

TENDER Ref: - 6300036665

Date: - 27.10.2021

ISSUED TO:	PERIOD OF CONTRACT	Four (04) MONTHS
	EMD :-	Rs. 3,00,000/-

Sub:- Renovation/Refurbishing of Bogie & Under frame hangar by replacing the existing old roof sheets, rain water down take pipes, gutters & miscellaneous civil works at BEML limited Bangalore Complex, Bangalore 560075

SCHEDULE 'A' BILL OF QUANTITIES

Sl. no	Description	Unit	Qty.	Rate/ Unit in fig. & in words Rs.	Amount Rs.
1	Removing the existing corrugated/semi-corrugated AC/GI/ FRP roof sheet including 'J' bolts, washers carefully at a minimum height of 10Mtrs approx, stacking the usable sheets at a place shown & handing over to civil maintenance department and shifting the unusable roof sheets to salvage stores upto min. 1.00Km distance etc., complete all as specified & directed by the Engineer-in-charge. Note: -Clear area of roof sheet excluding lap length shall be measured for payment.	Sq.M	8850		
2	Removing the existing corrugated/semi-corrugated AC curves including 'J' bolts, washers carefully at a minimum height of 10Mtrs approx, stacking the usable curves at a place shown & handing over to civil maintenance department and shifting the unusable roof curves to salvage stores upto min. 1.00Km distance etc., complete all as specified & directed by the Engineer-in-charge. Note:-Clear area of curve sheet excluding lap length shall only be measured for payment.	Sq.M	600		
3	Taking down/dismantling the existing broken north light plain/round glass carefully from the MS/metal frames by hacking out old putty or removing beads including making good breakages if any in taking out etc., complete all as specified & directed by the Engineer-in-charge.	Sq.M	75		
4	Taking down the existing AC/GI 150mm to 300mm dia. rain water down take pipes of any size or pattern including all fittings, heads, shoes, bends, swan necks etc., including cleaning and handing over the usable material to civil maintenance dept. etc., complete all as specified and directed by the Engineer-in-charge.	RM	1033		
5	Removing the existing GI/AC/aluminium gutter from the existing steel members including removing the supports if necessary, handing over to civil maintenance dept and stacking at a place shown etc., complete all as specified and directed by the Engineer-in-charge.	RM	220		

Sl. no	Description	Unit	Qty.	Rate/ Unit in fig. & in words Rs.	Amount Rs.
6	Dismantling the existing brick masonry wall built in Cement mortar including all quoins, arches, pillars & disposal of debris to a place as shown etc., complete all as specified and directed by the Engineer-in-charge.	Cu.M	10		
7(a)	Supplying & fixing M/s. JSW/TATA make single skin HI-Rib trapezoidal profile PPGL colour coated (sky blue) sheeting for roof 1060mm supply width, 975mm-1000mm covered width 29mm-30mm crest height, 24mm crest width with min. 195mm-200mm pitch in 0.60mm thick TCT Galvalume(55% aluminum-43%Zinc Coating) 150 GSM with 550 Mpa with a minimum lap of 200mm with wide pans with stiffening ribs for efficient water shedding & special male/female ends with full return leg on one lap for purlin, conforming to relevant IS including all hardware/fixtures like colour matched nylon head self tapping corrosion protected mechanically galvanised fasteners with integral washer etc , complete all as specified and as directed by Engineer in charge. Note:- a) The finished/Covered area of roof sheet excluding lap length shall be measured for payment. b) Contractors to visit the site and note the existing roof/ roof sheet profile before submission of quote as the existing roof is a combination of north light & Parabola.	Sq.M	8770		
7 (b)	Supplying and fixing of GI wire mesh of 50x50x2.50mm support for rock wool, welded to existing steel members with correct line and level etc., complete all as specified and directed by Engineer-in-Charge.	Sq.M	8350		
7 (c)	Supplying and fixing of 50mm thick thermal insulation with Resin bonded fibre rock wool of density 24Kg/CM, wrapped in 200G vinyl facing placed below the roof sheeting etc., complete all as specified and directed by Engineer-In-Charge.	Sq.M	8350		
8	Supplying and fixing M/s. JSW/TATA make 0.60mm TCT Galvalume north light curves (55% aluminum-43%Zinc Coating) 150 GSM with 550 Mpa minimum tensile strength conforming to relevant IS including all hardware/fixtures like colour matched nylon head self tapping corrosion protected mechanically galvanised fasteners with integral washer etc , complete all as specified and as directed by Engineer in charge. Note:- Clear area of roof curve excluding lap length shall be measured for payment.	RM	600		

Sl. no	Description	Unit	Qty.	Rate/ Unit in fig. & in words Rs.	Amount Rs.
9	Supplying and fixing M/s. Bayers / JSW / Everest make corrugated 2mm thick uniform thickness polycarbonate sheet for roof conforming to relevant IS with necessary hardware screws/washers and sealant, sheets fixed to suite the existing galvalume roof sheet profile such that no leakage occurs etc., complete all as specified & directed by Engineer in charge. Note:- Clear area of roof sheet excluding lap length shall be measured for payment.	Sq.M	70		
10	Supplying fabricating and fixing MS steel brackets to support for Gutter/ down take pipes using MS structural steel angles, plate, channels etc including welding to the existing MS members etc., complete all as specified & directed Note:- All consumables such as welding machine, electrodes, gas etc., required for the work are of contractor's own supply including labour.	Kgs	1500		
11	Supplying and fixing M/s. Bayers / JSW/ Everest make plain 2mm thick uniform thickness polycarbonate sheet for north light glass conforming to relevant IS with necessary hardware screws/washers and sealant, sheets fixed to existing MS structural north light frames etc., complete all as specified & directed by Engineer in charge.	Sq.M	75		
12	Supplying and fixing 0.50mm thick Gal valume ridge sheet, fixed to the MS structural steel members etc including all hardware/ fixtures like colour matched nylon head self tapping corrosion protected mechanically galvanised fasteners with integral washer etc , complete all as specified and as directed by Engineer in charge.	RM	55		
13	Supplying and fixing 0.50mm thick Gal valume flashing sheet, fixed to the MS structural steel members etc including all hardware/ fixtures like colour matched nylon head self tapping corrosion protected mechanically galvanised fasteners with integral washer etc , complete all as specified and as directed by Engineer in charge.	RM	55		
14	Providing & fixing 150mm dia PVC Class 2 pipes (6kg/cm2) for rain water down take of first quality, conforming to relevant IS manufactured by M/s.Supreme/Astral including all fittings, specials like elbows, bends, tees, tail pieces & fixtures such as pipe clips, clamps wooden plug, screws, washers etc secured firmly to the wall surfaces etc.,complete all as specified and as directed by Engineer in charge.	RM	800		

Sl. no	Description	Unit	Qty.	Rate/ Unit in fig. & in words Rs.	Amount Rs.
15	Providing & fixing 200mm dia PVC Class 2 pipes (6kg/cm ²) for rain water down take of first quality, conforming to relevant IS manufactured by M/s.Supreme/Astral including all fittings, specials like elbows, bends, tees, tail pieces & fixtures such as pipe clips, clamps wooden plug, screws, washers etc secured firmly to the wall surfaces etc.,complete all as specified and as directed by Engineer in charge.	RM	172		
16	Supplying, fabricating and fixing 3mm thick GI valley gutter including bending to the required profile to suit the site conditions, welding and erecting to the required height & to the correct line and level and making the joints water tight etc., complete all as specified and directed by Engineer in charge. (Width 1.50Mtrs approx.)	RM	150		
17	Providing water proofing treatment for the existing GI/AC/Aluminium gutters using Bitumat Synroof Hi – Build elastomeric premium quality liquid waterproofing system including one layer of 60 GSM thermally bonded special polyester reinforcement etc., complete all as specified and directed by Engineer in charge. Note: The rate is deemed to include for cleaning the gutters to the full length before carrying out the water proofing treatment etc complete.	Sq.M	600		
18	Providing and constructing 230mm thick/required thickness burnt brick masonry in cement mortar of mix proportion 1:6 using first class table moulded bricks for superstructure at required heights including tools & tackles, curing etc., complete all as specified & directed by Engineer in charge.	Cu.M	10		
19	Rendering/Plastering for the internal brick masonry wall / concrete surfaces in cement mortar of mix proportion 1:4, 15mm thick including tools & tackles, scaffolding as required for the work, necessary curing etc., complete as specified and directed by Engineer in charge.	Sq.M	100		
20	Rendering/Plastering for the external brick masonry wall / concrete surfaces in cement mortar of mix proportion 1:6, 20mm thick including tools & tackles, scaffolding as required for the work, necessary curing etc., complete as specified and directed by Engineer in charge.	Sq.M	100		

Sl. no	Description	Unit	Qty.	Rate/ Unit in fig. & in words Rs.	Amount Rs.
21	Preparing the existing old Painted external walls by scrapping, sand papering, including providing necessary repairs to cracks, scratches & filling the cracks with crack filling compound and cleaning the surface from dust, dirt and applying two coats of Exterior emulsion paint of first quality approved brand & colour manufactured by M/s.Asian Paints (ACE)/M/s Berger Paints (Wall Masta) over a coat of primer & touch up putty wherever necessary etc., complete all as specified and as directed by Engineer in charge.	Sq.M	200		
22	Carting away the damaged roof sheets, curves, debris, muck, broken glasses and dumping at a place shown inside the factory within a lead not exceeding 5.00Km etc., complete all as specified & directed by the Engineer-in-charge.	Cum	20		
23	Supplying and fixing GI funnels of required thickness and size for rain water gutters etc complete all as specified & directed by the Engineer-in-charge. Note:- The quoted rate is deemed to include for making funnels & fixing in the gutters to drain out rain water including welding to ensure leak proof joint.	No.	20		
	Total amount excluding GST				
	GST Amount				
	Total amount inclusive of GST				

Total Amount in words: -

Note:

THE FOLLOWING NOTES ARE APPLICABLE FOR ALL THE ABOVE MENTIONED ITEMS OF WORK

- 1) The contractor quoted rate is deemed to include for providing and removal of scaffolding/ staging as required for all the above mentioned works.
- 2) The contractors/ prospective bidders shall visit the site and acquaint themselves with the site conditions before submission of bid/ quote.
- 3) The contractor to note that the dismantled materials should be removed and shifted immediately from the site premises without disturbing the regular production activities in the area and in the adjoining hangars and the rate is deemed to include for the same.
- 4) since the work has to be carried out at a minimum height of 10.0 Mtrs, it is responsibility of the contractor to provide all safety / PPE for the labour/ workmen employed for the work and the work to be carried out after obtaining necessary safety permit as per BEML format for the days work under the contractors supervision.

Signature of the contractor
with seal