

Name of Work:- Construction of Remaining Compound Wall around Padhar Samaj

Smashan at Shahpur Ta. Viramgam PKG No Adimjuth/01 (2026-27)

ITEM NO: 1 "Excavation for foundation up to 1.5 mt. depth including sorting out and stacking of useful materials and disposing of the excavated stuff up to 50meter lead (B) Dense or Hard soil (S.O.R. 2023-24 P No. 46 item code 04001B)

- 1.0 Dense or Hard Soil: Any soil which generally require close application of picks or jumpers or scarifiers to loosen it stiff clay, gravel and rubble stone etc. fall-under this category.
- 2.0 Workmanship :
General: . Any soil which generally yields to the application of and shovels, phawaras, rakes or any such ordinary excavating implement or organic soil, gravel, silt, sand turf, loam, clay, peat etc., fall under this category.
- 2.0 Clearing the site : 2.1 The site on which the structure is to be built shall be cleared and all obstructions, loose stone, materials and rubbish of all kind, bush, wood and trees shall be removed as directed: The materials so obtained shall be property of the Government and be conveyed and stacked as directed within 50 M. lead. The roots of the trees coming in the sides shall be cut and coated with a hot asphalt.
- 2.2 The rate of site clearance is deemed to be included in the rate of earth work for which no extra will be paid.
- 3.0 Setting out: After clearing the site, the center lines will be given by the Engineer-in-charge. The contractor shall assume full responsibility for alignment, elevation and dimension of each and all parts of the tractor shall assume full responsibility for alignment elevation and dimension of each and all parts of the work. Contractor shall supply labourers, materials, etc. required for setting out the reference marks and bench marks and shall maintain them as long as required and directed.
- 4.0 Excavation : The excavation in foundation shall be carried out in true line and level and shall have the width and depth as shown in the drawings or as directed. The contractor shall do the necessary shoring and shutting or providing necessary slopes to a safe angle, at his own cost. The payment for such precautionary measures shall be paid separately if not specified. The bottom of the excavated area shall be levelled both longitudinally and transversely as directed by removing and watering as required. No earth filling will be allowed for bringing it to level, if by mistake or any other reason excavation is made deeper or wider than shown on the plan or directed. The extra depth or width shall be made up with concrete of same proportion as specified for the foundation concrete at the cost of the contractor. The excavation up to 1.5 m. depth shall be measured under this item.
- 5.0 Disposal of the excavated stuff : 5.1. The excavated stuff of the selected type shall be used in filling the trenches and plinth or levelling the ground in layers including ramming and watering etc.
- 5.2. The balance of the excavated quantity shall be removed by the contractor from the site of work to a place as directed with lead up to 50 M. and all lift.
- 6.0. Mode of measurement and payment:
 - 2.0. The measurement of excavation in trenches for foundation shall be made according to the sections of trenches shown on the drawing or as per sections given by the Engineer-in-charge. No payment shall be made for surplus excavation made in excess of above requirements or due to slopping and sloping back as found necessary on account of conditions of soil and requirements of safety.
 - 2.1. The rate shall be for a unit of one cubic metre.

ITEM NO: 2 Providing and laying cement concrete 1:4:8 (1 Cement: 4 coarse sand: 8 Machine crushed stone aggregates 40mm nominal size) and curing complete excluding cost of form work in (A) Foundation and plinth (R A No -01)

1.0 Materials:- Water, shall conform to M-I. Sand shall conform to M-6. Cement shall conform to M-3. Stone aggregate 40 mm. nominal size shall conform to M-12.

2.0 Workmanship:

2.1 General:

2.1.1. Before starting concrete bed of foundation trenches shall be cleared of all loose materials, levelled, watered and rammed as directed.

2.2 Proportion of Mix :

2.2.1. The Proportion of cement, sand and coarse aggregate shall be one part of cement, 3 parts of sand, 6 parts of stone aggregates and shall so measured by volume.

2.3 Mixing :

2.3.1. The concrete shall be mixed in a mechanical mixer at the site of work. Hand mixing may however be allowed for smaller quantity of work if approved by the Engineer-in-charge. When hand mixing is permitted by the Engineer-in-charge in case of break-down of machineries and in the interest of the work, it shall be carried out on a water tight platform and care shall be taken to ensure that mixing is continued until the mass is uniform in colour and consistency. However such cases 10% more cement than otherwise required shall have to be used without any extra cost. The mixing in mechanical mixer shall be done for a period 1 to 2 minutes. The quantity of water shall be sufficient to produce a dense concrete of required workability for the purpose.

2.4 Transporting & Placing the concrete :

2.4.1 The concrete shall be handled from the place of mixing to the final position in not more than 15 minutes by the methods directed and shall be placed into its final position, compacted and finished within 30 minutes of mixing with water i.e. before the setting commences.

2.4.2. The concrete shall be laid in layers of 15 cms. to 20 cms.

2.5 Compacting: 2.5.1. The concrete shall be rammed with heavy iron rammers and rapidly to get the required compaction and allow all the interstices to be filled with mortar.

2.6 Curing :

2.6.1. After the final set, the concrete shall be kept continuously wet, if required by ponding for a period of not less than 7 days from the date of placement.

3.0 Mode of measurement and payment:

The concrete shall be measured for its length, breadth and depth, limiting dimensions to those specified on plans or directed.

The rate shall be for a unit of one cubic metre.

ITEM NO: 03 Providing and laying cement concrete 1:3:6 (1 Cement: 3- Coarse sand: 6- crushed stone aggregates 20 mm nominal size) and curing complete including cost of formwork in (A) Wall Caps / Coping

1.0. Materials

1.1. Water shall conform to M-1. Cement shall conform to M-3 Sand shall conform to M-6. Stones aggregate 40 mm. nominal size shall conform to M-12.

2.0. Workmanship

2.1. General

2.1.1. Before stating concrete the bed of foundation trenches shall be cleared of all loose materials, leveled, watered and rammed as directed

2.2. Proportion of Mix:

2.2.1. The proportion of cement, sand and coarse aggregate shall be one part of cement. 3 parts of sand and 6 parts of crushed stone aggregates and shall be measured by volume.

The work shall be followed except that the work shall be carried out for coping and wall caps. The concrete work of wall caps/ coping.

2.3. Mixing:

2.3.1. The concrete shall be mixed in a mechanical mixer at the site of work. Hand mixing may however be allowed for smaller quantity of work if approved by the Engineer-in-charge. When hand mixing is permitted by the Engineer-in-charge in case "of break-down of machineries and in the interest of the work, it shall be carried out on a water tight platform and care shall be taken to ensure that mixing is continued until the mass is uniform in colour and consistency, However in such case 10% more cement than otherwise period 1 1/2 to 2 minutes. The quantity of water shall be just sufficient to produce a dense concrete of required workability for the purpose.

2.4. Transporting & Placing the Concrete:

2.4.1. The concrete shall be handed from the place, of mixing to the final position in not more than 15 minutes by the method as directed and shall be placed into its final-position, compacted and finished within 30 minutes of mixing with water i.e. before the setting commences.

2.4.2. The concrete shall be laid in layers of 15 cms. to 20 cms.

2.5.1. The concrete shall be rammed with heavy iron rammers and rapidly to get the required compaction and to allow all the interstices to be filled with mortar.

2.6. Curing:

2.6.1. After the final set, the concrete shall be kept continuously wet if required by ponding for a period of not less than 7 days from the date of placement.

2.7. Mode of Measurement & Payment:

2.7.1. The concrete shall be measured for its length, breadth and depth, limiting dimensions to those specified on plan or as directed. the rate includes cost of necessary form work.

2.7.2. The rate shall be for a unit of one cubic meter.

ITEM NO: 04 Brick work using common burnt clay building bricks having crushing strength not less than 35 kg./ Sq. Cm. in foundation and plinth in Cement Mortar 1:6. (1- Cement: 6 -fine sand) (B) Conventional (S.O.R 2024-25 P.No.71 Item No. 06002BA)

1.0 Materials: Water shall conform to M-I, Cement mortar shall conform to M-I1. Bricks shall conform to M-15.

2.0 Workmanship:

2.1. Proportion:

2.1.1. The proportion of the cement mortar shall be 1 : 6 (1 cement: 6 fine sand) by volume.

2.2. Wetting of bricks : 2.2.1. The bricks required for masonry shall be thoroughly wetted with clean water for about two hours before use or as directed. The cessation of bubbles, when the bricks are wetted with water is an indication of through wetting of bricks.

2.3. Laying:

2.0. .1. Bricks shall be laid in English bond unless directed otherwise. Half or cut bricks shall not be used except when necessary to complete to bond; closers in such case shall be cut to required size and used near the ends of walls.

- 2.3.2. A layer of mortar shall be spread on full width for suitable length of the lower course. Each brick shall first be properly bedded and set home by gently tapping with handle of trowel or wooden mallet. Its side face shall be flushed with mortar before the next brick is laid and pressed against it. On completion of course, the vertical joints shall be fully filled from the top with mortar.
- 23.3. The walls shall be taken up truly in plumb. All courses shall be laid truly horizontal and all vertical joint shall be truly vertical. Vertical joints in alternate course shall generally be directly one over the other. The thickness of brick course shall be kept uniform.
- 23.4. The brick shall be laid with frog upwards. A set of tools comprising of wooden straight edges, mason's spirit level, square half metre rule, and pins, string and plumb shall be kept on the site of work for frequent checking during the progress of work.
- 23.5. Both the faces of walls of thickness greater than 23 cms. shall be kept in proper place. All the connected brick work shall be kept not more than one metre over the rest of the work. Where this is not possible, the work shall be raked back according to bond (and not left toothed) at an angle not steeper than 45 degrees.
- 23.6. All fixtures, pipes, outlets of water, hold fasts of doors and windows etc. which are required to be built in wall shall be embedded in cement mortar.
- 2.1. Joints:
- 2.1.1. Bricks shall be so laid that all joints are quite flush with mortar. Thickness of joints shall not exceed 12 mm. The face joints shall be raked out as directed by taking tools daily during the progress of work, when the mortar is still green so as to provide key for plaster or pointing to be done.
- 2.1.2. The face of brick shall be cleaned the very day on which the brick work is laid and all mortar dropping removed.
- 2.2. Curing.
- 2.5.1. Green work shall be protected from rain suitably. Masonry work shall be kept moist on all the faces for a period of seven days. The top of masonry work shall be kept well wetted at the close of the day.
- 2.3. Preparation of foundation bed :
- 2.6.1. If the foundation is to be laid directly on the excavated bed, the bed shall be levelled, cleared of all loose materials, cleaned and wetted before starting masonry. If masonry is to be laid on concrete footing, the top of concrete shall be cleaned and moistened. The contractor shall obtain the Engineer's approval for the foundation bed, before foundation masonry is started. When pucca flooring is to be provided flush with the top of plinth, the inside plinth offset shall be kept lower than the outside plinth top by the thickness of the flooring.
- 3.0 Mode of measurements and payment:
- 3.1. The measurements of this item shall be taken for the brick masonry fully completed in foundation up to plinth. The limiting dimensions not exceeding those shown on the plans or as directed shall be final. Battered, tapered and curved portions shall be measured net.
- 3.2. No deduction shall be made from the quantity of brick work, nor any extra payment made for embedding in masonry or making holes in respect of following items :
- (1) Ends of joints, beams, posts, girders, rafters, purlins, trusses, corbel steps etc. where cross sectional area does not exceed 500 Sq.Cm.
 - (2) Openings not exceeding 1000 Sq. Cm.
 - (3) Wall plates and bed plates, bearing of slabs, chhajjas and the like whose thickness does not exceed 10 Cms. and the bearing does not extend to the full thickness of wall.
 - (4) Drainage holes, and recesses for cement concrete blocks to embed hold fasts for doors, windows etc.
 - (5) Iron fixtures, pipes upto 300 mm. dia; hold fasts and doors and windows built into masonry and pipes etc. for concealed wiring.
 - (6) Forming chases of section not exceeding 350 Sq. Cm. in masonry.
- 3.3. Apertures for fire places shall not be deducted nor shall extra labour required to make

splaying of jambs, throating and making Arches over the aperture be paid for separately.
3.4 The rate shall be for a unit of one cubic metre.

ITEM NO: 05 Brick work using common burnt clay building bricks having crushing strength not less than 35 kg./ Sq. Cm. in super structure in Cement Mortar 1:6. (1- Cement: 6 -fine sand) (B) Conventional (S.O.R 2024-25 P NO. 71,72 Item No. 06002BA+06006B)

Materials

Bricks shall conform to M-15. Cement mortar shall conform to M-11.

1.0 Workmanship

- 1.1.** The relevant specification of item No. 4 shall be followed except that the masonry work shall be carried out above plinth level to floor two level i.e. for ground floor.
- 1.2.** The frames of doors, windows, cupboards etc. shall be housed into the brick work at the correct location and level as directed. The heavy steel doors, window frames etc. shall be built in with work, but for ordinary steel doors and windows required opening for frames, hold-fasts, etc., shall be in the wall and frame embedded later on in order to avoid damage to the frames.
- 1.3.** Necessary scaffolding shall be provided. The supports of the scaffolding shall be sound and strong tied, together with horizontal pieces over which the scaffolding plunks shall be fixed. Simple scaffolding shall be allowed normally. In this case scaffolding hole shall rest in hole header horizontal coarse only. Minimum number of holes be left in brick work for supporting horizontal scaffolding poles. The contractor is responsible for providing and maintaining sufficiently strong scaffolding so as to withstand all loads likely to come upon it.
- 1.4.** For the face of brick work, where plastering is to be done, joints shall be racked out to a depth not less than thickness of joints. The face of brick work shall be cleaned and mortar dropping removed on very same day that brick work is laid.

2.0 Mode of measurements & payment

- 2.1.** The masonry work of G.F. i.e. above plinth level to floor two level shall be measured and paid under this item.
- 2.2.** Brick work in parapet shall be included in the corresponding masonry item of store immediately below the floor above which the parapet is built.
- 2.3.** No deduction shall be made from quantity of brick work nor any extra payment made for embedding in masonry of marking holes in respect of following item.
 - (1) Ends of joints, beams, posts, girders, rafters, purlins trusses corbel, steps, etc. where cross sectional area does not exceed 500 sq.cm.
 - (2) Opening not exceed in 1000 sq.cm.
 - (3) Wall plate sand bed plates bearing of slab, chhajjas, and like whose thickness does not exceed 10 cms. and the bearing does not extend the full thickness of wall.
 - (4) Drainage holes and recesses for cement concrete blocks to embed hold fasts for doors, window etc.
 - (5) Iron fixtures, pipes up to 300 mm. dia. hold fasts of doors, and window built into masonry and pipes etc. for concealed wiring.
 - (6) Forming charges of section not exceeding 350 sq.cm. in masonry.
 - (7) Apparatuses for fire places, shall not be deducted nor shall extra labour required to make splaying of jumps, throating and making trenches over the aperture be paid for separately.
- 2.4.** The rate shall be for a unit of one cubic meter

ITEM NO: 06 20mm thick sand faced cement plaster on walls up to 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. as directed including cost of 12mm x 12mm size grooves to be created as shown in drawing for completed items of work. (SOR 2024-25 P.No.137/ It Code-17009)

1.0. Materials

1.1. Water shall conform to M-1. Cement mortar shall conform to M-11.

2.0. Workmanship

2.1. The work shall be carried out in the coats. The backing coat (base coat) shall be 12 mm. thick in C.M. 1:3. The relevant specifications of item No. 17.58(I) shall be followed except that the thickness of back coat shall be 12 mm. average. Before the first coat hardens its surface shall be beaten up by edges of wooden tapers and close dents shall be made on the surface.

The subsequent coat shall be applied after this coat has been allowed to set for 3 to 5 days, depending upon the weather conditions. The surface shall not be allowed to dry during this period.

2.2 The second coat shall be completed to 8 mm. thickness in C.M. 1:1 as described above, including raising sand facing by bushing. The sample of sand face shall be got approved before the work is started. The whole work shall be carried out uniformly as per sample approved.

2.3. Curing :

The curing shall be started overnight after finishing of plaster. The plaster shall be kept wet for a period of 7 days. During this period, it shall be protected from all damages.

3.0. Mode of measurement & payment

3.1. The relevant specifications of item No. 17.58 shall be followed except that the sand face plaster on outside up to 10 m. above ground level shall be measured under this item.

3.2. The rate shall be for a unit of One sq. meter.

ITEM NO: 07 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 {SOR P. No.147 It. Code. 19031}

1.0 Materials

Water shall be conform M-1. The plastic emulsion shall conform to I.S.: 5411-1969 (part-I).

2.0 Workmanship

2.1. **Scaffolding** : The relevant specifications of item-No. 18.11 Para 2.1 shall be followed.

2.2. **Preparation of surface** : The relevant specification of item No. 18.44 Para 2.2 shall be followed.

2.3. Preparation of Mix :

This shall be done as per manufacture's instructions. The thinning of emulsion is to be done with water and not with turpentine. The quantity of thinner to be added shall be as per manufacturer instructions.

2.4. Application :

2.4.1. Before pouring into small containers for use, the paint shall be stirred thoroughly in item container. When applying also, the paint shall be continuously stirred in the smaller container, so that its consistency is kept uniform.

2.4.2. The paint shall be laid on evenly and smoothly by means of crossing and laying off the crossing and consist of covering the area over with paint, brushing the surface hard for the first time over and then, brushing alternately in opposite direction two or three times and then finally brushing lightly in direction at right angles to the same. In this process, no brush Marks shall be left after the laying off is finished. No hair marks from the brush or clogging of paint puddles in the corners of panels, angles of molding s, etc. shall be left on the work. The full process of crossing and laying off will constitute one coat.

2.4.3. The paint shall be applied with brush or rollers. For undecorated surfaces, the surface shall be treated with minimum two coats of cement water proofing paint. The second or subsequent

coat shall not be started until the proceeding coat as become sufficiently hard to resist marking by brushing being used.

2.4.4. The surface on finishing shall present a flat velvety smooth finish. It shall be even and uniform in shade without patches, brush marks, paint drops etc.

2.5. Precautions:

- (a) Old brushes if they are to be used with emulsion paints, shall be completely dried of turpentine or oil paint by washing in warm soap water. Brushes shall be quickly washed in water immediately after use and kept immersed in water fusing break periods to prevent the paint from hardening on the brush.
- (b) In the preparation of wall for plastic emulsion painting, no oil base petals shall be sued in filling cracks, holes etc.
- (c) Splashes on floors etc. shall be cleaned out without delay as they will be difficult to remove after hardening.
- (d) Washing or surfaces treated with emulsion paint shall not be done within 3 to 4 weeks of application

2.6. **Protective payment:** The relevant specifications of item No. 18.11 shall be followed.

3.0 Mode of measurements and payment

3.1. The relevant specifications of item No. 18.11 shall be followed.

3.2. The rate shall be for a unit of One sq. meter.

ITEM NO: 8 Filling available excavated Earth (Excluding Rock) in trench plinth side of foundation. in layer not excluding 20 cm in depth consolidation each deposited layer by ramming and watering etc. complete (SOR P. No.48 It. No 4006)

Workmanship

- 1.0. The earth to be used for filling shall be free from salts, organic or other foreign matter. All clods of earth shall be broken.
- 1.1. 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.
- 1.2. 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 hours and allowed to dry and then rammed and consolidated.
- 1.3. The finished level of filling shall be kept to shape intended to be given to floor.
- 1.4. 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.
- 1.5. 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.
- 1.6. Mode of Measurements & Payment
- 1.7. 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.
- 1.8 The rate shall be for a unit of one cubic meter

Deputy Executive Engineer

R & B Panchayat Sub Division

Viramgam

Executive Engineer

R & B Panchayat Division

Ahmedabad