



भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA
गोवा अंतरराष्ट्रीय एयरपोर्ट
GOA INTERNATIONAL AIRPORT
गोवा -403801
GOA - 403 801

दिनांक: Date: 01.07.2024

संख्या : भा.वि.प्रा./गोवा/ अभि (सि)/एमएलसीपी /2024-25/166

No: AAI/ GOA/Engg(C)/MLCP /2024-25/166

द्रुतगति डाक द्वारा /By Speed Post

सेवा मे,
मैसर्स के.एन. राय,
एंजिनीर्स एंड कोंट्रैक्टर्स,
74, सुहाना अपार्टमेंट,
आज़ाद रोड, अंधेरी ईस्ट,
मुंबई-400069

M/s. K. N. Rai
Engineers and contractors,
74, Suhana Appts,
Azad road, Andheri East,
Mumbai - 400069

विषय :- गोवा अंतरराष्ट्रीय हवाई अड्डे पर एमएलसीपी का कार्यालय भवन मे परिवर्तन।

Subject :- Modification of MLCP building into office building at Goa International Airport

संदर्भ/Ref :- आपकी दिनांक 11.06.2024 को खोली गई ई निविदा (निविदा क्र.2024_AAI_194080_1)

Your e-tender for the subject work opened on 11.06.2024.

(Tender ID: -2024_AAI_194080_1)

महोदय/ Dear Sir (s),

- उपर्युक्त कार्य के लिए ई निविदा संलग्न अनुसूची के अनुसार उद्धृत कुल रु. 8,18,54,806/- (बिना जी एस टी जोड़े) (रुपए आठ करोड अठाहर लाख चौपन हजार आठ सौ छः मात्र) जो अनुमानित लागत रु.1000.19 लाख (बिना जी एस टी जोड़े) (रुपए दस करोड उन्नीस हजार मात्र) से 18.16% (अठारह दशमलव सोलह प्रतिशत) से नीचे, की नियत मद दर पर, अध्यक्ष, भारतीय विमानपत्तन प्राधिकरण की ओर से स्वीकार की जाती है।
- Your E-tender for the work mentioned above is hereby accepted on behalf of the Chairman, Airports Authority of India, at the item rates quoted by you totalling to Rs. 8,18,54,806 /- (Excluding GST) (Rupees Eight Crore, Eighteen Lakh, Fifty-Four Thousand, Eight Hundred and Six only) which is 18.16% (Eighteen-point One Six Percent) below the estimated cost put to tender of Rs. 1000.19 Lakhs (Excluding GST) (Rupees Ten Crore, Nineteen Thousand Only).
- वरिष्ठ-महाप्रबंधक (अभि-सि), भा वि प्रा, गोवा अंतरराष्ट्रीय विमानक्षेत्र, दाबोलिम, गोवा इस कार्य के अभियंता प्रभारी होंगे। आपसे अनुरोध है कि आप संविदा करार पर हस्ताक्षर करने एवं उसे पूरा करने हेतु 16.07.2024

से पहले वरिष्ठ-महाप्रबंधक (अभि-सि), भा वि प्रा, गोवा अंतरराष्ट्रीय विमानक्षेत्र, दाबोलिम, गोवा के कार्यालय में उपस्थित हो। संविदा करार 100/- (रुपये एक सौ मात्र) के न्यायिकेतर स्टैम्प पेपर पर निष्पादित किया जाएगा और पेपर की लागत आप द्वारा वहन की जाएगी।

2. **Senior Manager (Engg-C), AAI, Goa International Airport, Dabolim, Goa** shall be Engineer-in-Charge of the work. You are requested to attend the office of the **Senior Manager (Engg-C), AAI, Goa International Airport, Dabolim, Goa** before **16.07.2024** to sign and complete the contract agreement. The contract agreement shall be executed on a non-judicial stamp paper of value **Rs.100/-** (Rupees One hundred only) and the cost of the stamp paper shall be borne by you.
3. आपकी निविदा के साथ रु 20,00,380/- (रुपये बीस लाख तीन सौ अस्सी मात्र) ऑनलाइन सी पी पी पोर्टल के स्टेट बैंक ऑफ इंडिया पेमेंट गेटवे के जरिये प्राप्त अग्रिम धन राशि को निविदा शर्तों के तहत लौटाया जाएगा। कृपया इस पत्र के जारी होने की तिथि से 10 दिनों के भीतर प्रतिभूती के रूप में रु 40,92,740/- (रुपये चालीस लाख बानबे हजार सात सौ चालीस मात्र) जमा करें। अन्यथा इस राशि की कटौती संविदा कागजात के पृष्ठ 16 (जी सी सी) के खंड 1ए के अनुसार कर ली जाएगी।
3. The earnest money amount of **Rs. 20,00,380/- (Rupees Twenty Lakh Three, Hundred and Eighty Only)** received along with your tender through State Bank of India payment gateway in CPP Portal will be refunded as per tender conditions. Please deposit **Rs. 40,92,740/- (Rupees Forty Lakh, Ninety-Two Thousand, Seven Hundred and Forty only)** towards Security Deposit within 10 days from the issue of this letter, failing which, the same will be deducted as per condition of clause 1 A on page 16 (GCC) of the contract agreement
4. अनुबंध हस्तावेष्ट की शर्त खण्ड-1, पृष्ठसंख्या-15, के अनुसार, कार्य आदेश जारी होने के 30 दिनों के भीतर आप भा.वि.प्रा. को रुपये 40,92,740/- (रुपये चालीस लाख बानबे हजार सात सौ चालीस मात्र) राशि की एक कार्य निष्पाधान गारंटी पृष्ठ संख्या -108 पर सलन्त प्रोफार्मा के अनुसार बैंक गारंटी के रूप में प्रस्तुत करेंगे।
4. Within 30 days of issue of Award letter, you shall submit to AAI, a Performance Guarantee as per condition of clause 1 on Page 15 for an amount of Rs. **40,92,740(Rupees Forty Lakh Ninety-Two Thousand Seven Hundred and Forty only)** in the form of Bank Guarantee on the Proforma appended at Appendix-XI on 108 of Contract Document.
5. आपसे अनुरोध है कि आप कोन्ट्रैक्ट लेबर (रेग्युलेशन एंड अबोलीशन) एक्ट 1970, कोन्ट्रैक्ट लेबर (रेग्युलेशन एंड अबोलीशन) सेंट्रल रूल 1971, बाल मजदूरी (प्रोहिबिशन एंड रेग्युलेशन) एक्ट 1986, कंस्ट्रक्शन वर्कर्स (रेग्युलेशन ऑफ एम्प्लोयमेंट एंड कंडीशन ऑफ सर्विस) एक्ट 1996, बिल्डिंग एवं कंस्ट्रक्शन वर्कर्स वेल्फर सेस एवं कंडीशन ऑफ सर्विस) एक्ट 1996, बिल्डिंग एवं अन्य कंस्ट्रक्शन वर्कर्स वेल्फर सेस, एक्ट 1996 के प्रावधानों एवं जी सी सी टेंडर खंड 19 पृष्ठ क्र. 49 और केंद्रीय व राज्य सरकारों के तदसंबंधी नियमों का अनुपालन करें।
5. You are requested to comply with the provisions of Contract Labour (Regulation and Abolition) Act 1970 and Contract Labour (Regulation and Abolition) Central Rules 1971 Child Labour (Prohibition & Regulation), Act 1986, Construction workers (Regulation of Employment and condition of service) Act 1996, Building and other Construction workers welfare cess Act 1996 as specified in clause 19-page no. 49 of GCC tender and rules of Central and State Government.

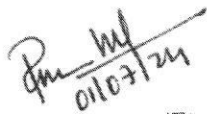


6. आपको वरिष्ठ प्रबंधक (अभि-सि), भा. वि. प्रा. गोवा अंतरराष्ट्रीय विमानपत्तन, दाबोलिम, गोवा से तत्काल संपर्क करने का निर्देश दिया जाता है जो आपको कार्य स्थल सौंपेंगे।
6. You are also directed to contact Sr Manager (Engg-Civil), Airports Authority of India, Goa International Airport, Dabolim, Goa immediately who will arrange to hand over the site to you.
7. कृपया ध्यान दे कि कार्य पूरा करने के लिए आपको 05 (पांच) महीने का समय प्रदान किया जाता है। जो इस पत्र के जारी होने की तारीख के बाद दसवे दिन से माना जाएगा।
7. Please note that the time allowed for carrying out the work shall be 05 (five) Months including 2 months for considered for rain and same shall be reckoned from tenth day after the date of issue of this letter.
8. अनुबंध के संबंध में कोई भी पत्राचार समान्य रूप से अभियंता प्रभारी को संबोधित किया जाना चाहिए।
8. Any further correspondence in connection with the contract should normally be addressed to the Engineer-in-charge.
9. कृपया पत्र की पावती भेजे और इस पत्र नकल पर स्वीकृती की निशानी के रूप में हस्ताक्षर करने के बाद हमें भेजे।
9. Please acknowledge the receipt & return the duplicate of this letter enclosed herewith after signing it to the undersigned as a token of acceptance.
10. यदि कोई विसंगति अंग्रेजी या हिन्दी संस्करण में पाई जाती है तो अंग्रेजी संस्करण को सही रूप में लिया जाएगा।
10. In case any discrepancy is found between English or Hindi version then English version will be taken as correct.

धन्यवाद /Thanking you.

अनुलग्नक/ Encl: Schedule -A (BOQ) [Pg.01-34]

भवदीय/Yours faithfully,


Senior Manager (Engg-Civil) (अभि-सिविल)
वरिष्ठ प्रबंधक (अभि-सि) (Engg.-Civil)
कृते तथा ओर से अध्यक्ष, गोवा विमानपत्तन, गोवा.
For and on behalf of Chairman,
भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

N.O.O.

प्रतिलिपी/ Copy to :-

बाहरी वितरण / External :-

1. उपमहाप्रबंधक (सतर्कता), प. क्षे. भारतीय विमानपत्तन प्राधिकरण, पारसीवाडा के सामने, सहार रोड, विले पार्ले (पु), मुंबई - 400099.
Dy. General Manager (Vig.), W.R AAI, Opp. Parsiwada, Sahar Road, Vile Parle (E), Mumbai-400099.
2. क्षेत्रीय श्रम आयुक्त (केंद्रीय), भारतीय सरकार, श्रम मंत्रालय, वास्को द गामा, गोवा
Regional Labour Commissioner (C), Govt. of India, Ministry of labour, Flat No.5, 3rd Floor, Dr. Mukund Building, Vasco-da-Gama, Goa.
3. ईपीएफ आयुक्त, ईडीसी कॉम्प्लेक्स, पाटो, पणजी, गोवा
E.P.F Commissioner, Panchdeep Bhavan, 3rd Floor, Plot No. 23, EDC Complex, Patto Plaza, Panaji, Goa.


01/03/24
Senior Manager (Engg.) प्रबंधक (अभि.-सिविल)
वरिष्ठ प्रबंधक (अभि.-सिविल) Sr. Manager (Engg.-Civil)
भारतीय विमानपत्तन प्राधिकरण, प्रा., गोवा विमानपत्तन, गोवा.
AAI, Goa Airport, Goa.
AIRPORTS AUTHORITY OF INDIA,
Goa Airport

N.O.O

प्रतिलिपि / Copy to :-

आंतरिकवितरण / Internal :-

1. विमानपत्तन निदेशक, भाविप्रा, सिविलएनक्लेव, गोवा
Airport Director, AAI, C.E, Goa.
- ✓ 2. महाप्रबंधक (अभि- विद्युत) भाविप्रा, सिविलएनक्लेव, गोवा
General Manager (Engg-Elec.), AAI, C.E, Goa.
3. संयुक्त महाप्रबंधक ((अभि-सि)) भाविप्रा, सिविलएनक्लेव, गोवा
Jt. Gen. Manager (Engg - C), AAI, C.E, Goa.
- ✕ 4. उप संयुक्त महाप्रबंधक (वित्त) भाविप्रा, सिविलएनक्लेव, गोवा
Dy. Gen Manager (Engg-C), AAI, C.E, Goa.
5. करारनामाप्रतिलिपि/ Agreement copy
6. कार्यफाइल/ Work file

Pm-ml
10/03/24
Senior Manager (Engg-C) (अभि-सिविल)
वरिष्ठ प्रबंधक (अभि-सि) Sr. Manager (Engg.-Civil)
भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA,
Goa Airport

Government eProcurement System
Created By: Vinay Hedao
Created Date/Time: 11-Jun-2024 06:24 PM
Tender Title: Retrofitting Of MLCP
Tender ID: 2024_AAI_194080_1

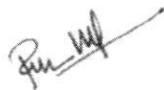
Tender Inviting Authority: Dy General Manager (Engg-C), AAI, Goa Airport

Name of Work: Modification of the MLCP Building into an Office Building at Goa International Airport

Contract No: Tender ID : 2024_AAI_194080_1

SCHEDULE OF WORK / ITEM(S)

Sl.No	Description of Work / Item(s)	No. of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
1.00	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge - Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	36.00	Cum	2500.00	90000.00
2.00	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in - charge	2.00	Cum	4000.00	8000.00
3.00	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge - In cement mortar	10.00	Cum	3200.00	32000.00
4.00	Dismantling steel work manually/ by mechanical means in built up sections without dismembering and stacking within 50 metres lead as per direction of Engineer-in-charge	5138.00	Kg	6.00	30828.00
5.00	Dismantling toilet cubical unit i/c the fittings etc. aluminium/ Gypsum partitions, fixed glazing and false ceiling complete including stacking of serviceable materials and disposal of unserviceable materials within 300 metres lead	326.00	Sqm	100.00	32600.00
6.00	Dismantling of WC, wash basin, urinal, recess panels, concealed flushing cistern including stacking of useful materials near the site and disposal of unserviceable materials within 300 metres lead.	68.00	Nos	200.00	13600.00
7.00	Dismantling C.I. or asbestos rain water pipe with fittings and clamps including stacking the material within 50 metres lead : 100 mm dia pipe	102.00	Mtr	160.00	16320.00
8.00	Taking out and refixing existing paverblocks as per the level and lines as per the direction of EIC.	48.00	Sqm	500.00	24000.00
9.00	Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 metres lead - Of area beyond 3 sq. metres	18.00	Nos	180.00	3240.00
10.00	Dismantling tile/granite work in floors, walls and roofs laid in cement mortar including stacking material within 50 metres lead - For thickness of tiles 10 mm to 25 mm	467.00	Sqm	250.00	116750.00
11.00	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved	163.00	Cum	260.00	42380.00



Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
12.00	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	48.00	Cum	7500.00	360000.00
13.00	Providing and laying factory made Precast concrete solid blocks of size 150x200x300mm in foundation and plinth in. Cement mortar 1:6 (1 cement : 6 coarse sand)	58.00	Cum	6000.00	348000.00
14.00	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 : 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)	1.00	Cum	9000.00	9000.00
15.00	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement with 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)	16.00	Cum	11000.00	176000.00
16.00	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement : 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)	1.00	Cum	11000.00	11000.00
17.00	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level : - Thermo-Mechanically Treated bars of grade Fe-500D or more.	147.00	Kg	95.00	13965.00
18.00	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.	1935.00	Kg	95.00	183825.00
19.00	Centering and shuttering including strutting, propping etc. and removal of form for - Shelves (Cast in situ)	11.00	Sqm	900.00	9900.00
20.00	Centering and shuttering including strutting, propping etc. and removal of form for - Suspended floors, roofs, landings, balconies and access platform	112.00	Sqm	900.00	100800.00
21.00	Centering and shuttering including strutting, propping etc. and removal of form for - Lintels, beams, plinth beams, girders, bressumers and cantilevers	27.00	Sqm	750.00	20250.00
22.00	Centering and shuttering including strutting, propping etc. and removal of form for - Foundations, footings, bases of columns, etc. for mass concrete	4.00	Sqm	700.00	2800.00
23.00	Centering and shuttering including strutting, propping etc. and removal of form for - Edges of slabs and breaks in floors and walls - under 20cm wide	5.00	Sqm	200.00	1000.00
24.00	12 mm cement plaster of mix : 1:6 (1 cement : 6 fine sand)	415.00	Sqm	600.00	249000.00

Pin - up

Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
25.00	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground, all complete as per direction of Engineer-in-Charge. - With cement mortar 1:4 (1 cement : 4 fine sand)	38.00	Sqm	700.00	26600.00
26.00	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	4363.00	Sqm	150.00	654450.00
27.00	Distempering with 1st quality acrylic distemper (ready mixed) having VOC content less than 50 gms/litre, of approved manufacturer, of required shade and colour complete, as per manufacturer's specification. Two or more coats on new work	10134.00	Sqm	180.00	1824120.00
28.00	Finishing walls with Acrylic Smooth exterior paint of required shade - 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)	214.00	Sqm	225.00	48150.00
29.00	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade - Two or more coats on new work	2724.00	Sqm	150.00	408600.00
30.00	Core cutting in concrete slab/walls from 75 mm to 150mm dia etc complete as per direction of Engineer-Incharge.	42.00	Nos	3000.00	126000.00
31.00	Core cutting in concrete slab/walls upto 75 mm dia etc complete as per direction of Engineer-Incharge	3.00	Nos	3000.00	9000.00
32.00	Providing and laying Vitrified tiles in floor with different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS 15622, of approved brand & manufacturer, in all colours and shade, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS : 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately) - Size of Tile 600x600 mm	4417.00	Sqm	1000.00	4417000.00
33.00	Providing and laying Vitrified 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 brand & manufacturer, in all colours and shade, in skirting, riser of steps, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately) - Size of Tile 600x600 mm	67.00	Sqm	1600.00	107200.00

Signature

Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
34.00	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS 15622, of approved brand & manufacturer, in all colours and shade laid on 20 mm 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. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge, clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily. Glazed Vitrified tiles Matt/Antiskid finish of size 600 x 600 mm	150.00	Sqm	1500.00	225000.00
35.00	Grouting the joints of flooring tiles having joints of 3 mm width, using epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg), including filling / grouting and finishing complete as per direction of Engineer-in-charge. - Size of Tile 600x600 mm	4634.00	Sqm	260.00	1204840.00
36.00	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement, 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete	335.00	Sqm	1100.00	368500.00
37.00	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement, 4 coarse sand) joints treated with white cement mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels - Granite stone slab colour black, Cherry/Ruby red - Area of slab over 0.50 sqm	125.00	Sqm	4000.00	500000.00
38.00	Providing edge moulding to 18 mm thick marble stone counters, Vanities etc., including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge. - Granite work	511.00	mtr	300.00	153300.00

Pm

Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
39.00	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS 733 and IS 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle. Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) For fixed portion- Powder coated aluminium (minimum thickness of powder coating 40 microns)	8947.00	Kg	600.00	5368200.00
40.00	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS 733 and IS 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle. Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately) Powder coated aluminium (minimum thickness of powder coating 40 microns)	1572.00	Kg	700.00	1100400.00
41.00	Providing and fixing 12 mm thick pre-laminated particle board flat pressed three layer or graded wood particle board conforming to IS 12823 Grade I Type II, in panelling fixed in aluminium doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of Engineer-in-charge. Pre-laminated particle board with decorative lamination on both sides	653.00	Sqm	940.00	613820.00
42.00	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber /neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item) With float glass panes of 5.50 mm thickness	1098.00	Sqm	1000.00	1098000.00

Pm-MP

05

Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
43.00	Providing and fixing 100mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete	37.00	Nos	1000.00	37000.00
44.00	Providing and fixing aluminium round shape handle of outer dia 100 mm with SS screws etc. complete as per direction of Engineer-in-charge - Powder coated aluminium (minimum thickness of powder coating 40 microns)	74.00	Nos	250.00	18500.00
45.00	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete. Twin rubber stopper	37.00	Nos	200.00	7400.00
46.00	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete.	37.00	Nos	2500.00	92500.00
47.00	Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete	15108.00	Kg	100.00	1510800.00
48.00	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete	3792.00	Kg	100.00	379200.00
49.00	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 - In stringers, treads, landings etc. of stair cases, including use of chequered plate wherever required, all complete	3607.00	Kg	100.00	360700.00
50.00	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 - In gratings, frames, guard bar, ladder railings, brackets, gates and similar works	3275.00	Kg	100.00	327500.00
51.00	Providing and fixing pre-coated 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 Engineer-in-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.	1673.00	Sqm	700.00	1171100.00

For Mtl

Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
52.00	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS 277 and consisting of angle cleats of size 25 mm wide x 16 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound, jointing tapes, finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with - 12.5 mm thick tapered edge gypsum plain board conforming to IS: 2095- (Part I) 2011 (Board with BIS certification marks)	358.00	Sqm	1100.00	393800.00
53.00	Treatment to the Pipe Outlets / Drain outlets / Cutouts. Supplying & sealing the pipe inserts, etc provided in the floor & walls with 1.5 mm thick two sided non-reinforced polymerized bituminous self adhesive Dr. Fixit Bathseal Tape (or equivalent) to seal the joint between pipes/inserts and the core cuts. The Tape shall have Softening point (R&B) >60°C as per ASTM D 36, Elongation, (Compound) > 500% as per ASTM D 412, Water absorption at 24 hrs < 0.3 as per ASTM D 570, Water permeability @ 5bar Nil as per BS EN 12390, Adhesion strength : 1.0 N/mm as per ASTM D 1000. Cold temperature flexibility < -6°C as per UEAtc, followed by grouting the gaps around the pipe / inserts with a non shrink cementitious waterproof grout, Dr. Fixit Pidigrout 10M (or equivalent), shall conform to ASTM C 109 - 1999 18, ASTM C 1107, Grade C, etc. complete as per the direction of EIC.	28.00	Nos	1000.00	28000.00

Pm. Mf

Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
54.00	Providing & Applying 2 coats of waterproof coating with high performance two component pre-packed cementitious waterproofing. Dr. Fixit Fastflex or equivalent, to achieve DFT of 1.5mm over the floor and wall surface as per the manufacturers' specification & drawing. All the coats to be applied in right angle to each other. The coating shall have following properties: Tensile strength : 2.6 N/mm ² as per ASTM D 412, Elongation at break, % : 120 as per ASTM D 412, Adhesion strength : 1 N/mm ² as per ASTM D 4541, crack bridging : 2mm as per ASTM C 836, Water penetration (5 bar pressure) : 1% as per BS EN 12390, Hardness, Shore A : 60 as per ASTM D 2240, RCPT permeability : 92% as per ASTM C 1202-97, including cleaning the surface, removing the laitance, grease, old paints, contaminants, curing compound with wire brush, cleaning the surface with compressed air. Damaged or loose plaster to be repaired with polymer modified cement-sand mortar with SBR Latex, Pidicrete URP (or equivalent). Small cracks upto 5mm needs to be repaired with crack filling material Crack X and the cracks above 5mm shall be repaired by polymer modified mortar with SBR Latex, Pidicrete URP (or equivalent) as per manufacturers' specification, etc, complete.	392.00	Sqm	600.00	235200.00
55.00	Cleaning the existing concrete surface for water proofing by removing the existing damages and chipping the loose concrete surface using automated or manual tools for making it free from all loose particles, laitance, sharp protrusions, mortar leftovers, deposited algae and all contaminants to achieve a solid base surface. It is to be followed by thorough cleaning with air blower, opening the cracks with grinder and filling cracks with cementitious crack filling polymer based powder. Existing Screed/substrate should be properly levelled, cleaned and made dust free. Saw cutting the damaged/ hollow surface along in the edge to get minimum required thickness in shape and to be filled and levelled with cementitious microconcrete with latex based water proofing polymer as admixture in the damaged areas.	1997.00	Sqm	200.00	399400.00
56.00	Providing and Applying at the junction of slab and Parapet wall and Vertical offsets with polymer modified cementitious mortar, in the size of 25mm x 25mm, as per the manufacturer specifications and as per the direction of EIC.	198.00	mtr	600.00	118800.00
57.00	Providing and applying fibre reinforced elastomeric liquid water proofing membrane with resilient acrylic polymers having Sun Reflectivity Index (SRI) of 105 on top of concrete roof in three coats @10.76 litre/ 10 sqm. One coat of self-priming of elastomeric waterproofing liquid (dilution with water in the ratio of 3:1) and two coats of undiluted elastomeric waterproofing liquid (dry film thickness of complete application/system not less than 500 microns). The operation shall be carried out after scrapping and properly cleaning the surface to remove loose particles with wire brushes, complete in all respect as per the direction of Engineer-in-Charge.	1997.00	Sqm	600.00	1198200.00

Pu-144

Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RA/(GSTN-NA)-703331	
				Rate	Amount
58.00	Supplying & laying 20mm THK protective screed of cement sand mortar of 1:3 mix admixed with integral compound conforming to IS 2645, Pidiproof LW+ (or equivalent) at manufacture specified quantity, to provide slope to the horizontal surface towards drain outlet and also to protect the waterproofing, etc. complete	150.00	Sqm	600.00	90000.00
59.00	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 - Internal work - Exposed on wall - 20 mm nominal dia Pipes	156.00	mtr	400.00	62400.00
60.00	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 - Internal work - Exposed on wall - 15 mm nominal dia Pipes	12.00	mtr	375.00	4500.00
61.00	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 - concealed work including cutting chases and making good the walls --15 mm nominal dia Pipes	46.00	mtr	500.00	23000.00
62.00	Providing and fixing SWR single socketed solvent jointed pipes(type B as per IS:13592) Prince /Plasto /Kisan or equivalent for soil, waste and vent including required fittings. 40 mm dia pipe	15.00	mtr	250.00	3750.00
63.00	Providing and fixing SWR single socketed solvent jointed pipes(type B as per IS:13592) Prince /Plasto /Kisan or equivalent for soil, waste and vent including required fittings. 75 mm dia pipe	132.00	mtr	400.00	52800.00
64.00	Providing and fixing SWR single socketed solvent jointed pipes(type B as per IS:13592) Prince /Plasto /Kisan or equivalent for soil, waste and vent including required fittings. 110 mm dia pipe	382.00	mtr	500.00	191000.00
65.00	Providing & fixing of white vitreous china counter top wash basin/circular basin (Jaquar cat no.ARS-WHT-39901 or equivalent) with CP brass waste assembly, wall flanges and rubber adapters for waste connection complete, nuts, washers, cutting and making good the walls floors wherever required as per direction of Engineer-Incharge	20.00	Nos	5000.00	100000.00

Praveen

Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
66.00	Providing & fixing of white vitreous China rimless wall hung water closet with soft close seat covers(Jaquar cat.no.ACS-WHT-87953BIUF5M or approved equivalent) with CP bolts nuts, CI chair hanging arrangements, bakelite seat & cover with CP hinges & rubber buffers, CP brass screw, washer with all accessories with WC connector with Rubber Lip / Buffer and side gap filled with silicon sealant wherever required with chrome finished brass concealed type dual flush cistern (Jaquar cat no JCH-WHT-2400FS or approved equivalent) comprising of actuator button facia assembly including brass / SS screws and washer complete including cutting, making good the walls, floors, slab wherever required as per direction of Engineer-Incharge	24.00	Nos	35000.00	840000.00
67.00	Providing & fixing white vitreous china flat back urinal with automatic flushing systems (Jaquar cat no URS-WHT-13253N or approved equivalent) comprising of all plumbing electronic and electrical items. CP brass flush pipe with CP brass elbow, CP brass spreader, CP wall flange including concealed type sensor flushing valve (Jaquar cat No SNR-STL 51087 or approved equivalent) and any other item required to provide satisfactory functioning including necessary wall cutting / chasing and making good, as required for urinal flushing complete as mentioned above as per direction of Engineer-Incharge.	12.00	Nos	8500.00	102000.00
68.00	Providing and fixing 32mm dia Bottle Trap (Jaquar cat.no.ALD-769L250x190 or approved equivalent) and other ancillary fittings, cutting and making good the walls wherever required complete as per directions of Engineer-Incharge.	20.00	Nos	2000.00	40000.00
69.00	Providing & fixing pillar cock for washbasin of chrome finished (Jaquar cat.no.FLR 5021M or approved equivalent) all flexible pipes & accessories as per direction of Engineer-Incharge	20.00	Nos	3000.00	60000.00
70.00	Providing and fixing uplasticised PVC connection pipe with brass unions - 45 cm length, 15 mm nominal bore	20.00	Nos	150.00	3000.00
71.00	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS 8931 15mm nominal bore	24.00	Nos	1500.00	36000.00
72.00	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS: 8931. - 15mm nominal bore	24.00	Nos	1500.00	36000.00
73.00	Providing & fixing C.P. brass health faucet (Jaquar cat no ALD-CHR-565 or approved equivalent) and flexible hose 1 m long connection with C.P. holder for hand spray complete in all respects as per direction of Engineer- in-Charge.	24.00	Nos	2000.00	48000.00
74.00	Providing & fixing SWR floor nahani trap of size 75x110mm of Plasto/Prince/ Kisan or approved equivalent with CP brass circular grating as per direction of Engineer-Incharge	36.00	Nos	500.00	18000.00
75.00	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with bevelled edges and fixed on SS studs etc. complete (a) 600 mm thick mirror of approved make	17.00	Sqm	3000.00	51000.00

For M/L

Sl.No	Description of Work / Item(s)	No. of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
76.00	Providing & fixing 10mm thick frosted glass urinal partitions (Jaquar 1810-UC/1110UC or approved equivalent) including all fittings and accessories required as per direction of Engineer-Incharge	8.00	Nos	6000.00	48000.00
77.00	Providing & fixing of toilet cubicles consisting of 12mm thick compact laminate board as for partitions of intermediate divider, doors and pilasters. The cubicle shall have head rail on top of panels and panels shall be fixed on the floor with a clearance of maximum 150mm using stainless steel satin finish adjustable legs screwed to the floor included stainless steel (SS) lock set, SS door knob, SS gravity self closing hinge, SS coat hook with door stopper, SS U channel, SS head rail, SS adjustable foot, SS tabular holder, SS head rail wall bracket, SS head rail corner connection and SS noise reducing tape, etc. as per direction of Engineer-Incharge	101.00	Sqm	12650.00	1277650.00
78.00	Providing fixing baffle ceiling of approved make consisting of U shaped profiles 50mmx100mm, 0.60mm thick with inwardly turned edge of 6-9mm as per the direction of Engineer In Charge. Baffles are coil coated on a continuous paint line, double baked and roll formed from higher strength and good roll forming characteristics. Baffles are to be fixed to slotted steel angle with the help of top cover, bottom cover and nut bolt or with baffle carrier. Distance between two baffles shall be 100mm c/c. Steel angle shall be fixed at a distance of 1.2 mtr c/c and shall be suspended by means of GI threaded rod of 6mm diameter @ 1.20 m interval c/c	973.00	Sqm	3000.00	2919000.00
79.00	Providing and fixing roller blinds of hunter douglas or equivalent make, 36mm dia roller mechanism encased in extruded aluminium alloy 6063 T6, bottom rail of powder coated aluminium with braided polyester cord with nylon cord (2mm dia) with 4.5 mm dia plastic beads complete as per the direction of EIC	344.00	Sqm	3000.00	1032000.00
80.00	Providing and fixing boards of any size with required text matter (in any language) and logo, cut out of eco printed vinyl and fixed on 5mm thick foam board, in any shade and colour as per the direction of EIC.	11.00	Sqm	2000.00	22000.00
81.00	Providing and fixing boards of any size with required text matter (in any language) and logo, cut out of eco printed vinyl and fixed on ACP backing sheet, in any shade and colours per the direction of EIC	30.00	Sqm	2000.00	60000.00
82.00	Excavating trenches of required width for pipes, cables, etc including excavation for sockets and dressing of sides, ramming of bottoms, depth upto 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m. Pipes, cables etc. exceeding 80 mm dia but not exceeding 300 mm dia	225.00	mtr	300.00	67500.00

For Mf

Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
83.00	Designing, supplying, fabricating, assembling and installing in position, frameless float glass partition of up to 2.6m high for office cubical at all locations with 12mm thick clear toughened glass mounted on S.S. Skirting 316 grade of 200mm high (polished/satin finish) to accommodate raceway at the bottom of M.S. Structure. Balance height above 2.6m shall be closed by ACP. The 12mm thick clear toughened glass unit shall be supported with SS 316 grade U-channel in bottom and top patch fittings of approved make. The rate shall include for handling, shifting, hoisting, erecting & fixing of the entire glazing system all accessories, S.S. Skirting & raceways, hardware & consumables such as nuts, bolts, rivets, washers, clamps, straps, chemical / mechanical anchor fasteners, self-tapping screws, making suitable holes in glass before tempering, structural/weather silicone sealants of approved manufacturer, necessary M.S. supports and inserts, setting blocks in EPDM or neoprene, necessary scaffolding / staging etc. all complete as per approved shop drawings, technical specifications all complete as per directions and to the satisfaction of the Engineer-in-charge. The periphery shall have to be sealed both from inside and outside with silicon weather sealant to make the glazing water and air tight. The sealing of glass to connector pipes with stainless steel fixtures shall be completed using Silicon sealant grade of "Dow Corning - USA" or "WACKER - Germany" or approved equivalent as per the design requirement. The partition shall be aligned for the entire height and for the entire length by laser beam equipment to ensure 100 percent X-axis and Y-axis alignment. The glass joints must be properly sealed with weather silicon to make the joint water tight and air tight as well as per directions of Engineer-In-Charge. (Cost of MS structure, SS Skirting & ACP work shall be measured and paid separately under relevant item.)	913.00	Sqm	5000.00	4565000.00
84.00	Providing and fixing SS (316) skirting made out of 2mm thick brush/ matt/ satin/ hair line finish sheet of required shape with necessary accessories etc. Including welding, grinding, bending, buffing, polishing and fitting etc complete as directed by Engineer in charge. SS sheet for skirting shall be fixed on backing steel frame with suitable adhesive and double side tape. Skirting shall be finished banding as require shape and size and grinded at edges and corner. Contractor shall prepared shop drawing for approval. Contractor shall prepare sample/ mock-up as suggested and get approved by Engineer in charge.	104.00	Sqm	7000.00	728000.00

Pr. 14

Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
85.00	Fabricating, installing and fixing in position Curtain Wall with Aluminium Composite Panel Cladding, with open grooves for linear as well as curvilinear portions of the building, for all heights and all levels etc. including. (a) Providing, fabricating and supplying and fixing panels of aluminium composite panel cladding in pan shape in metallic colour of approved shades made out of 4mm thick aluminium composite panel of required colour, shade of approved make, FR grade A2, consisting of a core of mineral core fibre sandwiched between two aluminium skins of 0.50mm thickness, 4mm overall thickness with surface finish of fluoro carbon (PVDF) protective colour coating, as specified using stainless steel screws, nuts, bolts, washers, cleats, weather silicone sealant, backer rods etc. (b) The fastening brackets of Aluminium alloy 6005 T5 / MS with Hot Dip Galvanised with serrations and serrated washers to arrest the wind load movement. Nylon separators to prevent bi-metallic contacts all complete as per specification. The item includes cost of all material & labour component, cleaning and protection of the curtain wall with aluminium composite panel cladding till the handing over of the building for occupation. Base frame work for ACP cladding is payable under the relevant aluminium item. The Contractor shall provide curtain wall with aluminium composite panel cladding, having all the performance characteristics all complete, as per the drawings and as directed by the Engineer-in-Charge. However, for the purpose of payment, only the actual area on the external face of the curtain wall with Aluminum Composite Panel Cladding (including width of groove) shall be measured in sqm up to two decimal places	331.00	Sqm	4000.00	1324000.00

For MRP

Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
86.00	Supply and Fixing of Folding Sliding Glass partition with manual sliding folding of aluminium track in top as per manufacturer specifications. The assembling and fixing of the 12mm thk clear toughened glass shall use and standard accessories & hardware's as per approved makes Dorma India Pvt. Ltd, Hafele India Pvt. Ltd, Hardwyn, GEZE, Linox Technology Pvt. Ltd, Assa Abloy (ENOX), Kich Architectural Products Pvt. Ltd. or equivalent make as approved by Engineer In- Charge. Including single leaf door with 12mm thick toughened clear glass of reputed makes Saint Gobain, AIS Glass Solutions Ltd, Glaverbel Modi Guard OR equivalent make as approved by Engineer In-Charge. The size of standard glass panel shall be max. height 3600 and max. width 1100mm and remaining end / corner glass size shall be as per actual size at site. All glass panes shall be free from any scratch / tong marks and any other visible defects, all necessary supports and fixing arrangement. The penale to penale fixed on folding hinges and top track fixed on existing ceiling level with proper supporting brackets etc tools, lifting machines etc. including cost of sealants, micro cured EPDM gaskets, spacers, backer rods, bolts, gasket, fixtures etc.	22.00	Sqm	7000.00	154000.00
87.00	Supplying and installation of 12mm thick frameless toughened glass door of approved make. All edges of the glass to be machine polished and sides also to be toughened. The work includes cost of all cut outs/holes. The door is to be hung on Dorma heavy floor spring BTS 65 of Dormakaba or approved equivalent. The patch fittings consisting of all required patch fittings of approved make for door with side and upper panel, upper and bottom patches, horizontal locks with lever handles complete as per the direction of Engineer In Charge. - Single leaf, double action door of size 90x210 cm.	47.00	Nos	8000.00	376000.00
88.00	Supplying and installation of 12mm thick frameless toughened glass door of approved make. All edges of the glass to be machine polished and sides also to be toughened. The work includes cost of all cut outs/holes. The door is to be hung on Dorma heavy floor spring BTS 84 of Dormakaba or approved equivalent. The patch fittings consisting of all required patch fittings of approved make for door with side and upper panel, upper and bottom patches, floor locks with cylinder and strike plate and pull handle of size 350x22mm complete as per the direction of Engineer In Charge. - double leaf, double action door of size 200x210 cm.	2.00	Nos	16000.00	32000.00
89.00	Providing and fixing self adhesive 3M Wall Graphics Applied on glass or any rigid smooth surface with digital Latex printing with over laminate to protect the print from fading, which will come in a matte finish with approved artwork digitally reproduced with water-based inks as per the direction of EIC	1002.00	Sqm	3200.00	3206400.00

Signature

Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RA(GSTN-NA)--703331	
				Rate	Amount
90.00	Providing structural design & drawing for construction of gagan room and gagan antenna above existing MLCP (Multi level Car Parking) terrace including vetting of structural design and drawing by Govt Engineering College. The Consultancy shall be carried out through a reputed structural consultant as approved by Engineer In-Charge and submitted before start of work. (cost is inclusive of cost of site visits by the consultants, in-situ and lab testings (if required), structural design, issue of 3 sets of good for construction drawings, vetting charges any other incidental charges required)	1.00	Job	1000000.00	1000000.00
91.00	SH-I Air-conditioning & Ventilation of MLCP including GAGAN room, Basement & Toilets SH-I (A) Reinstallation of VRF Air Conditioning System at First Floor of MLCP at Goa Airport.				
91.01	Dismantling of VRF Unit from Admin Block & transportation to MLCP	3.00	Job	77000.00	231000.00
92.00	Installation, Testing and Commissioning of following capacity Variable Refrigeration Volume / Flow Air-Conditioning System having multiple all 100% inverter scroll compressors, air-cooled condenser coils, condenser fans, heat exchangers, Accumulators, safety devices etc. all enclosed in powder coated housing and operating in conjunction with various Indoor units connected with copper pipes using R410A refrigerant including necessary internal wiring. Copper piping shall be carried out as per the approved drawings and as per guidelines of the VRF system manufacturer. The machine should deliver following mentioned capacity without deration even at 42 deg C ambient temperature. The Works also includes the properly lifting and shifting of outdoor units to terrace level and keeping it on desired location as per the approved drawings with the necessary civil foundation works.				
92.01	22 HP	3.00	Job	30800.00	92400.00
92.02	Dismantling of Indoor Unit from Admin Block & transportation to MLCP (First Floor).	39.00	Job	3080.00	120120.00
93.00	Installation, Testing and Commissioning of VRF type Indoor units having Louvers, Multi Speed fan, multi level filter, suspenders, cordless remote etc. as per the approved drawings complete as required. The unit should have electronic expansion valve and hiwall unit should be of following capacity.				
93.01	Hiwall Unit of 1.0 TR capacity	1.00	Nos	3850.00	3850.00
93.02	Hiwall Unit of 1.7 TR capacity	35.00	Nos	3850.00	134750.00
93.03	Hiwall Unit of 2.0 TR capacity	3.00	Nos	3850.00	11550.00
94.00	Installation and testing of pair of heavy duty copper Refnits, one on suction line and one on liquid line suitable for various Indoor units including insulation and satisfactory pressure testing. The selection of refnits should as per guideline of the VRF system manufacturer.	39.00	Nos	462.00	18018.00
95.00	Installation, Testing and Commissioning of Copper Shielded communication cable in PVC conduit between indoor units and outdoor units including supporting and terminations as required.	425.00	Meter	62.00	26350.00

For Mf

Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
96.00	Supply, Installation, Testing and Comissioning of heavy guage copper refrigerant piping for VRF machines with necessary joints and refrigerant gas including satisfactory pressure testing, making and finishing of openings / chasings / sleeves for routing of pipes / cables as per the approved drawings and tender specifications. The rate should be inclusive of 19 mm thick nitrile rubber insulation for suction line and minimum 13 mm nitrile rubber insulation for liquid line as required.				
96.01	21 to 35 mm dia	145.00	Meter	2679.00	388455.00
96.02	11mm to 20 mm dia	350.00	Meter	2516.00	880600.00
96.03	Upto 10mm dia	225.00	Meter	2354.00	529650.00
97.00	Supply and Installation of condensate drain piping from units to the drain with heavy gauge UPVC pipes including U-trap, necessary supports with nitrile rubber insulation, chasing and finishing in wall / slab wherever required.				
97.01	25/32 mm dia piping	125.00	Meter	323.00	40375.00
97.02	40 mm dia piping	35.00	Nos	388.00	13580.00
97.03	50 mm dia piping	75.00	Nos	469.00	35175.00
98.00	Supply of following sizes 1.1 kv grade XLPE insulated and PVC sheathed copper conductor armoured cable, confirming to IS-7098 (Part-I) of approved make & as per attached technical specification				
98.01	4 core x 16 sq mm armoured copper power cable for Outdoor unit	72.00	Meter	1960.00	141120.00
99.00	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade upto 35 sq. mm size (clamped with 1mm thick saddle) on wall surface as required.	72.00	Meter	261.00	18792.00
100.00	Supplying and making end termination with brass single compression gland and copper lugs for 4 x 16 sq.mm (28 mm) size of PVC insulated and PVC sheathed / XLPE copper conductor cable of 1.1 KV grade as required.	6.00	Set	644.00	3864.00
101.00	Supply, laying, installation and testing of 3 core x 1.5 sq mm armoured copper power cable of 1.1 KV grade for Indoor unit with the power cables connected to machines from nearest MCB, clamped on walls/ building structures, structural supports etc including termination of cables and supply of all ancilliary items such saddles, spacer bars, clamps, binding wires, termination kits, etc. as required and applicable	575.00	Meter	322.00	185150.00
102.00	Supply & installation of the painted MS stand of minimum 150mm height for mounting VRF outdoor units with Anti Vibration rubber pads	3.00	Nos	7300.00	21900.00
103.00	Properly flushing the entire system, Pressure testing upto 1.5 times of the working pressure, properly Vaccumization and R-410 gas top up for entire system and commissioning for entire system as required	3.00	Job	97000.00	291000.00
104.00	Supply and Installation of PVC cassing& capping (100mm x 50mm) to hide the copper refrigerent pipe, cables etc inside the room as required.	100.00	Meter	77.00	7700.00

For Mf

Sl.No	Description of Work / Item(s)	No. of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
105.00	Providing and fixing 4.00mm dia copper wire on surface or in recess for loop earthing along with existing surface / recessed conduit / submain wiring / cable as required	80.00	Meter	100.00	8000.00
106.00	SH-I (B) (i) VRV SYSTEM for 2nd Floor AA1 offices Supply of Variable Refrigerant volume Modular type air-conditioning system with wide range of indoor and outdoor units, with low external static pressure. The system consists of multiple indoor units ranging from high wall, fan coil, ducted type, cassette type etc. Connected to a single or multiple modular type outdoor units with individual controllers to each indoor unit, refrigerant piping, control cabling and also centralized controller. The specifications and details are as below:				
106.01	OUTDOOR UNITS Supply of Modular type Top discharge outdoor units equipped with high efficient scroll compressors, with all inverter type compressors, special acryl pre-coated heat exchanger having high efficiency E-pass coil design, low noise condenser fan coupled with variable speed motor, auto check-function for connection error, auto addressing Including required no. of multi connection piping kit. Refrigerant Gas is eco friendly R410a. 60 HP	2.00	Nos	1238000.00	2476000.00
107.00	INDOOR UNITS Supply of Ceiling Mounted Cassette type VRV indoor unit with fan motor, 3 step speed control, in built electronic expansion valve, washable filter. The Unit shall be supplied with cordless remote controller				
107.01	0.8 TR	2.00	Nos	36000.00	72000.00
107.02	1.03 TR upto 1.56 TR	18.00	Nos	38000.00	684000.00
107.03	2.02 TR upto 2.4 TR	22.00	Nos	41000.00	902000.00
107.04	2.56 TR upto 3 TR	4.00	Nos	43000.00	172000.00
107.05	3 TR and above	11.00	Nos	44000.00	484000.00
108.00	Remotes and Controls				
108.01	Cordless Remote for Cassette Type units	64.00	Nos	9817.00	628288.00
108.02	Supply of Refnet joints for branching of refrigerant.	32.00	Nos	8745.00	279840.00
108.03	Multiconnecting Kit for Outdoor Unit	4.00	Nos	17490.00	69960.00
109.00	SH-I (B) (II) Low-Side Air conditioning work				
109.01	OUTDOOR UNITS Installation, Testing and Commissioning of Modular type Top discharge outdoor units equipped with high efficient scroll compressors, with all inverter type compressors. Refrigerant Gas should be eco friendly R410a 60 HP	2.00	Nos	77000.00	154000.00
110.00	INDOOR UNITS Installation, Testing and Commissioning of Ceiling Mounted Cassette type indoor unit with fan motor, 3 step speed control, in built electronic expansion valve, washable filter. The Unit shall be supplied with cordless remote controller				
110.01	0.8 TR	2.00	Nos	4300.00	8600.00

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Sl.No	Description of Work / Item(s)	No. of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
110.02	1.03 TR upto 1.56 TR	18.00	Nos	4300.00	77400.00
110.03	2.02 TR upto 2.4 TR	22.00	Nos	4300.00	94600.00
110.04	2.56 TR upto 3 TR	4.00	Nos	4300.00	17200.00
110.05	3 TR and above	11.00	Nos	4300.00	47300.00
111.00	Installation, testing & commissioning of Refnet joints for branching of Refrigerant Piping.	55.00	Nos	462.00	25410.00
112.00	VRV Refrigerant Piping Supply, installation, testing & commissioning of copper piping with necessary fittings and Supports and with nitrile rubber tubular insulation of suitable thickness.				
112.01	6.4 mm Dia	80.99	Rmt	500.00	40495.00
112.02	9.5 mm Dia	153.01	Rmt	650.00	99456.50
112.03	12.7 mm Dia	111.54	Rmt	750.00	83655.00
112.04	15.9 mm Dia	182.65	Rmt	990.00	180823.50
112.05	19.1 mm Dia	130.00	Rmt	1000.00	130000.00
112.06	22.2 mm Dia	16.51	Rmt	1100.00	18161.00
112.07	28.6 mm Dia	89.70	Rmt	1600.00	143520.00
112.08	34.9 mm Dia	117.00	Rmt	2000.00	234000.00
113.00	Communication Cable Supply, Installation, Testing & Commissioning of Electrical flexible communication cable between Indoor & Outdoor units of 2C x 1.5 Sq.mm	1058.40	Rmt	275.00	291060.00
114.00	Drain Piping Supply, Installation and Commissioning of PVC piping complete with fittings, supports as per specifications and insulated with 9 mm thick nitrile insulation etc., complete as per technical specifications.				
114.01	25 mm dia	200.00	Rmt	275.00	55000.00
114.02	32 / 50 mm dia	300.00	Rmt	388.00	116400.00
115.00	Supply, installation, testing & commissioning of MS frame work for Outdoor unit with necessary supports.	8.00	Nos	7300.00	58400.00
116.00	Supply & installation of Additional gas charging for VRV refrigerant	100.00	Kg	1460.00	146000.00
117.00	SH-I (B) (iii) Power Supply to VRF (Indoor & Outdoor units)				

Per-ml

Sl.No	Description of Work / Item(s)	No. of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
117.01	Design, manufacture, supply, installation, testing and commissioning of outdoor totally enclosed double door feeder pillar panel confirming to IP 65, made of 14 SWG CRCA sheet steel, totally enclosed, standing on a MS Angle frame suitably fixed on floor foundation, dust and vermin proof, powder coated painting, suitable for operation on 3 phase and neutral, 415 V, 50 Hz AC system with busbars, connection and interconnections including supply & installation of following switchgears, metering instruments and accessories as per specifications: Incomers : 02 Nos. 630 Amp., 4 Pole, 415V, 50 KA, MCCB with built in thermal based release unit having Rotary operating mechanism with adjustable settings, Auxiliary Contactor as per the specification Buscoupler : 01 Nos. 630 Amp., 4 Pole, 415V, 50 KA, MCCB with built in thermal based release unit with adjustable settings. Instruments: 2 Nos. digital Multifunction Meter(Ammeter + Voltmeter) including suitable rating CTs for 3 Phase, 4 wire operation as per specification. Indications: R/Y/B(LED Type) phase indicating lamps controlled by 2 Amp MCB for all incomer & ON/OFF indication for all incomers and Outgoings. Bus-Bars : 4-Pole Aluminium Bus bar of 600 A rating of high conductivity with heat shrinkable, coloured sleeves, required intervals complete for cross section, size supports and their spacing etc as per specification. Outgoings : (1) 100 A, 4 Pole C curve MCB-08 Nos. 415V, 50 KA, MCCB with built in thermal based release unit with adjustable settings. All Incomers and Bus Coupler shall be mechanically and electrically interlocked with suitable accessories.	1.00	Nos	1200000.00	1200000.00
118.00	Supply of Cable, Laying of cables, end termination etc) Supply of following size XLPE insulated PVC Sheathed, armoured Aluminium/ Copper conductor cable of 1.1KV grade confirming to IS 7098 with up to date amendments etc. as required				
118.01	4C X 300 sq. mm (Aluminium Armoured Cable)	352.00	Meter	2000.00	704000.00
118.02	3½C X 35 sq. mm (Aluminium Armoured Cable)	150.00	Meter	500.00	75000.00
118.03	3C X 16 sq. mm (Copper Armoured Cable)	300.00	Meter	800.00	240000.00
118.04	4C X 2.5 sq. mm (Copper Armoured Cable)	300.00	Meter	250.00	75000.00
119.00	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 kV grade of following size on wall surface as required. Above 185 sq. mm and upto 400 sq. mm	50.00	Meter	200.00	10000.00
120.00	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 kV grade of following size in the existing masonry open duct as required. Above 185 sq. mm and upto 400 sq. mm	300.00	Meter	200.00	60000.00
121.00	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 kV grade of following size on cable tray as required. Upto 35 sq. mm	300.00	Meter	150.00	45000.00

Pm-ml

Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
122.00	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 kV grade as required. 4C x 300 sqmm	4.00	Set	5000.00	20000.00
123.00	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 kV grade as required. 3.5 C x 35 sqmm	4.00	Set	5000.00	20000.00
124.00	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
124.01	1 Way 15/16 amps switch.	30.00	Each	400.00	12000.00
125.00	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
125.01	6 pin 15/16 amps socket	30.00	Each	500.00	15000.00
126.00	Supplying and fixing of following ways surface/recess mounting, vertical type, 415 volts, Double door, TPN Vertical distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 amps tinned copper bus bar, common neutral link, earth bar, duly prewired with suitable size FRLS PVC insulated copper conductor up to terminal blocks in bar for mounting MCB's (but without MCB's and incomer) as required. 4 way (4 + 12) double door.	2.00	Each	7500.00	15000.00
127.00	Supplying and fixing of following way, horizontal type three pole and neutral, sheet steel, MCB distribution board 415 volts on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. (but without MCB's and incomer) as required. 4 way (4 + 12), double door.	1.00	Each	4000.00	4000.00
128.00	Wiring for Power plug with 4CX2.5 sq. mm XLPE insulated PVC Sheathed, armoured Aluminium/ Copper conductor cable of 1.1KV grade conforming to IS:7098 in surface/ recessed steel conduit alongwith as required.	300.00	Each	260.00	78000.00
129.00	Supplying and fixing 100 Amp rating, 415 V, 10kA, "C" curve, miniature circuit breaker suitable for inductive load of four poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.	2.00	Each	3700.00	7400.00
130.00	Supplying and fixing following rating, four pole, (single phase and neutral), 415 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing, MCB DB complete with connections, testing and commissioning etc. as required. 100 Amp	8.00	Each	4000.00	32000.00

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Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RAI(GSTN-NA)-703331	
				Rate	Amount
131.00	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. Single Pole	24.00	Each	250.00	6000.00
132.00	Supplying and fixing of following Modular GI Box along with suitable Modular Plate for fixing of 15/16 A Switch/ Socket as required 3 Module	30.00	Each	325.00	9750.00
133.00	Earthing				
133.01	Earthing with G. I. pipe 4.5 m long x 40 mm dia. including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc with charcoal and salt as required.	2.00	Each	6000.00	12000.00
134.00	Providing and laying earth connection from earth electrode with 6 SWG dia G.I. Wire in 15 mm dia G.I. pipe from earth electrode including connection with G.I. thimble excavation and re-filling as required.	20.00	Meter	150.00	3000.00
135.00	Providing and fixing 6 SWG dia GI wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.	150.00	Meter	50.00	7500.00
136.00	SH-I (C) Mechanical Ventilation Basement for MLCP				
136.01	CAR PARKING VENTILATION Supply, Lifting, Shifting, Installation, Testing & Commissioning of Induced air Axial Flow type Jet fans. Air flow should be 11280 cfm during fire mode. Fan should be complete with GSS casing, Aluminium impeller, Motor Class H, operating on 415 V + / - 10%, 3 phase, 50Hz electrical supply. Complete assembly should be certified for operation on 250°C for 2 hours' fire rating as per BS 7346 Part 2: 1990 Class B or EN 12101-3. The Locationing of the jet fans has to be done in such a way that the Air velocity at any point on the plane of 1m from ground level should not be less than 0.25 m/s during the normal mode. Technical details like make, model, dimensions, weight, dynamic load, noise level at operating conditions and copy of fire test report from competent authority must be submitted with the fans. Fan supports (G.I. / S.S.) are to be part of scope and should be included in the rate quoted.	13.00	Nos	90000.00	1170000.00

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Sl.No	Description of Work / Item(s)	No. of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
137.00	Supply, Lifting, Shifting, Installation, Testing & Commissioning of Tube Axial type Fresh air / Exhaust fans. 28,200 cfm / 20 mm WG static (during fire mode), fire rated for withstanding 250 deg. C for 120 minutes, with 16 gauge x 1/2" G.I. bird mesh, G.I. / S.S. 304 fasteners and hot dip galvanized foundation frames and spring isolators. Civil openings and foundation blocks shall be provided by client. Motors should be rated for 120 minutes operation at 250°C, smoke venting type suitable for 415+10% volts, 50 Hz, 3 phase AC supply with IP 55 protection, TEFC squirrel cage. Efficiency of fans should be more than 75% during normal mode. Performance curves and technical details like make, model, dimensions, weight, dynamic load, noise level at operating conditions should be submitted with offer to establish the suitability of the fan quoted for the intended duty. Fans should be tested as per [BS-7346 Part-2 : 1090] Class-B OR EN 12101-3 and a copy of fire test report from competent authority must be submitted with offer. Noise level of fans during normal mode must not be more than 65 dB @ 3 m during normal mode.	2.00	Nos	275500.00	551000.00
138.00	Supply, Lifting, Shifting, Installation, Testing & Commissioning of Tube Axial type Fresh air / Exhaust fans. 31000 cfm / 20 mm WG static (during fire mode), fire rated for withstanding 250 deg. C for 120 minutes, with 16 gauge x 1/2" G.I. bird mesh, G.I. / S.S. 304 fasteners and hot dip galvanized foundation frames and spring isolators. Civil openings and foundation blocks shall be provided by client. Motors should be rated for 120 minutes operation at 250°C, smoke venting type suitable for 415+10% volts, 50 Hz, 3 phase AC supply with IP 55 protection, TEFC squirrel cage. Efficiency of fans should be more than 75% during normal mode. Performance curves and technical details like make, model, dimensions, weight, dynamic load, noise level at operating conditions should be submitted with offer to establish the suitability of the fan quoted for the intended duty. Fans should be tested as per [BS-7346 Part-2 : 1090] Class-B OR EN 12101-3 and a copy of fire test report from competent authority must be submitted with offer. Noise level of fans during normal mode must not be more than 65 dB @ 3 m during normal mode.	4.00	Nos	331500.00	1326000.00

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Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
139.00	Supply, Lifting, Shifting, Installation, Testing & Commissioning of Panel to be manufactured out of 14 / 16 G CRCA sheets by a CPRI approved manufacturer. Panel should consist of following # main incomer isolator, necessary voltmeter, ammeter, RYB indications, Voltmeter and Ammeter selector switches busbars # internal cabling, electrical switchgear, terminations and outgoing for 13 nos. jet fans, 8 nos. CO sensors, 0 nos. fresh air fans and 3.0 nos. exhaust air fans 3.0 quoted for this compartment. # necessary transformer for generating required voltage for CO sensors. # Micro-processor / PLC based control system, suitable for operating the system on manual / auto modes AUTO mode: Jet fans and exhaust / fresh air fans shall operate on the basis of signal received from CO sensors - logic should be as follows: CO level <30 ppm - all fans off CO level 30-90 ppm - all fans to operate on single speed CO level >90 ppm - all fans should operate at double speed On receiving fire signal from fire alarm panel - all fans should operate at double speed MANUAL mode: Jet fans and fresh air / exhaust fans should operate on a 24 x 7 schedule settable through scheduler installed in the panel. Scheduler should be suitable for setting by the operator. In the event of receiving fire signal, the panel must change over to auto mode automatically and run all fans at double speed PPM level should also be settable at site. # Panel should have BMS compatibility for on-line monitoring and necessary adopter (BACNET / LONWORKS / MODBUS) should be a part of scope of panel.	2.00	Job	795000.00	1590000.00
140.00	Supply, Lifting, Shifting, Installation, Testing & Commissioning of Carbon Monoxide sensors, suitable for measuring CO content and passing LV signal to ventilation fan panel. (Minimum coverage area 700 sqm)	11.00	Nos	21890.00	240790.00
141.00	Power / control cabling (FRLS) for jet fans - cables to be LSZH (Low Smoke Zero Halogen, fire retardant, to be tested in accordance with BS EN 50200 Annex E and should meet requirements specified in clause 26.2d of BS 5839-1) Rate to include cable, saddles or cable trays where required etc. - quantities are tentative and to be confirmed / deviated if required by the contractor after studying drawings including End Termination with single compression brass cable gland and Crimping type copper lugs.				
141.01	3 Core x 1.5 SQ. MM. Copper Armoured (Sheilded cable) - For CO Sensor (cable to be saddled every 300mm)	200.00	Rmt	150.00	30000.00
141.02	3 Core x 2.5 SQ. MM. 2XWY - For Jet Fans (cable to be saddled every 300mm)	650.00	Rmt	200.00	130000.00
141.03	3 Core x 6 SQ. MM. 2XWY - For Exhaust Axial Fans through cable tray	60.00	Rmt	350.00	21000.00

For Mtl

Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
142.00	Earthing. Supply & Installation of the following earth conductor including earthing Clamps, terminal lugs etc. including connecting at all ends				
142.01	6 SWG bare G.I. wire for Panels & Motors	650.00	Rmt	80.00	52000.00
142.02	63 Amp TP, Isolator near Tube axial fan with Weather proof box	22.00	Nos	4000.00	88000.00
143.00	Cable Tray: Supply & installation of Hot dip Perforated type GI cable trays of 50 mm in Height with 1.5mm thickness & necessary supporting frame etc. for Data/ Voice cables as specified & shown on drawings				
143.01	Supplying and fixing of Perforated type GI Cable trays 150 mm wide x 50mm inclusive of all the required steel (painted) supports of Preferred Make	100.00	Rmt	810.00	81000.00
144.00	CFD analysis for each level and zone, carried out on software approved by manufacturer of fan, and showing CO concentration, visibility, velocity and temperature at various points before and after installation of jet fans, at jet fan height as well as at 1.7 m height. (CFD report must be submitted for approval BEFORE delivery of fans)	1.00	Job	52000.00	52000.00
145.00	Supply, Installation, Testing & Commissioning of G. S. S. Ducting (site fabricated) with supports, flanges, felt, sealants, fasteners etc. (sheet thickness, zinc coating, joinery details and support spacing to be as per IS 277 / IS 655 for site fabricated ducts)				
145.01	22 G - 0.8 mm minimum thickness	30.00	Sq mt	1400.00	42000.00
146.00	Hot dip galvanized base frames with suitable drilling and cleats for fan fixing, with S.S. 304 fasteners for all above fans quoted. Approximate quantity for the baseframes is to be considered as 35 Kg and 3 nos. x 5/8" x 100 mm long S.S. 304 fasteners to be considered for each fan	200.00	Set	5200.00	1040000.00
147.00	SH II Internal Electrification, Illumination, Augmentation / Extension / Improvement of Power supply and its distribution				
147.01	A) (Wiring MCB, MCB DBs, Cable Tray and ITC of Led Light, fan etc.) Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface / recessed GI steel conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required. Group C	400.00	Point	1500.00	600000.00
148.00	Wiring for group controlled (looped) for stair case light point (without independent switch etc.) with 1.5 sq. mm FR LSH PVC insulated copper conductor single core cable in surface/ recessed GI steel conduit, and earthing the point with 1.5 sq. mm FR LSH PVC insulated copper conductor single core cable etc. as required. (From one point to another point)- Group C	500.00	Point	900.00	450000.00
149.00	Wiring for circuit/ submain wiring alongwith earth wire with the following size of FRLS PVC insulated copper conductor single core cable in surface/ recessed GI steel conduit as required. 2 X 1.5 sq. mm + 1 X 1.5 sq mm earth wire	200.00	Meter	325.00	65000.00

Pm

Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
150.00	Wiring for circuit/submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed GI steel conduit as required. 2x2.5 sq.mm. + 1x2.5 sq.mm. earth wire	2000.00	Meter	300.00	600000.00
151.00	Wiring for circuit/submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed GI steel conduit as required. 4x2.5 sq.mm. + 2x2.5 sq.mm. earth wire	2400.00	Meter	475.00	1140000.00
152.00	Wiring for light/ power plug with 2X4 sq. mm FRLSH PVC insulated copper conductor single core cable in surface/ recessed GI steel conduit alongwith 1 No 4 sq. mm FRLSH PVC insulated copper conductor single core cable for loop earthing as required.	1200.00	Meter	365.00	438000.00
153.00	Wiring for light/ power plug with 4X4 sq. mm FRLSH PVC insulated copper conductor single core cable in surface/ recessed GI steel conduit alongwith 2 No 4 sq. mm FRLSH PVC insulated copper conductor single core cable for loop earthing as required.	1700.00	Meter	560.00	952000.00
154.00	Supply and drawing following sizes of FRLSH PVC insulated copper conductor, single core cable in the existing surface/recessed steel conduit as required. a) 3 x 1.5 sq. mm.	300.00	Meter	90.00	27000.00
155.00	Supply and drawing following sizes of FRLSH PVC insulated copper conductor, single core cable in the existing surface/recessed steel conduit as required. a) 3 x 2.5 sq. mm.	800.00	Meter	125.00	100000.00
156.00	Supply and drawing following sizes of FRLSH PVC insulated copper conductor, single core cable in the existing surface/recessed steel conduit as required. a) 3 x 4 sq. mm.	400.00	Meter	200.00	80000.00
157.00	Supply and drawing following sizes of FRLSH PVC insulated copper conductor, single core cable in the existing surface/recessed steel conduit as required. a) 6 x 4 sq. mm.	80.00	Meter	375.00	30000.00
158.00	Supplying and drawing 2 pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/PVC conduit as required.	3000.00	Meter	32.00	96000.00
159.00	Supply and Drawing of UTP 4 Pair CAT 6 LAN cable in existing surface/Recessed steel/ PVC Conduit as required	3000.00	Meter	80.00	240000.00
160.00	Supplying and fixing of following sizes of GI conduit along with accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required. 20 mm	6000.00	Meter	188.00	1128000.00
161.00	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch connection, etc. required.	290.00	Each	400.00	116000.00
162.00	Supplying and fixing suitable size GI box with modular plate and cover in front-on surface or in recess including providing and fixing 6 pin 5/6 amps & 6 pin 15/16 amps modular socket outlet and 15/16 amps modular switch connection, etc. required.	320.00	Each	500.00	160000.00

P. M. M.

Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
163.00	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required 3 pin 5/6 amps switch.	15.00	Each	100.00	1500.00
164.00	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required 6 pin 15/16 amps switch.	20.00	Each	140.00	2800.00
165.00	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. 3 pin 5/6 amps socket.	15.00	Each	110.00	1650.00
166.00	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required 6 pin 15/16 amps socket.	20.00	Each	175.00	3500.00
167.00	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. Telephone socket outlet	75.00	Each	140.00	10500.00
168.00	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. RJ45 socket outlet	84.00	Each	140.00	11760.00
169.00	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required. 2 Module (75mmX75mm)	159.00	Each	250.00	39750.00
170.00	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required 3 Module (100mmX75mm)	12.00	Each	300.00	3600.00
171.00	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required 6 Module (200mmX75mm)	9.00	Each	350.00	3150.00
172.00	Supplying and fixing call bell/ buzzer suitable for single phase, 230 volts, complete as required.	70.00	Each	500.00	35000.00
173.00	Supplying and fixing 6 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. Single Pole	296.00	Each	200.00	59200.00
174.00	Supplying and fixing 6 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. Double Pole	30.00	Each	550.00	16500.00

For Mf

Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
175.00	Supplying and fixing following rating, TP, 415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. 40 Amps	8.00	Each	900.00	7200.00
176.00	Supplying and fixing following rating, TPN, 415 volts, C Curve MCB in the existing MCB DB complete with connections, testing and commissioning etc. as required. 40 amps	4.00	Each	900.00	3600.00
177.00	Supplying and fixing following rating, four pole Isolator, 415 volts, MCB in the existing MCB DB complete with connections, testing and commissioning etc. as required 100 amps	7.00	Each	1150.00	8050.00
178.00	Supplying and fixing following rating, Four pole, (3 phase and neutral), 415 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing, MCB DB complete with connections, testing and commissioning etc. as required. 40Amp (30mA)	4.00	Each	3000.00	12000.00
179.00	Supplying and fixing following rating, Four pole, (3 phase and neutral), 415 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing, MCB DB complete with connections, testing and commissioning etc. as required 100 Amp (100mA)	7.00	Each	5000.00	35000.00
180.00	Supplying and fixing of following ways surface/recess mounting, Horizontal type, 415 volts, Double door, TPN distribution board of sheet steel, dust protected, duly powder painted, inclusive of 100 amps tinned copper bus bar, common neutral link, earth bar, duly prewired with suitable size FRLS PVC insulated copper conductor up to terminal blocksin bar for mounting MCB's (but without MCB's and incomer) as required. 12 way (8 + 36), double door.	7.00	Each	11500.00	80500.00
181.00	Supplying and fixing of following ways surface/recess mounting, vertical type, 415 volts, Double door, TPN Vertical distribution board of sheet steel, dust protected, duly powder painted, inclusive of 100 amps tinned copper bus bar, common neutral link, earth bar, duly prewired with suitable size FRLS PVC insulated copper conductor up to terminal blocksin bar for mounting MCB's (but without MCB's and incomer) as required 12 way (8 + 36), double door.	4.00	Each	11500.00	46000.00
182.00	Supplying and fixing 20 amps, 240 volts, SPN industrial type, socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 20 amps "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required	30.00	Each	1550.00	46500.00

Pin up

Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
183.00	Installation, testing and commissioning of prewired, indoor LED fitting of all types complete with all Mounting accessories (Suspension and surface) etc. directly on ceiling/ wall/ recess/ suspension including connection with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required	790.00	Each	200.00	158000.00
184.00	Installation of exhaust fan upto 450 mm sweep in the existing opening, including making the hole to suit the size of the above fan, making good the damage, fixing of louver, connections, testing, commissioning etc. as required. Upto 450 mm sweep	5.00	Each	200.00	1000.00
185.00	Installation, testing and commissioning of Wall mounted fan as required in site & as per the direction of EIC.	135.00	Each	200.00	27000.00
186.00	Supply & Installation of fully automatic, wall mounted, Brush AC type motor hand drier with SS 304 body, drying time not more than 20 sec, including all accessories with adjustable distance sensor between 10 to 30 cm. and suitable for 230 V, 50 Hz A.C. supply etc. complete as required and as per specifications attached (Make Euronics or similar)	2.00	Each	12000.00	24000.00
187.00	Supply and Fixing of P & F Krone module with base frame in the recess made out of 16 SWG sheet steel box, front openable, having locking arrangements duly powder painted, including dressing, ferruling and punching of telephone cable with krone tool etc. as required. 20 Pair	3.00	Each	5000.00	15000.00
188.00	Supplying and installing following size of M.S perforated cable tray hot dipped galvanized with perforation not more than 17.5%, in convenient sections, joined with connectors, duly mounted from wall with G.I angle including bolts & nuts, painting etc as required. (600 mm width X 50 mm depth X 1.6 mm thickness)	120.00	Meter	1500.00	180000.00
189.00	Supplying and installing following size of M.S perforated cable tray hot dipped galvanized with perforation not more than 17.5%, in convenient sections, joined with connectors, duly mounted from wall with G.I angle including bolts & nuts, painting etc as required. (300 mm width X 50 mm depth X 1.6 mm thickness)	150.00	Meter	816.00	122400.00
190.00	Supplying and installing following size of M.S perforated cable tray hot dipped galvanized with perforation not more than 17.5%, in convenient sections, joined with connectors, duly mounted from wall with G.I angle including bolts & nuts, painting etc as required. (100 mm width X 50 mm depth X 1.6 mm thickness)	280.00	Meter	560.00	156800.00
191.00	Providing and fixing of following rating and breaking capacity MCCB with thermo magnetic release, Rotary handle and terminal spreaders in existing cubical panel board including drilling holes in the cubical panel, making connections, etc as required. 125A, 25KA	8.00	Each	6950.00	55600.00

Pm

Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RAJ(GSTN-NA)--703331	
				Rate	Amount
192.00	SITC of PIR sensor 230V AC +/- 10%, 50/60Hz maximum load 10a.(2400VA) any load. Maximum length 100m LED indicators Red LED on movement Switch off delay 1 to 30 minutes Light level 250 to 1000 lux (30% reflection) Detection range of Occuswitch shall be 4 to 5 meters for small movements and 6 to 8 meter for larger movements like walking to be covered all around 360 degree etc. as required.	91.00	Each	10000.00	910000.00
193.00	B) (Light & Fan Fixtures)				
193.01	Supply of 8ft' aluminium extruded suspended 50W linear LED luminaire with IP20 protection, white power coated CRCA housing with LEDs mounted back lifted tray, Prismatic diffuser, LED driver, seamless frame with flat acrylic cover etc. complete as required, all prewired upto terminal block and suitable for operation on 230 V+/- 10%, 50Hz, single phase AC supply and as per technical specification.	25.00	Each	7080.00	177000.00
194.00	Supply of 4ft' aluminium extruded suspended 25W linear LED luminaire with IP20 protection, white power coated CRCA housing with LEDs mounted back lifted tray, Prismatic diffuser, LED driver, seamless frame with flat acrylic cover etc. complete as required, all prewired upto terminal block and suitable for operation on 230 V+/- 10%, 50Hz, single phase AC supply and as per technical specification.	220.00	Each	3480.00	765600.00
195.00	Supply of 4ft' L Shape aluminium extruded suspended 25W linear LED luminaire with IP20 protection, white power coated CRCA housing with LEDs mounted back lifted tray, Prismatic diffuser, LED driver, seamless frame with flat acrylic cover etc. complete as required, all prewired upto terminal block and suitable for operation on 230 V+/- 10%, 50Hz, single phase AC supply and as per technical specification.	35.00	Each	7800.00	273000.00
196.00	Supply of 400mm Dia. suspended Aluminum extrusion 25W LED luminaire with IP20 protection, white power coated CRCA housing with LEDs mounted back lifted tray, Opal diffuser, LED driver, seamless frame with acrylic cover etc. complete as required, all prewired upto terminal block and suitable for operation on 230 V+/- 10%, 50Hz, single phase AC supply and as per technical specification.	120.00	Each	1200.00	144000.00
197.00	Supply of 200mm Dia Surface mounted 15W LED luminaire with IP20 protection, white power coated CRCA housing with LEDs mounted back lifted tray, LED driver, seamless frame with acrylic cover etc. complete as required, all prewired upto terminal block and suitable for operation on 230 V+/- 10%, 50Hz, single phase AC supply and as per technical specification.	280.00	Each	820.00	229600.00
198.00	Supply of 4ft' aluminium extruded 40W LED batten luminaire with IP20 protection, white power coated CRCA housing with LEDs mounted back lifted tray, diffuser, LED driver, seamless frame with flat acrylic cover etc. complete as required, all prewired upto terminal block and suitable for operation on 230 V+/- 10%, 50Hz, single phase AC supply and as per technical specification.	90.00	Each	660.00	59400.00

Pr-mf

Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
199.00	Supply of 110mm Dia Recessed mounted 12W LED down light luminaire with IP20 protection, white power coated CRCA housing with LEDs mounted back lifted tray LED driver, seamless frame with acrylic cover etc. complete as required, all prewired upto terminal block and suitable for operation on 230 V+/- 10%, 50Hz, single phase AC supply and as per technical specification.	20.00	Each	500.00	10000.00
200.00	Supply of 400mm Wall Mounting Type Air Circulator fan including all accessories as required for ready to installation. (as per AAI approved make).	135.00	Each	2460.00	332100.00
201.00	Supply of 300 mm, 900 rpm, single phase, heavy duty Exhaust fan including louver, suitable for operation on 230V ±, 10% single phase, AC Supply Make: Crompton or equivalent AAI approved make list).	5.00	Each	2000.00	10000.00
202.00	(C) (Supply of Cable, Laying of cables, end termination etc.) Supply of following sizes of XLPE insulated PVC sheathed, Aluminium conductor armoured power cable of 1.1KV grade conforming to IS 7098, Part-I 1988 with up to date amendments.				
202.01	(a) 3.5 c x 25 Sq. mm	400.00	Meter	240.00	96000.00
202.02	(b) 4c x 16 Sq. mm	300.00	Meter	260.00	78000.00
202.03	(c) 3.5c x 35 Sq. mm	200.00	Meter	320.00	64000.00
203.00	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 kV grade of following size on cable tray as required. upto 35sq. mm (Clamp with 1mm thick shackle)	800.00	Meter	100.00	80000.00
204.00	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 kV grade of following size in the Surface as required. Upto 35 sq. mm (Clamp with 1mm thick shackle)	100.00	Meter	100.00	10000.00
205.00	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 kV grade as required. 3.5 x 25 sqmm	8.00	Set	1000.00	8000.00
206.00	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 kV grade as required 4 x 16 sqmm	8.00	Set	1000.00	8000.00
207.00	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 kV grade as required. 3.5 x 35 sqmm	4.00	Set	1000.00	4000.00
208.00	Chase Cutting of size upto 100 mm wide and 40 mm deep or as per requirement with saw cut machine, refilling and finishing the surface with coarse sand and bitumen or cement concrete 1:2:4 (1 cement, 2 coarse sand, 4 graded stone aggregate 10 mm dia nominal) etc complete as reqd.	2.00	Cum	6000.00	12000.00
209.00	(D) (Earthing and Miscellaneous)				

Run up

Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
209.01	Providing and fixing 6 SWG dia GI wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.	1600.00	Meter	70.00	112000.00
210.00	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc with charcoal/ coke and salt as required.	2.00	Each	8000.00	16000.00
211.00	Providing and fixing of 25 mm X 5 mm thick GI strip on surface or in Recess for connection etc required	60.00	Meter	100.00	6000.00
212.00	Dismantling, shifting and reinstallation of Main Electrical LT panel approx size (1.8x1.8*0.47mtr approx) from the existing Gagan Room of Administrative Building of AAI (Room at 2 floor roof) to the New Gagan Room of MLCP (Room at 2 floor roof) including disconnection of incoming and outgoing cable, opening of Earthing connection, Foundation nuts to dismantled and loading unloading, transporting (Approx Distance 350 mtr), making foundation, reinstallation of panel termination of cable of outgoings complete in all respect	1.00	Job	100000.00	100000.00
213.00	SH:III Provision of Fire alarm, Detector & Fire escape signages, Fire Extinguishers including Improvement / modification of existing Fire fighting system.				
213.01	Supplying, installation, testing and commissioning of micro processor based intelligent addressable main fire alarm panel, central processing unit with the following loop modules and capable of supporting not less than 240 devices (including detectors) and minimum 120 detectors per loop and loop length up to 2 km, network communication card, minimum 320 character graphics/ LCD display with touch screen or other keypad and minimum 4000 events history log in the non volatile memory (EPROM), power supply unit (230 ± 5% V, 50 hz), 48 hrs back-up with 24 volt sealed maintenance free batteries with automatic charger. The panel shall have facility to connect printer to printout log and facility to have seamless integration with analog/digital voice evacuation system (which is part of the schedule of work under SH: PA System) and shall be complete with all accessories. The panel shall be compatible for IBMS system with open protocol BACnet/ Modbus over IP complete as per specifications. (Model No: EST 3 of Edwards Fire Safety)				
213.02	2 Loop Panel	1.00	Each	225000.00	225000.00
214.00	Supplying, installation, testing & commissioning of intelligent analog addressable photothermal smoke detector complete with mounting base complete as required. (Below Ceiling - 100) (Make: Edwards Fire Safety)	100.00	Each	2700.00	270000.00
215.00	Supplying, installation, testing & commissioning of addressable control module complete as required.	4.00	Each	3000.00	12000.00
216.00	Supplying & laying of 2x1.5 sqmm fire alarm armoured cable, 600/1000V rated with annealed copper conductor having XLPE insulation, steel wire armouring & FRLS outersheath complete as required.	1300.00	Meter	160.00	208000.00

For M/s

Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
217.00	Supplying, installation, testing & commissioning of addressable manual call point complete as required.	2.00	Each	3700.00	7400.00
218.00	Supplying, installation, testing & commissioning of addressable horn cum strobe complete as required (Strobe/Hooter Including)	4.00	Each	3300.00	13200.00
219.00	Supply of CO2 High Pressure Portable 4.5 kg(6.8 litre) Fire Extinguisher confirms to IS 15683. Bearing ISI Marked consisting of high pressure seamless steel cylinder (IS 7285), fitted with wheel type valve, fully charged with CO2 gas (IS 15222), with nonconductor of electricity discharge PVC horn along with Bend pipe	55.00	Each	7500.00	412500.00
220.00	Supply of Mechanical Foam stored pressure type 9 ltr. Fire Extinguisher filled with AR-AFFF Foam confirms to IS 15683, bearing ISI marked complete with brass forged squeeze grip type valve fitted with pressure gauge, pressurize with dry nitrogen gas filled with discharge nozzle.	1.00	Each	7800.00	7800.00
221.00	Supply of Stored Pressure Water CO2 type fire extinguisher of capacity 9 ltr confirming to IS 15683, bearing ISI mark complete with brass forged squeeze grip type valve fitted with pressure gauge, pressurized with dry Nitrogen gas filled, with discharge nozzle.	8.00	Each	9000.00	72000.00
222.00	Supply of DCP Type Fire Extinguisher Capacity of 6 kg confirms 9 ltr confirms to IS 15683, bearing ISI marked complete with brass forged squeeze grip type valve fitted with pressure gauge, pressurize with dry nitrogen gas filled, with discharge nozzle.	45.00	Each	11000.00	495000.00
223.00	Supply, Installation, Testing and Commissioning of Hose reel Cabinet Double door of Mild steel with Hinges, Door Closer, D Type handle, Mortise Deadlock, Vision Panel Glass and Painting (two or more coats of painting with synthetic enamel paint, and one coat of metal primer). etc. Complete As required.	30.00	Each	4000.00	120000.00
224.00	Painting of Fire Hydrant/Sprinkler pipeline of different sizes installed at MLCP with two or more coats of painting with synthetic enamel paint, and one coat of metal primer including cleaning of surface with detergent, etc of approved brand or approved by engineer in charge as required.	650.00	Sq. Mt	150.00	97500.00
225.00	Supply and installation of Fire exit signage of 6" X 12" size of Acrylic sheet with auto glow, battery operated, hanging chain, hooks, etc complete as required.	24.00	Each	1200.00	28800.00
226.00	Supply and installation of Safe Assembly Area Signage of 9" X 18" size of Sun board auto glow with stand, etc complete as required.	2.00	Each	2200.00	4400.00
227.00	Supply, Installation, Testing and Commissioning of Pressure Gauge of range from 0-10 bar, etc of approved brand or approved by engineer in charge as required.	30.00	Each	1000.00	30000.00
228.00	SH-IV SITC of drainage / sewerage pumps & associated works.				

Signature

SI.No	Description of Work / Item(s)	No.of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
228.01	SITC of Sewerage Pump set non-self priming, Submersible single stage grinder type with Flow rate of 3LPS and 20 mtrs. Head, suitable for 3ph, 415v, 2 pole, 1.5KW F Class motor built in Thermid switch protection with the cast iron housing, cast iron Impella of Grinder system type Shaft seal suitable for maximum Ambient temperature of 400 C and 6 bar operating pressure with pipe work connection etc, cabling, end-termination along with DOL starter panel (with IP-68 protection) complete as required.	2.00	Nos	50000.00	100000.00
229.00	SH:V SITC of 1 no. Lift & associated works				
229.01	Design, Fabrication, Supply, Installation, Testing & Commissioning of following Electric Traction Type fully automatic Machine room less (MRL) Passenger Lifts with AC variable voltage & variable frequency drive unit suitable for operation on 415V, 3 Phase, 50 Hz. AC supply, power operated centre opening type car & landing doors, electro-magnetic brake system, operating panel with luminous buttons, overload warning indicator, battery operated alarm bell, emergency light, intercom suitable for hook up to AAI's EPABX, infrared ray sensing door protection for full height, reverse phase relay on controller, fire man's switch at Main Landing floor, digital car positions indicator in car & at all floors with up / down direction, light fixtures, ventilation fan, landing sill, main beam in shaft for machine, pit ladder etc. complete with all accessories serving different floors in the lift shaft along with Automatic Rescue Device (ARD) complete with dry maintenance free sealed batteries as required etc., as per data sheet and technical specifications.				
229.02	10Pax, 680 Kgs @ 1.0 mps, 21.90 mtr rise in (Floor Designation B2 (F), B1(F)) Simplex Control, SS Hairline Grade-304 Car with 2-Panel, Automatic Power operated Glass Doors of 700 mm (Width) X 2000 mm (Height), All Openings on same side and Counterweight Safety, as per technical data sheet (Elevator Schedule of requirement) & specification & work shall be carried out as per direction of AAI	1.00	Nos	3000000.00	3000000.00
230.00	Dismantling of the existing elevators (Johnson Lifts Pvt. Ltd Make) having capacity of 10 passenger Elevator with all components of car assembly, door assembly of all floors, pit assembly, shafts/ rail and supports, main drive motor and gear assembly etc. and storing all the dismantled parts in assigned location as per direction of AAI complete as required.	1.00	Job	100000.00	100000.00

Pm up

Sl.No	Description of Work / Item(s)	No.of Qty	Units	K N RAI(GSTN-NA)--703331	
				Rate	Amount
231.00	ACMC of elevators having capacity of 10 passenger Elevator (minimum capacity 680 Kgs) having automatic centre opening glass door, 6 stops & 6 openings (Basement-1, Basement-2, Ground floor, First floor, Second floor & Third floor) and entrance at front side on all the serving floors and suitable for travel height of 18.9 mtrs (vertical), gearless, VVVF DRIVE with ARD, operated on 415 volt, 50 Hz, 3 phase, 4 WIRE a.c. power supply with all safety and control devices etc. complete as per manufacturer's recommendations and in line with special conditions of contract complete as required.	7.00	Per Year	100000.00	700000.00

Total in Figures

81854806.00

Lowest Amount Quoted BY: K N RAI(81854806.00)


 वरीष्ठ प्रबंधक (अभि.-सिविल)
 Sr. Manager (Engg.-Civil)
 भा. वि. प्रा., गोवा विमानपत्तन, गोवा.
 A. A. I., Goa Airport, Goa.