Buildings (C & M) Circle,

P.W.D

Madurai

SCHEDULE - A

Name of Work: (Working Estimate): Providing for Finishing front elevation, name board, two wheeler shed, approach road, pedestrian path way, entrance arch, fire fighting, incinerator, entrance teak wood ornamental door, structural glazing, lawns and gardens, levelling and filling low lying area, front side compound wall & fencing arrangements, jungle clearances and other amenities to the work of Construction of veterinary college and Research Institute at Veerapandi village in Theni at Theni District

Sl.	Quantity	Description	TNBP	Rate	Unit	Amount
No			No.			
1	2	3	4	5	6	7

 $\frac{1}{366.00}$ m³ (Three hundred and sixty six cubic metres only)

Earth work excavation for foundation in all soils and sub-soils and to full depth as may be directed except in rock requiring blasting inclusive of shoring shuttering, bailing out water wherever necessary and depositing the surplus earth within the compound in places shown by the departmental officers with an initial lead of 10 mts and initial lift of 2 mts. and clearing and levelling the site, etc., complete complying with standard specification.

 $1 \, \mathrm{M}^3$ (One cubic metre)

2 9020.00 m^3 cubic metres only)

Earth work open excavation in all soils and sub soil and to full (Nine thousand and twenty depth as may be directed except in hard rock requiring blasting but including shoring, strutting and balling out water wherever necessary and depositing the surplus earth within the compound with an initial lead of 10 metres and lift of 2 metres in places shown by the departmental officers clearing, leveling the site etc., complete complying with standard specification.

1 M³ (One cubic metre)

1	2	3	4	5	6	7
3	162.00 m ³ (One hundred and sixty two cubic metres only)	Earth work excavation for pavement and drain in all soils and sub-soils and to full depth as may be directed except in rock requiring blasting inclusive of shoring shuttering, bailing out water wherever necessary and depositing the excavated earth with a lead of 10 mts. within the compound in places shown by the departmental officers and clearing and levelling the site, etc., complete complying with standard specification.			1 M ³ (One cubic metre)	
4	$9082.00 \ m^3$ (Nine thousand and eighty two cubic metres only)	Refilling with excavated earth other than sand with an initial head load of 100 mts. and depositing the earth as shown by the departmental officers in layers of not more than 15 cm thick well rammed, watered and consolidated etc. complete complying with standard specification			1 M ³ (One cubic metre)	
5	120.00 m ³ (One hundred and twenty cubic metres only)	Supplying and filling in foundation, basement, etc with Gravel in layers of not more than 15 cm thick well watered, rammed and consolidated etc. complete complying with standard specification and as directed by the departmental officers.			1 M ³ (One cubic metre)	

1	2	3	4	5	6	7
6	$125.00 \; \text{m}^3$ (One hundred and twenty five cubic metres only)	Supplying and filling in foundation, basement, etc with filling stone dust in layers of not more than 15 cm thick well watered, rammed and consolidated etc. complete complying with standard specification and as directed by the departmental officers.			1 M ³ (One cubic metre)	
7	$82.00\ \mathrm{m}^3$ (Eighty two cubic metres only)	Cement Concrete 1:5:10 (One Cement, Five sand and Ten hard broken stone jelly) using 40 mm gauge hard broken granite stone jelly for foundation including dewatering wherever necessary and laid in layers of not more than 15 cm thick well rammed, consolidated and curing etc. complete complying with standard specification			1 M ³ (One cubic metre)	
8	$232.00\ m^2$ (Two hundred and thirty two square metres only)	Supplying and erecting steel centering including necessary supports for plane surfaces for Reinforced Cement Concrete works such as column footings, column pedestals, plinth beams, grade beams, staircase steps, etc. which require only nominal strutting using mild steel sheets of size 90cm x 60cm and 10 BG stiffened with welded mild steel angles of size 25mm x 25mm x 3 mm for boarding, laid over silver oak joists of size 10cm x 6.5cm spaced at about 75cm centre to centre or at suitable intervals etc. complete in all floors complying with standard specification. (Payment for centering shall be given after the concrete is laid)			1m ² (One square metre)	

1	2	3	4	5	6	7
9		Supplying and erecting centering for sides and soffits including necessary supports and strutting upto 3.29 M height for plane surfaces as detailed below in all floors with all cross bracings using Mild Steel sheets of size 90 x 60 cm and 10 BG stiffened with welded Mild Steel angle of size 25mm x 25mm x 3 mm for boarding laid over silver oak joists of size 10cm x 6.50 cm spaced at abote 90 cm centre to centre and supported by casurina props of 10cm to 13 cm dia spaced at not more than 75 cm centre to centre etc. complete complying with the standard specificaiton. (Payment for centering shall be given after the concrete is laid)				
a)	$972.00\ m^2$ (Nine hundred and seventy two square metres only)	For plane surfaces such as RCC floor slab, roof slab, beams, lintels, bed blocks, landing slab, waist slab, portico slabs and beams, etc.			1m ² (One square metre)	
b)	$212.00\ m^2$ (Two hundred and twelve square metres only)	For plane surfaces such as vertical slab, side slabs of boxing, vertical drops, facia, vertical wall, etc.			1m ² (One square metre)	

				I		
c)	$\frac{2}{267.00~\text{m}^2}$ (Two hundred and sixty seven square metres only)	For plane surfaces such as rectangular or square RCC columns, sunshades, top and bottom slab of RCC boxing, etc.	4	5	1m ² (One square metre)	7
10	$142.00\ \mathrm{m}^2$ (One hundred and forty two square metres only)	Providing additional strutting to centering of RCC slabs of plain surface for every additional 1.0 metre height or part thereof but not less than 30 cm, over the initial 3.00 metre height from floor level using casurina props of 10cm to 13cm dia including cross bracing etc., complete complying with standard specification and as directed by the department officers.			1m ² (One square metre)	
11		Providing and laying in position, standardised concrete Mix M-20 Grade in accordance with IS:456-2000, using 20mm and down graded hard broken granite stone jelly for all RCC items of works with minimum cement content of 325 kg/m3 and maximum water cement ratio of 0.55, including admixture				

(plasticiser / super plasticiser) in recommended proportions as per IS:9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability with about (5 cu.m.) 7730 kg. of 20mm machine crushed stone jelly

and with about (3.3 cu.m.)

1	2	3	4	5	6	7
		5156 kg. of 10-12mm machine crushed stone jelly and with about (4.79 cu'm') 7670 kg. of crushed stone sand (M-sand), but excluding cost of reinforcement grill and fabricating charges, centering and shuttering and also including laying, vibrating with mechanical vibrators, finishing, curing, etc. and providing fixtures like fan clamps in the RCC floor/ roof slabs wherever necessary without claiming extra, etc., complete complying with standard specification and as directed by the departmental officers. The coarse and fine aggregates to be used should comply with the requirements of IS standards. (No separate payment will be made by the Department for the excess usage of materials).				
a)	$43.00\ \text{m}^3$ (Forty three cubic metres only)	In Foundation and Basement			1 M ³ (One cubic metre)	
b)	$34.00\ m^3$ (Thirty four cubic metres only)	In Ground Floor			1 M ³ (One cubic metre)	

1	2	3	4	5	6	7
c)	40.00 m^3	In First Floor			1 M ³	
	(Forty cubic metres only)				(One cubic	
	(,				metre)	

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Providing and laying in position, standardised concrete Mix M-25 Grade in accordance using 20mm with IS:456-2000, and down graded hard broken granite stone jelly for all RCC items of works with minimum cement content of 350 kglms and maximum water cement ratio of 0.50, including admixture (plasticiser / super plasticiser) in recommended proportions as per IS:9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability with about (5.0 cu.m.) 7730 k9. of 20mm machine crushed stone jelly and with about (3'3 cu'm') 5156 kg. of 10-12mm machine crushed stone jelly and with about (4.79 cu'm') 7670 kg' of sand, but excluding cost of reinforcement grill

1	2	3	4	5	6	7
		and fabricating charges, centering and shuttering and also				
		including laying, vibrating with mechanical vibrators, finishing,				
		curing, etc. and providing fixtures like fan clamps in the RCC				
		floor/ roof slabs wherever necessary without claiming extra, etc.,				
		complete complying with standard specification and as directed by the departmental officers. The coarse and fine aggregates to				
		be used should comply with the requirements of IS Standards.				
		(No separate payment will be made by the Department for the				
		excess usage of materials).				
a)	$44.00\ m^3$ (Forty four cubic metres only)	In Foundation and Basement			1 M ³ (One cubic metre)	
b)	$24.00\ m^3$ (Twenty four cubic metres only)	In Ground Floor			1 M ³ (One cubic metre)	

1	2	3	•	4		5	6	7
c)	23.00 m^3	In First Floor	1 M^3					
(Twenty three cubic metres (One cubic								
	only)						metre)	
							metre)	

13 238.00 Qtl (Two hundred and thirty eight quintals only) Supplying, fabricating and placing in position Mild Steel / Ribbed Tor Steel grills for all RCC works as per design given including cost of steel and G.I. binding wire in all floors etc. complete complying with standard specification. (Contractor has to make his own arrangements for the supply of steel and binding wire)

1 Qtl (One quintal)

Brick work in Cement Mortar 1:6 (One Cement and five crushed stone sand) using best quality of country bricks of size 8-3/4" x 4-1/4" x 2-3/4" for foundation and basement including curing, etc., complete complying with standard specifiction.

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1	2	3	4	5	6	7
a)	5.00 m^3	In Foundation and Basement			1 M ³	
	(Five cubic metres only)				(One cubic	
					metre)	
b)	20.00 m^3	In Ground Floor			1 M ³	
	(Twenty cubic metres only)				(One cubic	
	, ,				metre)	
c)	10.00 m^3	In First Floor			1 M ³	
	(Ten cubic metres only)				(One cubic	
	(metre)	

Brick work in Cement Mortar 1:5 (One Cement and five

crushed stone sand) using best quality of country bricks of size 8-3/4" x 4-1/4" x 2-3/4" for foundation and basement including curing, etc., complete complying with standard specifiction.

No.of corrections: No.of over writtings:

15

1	2	3	4	5	6	7
a)	350.00 m^3	In Foundation and Basement			1 M ³	
	(Three hundred and fifty				(One cubic	
	cubic metres only)				metre)	
• `	171.00 2				2	
b)	151.00 m^3	In Ground Floor			$1 \mathrm{M}^3$	
	(One hundred and fifty one				(One cubic metre)	
	cubic metres only)				metre)	
c)	103.00 m^3	In First Floor			1 M ³	
	(One hundred and three				(One cubic	
	cubic metres only)				metre)	
15	47.00 2				3	
d)		In First Floor			1 M ³	
	(Forty seven cubic metres				(One cubic metre)	
	only)				mene)	

1	2	3	4	5	6	7
16	36.00 m^3	Cement Concrete 1:5:10 (One cement, Five sand and Ten hard			1 M ³	
	(Thirty six cubic metres	broken stone) using 40 mm gauge hard broken jelly for flooring			(One cubic	
	only)	including laying, consolidating, finishing, rendering the top			metre)	
		surface rough to receive the floor, curing, etc. complete				
		complying with standard specification. (The rate is inclusive of				
		necessary planking for panelling wherever necessary and as				
		directed by the departmental officers				
17		Plain Cement Concrete 1:2:4 (one cement, two sand and four				
		hard broken stone jelly) using 20mm jelly for wearing coat				
		including laying, compacting, finishing and curing, etc.,				
		complete as per standard specificatins and as directed by the				
		departmental officers.				
a)	20.00 m^3	In Foundation and Basement			1 M ³	
	(Twenty oubic matres and				(One cubic	
	(Twenty cubic metres only)				metre)	

1	2	3	4	5	6	7
18	4116.00 m ² (Four thousand one hundred and sixteen square metres only)	Plastering with Cement Mortar 1:5 (One cement and Five sand), 12mm thick in all floors including curing etc. complete complying with standard specification and as directed by the departmental officers.			1m ² (One square metre)	
19	$861.00~\mathrm{m}^2$ (Eight hundred and sixty one square metres only)	Special ceiling plastering and finishing the exposed surface of all RCC items of work such as slabs, beams, sunshades, facia, canopy slab, staircase waist slab, landing slab etc., with Cement Mortar 1:3 (One Cement and Three Sand) 10mm thick including hacking the surfaces, providing cement mortar nosing, beading for sunshades, staircases, steps, landing slabs and curing, etc., in all floors complying with standard specification and as directed by the departmental officers			1m ² (One square metre)	
20	$735.00\ m^2$ (Seven hundred and thirty five square metres only)	Provided Jet black granite slab 4'x2" 18-20mm thick for working table etc., complete complying with standard specification and as directed by the departmental officers.			1m ² (One square metre)	

1	2	3	4	5	6	7
21		Labour charges for nosing of granite slab 18-20mm thick etc., complete complying with standard specification and as directed by the departmental officers.				
a)	850.00 Rm (Eight hundred and fifty running metres only)	Single nosing			1 RM. (One running metre)	
b)	2700.00 Rm (Two thousand and seven hundred running metres only)	Double nosing			1 RM. (One running metre)	
22	4590.00 Rm (Four thousand five hundred and ninety running metres only)	Labour charges for grooving the granite slab 18-20mm thick etc., complete complying with standard specification and as directed by the departmental officers.			1 RM. (One running metre)	

1 2 3 4 5 6 7

23 425.00 Rm (Four hundred and twenty five running metres only)

Supplying, fabricating and fixing in position of Stainless Steel (Salem Stainless Steel) Door Frame (Box Section using Stainless Steel Plate of 1.6mm thick) of size 100mm x 60mm with a rebate of 30 / 35mm x 15mm on one side of the frame conforming to ISI specified ensured of right butt joint riveted hold assembly with nylon insert, not be welded with special purpose hard ware ready to assemble condition for easy installation at site including dismantling, making necessary chipping and holes in RCC columns, walls with power drills to the extent required, including providing concrete 1:2:4 inside the box curing etc complete. The cost includes the cost of hold fast plastic bush, insert receiver, rubber bottom, shock absorber etc complete in all floors and as directed by the departmental officers.

1 RM. (One running metre)

Supplying and fixing Solid core Flush shutters with Teak ply on one side and commercial ply on other side with teak wook lipping alround 35 mm thick including supplying and fixing cost of wind appliances and furniture fittings such as 1no .200x12mm aluminium tower bolt 2nos. 150x12mm aluminium tower bolts 1no. 250x16mm aluminium aldrops, 2 nos.

150mm 'D' type aluminium door handle and door stopper with bush etc., complete as directed by the departmental officers.

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Contractor:

1	2	3	4	5	6	7
a)	32.00 m^2	Single leaf			1m ²	
	(Thirty two square metres				(One square	
	only)				metre)	
b)	$171.00\ m^2$ (One hundred and seventy one square metres only)	Double leaves			1m ² (One square metre)	
25		Supplying and erecting pull and push type rolling shutter with ISI make of approved size and section using 18 GI sheet. The shutter shall be painted with one coat of red oxide primer and the rate is inclusive of hood covers, transportation charges etc.,				
a)	$66.00 \ m^2$ (Sixty six square metres only)	Manually operated (up to 8 m2 area)			1m ² (One square metre)	

1	2	3	4	5	6	7
b)	27.00 m^2	Gear operated type (from 8 m2 to 12 m2 area)	•		1m ²	•
	(Twenty seven square				(One square	
	metres only)				metre)	

 $\begin{array}{ccc} 26 & 400.00 \ m^2 \\ & \text{(Four hundred square } \\ & \text{metres only)} \end{array}$

Manufacturing, Supplying and Fixing of Stainless Steel Hand rails for staircase using 50mm dia 304L Grade Stainless Steel pipe of 1.60mm thick at required locations to a height of 900 mm from finished floor level welded to 38mm dia Stainless Steel pipe post of 1.00mm thick as vertical at 900mm centre with 2 Nos. of 25mm dia intermediate horizontal stainless steel pipe of 1.60mm thick in between. The vertical pipe has to be welded to the 100 X 100 X 6mm MS base plate encased in the base concrete. The rate is inclusive of the charges for cutting, bending, welding, grinding, polishing, conveyance, electrical charges, etc. complete

1m²
(One square metre)

1	2	3	4	5	6	7
27	710.00 Rm (Seven hundred and ten running metres only)	Manufacturing, Supplying and Fixing of Stainless Steel Hand rails for staircase near wet riser using 50mm dia 304L Grade Stainless Steel pipe of 1.60mm thick will be provided with tubular supports made of 304L Grade Stainless Steel pipe of 25mm dia of 1.60mm thick welded to the railing. The supports will be grouted into the wall and provided with 93.00mm thick Stainless Steel circular base plate of 304 Grade. The rate shall included for grouting into concrete with necessary supporting arrangements the hand rail in floor polishing buffing, bonding, cutting, grinding, conveyance, welding charges, electrical charges, etc. complete			1 RM. (One running metre)	
28	$\begin{array}{c} 20.00 \text{ m}^2 \\ \text{(Twenty square metres only)} \end{array}$	Supplying and fixing in position of SFRC manhole covers with frames of size 60cm x 60cm of best approved quality as per standard specification etc., complete compying with standard specifications 600 x 600mm SFRC manhole Cover			1m ² (One square metre)	
29	1110.00 m ² (One thousand one hundred and ten square metres only)	Providing granolithic floor finish of the following thickness with plain cement concrete 1:2:4 (One Cement, Two sand and Four aggregate) using 10 to 12mm gauge hard broken stone jelly including laying, finishing and the top rubbed smooth with power trawl, thread lining, curing etc. complete complying with standard specification and as directed by the departmental officers. (The rate is inclusive of necessary planking for panelling wherever necessary and as directed by the departmental officers) - 40mm Thick			1m ² (One square metre)	

1	2	3	4	5	6	7
30	190.00 m^2	Supplying and laying of 300mm dia RCC Hume Pipe etc.,		•	1m ²	
	`	complete complying with standard specification and as directed by the departmental officers.			(One square metre)	

 $\begin{array}{cc} 31 & 65.00 \ m^2 \\ \text{(Sixty five square metres } \\ \text{only)} \end{array}$

Supplying and Installation of Ceramic writing board made on steel core the long lasting porceilain is fused at temeratures up to 800 c. with this process a scatch and stain resistant surface is created and become smooth and crasing free of "Ghost lines" virully maintence free, this chalk board never acquires. "chalking" in and total cleaning is accomplished with the clear water the writing surface will not crack peel even when solvents are to remove crayon, paint or other forign substances highly versatile, the entire writing area can become a display board with the steel writing surface 9mm MDF, 0.20mm GI Sheet. The above three materials sandwiched with rubber based adhesive and it is framed with heavy anodized aluminium section and chromium plated in corners etc., complete.

1m²
(One square metre)

1	2	3	4	5	6	7
32	7.65 Rm (Seven point six five running metres only)	Manufacturing, Supplying and Fixing of Stainless Steel Hand rails using 100mm x 100mm square type box section over which 100 mm dia ball with 12mm designed glasses for Elevation hand rail of height of 900 mm and 1200mm centre to centre distance. The rate is inclusive of the charges for transportation, cutting, bending, welding, grinding, polishing, conveyance, electrical charges, etc. complete			1 RM. (One running metre)	
33	$9.00\ \text{m}^2$ (Nine square metres only)	Providing and fixing of Aluminium Composite Panel (ACP) 4 sided having 50 x 25 x 1.50mm frame work vertical and horizontals out of specially designed extruded sections withstand wind pressure of 180 Kg/sq.m and fabricated fixed at all level elevation and heights. The extruded section cutting and fixing required space extruded section shall be of 6063 and alloy of BSH 9 confirming T is – 63400 rate shall included to fix the main frame with necessary clamps, fasteners, bolt nuts etc. The main frame of extruded section shall be of 22843 & 22739 (H9) grade conforming to BS 4174 (or) IS 8147. Rate shall included 4mm thick ACP sheet (0.25+ 3.5 + 0.25) alstrong or equivalent fixing with spacer tape and the ACP sheet bounded with special type structural sealant of dow corning 789 or equivalent in dust free conditions the gaps between ACP sheet to be filed with whether sealant and backer rod or 12mm foam sheet to ensure water and air tightness in all complete complying with standard specification as directed by the departmental officers			1m ² (One square metre)	

1	2	3	4	5	6	7
34	12.00 Nos (Twelve numbers only)	Supplying and fixing of SS sink of size 600x450x200mm. The rate inclusive of all materials , labour charges , transporation, loading, un loading and all other incidental charges etc., complete., should be got approved by the Executive Engineer before use on works			1 No (One Number)	
35	83.00 Nos (Eighty three numbers only)	Supplying and fixing in position best quality White Porcelin Sink of size 600mm x 450mm x 200mm with 32mm dia 'B' Class G.I. waste water pipe and 32mm dia C.P. waste coupling including fixing the sink in position and testing for leakages etc., complete complying with standard specifications excluding CI brackets. [The sink and specials should be got approved by the Executive Engineer before use on works]			1 No (One Number)	
36		Supplying and fixing in position 15mm dia brass CP screw down tap / Elbow action tap / swan neck tap (heavy duty) of approved make conforming to BIS specifications and quality including cost of shellac, thread, etc., complete complying with standard specification and including cutting and threading wherever necessary. (Taps should be got approved by the Executive Engineer before use on the works)				

1	2	3	4	5	6	7
a)	85.00 Nos	Swan neck tap			1 No (One Number)	
	(Eighty five numbers only)				(ene nambol)	
b)	10.00 Nos (Ten numbers only)	Elbow action tap			1 No (One Number)	
37	100.00 Nos (One hundred numbers only)	Supplying and fixing of Titanium gold plated sheet letters of 1" thickness of approved size and colour etc., complete complying with standard specifications. (The make, quality and colour of letters should be got approved by the Executive Engineer before use on works.)			1 No (One Number)	

1	2	3	4	5	6	7
38		Supplying and fixing of Aluminium Dye cast Letters of approved size and colour. The colour treatment process is achieved with MRF colour coat and then the processed coloured layer is set into the kiln for the heat treatment process for the following sizes.etc.,				
a)	409.00 Nos (Four hundred and nine numbers only)	Aluminium Dye cast letter 9" size			1 No (One Number)	
b)	526.00 Nos (Five hundred and twenty six numbers only)	Aluminium Dye cast letter 6" size			1 No (One Number)	

1	2	3	4	5	6	7
39	44.00 Nos (Forty four numbers only)	Supplying and fixing of notice board of size 1.20m x 0.75m using aluminum frame of 65mm x 40mm using 1mm thick powder coated aluminum sheet. The background of board made up of 10mm thick plywood board and 8mm thick foam. The foam should be covered by the aesthetic cloth and the board front side covered by the 5mm thick plain glass sliding shutter with locking arrangements. The colour and design should be got approved by the Executive Engineer before use on works. The rate include cost of material, labour and transportation charges etc., Complete			1 No (One Number)	
40	22.00 Nos (Twenty two numbers only)	Supplying and fixing of Key box of size 0.60m x 0.45m x 0.10m using 18mm both side pre laminated particle board. Front side covered by the 5mm thick glass sliding door with locking arrangements. There should be 25nos of SS hooks for holding the keys inside the box. The colour and design should be got approved by the Executive engineer before the use on works. The rate include the cost of all materials labour and transportation charges etc., complete.			1 No (One Number)	
41	3.00 Nos (Three numbers only)	Supplying and fixing of brass emblem of 15" size, including cost for transportation and labour etc., complete as directed by the departmental officers			1 No (One Number)	

1	2	3	4	5	6	7
42	7270.00 Kg (Seven thousand two hundred and seventy kilo grams only)	Supplying and fixing mild steel iron grill for Windows Ventilators and grill gate etc., including one coat of red oxide primer using M.S. angle of size 40x40x6mm and grill using 20x6mm MS flat and necessary hold fast with M.S. angle of size of 40x40x6mm - 230mm long spliced at end is to be provided appropriate places for fixing the grill etc complete complying with standard specification. The type design for the grills should be got approved by the departmental officers before execution.			1 Kg (One Kilo gram)	
43	$697.00\ m^2$ (Six hundred and ninety seven square metres only)	Supplying and fixing roofing with 0.47mm thick colour coated GI Sheet fully corrugated of approved quality by drilling holes (and not by punching) with necessary 'J' / 'U' bolts and nuts of 8mm dia of suitable length and providing one set of bitumen washers of 25mm dia and 1.60mm thick for each bolt including protruding portion of bolts in roof shall be covered with bitumen compound etc., complete complying with standard specification and as directed by the departmental officers.			1m ² (One square metre)	
44	$42.00\ \mathrm{m}^2$ (Forty two square metres only)	Providing and fixing structural glazing fabricated from roll formed sections made of galvanized steel colour coated (Base steel as per IS 513 of 'D' quality,galvanized as per IS 277 with Zinc of 120 grams / sqm.) with total coated thickness of 0.72mm. The glass holding section made of 304 grade SS of 0.6mm thick. Galvanized steel sections are to be used as stiffeners inside the colour coated steel / powder coated sections as per the design requirement. Design calculations are made to suit wind pressures as given in IS 875. Paint specifications: Primer coat with epoxy primer of 5-7 microns thick, finish painted with a polyester paint of 12-16 microns thick and back coated with alkyd backer of 5-7 microns or powder, coated with pure polyester powder upto 50-60 microns thick.Dimensions: The section should be of 37 x 53mm for frame vertical, 37 x 53mm for frame horizontal section and section for reinforcement should be of 31 x 55mm.			1m ² (One square metre)	

1	2	3	4	5	6	7
45	113.00 Nos (One hundred and thirteen numbers only)	Supplying and fixing of stored pressure ABC (Mono Ammonium Phospate)Powder Type fire Extinguishers of 6 Kg. capacity as per IS15683 with pressure gauge, discharge hose & control nozzle, wall mounting bracket, safety clip etc., including conveyance, all incidental charges necessary scaffolding and redoing the dismantled protion to its original condition whrever found necessary etc complete as per stadard specification and as directed by the Departmental officers. Make: EXCELLENT/ SAFETY FIRST / EQUIVALENT			1 No (One Number)	
46	37.00 Nos (Thirty seven numbers only)	Supplying and fixing of Carbon-di-Oxide Gas Type 2 Kg. capacity fire Extinguishers as per New IS15683, complete with control valve, discharge, necessary scaffolding and re-doing the dismantled portions to its original condition wherever found necessary scaffolding etc., complete as per stadard specification and as directed by the Departmental officers. Make: EXCELLENT/ SAFETY FIRST / EQUIVALENT			1 No (One Number)	
47	31.00 Nos (Thirty one numbers only)	Supply and fixing of Sanitary Napkin Destroyer (Incinerator) Wall mountable model with removable ash tray for easy to clean the ashes with electrically operated and auto power off for reducing power consumption with complete burning of Napkins with less than 1Gram ash per Napkin with Electronic LCD Display with three Step Safety Cut Off For Sensor Models with high density Heat Proof Ceramic Boards (not less than 1850°C) and puff Insulation for excellent thermal protection.			1 No (One Number)	

1	2	3	4	5	6	7
48	98.00 M ³ (Ninety eight cubic metres only)	Supplying and fixing of well seasoned Teak wood door of Ornamental frame and shutter for right side entrance door. The teak wood scantlings of size 150mm x 125mm for Door frames and for the Door shutter is using styles and rails of size 125mm x 50mm. The door frame is designed with carving and encraving works as the pattern approved by the Departmental officers incharge. The shutter frame is designed with carving and encraving works and on the both sides of the outer frame. Teak wood Ornamental paravaichakkai of 45cm width and 40mm thick with carvings has been fixed at the top of the Door and Teak wood Ornamental paravaichakkai of 45cm width and 40mm thick with carvings has been fixed on both sides of the Door frame. Teak wood shutter and door frames has been designed by using coloured brass strips as approved.		Þ	1 M ³ (One cubic metre)	I
49	$8.00~{ m M}^3$ (Eight cubic metres only)	Supplying and fixing following Ornamental well seasoned Teakwood framed fixed glazing as per the drawings and designs approved by the departmental officers .The size of the opening is 4.80x2.05m. The outer teakwood frame of 125mmx100mm and the opening shall be divided into partitions as per the approved drawings using teakwood frame of 125x100mm both horizontally and vertically. The openings finished with fixed glazing of approved pattern using 12mm thick toughned glass. All the frames shall given the two coats of best approved quality melamine finish. The rate inclusive of cost of approved quality teakwood, 12mm thick designed toughened glass etc. The cost also includes cost of material, labour charges, conveyance charges, fixing charges, carving charges and fixed glass design charges, electricity charges and all other incidental charges., etc. All materials should be got approved by the Executive Engineer before use on works.			1 M ³ (One cubic metre)	

1	2	3	4	5	6	7
50	5060.00 M ² (Five thousand and sixty square metres only)	Supplying and Painting the wall with two coats of wall putty as instructed by the departmental officers including preparing of surface , curing etc., complete in all floors Complying with standard specification (Wall putty shall be got approved by the Executive engineer before use of work)			1m ² (One square metre)	
51	1667.00 m ² (One thousand six hundred and sixty seven square metres only)	Painting two coats of newly plastered wall surface with ready mixed plastic Exterior emulsion paint of first class quality and of approved colour over a priming coat including thorough scrapping, clean removal of dirt, and including necessary plaster of paris putty, wherever required etc., complete complying with standard specification.			1m ² (One square metre)	
52	$930.00\ m^2$ (Nine hundred and thirty square metres only)	Textured painting of newly plastered wall surface with first class quality and approved design and colour including thorough scrapping, clean removal of dirt, including cost of material, Scaffolding Charges and labour etc., complete Complying with Standard Specification and as directed by departmental Officers			1m ² (One square metre)	

1	2	3	4	5	6	7
53	$\begin{array}{c} 22.00 \text{ m}^2 \\ \text{(Twenty two square metres } \\ \text{only)} \end{array}$	Painting new iron works such as steel doors, windows, ventilators, window bars, balustrades etc., with two coats of best approved first quality and colour of synthetic enamel paint over the existing red oxide priming coat in all floors excluding cost of priming coat etc., complete complying with standard specification. (The make, quality and colour of paint should be got approved by the Executive Engineer before use on works.)			1m ² (One square metre)	
54	$235.00 \ m^3 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	Granular Sub-base with Graded Material (Table:- 400-1) - Plant Mix Method Construction of granular sub-base by providing close graded Material, mixing in a mechanical mix plant at OMC, carriage of mixed Material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per clause 401 of MORTH Specification 111,112,401,900 - for grading- V Material			1 M ³ (One cubic metre)	
55	392.00 m ³ (Three hundred and ninety two cubic metres only)	Wet Mix Macadam (Table 400-13) Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density, Complete as per clause 406 of MORTH Specification 111,112,406,900			1 M ³ (One cubic metre)	

1	2	3	4	5	6	7
56	$1570.00 \; \mathrm{m}^2$ (One thosuand five hundred and seventy square metres only)	Prime coat Providing and applying primer coat with bitumen emulsion (SS-I type) on prepared surface of granular Base including clearing of road surface and spraying primer at the rate of 0.70 kg/sqm using mechanical means as per clause 502 of MORTH Specification 111,112,501,502 & 900 over WMM.			1m ² (One square metre)	
57	$1570.00\ \mathrm{m}^2$ (One thosuand five hundred and seventy square metres only)	Tack coat - Providing and applying tack coat with bitumen emulsion (RS-I type) using emulsion pressure distributor at the rate of 0.25 kg per sqm on the prepared bituminous/granular surface cleaned with mechanical broom as per clause 503 of MORTH Specification 111,112,501,503,900- over granular surfaces treated with primer.			1m ² (One square metre)	
58	79.00 m ³ (Seventy nine cubic metres only)	Bituminous Macadam (Table - 500-10) Providing and laying dense bituminous macadam with Hot Mix Plant using crushed aggregates of specified grading, premixed with bituminous binder (Viscosity Grade- 40) at percentage specified by Job Mix Formula by weight of total mix of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher to the required grade, level and alignment, rolled as per clause 501.6 and 501.7 to achieve the desired compaction, as per clause No.505 of MoRTH specification 111,112,505,900 Grading II			1 M ³ (One cubic metre)	

1	2	3	4	5	6	7
59	$47.00~\text{m}^3$ (Forty seven cubic metres only)	Bituminous Concrete (Table 500-17) Providing and laying bituminous concrete with hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder (Viscosity Grade-40) at percentage specified by Job Mix Formula of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher to the required grade, level and alignment, rolled as per clause 501.6 and 501.7 to achieve the desired compaction as per clause No. 507 of MORTH Specification 111,112,507,900 complete in all respects - Grading II			1 M ³ (One cubic metre)	
60		Providing and laying of hot applied thermo plastic compound 2.5mm thick including reflectorising Glass beads at 250 Gms. Per Sqm area thickness of 2.5mm is exclusive of surface applied glass beads as per IRC 35. The finished surface to be level, uniform and free from streaks and holes etc., complete (as per MORT&H specification No.803)			1m ² (One square metre)	
61	$49.00 \ m^2$ (Forty nine square metres only)	Providing and fixing reflective road studs of category A' Raised pavement markers made out of poly carbonate/ABS moulded body and reflective panels (bi-convex reflectors) with microprismatic lens capable of providing total internal reflection of the light entering the lens face with retro-reflectance of the light entering the lens face with retro-reflectance and chromaticity values conforming to ASTM D4280. The reflective raised pavement markers shall also confirm to the MORTH			1m ² (One square metre)	

1 2 3 4 5 6 7

circular No RW/NH 33023/10/97-DO.III dt.11.06.97 and the length, height and width of the body shall not be less than 100 mm,15mm, and 90mm and base of marker shall be flat within 1.3mm. the marker shall support a load of 13635 Kg tested in accordance with ASTM D4280. Lenses shall be moulded of polycarbonate or methy methecrylate conforming to ASTM D788. The area of each retro-reflectory surface shall not be less than 13.0 sq.cm. The solpe or retro-reflectory surface shall be 35+5 degress to base. Each reflector shall have a CIL not less than values specifed in table 2 of said MORT&H circulars and two cylindrical Polymer Shanks sof not less than 20mm diameter and not less than 30mm length shall be provided for better anchorage.

 $\begin{array}{ccc} 62 & 418.00 \ m^2 \\ & \text{(Four hundred and} \\ \text{eighteen square metres} \\ & \text{only)} \end{array}$

Making of lawn with korean grass truffing including forking the ground top, dressing with sludge manure of fertilizers, mixing with the same with forked soil, watering, weeding and maintenance for a period of 90 days or more from the actual date of completion of planting work till the grass forms a thick lawn, free from weeds and fit for mowing including supplying good earth if need etc complete as directed by the Departmental Officers

1m²
(One square metre)

1	2	3	4	5	6	7
63	418.00 m ² (Four hundred and eighteen square metres only)	Supplying, spreading and mixing red earth, sand and farm yard manure mixer for the depth of not less than 10cm with required base of chemical for control of pest and disease. For pest control neem cake and carbo fureden shall be used. Fertilizers for root regulator like DAP, Urea and superphosphate shall be used. The cost includes mix cost of red earth, sand with fertilizers and labour charges etc., complete as directed by the Departmental Officers			1m ² (One square metre)	
64	25.00 Nos (Twenty five numbers only)	Supplying and planting Arica Palms as directed by the departmental officers including digging holes in earth, refilling the same with manure, watering, dressing and removal of rubbish and surplus earth if any with all lead and lift. The cost includes maintenance of plant for a period of 30 days from the date of planting work etc., complete as directed by the Departmental Officers.			1 No (One Number)	
65	20.00 Nos (Twenty numbers only)	Supplying and planting Royal / Fox Tail Palms as directed by the departmental officers including digging holes in earth, refilling the same with manure, watering, dressing and removal of rubbish and surplus earth if any with all lead and lift. The cost includes maintenance of plant for a period of 30 days from the date of planting work etc., complete as directed by the Departmental Officers.			1 No (One Number)	

1	2	3	4	5	6	7
66	5.00 Nos (Five numbers only)	Supplying and planting Speimen Plants as directed by the departmental officers including digging holes in earth, refilling the same with manure, watering, dressing and removal of rubbish and surplus earth if any with all lead and lift. The cost includes maintenance of plant for a period of 30 days from the date of planting work etc., complete as directed by the Departmental Officers.			1 No (One Number)	
67	5.00 Nos (Five numbers only)	Supplying and planting Special Plants as directed by the departmental officers including digging holes in earth, refilling the same with manure, watering, dressing and removal of rubbish and surplus earth if any with all lead and lift. The cost includes maintenance of plant for a period of 30 days from the date of planting work etc., complete as directed by the Departmental Officers.			1 No (One Number)	
68	10.00 Nos (Ten numbers only)	Supplying and planting foliage /flowering shrubs as directed by the departmental officers including digging holes in earth, refilling the same with manure, watering, dressing and removal of rubbish and surplus earth if any with all lead and lift. The cost includes maintenance of plant for a period of 30 days from the date of planting work etc., complete as directed by the Departmental Officers.			1 No (One Number)	

1	2	3	4	5	6	7
69	10.00 Nos (Ten numbers only)	Supplying and planting ground covers as directed by the departmental officers including digging holes in earth, refilling the same with manure, watering, dressing and removal of rubbish and surplus earth if any with all lead and lift. The cost includes maintenance of plant for a period of 30 days from the date of planting work etc., complete as directed by the Departmental Officers.			1 No (One Number)	·
70	400.00 Nos (Four hundred numbers only)	Supplying and planting hedge plants as directed by the departmental officers including digging holes in earth, refilling the same with manure, watering, dressing and removal of rubbish and surplus earth if any with all lead and lift. The cost includes maintenance of plant for a period of 30 days from the date of planting work etc., complete as directed by the Departmental Officers.			1 No (One Number)	
71	20.00 Nos (Twenty numbers only)	Supplying and planting flowering trees as directed by the departmental officers including digging holes in earth, refilling the same with manure, watering, dressing and removal of rubbish and surplus earth if any with all lead and lift. The cost includes maintenance of plant for a period of 30 days from the date of planting work etc., complete as directed by the Departmental Officers.			1 No (One Number)	

1	2	3	4	5		6	7
72	15.00 Nos (Fifteen numbers only)	Supplying and fixing in position Sprinkler of approved make by conforming to BIS specifications and quality including cost of			ļ	1 No (One Number)	,
		shellac, thread, etc., complete complying with standard specification and including cutting and threading wherever necessary.					
73	$190000.00 \ M^2$ (One lakh and ninety thousand square metres only)	Clearing Scrub Jungle etc. complete complying with standard specification and as directed by the departmental officers.				1m ² (One square metre)	
74	96.00 Nos (Ninety six numbers only)	Supplying and fixing in position CI manhole covers with CI frames (Heavy duty) of size 60cm x 60cm of best approved quality as per standard specification etc., complete compying with standard specifications				1 No (One Number)	
		Total Item No: (74 items only) Sub Total					

GST 12% Total Rs.