

## BOQ/FINANCIAL BID

**Name of Work:- Construction of Main Entrance Gate at 220 KV Samaguri GSS, AEGCL.**

**NIT No:-AEGCL/DGM/TTC/TEZ/T-20/2022/189**

**Dated 05/11/2022**

### Part A (Main gate)

Sl. No.	Description of Items	Qty	Unit	Rates	Amount
1	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-incharge. 2.6.1 All kinds of soil	<b>14.93</b>	<b>cum</b>		
2	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth,consolidating each deposited layer by ramming and watering, lead upto 50 m and lift upto 1.5 m.	<b>14.40</b>	<b>cum</b>		
3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level . 1:3:6 (1 Cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources)	<b>10.05</b>	<b>cum</b>		
4	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level. Thermo-Mechanically Treated bars of grade Fe-500D or more.	<b>463.67</b>	<b>kg</b>		
5	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level : 5.1.2 1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	<b>7.60</b>	<b>cum</b>		
6	Centering and shuttering including strutting, propping etc. and removal of form for 5.9.1 Foundations, footings, bases of columns, etc. for mass concrete	<b>43.59</b>	<b>sqm</b>		
7	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required. 10.25.2 In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	<b>634.39</b>	<b>kg</b>		
8	Providing and fixing ball bearing for rolling shutter (wheels and guide rollers)	<b>8.00</b>	<b>each</b>		
9	Providing and fixing ISI marked oxidised M.S. sliding door bolts with nuts and screws etc. complete : 9.62.1 300x16 mm	<b>2.00</b>	<b>each</b>		
10	Providing and fixing ISI marked oxidised M.S. tower bolt black finish, (Barrel type) with necessary screws etc. complete : 9.63.1 250x10 mm	<b>2.00</b>	<b>each</b>		
11	9.60 Providing and fixing oxidised M.S. double acting spring hinges with necessary screws etc. complete. 9.60.1 150 mm	<b>4.00</b>	<b>each</b>		

Sl. No.	Description of Items	Qty	Unit	Rates	Amount
12	15 mm cement plaster on rough side of single or half brick wall finished with a floating coat of neat cement of mix : 13.8.2 1:4 (1 cement: 4 fine sand)	<b>0.81</b>	<b>sqm</b>		
13	Providing and laying flamed finish Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge : 11.55.1 Flamed finish granite stone slab Jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.	<b>15.36</b>	<b>sqm</b>		
14	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	<b>7.76</b>	<b>sqm</b>		
15	Finishing walls with Acrylic Smooth exterior paint of required shade : 13.46.1 New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	<b>7.76</b>	<b>sqm</b>		
16	13.61 Painting with synthetic enamel paint of approved brand and manufacture to give an even shade : 13.61.1 Two or more coats on new work	<b>37.50</b>	<b>sqm</b>		
17	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. 18.7.3) 25 mm nominal dia Pipes	<b>15.00</b>	<b>metre</b>		
18	Providing brick soling in foundation and under floor with stone/ best quality picked jhama brick, sand packed and laid to level and in panel after preparing the subgrade as directed including all labour and materials and if necessary dewatering, complete.	<b>72.71</b>	<b>sqm</b>		

Sl. No.	Description of Items	Qty	Unit	Rates	Amount
19	Wiring for light/ fan/ call bell point with 2x1.5 sq mm P.V.C. insulated single core unsheathed industrial (Multistrand) cable FR conforming to IS-694: 1990 with flexible bright annealed electrolytic copper conductor for voltage grade up to 1100 volts (Finolex /RR Kabel /Nicco / Anchor or Equivalent Make as approved by the Deptt.) with flat 19 mm ISI marked casing 'n' capping (AKG / Precision/ Presto Plast/Polycab/ MW or equivalent make as approved by the Deptt.) in surface system, including 6 Amp flush type switch/ bell push (Anchor Penta/Gold medal /Kolor kany.Kom/ Havells or equivalent make as approved by the Deptt.) GI/ MS switch board (ISI marked) half conceal on wall with phenolic laminated sheet cover ,ceiling rose (Anchor/Gold medal /Kolor kany.Kom / Havells or equivalent make as approved by the Deptt.) etc. complete as directed and specified by the Deptt.	4	each		
20	Supplying with fitting and fixing single Pole 10 KA 240/415V 50Hz MCB of the following capacity complete with making necessary connection as approved, specified and directed by the deptt. 16.1.1B Series (Schneider MG, legrand, Hager make) 16.1.1.2)6 to 32A	1	each		
21	Supply and laying of following size PVC/XLPE insulated and PVC sheathed 1.1 KV G Solid Aluminium conductor up to 10 sq mm balance stranded conductor, XLPE Insulated, cores laid up, PVC tape inner sheathed, Armour (Aluminium for single core up to 70 sq mm balance Aluminium strip, Galvanised for cables up to 2x10 sq mm.3x10 sq mm,4x6 sq mm balance all galvanised steel strip) , extruded PVC Type ST2 sheathed, 650/1100V grade as per IS 7908(Part 1) 1988 armoured U.G. cable U.G. cable laid in ground/partially in air (as required for termination over ground including excavation of cable trench up to depth of 75cm, refilling, protective brick covering, Sand cushioning etc complete handling of surplus spoil, debris et to proper place as specified and directed by the deptt. (Nicco/ Havells/ RPG/CCI/Polycab/Gloster/ Finolex make) .	30.00	Metre		
22	Supplying with fitting fixing of CFL/Fluorescent luminaries complete with all accessories such as ballast, starter etc. directly on wall / ceiling including connection as approved by the Deptt.)with 1.5 sq mm P.V.C. insulated S.C. copper conductor as required and as directed by the department. 23.1.5. Sleek Box type luminaries complete with Electronic ballast and plastic holder brackets with 1 X 36 / 40 watt Fluorescent tube.(Crompton Greaves make) Model- DJB 1314LDB50 / DJBN1314EB CROMTEK with Super Saver / Super Brite Lamp or equivalent (Equivalent will be selected by the deptt considering the mother items rate) PHILIPS/ WIPRO/ BAJAJ/ Havells/ HPL/ SOLAR/ JAQUAR make.	2	Each		
23	Supplying and fixing of Jaquar or equivalent Philips/ Wipro LED spot light fittings complete with Shade, back plate including connection cable, as approved by the Deptt.s etc. as required. LED Square front spot light,3W	2	Each		
24	Providing and making Substation name emblem with golden font over polished granite slab, which shall be fixed on wall surface of size (3.00x2.10)m approx	1.00	LS		

Sl. No.	Description of Items	Qty	Unit	Rates	Amount
25	Dismantling of existing Steel gate,RCC Column, existing structure etc. and shift the debris at a proper place as specified and directed by the depts.	1.00	LS		
<b>Part B (Security booth repairing)</b>					
Sl. No.	Description of Items	Qty	Unit	Rates	Amount
1	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	2.40	sqm		
2	Dismantling cement asbestos or other hard board ceiling or partition walls including stacking of serviceable materials and disposal of unserviceable materials within 50 metres lead.	6.40	sqm		
3	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead : 15.12.1 Of area 3 sq. metres and below	5.00	each		
4	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within 50 metres lead of: 15.28.1 G.S. Sheet	12.24	sqm		
5	Brick work with common burnt clay modular bricks of class designation 7.5 in foundation and plinth in: Cement mortar 1:4 (1 cement : 4 coarse sand)	0.67	cum		
6	15 mm cement plaster on rough side of single or half brick wall finished with a floating coat of neat cement of mix : 13.8.2 1:4 (1 cement: 4 fine sand)	8.88	sqm		
7	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows, fixing with butt hinges of required size with necessary screws, excluding panelling which will be paid for separately, all complete as per direction of Engineer-in-charge. 9.5.1 Second class teak wood 9.5.1.2 30 mm thick shutters	1.89	sqm		
8	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joints with white cement and matching pigments etc., complete. 11.41.1 Size of Tile 500x500 mm	2.40	sqm		

Sl. No.	Description of Items	Qty	Unit	Rates	Amount
9	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3 kg/sqm including grouting the joint with white cement & matching pigments etc. complete. 11.46.1 Size of Tile 500x500 mm	8.25	sqm		
10	Providing and fixing plain multipurpose cement board(Hight pressure steam cured) with suitable screws for cement particle board in ceiling etc. complete (frame work to be paid seperately). 12.26.1 6 mm thick Cement fiber board as per IS: 14862	6.40	sqm		
11	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	38.08	sqm		
12	Finishing walls with water proofing cement paint of required shade : 13.109.1 Old work (one or more coats applied @ 2.20 kg/10 sqm) over priming coat of primer applied @ 0.80 litres/10 sqm complete including cost of Priming coat.	46.96	sqm		
13	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade : 13.99.1 One or more coats on old work	14.52	sqm		
14	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineerin-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	12.24	sqm		
15	Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm (+0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete :12.51.1 Ridges plain (500 - 600mm)	2.50	metre		
	12.51.4 Barge board (Upto 300 mm)	14.20	metre		

Sl. No.	Description of Items	Qty	Unit	Rates	Amount
16	Providing and fixing aluminium sliding door bolts, ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete : 9.96.2 250x16 m	1.00	each		
17	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868 ) transparent or dyed to required colour or shade, with necessary screws etc. complete : 9.97.2 250x10 mm	2.00	each		
18	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete : 9.100.1 125 mm	2.00	each		
19	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level . 1:3:6 (1 Cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources)	0.20	cum		
20	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required : 17.2.1 W.C. pan with ISI marked white solid plastic seat and lid	1.00	each		
21	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.18.7.1)15 mm nominal dia Pipes	10	Rm		
22	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge. External work 18.9.9 100 mm nominal dia Pipes	20	Rm		

Sl. No.	Description of Items	Qty	Unit	Rates	Amount
23	Providing and fixing PTMT soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with concealed fitting arrangements, weighing not less than 106 gms.	1	Each		
24	Providing and fixing PTMT towel ring trapezoidal shape 215 mm long, 200 mm wide with minimum distances of 37 mm from wall face with concealed fittings arrangement of approved quality and colour, weighing not less than 88 gms.	1	each		
25	18.15 Providing and fixing brass bib cock of approved quality : 18.15.1 15 mm nominal bore	3	Each		
26	Providing and fixing brass stop cock of approved quality : 18.16.1 15 mm nominal bore	1	Each		
27	Providing and fixing 8 mm dia C.P. / S.S. Jet with flexible tube upto 1 metre long with S.S. triangular plate to European type W.C. of quality and make as approved by Engineer - in - charge.	1.00	each		
28	Providing, fitting and fixing anodised aluminium sliding windows and ventilators of standard sections of approved brand without horizontal glazing bars, joints mitred and welded (manufactured to relevant IS specifications) and providing and fixing handles, angle cleat, rubber gasket, roller, bolting device, locking arrangements, screws etc as required complete as specified and directed for all levels. (a)2 Track sliding window (iv) 5 mm clear glass	4.05	sqm		
29	Providing soling in foundation and under floor with stone/ best quality picked jhama brick, sand packed and laid to level and in panel after preparing the subgrade as directed including all labour and materials and if necessary dewatering, complete. (a)Brick on flat soling.	0.45	sqm		
30	Wiring for light/ fan/ call bell point with 2x1.5 sq mm P.V.C. insulated single core unsheathed industrial (Multistrand) cable FR conforming to IS-694: 1990 with flexible bright annealed electrolytic copper conductor for voltage grade up to 1100 volts (Finolex /RR Kabel /Nicco / Anchor or Equivalent Make as approved by the Deptt.) with flat 19 mm ISI marked casing 'n' capping (AKG / Precision/ Presto Plast/Polycab/ MW or equivalent make as approved by the Deptt.) in surface system, including 6 Amp flush type switch/ bell push (Anchor Penta/Gold medal /Kolor kany.Kom/ Havells or equivalent make as approved by the Deptt.) GI/ MS switch board (ISI marked) half conceal on wall with phenolic laminated sheet cover ,ceiling rose (Anchor/Gold medal /Kolor kany.Kom / Havells or equivalent make as approved by the Deptt.) etc. complete as directed and specified by the Deptt. 1.1.1.)short point up to 3.00 metre. length.	4.00	each		

Sl. No.	Description of Items	Qty	Unit	Rates	Amount
31	Wiring to 5 a pin 6 Amps plug point with 1.5 sq. mm P.V.C. insulated single core unsheathed industrial (Multistrand) cable FR conforming to IS-694: 1990 with flexible bright annealed electrolytic copper conductor for voltage grade up to 1100 volts (Finolex /RR Kabel /Nicco / Anchor or Equivalent Make as approved by the Deptt.) with flat 19 mm ISI marked casing 'n' capping (AKG / Precision/ Presto Plast/Polycab/ MW or equivalent make as approved by the Deptt.) in surface system, including 5 pin 6 Amps flush type plug socket and 6 Amps F/T switch (Anchor penta /Gold medal /Kolor kany.Kom/Havells or equivalent make as approved by the Deptt.), GI/ MS switch board (I.S.I. marked) with phenolic laminated sheet cover including earth continuity with 1.5 sq. mm. cable to third pin of the plug socket etc. as required complete, when placed elsewhere. Short point up to 3.00 metre. length.	2.00	each		
32	Wiring for drawing sub-main line with P.V.C. insulated single core unsheathed industrial (Multistrand) cable FR conforming to IS-694: 1990 with flexible bright annealed electrolytic copper conductor for voltage grade up to 1100 volts (Finolex /RR Kabel /Nicco / Anchor or Equivalent Make as approved by the Deptt.) in surface flat ISI marked casing 'n' capping (AKG / Precision/ Presto Plast/Polycab/ MW or equivalent make as approved by the Deptt.) system including earth continuity. 1.8.1. With 2 x 2.5 sq. mm. + earth continuity with 1x1.5 sq. mm. in flat 19 mm ISI marked casing 'n' capping system.	10.00	metre		
33	Supplying with fitting and fixing single Pole 10 KA 240/415V 50Hz MCB of the following capacity complete with making necessary connection as approved, specified and directed by the deptt. 16.1.1B Series (Schneider MG, legrand, Hager make) 16.1.1.2)6 to 32A	1.00	each		
34	Supplying with fitting and fixing sheet steel, phosphatised, powder painted Single door surface mounting MCB DB incorporated with bas-bar, Neutral link, Earth bar and din rail etc fitted on wall with grouting nuts & bolts as reqd. complete with making necessary connection as approved, specified and directed by the deptt. 15.1.1.2 6 way SPN single door	1.00	each		
35	Supplying and fitting of 18/20 Watt CFL lamp in the existing batten holder/angle holder/decorative bracket/bulk head fitting/pendent holder etc. as specified and directed by the deptt.	3.00	Each		
<b>Total Including GST ( Part A &amp; Part B)=</b>					