

**ICDS 2025-26**

**Name of Work : ICDS 2025-26 Construction of Anganwadi Building at  
Various Village of Umargam Taluka Dist Valsad ( Pk-1 Total -6  
Anganwadi)**

**ITEM WISE SPECIFICATION**

<b>Item No. 1</b>	<b><i>Excavation for foundation up to 1.5 M depth including sorting out and stacking of useful materials and disposing of the excavated stuff up to 50 meter lead.(B) Dense or hard soil.</i></b>
	<p>1.0. Workmanship</p> <p>1.1. The relevant specifications of item No. 4.0.0.(A) shall be followed except that the excavation shall be earned out for foundation upon 1.5 M lift in soft rock not requiring blasting</p> <p>1.2. The excavation in soft or disintegrated rock shall be carried out by crow bars, pickaxes or pneumatic drills or any other suitable means</p> <p>1.3. If contractor desires to resort to blasting, he can do so with permission of the Engineer-in-charge but nothing extra shall be paid to him.</p> <p>1.4. The materials available from soft excavation shall be properly stacked within 50 M. lead and 15 m. lift and shall be the property of department.</p> <p>1.5. The classification of strata of the foundation soil shall be done by the Engineer-in-charge and shall be acceptable to the contractor</p> <p>1.6. However this shall include the type of rock and boulder which may quarried or split with crow bars. Laterite and conglomerate also come under this category.</p> <p>2.0. Mode of measurements &amp; Payment</p> <p>2.1. The relevant specifications of item No. 4.0 0 (A) shall be followed.</p> <p>2.2. The rate shall be for a unit of one cubic metre.</p>
<b>Item No. 2</b>	<b><i>'Excavation for foundation for depth from 1.5 m to 3.0 m including sorting out and stacking of useful materials and disposing off the excavated stuff upto 50 Meter lead.(B) Dense and Hard Soil ' ( II ) 1.5 To 3.0 MT Depth</i></b>
	<p>The item shall be executed as per the relevant specification of General Technical Specification for Building works Booklet It. No. 4.0 . 0. 2 (B)/ Page No. 32.</p> <p>The Item shall be measured &amp; paid as finished work in Cum.</p>
<b>Item No. 3</b>	<b><i>Filling available excavated earth (Including rock in trenches plinth, sides of foundations etc. in layers not exceeding 20 cm. in depth consolidating each deposited layer by ramming and watering)</i></b>
	<p><b>1.0. Workmanship</b></p> <p>1.1. The earth to be used for filling shall be free from salts, organic or other foreign matter. All clods of earth shall be broken.</p> <p>1.2. As soon as the work in foundation has been completed and measured the site of foundation shall be cleared of all debris, brick bats: mortar dropping etc., and filled with earth in layers not exceeding 20 cms. Each layer shall be adequately watered, rammed and consolidated before the succeeding layer is laid The earth shall be rammed with iron rammers where feasible and with the but ends of crow-bars, where rammer cannot be used.</p> <p>1.3. The plinth shall be similarly filled with earth in layers not exceeding 20 cms. adequately watered and consolidated by ramming with iron or wooden rammers. When filling reaches finished level the surface shall be flooded with water for at least 24</p>

	<p>hours and allowed to dry and then rammed and consolidated.</p> <p><b>1.4.</b> The finished level of filling shall be kept to shape intended to be given to floor.</p> <p><b>1.5.</b> In case off large heavy duty flooring like factory flooring, the consolidation may be done by power rollers, where so specified. The extent of consolidation required, shall also be as specified.</p> <p><b>1.6.</b> The excavated stuff of the selected type shall be allowed to be used in filling the trenches and plinth. Under no circumstances black cotton soil be used for filling the plinth.</p> <p><b>2.0. Mode of Measurements &amp; Payment</b></p> <p><b>2.1.</b> The payment shall be made for filling in plinth and trenches. No deduction shall be made for shrinkage or voids, if consolidated as instructed above.</p> <p><b>2.2.</b> The rate shall be for a unit of one cubic meter.</p>
<b>Item No. 4</b>	<b><i>Providing &amp; filling in plinth with murrum or yellow soil or selected soil in layers of 20 cm. Thickness. Incl. watering, ramming &amp; consolidation etc. complete.</i></b>
	The relevant specification shall be followed as per General Technical specification for Building work booklet It.No.4.004./ P.No.35.
<b>Item No. 5</b>	<b><i>'Filling in plinth with sand under floors including watering ramming, consolidating and dressing complete '(A) Foundation and plinth</i></b>
	<p>1.0. Materials</p> <p>1.1. Sand shall conform to M 6</p> <p>2.0. Workmanship</p> <p>The relevant specifications of item No. 4.12 shall be followed except that sand shall be filled in under floors, including watering, ramming, consolidating and dressing etc , complete.</p> <p>3.0. Mode of Measurements &amp; Payment</p> <p>3.1. The relevant specifications of item No. 4.12 shall be followed.</p> <p>3.2. The rate includes cost of collecting, carting sand with all lead and labour for filling the same in plinth under floors.</p> <p>3.3. The rate shall be for a unit of one cubic meter.</p>
<b>Item No. 6</b>	<b><i>'Providing and laying cement concrete 1:3:6 (1- Cement : 3- Coarse sand : 6- graded stone aggregates 20 mm nominal size) and curing complete excluding cost of formwork in (A) Foundation and Plinth</i></b>
	<p>The relevant specification shall be followed as per General Technical specification for Building work booklet It.No.5.3.14(A) P.No.38.</p> <p>For form work the relevant specification shall be followed as per General Technical specification for Building work booklet It.No.9.1 (A) P.No.63.</p>
<b>Item No. 7</b>	<b><i>'Providing and laying controlled cement concrete M.250 and curing complete inculding the cost of formwork but Excluding the cost of reinforcement for reinforced concrete work in foundation, footings base of column and mass concrete. (A) Footing</i></b>

	<p>1.0. Materials &amp; Workmanship</p> <p>1.1. The relevant specifications of item No. 5.8.1. shall be followed except the grading of concrete shall be controlled concrete M-250 grades for the works as specified in the item.</p> <p>2.0. Mode of measurements &amp; payment</p> <p>2.1. The relevant specifications of item No. 5.8.1. shall be followed.</p> <p>2.2. The rate shall be for a unit of one cubic meter.</p>
<b>Item No. 8</b>	<b><i>'Providing and laying controlled cement concrete M.250 and curing complete including the cost of formwork but Excluding the cost of reinforcement for reinforced concrete work in All Types of Column D) Column, Pillers, posts and struts , upto Plinth</i></b>
	<p>1.0. Materials &amp; Workmanship</p> <p>1.1. The relevant specifications of item No. 5.8.1. shall be followed except the grading of concrete shall be controlled concrete M-250 grades for the works as specified in the item.</p> <p>2.0. Mode of measurements &amp; payment</p> <p>2.1. The relevant specifications of item No. 5.8.1. shall be followed.</p> <p>2.2. The rate shall be for a unit of one cubic meter.</p>
<b>Item No. 09</b>	<b><i>'Providing and laying controlled cement concrete M.200 and curing complete including the cost of formwork but Excluding the cost of reinforcement for reinforced concrete work in All Types of Column D) Column, Pillers, posts and struts, upto Ground Floor</i></b>
	<p>1.0. Materials &amp; Workmanship</p> <p>1.1. The relevant specifications of item No. 5.8.1. shall be followed except the grading of concrete shall be controlled concrete M-200 grades for the works as specified in the item.</p> <p>2.0. Mode of measurements &amp; payment</p> <p>2.1. The relevant specifications of item No. 5.8.1. shall be followed.</p> <p>2.2. The rate shall be for a unit of one cubic meter.</p>
<b>Item No. 10</b>	<b><i>'Providing and laying controlled cement concrete M.200 and curing complete including the cost of formwork but Excluding the cost of reinforcement for reinforced concrete work in All Types of Column D) Column, Pillers, posts and struts, upto First Floor</i></b>
	<p>1.0. Materials &amp; Workmanship</p> <p>1.1. The relevant specifications of item No. 5.8.1. shall be followed except the grading of concrete shall be controlled concrete M-200 grades for the works as specified in the item.</p> <p>2.0. Mode of measurements &amp; payment</p> <p>2.1. The relevant specifications of item No. 5.8.1. shall be followed.</p> <p>2.2. The rate shall be for a unit of one cubic meter.</p>
<b>Item No. 11</b>	<b><i>'Providing and laying controlled cement concrete M.250 and curing complete including the cost of formwork but Excluding the cost of the cost of reinforcement for reinforced concrete work in Beams. (E) Beam, upto Plinth</i></b>
	<p>1.0. Materials &amp; Workmanship</p> <p>1.1. The relevant specifications of item No. 5.8.1. shall be followed except the grading of concrete shall be controlled concrete M-250 grades for the works as specified in the item.</p> <p>2.0. Mode of measurements &amp; payment</p>

	<p>2.1. The relevant specifications of item No. 5.8.1. shall be followed.</p> <p>2.2. The rate shall be for a unit of one cubic meter.</p>
<b>Item No. 12</b>	<b><i>'Providing and laying controlled cement concrete M.200 and curing complete including the cost of formwork but Excluding the cost of reinforcement for reinforced concrete work in All Types of Beams,(E) Beam, Ground Floor</i></b>
	<p>1.0. Materials &amp; Workmanship</p> <p>1.1. The relevant specifications of item No. 5.8.1. shall be followed except the grading of concrete shall be controlled concrete M-200 grades for the works as specified in the item.</p> <p>2.0. Mode of measurements &amp; payment</p> <p>2.1. The relevant specifications of item No. 5.8.1. shall be followed.</p> <p>2.2. The rate shall be for a unit of one cubic meter.</p>
<b>Item No. 13</b>	<b><i>'Providing and laying controlled cement concrete M.200 and curing complete including the cost of formwork but Excluding the cost of reinforcement for reinforced concrete work in All Types of Slab,All Thickness (C) Slab upto Plinth and Ground Floor</i></b>
	<p>1.0. Materials &amp; Workmanship</p> <p>1.1. The relevant specifications of item No. 5.8.1. shall be followed except the grading of concrete shall be controlled concrete M-250 grades for the works as specified in the item.</p> <p>2.0. Mode of measurements &amp; payment</p> <p>2.1. The relevant specifications of item No. 5.8.1. shall be followed.</p> <p>2.2. The rate shall be for a unit of one cubic meter.</p>
<b>Item No.14</b>	<b><i>'Providing and laying controlled cement concrete M.200 and curing complete including the cost of formwork but Excluding the cost of reinforcement for reinforced concrete work in Chajja. Upto Ground Floor</i></b>
	<p>1.0. Materials &amp; Workmanship</p> <p>1.1. The relevant specifications of item No. 5.8.1. shall be followed except the grading of concrete shall be controlled concrete M-200 grades for the works as specified in the item.</p> <p>2.0. Mode of measurements &amp; payment</p> <p>2.1. The relevant specifications of item No. 5.8.1. shall be followed.</p> <p>2.2. The rate shall be for a unit of one cubic meter.</p>
<b>Item No.15</b>	<b><i>'Providing TMT Bar FE 500D reinforcement for R.C.C. work including bending, binding and placing in position complete upto floor two level,Ground Floor, First Floor , Second Floor, Third Floor, Terrace Floor (all floor).</i></b>
	<p><b>1.0. GENERAL</b></p> <p>This work shall consist of furnishing and placing <b>TMT Fe-500D Conforming to IS 1786 2008</b> reinforcement, bars (intentioned) of the shape and dimensions shown on the drawings and conforming to these Specifications or as approved by the Engineer in charge.</p> <p><b>2.0. MATERIAL</b></p> <p><b>2.1. TMT Bars</b></p> <p>Reinforcements may be either <b>TMT Fe-500D</b> tensile steel, high strength deformed bars. They may be uncoated or coated with epoxy or with approved protective coatings.</p>

	<p><b>2.2.</b> T.M.T. bars reinforcement for R C C work shall conform IS 432 (Part II) 1966 and shall be of tested quality. It shall also comply with relevant part of IS 456-1966</p> <p><b>2.3.</b> All reinforcement shall be clean and free from dirt, paint, grease or oil, all scale or loose or thick rust at the time of placing</p> <p><b>2.4.</b> All steel shall be procured from original producers no re-rolled steel shall be incorporated in the work</p> <p><b>2.5.</b> Only new steel shall be delivered to the site every bar shall be inspected before placing to its position and defective brittle or burnt bar shall be discarded cracked ends of bars shall be discarded</p> <p><b>3.0. Pitch</b></p> <p><b>3.1.</b> Distance between bars shall be as specified in drawings and as directed by the Engineer in Charge all bars shall be placed at an accurate distance from each other and shall be bind tightly to maintain the desired pitch Suitable means shall be provided for holding bars securely in position</p> <p><b>4.0. Binding wire</b></p> <p><b>4.1.</b> Mild steel binding wire shall be of 1.63 mm or 1.22 mm (16 to 18 gauge diameter and shall conform IS 280-1972</p> <p><b>4.2.</b> The use of black wire will be permitted for binding reinforcement bars. It shall be free from dirt, paint, grease or oil, oil scale or loose or thick rust and any other undesirable coating which may prevent adhesion of cement mortar at the time of binding</p> <p><b>4.3.</b> Only new binding wire shall be delivered to the site all binding wire shall be inspected before binding to its position and defective brittle, rusted, used wire, shall be discarded</p> <p><b>5.0. PROTECTION OF REINFORCEMENT</b></p> <p><b>5.1.</b> Uncoated reinforcing steel shall be protected from rusting or chloride contamination. Reinforcements shall be free from rust, mortar, loose mill scale, grease, oil or paints. This may be ensured either by using reinforcement fresh from the factory or thoroughly cleaning all reinforcement to remove rust using any suitable method such as sand blasting, mechanical wire brushing, etc. as directed by the Engineer. Reinforcements shall be stored on bricks, racks or platforms and above the ground in a clean and dry condition and shall be suitably marked to facilitate inspection and identification.</p> <p><b>5.2.</b> Portions of uncoated reinforcing steel and dowels projecting from concrete shall be protected within one week after initial placing of concrete with a brush coat of neat cement mixed with water to a consistency, of thick paint. This coating shall be removed by lightly tapping with a hammer or other tool not more than one week before placing of the adjacent pour of concrete. Coated reinforcing steel shall be protected against damage to the coating. If the coating on the bars is damaged during transportation or handling and cannot be repaired, the same shall be rejected.</p> <p><b>6.0. Workmanship</b></p> <p><b>6.1.</b> The work shall consist of furnishing and placing reinforcement to the shape and dimensions shown as on the drawings or as directed by The Engineer in charge.</p> <p><b>6.2.</b> Reinforcing steel shall conform accurate to the dimensions given in the bar bending schedules shown on relevant drawing</p> <p><b>7.0. BENDING OF REINFORCEMENT</b></p> <p><b>7.1.</b> Bar bend g schedule shall be furnished by the Contractor and got approved by the Engineer before start of work.</p> <p><b>7.2.</b> Reinforcing steel shall conform to the dimensions and shapes given in the approved bar bending Schedules.</p>
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**7.3.** Bars shall be bent cold to the specified shape and dimensions or directed by the Engineer using a proper bar bender operated by hand power to obtain the correct radius of bends and shape.

Bars shall not be bent or straightened in a manner that will damage parent material or the coating bars bent during transport or handling shall, be straightened before being used on work and shall not be heated to facilitate straightening.

#### **8.0. PLACING OF REINFORCEMENT**

**8.1.** The reinforcement cage should generally be fabricated in the yard at ground level, and then shifted and placed in position. The reinforcement shall be placed strictly, in accordance with the drawings and shall be assembled in position, only when structure is otherwise ready for placing of concrete. Prolonged time gap, between assembling of reinforcements and casting of concrete, which may result in rust formation on the surface, shall not be permitted.

**8.2.** Reinforcement bars shall be placed accurately in position as shown on the drawings. The bars, crossing one another shall be tied together at every intersection with binding wire (annealed), conforming to IS 280 to make the skeleton of the reinforcement rigid such that the reinforcement does not get displaced during placing of concrete, or any other operation. The diameter of binding wire shall not be less than 1 mm.

**8.3.** Bars shall be kept in position usually by the following methods

In case of beam and slab construction, industrially produced polymer cover blocks of thickness equal to the specified cover shall be placed between the bars and formwork subject to Satisfactory evidence that the polymer composition is not harmful to concrete and reinforcement. Cover blocks made of concrete may be permitted by the Engineer, provided they have the same strength and specification as those of the member.

**8.4.** In case of dowels for Columns and walls the vertical reinforcement shall be kept in position by means of timber templates with slots in them accurately, or with cover blocks tied to the Reinforcement Timber templates shall be removed after the concreting has progressed up to a level just below their location.

**8.5.** Layers of reinforcements shall be separated by spacer bars at approximately One meter intervals. The minimum diameter of spacer bars shall be 12 mm or equal to maximum size of main reinforcement or maximum size of coarse aggregate, whichever is greater. Horizontal reinforcement shall not be, allowed to sag between supports.

**8.6.** Necessary stays, blocks, metal chairs, spacers, metal hangers supporting wires etc, or other subsidiary, reinforcement shall be provided to fix the reinforcements firmly in its correct position.

**8.7.** Use of pebbles, broken stone, metal pipe, brick, mortar or wooden blocks etc as devices for positioning reinforcement shall not be permitted.

**8.8.** Bars coated with epoxy or any other approved protective coating shall be placed on supports that do not damage the coating. Supports shall be installed in a manner such that planes of weakness are not created in hardened concrete. The coated reinforcing steel shall be held in place by use of plastic or plastic coated binding wires especially manufactured for the purpose.

**8.9.** Placing and fixing of reinforcement shall be inspected and approved by the Engineer before concrete is deposited.

#### **9.0. Lapping**

**9.1.** All reinforcement shall be furnished in full lengths as indicated on the drawing. No splicing of bars, except where shown on the drawing; will be permitted without approval of the Engineer. The lengths of the splice shall be as indicated on drawing or as approved by the Engineer. Where practicable, overlapping bars shall not touch each other, and shall be kept apart by 25 mm or 1 1/4 times the maximum size of coarse aggregate, whichever is greater, If this is not feasible, overlapping bars shall be bound with annealed steel binding wire, not less than 1 mm diameter and twisted tight in such a manner as to maintain minimum clear cover to the reinforcement from the concrete

surface. Lapped splices shall be staggered or located at points, along the span where stresses are low.

#### **10.0. Welding**

**10.1** Splicing by welding of reinforcement will be permitted only if detailed on the drawing or approved by the Engineer. Weld shall develop an ultimate strength equal to or greater than that of the bars connected.

**10.2.** While welding may be permitted for T.M.T. reinforcing bars conforming to IS 432, welding of deformed bars conforming to IS 1786 shall in general be prohibited. Welding may be permitted in case of bars of other than S 240 grade including special. Welding grade of S 415 grade bars conforming to IS 1786, for which necessary chemical analysis has been secured and the carbon equivalent (CE) calculated from the chemical composition using the formula

$$CE = C + \frac{Mn}{6} + \frac{Cr + Mg + V}{5} + \frac{Ni + Cu}{15}$$

is 0.4 or less.

**10.3.** The method of welding shall conform to IS 2751 and IS 9417 and to any supplemental specifications to the satisfaction of the Engineer

**10.4.** Bars shall be bent cold to the specified shape and dimensions or as directed by Engineer in charge using the proper bender tool, operated by hand or power to attain proper radius of bends. Bars shall not be bent or straightened in a manner that will injure the material. Bars bent during transport or handling shall be straightened before being used in the work. Bars shall not be heated to facilitate bending

**10.5.** Unless otherwise specified a 'U' type hook at the end of each bar shall invariably be provided to main reinforcement. The radius of the bend shall not be less than twice the diameter of the round bar and the length of the straight part of the bar beyond the end of the curve shall be at least four times of the diameter of the round bar. In case of bars which are not round and in case of deformed bars, the diameter shall be taken as the diameter of circle having an equivalent effective area. The hooks shall be suitably encased to prevent any spalling of the concrete

**10.6.** All reinforcement bars shall be accurately placed in exact position shown on the drawings and shall be securely held in position during placing of concrete by annealed binding wire not less than 1 mm in size and by using say blocks or metal chairs spacers, metal hangers, supporting wires or other approved devices at sufficiently close intervals. Bars shall not be allowed to sag between supports not displaced during concreting or any other operations of the work. All devices used for positioning shall be of non-corrodible material. Wooden and metal supports shall not extend to the surface of the concrete, except where shown in drawings. Placing bars on layers of freshly laid concrete as the work progresses for adjusting bar spacing shall not be allowed. Pieces of broken stone or brick and wooden blocks shall not be used. Layers of bars shall be separated by spacer bars, pre-cast mortar blocks or other approved devices. Reinforcement after bending placed in position shall be maintained in a clean condition until completely embedded in concrete. Special care shall be exercised to prevent any displacement of reinforcement in concrete already placed. To prevent reinforcement from corrosion, concrete cover shall be provided as indicated on drawings. All bars protruding from concrete and to which other bars are to be lapped and which are likely to be exposed for a period exceeding 10 days shall be protected by a thick coat of neat cement grout

**10.7.** Bars crossing each other where required shall be secured by binding wire (annealed) of size not less than 1 mm in such a manner that they do not slip over at the time of fixing and concreting.

As far possible bars of full length shall be used in case this is not possible, overlapping of

bars shall be done as directed by the Engineer in charge When practicable overlapping bars shall not touch each other, but be kept apart by 25 mm Where no feasible overlapping bars shall be bound with annealed wires not less than 1 mm thick twisted tight The overlaps shall be staggered for different bars and located at points along the span where neither sheer not bending moments is maximum.

**10.8.** Whenever indicated on drawing or desired the Engineer in charge bars shall be jointed by coupling which shall have a cross section sufficient to transmit the full stresses of bars The end of the bars that are jointed by coupling shall be upset for sufficient length so that the effective cross section at the base of threads is not less than the normal cross section of the bar. Threads shall be standards threads Steel for coupling shall conform to IS 226

**10.9.** When permitted or specified on the drawings joints of reinforcement bars shall butt-welded so as to transmit their full stresses Welded joints shall preferably be located at points when steel will not be subject to more than 75 percent of the maximum permissible stresses and welds so staggered that at any one section not more than 20 percent of the rods are welded Only electric arc welding using a process which excludes air from the molten metal and conforms to any or other special provisions for the work shall be accepted Suitable means shall be provided for holding bars securely in position during welding It shall be ensured that no voids are left in welding and when welding is done in two or three stages previous surface shall be cleaned properly Ends of bars shall be cleaned of all loose scale rust stages paint and other foreign matter before welding Only competent welders shall be employed on the work. The M S electrodes used for welding shall conform IS 814 Welded pieces of reinforcement shall be tested. Specimen shall be taken from the actual site and their number shall frequency to test shall be as directed by the Engineer in charge

#### **11.0 MODE OF MEASUREMENTS and PAYMENT**

For the purpose of payment the bar shall be measured correct up to 10 mm length and weight payable works out at the rate specified below

Sr. No	Diameter of steel	weight of steel per running meter	Sr. No	Diameter of steel	weight of steel per running meter
1	6 mm	0.22 Kg Rmt	8	20 mm	2.47 Kg Rmt
2	8 mm	0.39 Kg Rmt	9	22 mm	2.98 Kg Rmt
3	10 mm	0.62 Kg Rmt	10	25 mm	3.85 Kg Rmt
4	12 mm	0.89 Kg Rmt	11	28 mm	4.83 Kg Rmt
5	14 mm	1.21 Kg Rmt	12	32 mm	6.31 Kg Rmt
6	16 mm	1.58 Kg Rmt	13	36 mm	7.99 Kg Rmt
7	18 mm	2.00 Kg Rmt	14	40mm	9.86 Kg Rmt

Excess consumption over 5% will be charged at penal rate.

Reinforcement shall be measured in length including hooks, if any, separately for different diameters as actually used in work, excluding overlaps. From the length so measured, the weight of reinforcement shall be calculated in tonnes on the basis of IS 1732. Wastage, overlaps, couplings, welded joints, spacer bars, chairs, stays, hangers and annealed steel wire or other methods for binding and placing shall not be measured and cost of these items shall be deemed to be included in the rates for reinforcement..

The contract unit rate for coated uncoated reinforcement shall cover the cost of material, fabricating, transporting, storing, bending, placing, binding and fixing in position as shown on the drawings as per these specifications and as directed by the Engineer, including all labour, equipment, supplies, incidentals, sampling, testing and



	<p>supervision.</p> <p>The unit Rate for coated reinforcement shall be deemed to also include cost of all material, labour, tools and plant, royalty, transportation and expertise required to carry out the work. The rate shall also cover sampling, testing and supervision required for the work. <b><u>No Payment shall be given for Lap.</u></b></p> <p>The rate shall be for a unit of <b>One Kg.</b></p>
<b>Item No. 16</b>	<b>'Brick work using common brunt clay building bricks having crushing strength not less than 35 kg/sqcm. in superstructure above plinth level upto floor two level in cement mortar 1:6 (1 cement :6 fine sand) etc.comp. (B) Conventional Ground Floor</b>
	<p>1.0. Materials &amp; Workmanship The relevant specification of item No. 6.19(A) shall be followed except that brick masonry work shall be carried out with conventional bricks.</p> <p>2.0. Mode measurement and payment</p> <p>2.1. The relevant specification of item No. 6.19 (A) Shall be followed.</p> <p>2.2. The rate shall be for a unit of one cubic meter per meter.</p>
<b>Item No. 17</b>	<b>'Brick work using common brunt clay building bricks having crushing strength not less than 35 kg/sqcm. in superstructure above plinth level upto floor two level in cement mortar 1:6 (1 cement :6 fine sand) etc.comp. (B) Conventional First Floor</b>
	<p>1.0. Materials &amp; Workmanship The relevant specification of item No. 6.19(A) shall be followed except that brick masonry work shall be carried out with conventional bricks.</p> <p>2.0. Mode measurement and payment</p> <p>2.1. The relevant specification of item No. 6.19 (A) Shall be followed.</p> <p>2.2. The rate shall be for a unit of one cubic meter per meter.</p>
<b>Item No. 18</b>	<b>'Half brick masonry in common brunt clay building bricks having crushing strength not less than 35 Kg/Sq.Cm. in Cement mortar 1:3 (1- Cement : 3 -coarse sand ) in (B) Conventional Ground Floor</b>
	<p>The Item shall be executed as per the relevant specifications of general technical specification for building work booklet Item No. 6.30 [A] / Page No.54.</p> <p>The Item shall be measured &amp; paid as finished work in Sqm.</p>
<b>Item No. 19</b>	<b>'Providing 15mm thick cement plaster in single coat on Rough (Similar)side of single or Full/half brick walls for interior plastering upto floor two level and finished even and smooth in (ii) Cement mortar 1:3 (1-cement :3-sand) Ground Floor</b>
	<p><b>General</b></p> <p>This work shall consist of providing <b>15 mm thick cement plaster in Two coat on brick/concrete wall for interior plastering</b> of the shape and dimensions shown on the drawings and conforming to these Specifications or as approved by the Engineer in charge</p> <p><b>Material</b></p> <p><b>CEMENT</b></p> <p><b>Cement shall confirm Specification No M-3,</b></p> <p><b>SAND</b></p>

	<p><b>Sand shall confirm specification no M-6, WATER</b></p> <p><b>Water shall confirm specification no M-1 WORKMANSHIP</b></p> <p><b>specification no 17.61 (II) and 17.95 shall be applied for this item</b></p> <p><b>The surface shall be Mala troweled finish</b></p> <p><b>The plaster shall then be finished off with a trowel</b> The straight edge shall be worked on screeds with a small upward and side way motion 50mm or 75mm at a time. Finally, the surface shall be finished off with a plaster's wooden float.</p> <p><b>Mode of Measurement &amp; Payment :</b></p> <p>The Item shall be measured for its <b>breadth and height</b> limiting dimensions to those specified on plan or as directed. The rate shall be for a unit of one square meter.</p> <p>The payment will be made on square Meter basis of the finished work.</p> <p>The rate shall be for a unit of <b>one square meter</b>.</p>
<b>Item No. 20</b>	<b><i>'Providing &amp; laying 10 mm. thick cement plaster in single coat on fair side of ceilings for interior plastering upto floor two level and finishing with smooth mala plaster.(i) Cement mortar 1:3 (1 cement : 3 sand) Ground Floor</i></b>
	<p>The Item shall be executed as per the relevant specifications of general technical specification for building work booklet Item No.17.58 (I) / Page No.119</p> <p>The Item shall be measured &amp; paid as finished work in Sqm.</p>
<b>Item No. 21</b>	<b><i>'20mm thick sand faced cement plaster on walls upto height 10 metres above ground level consisting of 12mm thick backing coat of C.M. 1:3 (1-cement : 3-sand) and 8mm thick finishing coat of C.M. 1:1 (1-cement : 1-sand) etc. complete.</i></b>
	The item shall be executed as per the relevant specifications of General Technical specifications for Building works Booklet It. No.17.95 / Page 122. The Item shall be measured & paid as finished work in Sqm.
<b>Item No. 22</b>	<b><i>'Providing throating or plaster drip and moulding to R.C.C. Chhajja.</i></b>
	<p><b>plaster drip and moulding to R.C.C. Chhajja. The Item Shall be executed</b></p> <p>The relevant specification shall be followed as per Architectural Detail drawing And directed by the Engineer in charge.</p> <p><b>Mode of Measurement and Payment</b></p> <p>The payment will be made on <b>Running Meter</b> basis of the finished work.</p>
<b>Item No. 23</b>	<b><i>'Providing and laying polished Granite Slab 18mm thick in Flooring laid 20mm thick Cement Mortar 1:4 (1-Cement : 4-Coarse Sand) and jointed with Grey Cement Slurry including full molded round front edges , rubbing and polishing etc. complete.</i></b>

	<p>The relevant specification shall be followed as per General Technical specification for Building work booklet It.No.14.43.(B) /P.No.99 except that using for that using 'Providing and laying polished Granite Slab 18mm thick in Flooring laid 20mm thick Cement Mortar 1:4 (1-Cement : 4-Coarse Sand) and jointed with Grey Cement Slurry including full molded round front edges , rubbing and polishing etc. complete.</p> <p>The rate shall be for a unit of one square meter.</p>
<b>Item No. 24</b>	<p><b>'Providing and laying polished Granite Slab 18mm thick in Risers of steps Dedo, window sill, jembs and pillars laid 10 mm thick Cement Mortar 1:4 (1-Cement : 4-Coarse Sand) and jointed with Grey Cement Slurry including full molded round edges , rubbing an</b></p>
	<p>The relevant specification shall be followed as per General Technical specification for Building work booklet It.No.14.43.(B) /P.No.99 except that using for that using 'Providing and laying polished Granite Slab 18mm thick in Risers of steps Dedo, window sill, jembs and pillars laid 10 mm thick Cement Mortar 1:4 (1-Cement : 4-Coarse Sand) and jointed with Grey Cement Slurry including full molded round edges , rubbing an</p> <p>The rate shall be for a unit of one square meter.</p>
<b>Item No. 25</b>	<p><b>'Providing and laying Vitrified tiles, 24" x 24" in flooring treads of steps and landing laid on a bed of 12mm thick cement mortar 1:3 (1-cement : 3-coarse sand ) finishing with flush pointing in white cement.Soluble Salt PVT. Tiles in All Rooms.</b></p>
	<p>The item shall be executed as per the relevant specification of General Technical Specification for Building works Booklet It. No. 14.29 /Page No. 96. except that the 24" x 24" vitrified 8 mm to 10 mm thick tile flooring over 12 mm (average) make Johnson kajaria, bell as base of cement mortar 1:3 ( 1 cement: 3 coarse sand) on new surface or fixing on existing flooring by adhesive material including dismantling of existing flooring and jointed with color cement slurry including finised with flush pointing &amp; cleaning the surface etc. complete for diff shed as directed by the Engineer in charge.</p> <p>The payment will be made on square Meter basis of the finished work.</p>
<b>Item No. 26</b>	<p><b>'Providing and laying Vitrified tiles, 24" x 24" in skirting risers of steps and dedo on 10mm thick cement plaster 1:3 (1-cement : 3-coarse sand) and jointed with white cement slurry Soluble Salt PVT. Tiles in All Rooms.</b></p>
	<p>The item shall be executed as per the relevant specification of General Technical Specification for Building works Booklet It. No. 14.29 /Page No. 96. except that the 24" x 24" vitrified 8 mm to 10 mm thick tile flooring over 10 mm (average) make Johnson kajaria, bell as base of cement mortar 1:3 ( 1 cement: 3 coarse sand) on new surface or fixing on existing flooring by adhesive material including dismantling of existing flooring and jointed with color cement slurry including finised with flush pointing &amp; cleaning the surface etc. complete for diff shed as directed by the Engineer in charge.</p> <p>The payment will be made on square Meter basis of the finished work.</p>

<b>Item No. 27</b>	<b>'Providing and fixing flush door both sides laminated and shutter fabricated from 35 mm thick solid core malemine faced three layered pre laminated flat pressed wood based exterior grade bonded BWP/BWR synthetic resin having stamped IS 12823 grade I type II including Stainless steel decorative type designs fixtures / fastening 2Nos. Handles, 2Nos. Aldropes, towerbolt etc.including I.T.W. triangular batten patti of size 30m.m.x30m.m.etc. as per architectural detailed drawing and as directed by engineer in charge..</b>
	<p>1.0. Materials Indian teak wood for shutters shall conform to M-29. Glass shall conform to M-38. (A) Plywood shall conform to M-37. (B) Particle board shall conform to M-40. Anodised aluminum butt hinges shall conform to M-43. (C) Hard board shall of best quality and shall be as approved by Engineer-in charge. (D) A.C. sheet shall conform to M-24.</p> <p>2.0. Workmanship 2.1. The relevant specifications of item No. 10.12 (A) (I) shall apply to this item except that the work is shuttered with (A) plywood (B) particle board (C) hard board panels (D) A.C. sheets panels as specified in item. 2.2. The shutter shall be prepared by fittings styles and rails (top, bottom, lock and frieze) as for paneled leaves with simple chamfer on edge only. The styles and rails shall be grooved with just sufficient width for receiving panels and plain panels of specified type panels shall be fitted into the grooves.</p> <p>3.0. Mode of measurements &amp; payment 3.1. The relevant specifications of item No. 10.t2 (A) (I) shall be followed. 3.2. The rate shall be for a unit of one sq. meter.</p>
<b>Item No. 28</b>	<b>'Providing and fixing FRP frame size 125x65 mm and 35mm thick FRP shutter having extra reinforcement on sides &amp; edges in polish finish. The core of the shutter &amp; frame is to be filed up with injected polyurethane foam done in situ alongwith embedded wooden pieces for stiffening &amp; also taking hinges &amp; fintures. The whole FRP frame &amp; shutter is to be water proof weather proof, termite proof &amp; resistance to mild acid/alkali. Rates are to be inclusive of S.S hinges with necessary screws &amp; alluminium S.S fixtures &amp; fastenings &amp; fastener sleeve.</b>
	<p>Above Item 'Providing and fixing FRP frame size 125x65 mm and 35mm thick FRP shutter having extra reinforcement on sides &amp; edges in polish finish. The core of the shutter &amp; frame is to be filed up with injected polyurethane foam done in situ alongwith embedded wooden pieces for stiffening &amp; also taking hinges &amp; fintures. The whole FRP frame &amp; shutter is to be water proof weather proof, termite proof &amp; resistance to mild acid/alkali. Rates are to be inclusive of S.S hinges with necessary screws &amp; alluminium S.S fixtures &amp; fastenings &amp; fastener sleeve. approved and Directed by Engineer In charged.</p> <p>MODE OF MEASUREMENT &amp; PAYMENT</p> <p>The payments shall be maid on Sqm basis.</p>
<b>Item No. 29</b>	<b>Providing and fixing window having extruded aluminum Colour anodized section frame main outer size 63.50 x 38.10 x 1.95 mm,@ Wt 1.094 Kg / Rmt, horizontal two track member size 61.85 mm x 31.75 mm x 1.20mm @ wt.of 0.695 Kg/mt, vertical member of size 61.85 mm x 31.75mm x 1.30 mm @ wt.of 0.659 Kg/mt with sliding shutters of horizontal member size</b>

	<p><b>40mm x 18mm x 1.29mm @ wt.of 0.456Kg/mt, vertical member of size 40mm x 18mm x 1.29mm @ wt.of 0.456Kg/mt, @ Wt. 0.457 Kg/mt with 5 mm thick transparent bronze colour tinted float glass with powder coated aluminum fittings and fixtures and transparent silicon sealant glass fixing to frame as per details etc complete for window.</b></p>
	<p><b>General</b> This work shall consist of providing <b>and fixing standard extruded of aluminum window</b> of the shape and dimensions shown on the drawings and conforming to these Specifications or as approved by the Engineer in charge</p> <p><b>MATERIAL</b> <b>Aluminum standard section</b> <b>Specification no M-31 from specification booklet</b> for Building works on surface. All section shall have finished luster surface on all sides</p> <p><b>Glass</b> <b>Specification no M-38 from specification booklet for Building works</b></p> <p><b>Rubber Gasket</b> Rubber gasket shall be of approved make. shall be Free from any scratches or holes or any damages on surface. and shall have finished luster surface on all sides</p> <p><b>Fixtures and fastenings</b> Specification no M-43 from specification booklet for Building works for fixture and fastening</p> <p><b>WORKMANSHIP</b> The Work of aluminum window shall be done with extreme finishing as directed by Engineer in charge using glazing clips and rubber gaskets as required All the fixtures and fastenings shall be fitted at right place and as directed by Engineer in charge. and shall be given trial of opening and closing properly.</p> <p><b>Mode of measurement and payment</b> The Item shall be measured for its <b>breath and height</b> limiting dimensions to those specified on plan or as directed. The payment will be made on square Meter basis of the finished work. The rate shall be for a unit of one square meter.</p>
<b>Item No. 30</b>	<p><b>'Providing and fixing standard extruded of aluminium section of size 63mm x 38.10mm x 1.2mm (Wt. 0.643 Kg/mt) with colour anodized aluminium frame for ventilation with 5 mm thick frosted glass as details etc complete for Ventilation</b></p>
	<p><b>General</b> This work shall consist of providing <b>and fixing standard extruded of aluminum window</b> of the shape and dimensions shown on the drawings and conforming to these Specifications or as approved by the Engineer in charge</p> <p><b>MATERIAL</b> <b>Aluminum standard section</b> <b>Specification no M-31 from specification booklet</b> for Building works on surface. All section shall have finished luster surface on all sides</p> <p><b>Glass</b> <b>Specification no M-38 from specification booklet for Building works</b></p> <p><b>Rubber Gasket</b> Rubber gasket shall be of approved make. shall be Free from any scratches or holes or any damages on surface. and shall have finished luster surface on all sides</p> <p><b>Fixtures and fastenings</b> Specification no M-43 from specification booklet for Building works for fixture and</p>

	<p>fastening</p> <p><b>WORKMANSHIP</b></p> <p>The Work of aluminum window shall be done with extreme finishing as directed by Engineer in charge using glazing clips and rubber gaskets as required All the fixtures and fastenings shall be fitted at right place and as directed by Engineer in charge. and shall be given trial of opening and closing properly.</p> <p><b>Mode of measurement and payment</b></p> <p>The Item shall be measured for its <b>breadth and height</b> limiting dimensions to those specified on plan or as directed.</p> <p>The payment will be made on square Meter basis of the finished work.</p> <p>The rate shall be for a unit of one square meter.</p>
<b>Item No. 31</b>	<p><b><i>'Providing and fixing M.S. grill of required pattern of windows etc. with M.S. flats at required spacing and frame around square or round headed bolts and nuts or by screws.including applying a priming coat of red lead paint and two coats of oil painting</i></b></p>
	<p>The relevant specification shall be followed as per General Technical specification for Building work booklet It.No.10.100.(A) / P.No.76</p> <p>Mode of Measurement and Payment</p> <p>The payment will be made on KG(KILOGRAM) basis of the finished work.</p>
<b>Item No. 32</b>	<p><b><i>'Applying two coats of Birla (white cement based) or (acrylic lapy- putty) or equivalent &amp; two coats of primer of approved brand and manufacture on new wall surface to give an even shade including thoroughly brushing the surface free from mortar dropping and other foreign matter and sand papered smooth. with Wall painting (two coats) with plastic emulsion paint of approved brand and manufacture on undecorated wall surface to give an even shade including thoroughly brushing the surface free from mortar droppings and other foreign matter and sand papered smooth.</i></b></p>
	<p><b>Birla Lappy Putty</b></p> <p>Birla Lappy Putty shall be of Approved brand and quality as approved by Engineer in charge</p> <p><b>Mode of Measurement &amp; Payment :</b></p> <p>The Item shall be measured for its <b>breadth and height</b> limiting dimensions to those specified on plan or as directed. The rate shall be for a unit of one square meter.</p> <p>The payment will be made on square Meter basis of the finished work.</p> <p>The rate shall be for a unit of <b>one square meter.</b></p> <p>Wall Painting The relevant specification shall be followed as per General Technical specification for Building work booklet It.No.18.57 / P.No.136&amp; It.no.18.59 +18.60/P.No.137.</p> <p>Mode of Measurement and Payment</p> <p>The payment will be made on square Meter basis of the finished work.</p>
<b>Item No. 33</b>	<p><b><i>'Applying two coats of Birla (white cement based) or (acrylic lapy- putty) or equivalent &amp; two coats of primer of approved brand and manufacture on new Ceiling surface to give an even shade including thoroughly brushing the surface free from mortar dropping and other foreign matter and sand papered smooth. Ceiling painting (two coats) with plastic emulsion paint of approved brand and manufacture on undecorated Ceiling surface to give an even shade including thoroughly brushing the surface free from mortar droppings and other foreign matter and sand papered smooth.</i></b></p>

	<p><b>Birla Lappy Putty</b>  <b>Birla Lappy Putty shall be of Approved brand and quality as approved by Engineer in charge</b>  <b>Mode of Measurement &amp; Payment :</b>  The Item shall be measured for its <b>breadth and height</b> limiting dimensions to those specified on plan or as directed. The rate shall be for a unit of one square meter.  The payment will be made on square Meter basis of the finished work.  The rate shall be for a unit of <b>one square meter</b>.  Wall Painting The relevant specification shall be followed as per General Technical specification for Building work booklet It.No.18.57 / P.No.136&amp; It.no.18.59 +18.60/P.No.137.  Mode of Measurement and Payment  The payment will be made on square Meter basis of the finished work.</p>
<b>Item No. 34</b>	<p><b>'Finishing wall with weather proof exterior emulsion paint on wall surface (two coats) to give an required shape even shade after thoroughly brushing the surface to remove all dirt, and remains of loose powdered materials.etc complete. Priming: Apply a liberal coat of exterior acrylic primer and allow it to dry for 4-5 hours. Application of putty is not recommended. Minimum 4-6 hours duration is required between each coat of weather shield max paint</b></p>
	<p>The relevant specification shall be followed as per Providing &amp; applying two coats of weather shield max paint of including applying exterior acrylic primer coat as per manufacturers specification and directions in shade and colour approved by architects, on exterior surfaces of the building including scaffolding, preparing the surface, watering, curing etc. complete and as directed by the architects and manufacturers.  Surface Preparation :  surface is thoroughly clean, dry and free from all loose dirt, chalk, grease, fungi, algae and flaking paint. This can be achieved by brushing with a wire/ stiff coir brush, followed by water jetting if required. Fill up all minor cracks and defects with white cement and sand mixture in the ratio 1:3. For application on previously painted wall, previous coatings of paint must be thoroughly scraped off and Clean the surface thoroughly using wire brushes.  Priming:  Apply a liberal coat of exterior acrylic primer and allow it to dry for 4-5 hours. Application of putty is not recommended.  Minimum 4-6 hours duration is required between each coat of weather shield max paint.all floor.  Mode of Measurement and Payment  The payment will be made on square Meter basis of the finished work.</p>
<b>Item No. 35</b>	<p><b><i>'Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc. consisting of following operations. (a) Applying and grouting a slurry coat of neat cement u ',brick bats is finally covered by jointless cement plaster 20mm th. in C.M. 1:4 added with special water proofing compound confirming to IS:2645 &amp; top smooth finished with trowel with false chequered marking of 300 mm.size.The treatment is carried along</i></b></p>
	<p>The item shall be executed as per the relevant specifications of General Technical specifications for Building works Booklet It. No.18.57/ Page 136. The Item shall be measured &amp; paid as finished work in Sqm.</p>

<b>Item No. 36</b>	<b>'Providing and constructing sandwich type Granite stone top &amp; bottom Kota Stone platform 0.6 mt. wide &amp; 0.75 mt. height, including front granite stone patti of 10 cm wide, vertical partitions of Kota stone with cement Mortar(1:1) as required comp as per</b>
	The item shall be executed as per the relevant specifications of General Technical specifications for Building works Booklet It. No.20.23 / Page 154. The Item shall be measured & paid as finished work in Sqm.
<b>Item No. 37</b>	<b>'Providing and fixing wash down water closet (European type, W.C. Pan) with integral P or S trap including jointing the trap with soil pipe in Cement Mortar 1:1 (1-Cement : 1-fine sand) (Seal and cover to be measured and paid for separately)(A) vitreous China Pattern :(i) in white colour, Providing and fixing 12.5 Litres low level flushing cistern with a pair, of C.I. or Mild brackets, complete with fittings such as lead valve less syphon, 15mm nom.nal size brass ball valve with polythene float, C.P brass handle unions and couplings for connections, with inlet, outlet and overflow pipes, 40mm dia.porcelain enamelled flush bend including cutting holes in walls and making good the same connecting the flush bend with cistern and closet (overflow pipe to be measured and paid for separately)(A) Vitreous China (I) In white colour, Providing and fixing plastic seat and cover for wash down water closer with C.P. brass hinges and rubber buffers. (B) Black plastic seal and cover, With Jet spray heavy duty with S.S. Braided hose 60 cm long.</b>
	The relevant specifications of Building Booklet It. No.23.112 (A)(I) Page No.165 shall be followed.
<b>Item No. 38</b>	<b>'Providing and fixing washbasin with single hole for pillar tap with C.I. or M.S. brackets painted white including sutting holes and making good the Providing and fixing C.P. brass waste for washbasin or sink. (A) 32mmdia.,Providing and fixing pillar tap, stop tap, bottle trap etc.</b>
	The item shall be executed as per the relevant specifications of General Technical specifications for Building works Booklet Item No. 23.127 / Page 167. The Item shall be measured & paid as finished work in Nos.
<b>Item No. 39</b>	<b>'Providing and fixing PVC SWR Nahni trap IS 14735 for drain - 100 mm diameter with jali of the following nominal diameter of self cleansing design with C.I screed down or hinged grating including the cost of cutting and making good the walls.</b>
	The item shall be executed as per the relevant specifications of General Technical specifications for Building works Booklet Item No.23.87 / Page 164. The Item shall be measured & paid as finished work in Nos.
<b>Item No. 40</b>	<b>'Providing and fixing screw down bib taps of following size.(A) Brass screw down bib tap polished bright. (i) 15mm dia.</b>
	The item shall be executed as per the relevant specifications of General Technical specifications for Building works Booklet Item No.23.144[B] / Page 169. The Item shall be measured & paid as finished work in Nos.
<b>Item No. 41</b>	<b>Providing &amp; fixing of overhead shower 80 mm (3") dia with 3 flow with Overhead Shower arm 200 mm with wall flange complete (i) 15mm dia.,Providing and fixing brass screw down stop tap.(A) 15mm dia.</b>



	The item shall be executed as per the relevant specifications of General Technical specifications for Building works Booklet Item No. specifications for Building works Booklet are Separately Attach The Item shall be measured & paid as finished work in Nos.
<b>Item No. 42</b>	<b>'Providing and fixing Kitchen sink with C.I. or M.S. brackets, painted white including cutting holes in walls and making good the same (C) S.S. &amp; Sink.(i) 450mm x 380mm x 150mm size with Providing and fixing C.P. brass waste for washbasin or sink, pillar tap, stop tap, bottle trap etc.</b>
	Specification Booklet of Building work Item No.23.130 (C) Page No. 167, Except Stainless steel Kitchen Sink Glossy ASIS 304 grade shall be used as directed by Engineer in charge + 23.95 (A) Page No. 171 + It.No. 23.96 (A) , Page No. 171 + It.No. 23.00.4, Page No.172
<b>Item No. 43</b>	<b>"Providing and fixing Gun metal check or non-return fullway wheel valve. 25mm. dia.</b>
	The item shall be executed as per the relevant specifications of General Technical specifications for Building works Booklet Item No.23.99 / Page 171. The Item shall be measured & paid as finished work in Nos.
<b>Item No. 44</b>	<b>'Providing and fixing Gun metal check or non-return fullway wheel valve. 40mm. dia.</b>
	The item shall be executed as per the relevant specifications of General Technical specifications for Building works Booklet Item No.23.99 / Page 171. The Item shall be measured & paid as finished work in Nos.
<b>Item No. 45</b>	<b>'Providing and fixing chromium plated brass half turn flush cock of approved quality including fixing in pipe line etc. complete.(ii) 25mm dia.</b>
	The item shall be executed as per the relevant specifications of General Technical specifications for Building works Booklet Item No.23.00 / Page 171. The Item shall be measured & paid as finished work in Nos.
<b>Item No. 46</b>	<b>"Providing and fixing ball cock of approved. quality as directed.(A) Copper Metal (A) 25mm. dia.</b>
	Specification Booklet of Building work Item No 23.00.5 (A) Page No. 173
<b>Item No. 47</b>	<b>'Providing laying and jointing in true line and level 15mm dia. U.P.V.C. Pipe ( SCH- 40) for cold water including fittings as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.</b>

	The item shall be executed as per the relevant specifications of General Technical specifications for Building works Booklet Section 23 / Page 166. The Item shall be measured & paid as finished work in Rmt.
<b>Item No. 48</b>	<b><i>'Providing laying and jointing in true line and level 25mm dia. U.P.V.C. Pipe (SCH- 40) for cold water including fittings as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.'</i></b>
	The item shall be executed as per the relevant specifications of General Technical specifications for Building works Booklet Section 23 / Page 166. The Item shall be measured & paid as finished work in Rmt.
<b>Item No. 49</b>	<b><i>"Providing laying and jointing in true line and level 50mm dia. U.P.V.C. Pipe (SCH- 40) for cold water including fittings as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials."</i></b>
	The item shall be executed as per the relevant specifications of General Technical specifications for Building works Booklet Section 23 / Page 166. The Item shall be measured & paid as finished work in Rmt.
<b>Item No.50</b>	<b><i>'Providing, laying and jointing in true line and level 110 diameter U.P.V.C (Type B) conforming to IS 13592-1992 with one end plain and other end socketed with rubber ring, &amp; fittings conforming to ISI 14735-1999 of approved make for drainage system pipe line, pipe shall be jointed with each other with rubber lubricant, pipe shall be fixed on wall using of PVC clamp of the size 110 mm diameter x 149 mm length x 145 mm height at every 2000 mm center to center or shall be concealed in walls as directed including necessary fittings such as bends, shoes etc. including testing of pipes and joints and jointed with adhesive solvent cement including cost of all materials.'</i></b>
	The item shall be executed as per the relevant specifications of General Technical specifications for Building works Booklet Section 23 / Page 166. The Item shall be measured & paid as finished work in Rmt.
<b>Item No. 51</b>	<b><i>'Providing and fixing S.W. gully trap with C.I. grating brick masonry chamber and water tight C.I. cover with frame of 300mm x 300mm size (inside) with standard weight.(i) Square mouth traps.(B) 150mm x 100mm size P or R type'</i></b>
	The item shall be executed as per the relevant specifications of General Technical specifications for Building works Booklet Item No.24.19 [1] / Page 176. The Item shall be measured & paid as finished work in Nos.
<b>Item No. 52</b>	<b><i>'Constructing Brick masonry road gully chamber 500mm x 450mm x 600mm including 500mm x 450mm C.I. horizontal grating with frame complete. 'P'</i></b>
	The item shall be executed as per the relevant specifications of General Technical specifications for Building works Booklet Item No. 20.40 / Page 182. The Item shall be measured & paid as finished work in Nos.

<b>Item No. 53</b>	<b><i>"Constructing brick masonry chamber for underground C.I. Inspection chamber and bends with bricks having crushing strength not less than 35Kg/Cm<sup>2</sup> in C.M. 1:5 C.I. cover with frame (Light duty) 455mm x 610mm intenal dimensions total weight of cover with frame to be not less than 38Kg. (Wt. of cover 23 Kg.) and Wt. of frame 15Kg. ) (R.C.C. top slabe with 1:2:4 mix (1-cement :2- coarse sand :4-graded stone aggregate 20mm size) foundation concrete 1:5:10 inside plaster 15mm thick with cement mortar 1:3 finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete.(i) Inside dimensions 455mmx 610mm and 450mm deep for single pipe line.</i></b>
	The item shall be executed as per the relevant specifications of General Technical specifications for Building works Booklet Item No. 20.40 / Page 182. The Item shall be measured & paid as finished work in Nos.
<b>Item No. 54</b>	<b><i>'Providing &amp; fixing G.I. Rain water spout of 50 mm.dia &amp; 30 cm length etc.</i></b>
	<p><b>1.0. Materials :</b> G.I. type of 50 mm. dia. shall conform to M-56.</p> <p><b>2.0. Workmanship</b></p> <p><b>2.1.</b> The G.I pipe of 30 cms. fixed as rain water pipe as directed. The pipe shall be fixed about 1/4 dia. below the floor level so as to make approach of water easy. The inlet of pipe shall be rounded off for easy entry of rain water pipe. The pipe shall be fixed in C.M. 1:3.</p> <p><b>3.0. Mode of measurements &amp; payment</b></p> <p><b>3.1.</b> The rate includes of all labour and materials required for satisfactory completion of this item.</p> <p><b>3.2.</b> The rate shall be for a unit of One number.</p>
<b>Item No. 55</b>	<b><i>'Providing and fixing in position cowl vent to pipes.(C) 100mm dia</i></b>
	<p>The P.V.C. cowl vent shall be suitable for 75 mm diameter pipe. The cowl vent be true to shape, smooth, cylindrical with inner and outer surfaces being as nearly as practicable concentric. It shall be sound and nicely cast and shall be free from cracks, or other imperfections and shall be neatly fixed in position</p> <p>The item shall be measured and paid on number basis.</p>
<b>Item No. 56</b>	<b><i>"Providing erecting and fixing double coated PVC. (ISI) water tank of required capacity each with all necessary fittings and connection etc. complete on terrace.</i></b>
	<p>General</p> <p>This work shall consist of Providing and fixing P V C water tank of specified capacity with necessary G I fittings including 25 mm dia G.I. over flow pipe, ball valve, of the shape and dimensions shown on the drawings and conforming to these Specifications or as approved by the Engineer in charge.</p> <p>PVC Water tank</p> <p>PVC Water tank of specified capacity and of I.S.I. mark of approved in liters of approved make and quality equivalent to syntax product</p> <p>Net capacity shall be net volume of water stored between the lowest level of overflow and lowest specified level.</p> <p>Nipple</p> <p>Galvanize pipe nipple shall be of approved make and of best quality Relevant specification given in Booklet of Building specification shall be applied for the execution of this item</p> <p>Ball valve</p> <p>Ball valve shall confirm specification no 23.00.5 (A) on page 172 of specification booklet for</p>

	<p>building works</p> <p>Ball valve shall be of approved make and of best quality. Relevant specification given in Booklet of Building specification shall be applied for the execution of this item</p> <p>Connections</p> <p>Connections shall be of approved make and of best quality. Relevant specification given in Booklet of Building specification shall be applied for the execution of this item</p> <p>WORKMAN SHIP</p> <p>Tank shall be approved quality and as per IS standard make. Material used in manufacturing tank shall be confirmed to relevant IS code. The material of tank and lead and fittings which may come in contact of water should be such that it does not impart any taste, colour or odor. It does not have any toxic effect and it does not contaminate the water. Thereby making it unpotable.</p> <p>The tank shall be fixed properly in a level position and making all required necessary correction like inlet outlet flushing overflow and air vent. Tank shall be satisfying the standards of public health.</p> <p>Mode of Measurement &amp; Payment:</p> <p>The payment will be made on capacity in litter's basis of the finished work.</p> <p>All necessary labour materials Equipment tools and plant, conveyance including loading and unloading etc shall be provided by the Contractor as directed by the Engineer in charge</p> <p>The item shall be measured for its capacity in litters limiting dimensions to those specified on plan or as directed.</p> <p style="text-align: center;">The rate shall be for a unit of one Litter.</p>
<b>Item No. 57</b>	<p><b><i>"Providing Sock pit of 5.0 Cum Volume (internal diameter of 1.50 meter) including Excavation and filling brick bats with dry masonry work attop for 45cm height including covering the top with R.C.C. Slab with One Man hole and C.I. cover of 0.60 x 0.45m , including providing vatas in Cement Motar 1:3 with the finishing curing and necessary connection with the septic tank outlet etc complete as directed by Engineer in charged.</i></b></p>
	<p>The relevant specification shall be followed as per General Technical specification for Building work booklet It.No.24.44 (II) P.No.184.</p>
<b>Item No. 58</b>	<p><b><i>'Providing septic tank of inside dimensions( 2.5 mt. x 2.0 mt.x 1.5 mt.) as Directed by incharge with brick masonry of CM 1:6 the foundation floor with 1:5:10 B.B.C.C. finished with 15 mm C.P. in C.M. 1:4 root cover of R.C.C. slab including connection pipe from inlet and outlet etc.comp.</i></b></p>
	<p>The relevant specification shall be followed as per General Technical specification for Building work booklet It.No.24.44 (II) P.No.184.</p>
<b>Item No. 59</b>	<p><b><i>'Providing of Bala Work for Anganwadi like Wall paintings on inside and outside walls upto the Slab height or lintel height, Measurements - vertical Scale Paint, Wall arts, Black board, Drawings of Animal, birds, Vegetables, Nutrition chart,Days-Months, Making Yojana Logo Board with all the deatils, writing bruiliding name in paint on the front side, etc complete as per Annexure (A) &amp; as per Directed by Engineer in charged.</i></b></p>
	<p><b>Material</b></p> <ol style="list-style-type: none"> <li>1. Oil paint shall be of specified colour and as approved by the Engineer in charge the ready mix paints shall only be used however, if ready mixed paint of specified shade or tint is not available white ready mixed paint with approved strainer will be allowed in such a case the contractor shall ensure that the shade of the paint so allowed shall be uniform.</li> <li>2. All paints shall meet with the following general requirements.</li> <li>3. The paint shall not show excessive setting in a freshly opened fuel can shall easily be</li> </ol>

	<p>redistricted with a paddle to a smooth homogenous shade.</p> <p>4. The paint shall show no curdling levering caking or colour separation and shall be free from lumps and skins.</p> <p>5. The paint shall not skin within 48 hours in a three quarters filled closed container.</p> <p>6. The paint shall dry to a smooth uniform finish free from roughness grit unevenness and other imperfections.</p> <p>7. Ready mixed paint shall be used exactly as received from the manufacturers and other imperfections.</p> <p>8. Enamel paints shall satisfy in general requirements in specification of oil paints Enamel paint shall confirm to IS 2933-1975</p> <p><b>Workmanship</b></p> <p>Wall paintings, Measurements, Wall arts, Black board, Nutrition chart, Etc as per Directed by Engineer In charged.</p> <p><b>MODE OF MEASUREMENT &amp; PAYMENT</b></p> <p>The payments shall be maid on JOB basis.</p>
<b>Item No. 60</b>	<p><b><i>'Providing, erecting &amp; Fixing Fibre Fabricted make childern Slide fit for children age group coming to Anganwadi and approved by Engineer in charge, in the playground of approved brand and quality at the site ad directed by engineer in Charge</i></b></p>
	<p>Above Item approved and Directed by Engineer In charged.</p> <p><b>MODE OF MEASUREMENT &amp; PAYMENT</b></p> <p>The payments shall be maid on Number basis</p>
<b>Item No. 61</b>	<p><b><i>'Providing, erecting &amp; Fixing Fibre Fabricted make childern Swing for children age group coming to Anganwadi and approved by Engineer in charge, in the playground of approved brand and quality at the site ad directed by engineer in Charge</i></b></p>
	<p>Above Item approved and Directed by Engineer In charged.</p> <p><b>MODE OF MEASUREMENT &amp; PAYMENT</b></p> <p>The payments shall be maid on Number basis</p>
<b>Item No. 62</b>	<p><b><i>'Providing Cello/Nikamal two Seat polypropelene Plastic Junior Well finished Study/Play Table with Chairs for Kids from 3-10 Years (Attractive colours like RED/Yellow/Green) with all necessary charges and taxes as Directed by the Engineer in charged.</i></b></p>
	<p>Above Item approved and Directed by Engineer In charged.</p> <p><b>MODE OF MEASUREMENT &amp; PAYMENT</b></p> <p>The payments shall be maid on Number basis</p>
<b>Item No. 63</b>	<p><b><i>'Supplying &amp; installing of Dry Chemical Powder type 6 Kg. Capacity fire extinguisher as per I.S. 2171 ISI. Mark with necessary fittings etc. complete.</i></b></p>
	<p>Above Item approved and Directed by Engineer In charged.</p> <p><b>MODE OF MEASUREMENT &amp; PAYMENT</b></p> <p>The payments shall be maid on Number basis</p>

<b>Item No. 64</b>	<b><i>'Providing and fixing kitchen platform trolley having three drawers of SS (IS 304) of required size like thali, katleri, perforated, partition, cupsosar type in kitchen platform having drawer front side and backside by using 19mm thick all proof plywood of ( IS 710 ) quality all side laminated etc. as directed. The size of SS (IS 304) basket of size 4" to 18" for thali, dish, katleri, perforated, partition, cupsosar type as directed including necessary S.S. fittings, handles, nobs, telescopic channels, etc. as directed</i></b>
	Above Item approved and Directed by Engineer In charged. <b>MODE OF MEASUREMENT &amp; PAYMENT</b> The payments shall be maid on Sqm basis
<b>Item No. 65</b>	<b><i>"Providing Office table with wooden top of approved brand Ply base of appropriate thickness of required dimensions with base support made up of Waterproof Ply of approved Brand(ISI make) on site with all necessary fittings , Fixtures like handles and adhesives,etc complete of design directed by Engineer incharged</i></b>
	Above Item approved and Directed by Engineer In charged. <b>MODE OF MEASUREMENT &amp; PAYMENT</b> The payments shall be maid on Number basis
<b>Item No. 66</b>	<b><i>'Providing Chair with armrest with leather /PVC / Mesh finish and proper cushion on site with all necessary fittings , Fixtures and adhesives,etc complete of design directed by Engineer incharged</i></b>
	Above Item approved and Directed by Engineer In charged. <b>MODE OF MEASUREMENT &amp; PAYMENT</b> The payments shall be maid on Number basis
<b>Item No. 67</b>	<b><i>'Providing and fixing of Polished Kota Stone / Kadapa for making Horizontal Shelves on wall using appropriate adehsive/motar and making appropriate vertical supports wherever necessary in brickwork or Kota Stone and and jointed with gray cement slury mixed with pigment to match the shade of slab and making the site cleaning as original with all necessary material and labour charges etc complete as per design directed by Engineer incharged</i></b>
	The relevant specification shall be followed as per General Technical specification for Building work booklet It.No.14.43.(B) /P.No.99 except that using for that using 'Providing and fixing of Polished Kota Stone / Kadapa for making Horizontal Shelves on wall using appropriate adehsive/motar and making appropriate vertical supports wherever necessary in brickwork or Kota Stone and and jointed with gray cement slury mixed with pigment to match the shade of slab and making the site cleaning as original with all necessary material and labour charges etc complete as per design directed by Engineer incharged The rate shall be for a unit of one square meter.

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Umargam

Executive Engineer  
Panchayat (R&B) Division  
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**- : SCHEDULE FOR TESTING OF MATERIALS :-**

For ensuring quality control and workmanship Various tests prescribed below for materials shall be taken at periodical intervals as stipulated below. The materials shall be got tested at Government recognized Laboratory (R&B) or field Laboratory of GERI (R&B) for which 1% of the estimated amount put to tender shall be recovered from the contractor from the RA bills and final bills and the testing charges shall be paid to the GERI by the Government . However if the charges increase over 1% no excess recovery shall be made from the contractor as per resolution of B & C department dated 10th May 1985 vide TNC/ 1085/ (4)/ S

It. No. as per schedule "B"	Brief description of materials to be tested	Qty of material	Prescription of test which shall be carried out	Frequency at which test shall be carried out	Total No of test to be taken.
1]	Coarse Aggregate		- Gradation test - Impact value - Flakiness and elongation	1 to 100 cm                      1 test 100 to 500 cm                      3 test 500 to 1500 cm                      5 test 1500 to 5000 cm                      7 test Minimum 1 test/ work	
2]	Grit		- Stripping value	As above	
3]	Granular materials		- Gradation - Atterbeg limits	As above	
4]	Murum		- P I Value	One test per 50 cum.	
5]	Sand/ quarry spall		- Silt content - Gradation - CBR test	One test per work/ season One test per 200 cmt. One test per work	
6]	Asphalt		1 Penetration test as per IS 1203 2 Ductility test as per IS 1208 3 Specific gravity test as per IS 1202 4 Softening point test as per IS 1204 5 Viscosity test as per IS 1206	1 to 10 tanker                      1 test 11 to 20 tanker                      2 test 21 to 50 "                      3 test 51 to 100 "                      4 test Remaining every 50"                      1 test	
7]	Cement		- Consistency - Setting time - Compressive strength - Fineness - Chemical analysis - Soundness	Up to 50 MT                      1 test 100 MT                      2 test 200 MT                      3 test 300 MT                      4 test 500 MT                      5 test 800 MT                      6 test 1300 MT                      7 test and 8 test for larger consignment	
8]	CC Cubes		- Compressive Strength (I.S. 519 – 1959)	1 to 5 cms                      1 No 6 to 15 cms                      2 No 16 to 20 cms                      3 No 21 to 50 cms                      4 No 51 and above                      4 + 1 (For each additional 50 m <sup>3</sup> or part thereof)	
9]	Water		- Chemical test	Once for approval of source of supply	
10]	Steel		- Tensile Strength	1 test/ 40 tonnes/ per category	

			<ul style="list-style-type: none"> <li>- Yield Stress</li> <li>- Elongation</li> <li>- Size</li> </ul>		
11]	Bricks		<ul style="list-style-type: none"> <li>- Water absorption</li> <li>- Efflorescence</li> <li>- Size</li> <li>- Compressive Strength</li> </ul>	1 test per 50,000 bricks	
12]	Prime coat/ Tack coat		<ul style="list-style-type: none"> <li>- Quality of binder</li> <li>- Binder temperature for application</li> <li>- Rate of spread of binder</li> </ul>	Number of samples per lot and test as per IS:73 At regular close intervals  Two test per 500 m <sup>2</sup> and not less than two test per day	
13]	Carpet and Seal coat mix/ B.M/ M.S.S.		<ul style="list-style-type: none"> <li>- Quality of binder</li> <li>- Grading</li> <li>- Temperature of binder</li> <li>- Binder content vide 45 IMD 2172</li> <li>- Rate of spread of mix materials</li> </ul>	Number of samples per lot and test as per IS:73 1 test on individual contents and mix aggregate from the dryer for each 100 tonnes of mix subject to minimum of two test per plant per day At regular close intervals  One test for each 100 tonnes of mix subject to mini. of Two per day Regular control through checks on layer thickness	
14]	Granular Sub-base	''''''	<ul style="list-style-type: none"> <li>- Gradation</li> <li>- Atterberg limits</li> <li>- Moisture content prior to compaction</li> <li>- Density of compacted layer</li> <li>- Deleterious constituents</li> <li>- C.B.R.</li> </ul>	As mentioned under serial number 3 As mentioned under serial number 3 As mentioned under serial number 3  One test per 500 m <sup>2</sup>  As required  As required	
15]	Wet Mix Macadam		<ul style="list-style-type: none"> <li>- Aggregate Impact Value</li> <li>- Grading</li> <li>- Flakiness and Elongation Index</li> <li>- Atterberg limits of portion of aggregate passing 425 micron sieve</li> <li>- Density of compacted layer</li> <li>-</li> </ul>	As mentioned under serial number 1  As mentioned under serial number 1 As mentioned under serial number 1  As mentioned under serial number 3  One test per 500 m <sup>2</sup>	
16]	Water Bound Macadam		<ul style="list-style-type: none"> <li>- Aggregate Impact Value</li> <li>- Grading</li> <li>- Flakiness Index and Elongation index</li> <li>- Atterberg limits of binding material</li> <li>- Atterberg limits of</li> </ul>	As mentioned under serial number 1 As mentioned under serial No.1 As mentioned under serial number 1  As mentioned under serial number 1 As mentioned under serial number 1	



			portion of aggregate passing 425 micron sieve		
17]	Earthwork		<ul style="list-style-type: none"> <li>- Sand Content [IS: 2720 (Part-4)]</li> <li>- Plasticity Test[IS:2720 (Part-5)]</li> <li>- Density Test [IS:2720 (Part-8)]</li> <li>- Moisture Content Test [IS :2720 (Part-2) ]</li> <li>- CBR Test</li> </ul>	<p>2 tests per 3000 cubic metres of soil 2 tests per 3000 cub. metres of soil.</p> <p>2 tests per 3000 cubic metres of soil. One test for every 250 cubic meters of soil.</p> <p>One CBR test for every 3000 cum. at least or closer as and when required by the Engineer.</p>	

The Number of tests will be as per Manual of quality control or latest Govt. G.R./Circular and it will be considered final

The contractor shall have to pay 1% of the estimated cost put to tender towards all testing of materials and the same shall be deducted from their bills for the works.

Testing charges of GERI shall be borne by Govt. No refund be made nor extra charges over 1% shall be recoverable from the contractor.

If directed by the Engineer in charge, the materials intended to be used for the work but not included in the above schedule shall also be got tested at Government recognized Laboratory or field Laboratory.

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Signature of the contractor