixing same with bolts and nuts, if necessary (but excluding cost of such bolts and nuts).	70	Qtl	412.00	28,840.00
6	Priming one coat on steel or other metal surface with synthetic oil bound primer of approved quality including smoothening surfaces by sand papering etc.	300	Sqm.	29.00	8,700.00
7	Painting with superior quality aluminium paint of approved make and brand including smoothening surface by sand papering etc on steel surface :				-
a	Two coats.	300	Sqm.	57.00	17,100.00
8	Supplying, fitting & fixing TF Bolt with one Nut & two Washers etc complete as per drawing and direction of Engineering -in- Charge (Local market rate)	75	Kg	135.00	10,125.00

<b>Sl.No</b>	<b>Description of Items</b>	<b>Qty.</b>	<b>Unit</b>	<b>Rate (Rs)</b>	<b>Amount (Rs)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6=3x5</b>
	<b>Total Amount of Fabrication &amp; Shed structural work</b>				<b>3,32,710.00</b>



Detailed Estimate & BOQ for Proposed Store and Maintenance Shed Structure at HPY-  
Structural Work

Sl.No	Description of Items	Qty.	Unit	Rate (Rs)	Amount (Rs)
1	2	3	4	5	6=3x5
	<b>3. STRUCTURAL WORK</b>				
1	M.S. structural works in columns, beams etc with simple rolled structural members (e.g. joists, angle, channel sections) conforming to IS : 226, IS : 808 SP (6)- 1964 connected to one another with bracket, gussets, cleats as per design, direction of Engineer-in-Charge complete including cutting to requisite shape and length, fabrication with necessary bolting, metal arc welding conforming to IS : 816-1956 & IS : 1995 using electrodes of approved make and brand conforming to IS : 814-1957, haulage, hoisting and erection all complete. The rate includes the cost of rolled steel section, consumables such as electrodes, gas and hire charges of all tools and plants and labour required for the work including all incidental charges such as electricity charges, labour insurance charges etc.				
	Payment to be made on the basis of calculated weight of structural members only in finished work as per IS specified weight. Payment for gusset, bracket, cleat, rivets, bolts and nuts may be made by adding the actual weight of such items with the weight of finished structural members or 7% of weight for finished structural members weighing not less than 22.5 kg/m. or 15% of weight for finished structural members weighing less than 22.5 kg/m. may be increased to allow for bracket, cleat, rivet, bolts and nuts etc and no separate payment being made for these items, as per direction of Engineer-in-Charge. The rates are considered for a height of erection 8 mtr. / 2nd floor level from the ground. Add 1.5% extra over the rate for each additional floor or 4 mtr. beyond initial 8 mtr. or part thereof.				
II)	For structural works in Roof Trusses etc. using joists, channels and angles of specified section weighing not less than 22.5 kg/m.	7.00	MT	60276.00	421932.00
	<b>Total Amount of structural work</b>				<b>421932.00</b>

Detailed Estimate & BOQ for Proposed Store and Maintenance Shed Structure at HPY -  
Surface Drain Work

Sl.No	Description of Items	Qty.	Unit	Rate (Rs)	Amount (Rs)
1	2	3	4	5	6=3x5
	<b>4. Surface Drain</b>				
1	Earthwork in excavation of foundation trenches or drains, in all sorts of soil (including mixed soil but excluding laterite or sandstone) including removing, spreading or stacking the spoils within a lead of 75 mtr. as directed. The item includes necessary trimming the sides of trenches, levelling, dressing and ramming the bottom, bailing out water as required complete.				
a	Depth of excavation average 1500 mm.	50	Cum.	119.27	5,963.50
2	Earth work in filling in foundation trenches or plinth in layers not exceeding 150 mm. Including watering and ramming etc. layer by layer complete.				-
a	With earth obtained from excavation of foundation.	40	Cum.	77.54	3,101.60
3	Single brick flat soling of picked jhama bricks including ramming and dressing bed to proper level and filling joints with powdered earth or local sand , in foundation, plinth and plinth protection.	40	Sqm.	358.00	14,320.00
4	Ordinary Cement Concrete (mix 1:2:4) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement, if any, in ground floor, as per relevant IS Codes.	5	Cum.	5262.54	26,312.70
5	Brick work with 1st class bricks in cement mortar (6:1).				-
a	In foundation and plinth.	20	Cum.	5306.00	1,06,120.00

Sl.No	Description of Items	Qty.	Unit	Rate (Rs)	Amount (Rs)
1	2	3	4	5	6=3x5
6	Hire and labour charges for shuttering with centering and necessary staging upto 4 m. using approved stout props and 9 to 12 mm. thick approved quality Steel / Ply board shuttering with required bracing for concrete slabs, beams, columns, lintels etc.including fittings, fixing and striking out after completion of works.				-
a	In ground floor.	20	Sqm.	335.00	6,700.00
7	Reinforcement for reinforced concrete work in all sorts of structures including distribution bars, stirrups, binders etc. including supply of rods, initial straightening and removal of loose rust (if necessary), cutting to requisite length, hooking and bending to correct shape, placing in proper position and welding (binding with 16 gauge annealed wire) at every intersection, complete as per drawing and direction.				-
a	For works in foundation, ground and first floor with Tor steel / mild steel. ( SAIL /TATA )	0.25	MT	58249.00	14,562.25
8	Plaster (to wall, floor, ceiling etc.) with sand and cement mortar including rounding off or chamfering corners as directed and raking out joints or roughening of concrete surface by chipping etc. including throating, nosing and drip course where necessary.				-
a	15 mm. thick wall plaster with cement mortar (6:1)	250	Sqm.	145.00	36,250.00
9	Neat cement punning about 1.5 mm thick in wall dado, window, sills, floor, drain etc.	250	Sqm.	34.00	8,500.00
	<b>Total Amount of Surface Drain work</b>				<b>2,21,830.05</b>

Detailed Estimate & BOQ for Proposed Store and Maintenance Shed Structure  
at HPY- Miscellaneous Work

<b>Sl.No</b>	<b>Description of Items</b>	<b>Qty.</b>	<b>Unit</b>	<b>Rate (Rs)</b>	<b>Amount (Rs)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5.00</b>	<b>6=3x5</b>
	<b>5. Miscellaneous work</b>				
1	Miscellaneous work- Execution of all unforeseen work covered by PWD Schedule of Rate w.e.f from 01.11.17 (Description of items of the above Schedule are based on SOR w.e.f. 01.11.17, which are to be executed as per relevant specification detailed in SOR - 2017 )		LS	50,000.00	50,000.00
	<b>Total Amount of Miscellaneous work</b>				<b>50,000.00</b>