

## Birla Industrial & Technological Museum

(National Council of Science Museums, Ministry of Culture, Govt. of India)



19A, Gurusaday Road, Kolkata - 700 019

## Sub: Civil work for Gym Park & Laminar flow exhibits at DSC, Digha.

| Sl.<br>No. | Description of item  | Qty. | Unit | Rate     | Amount    |
|------------|--|------|------|----------|-----------|
| 1.0        | Earth work in excavation of foundation trenches or drains, in all<br>sorts of soil (including mixed soil but excluding laterite or<br>sandstone) including removing, spreading or stacking the spoils<br>within a lead of 150 m. as directed. The item includes necessary<br>trimming the sides of trenches, levelling, dressing and ramming the                   |      |      |          |           |
| 2.0        | bottom, bailing out water as required complete. Depth of excavation<br>Earth work in filling in foundation trenches or plinth with good<br>earth, in layers not exceeding 150 mm. including watering and<br>ramming etc. layer by layer complete. (Payment to be made on the<br>basis of measurement of finished quantity of work)                                 | 20   | Cum. | 119.27   | 2385.40   |
| 3.0        | With earth obtained from excavation of foundation.<br>Filling in foundation or plinth by silver sand in layers not exceeding<br>150 mm as directed and consolidating the same by thorough<br>saturation with water, ramming complete including the cost of<br>supply of sand. (payment to be made on measurement of finished                                       | 20   | Cum. | 77.54    | 1550.80   |
| 4.0        | quantity)<br>Brick soling with picked Jhama bricks including preparation of bed<br>as necessary with brick joints properly filled in and packed with<br>powdered earth and including necessary cushion of similar material<br>below the soling (and in between layers when more than one layer is<br>used) completes as per direction.                             | 5    | Cum. | 543.51   | 2717.55   |
| 5.0        | Single brick flat soling (thickness 75 mm.)<br>Brick work with 1st class bricks (Class designation 75) in cement<br>mortar (1:6)<br>In Foundation & upto plinth.   | 50   | Sqm. | 348.00   | 17400.00  |
| 6.0        | 125mm thick brick work with 1st class bricks in cement mortar<br>(1:4) in any floor.   | 13   | Cum. | 5,198.00 | 67574.00  |
| 7.0        | Plaster (to wall, floor, ceiling etc.) with sand and cement mortar including rounding off or chamfering corners as directed and raking out joints including throating, nosing and drip course, scaffolding/staging where necessary at any height.  | 10   | Sqm. | 712.00   | 7,120.00  |
| 8.0        | With 1:4 cement mortar, 15mm thick plaster.<br>Neat cement punning about 1.5mm thick in wall, dado, window, sill,  | 80   | Sqm. | 155.00   | 12,400.00 |
| 9.0        | floor etc.<br>NOTE: Cement 0.152 cu.m per100 sq.m.<br>Providing and laying in position Ordinary Cement concrete of   | 50   | Sqm. | 34.00    | 1,700.00  |
|            | specified grade with graded stone chips (20 mm nominal size) of<br>Pakur variety excluding the cost of centering, shuttering and<br>reinforcement, if any, in ground floor as per relevant IS codes.   |      |      |          |           |
| 9.1        | 1:1½:3 (1 Cement: 1½ coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size)   | 12   | Cum. | 6,880.88 | 82,570.56 |
| 9.2        | <ul><li>1:2:4 (1 cement : 2 coarse sand (zone-III) : 4 graded stone aggregate</li><li>20 mm nominal size)</li><li>Hire and labour charges for shuttering with centering and necessary</li></ul>  | 9    | Cum. | 6,510.92 | 58,598.28 |
|            | staging upto 4 m using approved stout props and thick hard wood<br>planks of approved thickness with required bracing for concrete<br>slabs, beams, columns, lintels, curved or straight including fitting,<br>fixing and striking out after completion of works. 25mm to 30mm<br>thick wooden shuttering as per decision and direction of Engineer-in-<br>charge. | 10   | Sqm. | 205.00   | 2,050.00  |

|   | Reinforcement for reinforced concrete work in all sorts of structures including distribution bars, stirrups, binders etc. including supply of  |      |      |             |                            |  |
|---|--|------|------|-------------|----------------------------|--|
|   | rods, initial straightening and removal of loose rust (if necessary), cutting to requisite length, hooking and bending to correct shape, placing in proper position and binding with 16 gauge black annealed wire at every intersection, complete as per drawing and direction. For works in foundation and upto roof of ground floor/ upto 4 m using Tor/HYSD steel.  |      |      |             |                            |  |
|   | Make: JSW/JSPL/SHYAM/SRMB/BMASL/ELECROSTEEL/SSL.   | 0.50 | MT   | 68,053.00   | 34,026.50                  |  |
|   | Supplying and laying true to line and level High Grip, Scratch resistant, Neutral to UV rays, Full Body Vitrified Tiles conforming to IS:15622-2006 & IS 4457-2007 and tested in accordance with IS:13630 [Non- modular sizes for tiles with Skid resistance: 0.6, Mohr's hardness > 7.0, Staining resistance: Class- 1, Water Absorption E < 0.5%] & MOR > 35N/sq.mm and Breaking strength > 1500 N for Outdoor area of building e. g. Gang-way, Corridor, Driveway, Parking lots, Courtyards, Sloping ramps, Entrance lobbies, Patios, Portico etc. set over necessary underlay and 2 mm thick cement slurry at back side of tiles using cement @ 2.91 Kg./Sqm, joints grouted with admixture of white cement and colouring pigment to match with colour of tiles and removal of wax coating of top surface of tiles with warm water and cleaning the tiles using soft and dry cloth complete including the cost of materials, labour and all other incidental charges complete including backside slurry but excluding the cost of underlay and true to the manufacturer's specification and direction of Engineer-in-Charge. In Ground Floor: Sizes-300 mm x 300 mm x10 mm. Make: Kajaria/Jhonson/Somany | 130  | Sqm. | 785.00      | 102050.00                  |  |
|   | Supplying, fitting & fixing 1st quality Ceramic/ vitrified tiles in walls & floors to match with the existing work & 4 nos. of key stones (10mm) fixed with araldite at the back of each tile & finishing the joints with white cement mixed with colouring oxide if required to match the colour of tiles including roughening of concrete surface, if necessary or by synthetic adhesive & grout materials etc.  |      |      |             |                            |  |
| 13.1  | In floor with Sand Cement Mortar (1:4) 20 mm thick & 2 mm thick cement slurry at back side of tiles using cement @ 2.91 Kg/Sq.m & joint filling using white cement slurry @ 0.20kg/Sq.m. Area of each Coloured decorative premium quality antiskid tiles of minimum size 300 x 300 mm.   | 5    | Sqm. | 737.00      | 3,685.00                   |  |
|   | In walls with Sand Cement Mortar (1:3) 15 mm thick & 2 mm thick cement slurry at back side of tiles using cement @ 2.91 Kg/Sq.m & joint filling using white cement slurry @ 0.20kg/Sq.m. Area of each Coloured decorative premium quality tiles of minimum size 450 x 300 mm.  | 30   | Sqm. | 743.00      | 22,290.00                  |  |
|   | Providing & mixing polymer based water resistant bonding agent   |      |      |             |                            |  |
|   | like Dr. Fixit 101 LW+ or equivalent in cement plaster as per manufacture's specification and direction of EIC.  | 10   | Lit. | 375.00      | 3,750.00                   |  |
|   | Basic value of the work =  |      |      |             |                            |  |
| Say Rs.   |  |      |      |             | 4,21,868.09<br>4,21,868.00 |  |
| Add GST @18% over basic value of work =                       |  |      |      |             | 75,936.00                  |  |
| Cost of work including GST =                                  |  |      |      |             | 4,97,804.00                |  |
| Add Labour welfare cess @1% over cost of work including GST = |  |      |      |             | 4,978.00                   |  |
| Gross value of work including GST @18% & LWC @1% =            |  |      |      | 5,02,782.00 |                            |  |

| S<br>N |  | Description of item | Qty. | Unit | Rate | Amount |  |
|--------|--|---------------------|------|------|------|--------|--|
| NOTE · |  |                     |      |      |      |        |  |

## <u> OTE :</u>

- 1 Tenderers should visit the site before quoting the rate to understand the nature of work and condition of the site.
- 2 Rates shall be quoted inclusive of all materials, **wastage**, labour, shifting charges, **taxes & duties** etc. required for this job. No additional payment shall be made by the BITM for this purpose.
- 3 The work shall be required to carry out without obstructing the visitors' movements and may also be required to carry out beyond office hours (if required) for which no additional payment shall be made.
- 4 Regarding the work directives of the Engineer-in-Charge shall be final and binding.
- 5 All materials must be approved by the Engineer-in- Charge before supplying at site. List of Approved materials:
  - i) Cement: Ultratech/ ACC/ Lafarge/ Ambuja.
  - ii) Reinforcement: JSW/ JSPL/ SHYAM/ SRMB/ BMASL/ ELECTROSTEEL/ SSL.
  - iii) Vitrified tiles: Kajaria/ Johnson/ Nitco/ Orient/ Somany/ Vermora.

Signature with Seal of the Contractor