Purchase Order

Order Number PO/SKPL/23-24/001670

				C	order Number P	PO/SKPL/23-24/	001670						17-11-2025	13.11.11
				Shipped Location	1		Invoice L LKN Dom	ocation 1 The Irish I	House		-	rate Add LINA KIT	lress FCHENS PVT LTD	
Ven	dor No. V	000200		LKN Dom The Iri	sh House								ock A, Shiv Sagar	Estate.
VAI	RT INFRACO	N PRIVAT	E LIMITED	Chaudhary Chara		ional Airport	Chaudha Airport	ry Charan S	ingh Interna	ational		-	int Road,Worli, Mi	
Sec	ond Floor, 22	29, Neha I	ndustrial Premises	Amausi, Lucknov	v.		Amausi, l	Lucknow,			MUMB	AI, 4000	018	
Соо	perative Soc	iety Ltd, I	Dattapada Road, Borivali	LUCKNOW, 2260			226009				State	,	27	
	MBAI, 40006		-	India			India				State N	Jame	Maharashtra	1
Ind	•			India			IN					GST No.	27ABICS869	
	N. No.	A A 10	CV6164F	Contact Person							comp	u31 NU.	27ADIC3009	91°12J
	e Code	AAIQ	201046		022 4222 4204		000 400	24204						
Stat	le coue			Contact No.	022-43224304		022-4322				Requis	sition		
				E-Mail	kumar.dhulap@	@travelfoodser	kumar.dł	hulap@trav	elfoodservio	ces.com	No.			
Ven	dor GST No.	27A	AICV6164F1Z2	ETA:	vices.com		Payment	Terms	Net 15 days		PO Ent	try Date	14-11-2023	
Ven	dor Inv. No.			Order Address			GSTIN	094BICS	8699F1ZH		Projec	t ID	GEN	
Ven	dor Fax No.			or dor madrood			No.	09ADIC5	009911211		РО Тур	be	Capex-NSO	
Ven	dor Email	acco	unts@vartinfra.com											
		HSN\SAC											Total Tax	Total Amount
SNo	Item Code	Code	Item Description	Description		Item Category		Unit Co		GST%	VAT %	Excise	Amount(ININR)	(ININR)
1			ELECTRICAL WORKS		PER ANNEXURE		NOS	11,48,285.		18.00	0.00		0	1148285.00
2	7000018				PER ANNEXURE		NOS	1,53,430.0		18.00	0.00		0	153430.00
3	7000027		HVAC WORKS		PER ANNEXURE		NOS	7,99,245.0		18.00	0.00		0	799245.00
4	7000511		FIRE FIGHTING WORKS		PER ANNEXURE		NOS	1,55,465.0		18.00	0.00		0	155465.00
5 6	7000075 7000074	842410 995461	FIRE EQUIPMENT CCTV SYSTEMS & SERVICES		PER ANNEXURE PER ANNEXURE		NOS NOS	99,300.0 1,49,675.0		18.00 18.00	0.00 0.00		0	99300.00 149675.00
7			MUSIC & PA SYSTEMS		PER ANNEXURE		NOS	1,25,550.0		18.00	0.00		0	125550.00
	7000023	03102900		DETAILS AS	FER ANNEXORE		1103	Total Uni		10.00	0.00		0	123330.00
	Payment Terr	ns- Runnin	g Account Bill for actual work d	one at site shall be rais	ed at 15 days cycle	e which shall be paid	d within 15			Total Taxa	- able INR			26,30,950.00
	•		bject to the verification by the	Employer. Final Bill: Fi	hal Bill shall be sub	mitted within 30 da	ys from							
	Commissioni	ng, nanding	g over the site to Employer							Evoice	Amagunat			0.00
											Amount Amount			0.00 4,73,571.00
a) Pro	ducts to be Su	upplied by	b) Any deficiency in Documen	ts and Process will be l	ishility of the suppl	lier.only				1631	Cess			4,73,371.00
	ier at own cos	• •	b) Any deliciency in Documen	ts and Frocess will be i	ability of the supp	ner only					Cess			0.00
	ivery schedule		d) PLEASE SEND THE ORIGINA	AL COMMERCIAL/GST	INVOICE ALONG W	VITH THE MATERIAI	TO THE							0.00
	from the Buye		DELIVERY ADDRESS.											0.00
	tching the ma													
	Payment of t													
	leased once th													
Credit	ed to our Acco	ount or the												
GST P	ortal													
									To	tal INR Inc	d Taxes			31,04,521.00
									10					51,07,521.00

Disclaimer - Unless informed to us it is assumed that you are not registered as MSME with the respective government authority. If you have not yet provided the MSME details along with proof kindly provide the same at the earliest. Alternatively once you get registered then provide us relevant proof to update our records.

Purchase Order

Order Number PO/SKPL/23-24/001670

Page	No:	2	

14-11-2023 15:11:11

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		Shipped Location	1	Invoice Location	Corporate Addres	S
VART INFRACON P Second Floor, 229, 1	0200 RIVATE LIMITED Neha Industrial Premises y Ltd, Dattapada Road, Borivali	Amausi, Lucknov LUCKNOW, 2260 India	an Singh International Airport N,	LKN Dom The Irish House Chaudhary Charan Singh International Airport Amausi, Lucknow, 226009 India	Dr Annie Besant MUMBAI, 400018 State State Name	x A, Shiv Sagar Estate, Road,Worli, Mumbai 3 27 Maharashtra
P.A.N. No. State Code Vendor GST No.	AAICV6164F	India Contact Person Contact No. E-Mail ETA:	022-43224304 kumar.dhulap@travelfoodser vices.com	IN 022-43224304 kumar.dhulap@travelfoodservices.com	Comp GST No. Requisition No. PO Entry Date	27ABICS8699F1ZJ 14-11-2023
Vendor GST No. Vendor Inv. No. Vendor Fax No. Vendor Email	27AAICV6164F1Z2 accounts@vartinfra.com	Order Address		Payment Terms Net 15 days GSTIN No. 09ABICS8699F1ZH	Project ID PO Type	GEN Capex-NSO

	E COMPRTIVE - MEP @ HOUSE @ LUCKNOW	Vart Infra
		Paresh Gohil - 9136413050
Sr. No.	DESCRIPTION	Amount
1	Electrical	11,48,285
2	PHE	1,53,430
3	HVAC	7,99,245
4	Fire Fighting	1,55,465
5	Fire Alarm	99,300
6	CCTV	1,49,675
7	PA System	1,25,550
	TOTAL	26,30,950

AJ KITCH	EN @ LUCKNOW CAL BOQ			Vart Infra Paresh Gohil - 9136413050		
SR. No	DESCRIPTION		QTY	Rate	Amount	
	PANEL & SWITCHGEAR					
1	Supply, installation, testing & commissioning of free standing, floor mounting compartmentalized panels fabricated out of CRCA sheet steel sections after carrying out 7 tank cleaning process and duly powder coated using Siemens Grey Shade No. RAL 7032. The frame structure, doors and gland plates shall have 2.0 mm thick sheets and partitions shall be with 1.6 mm thick CRCA sheet. Base channel size 75 x 40 x 6 mm of ISMC shall be provided. The panel shall be dust and vermin proof with neoprene gasket. The doors shall be provided with concealed hinges and with brazing wherever required to avoid deformation and shall be earthed. The bus bar shall be of tinned Copper with epoxy supports and shall be insulated with colour coded heat shrink sleeves. The control wiring min. 2,5 Sq.mm shall be ZHLS type. The Panel shall be provided with CTs, phase indication lamps, meters, relays and all switchgear, etc. as per the SLD. The panel shall be complete in all aspects as per the final approval of the Consultant. All componants for Switchgears shall be L&T/Legrand					
		Cat	1	70.000	70.000	
a	Providing & installing MAIN LT PANEL as per SLD & Spec.: 63 Amps 4 pole, 16kA MCCB with Microprocessor Based overload, short circuit & Earth Fault protection, Energy manager (EM6400NG) with RS485 port for BMS connectivity & 4A with SP MCB with 100/5A-3 Nos., 15VA, CL-1 CT's for metering & of AE make and phase indicating lamps Vaishno make with SPMCB. CBCT with microprocesor based EFR	Set	1	70,000	70,000	
	Busbar chamber - 1 set, 4 pole 100A Tinned Cu. Busbar with necessary OUTGOINGS:					
i.	63A 4P MCB – 1 Nos.					
ii.	40A 4P MCB – 2 Nos.					
iii.	40A DP MCB – 2 Nos.					
iv.	MPCB suitable for 2.2kW-2 Nos.					
2	Supply, installation, testing & commissioning of Switchgears.(Standard Product)					
a	Supply,Installation,Testing and Commissioning of 40 Amps,4Pole MCB with ELCB at 300mAh for HVAC Outdoor Isolation all complete with mounting accessories	Nos.	RO			
b	Supply,Installation,Testing and Commissioning of 32 Amps,4Pole MCB for HVAC Outdoor Isolation all complete with mounting accessories.	Nos.	2	3,250	6,500	
С	Supply,Installation,Testing and Commissioning of 40 Amps, DP, MCB for UPS/INVERTER	Nos.	2	2,000	4,000	
d	Isolation all complete with mounting accessories for UPS. Supply & installation of DOL starter L&T/Siemens/Legrand for 3 kW load	Nos.	RO			
e e	Supply & installation of DOL starter L&T/Siemens/Legrand for 3 kW load	Nos.	RO			
	Supply & installation of Star Delta starter as per Type-2 Coordination for 3 kW (4HP)	1103.				
f	load with on / off / trip indication Lamp, on off push button, & phase indication Lamp .(For Exhaust air fan)(EXISTING UNIT PROVIDED BY MALL)	Nos.	RO			
g	Supply & installation of Star Delta starter as per Type-2 Coordination for 9.3 kW (12.5HP) load with on / off / trip indication Lamp, on off push button, & phase indication Lamp .(For Exhaust air fan)	Nos.	RO			
h	Supply & installation of Star delta starter as per Type-2 Coordination for 5.5 kW (7.5HP) load with on / off / trip indication Lamp, on off push button, & phase indication Lamp .(For Fresh air fan)	Nos.	RO			
i	Supply & installation of DOL starter as per Type-2 Coordination for 2.2 kW (3.0HP) load with on / off / trip indication Lamp, on off push button, & phase indication Lamp .(For AHU)	Nos.	RO			

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SR. No	DESCRIPTION	UOM	QTY	Rate	Amount
j	Supply & installation of DOL starter as per Type-2 Coordination for 1.5 kW (2.0HP) pump load with on / off / trip indication Lamp, on off push button, & phase indication	Nos.	RO		
-	Lamp .(For Scrubber)				
k	80 amps 4P ELMCB 300mA with 63A 5 Pin Ray Roll Socket complete with all mounting accessories – for Indoor Legrand make model No. 6078 80	Nos.	RO		
	63 amps 4P ELMCB 300mA with 63A 5 Pin Ray Roll Socket complete with all mounting	Nos.	RO		
·	accessories – for Indoor Legrand make model No. 6078 80 32 amps 4P MCB with 32A 5 Pin Ray Roll Socket complete with all mounting accessories	1105.			
m	– for Kitchen Legrand make model No. 6078 80	Nos.	RO		
n	25 amps 4P MCB with 25A 5 Pin Ray Roll Socket complete with all mounting accessories — for Kitchen Legrand make model No. 6078 80	Nos.	RO		
0	25A Rey roll socket complete with 25 amps SPMCB with 3 pin metal clad socket -	Nos.	RO		
	Legrand make Model No. 6078 41 20A Rey roll socket complete with 32 amps DPMCB with 3 pin metal clad socket -				
р	Legrand make Model No. 6078 41	Nos.	1	2,300	2,300
q	5/15A Rey roll socket complete with 15 amps SPMCB with 3 pin metal clad socket - Legrand make Model No. 6078 41	Nos.	7	2,000	14,000
	Set of 1no 25A Metal clad Socket with MCB, and 2nos 6/16A Switch sockets housed in		50		
r	Fabricated SS Panel suitable for hanging arrangement for Kitchen equipments.	Nos.	RO		
q	5/15A Swicth socket complete (IP-65) for Kitchen	Nos.	20	3,200	64,000
3	SITC of Standalone Gas leak detector with inbuilt sounder for Kitchen	Nos.	RO		
	TOTAL FOR MAIN PANEL & SWITCHGEAR				1,60,800
	INVERTER / UPS				
1	Supply, Installation, testing and commissioning of 6 KVA UPS System Single Phase I/C & Single Phase O/G complete with 30 Minutes Battery Back-up the required accessories as specified in the drawings & the specifications.	Nos	1	52,000	52,000
	as specified in the drawings & the specifications.				
	TOTAL FOR UPS				52,000
	DISTRIBUTION BOARDS				
	Supply, installation, testing & commissioning of Distribution Boards surface / flush mounted with Double door containing MCB/ELMCB as incomer and SPMCB as outgoing. All MCBs are of 10KA breaking capacity and ELMCBs/RCCB should be of 30mA/100 mA sensivity. The DB shall have appropriate no. of top and bottom knock outs for outgoing circuits and shall be complete with necessary busbars, interconnection terminals and earth studs. All terminations in DB shall be complete with ferulling, dressing and all circuits shall be properly labeled with PVC strip (sticker type) having identification as per the final approval of Consultant. For UPS DB MCB shall be 'D' type and other MCBs shall be 'C' category for lighting and raw power DB LEGRAND/L&T				
1	Lighting Distribution Board - LPDB	Nos.	1	29,000	29,000
	12 WAY TPN DB I/C- 1 # 40A FP MCB , 16KA				
	SUB I/C - 3 # 25A DP RCCB 30mA per phase				
	O/G - 30 # 10/20A SP MCB				
2	RAW Power Distribution Board - RPDB	Nos.	RO		
<u> </u>	6(8) WAY TPN DB				
	I/C- 1 #40 A FP MCB				
	SUB I/C- 3#40 DP ELCB 300mA per ph				

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SR. No	DESCRIPTION	UOM	QTY	Rate	Amount
	O/G - 18 # 16/20A SP MCB				
	Kitchen Power DB - (KPDB-1)	Nos.	2	24,500	49,000
	8 WAY TPN DB				
	I/C- 1 #40 A FP MCB				
	SUB I/C- 3#32 DP ELCB 100mA per ph				
	O/G - 18 # 16/20A SP MCB				
4	EMERGENCY LIGHTING DB (ELDB/UPSDB)	Nos.	1	13,000	13,000
•	12 way SPN DB	1105.	•	10,000	10,000
	Incomer: 40A DP RCBO 30mA				
	Outgoings :10/16 SP MCB, 'D' Type – 8 Nos				
	TOTAL FOR DISTRIBUTION BOARDS				91,000
IV	CABLES & ACCESSORIES				
	Supply & installation of following LT XLPE FRLSH cables (FINOLEX/RR KABLE/POLYCAB)				
	rated for 600 / 1100 volts AC as per IS standard 1554 Part 1 with necessary M.S.				
	clamps. All cables shall be properly clamped or tied when run on cable trays. All such				
	cables shall be provided with temporary labelling at every 20 mtrs and ten finally with				
	metal identification tags showing the size and the location from/to the specific				
1	Panel/DB at both ends.	N dtur	DO		
1	3.5C x 300 Sq. mm A2XFY	Mtr.	RO		
2	3.5C x 240 Sq. mm A2XFY	Mtr.	RO		
3	3.5C x 185 Sq. mm A2XFY	Mtr.	RO		
4	3.5C x 150 Sq. mm A2XFY 3.5C x 120 Sq. mm A2XFY	Mtr. Mtr.	RO RO		
6	3.5C x 95 Sq. mm A2XFY 3.5C x 95 Sq. mm A2XFY	Mtr.	RO	-	
7	3.5C x 70 Sq. mm A2XFY 3.5C x 70 Sq. mm A2XFY	Mtr.	RO		
8	3.5C x 50 Sq. mm A2XFY 3.5C x 50 Sq. mm A2XFY	Mtr.	RO		
9	3.5C x 35 Sq. mm A2XFT 3.5C x 35 Sq. mm A2XFY	Mtr.	RO		
10	4C x 16 Sq. mm A2XFY	Mtr.	100	243	24,300
10	4C x 10 Sq. mm A2XFY	Mtr.	RO	240	24,000
11	4C x 10 Sq. mm 2XFY (Cu)	Mtr.	RO		
13	4C x 16 Sq. mm 2XFY (Cu)	Mtr.	RO		
13	4C x 6 Sq. mm 2XFY Cable (Cu)	Mtr.	30	400	12,000
15	4C x 4 Sq. mm 2XFY Cable (Cu)	Mtr.	60	400	24,000
16	4C x 2.5 Sq. mm 2XFY Cable (Cu)	Mtr.	RO		,
17	3C x 6sq. mm YWY cable (Cu)	Mtr.	20	350	7,000
18	3C x 4sq. mm YWY cable (Cu)	Mtr.	40	350	14,000
19	3C x 2.5 Sq. mm YWY cable (Cu)	Mtr.	RO		.,
20	1C x 10 Sq. mm YY cable (Cu)	Mtr.	RO		
23	1C x 6 Sq. mm YY cable (Cu)	Mtr.	RO		
22	1C x 4 Sq. mm YY cable (Cu)	Mtr.	RO		
23	5Rx1Cx16 Sq.mm YY FRLS Cable (Cu)	Mtr.	RO		
24	5Rx1Cx10 Sq.mm YY FRLS Cable (Cu)	Mtr.	RO		
25	5Rx1Cx6 Sq.mm YY FRLS Cable (Cu)	Mtr.	RO		
26	5Rx1Cx4 Sq.mm YY FRLS Cable (Cu)	Mtr.	RO		
В	Termination of following sizes of cables with Single compression cable gland.(COMET/BRAKO)				
1	3.5C x 300 Sq. mm A2XFY	Nos.	RO		
2	3.5C x 240 Sq. mm A2XFY	Nos.	RO		
3	3.5C x 185 Sq. mm A2XFY	Nos.	RO		

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SR. No	DESCRIPTION	UOM	QTY	Rate	Amount
4	3.5C x 150 Sq. mm A2XFY	Nos.	RO		
5	3.5C x 120 Sq. mm A2XFY	Nos.	RO		
6	3.5C x 95 Sq. mm A2XFY	Nos.	RO		
7	3.5C x 70 Sq. mm A2XFY	Nos.	RO		
8	3.5C x 50 Sq. mm A2XFY	Nos.	RO		
9	3.5C x 35 Sq. mm A2XFY	Nos.	RO		
10	4C x 16 Sq. mm A2XFY	Nos.	2	650	1,300
11	4C x 10 Sq. mm A2XFY	Nos.	RO		
12	4C x 10 Sq. mm 2XFY (Cu)	Nos.	RO		
13	4C x 16 Sq. mm 2XFY (Cu)	Nos.	RO		
14	4C x 6 Sq. mm 2XFY Cable (Cu)	Nos.	6	550	3,300
15	4C x 4 Sq. mm 2XFY Cable (Cu)	Nos.	4	500	2,000
16	4C x 2.5 Sq. mm 2XFY Cable (Cu)	Nos.	RO	500	
17	3C x 6sq. mm YWY cable (Cu)	Nos.	4	500	2,000
18	3C x 4sq. mm YWY cable (Cu)	Nos.	4	400	1,600
19	3C x 2.5 Sq. mm YWY cable (Cu)	Nos.	RO		
20	1C x 10 Sq. mm YY cable (Cu)	Nos.	RO		
21	1C x 6 Sq. mm YY cable (Cu)	Nos.	RO		
22	1C x 4 Sq. mm YY cable (Cu)	Nos.	RO RO		
23	5Rx1Cx16 Sq.mm YY FRLS Cable (Cu)	Nos.	RO		
24 25	5Rx1Cx10 Sq.mm YY FRLS Cable (Cu) 5Rx1Cx6 Sq.mm YY FRLS Cable (Cu)	Nos.	RO		
25		Nos.	RO		
26	5Rx1Cx4 Sq.mm YY FRLS Cable (Cu)	Nos.	RU		
	TOTAL FOR CABLES & ACCESSORIES				91,500
V	WIRING & ACCESSORIES				
	Notes :				
	1) Rates for point wiring shall include supply & installation of Wires & wiring acccessories such as angle holders/ceiling roses as required. conduits, conduit accessories such as junction boxes, Ts, elbows etc,Switches, sockets & fixtures shall not be included in the point wiring rates. These will be counted & paid separately.				
	 Unless otherwise specified, all wires in point wiring shall be 2.5 sq.mm Stranded copper conductor 1.1 KV grade, I.S.I. marked (P+N+E), 				
	LSZH) PVC insulated .				
	Wires shall be colour coded (Red, Yellow and Blue for Phases,				
	Black for Neutral & Green for earth).				
	3) Looping of wires shall be in fittings and switch boxes only				
	4) Location of switches/sockets/ DBs shown on the drawings shall				
	be confirmed with the Architect/ Consultant/ Project Manager				
	before installation.				
				 	
	5) All Surface and concealed Conduits shall be rigid GI conduits of				
	size not less than 20 mm dia as per applicable IS.				
	6)The Contractor can take more than one circuit in the same conduit				
	provided they are of the same phase. The size of conduit shall be				
	decided according to the number of wires in it as per applicable IS & as specified.				

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SR. No	DESCRIPTION	UOM	QTY	Rate	Amount
	7) Payments for light fixtures & fans will be made separately as per the				
	items given in 'Light Fixtures & Accessories'.				
	8) Type & location of light fixtures shown in the drawings are				
	tentative and subject to revision as per the recommendation of				
	Architect/ Consultant. The quantities (number of points and accessories)				
	of point wiring will be revised as actual installed on account of such revisions in the layouts.				
	9) Circuit wiring from DBs to the switch boards or first light point shall				
	Be included as primary points & remaining points of the same looping				
	shall be considered as Secondary points and shall be counted in nos.				
	10) Circuit Wiring from DB to Kitchen Power points shall be measured in running meters				
	Supply, installation, testing & commissioning of point wiring for light points, power				
	points. Point wiring for primary point shall include wiring from Distribution Board upto				
1	First point of the circuit and shall be measured in nos. Secondary points shall also be				
-	measured in nos and shall include the remaining light points of the circuit controlled				
	from same distribution board where primary points are controlling. The Power points				
	shall be measured in Nos. Cost of GI conduits and accessories shall be included.				
	Averagepoint length of primary&secondaryto be derived by Contractor, from the				
a)	drawing provided AND+/-1MtrMeasured Radially Primary Light points controlled by MCB (3R x 2.5 sqmm wire)	Nos.	20	1,760	35,200
b)	Secondary Light points looped in the same circuit. (3R x 2.5 sqmm wire)	Nos.	90	1,050	94,500
~7		1100.		.,	0.,000
	Supply, installation, testing & commissioning of point wiring for light points, power				
	points. Point wiring for primary point shall include wiring from Switch Board upto First				
	point of the circuit and shall be measured in nos. Secondary points shall also be				
2	measured in nos and shall include the remaining light points of the circuit controlled				
	from same switch board where primary points are controlling. The Power points shall				
	be measured in Nos. Cost of GI. conduits, 6A switch & switch board and accessories shall be included.				
a)	Primary Light points controlled by Switch (3R x 2.5 sqmm wire)	Nos.	1	1,760	1,760
b)	Secondary Light points looped in the same circuit. (3R x 2.5 sqmm wire)	Nos.	2	1,050	2,100
	DB to SB & SB to SB circuit wiring : For Switch Operated Primary point @ SB to SB loop				
	point.				
c)	Wiring for switch board controlled by MCB already installed in DB by using 3 X 2.5 sq.	Mtrs	10	240	2,400
	mm flexible LSZH copper wires in 25mm GI conduits as per IS 9537 part-3 or surface				
	mounted.				
	Supply, installation, testing & commissioning of point wiring for Emargency light points,				
	power points. Point wiring for primary point shall include wiring from Distribution				
	Board upto First point of the circuit and shall be measured in nos. Secondary points				
3	shall also be measured in nos and shall include the remaining light points of the circuit				
	controlled from same distribution board where primary points are controlling. The				
	Power points shall be measured in Nos. Cost of GI conduits and accessories shall be				
	included.				
	Averagepoint length of primary&secondaryto be derived by Contractor, from the				
	drawing provided AND+/-1MtrMeasured Radially	Noc	2	1 750	2 500
a)	Primary Light points controlled by MCB (3R x 2.5 sqmm wire)	Nos.	2	1,750	3,500

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ELECTRIC	CAL BOQ			Paresh Gohi	I - 9136413050
SR. No	DESCRIPTION	UOM	QTY	Rate	Amount
b)	Secondary Light points looped in the same circuit. (3R x 2.5 sqmm wire)	Nos.	9	1,050	9,450
5	Providing point wiring for Raw Power/UPS points 1no. 6/16A switch socket outlet on Skirting level to be looped from the nearest point using 2 x 4.0 sq. mm copper conductor wires and minimum 4.0 sq. mm copper conductor PVC insulated green colour earth wire as per approval of Architect / Consultant. (Cost of GI Conduit / Floor Raceway and switch sockets are considered elsewhere). (Wires shall be LSZH type) Note: Average primary / secondary point length to be derived by Contractor, from the drawing / site provided AND +/- 1 Mtr Measured Radially.				
a) b)	Primary Point Secondary points	Nos. Nos.	8 27	2,900 1,600	23,200 43,200
6	Providing point wiring for Raw Power points 1no. 6A switch socket outlet on Skirting level to be looped from the nearest point using 2 x 2.5 sq. mm copper conductor wires and minimum 2.5 sq. mm copper conductor PVC insulated green colour earth wire as per approval of Architect / Consultant. (Cost of Conduit / Floor Raceway and switch sockets are considered elsewhere). (Wires shall be FRLS type) Note: Average primary / secondary point length to be derived by Contractor, from the drawing / site provided AND +/- 1 Mtr Measured Radially.				
a)	Primary Point	Nos.	RO		
b)	Secondary points	Nos.	RO		
8	Supply and laying of following PVC insulated copper conductor 1100 volt grade stranded flexible LSZH wire in already laid GI conduit concealed or surface mounted making connections where ever required to complete the installation.(For Kitchen and Bar Power Points) Conduit rate shall be paid separately.				10 500
a)	2R x 2.5Sqmm + 1R x 2.5Sqmm Cu. Wires	Mtr.	60	225 310	13,500
b)	3R x 4Sqmm Cu. Wires 4R x 4Sqmm + 2R x 2.5Sqmm Cu. Wires	Mtr.	240	310	74,400
c) d)	4R x 4Sqmm + 2R x 2.5Sqmm Cu. Wires 4R x 6Sqmm + 2R x 2.5Sqmm Cu. Wires	Mtr. Mtr.			
u)	4K X 05y11111 + 2K X 2.55y11111 Cu. Wiles	IVILI.			
9	Supply & installation of 25 mm dia. GI conduit with pull box / junction box & all accessories for Kitchen & Bar Power wiring as per the requirement				
a	- do - but conduit pipe shall be Rigid type.	Mtr.	350	185	64,750
b	- do - but flexible conduit pipe	Mtr.	25	85	2,125
10	Supply & installation of 20 mm dia. GI conduit with pull box / junction box & all accessories for Lighting & Power wiring as per the requirement				
а	- do - but conduit pipe shall be Rigid type.	Mtr.	RO		
b	- do - but flexible conduit pipe	Mtr.	RO		
11	Supply and installation of Perforated Cable Tray (ASIAN)out of 14 gauge GI sheet complete with necessary fixing arrangement with Anchor Fastener and all other accessories as per the final approval of the Consultant/Architect				
a	300 x 50 x 2mm	Mtr.	30	900	27,000
b	200 x 50 x 2mm	Mtr.	RO 10	750	7 500
C d	150 x 50 x 2mm	Mtr.	10 PO	750	7,500
d	100 x 50 x 2mm	Mtr.	RO		
е	50 x 50 x 2mm	Mtr.	RO		

	ien @ Lucknow Cal Boq				Infra - 9136413050
SR. No	DESCRIPTION	UOM	QTY	Rate	Amount
	Supply and installation of GI trunking (SV POWER/ASIAN) with 2 mm thickness &				
12	properties/clamps for suspension at appropriate intervals & as per the route approved				
12	by Architect/Consultant. (For DATA/CONTROL WIRING/LIGHTING & POWER CIRCUITS /				
	KITCHEN)				
а	300 x 50 x 2mm	Mtr.	RO		
b	200 x 50 x 2mm	Mtr.	RO		
С	150 x 50 x 2mm	Mtr.	30	1,000	30,000
d	100 x 50 x 2mm	Mtr.	RO		
е	50 x 50 x 2mm	Mtr.	RO		
	Supply and installation of GI raceway with 2 mm thickness & proper ties/clamps at				
13	appropriate intervals & as per the route approved by Architect/Consultant. (Cost of				
	cutting the floor for laying of raceways to be included).				
а	3 runs of underfloor raceways of size 100 x 40 mm	Mtr.	RO		
b	2 runs of underfloor raceways of size 100 x 40 mm	Mtr.	RO		
С	1 runs of underfloor raceways of size 100 x 40 mm	Mtr.	20	650	13,000
d	1 runs of underfloor raceway of size 85 x 40 mm	Mtr.	RO		
е	2 runs of underfloor raceway of size 65 x 40 mm	Mtr.	RO		
f	1 runs of underfloor raceway of size 65 x 40 mm	Mtr.	10	650	6,500
14	2" extra on all sides SS cover on top and having screw fixed plates on all four sides with knock out holes for conduits. The plates shall be retained on the sidezs having no conduit or raceway so as to avoid the entry of any unwanted material. Earth stud to be provided for all Junction boxes for earthing. Junction box to be prepared as per the final approval of Architect/Consultant. The junction boxes shall be protected from the entry of unwanted material till the completion of the project & the SS plates shall be installed after the final polishing of flooring.				
а	suitable for 450 x 450 x 50 mm	Nos.	RO		
b	suitable for 350 x 350 x 50 mm	Nos.	RO		
C	suitable for 250 x 250 x 50 mm	Nos.	4	950	3,800
d	suitable for 150 x 150 x 50 mm	Nos.	RO		- ,
15	Supply, installation, testing & commissioning of flush mounted plate type switch and switch + sockets with hot dipped GI box complete as per the final approval of Architect/Consultant				
а	6A one way plate type switch	Nos.	2	185	370
b	6A 5 pin Socket outlet	Nos.	RO		
С	6A 5pin switch socket outlet for CCTV & Charging point	Nos.	1	450	45
f	3 nos. 6A socket controlled by 1no 16A switch	Nos.	2	730	1,46
g	2 nos. 6A socket controlled by 2no 16A switch	Nos.			
	USB Point	Nos.	5	750	3,75
h	1 nos. 6/16A socket controlled by1nos 6/16A switch	Nos.	32	760	24,32
I	I phase, 2 Nos x 5/15 amp, bakelite socket & switch, housed in Fabricated SS Panel suitable for hanging arrangement for Kitchen equipments. (having Two outlet /6 modular plate)	Nos.	1	1,300	1,30

					t Infra il - 9136413050
SR. No	DESCRIPTION	UOM	QTY	Rate	Amount
16	Supplying, installation, Testing and commissioning flush mounting floor metallic boxes IP 66 (at terrace level) with 2 nos of 6/16A International switch & socket outlet + 1 set of blanking plate for 2 data/voice outlet suitable for AMP tyco I/o's of following modules complete with all installation kits, accessories, required to finish the installation – Sample will Approved by Client/Consultant. Cost of Switches, sockets outlet & blanking plat for Data/Voice outlets shall be included.				
16.1	300mm x 300mm x 65/75 mm	Nos.	RO		
Supplying, installation, Testing and commission IP 66 (at terrace level) with 2 nos of 6/16A In of blanking plate for 2 data/voice outlet s modules complete with all installation kii installation – Sample will Approved by Client/C Cost of Switches, sockets outlet & blanking plated as 00mm x 300mm x 65/75 mm 16.1 300mm x 300mm x 65/75 mm 2 Supply, installation of temporary lighting & purpose of with industrial type switch & so required to finish the work for interior cont throughout the site for construction work to maintain the saftey rules & regulations as material shall be taken back by the contractor 17 TOTAL FOR WIRING & ACCESSORIES 10 Installation, testing & commissioning of the f suspended light fixtures AS ARCHITECT/CLIENT/CONSULTANT with lamp supporting accessories. No additional cost sha 1 FILAMENT BULB 2 PULLEY LIGHT 3 CHANDELIER 4 KEG LIGHT 5 TRACK LIGHT 6 DECORATIVE LIGHT 7 HANGING SPOT LIGHT EMERGENCY 11 HANGING SPOT LIGHT EMERGENCY 11 HANGING SPOT LIGHT EMERGENCY 11 HANGING SPOT LIGHT EMERGENCY 9 SPIKE LIGHT 9 SPIKE LIGHT 10 FILAMENT LIGHT EMERGENCY 11 <td>Supply, installation of temporary lighting & power arrangement for construction purpose of with industrial type switch & sockets/MCB's/ELCB's & lighting fittings as required to finish the work for interior contractor & necessary electrical protections throughout the site for construction work till the handover of site. Contractor shall maintain the saftey rules & regulations as per Airport Security Department. The material shall be taken back by the contractor.</td> <td>doL</td> <td>1</td> <td>12,500</td> <td>12,500</td>	Supply, installation of temporary lighting & power arrangement for construction purpose of with industrial type switch & sockets/MCB's/ELCB's & lighting fittings as required to finish the work for interior contractor & necessary electrical protections throughout the site for construction work till the handover of site. Contractor shall maintain the saftey rules & regulations as per Airport Security Department. The material shall be taken back by the contractor.	doL	1	12,500	12,500
	TOTAL FOR WIRING & ACCESSORIES				5,02,035
VI	Installation, testing & commissioning of the following concealed / surface mounted or				
1	FILAMENT BULB	Nos.	46	150	6,900
2	PULLEY LIGHT	Nos.	12	150	1,800
3	CHANDELIER	Nos.	4	2,000	8,000
4	KEG LIGHT	Nos.	3	250	750
		Nos.	32	400	12,800
-		Nos.	1	250	250
		Nos.	12	250	3,000
		Mtr.	47	400	18,800
		Nos.	12	250	3,000
		Nos. Nos.	6 5	150 250	900 1,250
		1105.	5	230	1,230
	TOTAL FOR LIGHTING FIXTURES				57,450
VII	FARTHING				
	Supply and Installation of Maintenance Free Chemical earthing using Electrode of Size approx. 38 mm dia +/- 2mm, 3 metres long bonded with 50x6 copper internal strip complete with excavation, civil works, cast iron cover with backfill compound min. 40 KG. The system shall be CPRI tested. Warranty period of chemical earthing from the date of commissioning shall be 5 years. Warranty implies the voltage between earth and neutral will not exceed 0 volts for earthing pits installed. (Note: Body earthing provided by Base builder. We have considered Neutral earthing	Nos.	RO		
2	Supply & erection of G.I. strip of 50 x 6 mm used for earthing on wall, cable trays with necessary clamps fixed on wall painted with bituminous paint in an approved manner.	Mtr.	RO		
3	Supply & erection of G.I. strip of 25 x 3 mm used for earthing on wall, cable trays with necessary clamps fixed on wall painted with bituminous paint in an approved manner.	Mtr.	60	250	15,000
	1 no. 4 sq. mm VV cable in 25mm GL conduit for earthing EOP NETWORK PACK	Mtr.	20	150	3,000

AJ KITCH	EN @ LUCKNOW CAL BOQ				t Infra I - 9136413050
SR. No	DESCRIPTION	UOM	QTY	Rate	Amount
5	Supplying & erecting bare copper conductor of 8 swg for earthing purpose	Mtr.	80	110	8,800
7	Supplying & erecting bare GI conductor of 8 swg for earthing purpose	Mtr.			
8	Supplying & erecting bare CU conductor of 12 swg for earthing purpose	Mtr.			
9	Supplying & installation testing & commissioning of earth terminal box	Nos.			
	TOTAL FOR EARTHING				26,800
VIII	MISCELLANEOUS				
1	Supply & Installation of 6A 3 pin plug top	Nos.	RO		
2	Supply & Installation of 16A 3 pin plug top	Nos.	RO		
3	Supply, installation, testing & commissioning of Cat-6 FRLS Cable for Lighting Automation		RO		
4	Supply & laying of Rubber Mats, CPRI tested conforming to standards like BS 921, ASTM- D 178 & IEC 479 for different operatng voltage ratings as below.				
	Supply of 2M x 1M Rubber mat suitable for operating voltage upto 1.1 KV	Set	1	3,000	3,000
5	Supply & fixing of approved shock treatment chart written in English and in local Language. The chart shall be framed in Teakwood and covered with glass.	Nos.	1	500	500
6	Supply & fixing of approved Fire Alarm evacuation plan chart written in English and in local Language approved by cleint requrements.	Nos	RO		
7	Supply & fixing of the best quality LT Danger Boards(415V) for of approved shape and size as specified by the local electrical authorities written in English, and local Language		1	500	500
0	Consult O have de discussion a discust of First Aid Dave	Cat	DO		
8	Supply & handed over to client of First Aid Box	Set	RO		
9	SITC of Emergency Exit signage (battery operated) approval by client / architect / consultant. Make: Prolite or Equivalent	Nos.	RO		
					4 000
	TOTAL FOR MISELANIOUS				4,000
IX	LOW VOLTAGE SYSTEM				
Α	DATA AND TELEPHONE SYSTEM				
1	Supply & Installation of 25mm.dia. GI conduit with pull box/ junction box & all accessories for DATA /VOICE/WIFI wiring as per the requirement.	Mtr.	500	175	87,500
	, , , , , , , , , , , , , , , , , , , ,				
2	Providing DATA wiring inside 25mm dia GI conduit from each Data outlet to ICT CF Point by using Indoor Type CAT6A,		450	90	40,500
3	Supply & Installation of Internet Jack Unit RJ-45 suitable for CAT6A		20	400	8,000
4	Supply & Installation of make Cat 6A, UTP Patch Cords, with snagless boots, color matched, Blue, 3 Feet		20	400	8,000
5	Supply & Installation of make Cat 6A, UTP Patch Cords, with snagless boots, color matched, Blue, 7 Feet	Nos.	10	600	6,000

	EN @ LUCKNOW CAL BOQ			Vart Infra Paresh Gohil - 9136413050		
SR. No	DESCRIPTION	UOM	QTY	Rate	Amount	
6	Supply & laying indoors multi-pair 0.5mm dia copper PVC insulated and sheathed, armoured telephone cables on walls, ceiling, cable trays, trunking complete with clamps, cable markers etc. from MDF to the various tag blocks as specified					
а	10 pair cable armoured	Mtr.	40	280	11,200	
b	5 pair cable	Mtr.	RO			
С	3 pair cable	Mtr.	RO			
d.	2 pair cable	Mtr.	RO			
7	Supply & installation of telephone tag block with KRONE terminal connectors, G.I.J.B as specified & com-plete with all interconnections and jumper connections bet-ween the two tag blocks on all floors as shown on drgs.					
а	50 pair tel. tag block	Nos.	RO			
b	20 pair tel. tag block	Nos.	1	1,500	1,500	
С	10 pair tel. tag block	Nos.	RO			
	TOTAL FOR DATA AND TELEPHONE SYSTEM				1,62,700	
	GRAND TOTAL				11,48,285	

1.2 25 mm Dia R.mt - - 1.3 32mm Dia R.mt - - 1.4 40mm Dia R.mt - - 2 Providing & Fixing of gun metal heavy Ball Valves-PN-16 (approved makes as covered in specification) screwed type for water system of the following diameters. Valve shall have with unions. Leader / Neta / Zolotto / or approved Equivalent -	AJ KITCH	IEN -LUCKNOW-PHE BOQ				Vart Infra		
Ne. Description Make Unit City Rate Amount A WATER SUPPLY PIPING						Paresh Gohi	I - 9136413050	
CPVC Pipes conforming to ASTM D-2846, SDR-11 grade and CPVC solvent weld fittings like elbows, tees, couplars, brass threaded adaptors, insert ring etc. suitable for (domestic and flushing) cold applications rated, conceased piping within wal/ work shall also include chasing the walls with machine wherever required for concealed piping and making good the same after laying of pipes & necessary pressure testing Chasing finishing shall be done with 11 cernent mixed mortar. Including necessary protessure testing Chasing finishing shall be done with 11. cernent mixed mortar. Including necessary protessure testing pressure as covered in specifications) Astral / Astral /		Description	Make	Unit	Qty	Rate	Amount	
CPVC Pipes conforming to ASTM D-2846, SDR-11 grade and CPVC solvent weld fittings like elbows, tees, couplars, brass threaded adaptors, insert ring etc. suitable for (domestic and flushing) cold applications rated, conceased piping within wal/ work shall also include chasing the walls with machine wherever required for concealed piping and making good the same after laying of pipes & necessary pressure testing Chasing finishing shall be done with 11 cernent mixed mortar. Including necessary protessure testing Chasing finishing shall be done with 11. cernent mixed mortar. Including necessary protessure testing pressure as covered in specifications) Astral / Astral /	^							
CPVC solvent weld fittings like elbows, tees, couplars, brass Astral / Ast	~							
1.2 25 mm Dia R.mt - - 1.3 32mm Dia R.mt - - 1.4 40mm Dia R.mt - - 2 water system of the following diameters. Valve shall have with unions. Leader / Neta / Zolotto / or kos. 4 1.850 7,400 2.1 20mm Dia Nos. 4 1.850 7,400 - - 2.3 32mm Dia Nos. -<	1	CPVC solvent weld fittings like elbows, tees, couplars, brass threaded adaptors, insert ring etc. suitable for (domestic and flushing) cold applications rated, concealed piping within wall / floor including jointing with fittings using solvent cement, brass threaded end fittings for making connection to fixtures. The work shall also include chasing the walls with machine wherever required for concealed piping and making good the same after laying of pipes & necessary pressure testing Chasing finishing shall be done with 1:1 cement mixed mortar, restore the same original condition for internal and shaft piping, including necessary hot deep galvanised supports vertical / horizontal, as per direction of Site incharge direction. [The rate shall include supply of S.S.screws and nut bolts etc.chasing in walls done by machine] (For Domestic and Flushing water- Toilet internal) (Pipe shall be tested with 1.5 times working	Ashirwad /supreme / Prince or Approved					
1.3 32mm Dia R.mt - - 1.4 40mm Dia R.mt - - 2 Providing & Fixing of gun metal heavy Ball Valves-PN-16 (approved makes as covered in specification) screwed type for water system of the following diameters. Valve shall have with unions. Leader / Neta / Zolotto / or approved Equivalent Nos. 4 1,850 7,400 2.1 20mm Dia Nos. 4 1,850 7,400 2.1 20mm Dia Nos. - - 2.3 32mm Dia Nos. - - 2.4 40mm Dia Nos. - - 7.4 0mm Dia Nos. - - 2.4 40mm Dia Nos. - - 9 Providing, fixing, testing and commissioning capstan make Water Meter including providing & fixing matching Isolation valves, strainer, non-return valve, complete with all necessary fittings etc screwed type(15Kgs/Sq.cm). Valve shall have with union. Nos. 1 2,250 2,250 3.2 25 mm Dia incoming line Nos. RO - - 3.3 32 mm Dia incoming line Nos. RO - 3.3 <td< td=""><td>1.1</td><td>20 mm Dia</td><td></td><td>R.mt</td><td>35</td><td>550</td><td>19,250</td></td<>	1.1	20 mm Dia		R.mt	35	550	19,250	
1.4 40mm Dia R.mt - - 2 Providing & Fixing of gun metal heavy Ball Valves-PN-16 (approved makes as covered in specification) screwed type for water system of the following diameters. Valve shall have with unions. Leader / Neta / Zolotto / or approved Equivalent 2.1 20mm Dia Nos. 4 1.850 7.400 2.2 25mm Dia Nos. - - - 2.3 32mm Dia Nos. - - - 2.4 40mm Dia Nos. - - - 2.4 40mm Dia Nos. - - - 9 Providing ,fixing, testing and commissioning capstan make Water Meter including providing & fixing matching Isolation valves, strainer, non-return valve, complete with all necessary fittings etc screwed type(15Kgs/Sq.cm). Valve shall have with union. Nos. 1 2,250 2,250 3.1 20 mm Dia incoming line Nos. RO - - - 4 with Auto Shu-Loff Thermostat, along with isoliton Valves, Air Release valve, SS flexible connections andall other sta accessories Nos. RO - - 4.1 5 L Capacity- Imatch Shuch of Thermostat, along with isoliton Valves, Air Release valve					-		-	
Providing & Fixing of gun metal heavy Ball Valves-PN-16 (approved makes as covered in specification) screwed type for water system of the following diameters. Valve shall have with unions. Leader / Neta / Zoltot / or approved Equivalent 2.1 20mm Dia Nos. 4 1,850 7,400 2.2 25mm Dia Nos. 4 1,850 7,400 2.3 32mm Dia Nos. - - 2.4 40mm Dia Nos. - - 2.4 40mm Dia Nos. - - Providing fixing, testing and commissioning capstan make Water Meter including providing & fixing matching Isolation valves, strainer, non-return valve, complete with all necessary fittings etc screwed type(15Kgs/Sq.cm). Valve shall have with union. Nos. 1 2,250 2,250 3.1 20 mm Dia incoming line Nos. RO - - 3.3 32 mm Dia incoming line Nos. RO - - 4 with Auto Shut-loff Thermostat, along with isoliton Valves, Air Release valve, SS flexible connections andall other std accessories AO Smith or Approved Equivalent AO Smith or Approved Equivalent - 4 4.1 5 L Capacity- Nos. RO - 4.1 </td <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td>-</td>					-		-	
2.2 25mm Dia Nos. - - 2.3 32mm Dia Nos. - - 2.4 40mm Dia Nos. - - Providing ,fixing, testing and commissioning capstan make Water Meter including providing & fixing matching Isolation valves ,strainer, non-return valve, complete with all necessary fittings etc screwed type(15Kgs/Sq.cm). Valve shall have with union. Nos. 1 2,250 3.1 20 mm Dia incoming line Nos. 1 2,250 2,250 3.2 25 mm Dia incoming line Nos. RO - 3 32 mm Dia incoming line Nos. RO - 4 Supply, installation,testing & commissioning of Storage Type Electric Hot Water Generator of mentioned capacity, suitable for 3 KG/cm2 pressure, Wall Mounted / Floor standing type, with Auto Shut-off Thermostat, along with isoltion Valves, Air Release valve, SS flexible connections andall other stat accessories AO Smith or Approved Equivalent AO Smith or Approved 4.1 5 L Capacity- Nos. RO - 4.2 20 L Capacity Nos. 1 28,000	2	(approved makes as covered in specification) screwed type for water system of the following diameters. Valve shall have with	/ Zolotto / or approved					
2.332mm DiaNos2.440mm DiaNos2.440mm DiaNosProviding, fixing, testing and commissioning capstan make Water Meter including providing & fixing matching Isolation valves, strainer, non-return valve, complete with all necessary fittings etc screwed type(15Kgs/Sq.cm). Valve shall have with union3.120 mm Dia incoming lineNos.12,2503.225 mm Dia incoming lineNos.RO-3.332 mm Dia incoming lineNos.RO-4Supply, installation, testing & commissioning of Storage Type Electric Hot Water Generator of mentioned capacity, suitable for 3 KG/cm2 pressure, Wall Mounted / Floor standing type, with Auto Shut-off Thermostat, along with isoltion Valves, Air Release valve, SS flexible connections andall other stat accessoriesNos.RO4.15 L Capacity-Nos.RO-4.220 L CapacityNos.128,000					4	1,850	7,400	
2.440mm DiaNosProviding ,fixing, testing and commissioning capstan make Water Meter including providing & fixing matching Isolation valves ,strainer, non-return valve, complete with all necessary fittings etc screwed type(15Kgs/Sq.cm). Valve shall have with union.Image: Complete with all necessary models and commissioning capstan make water Meter including providing & fixing matching Isolation valves, strainer, non-return valve, complete with all necessary fittings etc screwed type(15Kgs/Sq.cm). Valve shall have with union.Image: Nos.Image: Complete with all necessary models and the complete with all necessary fittings etc screwed type(15Kgs/Sq.cm). Valve shall have with union.Image: Nos.Image: Complete with all necessary fittings etc screwed type(15Kgs/Sq.cm). Valve shall have with union.3.120 mm Dia incoming lineNos.Image: Complete with all necessary fittings etc screwed type(15Kgs/Sq.cm). Valve shall have with union.Nos.RO3.332 mm Dia incoming lineNos.ROImage: Complete with all necessary fittings etc screwed typeImage: Complete with all necessary fittings etc screwed typeNos.RO4Supply, installation, testing & commissioning of Storage Type Electric Hot Water Generator of mentioned capacity, suitable for 3 KG/cm2 pressure, Wall Mounted / Floor standing type, with Auto Shut-off Thermostat, along with isoltion Valves, Air Release valve, SS flexible connections andall other std accessoriesAO Smith or Approved EquivalentAO Smith or Approved Equivalent4.15 L Capacity-Nos.RO28,000					-		-	
Image: constraint of the second sec					-		-	
Water Meter including providing & fixing matching Isolation valves ,strainer, non-return valve, complete with all necessary fittings etc screwed type(15Kgs/Sq.cm). Valve shall have with union.Image: Complete with all necessary fittings etc screwed type(15Kgs/Sq.cm). Valve shall have with union.3.120 mm Dia incoming lineNos.12,2503.225 mm Dia incoming lineNos.ROImage: Complete with all necessary statistic complete with all necessary fittings etc screwed type(15Kgs/Sq.cm). Valve shall have with union.Nos.12,2503.225 mm Dia incoming lineNos.ROImage: Complete with all necessary fittings are complete with all necessary fittings etc screwed type(15Kgs/Sq.cm). Valve shall have with union.Nos.RO3.332 mm Dia incoming lineNos.ROImage: Complete with all necessary fittings etc screwed type(15Kgs/Sq.cm). Valve shall have with for 3 KG/cm2 pressure, Wall Mounted / Floor standing type, with Auto Shut-off Thermostat, along with isoltion Valves, Air Release valve, SS flexible connections andall other std accessoriesAO Smith or Approved EquivalentAO Smith or Approved Equivalent4.15 L Capacity-Nos.ROImage: ROImage: RO4.220 L CapacityNos.128,00028,000	2.4			1105.	-		-	
3.225 mm Dia incoming lineNos.ROImage: Constraint of the sector of the secto		Water Meter including providing & fixing matching Isolation valves ,strainer, non-return valve,complete with all necessary fittings etc screwed type(15Kgs/Sq.cm). Valve shall have with union.						
3.332 mm Dia incoming lineNos.RO3.332 mm Dia incoming lineNos.RO4Supply, installation,testing & commissioning of Storage Type Electric Hot Water Generator of mentioned capacity, suitable for 3 KG/cm2 pressure, Wall Mounted / Floor standing type, with Auto Shut-off Thermostat, along with isoltion Valves, Air Release valve, SS flexible connections andall other std accessoriesAO Smith or Approved EquivalentAO Smith or Approved Equivalent4.15 L Capacity-Nos.RO4.220 L CapacityNos.128,000						2,250	2,250	
ASupply, installation,testing & commissioning of Storage Type Electric Hot Water Generator of mentioned capacity, suitable for 3 KG/cm2 pressure, Wall Mounted / Floor standing type, with Auto Shut-off Thermostat, along with isoltion Valves, Air Release valve, SS flexible connections andall other std accessoriesAO Smith or Approved EquivalentAO Smith or Approved Equivalent4.15 L Capacity-Nos.RO4.220 L CapacityNos.128,000								
4Electric Hot Water Generator of mentioned capacity, suitable for 3 KG/cm2 pressure, Wall Mounted / Floor standing type, with Auto Shut-off Thermostat, along with isoltion Valves, Air Release valve, SS flexible connections andall other stid accessoriesAO Smith or Approved EquivalentAO Smith or Approved Equivalent4.15 L Capacity-Nos.RO4.220 L CapacityNos.128,000	3.3	32 mm Dia incoming line		Nos.	RO			
4.2 20 L Capacity Nos. 1 28,000 28,000		Electric Hot Water Generator of mentioned capacity, suitable for 3 KG/cm2 pressure, Wall Mounted / Floor standing type, with Auto Shut-off Thermostat, along with isoltion Valves, Air Release valve, SS flexible connections and all other std accessories	AO Smith or Approved					
					-	28,000	28,000	
	4.3	So L Capacity- For snower		INOS.	κυ			

AJ KITCH	IEN -LUCKNOW-PHE BOQ			Vart Infra		
					Paresh Gohil	- 9136413050
ltem No.	Description	Make	Unit	Qty	Rate	Amount
5	Supply, installation,testing & commissioning of Stiebel Type Electric Hot Water Generator of mentioned capacity, suitable for 3 KG/cm2 pressure, Wall Mounted / Floor standing type, with Auto Shut-off Thermostat, along with isoltion Valves, Air Release valve, SS flexible connections and all other std accessories (Optional in pantry)					
5.1	3.5kw in pantry- optional		Nos.	RO		
5.2	8kw		Nos.	RO		
5.3	13kw-3ph- Subject to load permits		Nos.	RO		
6	SITC of Eco smart RO-50 with all required accessories .(Prior to order cpacaity and model to need to be confirmed by the kitchen consultant)	Iron Exchange or Approved Equivalent	Nos	1	21,000	21,000
7	SITC of ACO grease trap -model Lipumobil 0.8 -Capacity -48 lit (0.8 LPS) with all required accessories (Order shall be placed as per space available below the counter)	Aco or Approved Equivalent	Nos	-		-
8	SITC of ACO grease trap -model Lipumobil S -Capacity -32 lit (0.5 LPS) with all required accessories	Aco or Approved Equivalent	Nos	-		-
	SUB TOTAL OF A					77,900
В	DRAINAGE					
1	uPVC-SWR pipes conforming to IS 13592/92 including fittings conforming to IS-14935/99 and agri type pipes above 100 mm dia. conforming to IS: 4985, cutting the pipes to required lengths, laying in the position to required grade and level, jointing, supporting with PVC cleat,hot deep galvanised bracket supports,hot deep galvanised nut-bolts, anchor fastners, PVC coated U-clamp, testing and rectifying leakages for piping within vertical shafts / supported on wall / hung below slab etc. with all material & labor complete and as directed. [The Rate shall include supply and fixing of hotdip galvanised bracket nut bolts/ PVC Coated U-Clamp and screws] Vertical line bracket shall be fixed at every 0.8 mtr to 1.00 mtr.] (For Soil , Waste, Vent and RWP-Internal and vertical shaft).	Supreme / Finolex / Prince / Oriplast / or Approved Equivalent				
1.1	40mm Dia		R.mt	2	140	280
1.2	50mm Dia		R.mt	6	175	1,050
1.3 1.4	65mm Dia 75mm Dia		R.mt R.mt	- 7	210	- 1,470
1.4	100 mm Dia		R.mt	2	360	720
1.6	150 mm Dia		R.mt	RO		120
2	Supply, Install PVC Floor Trap for the following pipes including making all approved quality Solvent cement joints with material & labour etc. all complete as per direction of the engineer-in-charge.		Nos.	2	1,350	2,700
3	Supply, Install PVC Multi Floor Trap for the following pipes including making all approved quality Solvent cement joints with material & labour etc. all complete as per direction of the engineer-in-charge.		Nos.	4	1,550	6,200

AJ KITCHEN -LUCKNOW-PHE BOQ Vart Infra Vart Infra Paresh Gohil - 913								
Item				0111				
No.	Description	Make	Unit	Qty	Rate	Amount		
4	Supply, Install PVC urinal Traps including fixing with necessary consumables with Circular SS Grating with anti cockroach jali Suitable for 75mm Dia outlet		Nos.	-		-		
5	Supply, Install PVC P- Traps including fixing with necessary consumables with Circular SS Grating with anti cockroach jali Suitable for 75mm Dia outlet		Nos.	-		-		
	SUB TOTAL OF B					12,420		
С 	SANITARY AND C. P. FITTINGS & FIXTURES Only installation, testing and commissioning of sanitary and C.P. fittings							
1.1	EWC with seat cover		Nos	-				
1.2	Concealed flush tank		Nos	-		-		
1.3	Concealed flush valve		Nos	-		-		
1.4 1.5	Health Faucet		Nos	-		-		
1.5	2 Way Bib-Cock with connection for Health Faucet Bided		Nos Nos	- R.O.		-		
1.7	Under Counter Wash Basin including waste Coupling		Nos	-		-		
1.8	Wash Basin Cock		Nos	-		-		
1.9	shower and mixer		Nos	-		-		
1.10	Jet Spray Bath Tub including waste Coupling and nessessary		Nos	-		-		
1.11	connections		Nos	-		-		
1.12	Under Counter Sink including waste Coupling		Nos	1	8,600	8,600		
1.13	Sink Pillar Cock		Nos	1	1,850	1,850		
1.14	Bottle Trap for WHB/ sink and urinal with all connecting pipes		Nos	1	2,260	2,260		
1.15	Angle Cock with PVC pipe connection upto WHB/sink/Geyser connection		Nos	7	2,200	15,400		
1.16	Urinal		Nos	-		-		
1.17	Auto Flush Valve & Sensor with connecting piping & spreader for urinal(DC)		Nos	-		-		
	SUB TOTAL -C-SANITARY AND C. P. FITTINGS & FIXTURES (ONLY INSTALLATIONS)					28,110		
D	S.S. GRATING							
	Only installations/ testing and commissioning of S.S.Gratings							
1	Making chamber in brick work including internal tiling etc for S.S Grating size, 1200mm x 200mm, in 16 swg 25mm x25mm Square Pipe around the Frame and 20mmX 20mm Square pipe in center of frame with SS perforated tray (304 SWR). Complete as per architectural detail drawing & Site Engineer's instruction.		Nos.	-		-		
2	Making chamber in brick work including internal tiling etc for S.S Grating size, 600mm x 300mm, in 16 swg 25mm x25mm Square Pipe around the Frame and 20mmX 20mm Square pipe in center of frame with SS perforated tray (304 SWR). Complete as per architectural detail drawing & Site Engineer's instruction.		Nos.	1	12,500	12,500		

	HEN -LUCKNOW-PHE BOQ				Vart Infra Paresh Gohil - 913641305		
ltem No.	Description	Make	Unit	Qty	Rate	Amount	
4	Making chamber in brick work including internal tiling etc for S.S Grating size, 300mm x 300mm, in 16 swg 25mm x25mm Square Pipe around the Frame and 20mmX 20mm Square pipe in center of frame with SS perforated tray (304 SWR). Complete as per architectural detail drawing & Site Engineer's instruction.		Nos.	3	7,500	22,500	
	SUB TOTAL -D-S.S. GRATING INSTALLATION (ONLY INSTALLATIONS)					35,000	
	GRAND - TOTAL A, B, C AND D					1,53,430	
	NOTES :						
	1. Taxes and duties shall be Extra as actual						
	Supply and installation of Sanitary fixtures and fitting in th kitchen and toilets						
	3. Supply of S.S. gratings in kitchen				-		

АЈ КІТСНЕ	N @ T3, LUCKNOW AIRPORT			Vart Infra			
HVAC BOO	2				Paresh Gohil	- 9136413050	
Sr. No.	Description Items	Unit	Qty	Supply	Installation	Total Rate	Total Amount
Note:	Prices shall be based on supply, installation, testing & commissioning (SITC) at site including all taxes, duties, transportation & insurance etc.						
1	CHILLED WATER TYPE CEILING SUSPENDED AHU (AIR HANDLING UNIT) :						
1.1	CEILING SUSPENDED AHU :						
	Supply and assembly of Ceiling Suspended Double skin cabinet type AHU Integrated (Air handling units) of following specifications:						
	Frame Structure: It shall consist of 48mm Extruded Aluminium with thermal break profile.						
	Panel: 45mm +/- 2mm thick double skin sandwich panels with rockwool insulation of density 64 kg/m3 or PUF insulation of 48 kg/m3 , The sheet thickness shall be minimum 0.6 mm for the outer skin precoated and 0.8 mm thickness for the inner skin of plain GI.						
	Filtration Section: It shall be provided with single stage washable type of prefilter 'MERV 8' first stage which shall be placed before coil section.						
	Coil Section: Chilled water coil Multi row deep constructed with Aluminium fins of min 0.11mm thick 12 Fins per inch, and copper tubes of min 27 Guage thickness HYRDOPHYLLIC coated fins. Copper tube shall be min 12.5mm diameter. AHRI certified coil.The coil face area velocity shall not exceed 2.5m/sec (500 fpm).						
	Drain Pan: Condensate drain pan shall be fabricated from 18G SS 304 powder coated, insulated with 13 mm thick closed cell elastomeric(nitrile rubber) insulation.						
	Fan Section: SISW / DIDW Direct drive backward curved fan. The fan section shall be provided with limt switch for safety to shut off fan during Opening of access door. Fan outlet velocity not to exceed 1600 FPM. The sound level shall not be exceed more than 60dB @ 1m from the source. Vibration isolators, Door Limit switch, UV Lamp as per Technical Specifications, AHU Summary Sheet and drawings. Total static pressue has to calculated by Contractor as per the configuration.						
	Other Details : AHU to house control box/ terminal box with Auto- Manual switch and incomer power terminal, with SPP, Over/ Undervoltage protection, shortcircuit protection and with no-nc contacts (potential free contact) to be provided for tripping on signal from Fire Dampers / Fire Alarm Panel. Power cable from Terminal box to motor & control cabling of required size upto the thermostat / sensor etc. to be provided. Internal electrical and control wiring of AHU to be provided as factory fitted from AHU supplier. The cost shall include all necessary supports & accessories required for installation.						
	Contractor shall design the chilled water coil according to the following conditions: a. Coil air entering temperature - 75.4°F DB						
	b. Coil air leaving temperature - 54 deg. F DB/ 52.99 deg. F WB						
	c. Chilled water temperature entering - 6.0 deg. C/ 42.8 deg. F						

	N @ T3, LUCKNOW AIRPORT	Vart Infra						
HVAC BOC					Paresh Gohil	- 9136413050	Total	
Sr. No.	Description Items	Unit	Qty	Supply	Installation	Total Rate	Total Amount	
	d. Chilled water temperature leaving - 13.3 deg. C/ 55.9 deg. F							
	Make : VTS / Zeco / Citizen							
	Type Capacity Tonnage ESP No. of							
	(Cfm) TR (mm WG) Rows							
а	CS AHU 2500 9.2 25 4/6							
	GENERAL NOTES:							
a.	LHS & RHS VALVE station location to be confirmed.							
b.	Fan outlet velocity - 1600 FPM							
с.	Contractor shall submit static pressure calculation for all above units to Client/Consultant.							
d.	Any change in motor HP shall be made at no extra cost to client.							
e.	Fan efficiency shall be minimum 75%							
	The cost shall be included liftting & shifting of each equipment /							
f.	material with all necesaary arrnagement. Also, it shall be included							
	the cost of scaffloding required for Installation of such material /							
	equipment.							
	SUB-TOTAL						-	
2	CHILLED WATER PIPING WITH INSULATION:							
2.1	CHW PIPE							
	SITC of MS Heavy duty class 'C' ERW Chilled Water pipe							
	conforming to IS 1239 - 2004 primer painted including bends, tees,							
	MS supports, PUFF saddles, anchor fasteners, steel angles and any							
	other material required to complete the work. The piping flange							
	connection bolts, washers and nuts should be hot dipped							
	galvanised. Flourscent Plastic Sticker/ paint shall be applied to							
	indicate Water flow directions. Only End flanges to be used for							
	capping of pipes. "Table E" of BS code for flange thickness to be							
	adhered.							
	Make: Jindal Hissar / TATA	Dreat	110	1400	200	1 (00)	1 70 000	
а	Φ 65 mm Φ 40 mm	Rmt Rmt	110 30	1400 900	200 200	1,600 1,100	1,76,000 33,000	
						,		
2.2	CHILLED WATER PIPING INSULATION - INTERNAL USE							
	SITC of insulation for chilled water. piping.							
	For internal pipe - Stick 25mm thick Nitrile rubber class "O" Closed							
	cell nitrile rubber with anti-microbial coating on it. Insulation shall							
	have Thermal conductivity of 0.033 W/(m.K) and water vapor							
	permeance of 0.10. Joints should be sealed with 50 mm wide 3 mm							
	thick self adhesive tape and putting PVC bands at all supports.							
а	Make: Armaflex & K-flex Φ 65 mm	Rmt	110	250	100	350	38,500	
u	Φ 40 mm	Rmt	30	200	100	300	9,000	
2.3	BALL VALVE							

J KITCHE	N @ T3, LUCKNOW AIRPORT			Vart Infra Paresh Gohil - 9136413050					
IVAC BUC					Paresh Gonil	- 9136413050			
Sr. No.	Description Items	Unit	Qty	Supply	Installation	Total Rate	Total Amount		
	SITC of following sizes of Ball Valve consist of Cap, Brass Body, Rated for 150 psi SWP, 600 psi WOG Pressure: Two-piece construction; with brass body, regular port, B-16 chrome-plated ball and stem, replaceable "Teflon" or "TFE" seats and seals, blowout-proof stem, vinyl covered steel handle, threaded or soldered ends and extended stem for insulated piping. Same valve shall be used as a Drain valve.								
	Make: Zoloto / Audco / Kitz								
а	Φ 40 mm	Nos.	8	4500	450	4,950	39,600		
-						.,			
2.4	BALL VALVE WITH Y-STRAINER								
	SITC of following sizes of Brass Ball Valve with Y-Strainer consist of Cap, Brass Body, Rated for 150 psi SWP, 600 psi WOG Pressure: Two- piece construction; with brass body, regular port, B-16 chrome- plated ball and stem, replaceable "Teflon" or "TFE" seats and seals, blowout-proof stem, vinyl covered steel handle, threaded or soldered ends and extended stem for insulated piping. Filter element shall be of non magnetic SS sheet with perforation.								
	Make: Zoloto / Audco / Kitz								
а	Φ 40 mm	Nos.	2	5800	450	6,250	12,500		
2.5	PIBCV VALVES								
	SITC of Pressure Independent Balancing cum Control Valves (PIBCV) including integrated motorised control valve and balancing device for combined flow and water balancing requirement. Valve body to be rated for PN 16. The valve design flow rate should be factory calibrated with +/- 5% flow accuracy. Valve shall have necessary measuring ports, drain port, flanges etc., Valve shall also provide temperature sensor with necessary cabling (min 2mtr length to be considered with each valve). The balancing to be done through microprocessor based hand held terminal / POT and the same results shall be furnished in the water balancing report as part of commissioning report and handing over manual.								
	Make: Oventrop / Siemens / Danfoss								
а	Φ 40 mm	Nos.	2	6500	450	6,950	13,900		
2.0									
2.6	Auto Air Vent Valves Make: Anergy / Flamco								
а	Providing and fitting Auto Vent Valves. SITC of Auto air vent in each risers & common headers & AHU. 3/4" auto vent valves at each coil / riser/ header.	Nos.	4	1800	450	2,250	9,000		
2.7	SITC of Pressure gauges & Thermometers								
	Make: H Guru / Waree								
а	Necessary pressure gauges and thermometers 4" Dial type. Water Pressure gauges 150mm dial complete with gauge valves, mounting, fittings and copper tubing extension wherever required. Pressure gauges Range 0-10 Kg/CM2	Nos.	4	5500	500	6,000	24,000		
	Thermometers of the mercury in glass stem type and copper separable well complete with guard etc., of industrial grade		4	1200	300	1,500	6,000		
b	mounting on water lines. Length 9/12 inches, Thermometer, Range 0-50 deg C	Nos.	4	1200	500	1,500	0,000		

2.8 INSULATED (SITC of UPVC supports and insulation lin thickness 9m Pipe wherew standby arra Make: Supre a Ø 25 mm b Ø 32 mm b Ø 32 mm All the piping c Unit rates for f Cleaning/Pa piping cost. The piping sot. Cleaning/Pa piping cost. The piping sot. Consultant. All the valve f Chilled wate considered. 3 SHEET META Supply, Fabri Fabricated G Plenums, Co	Description Items ss Test Plug of industrial grade mounting on water O CONDENSATE DRAIN PIPE /C pipes of following sizes for drain with necessary nd fittings such as elbows, tees & reducers etc. The	Unit Nos.	Qty RO	Supply	Paresh Gohil Installation	- 9136413050 Total Rate	Total
d SITC of Brass 2.8 INSULATED of SITC of UPVC supports and insulation lin thickness 9m Pipe wherew standby arra Make: Supre a Φ 25 mm b Φ 32 mm b Φ 32 mm b Φ 32 mm a Cover all ope pipe cleaning in the piping c Unit rates for furnished. Cleaning/Pa piping cost. The piping su additional su Consultant. All the valve chilled wate considered. 3 SHEET META 3.1 FACTORY FA Supply, Fabri Fabricated G Plenums, Co	ss Test Plug of industrial grade mounting on water D CONDENSATE DRAIN PIPE /C pipes of following sizes for drain with necessary nd fittings such as elbows, tees & reducers etc. The				Installation	Total Rate	
2.8 INSULATED (SITC of UPVC supports and insulation lin thickness 9m Pipe wherew standby arra Make: Supre a Ø 25 mm b Ø 32 mm b Ø 32 mm All the piping c Unit rates for f Cleaning/Pa piping cost. The piping sot. Cleaning/Pa piping cost. The piping sot. Consultant. All the valve f Chilled wate considered. 3 SHEET META Supply, Fabri Fabricated G Plenums, Co	CONDENSATE DRAIN PIPE /C pipes of following sizes for drain with necessary nd fittings such as elbows, tees & reducers etc. The	Nos.	RO	0			Amount
SITC of UPVC supports and insulation lin thickness 9m Pipe wherew standby arra Make: Supre a Φ 25 mm b Φ 32 mm b Φ 32 mm NOTES FOR I a Cover all ope b Pipe cleaning in the piping c Unit rates fo furnished. Cleaning/Pa piping cost. The piping su additional su Consultant. All the valve f Chilled wate considered. 3 SHEET META 3.1 FACTORY FA Supply, Fabri Fabricated G Plenums, Co	/C pipes of following sizes for drain with necessary nd fittings such as elbows, tees & reducers etc. The			0	0	-	
supports and insulation lin thickness 9m Pipe wherev standby arra Make: Supre a Φ 25 mm b Φ 32 mm b Φ 32 mm a NOTES FOR I a Cover all ope b Pipe cleaning in the piping c Unit rates for furnished. d Cleaning/Pa piping cost. d Cleaning/Pa piping cost. f the piping su additional su Consultant. All the valve f Chilled wate considered. 3 SHEET META 3 SHEET META 3 SHEET META 5 Supply, Fabri Fabricated G Plenums, Co	nd fittings such as elbows, tees & reducers etc. The						
a Φ 25 mm b Φ 32 mm NOTES FOR I a Cover all ope b Pipe cleaning in the piping c Unit rates for furnished. d Cleaning/Pa piping cost. The piping si additional su Consultant. All the valve f Chilled wate considered. 3 SHEET META 3.1 FACTORY FA Supply, Fabri Fabricated G Plenums, Co	ine to be insulated with nitrile rubber insulation of mm and wrapped by weather proof protection tape. The ever concealed should also have a parallel line as a rangement in case of block of primary pipe.						
b Φ 32 mm NOTES FOR I a Cover all ope pipe cleaning in the piping c Unit rates for furnished. d Cleaning/Pa piping cost. The piping so additional su Consultant. All the valve f Chilled wate considered. 3 SHEET META 3.1 FACTORY FA Supply, Fabri Fabricated G Plenums, Co	reme, Prince, Astral						
a NOTES FOR I a Cover all operations in the piping b Pipe cleaning in the piping c Unit rates for furnished. d Cleaning/Pa piping cost. r The piping statement of the pipin		Rmt	10	300	100	400	4,000
a Cover all ope b Pipe cleaning in the piping C Unit rates for furnished. Cleaning/Pa piping cost. The piping so additional so Consultant. All the valve Chilled wate considered. 3 SHEET META 3 SHEET META 5 Supply, Fabri Fabricated G Plenums, Co		Rmt	20	320	100	420	8,400
b Pipe cleaning in the piping c Unit rates for furnished. d Cleaning/Pa piping cost. The piping so additional su Consultant. All the valve chilled wate considered. 3 SHEET META 3 SHEET META 3 SHEET META 5 Supply, Fabri Fabricated G Plenums, Co	R PIPING:						
b in the piping C Unit rates for furnished. Cleaning/Pa piping cost. The piping so additional so Consultant. All the valve Consultant. All the valve Chilled wate considered. SUB-TOTAL 3 SHEET META 3.1 FACTORY FA Supply, Fabri Fabricated G Plenums, Co	pen pipe ends with muslin cloth during construction						
c Unit rates for furnished. Cleaning/Pa piping cost. The piping so additional su Consultant. All the valve f Chilled wate considered. SUB-TOTAL 3 SHEET META 3.1 FACTORY FA Supply, Fabri Fabricated G Plenums, Co	ng & chemical treatment as per specs shall be included ng cost.						
d Cleaning/Pa piping cost. The piping so additional su Consultant. All the valve Chilled wate considered. SUB-TOTAL 3 SHEET META 3.1 FACTORY FA Supply, Fabri Fabricated G Plenums, Co	for all indicated sizes of pipes & valves shall be						
e additional su Consultant. All the valve Chilled wate considered. SUB-TOTAL 3 SHEET META 3.1 FACTORY FA Supply, Fabri Fabricated G Plenums, Co	ainting of pipe before insulation shall be included in						
e additional su Consultant. All the valve Chilled wate considered. SUB-TOTAL 3 SHEET META 3.1 FACTORY FA Supply, Fabri Fabricated G Plenums, Co	support should be as per tender specification and						
f Chilled wate considered. SUB-TOTAL 3 SHEET META 3.1 FACTORY FA Supply, Fabri Fabricated G Plenums, Co	supports are to be provided Contractor as decided by						
3 SHEET META 3.1 FACTORY FA Supply, Fabri Fabricated G Plenums, Co	res shall be insulated with the same material as that of ter pipng and cost of insulation for valves shall be l.						
3 SHEET META 3.1 FACTORY FA Supply, Fabri Fabricated G Plenums, Co							
3.1 FACTORY FA Supply, Fabri Fabricated G Plenums, Co	_						3,82,70
3.1 FACTORY FA Supply, Fabri Fabricated G Plenums, Co	TAL WORKS:						
Supply, Fabri Fabricated G Plenums, Co							
Fabricated G Plenums, Co	ABRICATED G.I RECTANGULAR DUCT						
Supports, Ro	orication, Testing, and Commissioning of Factory GI Sheet Metal 120GSM Rectangular boxed ducting, owls, Elbows with turning vanes, Splitters, Reducers, ollars etc as per IS and Installaton as per SMACNA The complete ducting shall be provided with MS Rods, Angles, Flanges, Bracing, Rubber Gaskets, Wooden nvas Connections, etc. as per drawings and specifications.						
GI Sheet Ma	Nakes : Tata, Jindal, SAIL, Ispat						
	a Star, Zeco & Ductofab						
	6I Sheet Metal Duct (751-1500mm)	Sq.mtr	RO			-	
b 24 Gauge GI	61 Sheet Metal Duct (0-750mm)	Sq.mtr	10	860	250	1,110	11,100
c d FACTORY FA							

	N @ T3, LUCKNOW AIRPORT			Vart Infra Paresh Gohil - 9136413050					
IVAC BOC	2				Paresh Gohil	- 9136413050			
Sr. No.	Description Items	Unit	Qty	Supply	Installation	Total Rate	Total Amount		
	Supply, Fabrication, Testing, and Commissioning of Factory								
	Fabricated GI Sheet Metal 120GSM Exposed Flat Oval ducting,								
	Elbows with turning vanes, Splitters, Reducers, Collars etc as per IS								
	and Installaton as per SMACNA standards, The complete ducting								
	shall be provided with MS Supports, Rods, Angles, Flanges, Bracing,								
	Rubber Gaskets, Wooden frames, Canvas Connections, etc. as per								
	drawings and specifications. All exposed ducts has to be powder								
	coated by HVAC contractor, sample and color code to be presented for the validation of Client / Architect.								
3.2	GI Sheet Makes : Tata, Jindal, SAIL, Ispat								
	Make: Rola Star, Zeco & Ductofab								
	22 Gauge GI Sheet Metal Duct (751-1500mm)	Sq.mtr	RO						
	24 Gauge GI Sheet Metal Duct (0-750mm)	Sq.mtr	115	1,050	300	1,350	1,55,25		
3.3									
	EXTRUDED ALUMINIUM CEILING GRILLES								
	Supply, Installation, Testing and Balancing of Powder coated								
	aluminium supply air grilles complete with removable inner core as								
	per approved shop drawing and specifications. The area of grille can								
	be of any geometrical shape (Square/rectangular/Linear). The grilles								
	shall be with 15/30/45° deflections as per requirement. The Colour shall be decided and approved by client and architect.								
	Curve Grille	Sq.mtr	1.5	5,000	1,000	6,000	9,00		
3.4	Make: Cosmos, Air Master & System Air								
3.4	SPIGOT DAMPER FOR ELLIPTICAL DUCT								
	Supply, installation and testing of galvanized steel construction								
	dampers for circular ducts (VCD) within ducts provided with								
	suitable lever and quadrants for manual control of volume of air	Sq.mtr	0.5	4,300	800	5,100	2,55		
	flow and for proper balancing of the air distribution system.								
	Make: Cosmos, Air Master & System Air								
3.5									
	OPPOSED BLADE DAMPER								
	SITC of Aluminium Opposed blade dampers black powder coated								
	vertical blades type for supply air collar. The damper should be gear	Sq.mtr	1.5	6000	800	6,800	10,20		
	operated type.								
3.6									
	CANVAS CONNECTION								
	SITC of Flexible connections between mouth piece of Fan and initial								
а	piece of ducting with inspection zip. Flexible connections shall be								
	double thickness non-flammable material (Fire retardant type).								
b	For AHU	Nos.	2	2,860	1,050	3,910	7,82		
3.7	CURTAIN TYPE FIRE DAMPER								
5./									
	SITC of fire dampers consist of 16G GI frame, 20G GI interlocking								
	blades secured with SS springs, blades outside airstream clamped								
	with fusible link UL-555 listed with melting point 165 / 225°F, etc; as								
	per the approved shop drawings and specifications.								
	Make: Carryaire / System Air / Dynacraft / Air Master								
a	Bare fire dampers	Sq.mtr	0.5	8,200	1,200	9,400	4,70		
b	Fusible link as per specification UL 555	No	1	2,200	700	2,900	2,90		

	N @ T3, LUCKNOW AIRPORT			Vart Infra						
HVAC BOO	2				Paresh Gohil	- 9136413050				
Sr. No.	Description Items	Unit	Qty	Supply	Installation	Total Rate	Total Amount			
	The ducting support should be as per tender specification and additional supports are to be provided by Contractor as decided by Consultant.									
	Muslin cloth cover for all air outlets during construction. Pressure testing of complete duct work as per DW/ SMACNA standard.									
	Silicon sealant for longitudinal & transverse joints as per specification.									
	Diffusers & grilles shall be powder coated as per color approved by Architect.									
	SUB-TOTAL						2,03,520			
4	THERMAL & ACOUSTIC INSULATION:									
4.1	THERMAL INSULATION									
	Supply & fixing of Thermal insulation for supply air duct using 13mm thick class " O " Closed cell nitrile rubber with anti-microbial coating on it. Insulation shall have Thermal conductivity of 0.033 W/(m.K) and water vapor permeance of 0.10. Joints should be sealed with 50 mm wide 3 mm thick self adhesive tape. The duct shall be stick with recommended adhesive.	Sq.mtr	100	510	165	675	67,500			
	Make: Armaflex & K-flex									
4.2	ACOUSTIC INSULATION									
	Supply & fixing acoustic insulation for ducting using Class "1" closed cell elastomeric insulation of 10mm thick Nitrile rubber insulation adhesive, longitudinal & transverse joints sealed with adhesive in neat & clean manner. Material shall be processed Nitrile Rubber foam with anti-microbial protection. Insulation shall have thermal conductivity of 0.047 W/(m.K) and density of 140 - 180 kg/m ³ .	Sq.mtr	25	700	165	865	21,625			
	Make: Armaflex & K-flex									
	Neto									
a.	Note: Insulation work to be coordinated with other agencies and repair to be included by contractor as per site requirement.									
b.	Vendors to take care of the installation, if any damages takes place the vendor to repair or replace and hand over to clients in good									
C.	and acceptable condition. Thermal insulation shall be internal for Elliptical / Expossed ducting.									
							00 105			
	SUB-TOTAL						89,125			
5	ELECTRICAL WORKS:									
5.1	STARTER PANEL									
	•	-	-	•	•					

STAR supp shall TOP	Description Items C of indoor / outdoor, wall mounting type 3PH, 415VAC MOTOR RTERS IN CRCA SHEET STEEL ENCLOSURE with necssary porting brackets and required accessories, etc., The Enclosure	Unit	Qty	Supply	Paresh Gohil Installation	- 9136413050 Total Rate	Total
SITC STAR supp shall TOP	C of indoor / outdoor, wall mounting type 3PH, 415VAC MOTOR RTERS IN CRCA SHEET STEEL ENCLOSURE with necssary porting brackets and required accessories, etc., The Enclosure	Unit	Qty	Supply	Installation	Total Pata	Total
STAR supp shall TOP	RTERS IN CRCA SHEET STEEL ENCLOSURE with necssary porting brackets and required accessories, etc., The Enclosure					Total Nate	Amount
MPC butto indic	Il be provided with knockouts suitable for cable termination at P & BOTTOM for incoming and outgoing power cables of A2XFY e and size specified. The starters shall be complete with suitable CB/MCCB, Contactor, Bi-metal O/L relay with SPP, ON/OFF Push tons, on / off / trip indication Lamp, on off push button, & phase cation Lamp. Selection of relay, contractor, MPCB/MCCB etc. as Type-2 Coordination. Panel shall have provision to connect with						
BMS.	S.						
a Suita	able for 2500 CFM AHU, DOL Starter Panel	Nos.	2	23,000	2,350	25,350	50,700
6.2 POW	WER CABLING						
comr FRLS cable supp earth comp Own shall Powe contr	ply, handling, laying effecting proper connections testing and missioning of following sizes of 1.1 KV grade XLPE insulated S Aluminium /Copper conductor cables laid over MS supports le racks or fixing on walls including clamping the cable to ports in an approved manner as required complete with Copper thing as specified for continuous earthing along with cable. All uplete as required and as per final instruction as given by ners/ Consultants and as per Technical specifications. Earthing II be measured separately and shall be connected in two runs. ver to ELCB to be provided near each ODU by electrical tractor.						
Suita	able for 2500 CFM AHU, DOL Starter Panel	Rmt	10	380	130	510	5,100
b Earth	thing:						
8 SW		Rmt	20	65	20	85	1,700
							,
Supp temp a) Uli b) Mi c) Flo	J METER ply,fixing and testing of inline Btu meter for the flow rate & apperature measurement consisting mainly of following 3 parts Iltrasonic Flow Meter Atched pair of temp sensor lowcell Sensor						
Inser appli be 24 with BMS optic	TU Meter - 4 - 20mA DC from flowmeter ertion type flowmeter shall be suitable for chilled water lication for temp. Ranging from 0 to 50 deg C. Power supply shall 240V AC (+/-) 15 %. Display shall have 16 characters LCD display h Back light, flow rate, Velocity, totaliser etc. Output shall be S Modbus compatible & shall have keypad lockout security ion. It also should be able to show various units such as gallons, 8, lbs, liters, m^3, kg etc						
	ke: Honeywell / Danfoss / Siemens						
a Dia 6	65 mm	No.	1	55,000	2,000	57,000	57,000
6.4 CABL	BLE TERMINATION :						

	N @ T3, LUCKNOW AIRPORT					Infra	
IVAC BOO					Paresh Gohil	- 9136413050	1
Sr. No.	Description Items	Unit	Qty	Supply	Installation	Total Rate	Total Amount
	Supply & Making of Cable termination of armoured / unarmoured cables 1.1 KV grade including installation of cable glands, cable lugs (Aluminium for A2XFY & copper for 2XFY & YY Double compression type), heat shrinkable sleeves on long ends, crimping paste etc. The work includes testing & commissioning of cables, meggaring values & submitting reports of tests. (One set includes termination of all cores of one end only). All crimping tools & dies shall be arranged by contractor.						
а	Suitable for 2500 CFM AHU	Nos.	4	800	500	1,300	5,200
6.5	CABLE TRAYS						
	Supplying & Fixing of following sizes of GI cable tray duly painted perforated type of height 50mm along with necessary bends, reducers etc. anchored along the wall / suspended from the ceiling with necessary MS supports.						
а	50mm wide	Rmt	10	300	120	420	4,200
	SUB-TOTAL						1,23,90
	GRAND TOTAL						7,99,24

	CHEN -LUCKNOW				art Infra bhil - 9136413050
S/NO		UNIT	QUANTITY	Rate	Amount
5/ NU	DESCRIPTION	UNIT	QUANTITY	Rate	Amount
	Providing, laying, jointing, testing and commissioning of G.I. `C' Class pipes (IS:1239 (Part-I)-1979) including				
	cutting, threading welding etc providing all malleable galvanized iron fittings conforming to IS 1879, viz. Flanges,				
	bends, tees, elbows, reducers, unions, supporting with G. I. clamps, hangers, M.S. brackets etc. including cutting				
1	holes and chases in brick or RCC wall / slabs and making good the same to the Approval of Architect /				
	consultant, complete including painting with one coat of primer and two or more coats of synthetic enamel paint				
	of approved make and shade. (Note- Rigid pipe extension from existing line is considered)				
i)	25 mm dia.	RMT	18	760	13,680
ii)	32 mm dia.	RMT	0		-
iii)	40 mm dia.	RMT	3	945	2,835
	50 mm dia.	RMT	10	1,050	10,500
iv)					
v)	65 mm dia.	RMT	5	1,250	6,250
vi)	80 mm dia.	RMT	0		-
vii)	100 mm dia.	RMT	0		-
2	Providing , fixing testing and commissioning of pendant type sprinkler heads 68 deg. Temp.(Quick response	No	0	650	
Z	type)	No.	0	650	-
	Providing, fixing testing and commissioning of concealed type sprinkler heads 68 deg. Temp.(Extended				
3	coverage /Quick response type)	No.	0		-
4	Providing, fixing testing and commissioning of upright type sprinkler heads 68 deg. temp(Quick response type)-	No.	0		-
	Optional Subject to liasion team requirements		-		
-		Na	12	4.050	40.000
5	Providing, fixing testing and commissioning of upright type sprinkler heads 79 deg. Temp (Quick response type)	No.	12	1,350	16,200
6	Providing & fixing testing and commissioning of braided UL Rated SS Flexible pipe				
i)	1 MT Long	No.	0		
				4.000	40.000
ii)	1.6 MT Long	No.	12	4,000	48,000
7	Gun metal chrome finished Ball valves (PN 16) with fittings of screwedend type.				
I)	40 mm dia.	No.	R.O.		
I)	32 mm dia. (Sprinkler drain-OPTIONAL)	Nos.	1	1,800	1,800
	Butterfly Valves (PN 16) with CI Body, Black Nitrile Body Liner and Nylon Coated SG Iron Disc with material and				
8	labour including hydraulic testing etc. complete as per drawing, specification & to the level of satisfaction of Site				
	Incharge.				
I)	150 mm dia.	No.	R.O.		
1)	100 mm dia.	No.	R.O.		
,				0.000	40.000
I)	65 mm dia. (OPTIONAL)	No.	2	6,600	13,200
9	6kg capacity ABC type dry chemical powder fire Extinguishers with wall mounting brackets	Nos.	4	6,500	26,000
10	6kg capacity K type fire Extinguishers with wall mounting brackets	No.	0		-
11	5kg capacity CO2 type fire Extinguishers with wall mounting brackets	No.	2	8,500	17,000
12	9Lit AR-AFFF type fire Extinguishers with wall mounting brackets	Nos.	R.O.		
	Flow switch on sprinkler distribution header on each floor with 2 SPDT contacts suitably rated, capable of the				
13	high pressure system and connected to fire alarm panel through cable.				
:\		Na			
i)	100 mm dia.	No.	0		-
	Ceasefire 5 Kg Ceiling Mounted Fire Extinguisher Clean Agent FE-36, Zero ODP, Stored Pressure Type, Pressure				
	Gauge, Gross Weight 7.7 Kg, empty Weight 2.7 Kg, Can Height 264MM, Diameter 240MM,Discharge Time less				
14	than 8 Secs, Auto discharge mechanism on temperature rise, applicable on Class A,B,C and electrically started	No.	0		-
	Fire, Can Construction : Deep drawn & Co2 Mig welded, Valve Construction : Forging & Machining, Internal				
	Coating of Can : Epoxy Powder coating, External Coating of Can : Epoxy Polyster Powder coating, Sheet metal				
	thickness : 2.0MM, Helium Leak Detection Test, 5 Years Warranty-model no 1CH21CF				
	GRAND TOTAL				1,55,465

Note : Taxes Extra as applicable.

ADDRES DATE: 6.	SABLE FIRE ALARM BOQ FOR AJ KITCHEN @ LUCKNOW 10.2023				Vart Infr Paresh Gohil - 91		
SR.NO	DESCRIPTION	UNIT	TOTAL QTY.	Supply	Installation	Total Rate	Total Amount
•							
Α	ADDRESSABLE FIRE ALARM SYSTEM - NOTIFIER MAKE						
1	Analog Addressable Fire Alarm Control panel with battery back up for 24 hours normal operation and 15 minutes alarm operation. The control panel, battery charger etc. The panel shall be with 1 loop and expandable upto 2 loop capacity. The Fire Alarm Control Panel shall include a full featured operator interface control and annunciation panel that shall include a backlit 640-character liquid crystal display, individual, color coded system status LEDs, and a QWERTY style alphanumeric keypad for the field programming and control of the fire alarm system. Number of Loops / Fire alarm panels should be worked out based on loop capacity, It shall be selected keeping atlest 20 addresses as spare capacity in each loop. The control panel shall be capable of network expandable upto multiple panels. The panel & all devises should be FM approved and comply UL 864 or equivalent. The enclosure shall also be UL listed or equivalent The quoted rate shall include supply of necessary software and harware for programming the panel with all necessary licence. Should have the Facility to get integrated with the MAIN FAS Panel of the Building. Electrical main LT panel, (PRO).Connecting to BMS on Bacnet or TCP/IP.	Nos	RO				
	 i) Each loop with Min. 125 Devices & Detectors modules connection capability of Addressable FACP) 2 Loop Panel. ii) FACP with all in-built modules & displays. 						
	 iii) FACP with all in-built modules & displays. iiii) 240 volts AC power supply, automatic battery charger, 24 volts sealed lead acid batteries sufficient for 24 hours normal working. iv) Programming & setting up v) system to be capable of operating the system for 2 hours during an emergency condition including all necessary software for remote programming of fire alarm 						
	system through central control station.						
2	Passive Repeater Panel with 80-Character (2x40) display with supervised power supply from FACP. Repeater Panel shall monitor and control (Scroll, Acknowledge, Reset & Mute) all the events of the FACP to which it is connected and it shall have Port Vectoring / Event Filtering capability of showing only ALARMS, TROUBLES or SUPERVISORY or customized combinations of user selected events.		RO.			-	
2.1	Supply installation and testing of signal loop components in a suitable galvanised steel junction box.	Nos.	1	6500	500	7,000	7,000
3	Detectors and Devices						
3.1	Supply,Installation,Testing & Commissioning of Analogue Addressable Monitor module having Rotary, decimal addressing system for monitoring the field devices & shall be capable of providing DPDTcontact rated at 24V DC, 2A.		2	5100	500	5,600	11,200
3.2	Supply,Installation,Testing & Commissioning of Analogue Addressable Relay module having Rotary, decimal addressing system and shall be capable of providing DPDTcontact rated at 24v DC, 2A.		2	5100	500	5,600	11,200
3.3	Supply,Installation,Testing & Commissioning of wall / ceiling mounted Horn cum Strobe rated at 82 dBA @ 3m for Audible annunciation and 75cd flashing at 1 Hz for visual indication and necessary accessories including back box.		2	3200	500	3,700	7,400
3.5	Supply,Installation,Testing & Commissioning of above / below ceiling mounted Analogue Addressable Flash scan Type Photoelectric smoke detectors having Rotary, decimal addressing system with standard base, built in isolation function and junction box. The detector shall be capable to address in the range of 1-159. The detector shall be with Visible bi-color LEDs for 360 deg viewing and shall blink green every time the detector is addressed, and illuminate steady red on alarm.	Nos	6	3800	500	4,300	25,800
3.6	Supply,Installation,Testing & Commissioning of above / below ceiling mounted Analogue Addressable Heat / Thermal detectors having Rotary, decimal addressing system with standard base, built in isolation function and junction box. The detector shall be capable to address in the range of 1-159. The detector shall be with Visible bi- color LEDs for 360 deg viewing and shall blink green every time the detector is addressed, and illuminate steady red on alarm.	Nos	1	3200	500	3,700	3,700

	SSABLE FIRE ALARM BOQ FOR AJ KITCHEN @ LUCKNOW				Vart Infr Paresh Gohil - 91		
SR.NO	DESCRIPTION	UNIT	TOTAL QTY.	Supply	Installation	Total Rate	Total Amoun
3.7	Supply,Installation,Testing & Commissioning of Addressable Break Glass Manual Call Point having Rotary, decimal addressing system and having an integrally mounted addressabla module that monitors and reports contact status.		2	2800	500	3,300	6,600
4	Response indicator.	Nos	RO			-	
	NOTE: FIRE PANEL SHALL BE PROVIDED WITH FACILITY TO INTEGRATE WITH AIRPORT PANEL						
5	CABLES						
	Supplying, laying, testing and commissioning of 1100V grade FIRE RESISTANCE LOW SMOKE multicore, round type, insulated, sheathed, flexible copper conductor control cables with Including necessary end terminations with copper lugs, junction box, crimping identification tags at each end etc.,) RED COLOUR ONLY (MAKE: RR CABLE)						
а	2 core x 1.5 Sq.mm armoured cable(Un-screened, LSZH armoured)	Mtr	220	95	25	120	26,400
6	REWORKS						
	Shifting , relocation and reworking including extending of cable & testing and commissioning of the following devices						
a b	Photoelectric Smoke Detectors (BFC) at actuals. Response Indicator of AFC detectors at actuals	Nos. Nos.	R.O. R.O.			-	
	TOTAL FOR ADDRESSABLE FIRE ALARM SYSTEM						99,300

ССТУ ВО	Q FOR AJ KITCHEN @ LUCKNOW		Va	art Infra			
DATE: 6.	10.2023						
SR.NO	DESCRIPTION	UNIT	TOTAL QTY.	Supply	Installation	Total Rate	Total Amount
II	CCTV SURVIELLIANCE SYSTEM						
1	Supply, Istallation, Testing & Commissioning of 5MP HD Dome Camera Model No. DS-2CE76HOTITMFS	Nos.	7	3800	500	4,300	30,100
2	Supply & Installation of 230/12V -20A DC Power Supply Unit for Camera Make: MRE/ACOORD	Set	1	18500	1500	20,000	20,000
3	4-Channel Embedded DVR, Real Time Recording @ CIF Resolution for all Channels or D1 Resolution on 1st Channel and rest at Real Time @ CIF , Support English OSD, 1 SATA slot available, 230VAC & TCP/IP Connectivity. (Honeywell Make, HDDVR1004 Model)	Nos				-	-
4	8-Channel Embedded DVR, Real Time Recording @ CIF Resolution for all Channels or D1 Resolution on 1st Channel and rest at Real Time @ CIF , Support English OSD, 1 SATA slot available, 230VAC & TCP/IP Connectivity. (Honeywell Make, HDDVR1008 Model)	Nos	1	5000	700	5,700	5,700
5	VGA Flat screen TFT 21" high resolution Monitor with power supply complete	No.	RO			-	
6	8 TB Hard Disk (15 Days)	No.	1	14000	500	14,500	14,500
	Supply & Instllation of Power connector	No.	7	500	100	600	4,200
	Supply & Installation of co-axial connector	No.	14	500	100	600	8,400
7	Supply & laying of 2C x 1.5 sq. mm non-FRLS flexible PVC insulated cable with GI conduit FOR POWER SUPPLY	Mtr	245	65	20	85	20,825
8	Supply & laying of RT-3 Co-axial & Power FRLS Cable	Mtr	245	125	35	160	39,200
9	Supply & Laying of 25mm dia. GI Conduit	Mtr	90	55	20	75	6,750
10	Supply & laying of RG6 cable for video transmission from all cameras to DVR located in Server Room with PVC conduit.	Mtr	RO			-	
	TOTAL FOR CCTV SYSTEM						1,49,675

	TEM BOQ				t Infra il - 9136413050
SR. No	DESCRIPTION	UNIT	TOTAL QTY.	Rate	Amount
A	PA/MUSIC SYSTEM EQUIPMENTS SUPPLY				
1	Supply & Installation of JBL make Loudspeaker (6 watt) CEILING SPKR to match with Airport PA System	Nos.	8	13,500	1,08,000
2	Supply of JBL make Loudspeaker 20 watt wall mount SPKR	Nos.			-
3	Supply, installation, testing & commissioning of Control 24CT Microplus JBL make Speakers	Nos.	RO		
4	Supply of Amplifier with Line matching transformers	Nos.	RO		
5	Supply of DSP with Card Model No. BLU-100/BLU 102	Nos.	RO		
6	Supply of ZONE CONTROLLER Model No. BLU-3	Nos.	RO		
7	Supply of Paging Mic Model No. DST-995	Nos.	RO		
8	Supply of DVD Player for BGM	Nos.	RO		
9	Supply & Laying of 2x2.5 Sq.mm FRLS Speaker Cable. The cost of conduit shall be paid separately.	Mtr.	72	125	9,000
10	Supply of 3x1.5 Sq.mm FRLS Microphone Cable The cost of conduit shall be paid separately.	Mtr.	RO		
11	Supply of 12U (600mmx800mm) Equipment Rack	Nos.	1	4,300	4,300
12	Supply & Laying of 25mm dia. GI Conduit	Mtr.	50	85	4,250
	TOTAL FOR MUSIC SYSTEM EQUIPMENTS				1,25,550

	E COMPRTIVE - MEP @ HOUSE @ LUCKNOW	Pioneer Infra	Vart Infra	Emtech Solutions
		Vipin - 9833187606	Paresh Gohil - 9136413050	Aniket - 9096871414
Sr. No.	DESCRIPTION	Amount	Amount	Amount
1	Electrical	19,88,675	11,48,285	28,44,922
2	PHE	2,80,900	1,53,430	3,37,500
3	HVAC	10,58,450	7,99,245	14,45,339
4	Fire Fighting	1,99,500	1,55,465	1,89,726
5	Fire Alarm	1,15,900	99,300	1,98,430
6	CCTV	2,20,975	1,49,675	2,26,913
7	PA System	1,48,950	1,25,550	53,802
	TOTAL	40,13,350	26,30,950	52,96,632

	EN @ LUCKNOW			Pioneer Infra Vart Infra				Emtech Solution		
ELECTRIC				•	833187606		hil - 9136413050		9096871414	
SR. No	DESCRIPTION	UOM	QTY	Rate	Amount	Rate	Amount	Rate	Amount	
I	PANEL & SWITCHGEAR									
	FANLE & SWITCHGLAR									
	Supply, installation, testing & commissioning of free standing, floor mounting									
	compartmentalized panels fabricated out of CRCA sheet steel sections after carrying out									
	7 tank cleaning process and duly powder coated using Siemens Grey Shade No. RAL									
	7032. The frame structure, doors and gland plates shall have 2.0 mm thick sheets and									
	partitions shall be with 1.6 mm thick CRCA sheet. Base channel size 75 x 40 x 6 mm of ISMC shall be provided. The panel shall be dust and vermin proof with neoprene									
1	gasket. The doors shall be provided with concealed hinges and with brazing wherever									
	required to avoid deformation and shall be earthed. The bus bar shall be of tinned									
	Copper with epoxy supports and shall be insulated with colour coded heat shrink sleeves. The control wiring min. 2,5 Sq.mm shall be ZHLS type. The Panel shall be									
	provided with CTs, phase indication lamps, meters, relays and all switchgear, etc. as per									
	the SLD. The panel shall be complete in all aspects as per the final approval of the									
	Consultant. All componants for Switchgears shall be L&T/Legrand									
а	Providing & installing MAIN LT PANEL as per SLD & Spec.:	Set	1	75,000	75,000	70,000	70,000	1,24,800	1,24,800	
	63 Amps 4 pole, 16kA MCCB with Microprocessor Based overload, short circuit & Earth									
	Fault protection, Energy manager (EM6400NG) with RS485 port for BMS connectivity & 4A with SP MCB with 100/5A-3 Nos., 15VA, CL-1 CT's for metering & of AE make and							-		
	phase indicating lamps Vaishno make with SPMCB. CBCT with microprocesor based EFR									
	Busbar chamber - 1 set, 4 pole 100A Tinned Cu. Busbar with necessary							-		
	OUTGOINGS:							-		
i.	63A 4P MCB – 1 Nos.							-		
ii.	40A 4P MCB – 2 Nos.							-		
iii.	40A DP MCB – 2 Nos.							-		
iv.	MPCB suitable for 2.2kW-2 Nos.							-		
2	Supply, installation, testing & commissioning of Switchgears.(Standard Product)							-		
								-		
а	Supply, Installation, Testing and Commissioning of 40 Amps, 4Pole MCB with ELCB at 300mAh for HVAC Outdoor Isolation all complete with mounting accessories	Nos.	RO					-		
b	Supply,Installation,Testing and Commissioning of 32 Amps,4Pole MCB for HVAC	Nos.	2	4,500	9,000	3,250	6,500	20,800	41,600	
	Outdoor Isolation all complete with mounting accessories. Supply,Installation,Testing and Commissioning of 40 Amps, DP, MCB for UPS/INVERTER									
С	Isolation all complete with mounting accessories for UPS.	Nos.	2	2,200	4,400	2,000	4,000	27,040	54,080	
d	Supply & installation of DOL starter L&T/Siemens/Legrand for 3 kW load	Nos.	RO					-		
е	Supply & installation of DOL starter L&T/Siemens/Legrand for 4 kW load Supply & installation of Star Delta starter as per Type-2 Coordination for 3 kW (4HP)	Nos.	RO					-		
f	load with on / off / trip indication Lamp, on off push button, & phase indication Lamp	Nos.	RO					-		
	.(For Exhaust air fan)(EXISTING UNIT PROVIDED BY MALL)									
a	Supply & installation of Star Delta starter as per Type-2 Coordination for 9.3 kW (12.5HP) load with on / off / trip indication Lamp, on off push button, & phase indication	Nos.	RO					_		
g	Lamp .(For Exhaust air fan)	1105.	RO					-		
	Supply & installation of Star delta starter as per Type-2 Coordination for 5.5 kW (7.5HP)									
h	load with on / off / trip indication Lamp, on off push button, & phase indication Lamp	Nos.	RO					-		
	.(For Fresh air fan) Supply & installation of DOL starter as per Type-2 Coordination for 2.2 kW (3.0HP) load									
i	with on / off / trip indication Lamp, on off push button, & phase indication Lamp .(For	Nos.	RO					-		
	AHU) Supply & installation of DOL starter on new Type 2 Coordination for 1.5 (WV (2.010)									
	Supply & installation of DOL starter as per Type-2 Coordination for 1.5 kW (2.0HP) pump load with on / off / trip indication Lamp, on off push button, & phase indication	Nos.	RO					-		
-	Lamp .(For Scrubber)									
k	80 amps 4P ELMCB 300mA with 63A 5 Pin Ray Roll Socket complete with all mounting accessories – for Indoor Legrand make model No. 6078 80	Nos.	RO					-		
1	63 amps 4P ELMCB 300mA with 63A 5 Pin Ray Roll Socket complete with all mounting	Noc	PO							
I	accessories – for Indoor Legrand make model No. 6078 80	Nos.	RO					-		
m	32 amps 4P MCB with 32A 5 Pin Ray Roll Socket complete with all mounting accessories – for Kitchen Legrand make model No. 6078 80	Nos.	RO					-		
	25 amps 4P MCB with 25A 5 Pin Ray Roll Socket complete with all mounting accessories	Nie -	PC							
n	- for Kitchen Legrand make model No. 6078 80	Nos.	RO					-		
0	25A Rey roll socket complete with 25 amps SPMCB with 3 pin metal clad socket - Legrand make Model No. 6078 41	Nos.	RO					-		
р	20A Rey roll socket complete with 32 amps DPMCB with 3 pin metal clad socket	Nos.	1	2,500	2,500	2,300	2,300	4,160	4,160	
r	Legrand make Model No. 6078 41 5/15A Rey roll socket complete with 15 amps SPMCB with 3 pin metal clad socket -							.,		
q	Legrand make Model No. 6078 41	Nos.	7	2,400	16,800	2,000	14,000	4,160	29,120	
r	Set of 1no 25A Metal clad Socket with MCB, and 2nos 6/16A Switch sockets housed in Fabricated SS Panel suitable for hanging arrangement for Kitchen equipments.	Nos.	RO					-		
q	5/15A Swicth socket complete (IP-65) for Kitchen	Nos.	20	3,200	64,000	3,200	64,000	11,635	2,32,700	
ч 3	SITC of Standalone Gas leak detector with inbuilt sounder for Kitchen	Nos.	RO	0,200	0.,000	2,200	1,000	-	_,52,100	
					1 74 700		1 60 000	-	4 00 400	
	TOTAL FOR MAIN PANEL & SWITCHGEAR				1,71,700		1,60,800	-	4,86,460	
II	INVERTER / UPS							-		
								-		

AJ KITCH	EN @ LUCKNOW	Pioneer Infra Vart Infra Vipin - 9833187606 Paresh Gohil - 9136413050		Emtech Solut 13050 Aniket - 909687					
SR. No	DESCRIPTION	иом	QTY	Rate	Amount	Rate	Amount	Rate	Amount
3N. NU	Supply, Installation, testing and commissioning of 6 KVA UPS System Single Phase I/C &	00101	QII	Rale	Amount	Rale	Amount	Rale	Amount
1	Supply, instantion, testing and commissioning of o kit or sustein single rules i/c & Single Phase O/G complete with 30 Minutes Battery Back-up the required accessories as specified in the drawings & the specifications.	Nos	1	58,000	58,000	52,000	52,000	1,91,917	1,91,917
	TOTAL FOR UPS				58,000		52,000	-	1,91,917
					00,000		02,000	-	1,01,011
III'	DISTRIBUTION BOARDS							-	
	Supply, installation, testing & commissioning of Distribution Boards surface / flush mounted with Double door containing MCB/ELMCB as incomer and SPMCB as outgoing. All MCBs are of 10KA breaking capacity and ELMCBs/RCCB should be of 30mA/100 mA sensivity. The DB shall have appropriate no. of top and bottom knock outs for outgoing circuits and shall be complete with necessary busbars, interconnection terminals and earth studs. All terminations in DB shall be complete with ferulling, dressing and all circuits shall be properly labeled with PVC strip (sticker type) having identification as per the final approval of Consultant. For UPS DB MCB shall be 'D' type and other MCBs shall be 'C' category for lighting and raw power DB LEGRAND/L&T							-	
1	Lighting Distribution Board - LPDB	Nos.	1	38,000	38,000	29,000	29,000	27,431	27,431
	12 WAY TPN DB							-	
	I/C- 1 # 40A FP MCB , 16KA SUB I/C - 3 # 25A DP RCCB 30mA per phase							-	
	O/G - 30 # 10/20A SP MCB							-	
								-	
2	RAW Power Distribution Board - RPDB 6(8) WAY TPN DB	Nos.	RO					-	
	6(8) WAY IPN DB I/C- 1 #40 A FP MCB							-	
	SUB I/C- 3#40 DP ELCB 300mA per ph							-	
	O/G - 18 # 16/20A SP MCB							-	
3	Kitchen Power DB - (KPDB-1)	Nos.	2	38,000	76,000	24,500	49,000	- 29,457	58,914
5	8 WAY TPN DB			00,000	10,000	21,000	10,000	-	00,011
	I/C- 1 #40 A FP MCB							-	
	SUB I/C- 3#32 DP ELCB 100mA per ph O/G - 18 # 16/20A SP MCB							-	
	0/0 - 18 # 10/20A SP MICD							-	
4	EMERGENCY LIGHTING DB (ELDB/UPSDB)	Nos.	1	15,000	15,000	13,000	13,000	6,947	6,947
	12 way SPN DB							-	
	Incomer: 40A DP RCBO 30mA Outgoings :10/16 SP MCB, 'D' Type – 8 Nos							-	
								-	
	TOTAL FOR DISTRIBUTION BOARDS				1,29,000		91,000		93,292
IV	CABLES & ACCESSORIES							-	
	Supply & installation of following LT XLPE FRLSH cables (FINOLEX/RR KABLE/POLYCAB) rated for 600 / 1100 volts AC as per IS standard 1554 Part 1 with necessary M.S. clamps. All cables shall be properly clamped or tied when run on cable trays. All such cables shall be provided with temporary labelling at every 20 mtrs and ten finally with metal identification tags showing the size and the location from/to the specific Panel/DB at both ends.							-	
1	3.5C x 300 Sq. mm A2XFY	Mtr. Mtr.	RO RO					-	
2	3.5C x 240 Sq. mm A2XFY 3.5C x 185 Sq. mm A2XFY	Mtr.	RO					-	
4	3.5C x 150 Sq. mm A2XFY	Mtr.	RO					-	
5	3.5C x 120 Sq. mm A2XFY	Mtr.	RO					-	
6 7	3.5C x 95 Sq. mm A2XFY 3.5C x 70 Sq. mm A2XFY	Mtr. Mtr.	RO RO					-	
8	3.5C x 50 Sq. mm A2XFY	Mtr.	RO					-	
9	3.5C x 35 Sq. mm A2XFY	Mtr.	RO					-	
10 11	4C x 16 Sq. mm A2XFY 4C x 10 Sq. mm A2XFY	Mtr. Mtr.	100 RO	650	65,000	243	24,300	310	31,000
12	4C x 10 Sq. mm A2X1 4C x 10 Sq. mm 2XFY (Cu)	Mtr.	RO					-	
13	4C x 16 Sq. mm 2XFY (Cu)	Mtr.	RO					-	
14	4C x 6 Sq. mm 2XFY Cable (Cu)	Mtr.	30	550	16,500	400	12,000	649	19,470
15 16	4C x 4 Sq. mm 2XFY Cable (Cu) 4C x 2.5 Sq. mm 2XFY Cable (Cu)	Mtr. Mtr.	60 RO	550	33,000	400	24,000	432	25,920
17	3C x 6sq. mm YWY cable (Cu)	Mtr.	20	450	9,000	350	7,000	468	9,360
18	3C x 4sq. mm YWY cable (Cu)	Mtr.	40	450	18,000	350	14,000	356	14,240
19 20	3C x 2.5 Sq. mm YWY cable (Cu) 1C x 10 Sq. mm YY cable (Cu)	Mtr. Mtr.	RO RO					-	
20	1C x 6 Sq. mm YY cable (Cu)	Mtr.	RO					-	
22	1C x 4 Sq. mm YY cable (Cu)	Mtr.	RO					-	
23	SRx1Cx16 Sq.mm YY FRLS Cable (Cu)	Mtr. Mtr	RO RO					-	
24 25	SRx1Cx10 Sq.mm YY FRLS Cable (Cu) SRx1Cx6 Sq.mm YY FRLS Cable (Cu)	Mtr. Mtr.	RO RO					-	
26	SRx1Cx4 Sq.mm YY FRLS Cable (Cu)	Mtr.	RO					-	
								-	
В	Termination of following sizes of cables with Single compression cable gland.(COMET/BRAKO)							-	
1	3.5C x 300 Sq. mm A2XFY	Nos.	RO					-	
2	3.5C x 240 Sq. mm A2XFY	Nos.	RO					-	
3	3.5C x 185 Sq. mm A2XFY	Nos.	RO					-	

AJ KITCH	EN @ LUCKNOW			Pion	eer Infra	Va	rt Infra	Emtec	h Solutions
ELECTRIC	CAL BOQ				833187606		hil - 9136413050		9096871414
SR. No	DESCRIPTION	UOM	QTY	Rate	Amount	Rate	Amount	Rate	Amount
4	3.5C x 150 Sq. mm A2XFY	Nos.	RO						
	3.5C x 120 Sq. mm A2XFY	Nos.	RO					-	
	3.5C x 95 Sq. mm A2XFY	Nos.	RO					-	
	3.5C x 70 Sq. mm A2XFY	Nos.	RO					-	
	3.5C x 50 Sq. mm A2XFY	Nos.	RO					-	
9	3.5C x 35 Sq. mm A2XFY	Nos.	RO					-	
10	4C x 16 Sq. mm A2XFY	Nos.	2	800	1,600	650	1,300	577	1,154
11	4C x 10 Sq. mm A2XFY	Nos.	RO					-	
12	4C x 10 Sq. mm 2XFY (Cu)	Nos.	RO					-	
13	4C x 16 Sq. mm 2XFY (Cu)	Nos.	RO					-	
14	4C x 6 Sq. mm 2XFY Cable (Cu)	Nos.	6	650	3,900	550	3,300	560	3,360
15	4C x 4 Sq. mm 2XFY Cable (Cu)	Nos.	4	650	2,600	500	2,000	498	1,992
16	4C x 2.5 Sq. mm 2XFY Cable (Cu)	Nos.	RO					-	
17	3C x 6sq. mm YWY cable (Cu)	Nos.	4	650	2,600	500	2,000	505	2,020
18	3C x 4sq. mm YWY cable (Cu)	Nos.	4	650	2,600	400	1,600	461	1,844
	3C x 2.5 Sq. mm YWY cable (Cu)	Nos.	RO					-	
20	1C x 10 Sq. mm YY cable (Cu)	Nos.	RO					-	
21	1C x 6 Sq. mm YY cable (Cu)	Nos.	RO					-	
22	1C x 4 Sq. mm YY cable (Cu)	Nos.	RO					-	
	5Rx1Cx16 Sq.mm YY FRLS Cable (Cu)	Nos.	RO					-	
24	5Rx1Cx10 Sq.mm YY FRLS Cable (Cu)	Nos.	RO					-	
25	5Rx1Cx6 Sq.mm YY FRLS Cable (Cu)	Nos.	RO					-	
26	5Rx1Cx4 Sq.mm YY FRLS Cable (Cu)	Nos.	RO					-	
								-	
	TOTAL FOR CABLES & ACCESSORIES				1,54,800		91,500		1,10,360
								-	
V	WIRING & ACCESSORIES	<u> </u>						-	
	Notos -	<u> </u>						-	
	Notes :	<u> </u>						-	
								-	
	1) Rates for point wiring shall include supply & installation of Wires & wiring								
	acccessories such as angle holders/ceiling roses as required. conduits, conduit								
	accessories such as junction boxes, Ts, elbows etc, Switches, sockets & fixtures shall not							-	
	be included in the point wiring rates. These will be counted & paid separately.								
								-	
	2) Unless otherwise specified, all wires in point wiring shall be 2.5 sq.mm							-	
	Stranded copper conductor 1.1 KV grade, I.S.I. marked (P+N+E),							-	
	LSZH) PVC insulated .							-	
	Wires shall be colour coded (Red, Yellow and Blue for Phases,							-	
	Black for Neutral & Green for earth).							-	
								-	
	3) Looping of wires shall be in fittings and switch boxes only							-	
	4) Location of switches/sockets/ DBs shown on the drawings shall							-	
								-	
	be confirmed with the Architect/ Consultant/ Project Manager								
	before installation.							-	
	5) All Surface and concealed Conduits shall be rigid GI conduits of							-	
	size not less than 20 mm dia as per applicable IS.							-	_
	size not less than zo mm dia as per applicable is.							-	
	6)The Contractor can take more than one circuit in the same conduit							-	
	provided they are of the same phase. The size of conduit shall be	<u> </u>						-	
	decided according to the number of wires in it as per applicable IS & as	<u> </u>		L				-	
	specified.							-	
	opeoneo.							-	
	7) Payments for light fixtures & fans will be made separately as per the	1						-	
	items given in 'Light Fixtures & Accessories'.	<u> </u>						-	
								-	
	8) Type & location of light fixtures shown in the drawings are							-	
	tentative and subject to revision as per the recommendation of							-	
	Architect/ Consultant. The quantities (number of points and accessories)							-	
	of point wiring will be revised as actual installed on account of such							-	
	revisions in the layouts.							-	
		1						-	
	9) Circuit wiring from DBs to the switch boards or first light point shall		1					-	
	Be included as primary points & remaining points of the same looping							-	
	shall be considered as Secondary points and shall be counted in nos.							-	
-								-	
	10) Circuit Wiring from DD to Kitchen Davier points shall be used on the second discussed		Γ						
	10) Circuit Wiring from DB to Kitchen Power points shall be measured in running meters							-	
								-	
								-	
	Supply installation tosting & commissioning of maint white for light waits								
	Supply, installation, testing & commissioning of point wiring for light points, power								
	points. Point wiring for primary point shall include wiring from Distribution Board upto								
1	First point of the circuit and shall be measured in nos. Secondary points shall also be							-	
	measured in nos and shall include the remaining light points of the circuit controlled								
	from same distribution board where primary points are controlling. The Power points								
	shall be measured in Nos. Cost of GI conduits and accessories shall be included.								
	Averagepoint length of primary&secondaryto be derived by Contractor, fromthe								
	drawing provided AND+/-1MtrMeasured Radially							-	
a)	Primary Light points controlled by MCB (3R x 2.5 sqmm wire)	Nos.	20	2,450	49,000	1,760	35,200	7,145	1,42,900
-1	, , , , , , , , , , , , , , , , , , , ,			_,	,	,	,=	,	.,,c

	IEN @ LUCKNOW CAL BOQ				er Infra		irt Infra		Solutions 9096871414
SR. No	DESCRIPTION	UOM	QTY	Rate	333187606 Amount	Paresh Gol Rate	hil - 9136413050 Amount	Rate	9096871414 Amount
_		Nos.	90	1,850	1,66,500	1,050	94,500	2,858	2,57,220
b)	Secondary Light points looped in the same circuit. (3R x 2.5 sqmm wire)	NUS.	90	1,850	1,00,500	1,030	94,500	-	2,57,220
2	Supply, installation, testing & commissioning of point wiring for light points, power points. Point wiring for primary point shall include wiring from Switch Board upto First point of the circuit and shall be measured in nos. Secondary points shall also be measured in nos and shall include the remaining light points of the circuit controlled from same switch board where primary points are controlling. The Power points shall be measured in Nos. Cost of GI. conduits, 6A switch & switch board and accessories shall be included.							-	
a)	Primary Light points controlled by Switch (3R x 2.5 sqmm wire)	Nos.	1	1,950	1,950	1,760	1,760	3,036	3,036
b)	Secondary Light points looped in the same circuit. (3R x 2.5 sqmm wire)	Nos.	2	1,650	3,300	1,050	2,100	2,314	4,628
c)	DB to SB & SB to SB circuit wiring : For Switch Operated Primary point @ SB to SB loop point. Wiring for switch board controlled by MCB already installed in DB by using 3 X 2.5 sq. mm flexible LSZH copper wires in 25mm GI conduits as per IS 9537 part-3 or surface mounted.	Mtrs	10	240	2,400	240	2,400	463	4,630
3	Supply, installation, testing & commissioning of point wiring for Emargency light points, power points. Point wiring for primary point shall include wiring from Distribution Board upto First point of the circuit and shall be measured in nos. Secondary points shall also be measured in nos and shall include the remaining light points of the circuit controlled from same distribution board where primary points are controlling. The Power points shall be measured in Nos. Cost of GI conduits and accessories shall be included. Averagepoint length of primary&secondaryto be derived by Contractor, fromthe							-	
	drawing provided AND+/-1MtrMeasured Radially							-	
a)	Primary Light points controlled by MCB (3R x 2.5 sqmm wire)	Nos.	2	2,450	4,900	1,750	3,500	7,145	14,290
b)	Secondary Light points looped in the same circuit. (3R x 2.5 sqmm wire)	Nos.	9	1,850	16,650	1,050	9,450	2,858	25,722
5	Providing point wiring for Raw Power/UPS points 1no. 6/16A switch socket outlet on Skirting level to be looped from the nearest point using 2 x 4.0 sq. mm copper conductor wires and minimum 4.0 sq. mm copper conductor PVC insulated green colour earth wire as per approval of Architect / Consultant. (Cost of GI Conduit / Floor Raceway and switch sockets are considered elsewhere). (Wires shall be LSZH type) Note: Average primary / secondary point length to be derived by Contractor, from the drawing / site provided AND +/- 1 Mtr Measured Radially.							-	
a)	Primary Point	Nos.	8	3,250	26,000	2,900	23,200	7,844	62,752
b)	Secondary points	Nos.	27	2,450	66,150	1,600	43,200	6,404	1,72,908
6	Providing point wiring for Raw Power points 1no. 6A switch socket outlet on Skirting level to be looped from the nearest point using 2 x 2.5 sq. mm copper conductor wires and minimum 2.5 sq. mm copper conductor PVC insulated green colour earth wire as per approval of Architect / Consultant. (Cost of Conduit / Floor Raceway and switch sockets are considered elsewhere). (Wires shall be FRLS type) Note: Average primary / secondary point length to be derived by Contractor, from the drawing / site provided AND +/- 1 Mtr Measured Radially.							-	
a)	Primary Point	Nos.	RO					-	
b)	Secondary points	Nos.	RO					-	
								-	
8	Supply and laying of following PVC insulated copper conductor 1100 volt grade stranded flexible LSZH wire in already laid GI conduit concealed or surface mounted making connections where ever required to complete the installation.(For Kitchen and Bar Power Points) Conduit rate shall be paid separately.							-	
a)	2R x 2.5Sqmm + 1R x 2.5Sqmm Cu. Wires	Mtr.	60	225	13,500	225	13,500	476	28,560
b)	3R x 4Sqmm Cu. Wires	Mtr.	240	310	74,400	310	74,400	526 -	1,26,240
c) d)	4R x 4Sqmm + 2R x 2.5Sqmm Cu. Wires 4R x 6Sqmm + 2R x 2.5Sqmm Cu. Wires	Mtr. Mtr.						-	
- 4/		.vid.						-	
9	Supply & installation of 25 mm dia. GI conduit with pull box / junction box & all							-	
а	accessories for Kitchen & Bar Power wiring as per the requirement - do - but conduit pipe shall be Rigid type.	Mtr.	350	185	64,750	185	64,750	350	1,22,500
b	- do - but flexible conduit pipe	Mtr.	25	85	2,125	85	2,125	111 -	2,775
10	Supply & installation of 20 mm dia. GI conduit with pull box / junction box & all accessories for Lighting & Power wiring as per the requirement							-	
а	- do - but conduit pipe shall be Rigid type.	Mtr.	RO					-	
b	- do - but flexible conduit pipe	Mtr.	RO					-	
11	Supply and installation of Perforated Cable Tray (ASIAN)out of 14 gauge GI sheet complete with necessary fixing arrangement with Anchor Fastener and all other accessories as per the final approval of the Consultant/Architect			4.050	10 505		07.000	-	00.116
a b	300 x 50 x 2mm 200 x 50 x 2mm	Mtr. Mtr.	30 RO	1,350	40,500	900	27,000	2,738	82,140
c	150 x 50 x 2mm	Mtr.	10		-	750	7,500	- 1,727	17,270
d	100 x 50 x 2mm	Mtr.	RO					-	
е	50 x 50 x 2mm	Mtr.	RO					-	
								-	

AJ KITCHEN @ LUCKNOW ELECTRICAL BOQ				Pioneer Infra Vipin - 9833187606		Vart Infra Paresh Gohil - 9136413050		Emtech Solutions Aniket - 9096871414	
SR. No	DESCRIPTION	UOM	QTY	Rate	Amount	Paresh Gor Rate	Amount	Rate	Amount
5N. NO	Supply and installation of GI trunking (SV POWER/ASIAN) with 2 mm thickness &	00101	U II	Rate	Amount	Nate	Amount	Nate	Amount
	properties/clamps for suspension at appropriate intervals & as per the route approved								
12	by Architect/Consultant. (For DATA/CONTROL WIRING/LIGHTING & POWER CIRCUITS /							-	
	KITCHEN)	h dtw	PO						
a b	300 x 50 x 2mm 200 x 50 x 2mm	Mtr. Mtr.	RO RO					-	
С	150 x 50 x 2mm	Mtr.	30	1,150	34,500	1,000	30,000	2,784	83,520
d	100 x 50 x 2mm	Mtr.	RO					-	
e	50 x 50 x 2mm	Mtr.	RO					-	
	Supply and installation of GI raceway with 2 mm thickness & proper ties/clamps at							_	
13	appropriate intervals & as per the route approved by Architect/Consultant. (Cost of							-	
	cutting the floor for laying of raceways to be included).	Mtr.	RO					-	
a b	3 runs of underfloor raceways of size 100 x 40 mm 2 runs of underfloor raceways of size 100 x 40 mm	Mtr.	RO					-	
С	1 runs of underfloor raceways of size 100 x 40 mm	Mtr.	20	950	19,000	650	13,000	2,573	51,460
d	1 runs of underfloor raceway of size 85 x 40 mm	Mtr.	RO					-	
e f	2 runs of underfloor raceway of size 65 x 40 mm 1 runs of underfloor raceway of size 65 x 40 mm	Mtr. Mtr.	RO 10	850	8,500	650	6,500	- 2,080	20,800
	1 runs of underhoor raceway of size 65 x 40 mm	iviti.	10	850	8,300	050	0,500	2,000	20,800
	Supply & installation of GI junction boxes with 2 mm thickness, 2mm thick SS cover with								
	2" extra on all sides SS cover on top and having screw fixed plates on all four sides with								
	knock out holes for conduits. The plates shall be retained on the sidezs having no								
14	conduit or raceway so as to avoid the entry of any unwanted material. Earth stud to be							-	
	provided for all Junction boxes for earthing. Junction box to be prepared as per the final								
	approval of Architect/Consultant. The junction boxes shall be protected from the entry of unwanted material till the completion of the project & the SS plates shall be installed								
	after the final polishing of flooring.								
а	suitable for 450 x 450 x 50 mm	Nos.	RO					-	
b	suitable for 350 x 350 x 50 mm	Nos.	RO					-	
С	suitable for 250 x 250 x 50 mm	Nos.	4	1,350	5,400	950	3,800	8,710	34,840
d	suitable for 150 x 150 x 50 mm	Nos.	RO					-	
	Supply, installation, testing & commissioning of flush mounted plate type switch and							-	
15	switch + sockets with hot dipped GI box complete as per the final approval of							-	
	Architect/Consultant								
a	6A one way plate type switch	Nos. Nos.	2 RO	550	1,100	185	370	334	668
b c	6A 5 pin Socket outlet 6A 5pin switch socket outlet for CCTV & Charging point	Nos.	<u>RU</u>	950	950	450	450	- 376	376
f	3 nos. 6A socket controlled by 1no 16A switch	Nos.	2	1,250	2,500	730	1,460	1,498	2,996
g	2 nos. 6A socket controlled by 2no 16A switch	Nos.						-	
h	USB Point 1 nos. 6/16A socket controlled by1nos 6/16A switch	Nos. Nos.	5 32	750 1,050	3,750 33,600	750 760	3,750 24,320	2,056 927	10,280 29,664
		1105.	52	1,050	33,000	700	24,320	-	29,004
	I phase, 2 Nos x 5/15 amp, bakelite socket & switch, housed in Fabricated SS Panel								
I	suitable for hanging arrangement for Kitchen equipments. (having Two outlet /6	Nos.	1	1,350	1,350	1,300	1,300	1,853	1,853
	modular plate)							-	
	Supplying, installation, Testing and commissioning flush mounting floor metallic boxes IP 66 (at terrace level) with 2 nos of 6/16A International switch & socket outlet + 1 set of								
4.5	blanking plate for 2 data/voice outlet suitable for AMP tyco I/o's of following modules								
16	complete with all installation kits, accessories, required to finish the installation –							-	
	Sample will Approved by Client/Consultant.								
	Cost of Switches, sockets outlet & blanking plat for Data/Voice outlets shall be included.								
16.1	300mm x 300mm x 65/75 mm	Nos.	RO					-	
	Supply, installation of temporary lighting & power arrangement for construction							-	
	purpose of with industrial type switch & sockets/MCB's/ELCB's & lighting fittings as								
17	required to finish the work for interior contractor & necessary electrical protections	doL	1	25,000	25,000	12,500	12,500	11,635	11,635
	throughout the site for construction work till the handover of site. Contractor shall maintain the saftey rules & regulations as per Airport Security Department. The material					,			
	shall be taken back by the contractor.								
								-	
	TOTAL FOR WIRING & ACCESSORIES				6,67,775		5,02,035		13,15,663
VI	LIGHTING FITTINGS							-	
<u> </u>	Installation, testing & commissioning of the following concealed / surface mounted or								
	suspended light fixtures AS PER FINAL APPROVAL FROM							_	
	ARCHITECT/CLIENT/CONSULTANT with lamps, ballast & all necessary mounting &								
	supporting accessories. No additional cost shall be paid for supporting.							-	
1	FILAMENT BULB	Nos.	46	2,200	1,01,200	150	6,900	650	29,900
2	PULLEY LIGHT	Nos.	12	5,200	62,400	150	1,800	650	7,800
3	CHANDELIER	Nos.	4	18,000	72,000	2,000	8,000	2,275	9,100
4	KEG LIGHT TRACK LIGHT	Nos. Nos.	32	4,800 3,800	14,400 1,21,600	250 400	750 12,800	2,275 650	6,825 20,800
6	DECORATIVE LIGHT	Nos.	1	18,000	18,000	250	250	2,275	2,275
7	HANGING SPOT LIGHT	Nos.	12	4,200	50,400	250	3,000	650	7,800
8	LED STRIP LIGHT	Mtr.	47	450	21,150	400	18,800	650	30,550
9 10	SPIKE LIGHT FILAMENT LIGHT EMERGENCY	Nos. Nos.	12 6	2,800 2,200	33,600 13,200	250 150	3,000 900	650 2,275	7,800 13,650
10		1405.	U	2,200	13,200	150	500	2,215	13,030

AJ KITCH	EN @ LUCKNOW				eer Infra 833187606		rt Infra nil - 9136413050		h Solutions 9096871414
SR. No	DESCRIPTION	UOM	QTY	Rate	Amount	Rate	Amount	Rate	Amount
	HANGING SPOT LIGHT EMERGENCY	Nos.	5	4,200	21,000	250	1,250	2,275	11,375
11		1105.	5	4,200	21,000	230	1,230	-	11,373
	TOTAL FOR LIGHTING FIXTURES				5,28,950		57,450		1,47,875
N/II	FARTUNC							-	
	EARTHING Supply and Installation of Maintenance Free Chemical earthing using Electrode of Size							-	
	approx. 38 mm dia +/- 2mm, 3 metres long bonded with 50x6 copper internal strip								
	complete with excavation, civil works, cast iron cover with backfill compound min. 40								
1	KG. The system shall be CPRI tested. Warranty period of chemical earthing from the date of commissioning shall be 5 years.	Nos.	RO						
	Warranty period of chemical earthing from the date of commissioning shall be 3 years. Warranty implies the voltage between earth and neutral will not exceed 0 volts for		NO					_	
	earthing pits installed.								
	(Note: Body earthing provided by Base builder. We have considered Neutral earthing								
-	for UPS & Server racks.)								
	Supply & erection of G.I. strip of 50 x 6 mm used for earthing on wall, cable trays with necessary clamps fixed on wall painted with bituminous paint in an approved manner.	Mtr.	RO					-	
3	Supply & erection of G.I. strip of 25 x 3 mm used for earthing on wall, cable trays with	Mtr.	60	320	19,200	250	15,000	157	9,420
_	necessary clamps fixed on wall painted with bituminous paint in an approved manner.				,		,		-,
4	1 no. 4 sq. mm YY cable in 25mm GI conduit for earthing FOR NETWORK RACK	Mtr.	20	195	3,900	150	3,000	416	8,320
	Supplying & erecting bare copper conductor of 8 swg for earthing purpose Supplying & erecting bare GI conductor of 8 swg for earthing purpose	Mtr. Mtr.	80	110	8,800	110	8,800	59 -	4,720
	Supplying & electing bare CU conductor of 12 swg for earthing purpose	Mtr.						-	
	Supplying & installation testing & commissioning of earth terminal box	Nos.						-	
	TOTAL FOR EARTHING				31,900		26,800	-	22,460
					31,900		20,000	-	22,400
	MISCELLANEOUS							-	
1	Supply & Installation of 6A 3 pin plug top	Nos.	RO					-	
2	Supply & Installation of 16A 3 pin plug top	Nos.	RO					-	
								-	
3	Supply, installation, testing & commissioning of Cat-6 FRLS Cable for Lighting Automation	Mtr.	RO					-	
								-	
4	Supply & laying of Rubber Mats, CPRI tested conforming to standards like BS 921, ASTM-							-	
	D 178 & IEC 479 for different operatng voltage ratings as below. Supply of 2M x 1M Rubber mat suitable for operatng voltage upto 1.1 KV	Set	1	3,500	3,500	3,000	3,000	2,925	2,925
		bet		0,000	0,000	0,000	0,000	-	2,020
5	Supply & fixing of approved shock treatment chart written in English and in local	Nos.	1	1,500	1,500	500	500	2,210	2,210
	Language. The chart shall be framed in Teakwood and covered with glass.							-	
C	Supply & fixing of approved Fire Alarm evacuation plan chart written in English and in	Nee	DO						
6	local Language approved by cleint requrements.	Nos	RO					-	
	Supply & fixing of the best quality LT Danger Boards(415V) for of approved shape and							-	
	size as specified by the local electrical authorities written in English, and local		1	1,300	1,300	500	500	1,950	1,950
	Language								
8	Supply & handed over to client of First Aid Box	Set	RO					-	
	suppry a number of the offent of the box							-	
9	SITC of Emergency Exit signage (battery operated) approval by client / architect /	Nos.	RO					-	
	consultant. Make: Prolite or Equivalent							-	
	TOTAL FOR MISELANIOUS				6,300		4,000		7,085
іх	LOW VOLTAGE SYSTEM							-	
								-	
Α	DATA AND TELEPHONE SYSTEM							-	
	Supply & Installation of 25mm.dia. GI conduit with pull box/ junction box & all							-	
1	accessories for DATA /VOICE/WIFI wiring as per the requirement.	Mtr.	500	175	87,500	175	87,500	343	1,71,500
		L						-	
2	Providing DATA wiring inside 25mm dia GI conduit from each Data outlet to ICT CP Point by using Indoor Type CAT6A,	Mtr.	450	215	96,750	90	40,500	343	1,54,350
								-	
3	Supply & Installation of Internet Jack Unit RJ-45 suitable for CAT6A	Nos.	20	450	9,000	400	8,000	975	19,500
	Supply & Installation of make Cat 6A, UTP Patch Cords, with snagless boots, color							-	
4	matched, Blue, 3 Feet	Nos.	20	950	19,000	400	8,000	3,185	63,700
	Supply & Installation of make Cat CA LITE Batch Could with meriles here it							-	
5	Supply & Installation of make Cat 6A, UTP Patch Cords, with snagless boots, color matched, Blue, 7 Feet	Nos.	10	1,250	12,500	600	6,000	5,135	51,350
								-	
		1							
	Supply & laying indoors multi-pair 0.5mm dia copper PVC insulated and sheathed,								
6	armoured telephone cables on walls, ceiling, cable trays, trunking complete with							-	
6	armoured telephone cables on walls, ceiling, cable trays, trunking complete with clamps, cable markers etc. from MDF to the various tag blocks as specified							-	
6 a	armoured telephone cables on walls, ceiling, cable trays, trunking complete with clamps, cable markers etc. from MDF to the various tag blocks as specified 10 pair cable armoured	Mtr.	40 RO	350	14,000	280	11,200	- 180 -	7,200
6	armoured telephone cables on walls, ceiling, cable trays, trunking complete with clamps, cable markers etc. from MDF to the various tag blocks as specified		40 RO RO	350	14,000	280	11,200	- 180 - -	7,200

EN @ LUCKNOW				er Infra		rt Infra		h Solutions
AL BOQ			Vipin - 9	833187606	Paresh Gol	nil - 9136413050	Aniket -	9096871414
DESCRIPTION	UOM	QTY	Rate	Amount	Rate	Amount	Rate	Amount
							-	
Supply & installation of telephone tag block with KRONE terminal connectors, G.I.J.B as								
specified & com-plete with all interconnections and jumper connections bet-ween the							-	
two tag blocks on all floors as shown on drgs.								
50 pair tel. tag block	Nos.	RO					-	
20 pair tel. tag block	Nos.	1	1,500	1,500	1,500	1,500	2,210	2,210
10 pair tel. tag block	Nos.	RO						
TOTAL FOR DATA AND TELEPHONE SYSTEM				2,40,250		1,62,700		4,69,810
				10.99.675		11 49 295		28,44,922
	AL BOQ DESCRIPTION Supply & installation of telephone tag block with KRONE terminal connectors, G.I.J.B as specified & com-plete with all interconnections and jumper connections bet-ween the two tag blocks on all floors as shown on drgs. 50 pair tel. tag block 20 pair tel. tag block 10 pair tel. tag block	DESCRIPTION UOM Supply & installation of telephone tag block with KRONE terminal connectors, G.I.J.B as specified & com-plete with all interconnections and jumper connections bet-ween the two tag blocks on all floors as shown on drgs. 50 pair tel. tag block Nos. 20 pair tel. tag block Nos. 10 pair tel. tag block Nos. TOTAL FOR DATA AND TELEPHONE SYSTEM	AL BOQ DESCRIPTION UOM QTY Supply & installation of telephone tag block with KRONE terminal connectors, G.I.J.B as specified & com-plete with all interconnections and jumper connections bet-ween the two tag blocks on all floors as shown on drgs. Image: Complete with all interconnections and jumper connections bet-ween the two tag blocks on all floors as shown on drgs. RO 50 pair tel. tag block Nos. RO 20 pair tel. tag block Nos. 1 10 pair tel. tag block Nos. RO TOTAL FOR DATA AND TELEPHONE SYSTEM Image: Complete terminal comp	AL BOQ Vipin - 9 DESCRIPTION UOM QTY Rate Supply & installation of telephone tag block with KRONE terminal connectors, G.I.J.B as specified & com-plete with all interconnections and jumper connections bet-ween the two tag blocks on all floors as shown on drgs. Nos. RO 50 pair tel. tag block Nos. Nos. 1 1,500 10 pair tel. tag block Nos. Nos. 1 1,500 TOTAL FOR DATA AND TELEPHONE SYSTEM Image: State St	AL BOQ Vipin - 9833187606 DESCRIPTION UOM QTY Rate Amount Supply & installation of telephone tag block with KRONE terminal connectors, G.I.J.B as specified & com-plete with all interconnections and jumper connections bet-ween the two tag blocks on all floors as shown on drgs. Nos. RO Common Plete with all interconnections and jumper connections bet-ween the two tag blocks on all floors as shown on drgs. Nos. RO Common Plete with all interconnections and jumper connections bet-ween the two tag block Nos. RO Common Plete with all interconnections and jumper connections bet-ween the two tag block Nos. RO Common Plete with all interconnections and jumper connections bet-ween the two tag block Nos. RO Common Plete with all interconnections and jumper connections bet-ween the two tag block Nos. RO Common Plete with all interconnections and jumper connections bet-ween the two tag block Nos. RO Common Plete with all interconnections and jumper connections bet-ween the two tag block Nos. RO Common Plete with all interconnections and jumper connections bet-ween the two tag block Nos. RO Common Plete with all interconnections and jumper connections and jumper connections and plete with all interconnections and jumper connections and jumper connectins and jumper connections	AL BOQ Vipin - yath Strenge Paresh Gol DESCRIPTION UOM QTY Rate Amount Rate Supply & installation of telephone tag block with KRONE terminal connectors, G.I.J.B as specified & com-plete with all interconnections and jumper connections bet-ween the two tag blocks on all floors as shown on drgs. Nos. RO Common State Common Sta	AL BOQ Vipin - 933187606 Paresh Gwi- 9136413050 DESCRIPTION UOM QTY Rate Amount Rate Amount Supply & installation of telephone tag block with KRONE terminal connectors, G.I.J.B as specified & com-plete with all interconnections and jumper connections bet-ween the two tag blocks on all floors as shown on drgs. Nos. RO Image: Complete with all interconnections and jumper connections bet-ween the two tag blocks on all floors as shown on drgs. Nos. RO Image: Complete with all interconnections and jumper connections bet-ween the two tag blocks on all floors as shown on drgs. Nos. RO Image: Complete with all interconnections and jumper connections bet-ween the two tag blocks on all floors as shown on drgs. Nos. RO Image: Complete with all interconnections and jumper connections bet-ween the two tag blocks on all floors as shown on drgs. Nos. RO Image: Complete with all interconnections and jumper connections bet-ween the two tag blocks on all floors as shown on drgs. Nos. RO Image: Complete with all interconnections and jumper connections bet-ween the two tag blocks on all floors as shown on drgs. Nos. RO Image: Complete with all interconnections and jumper connections and jumper complete with all interconnections and jumper connections and jumper complete with all interconnections and jumper complete with all interconnections and jumper complete with all interconnectins and jumper complete with all int	AL BOQVipin -> 33187606Paresh Goli - 9136413050Aniket -DESCRIPTIONUOMQTYRateAmountRateAmountRateSupply installation of telephone tag block with KRONE terminal connectors, G.I.J.B as specified & com-plete with all interconnections and jumper connections bet-ween the two tag blocks on all floors as shown on drgs.Nos.ROComComSupplySupplyInstallationSupplyNos.ROInterconnectionInterconnections and jumper connections bet-ween the two tag blocks on all floors as shown on drgs.Nos.ROInterconnectionInterconnectionInterconnectionInterconnectionInterconnectionRowROInterconnectionInter

AJ KITCH	IEN -LUCKNOW-PHE BOQ					er Infra		rt Infra		h Solutions
Item						333187606		1 - 9136413050		9096871414
No.	Description	Make	Unit	Qty	Rate	Amount	Rate	Amount	Rate	Amount
А	WATER SUPPLY PIPING									
1	CPVC Pipes conforming to ASTM D-2846, SDR-11 grade and CPVC solvent weld fittings like elbows, tees, couplars, brass threaded adaptors, insert ring etc. suitable for (domestic and flushing) cold applications rated, concealed piping within wall / floor including jointing with fittings using solvent cement, brass threaded end fittings for making connection to fixtures. The work shall also include chasing the walls with machine wherever required for concealed piping and making good the same after laying of pipes & necessary pressure testing Chasing finishing shall be done with 1:1 cement mixed mortar, restore the same original condition for internal and shaft piping, including necessary hot deep galvanised supports vertical / horizontal, as per direction of Site incharge direction. [The rate shall include supply of S.S.screws and nut bolts etc.chasing in walls done by machine] (For Domestic and Flushing water-Toilet internal) (Pipe shall be tested with 1.5 times working pressure as covered in specifications)	Astral / Ashirwad /supreme / Prince or Approved Equivalent								
1.1	20 mm Dia		R.mt	35	750	26,250	550	19,250	391	13,685
1.2 1.3	25 mm Dia 32mm Dia		R.mt R.mt	-		-		-	554 810	-
1.4	40mm Dia		R.mt	-		-		-	1,071	-
2	Providing & Fixing of gun metal heavy Ball Valves-PN-16 (approved makes as covered in specification) screwed type for water system of the following diameters. Valve shall have with unions.	Leader / Neta / Zolotto / or approved Equivalent							0	
2.1 2.2	20mm Dia 25mm Dia		Nos. Nos.	- 4	4,500	18,000	1,850	7,400	1,402 1,972	5,608
2.2	32mm Dia		Nos.	-		-		-	3,226	-
2.4	40mm Dia		Nos.	-		-		-	4,822 0	-
3 <u>3.1</u> 3.2	Providing ,fixing, testing and commissioning capstan make Water Meter including providing & fixing matching Isolation valves ,strainer, non-return valve,complete with all necessary fittings etc screwed type(15Kgs/Sq.cm). Valve shall have with union. 20 mm Dia incoming line 25 mm Dia incoming line		Nos.	1 1	2,250	2,250	2,250	2,250	0 20,150 0	20,150
3.3	32 mm Dia incoming line		Nos.	RO					0	
4.1	Supply, installation,testing & commissioning of Storage Type Electric Hot Water Generator of mentioned capacity, suitable for 3 KG/cm2 pressure, Wall Mounted / Floor standing type, with Auto Shut-off Thermostat, along with isoltion Valves, Air Release valve, SS flexible connections andall other std accessories 5 L Capacity-	AO Smith or	Nos.	RO					0	
4.2	20 L Capacity		Nos.	1	28,000	28,000	28,000	28,000	37,050	37,050
4.3	35 L Capacity- For shower		Nos.	RO					0	
	Supply, installation,testing & commissioning of Stiebel Type Electric Hot Water Generator of mentioned capacity, suitable for 3 KG/cm2 pressure, Wall Mounted / Floor standing type, with Auto Shut-off Thermostat, along with isoltion Valves, Air Release valve, SS flexible connections andall other std accessories (Optional in pantry)	Stiebel Entron or Approved Equivalent							0	
5.1	3.5kw in pantry- optional		Nos.	RO					0	
5.2 5.3	8kw 13kw-3ph- Subject to load permits		Nos. Nos.	RO RO					0	
0.0			1100.						0	
6	SITC of Eco smart RO-50 with all required accessories .(Prior to order cpacaity and model to need to be confirmed by the kitchen consultant)	Iron Exchange or Approved Equivalent	Nos	1	42,000	42,000	21,000	21,000	0 1,14,400 0	1,14,400
7	SITC of ACO grease trap -model Lipumobil 0.8 -Capacity -48 lit (0.8 LPS) with all required accessories (Order shall be placed as per space available below the counter)	Approved Equivalent	Nos	-		-		-	- 0	-
8	SITC of ACO grease trap -model Lipumobil S -Capacity -32 lit (0.5 LPS) with all required accessories	Aco or Approved Equivalent	Nos	-		-		-	83,055 0	-
	SUB TOTAL OF A					1,16,500		77,900	J	1,90,893
									0	
В	DRAINAGE								0	

AJ KITCH	IEN -LUCKNOW-PHE BOQ		1			er Infra		t Infra I - 9136413050		Solutions
Item	Description	Make	Unit	044		Amount	Rate		Rate	9096871414
No.	Description	IVIAKE	Unit	Qty	Rate	Amount	Rale	Amount	Rate	Amount
	uPVC-SWR pipes conforming to IS 13592/92 including fittings									
	conforming to IS-14935/99 and agri type pipes above 100 mm dia. conforming to IS: 4985, cutting the pipes to required lengths, laying									
	in the position to required grade and level, jointing, supporting with	Supreme /								
	PVC cleat,hot deep galvanised bracket supports,hot deep	Finolex /								
1	galvanised nut-bolts, anchor fastners, PVC coated U-clamp, testing	Prince /							0	
	and rectifying leakages for piping within vertical shafts / supported on wall / hung below slab etc. with all material & labor complete and	Oriplast / or Approved								
	as directed. [The Rate shall include supply and fixing of hotdip	Equivalent								
	galvanised bracket nut bolts/ PVC Coated U-Clamp and screws]									
	Vertical line bracket shall be fixed at every 0.8 mtr to 1.00 mtr.] (For									
	Soil, Waste, Vent and RWP-Internal and vertical shaft).									
1.1	40mm Dia		R.mt	2	750	1,500	140	280	517	1,034
1.2 1.3	50mm Dia 65mm Dia		R.mt R.mt	6	850	5,100	175	1,050	717 1,102	4,302
1.3	75mm Dia		R.mt	- 7	1,050	7,350	210	- 1,470	1,668	- 11,676
1.5	100 mm Dia		R.mt	2	1,250	2,500	360	720	2,412	4,824
1.6	150 mm Dia		R.mt	RO					4303	
									0	
									0	
	Supply, Install PVC Floor Trap for the following pipes including									
2	making all approved quality Solvent cement joints with material &		Nos.	2	2,000	4,000	1,350	2,700	3,900	7,800
	labour etc. all complete as per direction of the engineer-in-charge.									
									0	
	Supply, Install PVC Multi Floor Trap for the following pipes									
3	including making all approved quality Solvent cement joints with		Nos.	4	2,500	10,000	1,550	6,200	3,900	15,600
-	material & labour etc. all complete as per direction of the engineer-				2,000	. 0,000	.,	0,200	2,000	.0,000
	in-charge.								0	
	Supply, Install PVC urinal Traps including fixing with necessary								U	
4	consumables with Circular SS Grating with anti cockroach jali		Nos.	-		-		-	-	-
	Suitable for 75mm Dia outlet									
	O set a lostella DVO. D. Terres lost allos (" loss "literations								0	
5	Supply, Install PVC P- Traps including fixing with necessary consumables with Circular SS Grating with anti cockroach jali		Nos.							
5	Suitable for 75mm Dia outlet		1105.	-		-		-	-	-
									0	
	SUB TOTAL OF B					30,450		12,420		45,236
									0	
									0	
С	SANITARY AND C. P. FITTINGS & FIXTURES								0	
	Only installation, testing and commissioning of sanitary and C.P.								0	
	fittings									
1.1	EWC with seat cover		Nos	-					0	
1.1	Concealed flush tank		Nos			-			-	
1.3	Concealed flush valve		Nos	-		-		-	-	-
	Health Faucet		Nos	-		-		-	-	-
	2 Way Bib-Cock with connection for Health Faucet		Nos	-		-		-	-	-
1.6 1.7	Bided Under Counter Wash Basin including waste Coupling		Nos Nos	R.O.		-		-	0	
1.8	Wash Basin Cock		Nos	-		-		-	-	-
1.9	shower and mixer		Nos	-		-		-	-	-
1.10	Jet Spray		Nos	-		-		-	-	-
1.11	Bath Tub including waste Coupling and nessessary connections		Nos	-		-		-	-	-
1.12	Under Counter Sink including waste Coupling		Nos	1	12,500	12,500	8,600	8,600	3,250	3,250
	Sink Pillar Cock		Nos	1	4,500	4,500	1,850	1,850	455	455
1.14	Bottle Trap for WHB/ sink and urinal with all connecting pipes		Nos	1	3,000	3,000	2,260	2,260	455	455
1.15	Angle Cock with PVC pipe connection upto WHB/sink/Geyser connection		Nos	7	2,850	19,950	2,200	15,400	455	3,185
1.16	Urinal		Nos	-		-		-	-	-
1.17	Auto Flush Valve & Sensor with connecting piping & spreader for		Nos						_	
/	urinal(DC)		1105	-		-		-		-
		-							0	
									0	
	SUB TOTAL -C-SANITARY AND C. P. FITTINGS & FIXTURES (39,950		28,110		7,345
	ONLY INSTALLATIONS)								0	
D	<u>S.S. GRATING</u>								0	
									0	
	Only installations/ testing and commissioning of S.S.Gratings								0	
									0	
									0	
	Making chamber in brick work including internal tiling etc for S.S Grating size, 1200mm x 200mm, in 16 swg 25mm x25mm Square									
1	Pipe around the Frame and 20mmX 200m Square pipe in center		Nos.	- 1		-		_	-	-
	of frame with SS perforated tray (304 SWR). Complete as per									
	architectural detail drawing & Site Engineer's instruction.									
ŀ									0	
									0	

АЈ КІТС	HEN -LUCKNOW-PHE BOQ		I	Γ		er Infra 333187606		rt Infra I - 9136413050		h Solutions 9096871414
ltem No.	Description	Make	Unit	Qty	Rate	Amount	Rate	Amount	Rate	Amount
2	Making chamber in brick work including internal tiling etc for S.S Grating size, 600mm x 300mm, in 16 swg 25mm x25mm Square Pipe around the Frame and 20mmX 20mm Square pipe in center of frame with SS perforated tray (304 SWR). Complete as per architectural detail drawing & Site Engineer's instruction.		Nos.	1	23,500	23,500	12,500	12,500	27,654	27,654
4	Making chamber in brick work including internal tiling etc for S.S Grating size, 300mm x 300mm, in 16 swg 25mm x25mm Square Pipe around the Frame and 20mmX 20mm Square pipe in center of frame with SS perforated tray (304 SWR). Complete as per architectural detail drawing & Site Engineer's instruction.		Nos.	3	23,500	70,500	7,500	22,500	0 22,124	66,372
	SUB TOTAL -D-S.S. GRATING INSTALLATION (ONLY INSTALLATIONS)					94,000		35,000		94,026
	GRAND - TOTAL A, B, C AND D					2,80,900		1,53,430		3,37,500
	NOTES :									
	NOTES : 1. Taxes and duties shall be Extra as actual 2. Supply and installation of Sanitary fixtures and fitting in th kitchen and toilets 3. Supply of S.S. gratings in kitchen									
	3. Supply of S.S. gratings in kitchen									

AJ KITCHEN HVAC BOQ	I @ T3, LUCKNOW AIRPORT					er Infra 333187606				Infra - 9136413050		Emtech Solutions Aniket - 9096871414			
Sr. No.		11-14	0.54	Cummba		Total Rate	Total	Cummbu	Installation	Total Rate	Total	Gunnha	Installatio	Total	4 Total Amount
Sr. NO.	Description Items	Unit	Qty	Supply	Installation	lotal kate	Amount	Supply	Installation	i otal kate	Amount	Supply	n n	Rate	Total Amount
Note:	Prices shall be based on supply, installation, testing & commissioning (SITC) at site including all taxes, duties, transportation & insurance etc.														
1	CHILLED WATER TYPE CEILING SUSPENDED AHU (AIR HANDLING UNIT) :														
1.1	CEILING SUSPENDED AHU :														
	Supply and assembly of Ceiling Suspended Double skin cabinet type														
	AHU Integrated (Air handling units) of following specifications:														
	Frame Structure: It shall consist of 48mm Extruded Aluminium with thermal break profile.														
	Panel: 45mm +/- 2mm thick double skin sandwich panels with														
	rockwool insulation of density 64 kg/m3 or PUF insulation of 48 kg/m3 , The sheet thickness shall be minimum 0.6 mm for the outer														
	skin precoated and 0.8 mm thickness for the inner skin of plain GI.														
	Filtration Section: It shall be provided with single stage washable type of prefilter 'MERV 8' first stage which shall be placed before														
	coil section.														
	Coil Section: Chilled water coil Multi row deep constructed with														
	Aluminium fins of min 0.11mm thick 12 Fins per inch, and copper tubes of min 27 Guage thickness HYRDOPHYLLIC coated fins. Copper														
	tube shall be min 12.5mm diameter. AHRI certified coil.The coil face area velocity shall not exceed 2.5m/sec (500 fpm).														
	Drain Pan: Condensate drain pan shall be fabricated from 18G SS						l								
	304 powder coated, insulated with 13 mm thick closed cell elastomeric(nitrile rubber) insulation.														
	Fan Section: SISW / DIDW Direct drive backward curved fan. The fan														
	section shall be provided with limt switch for safety to shut off fan during Opening of access door. Fan outlet velocity not to exceed														
	1600 FPM. The sound level shall not be exceed more than 60dB @														
	1m from the source. Vibration isolators, Door Limit switch, UV Lamp as per Technical Specifications, AHU Summary Sheet and drawings.														
	Total static pressue has to calculated by Contractor as per the														
	configuration.														
	Other Details : AHU to house control box/ terminal box with Auto- Manual switch and incomer power terminal, with SPP, Over/														
	Undervoltage protection, shortcircuit protection and with no-nc														
	contacts (potential free contact) to be provided for tripping on signal from Fire Dampers / Fire Alarm Panel. Power cable from														
	Terminal box to motor & control cabling of required size upto the thermostat / sensor etc. to be provided. Internal electrical and														
	control wiring of AHU to be provided as factory fitted from AHU														
	supplier. The cost shall include all necessary supports & accessories required for installation.														
	Contractor shall design the chilled water coil according to the														
	following conditions: a. Coil air entering temperature - 75.4°F DB														
	b. Coil air leaving temperature - 54 deg. F DB/ 52.99 deg. F WB														
	c. Chilled water temperature entering - 6.0 deg. C/ 42.8 deg. F														
	d. Chilled water temperature leaving - 13.3 deg. C/ 55.9 deg. F Make : VTS / Zeco / Citizen														
	Type Capacity Tonnage ESP No. of						-	-							
а	(Cfm) TR (mm WG) Rows CS AHU 2500 9.2 25 4/6														
	GENERAL NOTES:														
a.	LHS & RHS VALVE station location to be confirmed.														
b. с.	Fan outlet velocity - 1600 FPM Contractor shall submit static pressure calculation for all above						<u> </u>	<u> </u>							
	units to Client/Consultant.														
d.	Any change in motor HP shall be made at no extra cost to client. Fan efficiency shall be minimum 75%														
e.	The cost shall be included liftting & shifting of each equipment /														
f.	material with all necesaary arrnagement. Also, it shall be included the cost of scaffloding required for Installation of such material /														
	equipment.														
	SUB-TOTAL						-				-				-
2	CHILLED WATER PIPING WITH INSULATION:														
2.1	CHW PIPE														
	SITC of MS Heavy duty class 'C' ERW Chilled Water pipe														
	conforming to IS 1239 - 2004 primer painted including bends, tees, MS supports, PUFF saddles, anchor fasteners, steel angles and any														
	other material required to complete the work. The piping flange connection bolts, washers and nuts should be hot dipped														
	galvanised. Flourscent Plastic Sticker/ paint shall be applied to														
	indicate Water flow directions. Only End flanges to be used for capping of pipes. "Table E" of BS code for flange thickness to be														
	adhered. Make: Jindal Hissar / TATA														
а	Φ 65 mm	Rmt	110	1750	200	1,950	2,14,500	1400	200	1,600	1,76,000	1115	507	1,622	1,78,420
	Φ 40 mm	Rmt	30	1550	200	1,750	52,500	900	200	1,100	33,000	625 0	312 0	937	28,110
2.2	CHILLED WATER PIPING INSULATION - INTERNAL USE											0	0		

	I @ T3, LUCKNOW AIRPORT					er Infra			Vart					n Solutions 909687141	
HVAC BOO				6		33187606	Total	6		- 9136413050	Total	61		Total	
Sr. No.	Description Items	Unit	Qty	Supply	Installation	Total Rate	Amount	Supply	Installation	Total Rate	Amount	Supply	Installatio n	Rate	Total Amount
	SITC of insulation for chilled water. piping. For internal pipe - Stick 25mm thick Nitrile rubber class "O" Closed cell nitrile rubber with anti-microbial coating on it. Insulation shall have Thermal conductivity of 0.033 W/(m.K) and water vapor permeance of 0.10. Joints should be sealed with 50 mm wide 3 mm thick self adhesive tape and putting PVC bands at all supports.											0	0		
а	Make: Armaflex & K-flex Φ 65 mm	Rmt	110	250	100	350	38,500	250	100	350	38,500	1014	338	1,352	1,48,720
	Φ 40 mm	Rmt	30	275	100	375	11,250	200	100	300	9,000	6 <u>2</u> 4	208 0	832	24,960
2.3	BALL VALVE											0	0		
	SITC of following sizes of Ball Valve consist of Cap, Brass Body, Rated for 150 psi SWP, 600 psi WOG Pressure: Two-piece construction; with brass body, regular port, B-16 chrome-plated ball and stem, replaceable "Teflon" or "TFE" seats and seals, blowout-proof stem, vinyl covered steel handle, threaded or soldered ends and extended stem for insulated piping. Same valve shall be used as a Drain valve.											0	0		
a	Make: Zoloto / Audco / Kitz Φ 40 mm	Nos.	8	4500	500	5,000	40,000	4500	450	4,950	39,600	0 2809	0 416	3,225	25,800
		1103.	0	4500	500	5,000	40,000	4500	450	4,950	33,000	0	0	3,223	23,800
2.4	BALL VALVE WITH Y-STRAINER SITC of following sizes of Brass Ball Valve with Y-Strainer consist of Cap, Brass Body, Rated for 150 psi SWP, 600 psi WOG Pressure: Two- piece construction; with brass body, regular port, B-16 chrome- plated ball and stem, replaceable "Teflon" or "TFE" seats and seals, blowout-proof stem, vinyl covered steel handle, threaded or soldered ends and extended stem for insulated piping. Filter element shall be of non magnetic SS sheet with perforation. Make: Zoloto / Audco / Kitz											0	0		
а	Φ 40 mm	Nos.	2	7500	500	8,000	16,000	5800	450	6,250	12,500	5618	832	6,450	12,900
2.5	PIBCV VALVES											0	0		
	SITC of Pressure Independent Balancing cum Control Valves (PIBCV) including integrated motorised control valve and balancing device for combined flow and water balancing requirement. Valve body to be rated for PN 16. The valve design flow rate should be factory calibrated with +/ 5% flow accuracy. Valve shall have necessary measuring ports, drain port, flanges etc., Valve shall also provide temperature sensor with necessary cabling (min 2mtr length to be considered with each valve). The balancing to be done through microprocessor based hand held terminal / POT and the same results shall be furnished in the water balancing report as part of commissioning report and handing over manual.											0	0		
	Make: Oventrop / Siemens / Danfoss											0	0		
a	Φ 40 mm	Nos.	2	6500	500	7,000	14,000	6500	450	6,950	13,900	46475 0	1950 0	48,425	96,850
2.6	Auto Air Vent Valves Make: Anergy / Flamco											0	0		
a	Providing and fitting Auto Vent Valves. SITC of Auto air vent in each risers & common headers & AHU. 3/4" auto vent valves at each coil / riser/ header.	Nos.	4	1800	500	2,300	9,200	1800	450	2,250	9,000	0 3250	0 1300	4,550	18,200
2.7	SITC of Pressure gauges & Thermometers											0	0		
	Make: H Guru / Waree											0	0		
а	Necessary pressure gauges and thermometers 4" Dial type. Water Pressure gauges 150mm dial complete with gauge valves, mounting, fittings and copper tubing extension wherever required. Pressure gauges Range 0-10 Kg/CM2	Nos.	4	7500	800	8,300	33,200	5500	500	6,000	24,000	3250	975	4,225	16,900
b	Thermometers of the mercury in glass stem type and copper separable well complete with guard etc., of industrial grade mounting on water lines. Length 9/12 inches, Thermometer, Range	Nos.	4	1200	300	1,500	6,000	1200	300	1,500	6,000	4550	975	5,525	22,100
с	0-50 deg C Thermowells	Nos.	8	800	300	1,100	8,800	800	300	1,100	8,800	1950	585	2,535	20,280
d	SITC of Brass Test Plug of industrial grade mounting on water	Nos.	RO			-	2,000	0	0	-	2,000	0	0	_,555	
												0	0		
2.8	INSULATED CONDENSATE DRAIN PIPE SITC of UPVC pipes of following sizes for drain with necessary supports and fittings such as elbows, tees & reducers etc. The insulation line to be insulated with nitrile rubber insulation of thickness 9mm and wrapped by weather proof protection tape. The Pipe wherever concealed should also have a parallel line as a standby arrangement in case of block of primary pipe .											0	0		
a	Make: Supreme, Prince, Astral Φ 25 mm	Rmt	10	450	150	600	6,000	300	100	400	4,000	0 390	0 65	455	4,550
b	Φ 32 mm	Rmt	20	500	150	650	13,000	320	100	420	8,400	390	65	455	9,100
	NOTES FOR PIPING:											0	0		
а	Cover all open pipe ends with muslin cloth during construction											0	0		
b	Pipe cleaning & chemical treatment as per specs shall be included in the pining cost				-							0	0		
c	in the piping cost. Unit rates for all indicated sizes of pipes & valves shall be											n	0		
	furnished. Cleaning/Painting of pipe before insulation shall be included in											-			
d e	piping cost. The piping support should be as per tender specification and additional supports are to be provided Contractor as decided by											0	0		
f	Consultant. All the valves shall be insulated with the same material as that of Chilled water pipng and cost of insulation for valves shall be											0	0		
-	considered.											0	0		
-			_	-							_				

	N @ T3, LUCKNOW AIRPORT					er Infra				Infra				h Solutions	
HVAC BOO						33187606	Total			- 9136413050	Total			909687141 Total	
Sr. No.	Description Items	Unit	Qty	Supply	Installation	Total Rate	Amount	Supply	Installation	Total Rate	Amount	Supply	Installatio n	Rate	Total Amount
	SUB-TOTAL						4,62,950				3,82,700	0	0		6,06,890
3	SHEET METAL WORKS:											0	0		
3.1	FACTORY FABRICATED G.I RECTANGULAR DUCT											0	0		
	Supply, Fabrication, Testing, and Commissioning of Factory Fabricated GI Sheet Metal 120GSM Rectangular boxed ducting, Plenums, Cowls, Elbows with turning vanes, Splitters, Reducers, Flanges, Collars etc as per IS and Installaton as per SMACNA standards, The complete ducting shall be provided with MS Supports, Rods, Angles, Flanges, Bracing, Rubber Gaskets, Wooden frames, Canvas Connections, etc. as per drawings and specifications. GI Sheet Makes : Tata, Jindal, SAIL, Ispat											0	0		
	Make: Rola Star, Zeco & Ductofab											0	0		
a b	22 Gauge GI Sheet Metal Duct (751-1500mm) 24 Gauge GI Sheet Metal Duct (0-750mm)	Sq.mtr Sq.mtr	RO 10	1,175	300	- 1,475	14,750	860	250	- 1,110	11,100	965 757	350 350	1,315 1,107	11,070
c d	FACTORY FABRICATED G.I FLAT OVAL DUCT											0	0		
	Supply, Fabrication, Testing, and Commissioning of Factory Fabricated GI Sheet Metal 120GSM Exposed Flat Oval ducting, Elbows with turning vanes, Splitters, Reducers, Collars et as per IS and Installaton as proMACNA standards, The complete ducting shall be provided with MS Supports, Rods, Angles, Flanges, Bracing, Rubber Gaskets, Wooden frames, Canvas Connections, etc. as per drawings and specifications. All exposed ducts has to be powder coated by HVAC contractor, sample and color code to be presented for the validation of Client / Architect. GI Sheet Makes : Tata, Jindal, SAIL, Ispat											0	0		
	Make: Rola Star, Zeco & Ductofab	Co. mbr	10									0	0		
	22 Gauge GI Sheet Metal Duct (751-1500mm) 24 Gauge GI Sheet Metal Duct (0-750mm)	Sq.mtr Sq.mtr	RO 115	1,850	500	2,350	2,70,250	1,050	300	1,350	1,55,250	1447 1136	525 525	1,661	1,91,015
3.3	EXTRUDED ALUMINIUM CEILING GRILLES											0	0		
	Supply, Installation, Testing and Balancing of Powder coated aluminium supply air grilles complete with removable inner core as per approved shop drawing and specifications. The area of grille can be of any geometrical shape (Square/rectangular/Linear). The grilles shall be with 15/30/45° deflections as per requirement. The Colour shall be decided and approved by client and architect.											0	0		
	Curve Grille Make: Cosmos, Air Master & System Air	Sq.mtr	1.5	5,000	1,000	6,000	9,000	5,000	1,000	6,000	9,000	22841	3900	26,741	40,112
3.4	SPIGOT DAMPER FOR ELLIPTICAL DUCT											0	0		
	Supply, installation and testing of galvanized steel construction dampers for circular ducts (VCD) within ducts provided with suitable lever and quadrants for manual control of volume of air flow and for proper balancing of the air distribution system. Make: Cosmos, Air Master & System Air	Sq.mtr	0.5	7,500	1,000	8,500	4,250	4,300	800	5,100	2,550	17169	1950	19,119	9,560
3.5	OPPOSED BLADE DAMPER											0	0	-	
	SITC of Aluminium Opposed blade dampers black powder coated vertical blades type for supply air collar. The damper should be gear operated type.	Sq.mtr	1.5	6500	1000	7,500	11,250	6000	800	6,800	10,200	17169	1950	19,119	28,679
3.6	CANVAS CONNECTION											0	0		
a	SITC of Flexible connections between mouth piece of Fan and initial piece of ducting with inspection zip. Flexible connections shall be double thickness non-flammable material (Fire retardant type).											0	0		
b	For AHU	Nos.	2	9,500	1,200	10,700	21,400	2,860	1,050	3,910	7,820	3900 0	1950 0	5,850	11,700
3.7	CURTAIN TYPE FIRE DAMPER SITC of fire dampers consist of 16G GI frame, 20G GI interlocking blades secured with SS springs, blades outside airstream clamped with fusible link UL-5S5 listed with melting point 165 / 225°F, etc; as per the approved shop drawings and specifications. Make: Carryaire / System Air / Dynacraft / Air Master											0	0		
a b	Bare fire dampers Fusible link as per specification UL 555	Sq.mtr No	0.5	12,500 4,500	1,200 700	13,700 5,200	6,850 5,200	8,200 2,200	1,200 700	9,400 2,900	4,700 2,900	17169 5850 0	1950 2600 0	19,119 8,450	9,560 8,450
	NOTES: The ducting support should be as per tender specification and additional supports are to be provided by Contractor as decided by Consultant.	ļ	ļ									0	0		
	Muslin cloth cover for all air outlets during construction. Pressure testing of complete duct work as per DW/ SMACNA standard.											0	0		
	Silicon sealant for longitudinal & transverse joints as per specification.											0	0		
	Diffusers & grilles shall be powder coated as per color approved											0	0		
	by Architect. SUB-TOTAL						3,42,950				2,03,520	0	0		3,10,144
4	THERMAL & ACOUSTIC INSULATION:											0	0		
4.1	THERMAL INSULATION											0	0		
	Supply & fixing of Thermal insulation for supply air duct using 13mm thick class " 0 " Closed cell nitrile rubber with anti-microbial coating on it. Insulation shall have Thermal conductivity of 0.033 W/(m.K) and water vapor permeance of 0.10. Joints should be sealed with 50 mm wide 3 mm thick self adhesive tape. The duct shall be stick with recommended adhesive.	Sq.mtr	100	550	175	725	72,500	510	165	675	67,500	1235	260	1,495	1,49,500
	Make: Armaflex & K-flex											0	0		

Desc		e T3, LUCKNOW AIRPORT					er Infra				Infra				h Solutions	
Note Description No N	HVAC BOQ					Vipin - 98	33187606	T !		Paresh Gohil	- 9136413050	-		Aniket -		.4
Image Matrix sector Matrix sect	Sr. No.	Description Items	Unit	Qty	Supply	Installation	Total Rate		Supply	Installation	Total Rate		Supply			Total Amount
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Image: sector of control were service of control were	4.2												0	0		
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Image: set of the stand of the original of the stand o			Sq.mtr	25	950	250	1,200	30,000	700	165	865	21,625	1950	585	2,535	63,375
Normality of the source of the sour		foam with anti-microbial protection. Insulation shall have thermal														
Image: Section of the sectin of the section of the section													0	0		
Note Solution (Solution (Solutice)))) <tbol></tbol>		Make: Armatiex & K-tiex											-	0		
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Image: and the problem in the property backward by the proproperty backward by the property backward by the property backwa	5.1	STARTER DANEI											0	0		
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Image in the section of bound on the section of bound of the section of the section of the section of bound of the section of bound of the section of the sectin of the section		MPCB/MCCB, Contactor, Bi-metal O/L relay with SPP, ON/OFF Push											0	J		
br 2000 2 Coordination, Provide Name or																
1 Name 20 2.000 </td <td></td> <td>per Type-2 Coordination. Panel shall have provision to connect with</td> <td></td>		per Type-2 Coordination. Panel shall have provision to connect with														
A. Port ALMOG I	a		Nos.	2	25.000	2.500	27.500	55.000	23.000	2.350	25.350	50.700	85150	5850	91,000	1,82,000
Supply holding: Jayer (Entra proce concession learning and consistency and consis andefinition consistency and consistency and consiste					.,	,	,			.,	.,			0	,	,,
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Bits cold filting on which which we calle for upport in any strategy of many and any strategy of many any strategy of many and any strategy of many any strategy of many and any strategy of many and any strategy of many any strategy of many any strategy of many any strategy		commissioning of following sizes of 1.1 KV grade XLPE insulated														
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Bower to ECK to be provided ner each OUU by electrical contractor. Control Control Contro Contro Contro </td <td></td>																
a binable Proof Calk: Proof Calk Proof C		Power to ELCB to be provided near each ODU by electrical														
Unable for 2300 CPM AHU, D0, Statter Parel Pm 10 90 150 1,100 1100 230 130 1100 100 510 510 85 137 1.000 b Carthing: Carthin: Carthing: <thcarthing:< th=""></thcarthing:<>													0	0		
b Earthing: D			Rmt	10	950	150	1,100	11,000	380	130	510	5,100	-		1,040	10,400
Sale Matter Matrix Image: Constraint of the Bunch of	b	Earthing:											•	0		
Supply,flaing and testing of inline Blu meter for the flow rate & more rature measuremet, consisting mainly of following 3 parts Image and testing of inline Blu meter for the flow rate & how in the image and indicates in the image andifference indicates in the image and indinticates in the image an		8 SWG	Rmt	20	90	40	130	2,600	65	20	85	1,700			91	1,820
Istemporative measurement consisting mainly of following 3 parts Image: Space and Spac	6.3	BTU METER											0	0		
a) Ultrasonic Row Meter I <td></td> <td>0</td> <td>0</td> <td></td> <td></td>													0	0		
b) Matche qui of temp sensor image: sensor <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0</td><td>0</td><td></td><td></td></th<>													0	0		
c) BTU Meter -4 - 20m ADC from flowmeter 0 <td></td> <td>b) Matched pair of temp sensor</td> <td></td> <td>-</td> <td>0</td> <td></td> <td></td>		b) Matched pair of temp sensor											-	0		
application for terms. Ranging from 0 to 50 deg C. Power supply shalb be 26V0 AC (-/) 150 bights with mask 16 sharters to Charget 16 characters LO display with back light, from rate, Velocity, totaliser etc. Output shall be BMS module complexing part of CAST 200 bight 30 bights with back light. Row rate, Velocity, totaliser etc. Output shall be BMS module complexing part of CAST 200 bight 30 bights with back light. Row rate, Velocity, totaliser etc. Output shall be BMS module complexing part of CAST 200 bight 30 b													0	0		
shall be 240V AC (y-) 15%. Displayshall have 16 characters LD display with back light, from rate, Velocity, totaliser etc. Output listers, m ³ , kg etc shall be 240V AC (y-) 15%. Displayshall have key had lockus security shall be 240V AC (y-) 15%. Displayshall have key had lockus security shall be 240V AC (y-) 15%. Displayshall have key had lockus security shall be 240V AC (y-) 15%. Displayshall have key had lockus security shall be 240V AC (y-) 15%. Displayshall have key had lockus security shall be 240V AC (y-) 15%. Displayshall have key had lockus security shall be 240V AC (y-) 15%. Displayshall have key had lockus security shall be 240V AC (y-) 15%. Displayshall have key had lockus security shall be 240V AC (y-) 15%. Displayshall have key had lockus security shall be 240V AC (y-) 15%. Displayshall have key had lockus security shall be 240V AC (y-) 15%. Displayshall have key had lockus security shall be 240V AC (y-) 15%. Displayshall have key had lockus security shall be 240V AC (y-) 15%. Displayshall have key had lockus security shall be 240V AC (y-) 15%. Displayshall have key had lockus security shall be 240V AC (y-) 15%. Displayshall have key had lockus security shall be 240V AC (y-) 15%. Displayshall have key had lockus security shall be 240V AC (y-) 15%. Displayshall have key had lockus security shall be 240V AC (y-) 15%. Displayshall have key had lockus security shall be 240V AC (y-) 15%. Displayshall have key had lockus security shall be 240V AC (y-) 15%. Displayshall have key had lockus security shall be 240V AC (y-) 15%. Displayshall have key had lockus security shall be 240V AC (y-) 15%. Displayshall have key had lockus security<																
display with Back light, flow rate, velocity, totaliser etc. Output shall singlay with Back light, flow rate, velocity, totaliser etc. Output shall singlay with Back light, flow rate, velocity, totaliser etc. Output shall singlay with Back light, flow rate, velocity, totaliser etc. Output shall singlay with Back light, flow rate, velocity, totaliser etc. Output shall singlay with Back light, flow rate, velocity, totaliser etc. Output shall singlay with Back light, flow rate, velocity, totaliser etc. Output shall singlay with Back light, flow rate, velocity, totaliser etc. Output shall singlay with Back light, flow rate, velocity, totaliser etc. Output shall singlay with Back light, flow rate, velocity, totaliser etc. Output shall singlay with Back light, flow rate, velocity, totaliser etc. Output shall singlay with Back light, flow rate, velocity, totaliser etc. Output shall singlay with Back light, flow rate, velocity, totaliser etc. Output shall singlay with Back light, flow rate, velocity, totaliser etc. Output shall singlay with Back light, flow rate, velocity, singlay shall singlay shall <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>																
option. It also should be able to show various units such as gallons, 'A'' Jus, litters, m''''''''''''''''''''''''''''''''''''		display with Back light, flow rate, Velocity, totaliser etc. Output shall											0	0		
Make: Honeywell / Danfoss / Siemens I		option. It also should be able to show various units such as gallons,														
a Dia 65 mm No. 1 60,000 2,500 62,500 55,000 2,000 57,000 97810 3250 1,01,060 1,01,060 c.4 CABLE TERMINATION : ·																
Supply & Making of Cable termination of armoured / unarmoured cables 1.1 KV grade including installation of cable glands, cable lugs (Aluminium for AZXFY & copper for 2XFY & YY Double compression type), heat shrinkable sleeves on long ends, crimping paste etc. The work includes testing & commissioning of cables, meggaring values & submitting reports of tests. (One set includes shall be arranged by contractor.Nos.48005001,3005,2008005001,3001,3003251,6506,500aSuitable for 2SOD CFM AHUNos.48005001,3005,2008005001,3001,3003251,65006.5CABLE TRAYS5656566666666666663upplying & Fixing of following sizes of Gl cable tray duly painted perforated type of height 50m malong with necessary bends, reducers etc. anchored along the wall / suspended from the ceiling with necessary MS supports.7101,1752001,3753001204204,20011052601,36513,650aSUB-TOTALFor HammannFor Hammann72001,37513,7503001204204,20011052601,31513,650	a		No.	1	60,000	2,500	62,500	62,500	55,000	2,000	57,000	57,000	0 97810	3250	1,01,060	1,01,060
Supply & Making of Cable termination of armoured / unarmoured cables 1.1 KV grade including installation of cable glands, cable lugs (Aluminium for AZXFY & copper for 2XFY & YY Double compression type), heat shrinkable sleeves on long ends, crimping paste etc. The work includes testing & commissioning of cables, meggaring values & submitting reports of tests. (One set includes shall be arranged by contractor.Nos.48005001,3005,2008005001,3001,3003251,6506,500aSuitable for 2SOD CFM AHUNos.48005001,3005,2008005001,3001,3003251,65006.5CABLE TRAYS5656566666666666663upplying & Fixing of following sizes of Gl cable tray duly painted perforated type of height 50m malong with necessary bends, reducers etc. anchored along the wall / suspended from the ceiling with necessary MS supports.7101,1752001,3753001204204,20011052601,36513,650aSUB-TOTALFor HammannFor Hammann72001,37513,7503001204204,20011052601,31513,650	6.4	CABLE TERMINATION :											0	0		
lugs (Aluminum for A2XFY & copper for 2XFY & VT Double compression type), heat shrinkable sleeves on long ends, crimping paste etc. The work includes testing & commissioning of cables, meggaring values & submitting reports of tests. (One set includes termination of all cores of one end only). All crimping tools & dies shall be arranged by contractor.Image and the set includes termination of all cores of one end only). All crimping tools & dies shall be arranged by contractor.Image and the set includes termination of all cores of one end only). All crimping tools & dies shall be arranged by contractor.Image and the set includes termination of all cores of one end only). All crimping tools & dies termination of all cores of one end only). All crimping tools & dies shall be arranged by contractor.Image and the set includes termination of all cores of one end only). All crimping tools & dies termination of all cores of one end only). All crimping tools & dies termination of all cores of one end only). All crimping tools & dies termination of all cores of one end only). All crimping tools & dies termination of all cores of one end only). All crimping tools & dies termination of all cores of one end only). All crimping tools & dies termination of all cores of one end only). All crimping tools & dies termination of all cores of one end only). All crimping tools & dies termination of all cores of one end only). All crimping tools & dies termination of all cores of one end only). All crimping tools & dies termination of all cores of one end only). All crimping tools & dies termination of all cores of one end only). All crimping tools & dies termination of all cores of one end only). All crimping tools & dies termination of all cores of one end only. All crimping tools & dies termination of all cores of one end only. All cores of termination one with necessary MS		Supply & Making of Cable termination of armoured / unarmoured														
compression type), heat shrinkable sleeves on long ends, crimping paste etc. The work includes testing & commissioning of cables, meggaring values & submitting reports of tests. (One set includes termination of all cores of one end only). All crimping tools & dies shall be arranged by contractor. Image: Stability of tests (One set includes termination of all cores of one end only). All crimping tools & dies shall be arranged by contractor. Image: Stability of tests (One set includes termination of all cores of one end only). All crimping tools & dies shall be arranged by contractor. Image: Stability of tests (One set includes termination of all cores of one end only). All crimping tools & dies shall be arranged by contractor. Image: Stability of tests (One set includes termination of all cores of one end only). All crimping tools & dies shall be arranged by contractor. Image: Stability of tests (One set includes termination of all cores of one end only). All crimping tools & dies shall be arranged by contractor. Image: Stability of tests (One set includes termination of all cores of one end only). All crimping tools & dies shall be arranged by contractor. Image: Stability of tests (One set includes termination of all cores of one end only). All crimping tools & dies shall be arranged by contractor. Image: Stability of tests (One set includes termination of all cores of one end only). All crimping tools & dies shall be arranged by contractor. Image: Stability of tests (One set includes termination of all cores of one end only). All crimping tools & dies shall be arranged by contractor. Image: Stability of tests (One set includes termination of all cores of one end only). All crimping tools & dies shall be arranged by contractor. Image: Stability of tests (One set includes termination of tests (One set includes terminati																
meggaring values & submitting reports of tests. (One set includes termination of all cores of one end only). All crimping tools & dies shall be arranged by contractor. i		compression type), heat shrinkable sleeves on long ends, crimping											0	0		
termination of all cores of one end only). All crimping tools & dies in in<													-			
a Suitable for 2500 CFM AHU Nos. 4 800 500 1,300 5,200 800 5,000 1,300 5,200 1,300		termination of all cores of one end only). All crimping tools & dies														
Image: space	а		Nos.	4	800	500	1,300	5,200	800	500	1,300	5,200	1300	325	1,625	6,500
Supplying & Fixing of following sizes of GL cable tray duly painted perforated type of height 50mm along with necessary bends, reducers etc. anchored along the wall / suspended from the ceiling with necessary MS supports. Image: Constraint of the ceiling with necessary bends, reducers etc. anchored along the wall / suspended from the ceiling with necessary MS supports. Image: Constraint of the ceiling with necessary bends, reducers etc. anchored along the wall / suspended from the ceiling with necessary MS supports. Image: Constraint of the ceiling with necessary MS supports. Image: Constraint of the ceiling with necessary MS supports. Image: Constraint of the ceiling with necessary MS supports. Image: Constraint of the ceiling with necessary MS supports. Image: Constraint of the ceiling with necessary MS supports. Image: Constraint of the ceiling with necessary MS supports. Image: Constraint of the ceiling with necessary MS supports. Image: Constraint of the ceiling with necessary MS supports. Image: Constraint of the ceiling with necessary MS supports. Image: Constraint of the ceiling with necessary MS supports. Image: Constraint of the ceiling with necessary MS supports. Image: Constraint of the ceiling with necessary MS supports. Image: Constraint of the ceiling with necessary MS supports. Image: Constraint of the ceiling with necessary MS supports. Image: Constraint of the ceiling with necessary MS supports. Image: Constraint of the ceiling with necessary MS supports. Image: Constraint of the ceiling with necessary MS supports. Image: Constraint of the ceiling with necessary MS supports. Image: Constraint of the ceiling with necessary MS supports. Imag													0	0		
reducers etc. anchored along the wall / suspended from the ceiling with necessary MS supports. Image: Support Su	0.5	Supplying & Fixing of following sizes of GI cable tray duly painted											0	J		L
with necessary MS supports. icity icity <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0</td><td>0</td><td></td><td></td></t<>													0	0		
SUB-TOTAL Image: Constraint of the second secon		with necessary MS supports.	Rm+	10	1 175	200	1 275	12 750	200	120	420	1 200	1105	260	1 265	12 650
	d		Ant	10	1,1/5	200	1,375		300	120	420		1105	200	1,305	
GRAND TOTAL 10,58,450 7,99,245 14,45,335		SUB-TOTAL						1,50,050				1,23,900				3,15,430
		GRAND TOTAL						10,58,450				7,99,245				14,45,339

	HEN -LUCKNOW				er Infra		/art Infra		Solutions
BOQ F	DR FIRE FIGHTING SYSTEMS			Vipin - 98	333187606	Paresh G	ohil - 9136413050	Aniket - 9	096871414
S/NO	DESCRIPTION	UNIT	QUANTITY	Rate	Amount	Rate	Amount	Rate	Amount
1	Providing, laying, jointing, testing and commissioning of G.I. `C' Class pipes (IS:1239 (Part-I)-1979) including cutting, threading welding etc providing all malleable galvanized iron fittings conforming to IS 1879, viz. Flanges, bends, tees, elbows, reducers, unions, supporting with G. I. clamps, hangers, M.S. brackets etc. including cutting holes and chases in brick or RCC wall / slabs and making good the same to the Approval of Architect / consultant, complete including painting with one coat of primer and two or more coats of synthetic enamel paint of approved make and shade. (Note- Rigid pipe extension from existing line is considered)								
.,		D1 (T	10	4005	00.050	700	10.000	767	40.000
	25 mm dia.	RMT	18	1225	22,050	760	13,680	767 989	13,806
	32 mm dia.	RMT	0	1550	- 4,650	945	- 2,835	1165	- 3,495
iii)	40 mm dia.	RMT	_	1550		945			
iv)	50 mm dia.	RMT	10	1650	16,500	,	10,500	1578	15,780
,	65 mm dia.	RMT	5	1850	9,250	1,250	6,250	2027	10,135
vi)	80 mm dia.	RMT	0	2250	-		-	2568	-
vii)	100 mm dia.	RMT	0		-		•	3551	-
2	Providing , fixing testing and commissioning of pendant type sprinkler heads 68 deg. Temp.(Quick response type)	No.	0		-	650	-	0 780 0	-
3	Providing , fixing testing and commissioning of concealed type sprinkler heads 68 deg. Temp.(Extended coverage /Quick response type)	No.	0		-		-	0	-
								0	
4	Providing , fixing testing and commissioning of upright type sprinkler heads 68 deg. temp(Quick response type)- Optional Subject to liasion team requirements	No.	0		-		-	0	-
5	Providing , fixing testing and commissioning of upright type sprinkler heads 79 deg. Temp (Quick response type)	No.	12	1850	22,200	1,350	16,200	0 780	9,360
								0	
6	Providing & fixing testing and commissioning of braided UL Rated SS Flexible pipe							0	
i)	1 MT Long	No.	0		-		-	2600	-
ii)	1.6 MT Long	No.	12	4250	51,000	4,000	48,000	3380	40,560
								0	
7	Gun metal chrome finished Ball valves (PN 16) with fittings of screwedend type.							0	
I)	40 mm dia.	No.	R.O.					0	
I)	32 mm dia. (Sprinkler drain-OPTIONAL)	Nos.	1	1,850	1,850	1,800	1,800	11050	11,050
8	Butterfly Valves (PN 16) with CI Body, Black Nitrile Body Liner and Nylon Coated SG Iron Disc with material and labour including hydraulic testing etc. complete as per drawing, specification & to the level of satisfaction of Site- Incharge.							0	
l)	150 mm dia.	No.	R.O.					0	
l)	100 mm dia.	No.	R.O.					0	
I)	65 mm dia. (OPTIONAL)	No.	2	7,500	15,000	6,600	13,200	22750	45,500
9	6kg capacity ABC type dry chemical powder fire Extinguishers with wall mounting brackets	Nos.	4	9,500	38,000	6,500	26,000	0 4940	19,760
10	6kg capacity K type fire Extinguishers with wall mounting brackets	No.	0		-		-	0	-
	5kg capacity CO2 type fire Extinguishers with wall mounting brackets	No.	2	9,500	19,000	8,500	17,000	10140	20,280
12	9Lit AR-AFFF type fire Extinguishers with wall mounting brackets	Nos.	R.O.						
13	Flow switch on sprinkler distribution header on each floor with 2 SPDT contacts suitably rated, capable of the high pressure system and connected to fire alarm panel through cable.								
i)	100 mm dia.	No.	0		-		-		-

AJ KI	CHEN -LUCKNOW			Pione	er Infra		Vart Infra	Emtech	Solutions
BOQ	OR FIRE FIGHTING SYSTEMS			Vipin - 98	33187606	Paresh (Gohil - 9136413050	Aniket - 9	096871414
S/NC	DESCRIPTION	UNIT	QUANTITY	Rate	Amount	Rate	Amount	Rate	Amount
14	Ceasefire 5 Kg Ceiling Mounted Fire Extinguisher Clean Agent FE-36, Zero ODP, Stored Pressure Type, Pressure Gauge, Gross Weight 7.7 Kg, empty Weight 2.7 Kg, Can Height 264MM, Diameter 240MM,Discharge Time less than 8 Secs, Auto discharge mechanism on temperature rise, applicable on Class A,B,C and electrically started Fire, Can Construction : Deep drawn & Co2 Mig welded, Valve Construction : Forging & Machining, Internal Coating of Can : Epoxy Powder coating, External Coating of Can : Epoxy Powder coating, Sheet metal thickness : 2.0MM, Helium Leak Detection Test, 5 Years Warranty-model no 1CH21CF	No.	0		-		-		-
	GRAND TOTAL				1,99,500		1,55,465		1,89,726

Note : Taxes Extra as applicable.

A r r f f a i k l l s s s s f	DESCRIPTION ADDRESSABLE FIRE ALARM SYSTEM - NOTIFIER MAKE Analog Addressable Fire Alarm Control panel with battery back up for 24 hours normal operation and 15 minutes alarm operation. The control panel, battery charger etc. The panel shall be with 1 loop and expandable upto 2 loop capacity. The Fire Alarm Control Panel shall include a full featured operator interface control and annunciation panel that shall include a backlit 640-character liquid crystal display, individual, color coded system status LEDs, and a QWERTY style alphanumeric keypad for the field programming and control of the fire alarm system. Number of Loops / Fire alarm panels should be worked out based on loop capacity, It shall be selected keeping atlets 20 addresses as spare capacity in each loop. The control anel shall be capable of network expandable upto multiple panels. The panel & all devises should be FM approved and comply UL 864 or equivalent. The enclosure shall also be UL listed or equivalent The quoted rate shall include supply of necessary software and harware for progamming the panel with all necessary licence. Should have the Facility to get integrated with the MAIN FAS Panel of the Building. Electrical main LT panel, (PRO).Connecting to BMS on Bacnet or TCP/IP.	Nos	RO	Supply	Installation	- 9833187606 Total Rate	Total Amount	Supply	Paresh Gohil - 91	Total Rate	Total Amount	Supply	Aniket - 90968	Total Rate	Total Amount
A A A r r r r r r r r r r r r r r r r r	Analog Addressable Fire Alarm Control panel with battery back up for 24 hours normal operation and 15 minutes alarm operation. The control panel, battery charger etc. The panel shall be with 1 loop and expandable upto 2 loop capacity. The Fire Alarm Control Panel shall include a full featured operator interface control and annunciation panel that shall include a backlit 640-character liquid crystal display, individual, color coded system status LEDs, and a QWERTY style alphanumeric keypad for the field programming and control of the fire alarm system. Number of Loops / Fire alarm panels should be worked out based on loop capacity, It shall be selected keeping atlest 20 addresses as spare capacity in each loop. The control panel shall be capable of network expandable upto multiple panels. The panel & all devises should be FM approved and comply UL 864 or equivalent. The enclosure shall also be UL listed or equivalent The quoted rate shall include supply of necessary software and harware for progamming the panel with all necessary licence. Should have the Facility to get integrated with the MAIN FAS Panel of the Building. Electrical										Amount				
A r r f f a i k l l s s s s f	Analog Addressable Fire Alarm Control panel with battery back up for 24 hours normal operation and 15 minutes alarm operation. The control panel, battery charger etc. The panel shall be with 1 loop and expandable upto 2 loop capacity. The Fire Alarm Control Panel shall include a full featured operator interface control and annunciation panel that shall include a backlit 640-character liquid crystal display, individual, color coded system status LEDs, and a QWERTY style alphanumeric keypad for the field programming and control of the fire alarm system. Number of Loops / Fire alarm panels should be worked out based on loop capacity, It shall be selected keeping atlest 20 addresses as spare capacity in each loop. The control panel shall be capable of network expandable upto multiple panels. The panel & all devises should be FM approved and comply UL 864 or equivalent. The enclosure shall also be UL listed or equivalent The quoted rate shall include supply of necessary software and harware for progamming the panel with all necessary licence. Should have the Facility to get integrated with the MAIN FAS Panel of the Building. Electrical	Nos	RO												
r c F a i k L S S F S S S S S	normal operation and 15 minutes alarm operation. The control panel, battery charger etc. The panel shall be with 1 loop and expandable upto 2 loop capacity. The Fire Alarm Control Panel shall include a full featured operator interface control and annunciation panel that shall include a backlit 640-character liquid crystal display, individual, color coded system status LEDs, and a QWERTY style alphanumeric keypad for the field programming and control of the fire alarm system. Number of Loops / Fire alarm panels should be worked out based on loop capacity, It shall be selected keeping atlest 20 addresses as spare capacity in each loop. The control anel shall be capable of network expandable upto multiple panels. The panel & all devises should be FM approved and comply UL 864 or equivalent. The enclosure shall also be UL listed or equivalent The quoted rate shall include supply of necessary software and harware for progamming the panel with all necessary licence. Should have the Facility to get integrated with the MAIN FAS Panel of the Building. Electrical	Nos	RO												
						-				-				-	
) Each loop with Min. 12E Devices & Detectors, modules connection capability of														
A	 i) Each loop with Min. 125 Devices & Detectors modules connection capability of Addressable FACP) 2 Loop Panel. 														_
	ii) FACP with all in-built modules & displays. iii) 240 volts AC power supply, automatic battery charger, 24 volts sealed lead acid														
t	batteries sufficient for 24 hours normal working.														
	 v) Programming & setting up v) system to be capable of operating the system for 2 hours during an emergency 														
c	condition including all necessary software for remote programming of fire alarm system through central control station.														
2 F F	Passive Repeater Panel with 80-Character (2x40) display with supervised power supply from FACP. Repeater Panel shall monitor and control (Scroll, Acknowledge, Reset & Mute) all the events of the FACP to which it is connected and it shall have Port Vectoring / Event Filtering capability of showing only ALARMS, TROUBLES or SUPERVISORY or customized combinations of user selected events.	Nos	RO.			-				-				-	
	Supply installation and testing of signal loop components in a suitable galvanised steel junction box.	Nos.	1	6,500	500	7,000	7,000	6500	500	7,000	7,000	70200	3900	74,100	74,100
3 [Detectors and Devices											0	0		
												0	0		
3.1 r	Supply,Installation,Testing & Commissioning of Analogue Addressable Monitor module having Rotary, decimal addressing system for monitoring the field devices & shall be capable of providing DPDTcontact rated at 24V DC, 2A.	Nos	2	6,500	500	7,000	14,000	5100	500	5,600	11,200	5265	650	5,915	11,830
3.2 ł	Supply,Installation,Testing & Commissioning of Analogue Addressable Relay module having Rotary, decimal addressing system and shall be capable of providing DPDTcontact rated at 24v DC, 2A.	Nos	2	6,500	500	7,000	14,000	5100	500	5,600	11,200	5850	650	6,500	13,000
3.3	Supply,Installation,Testing & Commissioning of wall / ceiling mounted Horn cum Strobe rated at 82 dBA @ 3m for Audible annunciation and 75cd flashing at 1 Hz for visual indication and necessary accessories including back box.	Nos	2	3,200	500	3,700	7,400	3200	500	3,700	7,400	8450	650	9,100	18,200
3.5 j	Supply,Installation,Testing & Commissioning of above / below ceiling mounted Analogue Addressable Flash scan Type Photoelectric smoke detectors having Rotary, decimal addressing system with standard base, built in isolation function and junction box. The detector shall be capable to address in the range of 1-159. The detector shall be with Visible bi-color LEDs for 360 deg viewing and shall blink green every time the detector is addressed, and illuminate steady red on alarm.	Nos	6	3,800	500	4,300	25,800	3800	500	4,300	25,800	4680	520	5,200	31,200
3.6 s	Supply,Installation,Testing & Commissioning of above / below ceiling mounted Analogue Addressable Heat / Thermal detectors having Rotary, decimal addressing system with standard base, built in isolation function and junction box. The detector shall be capable to address in the range of 1-159. The detector shall be with Visible bi-color LEDs for 360 deg viewing and shall blink green every time the detector is addressed, and illuminate steady red on alarm.	Nos	1	3,200	500	3,700	3,700	3200	500	3,700	3,700	0 4680	520	5,200	5,200

ADDRESSABLE FIRE ALARM BOQ FOR AJ KITCHEN @ LUCKNOW					Pioneer Infra Vipin - 9833187606			Vart Infra Paresh Gohil - 9136413050				Emtech Solutions Aniket - 9096871414			
SR.NO					Installation	Total Rate	Total Amount	Supply	Installation	Total Rate	Total Amount	Supply	Installation	Total Rate	Total Amount
3.7	Supply,Installation,Testing & Commissioning of Addressable Break Glass Manual Call Point having Rotary, decimal addressing system and having an integrally mounted addressabla module that monitors and reports contact status.	Nos	2	2,800	500	3,300	6,600	2800	500	3,300	6,600	5850	650	6,500	13,000
4	Response indicator.	Nos	RO			-				-		0	0	-	
	NOTE: FIRE PANEL SHALL BE PROVIDED WITH FACILITY TO INTEGRATE WITH AIRPORT PANEL											0	0		
5	CABLES											0	0		
	Supplying, laying, testing and commissioning of 1100V grade FIRE RESISTANCE LOW SMOKE multicore, round type, insulated, sheathed, flexible copper conductor control cables with Including necessary end terminations with copper lugs, junction box, crimping identification tags at each end etc,) RED COLOUR ONLY (MAKE: RR CABLE)											0	0		
а	2 core x 1.5 Sq.mm armoured cable(Un-screened, LSZH armoured)	Mtr	220	145	25	170	37,400	95	25	120	26,400	106	39	145	31,900
6	REWORKS Shifting , relocation and reworking including extending of cable & testing and														
	commissioning of the following devices Photoelectric Smoke Detectors (BFC) at actuals.	Nos.	R.O.												
b	Photoelectric Smoke Detectors (BFC) at actuals. Response Indicator of AFC detectors at actuals	Nos.	R.O.			-				-				-	
	TOTAL FOR ADDRESSABLE FIRE ALARM SYSTEM						1,15,900				99,300				1,98,430

CCTV B	DQ FOR AJ KITCHEN @ LUCKNOW				Pio	neer Infra			Vart In	fra					
DATE: 6	5.10.2023				Vipin -	9833187606			Paresh Gohil - 9	136413050			Aniket - 909	6871414	
SR.NO	DESCRIPTION		TOTAL QTY.	Supply	Installation	Total Rate	Total Amount	Supply	Installation	Total Rate	Total Amount	Supply	Installation	Total Rate	Total Amount
Ш	CCTV SURVIELLIANCE SYSTEM														
1	Supply, Istallation, Testing & Commissioning of 5MP HD Dome Camera Model No. DS-2CE76HOTITMFS	Nos.	7	3,800	800	4,600	32,200	3800	500	4,300	30,100	2925	520	3,445	24,115
2	Supply & Installation of 230/12V -20A DC Power Supply Unit for Camera Make: MRE/ACOORD	Set	1	1,450	350	1,800	1,800	18500	1500	20,000	20,000	0 2340	0 520	2,860	2,860
3	4-Channel Embedded DVR, Real Time Recording @ CIF Resolution for all Channels or D1 Resolution on 1st Channel and rest at Real Time @ CIF , Support English OSD, 1 SATA slot available, 230VAC & TCP/IP Connectivity.	Nos				-	-			-	-	0	0	-	-
4	8-Channel Embedded DVR, Real Time Recording @ CIF Resolution for all Channels or D1 Resolution on 1st Channel and rest at Real Time @ CIF , Support English OSD, 1 SATA slot available, 230VAC & TCP/IP Connectivity.	Nos	1	14,500	800	15,300	15,300	5000	700	5,700	5,700	11583	1950	13,533	13,533
5	VGA Flat screen TFT 21" high resolution Monitor with power supply	No.	RO			-				-		8190	650	8,840	
6	8 TB Hard Disk (15 Days)	No.	1	14,000	500	14,500	14,500	14000	500	14,500	14,500	19890	390	20,280	20,280
	Supply & Instilation of Power connector	No.	7	800	100	900	6,300	500	100	600	4,200	52	26	78	546
	Supply & Installation of co-axial connector	No.	14	800	100	900	12,600	500	100	600	8,400	65	26	91	1,274
7	Supply & laying of 2C x 1.5 sq. mm non-FRLS flexible PVC insulated cable with GI conduit FOR POWER SUPPLY	Mtr	245	220	55	275	67,375	65	20	85	20,825	384	117	501	1,22,745
8	Supply & laying of RT-3 Co-axial & Power FRLS Cable	Mtr	245	125	45	170	41,650	125	35	160	39,200	0 59	0 39	98	24,010
9	Supply & Laying of 25mm dia. Gl Conduit	Mtr	90	175	150	325	29,250	55	20	75	6,750	0 156	0 39	195	17,550
10	Supply & laying of RG6 cable for video transmission from all cameras to DVR located in Server Room with PVC conduit.	Mtr	RO			-				-				-	
	TOTAL FOR CCTV SYSTEM						2,20,975				1,49,675				2,26,913

	HEN @ LUCKNOW				eer Infra		rt Infra		n Solutions
PA SYS	TEM BOQ			Vipin -	9833187606	Paresh Go	hil - 9136413050	Aniket -	9096871414
SR. No	DESCRIPTION	UNIT	TOTAL QTY.	Rate	Amount	Rate	Amount	Rate	Amount
Α	PA/MUSIC SYSTEM EQUIPMENTS SUPPLY								
1	Supply & Installation of JBL make Loudspeaker (6 watt) CEILING SPKR to match with Airport PA System	Nos.	8	13,500	1,08,000	13,500	1,08,000	2,860	22,880
2	Supply of JBL make Loudspeaker 20 watt wall mount SPKR	Nos.			-		-	-	-
3	Supply, installation, testing & commissioning of Control 24CT	Nos.	RO					-	
4	Supply of Amplifier with Line matching transformers	Nos.	RO					-	
5	Supply of DSP with Card Model No. BLU-100/BLU 102	Nos.	RO					-	
6	Supply of ZONE CONTROLLER Model No. BLU-3	Nos.	RO					-	
7	Supply of Paging Mic Model No. DST-995	Nos.	RO					-	
8	Supply of DVD Player for BGM	Nos.	RO					-	
9	Supply & Laying of 2x2.5 Sq.mm FRLS Speaker Cable. The cost of conduit shall be paid separately.	Mtr.	72	225	16,200	125	9,000	133	9,576
10	Supply of 3x1.5 Sq.mm FRLS Microphone Cable The cost of conduit shall be paid separately.	Mtr.	RO					-	
11	Supply of 12U (600mmx800mm) Equipment Rack	Nos.	1	16,000	16,000	4,300	4,300	- 11,596 -	11,596
12	Supply & Laying of 25mm dia. GI Conduit	Mtr.	50	175	8,750	85	4,250	- 195	9,750
	TOTAL FOR MUSIC SYSTEM EQUIPMENTS				1,48,950		1,25,550		53,802

Sarvesh Patil

From: Sent: To:	Irfan Sayed <irfan.sayed@travelfoodservices.com> 14 November 2023 14:48 Stephen P</irfan.sayed@travelfoodservices.com>
Cc:	Sarvesh Patil; Binu Balachandran; Lovejot Sekhon; Suraj Kumbhar; Prakash Mistry; Khushbu Verma; Akshay Sharma; Shama Nair
Subject:	FW: TC Recommendation - LKO - Irish House - MEP contractor
Attachments:	R2 - Price Comparative - Irish House- MEP.xlsx; Safety Requirements.pdf; GTC - Mid Value Domestic On-site Works.pdf; STC - Non Aero works @ LKO-R1.pdf; Human Resources and Industrial Relations Requirements.pdf; Re: Revised Irish House MEP 13 nov 2023; RE: Revised Irish House MEP 13 nov 2023
Importance:	High

Dear Stephen

Find attached contractor finalisation mail from techno commercial team on LKO-T3 – Irish House - D-15/15A – MEP.

Request you to go through the same and release PO on priority basis.

Note :- Civil & Interior PO already release to Vart Infra.

Regards, Irfan Sayed +91 99676 92498 http://www.k-hospitality.com/



From: Manish Mulchandani <<u>Manish.Mulchandani@adani.com</u>> Sent: Tuesday, November 14, 2023 2:33 PM To: Irfan Sayed <<u>irfan.sayed@travelfoodservices.com</u>> Cc: Jatin Jain <<u>Jatin.Jain@adani.com</u>>; Ashish Pandey <<u>Ashish.Pandey1@adani.com</u>>; Utkarsh Singh <<u>Utkarsh.Singh@adani.com</u>>; Ajay Surve <<u>Ajay.Surve@adani.com</u>>; Vaibhav Pandey <<u>Vaibhav.Pandey1@adani.com</u>>; Rahul Sahni <<u>Rahul.Sahni@adani.com</u>>; Prakash Mistry <<u>prakash.mistry@travelfoodservices.com</u>>; Khushbu Verma <<u>khushbu.dayal@travelfoodservices.com</u>>; Akshay Sharma <<u>akshay.sharma@semolinakitchens.com</u>>; Shama Nair <<u>shama.nair@travelfoodservices.com</u>>; Raj Shekhar <<u>Raj.Shekhar@adani.com</u>>; Saikat Pal <<u>Saikat.Pal@adani.com</u>>; Pankaj Rohatgi <<u>Pankaj.Rohatgi@adani.com</u>>; Stephen P <<u>stephen.p@k-corp.in</u>> Subject: TC Recommendation - LKO - Irish House - MEP contractor

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#Subject changed as suitable

Dear Irfan

With reference to subjected works, we hereby recommend below listed vendor for your further action.

Vendor Name	Final Negotiated Amount	Тах	Final Negotiated Amount with Taxes	Project / Outlet	Remark			
M/s. VART Infra	Rs.26,30,950	Rs.4,73,571	Rs.31,04,521	Irish House (MEP) Lucknow, Terminal 3	Finalized Packages: Plumbing Electrical HVAC Fire Fighting Fire Alarm CCTV PA System 			
RA Bill & Payment Terms	RA Bill cycle o	RA Bill cycle of 15 Days. Payment in 15 days from date of submission of bill.						
Other Terms & Conditions	As per STC and	d standard GT	C (Attached).					

Vendor details as follows:

Contact person: Mr. Paresh Gohil Mobile No.: +91 9136413050 Email ID: paresh@vartinfra.com

Attachments for reference:

- 1. Price Comparative
- 2. Quotations from vendor
- 3. Special Terms & Conditions
- 4. General Terms & Conditions
- 5. Safety Requirements
- 6. HR and IR Requirements

Regards, Manish Mulchandani Contracts & Procurement Cell No. | +91 8105870198 Adani Airport Holdings Limited

Office Address | 6th Floor | East, Commerce House 6, Corporate Road, Off S G Highway, Prahladnagar, Ahmedabad 380 051, Gujarat, India



Our Values: Courage | Trust | Commitment

From: Irfan Sayed irfan.sayed@travelfoodservices.com

Sent: Wednesday, November 8, 2023 6:06 AM

To: Manish Mulchandani <<u>Manish.Mulchandani@adani.com</u>>; Raj Shekhar <<u>Raj.Shekhar@adani.com</u>>

Cc: Avadhesh Kumar Singh <<u>Avadhesh.Kumar@adani.com</u>>; Ashish Pandey <<u>Ashish.Pandey1@adani.com</u>>; Utkarsh Singh <<u>Utkarsh.Singh@adani.com</u>>; Ajay Surve <<u>Ajay.Surve@adani.com</u>>; Vaibhav Pandey <<u>Vaibhav.Pandey1@adani.com</u>>; Rahul Sahni <<u>Rahul.Sahni@adani.com</u>>; Prakash Mistry <<u>prakash.mistry@travelfoodservices.com</u>>; Khushbu Verma <<u>khushbu.dayal@travelfoodservices.com</u>>; Akshay Sharma <<u>akshay.sharma@semolinakitchens.com</u>>; Shama Nair <<u>shama.nair@travelfoodservices.com</u>>; Shama Nair

Sarvesh Patil

From:	Tejas Raj <tejas.raj@vartinfra.com></tejas.raj@vartinfra.com>
Sent:	14 November 2023 13:55
То:	Manish Mulchandani
Cc:	Jatin Jain; Utkarsh Singh; Paresh Gohil; Rohit Mistry
Subject:	Re: Revised Irish House MEP 13 nov 2023

CAUTION: This mail has originated from outside Adani. Please exercise caution with links and attachments.

Dear sir

We acknowledge the BOQ send by you amounting Rs.26,30,945/-+ GST as per specification.

With regards

From: Manish Mulchandani <<u>Manish.Mulchandani@adani.com</u>>
 Date: Tuesday, 14 November 2023 at 12:45 PM
 To: Tejas Raj <<u>tejas.raj@vartinfra.com</u>>
 Cc: Jatin Jain <<u>Jatin.Jain@adani.com</u>>, Utkarsh Singh <<u>Utkarsh.Singh@adani.com</u>>, Paresh Gohil <<u>paresh@vartinfra.com</u>>, Rohit Mistry <<u>rohit@vartinfra.com</u>>
 Subject: RE: Revised Irish House MEP 13 nov 2023

Dear Raj

Please ignore the previous file and consider the attached one for your confirmation to proceed.

Regards, Manish Mulchandani

From: Manish Mulchandani Sent: Tuesday, November 14, 2023 12:37 PM

To: Tejas Raj <<u>tejas.raj@vartinfra.com</u>> Cc: Jatin Jain <<u>Jatin.Jain@adani.com</u>>; Utkarsh Singh <<u>Utkarsh.Singh@adani.com</u>>; Paresh Gohil <<u>paresh@vartinfra.com</u>>; Rohit Mistry <<u>rohit@vartinfra.com</u>> Subject: RE: Revised Irish House MEP 13 nov 2023

Dear Raj

As discussed, please find our final rates for your confirmation to proceed.

Regards, Manish Mulchandani

From: Tejas Raj <<u>tejas.raj@vartinfra.com</u>> Sent: Monday, November 13, 2023 11:07 PM To: Manish Mulchandani <<u>Manish.Mulchandani@adani.com</u>>; Paresh Gohil <<u>paresh@vartinfra.com</u>>; Rohit Mistry <<u>rohit@vartinfra.com</u>>; Subject: Revised Irish House MEP 13 nov 2023

CAUTION: This mail has originated from outside Adani. Please exercise caution with links and attachments.

Dear Sir

PFA revised and final MEP for Irish House .

With regards

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STC for Airports Non-Aero Works

Sr. No.	Particulars	Employer's Terms and Conditions
1.	Interpretation of SO Documents	Replace GTC Clause 2.1 with the following: The Contractor has thoroughly examined the documents comprising the SO and is satisfied that there are no ambiguities, discrepancies, inconsistencies, divergences or operation or maintenance impracticalities within and between such documents and that such documents are accurate and sufficient in all respects for the purposes of the performance of its obligations thereunder and hereunder. The several documents forming the SO are to be taken as mutually explanatory of one another, but in case of ambiguities or discrepancies the same shall be brought to the notice of the Employer. The order of precedence of the documents in document at (a) will supersede the document at (b), which will supersede the contents in document at (c) and so on: a. Service Order b. Tender Drawings c. Priced Bill of Quantities (BOQ) d. Special Terms of Contract (STC) e. General Terms of Contract (GTC) f. Technical Specifications g. Safety Requirements
2.	Scope of Work	As per BOQ and drawings provided. Work shall include preparation of shop drawings, as-built drawings, and prototype (if any).
3.	Effective Date	The Effective Date shall mean the date of issuance of the Service Order/letter of award by the Employer to the Contractor.
4.	Site	The Contractor shall perform the Works at location specified in PO and shall have access to the Site from the issuance of order/letter of award or as intimated by Employer, whichever is later.
5.	Completion Schedule	 4.1 Completion period shall be as per the mutually agreed project schedule from the date of Service Order or as notified by Employer subject to Site handover and work front availability. The coordinated schedule with other works shall be mutually agreed between Contractor and project team of Employer after issue of Service Order. 4.2 The Contractor shall mobilise at the Site within Three (03) days from the date of Notice to proceed or commencement date notified by Employer.
6.	Variation	Add the following in continuation to Clause 10.1 of GTC

	 All extra or additional Work done or Work omitted by order of the Employer shall be valued at the Contract Rates set out in the Contract if, in the opinion of the Employer, the same shall be applicable. If the Contract does not contain any rates or prices applicable to the extra or additional work, then suitable rates or prices shall be derived by the Employer based on the following: a. The rates for a nearest similar item of Work as are specified in the Contract. b. If no rate is specified in the Contract for the Work, and which cannot be derived in the manner specified above, then such work shall be carried out at the rates derived as follows: i. The direct and indirect cost of labour and ii. The material cost shall be inclusive of all Taxes (Except GST), delivered to the Site. iii. Operational cost of plants and equipment. iv. In addition, the Contractor shall be entitled for overheads and profit at the rate of 15% of the cost of (i + ii + iii) as above and prevailing taxes not covered under i, ii and iii above. v. The Contractor has to submit all original invoices and supporting documents for the valuation of variations.
Basic cost / Base rate of Material	5.1 The Basic cost / Base rate of Material as specified in the BOQ shall be FOR site and shall be inclusive of applicable Taxes (except GST), transportation charges, loading and other charges except unloading at site as unloading is a part of item rate and in the scope of the Contractor.
Taxes	GST shall be paid at actuals, as per the rates specified in the BOQ. BOCW Cess, if applicable, shall be directly paid by the Employer.
Payment Terms	 Running Account Bill for actual work done at site shall be raised at 15 days cycle which shall be paid within 15 days after submission subject to the verification by the Employer. RA Bill shall accompany the following documents: (a) Draft invoice followed by Tax Invoice, including details such as item number, Contractor's GST identification number and permanent account number: one (1) set of original and two (2) sets of copies; (b) Basic Cost / Base Rate variation statement (c) Inspection release note and/or measurement sheets duly certified by the Employer's representative; (d) Reconciliation statement of Free Issue Materials/ Adhoc Payments / Advance (if applicable); (e) Copy of insurance policies to be procured by the Contractor; and (f) Copy of statutory registrations as required for performance of the Works under the SO Documents.
	rate of Material Taxes

Sr. No.	Particulars	Employer's Terms and Conditions
		Final Bill: Final Bill shall be submitted within 30 days from Commissioning, handing over the site to Employer and on submission of the following documents:
		 (a) [invoice/Final Invoice]: one (1) set of original and two (2) sets of copies; (b) Basic Cost / Base Rate variation statement (c) Provisional Acceptance Certificate issued by the Employer. (d) final reconciliation statement of Free Issue Material/ Adhoc Payments / Advance (if applicable); (e) [no-claim certificate for release of final payment]; and (f) [undertaking for compliance with labour laws].
		It shall be paid within 15 Days of submission as above subject to verification by the Employer.
10.	8.1 Delay Liquidated Damages	Three percent (3%) of the SO Price (along with applicable GST), for each completed week of delay or part thereof, subject to a maximum of Six percent (6%) of the SO Price.
11.	9.1 Advance Payment Bank Guarantee	Not Applicable as there is no Advance payment
12.	Retention Money	A sum of 5% of the gross value of work certified (incl. of GST) for each Bill shall be deducted and. shall be refunded / released to the Contractor, on his written application, after the successive completion of Defect Liability Period. The retention money, provided by the Contractor in whatsoever form, shall not bear any interest
13.		Defect Liability Period
	Period	The Defect Liability Period shall be for a period of Twelve (12) months from the date of Completion as per the Completion Schedule.
		Warranty
	Warranty	 Warranty for all Equipment (if any) shall be for a period of twenty-four (24) months or as per the OEM whichever is higher. For Waterproofing and Anti termite (if included in Scope of Works), warranty (on Rs. 100 Stamp paper) shall be 10 Years unless specified otherwise in BOQ/Service order.
14.	MSME Status	If the Contractor is registered as a [<mark>micro/small/medium</mark>] enterprise under the Micro, Small and Medium Enterprises Development Act, 2006 and the rules and regulations made thereunder, the Contractor shall furnish documentary evidence with respect to its status as a [micro/small/medium] enterprise.

Sr. No.	Particulars	Employer's Terms and Conditions
15.	Acceptance of Tender Documents	The contractor has agreed and confirmed that they have gone through complete tender documents which include, General Terms of Contract, HR & IR Compliance, Safety Compliance, Technical Specifications, Tender Drawings and Approved Make list etc. shared and discussed during the tender process and rates submitted are as per the details. They have also done site visit and investigation.
16.	Specific Agreed Terms	Escalation: No Escalation is applicable.
	rems	Quantity Variation : This is Item Rate package and quantity for any individual item may vary to any extent, however individual rate shall remain same.
		Free Issue Material: Nil
		Utilities and Facilities: All Boarding. Lodging, travel, storing material transportation to work location etc. (as applicable) shall be in Contractor scope, Employer shall not be responsible for any delay occurred due to such incident.
		Storage: Shall be in contractor scope. Space (if available) shall be provided by Employer but responsibility of storage, security of material, loading/un-loading etc shall be in contractor scope. Contractor shall restore space provided for storage in its original condition.
		Water and Electricity: Water Shall be provided free of cost by the Employer on single point. Electricity shall be provided by the Employer free of cost till the time Electricity Board connection is installed at the Airport after which it shall be on chargeable basis.
		Health Protocol: Contractor shall follow Govt. of India Guidelines related to spread of Covid-19 virus or any viral disease and any other advisory issued from time to time.
		Local Liaising/Octroi: Contractor shall make his own arrangement for any permission required for Dumping of material (not applicable to the items where dumping location is given by Employer).
		Work Permit/Entry Passes: Contractor shall make his own arrangement for Work Permit, Parking, Vehicle entry passes, parking charges etc. for execution of work required, however the Employer will assist the contractor for the same.
		Debris Management: Contractor will be responsible for making the site clean and follow all guidelines related to EHS and Safety.



GENERAL TERMS AND CONDITIONS (MID VALUE DOMESTIC ON-SITE WORKS)

Revision 1 dated March 15, 2021

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1. Definitions

1.1 Unless the context otherwise requires, the terms capitalized and used herein or in any other document which is part of the SO Documents and the defined terms set forth in this Clause 1, together with their respective grammatical variations and cognate expressions, shall have the meanings specified herein:

Acceptable Bank	shall mean a 'scheduled bank' in India (as set forth in the Second Schedule to the Reserve Bank of India Act, 1934), excluding any co-operative or gramin (rural) bank.		
Additional Tests	shall have the meaning ascribed to the term in Clause 22.6.		
Advance Payment Bank Guarantee	shall mean unconditional and irrevocable first demand bank guarantee(s) provided by the Contractor to the Employer in terms of Clause 8, to secure the advance payment(s) made by the Employer to the Contractor.		
Affiliate	shall mean, with respect to any Party, any Person which directly or indirectly, Controls, is Controlled by or is under common Control with it.		
Basic Price	shall mean the amount payable by the Employer to the Contractor for performance of the Scope of Work determined in accordance with Clause 4, which shall be inclusive of applicable Taxes (except GST and BOCW Cess), labour and other statutory charges, gratuity amounts, cost of materials, consumables, tools and tackles, cost for Contractor's Equipment, insurance charges, margin, overheads, charges for bank guarantees and all other costs associated with performance of the Scope of Work and other obligations under the SO Documents, unless otherwise specified in the Service Order.		
BOCW Cess	shall mean the cess payable under the Building and Other Construction Workers Welfare Cess Act, 1996.		
BOQ	shall mean the bills of quantity and items forming part of the Works, and item rates as set out in the Price Schedule.		
Change	shall	have the meaning ascribed to the term in Clause 10.1.	
Change in Law	shall	mean the occurrence of any of the following after the Effective Date:	
	(a)	enactment, modification or repeal of any new applicable law in India;	
	(b)	any change in the interpretation or enforcement of any applicable law by a decision rendered by the Supreme Court of India; or	
	(c)	increase or decrease in the relevant rates of applicable GST in India,	
	provided that "Change in Law" shall not include any:		
	(i)	change in the interpretation or application of any applicable law except as provided in (b) above;	
	(ii)	enactment, modification, repeal, interpretation or application of any applicable law of India which increases market prices of Equipment and Materials, commodities, raw materials and labour in general, used in the performance of the Works;	
	(iii)	such event of Change in Law listed in points (a), (b) and (c) above, which occurs during the time period of delay in the performance of the Contractor's obligations, for reasons not attributable to the Employer; and	
	(iv)	implication on the SO Price arising out of currency fluctuations.	
Change Proposal	shall	have the meaning ascribed to the term in Clause 10.3.	
Codes and Standards	shall mean the latest applicable international and Indian codes and standards that would be applicable for services and works of a similar type and specification as the Works.		

Commissioning	shall mean the successful operation of the Works at full load (or as may be applicable) in accordance with the terms of the SO Documents and the achievement of the parameters corresponding to the commissioning of the Works, as set out in the Specifications.		
Completion	shall mean the completion of such portions of the Scope of Work pertaining to construction and Commissioning of the Works (as may be applicable), as per the Specifications and in accordance with the terms of the SO Documents.		
Completion Schedule	shall mean the time specified in the Service Order (as extended in accordance with the terms herein), within which the Completion as a whole (or of a part of the Works where a separate time for completion of performance of such part has been prescribed) is to be achieved in accordance with the terms of the SO Documents.		
Confidential Information	shall have the meaning ascribed to the term in Clause 44.1.		
Contract Performance Bank Guarantee	shall mean a single, unconditional, irrevocable first demand bank guarantee provided by the Contractor to the Employer in terms of Clause 8, to secure the performance by the Contractor of the Scope of Work for a time period as specified in the Service Order.		
	shall mean a single, unconditional, irrevocable first demand bank guarantee provided by the Contractor to the Employer in terms of Clause 8, to secure the performance by the Contractor for the entire Scope of Work, including the Contractor's obligations during the Defect Liability Period, as specified in the Service Order.		
Contractor	shall mean the successful bidder who is awarded the SO Documents and which is a company duly incorporated and validity existing as per the provisions of Companies Act, 2013; or a proprietor in case the bidder is a sole proprietorship; or a partnership firm registered under the applicable law.		
Contractor's Equipment	shall mean any and all equipment, materials, tools, supplies and other items brought in by the Contractor for or in connection with the performance of the Works (not constituting Equipment and Materials).		
Control	shall mean, with reference to a Person, the possession, directly or indirectly, of the power or authority to direct or cause the direction of the day to day affairs, management or policies of such Person, whether through the ownership of voting securities, by any agreement with respect to voting of securities, by any other agreement conferring control over management or policy decisions, by virtue of the power to control the composition of the board of directors or managers of such Person, or otherwise.		
Defect Liability Period	shall mean the period more specifically set out in the Service Order, during which the Contractor shall remain liable, at its own cost and expense, for all repairs or replacement of any Defects.		
Defect(s)	shall mean any defect arising from or deficiency in the Works and/or the Equipment and Materials (including any portion performed, provided or executed by any Sub-Contractor) on account of: (i) non-conformance of the Works and/or the Equipment and Materials with the Specifications; or (ii) any faulty design, material, engineering or workmanship, which affects the ability of the Works to comply with the Specifications on a consistent and reliable basis.		
Delay Liquidated Damages	shall have the meaning ascribed to the term in Clause 25.1.		
Disclosing Party	shall have the meaning ascribed to the term in Clause 44.1.		

Drawings and Documents	shall mean all drawings referred to in the SO Documents, along with any modification of such drawings (as approved in writing by the Employer) and shall include: (i) drawings furnished by the Employer or the Employer's consultant to the Contractor; and (ii) engineering data and drawings submitted by the Contractor during the progress of the Scope of Work.
Effective Date	shall mean the date of issuance of the Service Order by the Employer to the Contractor, unless otherwise specified in the Service Order.
Employer	shall mean the company issuing the Service Order, including its legal successors and assigns.
Equipment and Materials	shall mean any and all plant, machinery, equipment, materials and other items, including spare parts, incorporated or intended to be incorporated in the Works.
ESG	shall have the meaning ascribed to the term in Clause 27.1.
Extra Item	shall mean any item not provided for in the BOQ and required for Completion, as more particularly specified in Clause 4.1(c).
Factory Tests	Shall have the meaning ascribed to the term in Clause 22.2(a).
Final Acceptance Certificate	shall have the meaning ascribed to the term in Clause 31.
Final Invoice	shall mean the invoice in respect of all outstanding amounts raised by the Contractor on Completion or on issuance of the Final Acceptance Certificate, as may be specified in the Service Order.
Force Majeure	shall have the meaning ascribed to the term in Clause 38.1.
Free Issue Material	shall mean the material supplied free of charge by the Employer to the Contractor in accordance with Clause 20 and as per the list specified in the Service Order.
Good Industry Practice	shall mean standards, methods, techniques and procedures that are employed by leading, reasonable and prudent service providers engaged in the performance of works and services which are similar to the Works.
GST	shall mean the applicable goods and services tax and/or any compensation or cess payable in terms of the Central Goods and Service Tax Act, 2017, the State Goods and Services Tax Acts passed by the States in the Republic of India, Integrated Goods and Services Tax Act, 2017, the Union Territory Goods and Services Tax Act, 2017, the Goods and Service Tax (Compensation to States) Act, 2017, or any other statute or ordinance issued as a part of the regime applicable to goods and services and the rules, notifications and circulars under each of the foregoing for the time being in effect, as applicable to the Scope of Work performed under the SO Documents.
GTC	shall mean these general terms and conditions.
	shall mean the norms, rules, regulations and policies pertaining to compliances, as provided by the Employer to the Contractor, in respect of human resources and industrial relations that are to be adhered to by the Contractor as may be applicable to the Scope of Work and set out in the annexure which may be identified as 'Human Resources and Industrial Relations Requirements' and attached to the Service Order, as may be amended or modified, from time to time.
Intellectual Property Rights	shall mean all patent, trademark, copyright, design rights, trade secret, mark or any other intellectual property rights (whether registered or not) applicable to or utilised in the Works licensed, granted or assigned by the Contractor or any Contractor's Affiliate to, or otherwise vested in the Employer pursuant to the terms of the SO Documents.



Interim Change Order	shall have the meaning ascribed to the term in Clause 10.5.		
Latent Defect(s)	shall mean inherent Defects in design, workmanship or material which has surfaced after the Defect Liability Period and which could not be determin during routine inspection and which may hinder or endanger the norr operation of the Works.		
Latent Defect Liability Period	⁷ shall mean the period of five (5) years commencing from the date of exp the Defect Liability Period, during which the Contractor shall remain liable own cost and expense for all repairs or replacement of any Latent Defect.		
Party	shall mean the Employer or the Contractor, as applicable.		
Performance Bank Guarantee	shall mean a single, unconditional, irrevocable first demand bank guara provided by the Contractor to the Employer in terms of Clause 8, to se performance of the Contractor's obligations during the Defect Liability Peri		
Performance Guarantee	shall mean the guaranteed standards and parameters of operation and/or performance of the Works as set out in the Specifications.		
Performance Guarantee Tests	shall mean the test(s) that may be conducted by the Contractor with regard to the Works to ascertain whether the installed Works, or the specified parts thereof, are able to achieve the Performance Guarantee.		
Person	shall mean individuals, firms, companies, corporations, trusts, government entities, joint ventures and other bodies, whether incorporated or not.		
Price Schedule	shall mean the schedule annexed to the Service Order, setting out the prices payable in respect of the Works.		
Provisional Acceptance Certificate	shall have the meaning ascribed to the term in Clause 23.5.		
Punch-List Items	shall mean such items of work which, in the Employer's determination, individually or in any combination, do not have an adverse effect on the safety, functioning, operability or integrity of the use of the whole or part of the Works for its intended use.		
Receiving Party	shall have the meaning ascribed to the term in Clause 44.1.		
Running Account Bills	shall mean the periodic bills raised by the Contractor based on the progress of the Works performed, but shall not include the Final Invoice.		
Safety Requirements	shall mean the safety norms, rules, regulations and policies provided by the Employer to the Contractor, as may be applicable to the Scope of Work and set out in the annexure which may be identified as 'Safety Requirements' and attached to the Service Order, as may be amended or modified, from time to time.		
Scope of Work	shall mean the Works and such other activities required to be performed by the Contractor under the SO Documents, as specifically set out in Clause 3.		
Service Order	shall mean the service order issued by the Employer.		
Shortfall Liquidated Damages	shall have the meaning ascribed to the term in Clause 25.2.		
Site	shall mean the location designated by the Employer for the performance of the		
	Works (or any part thereof), as specified in the Service Order.		

SO Price	shall mean the Basic Price plus applicable GST, payable to the Contractor for performance of its obligations under the SO Documents, as specified in the Service Order.
Specifications	shall mean all Drawings and Documents, referred standards, various technical guidelines, quality standards, technical documents, specifications, provisions and requirements which pertain to the method and manner of performing the Scope of Work and to the quantities and qualities of the Works and the Equipment and Materials to be furnished under the SO Documents, as set out in the annexure which may be identified as 'Price Schedule' or 'Specifications' and attached to the Service Order, as may be amended or modified from time to time.
Sub-Contractor	shall mean (i) any Person to whom any part of the Scope of Work has been subcontracted by the Contractor, or (ii) any supplier from whom the Contractor purchases any item(s) required for the performance of the Scope of Work (including any Equipment and Materials), and shall include the successors and permitted assigns of such entities.
Taxes	shall mean and include taxes, duties, levies, cess, GST, royalty and other similar imposts by whatever name called, whether in the nature of indirect tax or direct tax and whether or not imposed at the federal, state, municipal or any other level.
Term	shall have the meaning ascribed to the term in Clause 9.1.
ΤΡΙΑ	shall mean the third party inspection agency appointed and/or authorized by the Employer for carrying out inspection and review of the Works.
Works	shall mean all the works performed by the Contractor as per the Specifications and the terms of the SO Documents, which may pertain to or include engineering, design, procurement, installation, erection, construction, supervision testing, commissioning and handing over services, as may be applicable and as specified in the Service Order.

2. Interpretation of SO Documents

- 2.1 Subject to the order of precedence as set out below, all documents forming part of the SO Documents are intended to be correlative, complementary and mutually explanatory. The SO Documents shall be read and construed together as a single document and where these documents are at variance with each other, for the purpose of interpretation, the priority of the documents shall be in the following sequence:
 - (a) The Service Order.
 - (b) The Specifications, including all Schedules, Drawings and Documents and any other documents.
 - (c) The GTC.
 - (d) Any other Schedules and Annexures forming part of the SO Documents.
- 2.2 In the event of any inconsistency:
 - (a) between the text of the Clauses, the Annexures and the Specifications hereto, the text of the Clauses shall prevail;
 - (b) between the text of the Specifications and the Annexures hereto, the text of the Specifications shall prevail; and
 - (c) between the provisions and particulars of one Annexure and those of any other Annexure, the provisions and particulars of the Annexure more specific to the provision which is inconsistent shall prevail.
- 2.3 Notwithstanding the sub-division of the SO Documents into sections, every part of each document shall be deemed to be supplementary to and complementary of each other.
- 2.4 All headings and marginal notes to the items of the GTC, the Service Order, the Specifications or to any other document forming part of the SO Documents are solely for the purpose of giving a concise

indication of the general subject matter thereof and not a summary of the contents. Such headings and marginal notes shall not be deemed to be part of or be used in the interpretation or construction of the said document.

- 2.5 Words incorporating the singular only shall also include the plural and vice-versa where the context requires. Words of any gender are deemed to include the other gender(s).
- 2.6 The term 'Clause', 'Schedule' or 'Annexure' refers to a specified clause, schedule or annexure of the GTC, unless otherwise expressly specified.
- 2.7 Reference to the words 'include', 'including' and 'included' shall be construed without limitation.
- 2.8 For the purposes of the SO Documents, the words and abbreviations that have well-known technical or trade meanings used but not defined in the SO Documents, shall be construed in accordance with such recognized technical or trade meanings.
- 2.9 Reference to any legislation, law, regulation or to any provision thereof shall include references to any such law as it may be amended, supplemented or re-enacted from time to time (whether before or after the date of the SO Documents) and any reference to a statutory provision shall include any subordinate legislation made from time to time under that provision.
- 2.10 The SO Documents are a joint draft product of the Parties, and any rule of statutory interpretation interpreting agreements against a party primarily responsible for drafting the agreement shall not be applicable to the SO Documents.
- 2.11 All approvals provided by a Party under the SO Documents shall be in writing and, for the purposes of the SO Documents, 'in writing' shall mean and include printing, electronic mail and letters.
- 2.12 Any reference to the SO Documents shall include all amendments, changes and modifications made to the SO Documents in accordance with the provisions hereof.

3. Scope of Work

- 3.1 The detailed Scope of Work shall be as specified in the Service Order and Specifications. The Contractor shall be bound to ensure that the Works, the performance of the Works and the Equipment and Materials used therein, if any, are compliant with the Specifications and Codes and Standards, as set out in the SO Documents.
- 3.2 The Contractor shall, unless specifically excluded in the SO Documents, perform all such incidental work and activities with respect to such items not specifically mentioned in the SO Documents but can be reasonably inferred as required or necessary to complete the Scope of Work, as if such work, activities and/or items were expressly mentioned in the SO Documents. However, the Contractor shall not perform any extra or additional work and activities which do not form part of or can be inferred from the Scope of Work, unless such additional work is included in the SO Documents by way of an amendment. Except as otherwise expressly provided in the SO Documents, the Contractor agrees and acknowledges that the Contractor shall perform all of its obligations and responsibilities under the SO Documents at its own risk, cost and expense.
- 3.3 The Works shall be complete in every respect with all mountings, fittings, fixtures and standard accessories normally supplied with such Works. The Contractor shall ensure that the Works shall be fit and suitable for the intended purposes (including attaining the Completion) as evidenced by the SO Documents, and shall comply with the terms of the SO Documents. The Contractor shall not be eligible for any extra payment in respect of such mountings, fittings, fixtures and standard accessories etc., which may be required for the safe operation of the Works in accordance with the Specifications, applicable Codes and Standards and the SO Documents, even though such items may not have been included specifically in the SO Documents.
- 3.4 In addition to provision of Equipment and Materials and all other spare parts, tools and tackles as may be specified in the SO Documents, the Contractor agrees to provide at the Site, all materials, equipment, consumables, accessories and construction supplies as may be required up to completion of the Scope of Work (as applicable), at its own cost and expense.
- 3.5 The Contractor agrees and acknowledges that it has entered into the SO Documents after due and careful inquiry of all matters relating hereto and has satisfied itself in respect of all pertinent matters which may have a bearing upon the performance of the Scope of Work, including the nature, quality and magnitude

of Scope of Work to be performed, availability of personnel and resources, applicable laws and conditions at the Site. The Contractor's failure to acquaint itself and/or consider any applicable condition, situation, requirement or other matter referred to under this Clause or those pertaining to the Scope of Work or the SO Documents shall not relieve the Contractor from performing its obligations under the SO Documents, nor entitle the Contractor to any variation in accordance with Clause 10 herein.

4. Basic Price

4.1 For Basic Price on lump-sum basis

The Basic Price shall be as specified in the Service Order. Unless otherwise provided for in the Service Order or agreed otherwise by the Employer, the Basic Price shall remain firm and no escalation to the Basic Price shall be allowed during the tenure of the SO Documents, including any extensions thereto.

OR

For Basic Price on BOQ basis

- (a) The Basic Price payable to the Contractor shall be calculated on the basis of estimated quantities and rates quoted by the Contractor in the BOQ, and shall be as set out in the Price Schedule. The Contractor acknowledges that the actual amount payable by the Employer to the Contractor may differ from the Basic Price, based on the quantities executed and as certified by the Employer. If the quantity variation results in an increase in the estimated value of the Basic Price, as set out in the Price Schedule, the Parties shall mutually agree upon the revised quantities to be availed under the BOQ and effect necessary amendments to the SO Documents in accordance with Clause 10.
- (b) The unit rates quoted and accepted as per the BOQ shall remain firm till Completion, irrespective of any quantity variation, and shall not be revised under any circumstances and for whatsoever reason till the Completion, except in accordance with Clause 10 or as may be agreed otherwise by the Employer.
- (c) Payment for Extra Items not included in BOQ
 - (i) If any item is not provided for in the BOQ and is required to be executed to achieve Completion, it shall be acknowledged as an Extra Item, and the Contractor on receipt of instructions from the Employer, shall be bound to carry out such Extra Items.
 - (ii) The rate for such Extra Items shall be submitted by the Contractor to the Employer, which shall be calculated in accordance with the procedure set out in the Service Order. The Contractor shall submit the details of the Extra Items executed in the subsequent Running Account Bills.
 - (iii) In the event mutually agreeable rates for the Extra Items are not finalised between the Parties, the Contractor shall proceed to carry out the Works at the provisional rates to be decided by the Employer. The Employer shall certify payments to the Contractor, based on such provisional rates fixed by the Employer, for the Works performed on the basis of such Extra Item, subject to upward or downward adjustment after such provisional rates are finalized.
- 4.2 The Contractor shall be deemed to have satisfied itself as to the correctness and sufficiency of the Basic Price, which shall, except as otherwise provided for in the SO Documents, cover all its obligations under the SO Documents. Unless otherwise provided for in the Service Order, the Basic Price shall be inclusive of all applicable Taxes (except GST and BOCW Cess), labour and other statutory charges, gratuity amounts, cost of materials, consumables, tools and tackles, cost for Contractor's Equipment, insurance charges, margin, overheads, charges for bank guarantees and all other costs associated with the performance of the Scope of Work and other obligations under the SO Documents.

5. Payment Terms

- 5.1 The SO Price shall be payable as per the terms specified in the Service Order. The Contractor agrees that it shall not be entitled to payment of idling, down-time or any other analogous charges in respect thereof, for any reason whatsoever.
- 5.2 Unless otherwise specified in the Service Order, the mode of payment through which the Employer shall make payments under the SO Documents shall be wire transfer. Any bank charges incurred with respect

to such payments shall be to the respective accounts of the Parties. No payment made by the Employer herein shall be deemed to constitute acceptance by the Employer of the Works or any part(s) thereof. All payments payable by the Employer to the Contractor under the SO Documents shall be made subject to any deductions or withholdings required under applicable laws and the Employer shall provide the Contractor with the relevant documents and/or certificates required under applicable laws in connection with such deductions or withholdings.

5.3 Invoicing

(a) The Contractor shall raise Running Account Bills and the Final Invoice for claiming payment of the SO Price, in accordance with the stipulations set out in the Service Order and the manner as set out below. The Contractor shall ensure that all invoices raised under the SO Documents are correct and complete. Unless otherwise specified in the Service Order, the Contractor shall raise all invoices in an electronic format and comply with the applicable laws in this respect, including the relevant procedure pertaining to e-invoicing. Any invoice issued by the Contractor, in any manner other than the manner prescribed under the SO Documents shall be deemed to be an incorrect invoice and shall not be eligible for any payments under the Service Order.

(b) <u>Running Account Bills</u>

- (i) The SO Price shall be paid to Contractor on a *pro-rata* basis against Running Account Bills within such number of days of submission of such Running Account Bills and along with the documents as specified in the Service Order.
- (ii) The Contractor shall submit Running Account Bills on the basis of the total value attributable to completed portion of the Works for claiming payment, in a manner and form as specified in the Service Order.
- (iii) All Running Account Bills shall be verified and approved by the Employer prior to payment. The Employer shall not be obligated to pay Running Account Bills unless they are fully supported by documents as prescribed herein and have been verified and confirmed by Employer.
- (iv) Payments made against Running Account Bills shall be treated as advance payments against amounts that would be payable against the Final Invoice.
- (c) <u>Final Payment</u>
 - (i) The Final Invoice shall be drawn up by the Contractor in the form approved by the Employer and shall include all outstanding claims. The Contractor hereby waives, any and all outstanding amounts with reference to any part of the Works and/or any outstanding claims that are not claimed by the Contractor in the Final Invoice. The Contractor shall submit to the Employer, such certificates as may be specified in the Service Order, along with the Final Invoice, in a form and manner as may be specified in the Service Order.
 - (ii) In the event the SO Price is payable on a BOQ basis, the Contractor shall draw up the Final Invoice by applying the applicable rates specified in the BOQ to the actual installed quantities. If the Employer determines that any part of the Works is not covered by any item in the BOQ, then the Employer shall determine the applicable rates in respect thereof. If the Parties do not agree on the BOQ applied in the Final Invoice, the Parties shall mutually discuss and agree on the revisions that may be required to the Final Invoice within thirty (30) days of raising of the Final Invoice by the Contractor and the Contractor shall revise and re-issue the Final Invoice accordingly.

5.4 Discrepant Amounts

(a) In the event the Employer finds any discrepancy, within a reasonable time period, in any invoice raised by the Contractor, the Employer shall give a notice regarding discrepant amount to the Contractor and withhold such part of the invoice value which is discrepant till such time the discrepancy is resolved between the Parties. If the Contractor intends to dispute the discrepant amount, the Contractor shall provide documentary evidence to the Employer within fifteen (15) days of receipt of notice regarding discrepant amount. If the Contractor's documentary evidence is accepted by the Employer, the Employer shall pay the amount as mentioned in the invoice originally raised by the Contractor as per the payment terms specified in the Service Order, from



the date of submission of Contractor's documentary evidence. In the event that the Parties are unable to resolve any issue in relation to discrepant amount within thirty (30) days of issue of the notice by the Employer in relation to the discrepant amount, such dispute shall be resolved in accordance with Clause 42.

(b) Notwithstanding anything to the contrary in the SO Documents, the payment of any invoice by the Employer shall not prejudice, at any point of time, any rights of the Employer under the SO Documents, including the right of the Employer to notify any discrepancy in respect of any amounts therein, as may be identified by way of any audit or inspection, that may have been conducted subsequent to the payment of such invoice. In the event any such discrepancy is identified in relation to any invoice that has already been paid by the Employer, the Employer shall have the right to adjust any amount that may be due and payable by the Contractor, in accordance with Clause 45.

6. Taxes

- 6.1 Except GST and BOCW Cess, all applicable Taxes shall be solely payable by the Contractor, unless otherwise specified in the Service Order. The Parties agree that the BOCW Cess shall be directly paid to the relevant government authorities by the Employer. The Contractor shall register itself under the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act. 1996 within fifteen (15) days of the Effective Date and furnish its registration details to the Employer for the purpose of payment of the BOCW Cess by the Employer within three (3) days of such registration. The Employer shall pay the applicable GST to the Contractor at actuals, as per the rates specified in the Price Schedule. The Contractor shall deposit the applicable GST with the relevant government authority and file returns and such other analogous statutory filings with respect to GST, in accordance with the manner and timelines stipulated under applicable laws (including all rules and regulations in respect thereof). The Contractor shall, within three (3) days from such deposit and/or filings (as the case may be), submit to the Employer all relevant documentation evidencing such compliance and deposit of GST. If the Contractor fails to comply with its obligations under this Clause 6, the Employer shall be entitled to: (i) withhold payments due to the Contractor under the SO Documents; and/or (ii) invoke the bank quarantee(s) (as applicable) provided by the Contractor in accordance with Clause 8, to the extent of the amount of GST that has not been deposited by the Contractor with the government authorities, along with any interest, fine and/or penalty, as may be levied under applicable laws. In the event the Contractor is in breach of its obligations under this Clause 6.1, the Employer shall also be entitled to blacklist the Contractor and thereby restrict the Contractor from participating in future projects of the Employer.
- 6.2 In the event the Contractor is required to collect from the Employer, tax collected at source ("**TCS**") as per the applicable law, then the Contractor shall forthwith inform the Employer and shall ensure that all invoices raised under the SO Documents (including pro-forma invoices for release of advance payments), clearly specify the correct amount of applicable TCS on the total invoice amount (including GST). The Contractor shall, if required by the Employer, furnish all other details and documentary evidence pertaining to such applicable TCS. The Contractor shall comply with the requirements of the applicable law with respect to TCS and shall be solely responsible for any incorrect declaration in this regard.
- 6.3 Unless otherwise specified in the Service Order, the import or customs duty, if applicable, on the import of Equipment and Materials under the applicable laws, is included in the SO Price and shall be borne by the Contractor.
- 6.4 The Contractor shall, in respect of the deposit of Taxes (as may be applicable), comply with all applicable laws (including all rules and regulations in respect thereof) and shall ensure that all requirements, as stipulated under applicable laws in relation to the deposit of Taxes, are complied with. The Contractor shall ensure timely deposit of all Taxes, including applicable fees, assessments and other analogous charges, as may be required in connection therewith with the government authorities. The Contractor shall be solely liable for any consequences arising out of non-compliance with such applicable laws and any expenses suffered by the Employer on account of such non-compliance by the Contractor shall be to the Contractor's account.
- 6.5 The Contractor hereby agrees and acknowledges that in case any tax benefits/rebates, duty drawbacks, GST refunds or such other applicable tax concessions and/or exemptions are available with respect to the Works, the Contractor shall avail of such concessions and/or exemptions or benefits and pass on such exemptions or benefits to the Employer, or shall assist the Employer in availing such exemptions or

benefits. In order to enable the Employer to satisfy its obligations under this Clause 6, the Contractor shall duly execute all such further instruments and documents and do or procure to be done all such acts or things, as may be required to ensure that the terms of the SO Documents are complied with.

6.6 If there is a delay in Completion and a statutory increase occurs in the applicable GST or implication of any new Taxes during the period of such delay, for reasons not attributable to the Employer, the same shall be to the account of the Contractor.

7. Royalties

The Contractor shall be liable to pay all royalties, rents and other payments, including Taxes on royalties such as district mineral fund for natural materials (including crushed stone aggregate, natural sand and earth) and other surplus material (whether natural or man-made), obtained from the Site or otherwise. Unless otherwise specified in the Service Order, the Basic Price includes all applicable royalties, rents and other payments as per the prevailing rates and applicable laws.

8. Bank Guarantees

- The Contractor shall provide the Employer with an Advance Payment Bank Guarantee, Contract 8.1 Performance Bank Guarantee, Performance Bank Guarantee and/or Contract Performance cum Performance Bank Guarantee, as the case may be, issued by an Acceptable Bank, at the times and in the amount, manner and form as more particularly specified in the Service Order. The Contractor shall also procure a confirmation from the bank issuing such Advance Payment Bank Guarantee, Contract Performance Bank Guarantee, Performance Bank Guarantee and/or Contract Performance cum Performance Bank Guarantee, as the case may be, of the valid issue of such guarantees and provide such confirmation to the Employer, within ten (10) days of the submission of such bank guarantees to the Employer. The Contractor shall ensure that the Advance Payment Bank Guarantee, Contract Performance Bank Guarantee, Performance Bank Guarantee and/or Contract Performance cum Performance Bank Guarantee, as the case may be, that is submitted by the Contractor and the rights and interests therein are assignable by the Employer in favour of its lenders or security trustees. In the event that the bank issuing such Advance Payment Bank Guarantee, Contract Performance Bank Guarantee, Performance Bank Guarantee and/or Contract Performance cum Performance Bank Guarantee, as the case may be, no longer meets the requirement of an Acceptable Bank at any time during the subsistence of such bank guarantee, the Contractor shall replace such bank guarantee with another bank guarantee from an Acceptable Bank within fifteen (15) days of the Employer's demand.
- 8.2 The Employer shall have an unqualified option under the Advance Payment Bank Guarantee, Contract Performance Bank Guarantee, Performance Bank Guarantee and/or Contract Performance cum Performance Bank Guarantee, as the case may be, to invoke such guarantee(s) and claim the amounts thereunder in the event of the Contractor's failure to honour its obligations, responsibilities or commitments under the SO Documents for which such relevant security has been provided and/or in respect of any amounts due from the Contractor to the Employer.
- 8.3 In the event the Employer draws on the Contract Performance Bank Guarantee, the Performance Bank Guarantee or Contract Performance cum Performance Bank Guarantee, as the case may be, in part or in full, the Contractor shall immediately restore the value of such bank guarantee to such value which existed prior to drawal of such bank guarantee. If the Contractor fails to restore such bank guarantee, the Contractor shall not be entitled for any further payments under the SO Documents.
- 8.4 In the event that:
 - the Completion of the Works is delayed beyond the Completion Schedule on account of which the advance amount remains unadjusted, the validity of the Advance Payment Bank Guarantee shall be extended till the revised Completion Schedule or until recovery or refund of the full amount of the advance payment;
 - (b) the Completion of the Works has been delayed beyond the Completion Schedule, thirty (30) days prior to the scheduled expiry of the Contract Performance Bank Guarantee, the validity of the Contract Performance Bank Guarantee shall be extended till the revised Completion Schedule; and
 - (c) the Defect Liability Period is extended, the validity of the Performance Bank Guarantee or the Contract Performance cum Performance Bank Guarantee, as the case may be, shall be extended till the expiry of such extended Defect Liability Period.

8.5 The Parties agree that all costs relating to the bank guarantees provided by the Contractor in accordance with the terms of this Clause, including any costs in respect of the opening, renewal, maintenance and invocation of such bank guarantees (as applicable), shall be borne by the Contractor.

9. Term of the Service Order and Completion Schedule

- 9.1 The SO Documents shall be in full force and effect from the Effective Date and shall continue to be in subsistence until all obligations under the SO Documents have been fulfilled by the Parties, unless otherwise terminated in accordance with the provisions of the SO Documents (**"Term**").
- 9.2 The Completion Schedule shall be as specified in the Service Order. The Completion Schedule shall be deemed to be of essence with respect to the SO Documents and any extension of time in this respect shall also be considered to be of essence of the SO Documents. If the Contractor fails to Complete the Works or any part thereof within the specified period, the Employer shall be entitled, at its option, to:
 - (a) recover Delay Liquidated Damages from the Contractor; and/or
 - (b) terminate the SO Documents or part thereof and engage a third party to complete the Works, at the risk and cost of the Contractor.
- 9.3 Any cost or expense resulting from delay in Completion shall be solely to the Contractor's account. The adjustments with respect to the amount recoverable, if any, in terms of Clause 9.2 above, shall be made from the bank guarantee(s) provided by the Contractor in terms of Clause 8, as may be available, or in any other manner as may be deemed appropriate by the Employer.

10. Variation

- 10.1 Subject to Clauses 10.4 and 10.5, the Employer shall have the right to propose, and subsequently require the Contractor to make, any change, modification, addition or deletion to, in or from the Scope of Work ("Change"). The Contractor may during its performance of the Works propose to the Employer any Change that the Contractor considers necessary or desirable to improve the quality, efficiency or safety of the Equipment and Materials, the Works. The Employer may at its discretion approve or reject any Change proposed by the Contractor.
- 10.2 Notwithstanding Clause 10.1, any necessary change made due to any default of the Contractor in the performance of its obligations under the SO Documents, shall not be deemed as a Change and shall not result in any adjustment of the SO Price or the Completion Schedule.
- 10.3 If the Employer proposes a Change or acknowledges the Contractor's proposal for a Change in accordance with Clause 10.1, it shall send to the Contractor a request to that effect, requiring the Contractor to prepare and furnish to the Employer as soon as practicable a proposal detailing the proposed Change ("Change Proposal"), which shall include, *inter alia*, brief description of the Change, estimated impact on the Completion Schedule, SO Price, Specifications or any other provisions of the SO Documents.
- 10.4 Upon receipt of the Change Proposal, the Employer and the Contractor shall mutually agree upon all matters therein contained. Within fifteen (15) days after such agreement, the Employer shall, if it intends to proceed with the Change, issue the Contractor with a written change order, incorporating the proposed Change. If the Employer is unable to reach a decision within fifteen (15) days or decides not to proceed with the Change for any reason, it shall notify the Contractor accordingly.
- 10.5 If the Employer and the Contractor cannot reach agreement on the price for the Change, an equitable adjustment to the Completion Schedule, or any other matters identified in the Change Proposal, the Employer may nevertheless instruct the Contractor to proceed with the Change by issue of an order signed by the Employer ("Interim Change Order").
- 10.6 Upon receipt of an Interim Change Order, the Contractor shall immediately proceed with effecting the Changes covered by such order. The Parties shall thereafter attempt to reach agreement on the outstanding issues under the Change Proposal. If the Parties cannot reach an agreement within sixty (60) days from the date of issue of the Interim Change Order, then the matter may be referred for dispute resolution, in accordance with Clause 42.

11. Site Access and Mobilisation

The Contractor shall have access to the Site from such date as may be specified in the Service Order, and the Employer shall provide the Contractor on a non-exclusive basis with the non-exclusive right to use of,

enter upon, access and work upon such portions of the Site, as may be specified in the Service Order. The Contractor shall complete mobilisation at the Site within such time period as specified in the Service Order, with all necessary consumable materials, equipment, rigs, machinery, personnel, etc. as may be required for the performance of the Works and specified in the SO Documents. Unless otherwise specified in the Service Order, the Basic Price shall be inclusive of charges in respect of mobilisation or demobilisation and the Contractor shall not be entitled to any additional payment on account thereof.

12. Utilities and Facilities at the Site

- 12.1 The Parties agree that, unless specified otherwise in the Service Order: (i) the Contractor shall, at its cost, be responsible for construction and maintenance of office and storage facilities at the Site; and (ii) the Employer shall be responsible for arrangement of utilities required for the performance of the Works at a single point within the Site, as specified in the Service Order. The Contractor shall be responsible for any further distribution of such utilities and setting up a metering system for measuring the consumption of utilities. Unless otherwise specified in the Service Order, the cost of such utilities shall be borne by the Contractor.
- 12.2 The Contractor shall ensure that all the Contractor's Equipment is in sound operating condition, compliant with the site regulations and be safe and fit for the purpose and use intended under the SO Documents. The Contractor's Equipment shall be energy efficient and the Contractor shall perform Works in a manner which optimises the energy consumption by the Contractor. The Contractor shall be solely responsible for the Contractor's Equipment.
- 12.3 The Employer shall have the right to inspect and approve of all the Contractor's Equipment. Any Contractor's Equipment which is not in conformity with the terms of the SO Documents as per the Employers' determination, shall be promptly repaired or suitably replaced by the Contractor, at its own cost and expense.

13. Programme of Performance

Unless otherwise required by the Employer, the Contractor shall, within fifteen (15) days from the Effective Date, submit to the Employer a detailed programme of performance of the Scope of Work by the Contractor, presenting the sequence in which the Contractor proposes to schedule, program and achieve completion of all obligations of the Contractor under the SO Documents. The programme so submitted by the Contractor shall be in accordance with the Completion Schedule and other dates and periods specified in the Service Order. The Contractor shall update and revise the programme as and when appropriate or when required by the Employer and shall submit all such revisions to the Employer. The Contractor shall monitor progress of all the activities specified in the programme referred to in this Clause and submit a progress report to the Employer on a daily, weekly and/or monthly basis, as may be required by the Employer's representative.

14. Drawings and Documents

- 14.1 Unless otherwise required by the Employer, the Contractor shall submit copies of the Drawings and Documents to the Employer for approval within fourteen (14) days of the Effective Date (or within such other time period as may be specified by the Employer). The Employer shall, within fourteen (14) days of receipt of such Drawings and Documents, either return one copy thereof to the Contractor along with its approval or notify the Contractor in writing of its disapproval and provide comments. If the Employer disapproves the Drawings and Documents, the Contractor shall modify the Drawings and Documents as per the Employer's comments and resubmit them for approval.
- 14.2 The Contractor shall not deviate from any Drawings and Documents submitted in accordance with Clause 14.1, without the Employer's approval in writing. In the event of any inconsistency, inaccuracy or ambiguity in the Drawings and Documents, or if, in the opinion of the Contractor, any detail thereof requires modification, the Contractor shall immediately obtain the Employer's approval and further instructions in writing before proceeding with the modification in the Drawings and Documents, which the Contractor shall perform in compliance with such instructions issued by the Employer. Notwithstanding any consent or approval of the Employer, the Contractor shall be responsible for, and promptly correct, any discrepancies, errors or omissions in the Drawings and Documents and other particulars supplied by the Contractor. If the Contractor neglects or refuses to make the required corrections, the Employer may, without prejudice to any of its other rights under the SO Documents, and

after giving notice to the Contractor, proceed to make the correction by itself or through a third party, and shall be entitled to recover the cost thereof from the Contractor.

15. Personnel

15.1 *Project Manager*

The Contractor shall, for the purpose of the SO Documents, designate a competent and experienced person to serve as the Contractor's project manager, who shall be responsible for the administration, supervision, co-ordination and execution of the Contractor's obligations hereunder. Such project manager shall be authorised to bind the Contractor for all purposes under the SO Documents and notices, approvals and consents given to or received from the project manager shall have the same effect as if given to or received from the Contractor.

15.2 Other Obligations of the Contractor

- (a) The Contractor shall be solely responsible for all personnel engaged for the performance of the Scope of Work, without any recourse to the Employer. The Contractor shall take all necessary precautions to prevent any unlawful, riotous or disorderly conduct by or amongst its personnel and to preserve peace and protection of persons and property on and near the Site. The personnel shall possess suitable competence, ability, skill, expertise, training and qualifications as is required for the performance of the Contractor's obligations under the SO Documents. The Parties agree that the Employer shall have no responsibility whatsoever for the Contractor's personnel, Sub-Contractors, vehicles and equipment, which are engaged for the performance of the Scope of Work under the SO Documents. The Employer reserves the right to require the Contractor to cause removal or replacement of any personnel indulging in misconduct or acting in a manner which is non-compliant with the SO Documents or prejudicial to the health, safety, protection of the project or the environment.
- (b) The Contractor shall, and require its Sub-Contractors and personnel engaged in performance of the Scope of Work to, comply with the SO Documents and relevant labour laws, including laws relating to employment, provident fund, minimum wages, prohibition of child labour, health, safety, welfare and immigration. The Contractor shall, and ensure that its personnel, Sub-Contractors and their respective personnel shall, strictly comply with the Human Resources and Industrial Relations Requirements and other standard norms, rules, regulations and policies prevalent in the industry, while performing their respective obligations under the SO Documents. In the event the Contractor is in breach of the Human Resources and Industrial Relations Requirements and/or any of its obligations under this Clause 15.2(b), the Employer shall be entitled to levy liquidated damages upon the Contractor, in accordance with Clause 25.4.
- (c) The Contractor shall undertake background verification and screening in respect of all personnel engaged for performance of the Scope of Work, including for criminal records and shall be responsible for the visas, work permits and other immigration requirements for its personnel.
- (d) The Contractor shall be liable and responsible for all payments to its personnel, including salaries, wages, Taxes, allowances and other benefits in accordance with applicable laws. Unless otherwise specified in the Service Order, the Contractor shall, at its own cost, make arrangements for the engagement of all personnel, local or otherwise, including their boarding and lodging and transport.

16. Permits and Licenses

The Contractor shall obtain and maintain all necessary authorisations and clearances for the performance of the Works, which may be required to be obtained and maintained under applicable laws. The Contractor shall maintain all records and registers as per the provisions of applicable laws and shall be solely liable for any consequences arising out of non-compliance with applicable laws by itself or by its Sub-Contractors, agents or personnel. Any incidental expenses for complying with applicable laws shall be borne by the Contractor.

17. Quality Assurance

The Contractor shall perform the Works strictly in accordance with the Drawings and Documents, Specifications, Good Industry Practice and all terms and conditions specified in the SO Documents such that the Works meet the requirements of the SO Documents including, *inter alia*, the Performance Guarantee. The Contractor shall institute a system for quality assurance for complying with the

requirements set forth in the SO Documents and the quality control plans and procedures specified or approved by the Employer. The Contractor shall strictly adhere to such quality assurance system. However, such compliance shall not relieve the Contractor of its duties, obligations or responsibilities under this Contract. The Employer reserves the right to reject the Works on account of non-compliance with the quality assurance requirements under the SO Documents and the Contractor shall be responsible for any costs, losses or damages in respect of the same.

18. Maintenance of Site

The Contractor shall keep the Site and all construction thereupon clean and otherwise free from accumulation of waste materials, rubbish and other debris resulting from performance of the Works. On or before the date of Completion as per the Completion Schedule, the Contractor shall remove from the Site all waste materials, rubbish and other debris resulting from the performance of the Works, as well as all the Contractor's Equipment and surplus material to which the Employer does not hold title, and shall leave the Site in a neat, clean and usable condition.

19. Cooperation

The Contractor shall fully co-operate with the Employer's other contractors or third parties deputed by the Employer at the Site. The Contractor shall coordinate and plan its work and activities in mutually agreed schedule with the Employer's representative, other contractor(s) and third parties at the Site, and shall undertake all actions as may be necessary for such cooperation. If any part of the Contractor's work is dependent upon the work of any other contractor or third party, it shall be the responsibility of the Contractor to inspect and promptly report in writing to the Employer of any defect in such works which may affect the performance of the Works. The failure of the Contractor to do so shall constitute an acceptance by the Contractor of the other contractor's or third parties' work and no claim or extension of time by the Contractor in this regard shall be entertained by the Employer.

20. Free Issue Material

- 20.1 The Employer may supply Free Issue Materials to the Contractor from its stores, in accordance with the requirement of the Contractor and/or stipulations set out in the Service Order. If such Free Issue Materials are being supplied, the Contractor shall take possession of such Free Issue Materials and transport the same from the Employer's stores to the Site at its cost and risk. The Contractor shall prepare and submit to the Employer, within such timeline as may be prescribed by the Employer: (i) an overall schedule for the estimated Free Issue Materials as may be required by the Contractor for the performance of the Works; and (ii) a look ahead schedule for the estimated quantities of the required Free Issue Materials.
- 20.2 Any subsequent requisition for issue of Free Issue Materials submitted by the Contractor to the Employer shall contain the following details:
 - (a) cumulative quantity issued prior to the current requisition;
 - (b) available stock with the Contractor; and
 - (c) quantity of Free Issue Materials required under the current requisition, together with the details of the proposed and theoretical consumption of the same and the program for the Works for which such Free Issue Materials are required.
- 20.3 For each consignment of Free Issue Materials, the Contractor shall provide a written acknowledgement of the receipt thereof. The acknowledgement shall indicate full particulars of the quantities, sections, sizes, grade and such other information as may be required by the Employer.
- 20.4 Any Free Issue Material issued by the Employer to the Contractor from its stores shall be on the basis of the Drawings and Documents which are pre-approved by the Employer. Wastage parameters in respect of such Free Issue Material shall be as per Clause 20.4(d) and the mode of issuing such Free Issue Materials shall be as below:
 - (a) *Cement*

Any cement to be issued to the Contractor shall be issued on weighment basis, the procedure for which may be prescribed by the Employer.

(b) Reinforcement steel



- (i) Any reinforcement steel to be issued to the Contractor shall be issued in accordance with the requirements set out in the Drawings and Documents and any bar bending schedules provided by the Contractor. Such reinforcement steel shall be issued to the Contractor on the basis of weight, which shall be calculated as specified below:
 - a. all reinforcement steel (in coils or straight length) shall be issued on the basis of actual weighment carried out by the Employer at the Site or in the vicinity of the Site; or
 - b. reinforcement steel may also be issued on the basis of "sectional weight" as per IS:1752.
- (ii) The actual weighment shall be done on weighing equipment available at the Site or in the vicinity of the Site and shall be jointly recorded in a register by the Parties, on a daily basis or on *each* indent basis. The reinforcement steel shall be issued to the Contractor in such diameters and lengths which are presently rolled in India or as may be available in the stores of the Employer.
- (iii) Any reinforcement steel which is equal to or less than: (i) one hundred (100) times its diameter; or (ii) two (2) metres, whichever is higher, shall be considered as scrap. The Contractor shall return any such scrap generated from the use of reinforcement steel to the *Employer* at its store or at a location designated by the Employer, and such scrap shall be considered under accountable wastage for the purpose of reconciliation.
- (iv) Any pieces of reinforcement steel measuring equal to or more than the length specified in Clause 20.4(b)(iii) above shall be classified as cut pieces and stacked separately. Any cut pieces being returned by the Contractor shall be weighed in the same manner as was adopted at the time of issue of such reinforcement steel.
- (c) Structural steel
 - (i) Any structural steel to be issued to the Contractor shall be issued on the basis of weight and the type of structural steel being issued.
 - (ii) <u>Steel plates</u>
 - a. All steel plates shall be issued on the basis of actual weighment carried out by the Employer at the Site or in the vicinity of the Site. Alternatively, the Employer may issue steel plates on the basis of "sectional weight" specified for plates in SP:6.
 - b. The actual weighment shall be done on weighing equipment available at the Site or in the vicinity of the Site or, in the event the weighing equipment is not available, on the basis of random lengths or bundle weights. The Parties shall jointly record the weighment in a register, on a daily basis or on each indent basis.
 - (iii) <u>Structural steel (other than plates)</u>
 - a. All structural steel (other than plates) shall be issued on the basis of "sectional weight" as per SP:6, irrespective of the section involved.
 - b. The structural steel shall be issued to the Contractor in such sections and length which are presently rolled in India or as may be available in the stores of the Employer.
 - c. In the event there is no unit weight prescribed in the relevant 'Indian Standards' for the issued sections of structural steel, the unit weights furnished by the supplier of such structural steel shall be considered. If there are no unit weights furnished by the supplier of such structural steel, the Employer may prescribe a representative unit weight on the basis of actual weighment carried out for samples of the issued structural steel.
 - (iv) <u>Classification of scrap</u>
 - a. Pieces of plates measuring less than one thousand and five hundred (1500) square centimetres in area or less than ten (10) centimetres in width shall be classified as scrap and stacked separately.
 - b. Cutting edges/pieces of plates measuring less than forty (40) millimetres in width or less than three (3) kilograms in weight shall be classified as rolling/melting scrap.



- c. Pieces of structural steel (except for plates) measuring less than two (2) metres in length shall be classified as scrap and stacked separately.
- (v) <u>Cut pieces</u>
 - a. Pieces of plates measuring more than or equal to one thousand and five hundred (1500) square centimetres in area or ten (10) centimetres in width shall be classified as cut pieces and stacked separately. The cut pieces of plates returned shall be rectangular in shape.
 - b. Pieces of structural steel (except for plates) measuring equal to or more than two (2) metres in length shall be classified as cut pieces and stacked separately.
 - c. Any cut pieces being returned by the Contractor shall be weighed in the same manner as adopted at the time of issue of such material.
- (d) Wastage Parameters

Sr. No.	Material Description	Permissible Wastage	Accountable Wastage	Unaccountable Wastage
1.	Cement	1.0%	-	-
2.	Reinforcement Steel	3.0%	2.5%	0.5%
3.	Structural Steel	3.0%	2.5%	0.5%

- 20.5 The Contractor shall construct fenced store yard(s) with adequate arrangements for stacking of Free Issue Materials. The Contractor shall be responsible for safe custody of such Free Issue Materials and shall be liable for any loss or damage caused to the Free Issue Material. The Contractor shall, during stacking and storage of the following Free Issue Materials (if provided by the Employer), ensure the following:
 - (a) Cement

The Contractor shall construct a cement godown of suitable storage capacity, at its own cost. The cement bags shall be stacked in a manner that ensures adequate insulation from the walls and the floor, in order to ensure that such bags are not subjected to any contact with moisture. The cement bags shall be stacked in a manner that facilitates ease in counting and removal of such bags for use, on a 'first in first out' basis. The Parties agree that empty cement bags shall be the property of the Employer and the Contractor shall deposit such empty bags in the store.

(b) Steel

Reinforcement and structural steel shall be stored and stacked in such a manner so as to facilitate easy identification, and removal. The Contractor shall take proper care to prevent direct contact between the steel and the ground, at its own cost.

- 20.6 The Contractor shall submit a consumption statement for Free Issue Material along with each Running Account Bill and/or Final Invoice raised, as the case may be, in a format as may be specified by the Employer, which shall tally with the balance Free Issue Material and scrap available with the Contractor. The Employer reserves the right to withhold payment in the event the reconciliation statement is not submitted to the satisfaction of the Employer.
- 20.7 The Contractor shall use the Free Issue Materials provided by the Employer solely for the performance of the Works. The Contractor shall procure materials (including cement and steel) required for its office, colony, stores and for works and temporary works, at its own cost and expense. Unless specified otherwise in the Service Order, the Free Issue Material provided by the Employer shall not be used for manufacturing of items such as reinforced cement concrete hume pipes, tiles and other such pre-cast elements, which may be manufactured outside the Site. The Employer shall have the right to recover the cost for any such Free Issue Materials consumed due to non-compliance with this Clause in accordance with Clause 20.8 below.

- 20.8 On Completion, surplus Free Issue Material shall be returned by the Contractor to the Employer's stores, at the risk and cost of the Contractor. The Contractor shall not be permitted to utilise any Free Issue Materials provided to it in excess of the theoretical consumption specified for such Free Issue Materials (including permissible wastage limits as specified in Clause 20.4(d) above). If the Contractor: (i) fails to return the surplus Free Issue Materials; or (ii) utilises any Free Issue Material in excess of the theoretical consumption specified for such Free Issue Materials (including permissible wastage limits as specified in Clause 20.4(d) above), the Employer shall have the right to recover from the Contractor the landed cost (*i.e.* cost plus freight, Taxes and twenty five percent (25%) of overheads), incurred by the Employer in respect of such Free Issue Materials which the Contractor has failed to return or consumed in excess of the prescribed theoretical quantity.
- 20.9 Utilisation of Cut-pieces
 - (a) The Contractor shall utilise the cut portions of reinforcement and structural steel as the Free Issue Materials, without any cost to the Employer, either by way of lapping in reinforcement steel or butt welding or splicing in structural steel.
 - (b) The Employer's representative shall have the right to direct the Contractor to utilise the cut portions generated by other contractors working at the Site, without any cost to the Employer. These cut pieces shall be received by the Contractor either from the Employer's stores or from the fabrication yards of other contractors, in accordance with the directions of the Employer's representative. The cut pieces shall be issued on the same basis as the issue of fresh steel. All other stipulations mentioned in this Clause regarding wastage and excessive consumption of steel shall be applicable for such cut-pieces as well.

21. Insurance

- 21.1 Unless otherwise specified in the Service Order: (i) the Contractor shall, at its own cost, arrange, secure and maintain, all insurance policies required under applicable laws in connection with the performance of the Works (except the insurance policy(ies) required to be obtained by the Employer as per the SO Documents), including workmen's compensation, employees' state insurance, public liability insurance and insurance for all its employees, equipment, vehicles and other assets engaged in the performance of the Works; and (ii) the Employer shall procure the construction/erection all risks insurance policy for the Works.
- 21.2 The Basic Price is inclusive of all charges pertaining to such insurance, unless otherwise specified in the Service Order. If any damage is caused to the property of the Employer or of a third party during the performance of the Works, the cost of such damages as estimated by the Employer or ascertained or demanded by the affected third party shall be borne by the Contractor. The Contractor shall (where required by the Employer) designate the Employer's lenders as the 'loss payees', in all the insurance policies procured by the Contractor under the SO Documents.

22. Inspection, Testing and Commissioning

22.1 The Employer, its representatives or any TPIA shall have the right to inspect, examine and measure all design, engineering, Equipment and Materials and the Works supplied or executed by the Contractor pursuant to the Scope of Work, during any stage of the Works and at any and all places where the Works are being performed. The procedures for such inspection, examination or measurement shall be as set out in the Specifications or in accordance with Codes and Standards and/or Good Industry Practice. The Contractor shall cooperate with the Employer for such inspection, examination, measurement and shall if necessary, obtain the authorisation for the Employer to conduct the same.

22.2 Inspection and Testing for Equipment and Materials

(a) The Employer shall have the right to cause the Contractor to perform all such tests and inspections for the Equipment and Materials at the place of manufacture or assembly thereof, in accordance with the quality assurance plan, in order to determine whether the Equipment and Materials conform to the quality assurance plan, Specifications, Codes and Standards and other requirements of the SO Documents ("Factory Tests"). The Contractor shall give fifteen (15) days' advance notice of the conduct of the Factory Tests and of the place and time thereof to the Employer and, unless otherwise agreed by the Employer, all such Factory Tests shall be conducted in the presence of the Employer and/or the TPIA.

- (b) If the Equipment and Materials or any part thereof fail to pass the Factory Tests, the Employer and/or the TPIA shall have the right to reject such Equipment and Materials or parts thereof in accordance with Clause 23.
- 22.3 When the Factory Tests in respect of the Equipment and Materials performed in accordance with Clause 22.2 have been successfully carried out and the test reports thereof have been approved by the Employer, the Employer shall issue the MDCC to the Contractor. The Contractor shall dispatch the Equipment and Materials only after issuance of the MDCC by the Employer. Any permission for dispatch of the Equipment or Materials approved by the Employer or the TPIA (as the case may be), including the issuance of MDCC, shall not relieve the Contractor from its obligations and responsibilities under the PO Documents.
- 22.4 The Contractor shall submit 'Manufacturer's Test Certificates' and the MDCC along with the dispatch of respective Equipment and Materials. The Contractor shall also provide a scanned copy of the same to the Employer by e-mail, for reference.
- 22.5 Inspection and Testing for Parts of the Works
 - (a) No part of the Works shall be covered up on the Site without the Contractor carrying out any test or inspection as may be required in accordance with the Specifications or by the Employer. The Contractor shall, no later than seven (7) days prior to the likely completion of the construction of such parts of the Works, notify the Employer of the readiness thereof to be subjected to testing.
 - (b) If the tests conducted upon completion of construction of such parts of the Works are not successful, then the Employer has the right to reject such parts of the Works without any liability whatsoever, in accordance with Clause 23.
- 22.6 Additional Tests

The Employer may, in addition to the tests conducted in accordance with this Clause 22 and otherwise prescribed under the SO Documents, require the Contractor to carry out any additional tests in connection with the Scope of Work ("Additional Tests"). In the event the results of such Additional Tests show that the design, engineering, workmanship and/or construction of the Equipment and Materials and/or the Works, as the case may be, are:

- (a) not in accordance with the terms of the SO Documents, the Contractor shall be responsible for rectification of the Defect and/or replacement of the Defective portion of the Equipment and Materials and/or the Works as discovered through the Additional Tests, and any implication on the Completion Schedule shall be borne by the Contractor; or
- (b) in accordance with the terms of the SO Documents, the Contractor shall be entitled to propose a Change for adjustment to the Completion Schedule in accordance with Clause 10, to the extent that such Additional Tests have had a material effect on the Contractor's ability to meet the Completion Schedule.
- 22.7 Commissioning
 - (a) The Contractor shall, if applicable, perform the tests for Commissioning of the Works, within such timeline as may be specified by the Employer. The Contractor shall conduct the tests for Commissioning, in a manner consistent with safe and accepted operating procedures, to test the Works under design conditions and to demonstrate that the Works are capable of meeting the design and technical parameters as set out in the Specifications and the SO Documents.
 - (b) If the tests for Commissioning of the Works are not successful, then the Employer has the right to reject such Works without any liability whatsoever, in accordance with Clause 22.2. Upon successful completion of construction and/or Commissioning of the Works, as the case may be, the Contractor shall notify the Employer and may request the Employer to certify the same in respect of the Works. In the event of unsuccessful Commissioning of the Works, the Contractor shall, at the Employer's option, pay Shortfall Liquidated Damages to the Employer in accordance with Clause 25.2. Provided however that, in cases where separate Performance Guarantee Tests are being performed in terms of Clause 24, the Shortfall Liquidated Damages shall be payable in accordance with the provisions of Clause 25.2.
- 22.8 The Contractor shall furnish all requisite facilities, assistance, labour, equipment, materials, utilities, apparatus and instruments necessary for the safe and convenient inspection and testing in accordance

with this Clause 22, including the Factory Tests. The right of inspection, examination, measurement and testing by the Employer, its representatives or TPIA provided herein is intended solely for the Employer's benefit. No exercise of or failure to exercise such right shall relieve the Contractor of any of its obligations hereunder or prejudice any of the Employer's rights under the SO Documents..

23. Acceptance and Rejection

- 23.1 If as a result of (i) any inspection, examination or testing of the Equipment and Materials and/or the Works carried out in accordance with Clause 22; or (ii) performance of activities specified under Clause 24, the Employer determines that any part of the Equipment and Materials and/or the Works is defective, unable to achieve Commissioning or Performance Guarantee, or otherwise not in accordance with the SO Documents, the Employer shall have the right to reject such part of the Equipment and Materials and/or the Works and shall notify the Contractor promptly of such rejection. The Contractor shall promptly undertake the necessary remedial work at its own cost and ensure that the rejected part of such Equipment and Materials and/or the Works complies with the SO Documents, which may include:
 - (a) all specific corrective measures or rectification in respect of the Works, which when implemented and operated, shall enable the Equipment and Materials and/or the Works to comply with the requirements of the SO Documents; or
 - (b) correct the Drawings and Documents and other technical documentation to reflect such corrective measures.
- 23.2 In case the Contractor fails to rectify or replace the rejected Equipment and Materials and/or the Works or any part thereof, or undertake remedial measures as set out in Clause 23.1 above, within the timeframe given by the Employer, the Employer shall have the right to rectify such Equipment and Materials and/or the Works or parts thereof in accordance with Clause 33.
- 23.3 After completion of the necessary remedial work, the Employer has the right to: (i) subject the Equipment and Materials and the Works or parts thereof to further inspection, examination and testing by the Employer, its representatives or TPIA in accordance with the procedure set out under Clause 22; or (ii) perform activity set out in Clause 24 below, after all corrective measures to eliminate the Defects or deficiencies have been undertaken. All costs and expenses of such further inspection, examination and testing shall be to the Contractor's account.
- 23.4 The Contractor shall ensure that it performs its obligations under this Clause 23 in accordance with the schedule and the timelines for the Project, as specified by the Employer to the Contractor. The Contractor shall not be entitled to raise any Running Account Bills or invoice for any sums payable in respect of the portion of the Equipment and Materials and/or the Works which has been rejected by the Employer in accordance with the provisions of this Clause.
- 23.5 When all the activities required to be performed in respect of the Works, as set out in Clause 22, including any retests pursuant to this Clause 22.2, have been successfully carried out and the Works are complete in terms of the requirements of the SO Documents, the Contractor shall notify the Employer in writing of the same and shall request the Employer to take over the Works and issue a certificate to the Contractor, certifying that the Completion for the Works has been achieved ("**Provisional Acceptance Certificate**"). Upon receipt of such request from the Contractor and the Contractor having complied with the conditions set forth in this Clause 23 to the Employer's satisfaction, the Employer shall issue the Provisional Acceptance Certificate to the Contractor, provided that the Works can be safely and reliably placed in commercial operation notwithstanding the Punch-List Items being outstanding and/or incomplete.

24. Performance Guarantee

24.1 Upon receiving the Provisional Acceptance Certificate for the Works, the Contractor shall, if applicable to the Works and at the request of the Employer, perform the Performance Guarantee Tests for the Works to demonstrate compliance with the Performance Guarantee, within such timeline as may be specified by the Employer. The Contractor guarantees that, during the Performance Guarantee Tests, the Works and all parts thereof shall achieve the Performance Guarantee. If, the Performance Guarantee is not achieved (either in whole or in part), the Contractor shall, at the Employer's option, either (a) undertake such measures as specified in Clause 23; or (b) pay Shortfall Liquidated Damages to the Employer in respect of the failure to meet the minimum Performance Guarantees in accordance with Clause 25.2.

- 24.2 If, for any reason not attributable to the Employer, even the minimum level of Performance Guarantee is not achieved, the Employer has the right to reject such Works without any liability whatsoever, in accordance with Clause 22.2. Notwithstanding anything contained to the contrary in the SO Documents, the Employer may, at its sole discretion, choose to accept such Works after the Parties have renegotiated the Basic Price for such Works and the Contractor has paid to the Employer the Shortfall Liquidated Damages for such Works.
- 24.3 The Contractor shall, if required for the successful completion of the Performance Guarantee Tests, bring to the Site the Contractor's Equipment (including any special equipment, apparatus, measuring instrument, tools and tackles) and upon the completion of the Performance Guarantee Tests, remove such Contractor's Equipment at its own cost and with prior approval from the Employer. The Employer shall furnish labour, electricity, water and fuel, without any cost to the Contractor, for conducting the Performance Guarantee Tests.

25. Liquidated Damages

- 25.1 If the Contractor fails to achieve Completion as per the Completion Schedule, the Employer shall have the right to levy liquidated damages for such delay, in accordance with the terms specified in the SO Documents ("**Delay Liquidated Damages**").
- 25.2 In case the Works fail to achieve successful Commissioning or pass the Performance Guarantee Tests (as applicable), the Employer shall have the right to levy liquidated damages for such shortfall in performance, in accordance with the terms specified in the SO Documents ("Shortfall Liquidated Damages"). Unless otherwise specified in the Service Order, it is hereby clarified that in the event Performance Guarantee Tests are applicable for the Works, the Shortfall Liquidated Damages shall be levied upon the Works failing to successfully achieve such Performance Guarantee Tests, and not upon any instance of unsuccessful Commissioning of the Works.
- 25.3 The combined maximum ceiling for the Delay Liquidated Damages and Shortfall Liquidated Damages shall be as specified in the Service Order.
- 25.4 In the event the Contractor breaches any of its obligations set out under Clause 15.2(b) or Clause 28, the Employer shall have the right to levy liquidated damages for such breach, as specified in the Service Order.
- 25.5 The Parties agree that the liquidated damages set out in the SO Documents are a genuine pre-estimate of the losses/damages that shall be suffered by the Employer on account of any delay in completion of the Scope of Work, failure to pass the Performance Guarantee Tests and/or failure to achieve Commissioning (as may be applicable). The Parties further irrevocably agree that the liquidated damages prescribed herein: (i) shall be payable on demand without requiring any proof of actual loss/damages caused by the Contractor's breaches; and (ii) have been mutually determined after joint discussions and calculations.
- 25.6 The Parties agree that the GST applicable on liquidated damages payable by the Contractor under this Clause 25 shall be to the Contractor's account. The total amount of liquidated damages payable by the Contractor in terms of the SO Documents shall be grossed up to take into account such liability of GST and the Employer shall be entitled to raise invoice(s) upon the Contractor in respect of the same. The Employer may recover such liquidated damages (as grossed up) by: (i) deducting such liquidated damages from any amounts due or which may become due to the Contractor; (ii) directing the Contractor to pay such liquidated damages to the Employer as a debt due and payable; or (iii) claiming such liquidated damages from available bank guarantees.
- 25.7 The payment of liquidated damages shall not relieve the Contractor from its obligation to achieve Completion, nor from any other obligations and liabilities under the SO Documents, and shall not prejudice any other remedy that the Employer may have in relation to the Contractor's non-compliance with the SO Documents. Any correspondence or minutes of meetings and/or acceptance of delayed performance of the Scope of Work shall not be construed as a waiver of liquidated damages payable under the SO Documents.

26. Compliance with Applicable Laws and Site Regulations

26.1 The Contractor shall, and ensure that its Sub-Contractors and their respective personnel shall, abide by all applicable laws relating to the performance of the Scope of Work. The Contractor shall comply with

the specific rules and regulations, as provided by the Employer and to be observed during performance of the SO Documents at the Site. The Contractor shall ensure that its Sub-Contractors, labourers and personnel also comply with the said rules and regulations. Such rules and regulations shall include rules in respect of security, safety of the Works and people at the Site, gate control, sanitation, medical care and fire prevention. The Contractor shall also comply with the 'code of conduct', published on the Employer's website, during the performance of its obligations under the SO Documents.

- 26.2 The Contractor shall provide and maintain, at its own cost, all lighting, fencing and watch and ward for the Site, as may be necessary for the proper execution and the protection of the Works and the safety of the Employer's personnel and property, occupiers of adjacent property and the general public. The Contractor shall develop and submit for the Employer's Representative's approval, a comprehensive security plan with respect to the Works and the Site, which shall be consistent with the security requirements specified by the Employer, and the Contractor shall strictly adhere to such plan approved by the Employer. The Contractor shall be further responsible for keeping unauthorised persons away from the Site or the portions for which the Contractor is responsible for security.
- 26.3 The Contractor shall be liable for any damage or injury to persons or property of the Employer or third parties caused as a result of acts or omissions of the Contractor in the course of performing the Scope of Work under the SO Documents.

27. Compliance with Environmental, Social and Governance Requirements

- 27.1 The Contractor shall, as a part of performing its obligations under the SO Documents, ensure responsible business management pertaining to environmental, social and governance ("ESG") related matters. In this regard, the Contractor shall, and ensure that its Sub-Contractors and their respective personnel shall: (i) comply with policies, codes and guidelines, as may be notified by the Employer to the Contractor, pertaining to the ESG requirements and as may be required in terms of applicable laws; (ii) employ management systems for ESG risks and opportunities, and commit to continuous improvements thereof; (iii) ensure fair terms and conditions of employment for its Sub-Contractors, employees and personnel; (iv) take all necessary care of the personnel engaged in the performance of the Works and undertake activities for their skill enhancement and welfare; (v) assess and mitigate the health, safety and environmental risks which may arise due to the performance of the Scope of Work; and (vi) focus on corporate responsibility and long term sustainability.
- 27.2 The Contractor shall, and ensure that its Sub-Contractors and their respective personnel shall, abide by all environmental laws. The Contractor shall take all necessary care that the Scope of Work is performed with the minimum possible impact on the environment and local community in respect of land and occupants affected by or adjacent to the Site, and shall further take all precautions to avoid pollution or contamination of air, land or water arising out of the performance of the Scope of Work. The Contractor shall ensure efficient management and disposal of hazardous materials and toxic emissions, in compliance with the applicable laws. The Contractor shall preserve and protect all existing vegetation such as trees (but not shrubs or grass) on or adjacent to the Site. Further, the Contractor shall not remove or destroy such vegetation, unless such vegetation creates any hindrance with respect to the performance of the Works.
- 27.3 Further, the Contractor shall, and ensure that its Sub-Contractors shall, as part of its corporate responsibility, undertake to focus on: (i) the promotion of diversity, prosperity and sustainable development; (ii) enhancement of skills, empowerment of women, protection of human rights and development of local community; (iii) reduction of pollution, preservation of biodiversity and water resources, conservation of natural resources and energy and supporting efforts to combat climate change; (iv) develop and use environmental friendly technology and reduce negative impact on the environment; (v) creation and implementation of sustainable water use strategies; (vi) avoiding the usage of plastic (including any single use plastic items or non-biodegradable materials) and innovating new products to reduce carbon footprint; and (vii) establishing strong risk management and corporate governance mechanisms and build healthy stakeholder relationships.
- 27.4 In furtherance to the objectives and requirements stipulated in this Clause 27, the Contractor represents, warrants and covenants that:
 - (a) equal employment opportunities and a work environment conducive to the growth and development are provided to the Contractor's personnel;



- (b) all personnel are employed on their own free will;
- (c) the Contractor's workforce does not comprise of any form of prohibited labour, including forced or bonded labour and child labour;
- (d) the Contractor's personnel are not subjected to any form of discrimination or harassment;
- (e) there is no incidence of slavery and human trafficking of any form in any transactions entered into by the Contractor;
- (f) the Contractor's personnel do not and shall not indulge in any activity which is prohibited under the applicable laws;
- (g) regular meetings are conducted with the Contractor's personnel by the supervisor of such personnel such that the personnel are provided with a fair and transparent forum to freely raise their problems and grievances;
- (h) a formal grievance redressal mechanism is established by the Contractor such that its personnel have free and fair access to the Contractor's representative, for the personnel to raise their grievances, without any kind of prejudice or retaliation on account of raising such grievances; and
- (i) the Employer's whistle blower policy is complied with and if any of the Contractor's personnel becomes aware of any wrongdoing or unethical activity being performed by the Employer's personnel or other contractors, then such activity is promptly reported to the Employer in accordance with such policy.

28. Compliance with Safety Requirements

- 28.1 The Contractor shall, and ensure that its personnel, Sub-Contractors and their respective personnel shall, strictly comply with the Safety Requirements and other standard safety norms, rules, regulations and policies prevalent in the industry, while performing the obligations under the SO Documents. The Contractor shall conduct, prior to commencement of the Works, a: (i) job safety analysis for the Works and obtain a permit to work for the same, which shall be duly approved by the Employer, and (ii) training session for the personnel deployed for the performance of the Works on the Safety Requirements and compliance measures with respect to the same. The Contractor shall further ensure that the personnel deployed for the performance of Work are adequately trained and medically fit for the purpose of performing any activities which may be hazardous or involve high risks.
- 28.2 All safety plans, checklists and method statements prepared by the Contractor in respect of the Works shall, if required by the Employer, be submitted to the Employer for approval. The Contractor shall, with the Employer's approval and in accordance with the Safety Requirements, appoint and deploy competent safety resources at the Site, including supervisors and safety stewards, for the performance of the SO Documents. The Contractor shall, as part of the Safety Requirements and for the benefit of its personnel: (i) establish and construct necessary safety-related infrastructure and welfare facilities at the Site; (ii) conduct safety awareness and training programs for its personnel in order to ensure that the necessary risk control measures are adopted for the performance of the Works; (iii) conduct periodical medical check-ups and provide adequate medical facilities; (iv) provide personal protective equipment that complies with IS/EN standards (as updated); (v) conduct routine inspections in respect of compliance with safety measures at the Site; (vi) prepare and enforce emergency plans, policies for prevention of substance abuse, fire incidents and safety hazard mitigation policies etc.; (vii) adhere to housekeeping requirements for the Site and other facilities established by the Contractor; and (viii) constitute a Sitelevel safety committee for the purpose of reviewing and reporting compliance with the Safety Requirements, Further, the Contractor shall, and ensure that its Sub-Contractors and their personnel shall, ensure prompt identification and mitigation of all safety-related incidents and conditions, that may arise during the performance of the Scope of Work and keep the Employer apprised of the same.
- 28.3 The Employer and/or its representatives shall have the right to conduct audits and inspections on a periodic basis and evaluation on a continuous basis, in order to assess the Contractor's compliance with the Safety Requirements and its obligations under this Clause 28. Based on the evaluation of such audits and inspections, the Employer may, at its discretion, provide incentives to the Contractor for satisfactory compliance with the Safety Requirements, in accordance with the terms specified in the Safety Requirements. In the event the Contractor is in breach of the Safety Requirements and/or any of its



obligations under this Clause 28, the Employer shall also be entitled to levy liquidated damages upon the Contractor, in accordance with Clause 25.4.

28.4 If the Employer has a first-aid centre and other facilities at the Site, the Employer may, at its option, make available such facilities for the treatment of the Contractor's personnel, who may be injured or become ill while engaged in the performance of the Works. If such facilities are made available to the Contractor's personnel then in consideration for the use of such facilities, the Contractor hereby agrees to defend, indemnify and hold harmless the Employer and all providers of medical services or facilities from any claims arising out of or relating to the use of such medical services or facilities by the Contractor's personnel. Nothing herein contained shall be construed as imposing any duty upon the Employer to provide facilities necessary to furnish emergency medical treatment or related services to the Contractor's personnel or to make such facilities and/or services available to the Contractor's personnel.

29. Title and Risk of Loss

- 29.1 Except as otherwise provided herein, title and proprietary interest in the Works (or any part thereof) created pursuant to performance of the Works, including any Drawings and Documents, shall become the property of the Employer, on the earlier of the following:
 - (a) issuance of the Provisional Acceptance Certificate; or
 - (b) SO Price payable for the Works (or such part thereof) is paid by the Employer to the Contractor.
- 29.2 Notwithstanding the foregoing, the Contractor shall be responsible for and shall bear any and all risk of loss or damage to the Works until Completion thereof in accordance with the provisions of the SO Documents. Upon Completion, risk of loss or damage shall pass to the Employer, provided that any loss or damage to the Works caused due to reasons attributable to the Contractor shall be borne by the Contractor.

30. Defect Liability

- 30.1 The Contractor warrants that the Works or any part thereof shall be free from any Defects and Latent Defects. If any Defects are found in the Works during the Defect Liability Period, the Contractor shall, at its cost and expense and in consultation and agreement with the Employer regarding appropriate remedying of the Defects, promptly repair, replace or otherwise make good such Defects, deficiencies or damages as may be notified by the Employer on or before the expiry date of the Defect Liability Period for the Works or any part thereof, including any other damage to the Works caused by such Defects. The Contractor shall complete the pending or Punch-List Items (if any) in consultation with the Employer, as the case may be within thirty (30) days of the date of the Provisional Acceptance Certificate or such other time period as may be specified by the Employer. For the avoidance of the doubt, it is clarified that the determination of a Defect shall be at the sole discretion of the Employer and the decision of the Employer in this regard should be final and binding on the Contractor of its obligations under this Clause.
- 30.2 The Employer shall provide the Contractor with necessary access to the Works at the Site as required for performance of the Contractor's obligations under this Clause. The Contractor may, with the consent of the Employer, remove from the Site the Works or any part thereof that is Defective and/or damaged, if such repairs cannot be expeditiously carried out at the Site.
- 30.3 If the Contractor fails to promptly commence remediation of such Defect(s), the Employer may, following notice to the Contractor, proceed to remedy the Defect(s), and any costs incurred by the Employer in connection therewith shall be: (i) reimbursed by the Contractor; (ii) deducted by the Employer from any amounts due to the Contractor; or (iii) claimed by the Employer under the applicable bank guarantee(s).
- 30.4 If the repair, replacement or making good of any Works that are Defective, is of such a character that it may affect the efficiency of the Works or any part thereof, the Employer may require the Contractor to immediately perform tests on the repaired or replaced part of such Works, upon completion of such remedial work. If such repaired or replaced part fails the tests, the Contractor shall carry out further repair, replacement or making good (as the case may be) until that part of the Works passes such tests. The tests shall be mutually agreed upon by the Parties.
- 30.5 If the Works or any part thereof cannot be used by reason of such Defect and/or making good of such Defect, the Defect Liability Period of the Works or such part, as applicable, shall be extended by a period equal to the period during which the Works or such part could be used by the Employer because of any

of the aforesaid reasons. In the event any Sub-Contractor provides a longer guarantee with respect to the Works or any part thereof, the Contractor shall extend the benefit of such longer guarantee to the Employer.

30.6 At the end of the Defect Liability Period, the Contractor's liability for Defects with respect to the Works ceases, except in case of Latent Defects. The Contractor shall make good such Latent Defects until the expiry of the Latent Defect Liability Period, in accordance with this Clause 30.

31. Final Acceptance

The Contractor may, by written notice to the Employer, request the Employer to issue a certificate for final acceptance of the Works (the "**Final Acceptance Certificate**") after the end of the Defect Liability Period, provided that the following conditions (as may be applicable) shall have been fulfilled to the satisfaction of the Employer:

- (a) any and all liquidated damages and any other amounts payable under the SO Documents by the Contractor shall have been paid;
- (b) the Contractor shall have, if applicable, successfully conducted the Performance Guarantee Tests;
- (c) any Punch-List Item as requiring rectification or completion hereunder shall have been so rectified or completed by the Contractor to the Employer's satisfaction; and
- (d) any and all Defects in respect of the Works arising during the Defect Liability Period shall have been remedied and/or rectified to the Employer's satisfaction.

32. Representations and Warranties

- 32.1 The Contractor hereby represents and warrants to the Employer that:
 - (a) it is duly organized, validly existing, and in good standing under the laws of the country or state in which it is organized or incorporated;
 - (b) it is duly qualified to do business in all jurisdictions and owns or possesses all applicable permits that are necessary to operate its business as is currently being conducted, perform its obligations under the SO Documents and that the copies of such applicable permits have been delivered to the Employer;
 - (c) the execution, delivery and performance of the SO Documents by the Contractor and the consummation of the transactions contemplated thereby do not and shall not contravene the certificate of incorporation or by-laws of the Contractor and do not and shall not conflict with or result in: (i) a breach of or default under any indenture, agreement, judgment, decree, order or ruling of any court, government authority or regulatory body to which the Contractor is a party or by which any of its assets are bound that would have a material adverse effect on the Contractor's ability to perform its obligations under the SO Documents; or (ii) a breach of any applicable laws;
 - (d) the SO Documents constitute legal, valid and binding obligations of the Contractor, which are enforceable against it in accordance with the terms of the SO Documents;
 - (e) it is the owner, valid licensee or authorized user of all Intellectual Property Rights and any other tools or equipment which shall be used for or is incident to the design, engineering and the performance of the Scope of Work and that the Employer's proposed use (as contemplated by the SO Documents) of the Works and all other property provided by the Contractor under the SO Documents, do not and shall not infringe or misappropriate the Intellectual Property Rights of any Person;
 - (f) the Scope of Work shall be performed with professionalism, promptness, diligence, in a skilled and workmanlike manner, in accordance with Good Industry Practice and the terms of the SO Documents;
 - (g) there are no legal, arbitration proceedings or any other proceedings by or before any government authority, now pending or threatened against it, its Affiliate or any Sub-Contractor which, if adversely determined, could be expected to have adverse effects on the financial condition, options, prospects or business of the Contractor or the Contractor's ability to perform its obligations under the SO Documents;



- (h) it has the requisite expertise, skill, knowledge, experience, manpower and adequate infrastructure (with capacity and ability to augment all of these as may be necessary) to successfully perform the Scope of Work in accordance with the terms of the SO Documents;
- (i) it has examined all aspects of the SO Documents (including other terms and conditions of the SO Documents) and the Scope of Work and has satisfied itself fully as to the sufficiency of consideration for performance and completion of all of its obligations under the SO Documents;
- (j) the Works shall be free of Defects and deficiencies (including Latent Defects);
- (k) it is fully aware of and shall comply with all applicable laws during the performance of the Scope of Work;
- the Works performed hereunder shall be executed in a timely manner with due care and diligence and shall be fit for the purposes and uses intended and capable of operation in the manner contemplated hereby and in accordance with the SO Documents;
- (m) the Works shall be free and clear of any and all claims and encumbrances;
- (n) neither the Contractor nor any of its Affiliates or Sub-Contractors, and to the best of its knowledge, none of its or its Affiliates' or Sub-Contractors' respective employees, officers, directors, representatives, or agents, has made, offered to make or agreed to make any loan, gift, donation, commission, kick-back, bribe or other payment or facility, directly or indirectly, whether in cash or in kind, to or for: (i) any government official, employee, representative or agent; (ii) any employee, officer, director, representative or agent of the Employer or its Affiliates; or (iii) any other Person with respect to the negotiation, execution or performance of the SO Documents; and
- (o) no representation or warranty made by it, as contained herein or in any other document furnished by it to the Employer or to any government authority in relation to applicable permits in relation to the SO Documents, contains or shall contain any untrue statement of material fact or omits or shall omit to state a material fact necessary to make such representation or warranty not misleading.
- 32.2 The Employer represents and warrants to the Contractor that:
 - (a) it is a corporation duly organized, validly existing, and in good standing under the laws of India;
 - (b) it has full corporate power and authority to execute, deliver and to perform its obligations under the SO Documents, and that the execution, delivery and performance of the SO Documents by the Employer have been duly authorized by all necessary corporate action on the part of the Employer; and
 - (c) the execution, delivery and performance of the SO Documents by it and the consummation of the transactions contemplated thereby do not and shall not: (i) contravene the Employer's certificate of incorporation, its constituent documents or by-laws; (ii) conflict with or result in a breach of or default under any license, indenture or agreement to which the Employer is a party that would materially and adversely affect the Employer's ability to perform its obligations under the SO Documents; or (iii) breach any applicable laws, judgment, decree, order or ruling of any court, government authority or regulatory body to which the Employer is a party or by which any of its assets are bound.

33. Contractor's Liability for Failure to Perform

In the event that the Contractor is in breach of its obligations under the SO Documents, which results in delay in the Completion Schedule or hindrance in performance of the Scope of Work, the Employer shall, without prejudice to any of its other rights under applicable law or the SO Documents, be entitled to complete the Works by itself or appoint another contractor to perform or complete the Works, and the Contractor shall, in addition to the payment of liquidated damages, be liable to reimburse to the Employer any additional costs, including any overheads, incurred for the engagement of such third party contractor.

34. Intellectual Property Rights

34.1 In performing the Scope of Work, the Contractor shall not incorporate into the Works or any part of the Scope of Work or use in connection with the provision of the Works, any materials, components, designs, Drawings and Documents, methods, processes or systems that involve the use of any Confidential Information, or Intellectual Property Rights that the Contractor does not have the right to use or

incorporate or which may result in claims or suits against the Employer, the Contractor or any Sub-Contractor, arising out of claims of infringement of any proprietary rights, Intellectual Property Rights of a third party or any licensing agreements thereof.

- 34.2 The title to all the designs, Drawings and Documents, documentation, inventions and discoveries made by the Contractor in the course of performing its obligations under the SO Documents shall, at all times, reside with the Employer. Notwithstanding any proprietary legends or copyright notices to the contrary, the Employer shall be entitled to copy or reproduce documents and information furnished by the Contractor with respect to the SO Documents and distribute such copies or reproductions to others for the purposes of the Works and/or the SO Documents. The Contractor is responsible for obtaining necessary permissions and releases from any third parties placing proprietary rights or copyrights on such documents or information.
- 34.3 The Contractor shall defend, indemnify and hold harmless the Employer, the Employer's representatives, employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs and expenses of whatsoever nature, which the Employer or its representatives, employees and officers may suffer as a result of any infringement or alleged infringement of Intellectual Property Rights, which the Contractor is not licensed to use, or any claims, suits or proceedings by a third party, whether rightful or otherwise, alleging that a proprietary right or copyright has been infringed by any use, copying, reproduction or distribution by the Employer.

35. Indemnity

- 35.1 The Contractor shall defend, indemnify and hold the Employer harmless from and against any and all losses arising directly or indirectly from or incurred by reason of:
 - the acts or omissions of the Contractor, its Affiliates, Sub-Contractors or any of their respective personnel during the performance of the Contractor's obligations under the SO Documents, including any such losses arising from injury to or death of any person or damage to or loss of property;
 - (b) hazardous materials introduced to the Site or any other location by the Contractor, its Affiliates, Sub-Contractors or their respective personnel in the performance of the Scope of Work;
 - (c) non-compliance with applicable laws by the Contractor, its Affiliates, Sub-Contractors or their respective personnel; and
 - (d) any breach of representations or warranties given by the Contractor, its Affiliates, Sub-Contractors or their respective personnel under or in relation to the SO Documents.
- 35.2 The obligation to indemnify stipulated in this Clause is a continuing, separate and independent obligation of the Contractor and shall not be limited or reduced by any insurance, except to the extent that the proceeds of any such insurance are capable of being applied towards reduction of the claims made against the Employer.

36. Limitation of Liability

- 36.1 The aggregate liability of either Party, arising out of or in connection with the Scope of Work or the SO Documents, shall not exceed one hundred percent (100%) of the SO Price, provided that no such limit shall apply in respect of the Contractor's liability for:
 - (a) losses resulting from any fraud, wilful misconduct or illegal or unlawful acts or omissions of the Contractor or any Sub-Contractor or any of their respective personnel;
 - (b) liquidated damages payable by the Contractor under the SO Documents;
 - (c) costs and expenses incurred with respect to rectification of any Defect or Latent Defect; and
 - (d) liability pursuant to the breach of the Contractor's indemnity obligations under the SO Documents.
- 36.2 Neither Party shall be liable to the other Party for any loss of use, loss of production or loss of profits or any other indirect or consequential damage, whether foreseeable or not, that may be suffered by the other Party.



37. Change in Law

- 37.1 The Contractor shall, on or following the occurrence of a Change in Law, give notice of such Change in Law to the Employer in accordance with the provisions of this Clause as soon as may be reasonably practicable. The notice served pursuant to this Clause shall provide, *inter alia*, details of the Change in Law and the effect thereof on the SO Documents. If the Employer accepts the Change in Law proposed by the Contractor, the SO Price shall be correspondingly increased or decreased, and/or the Completion Schedule shall be adjusted to the extent that the Contractor has been affected in the performance of any of its obligations under the SO Documents.
- 37.2 If due to such Change in Law, the Contractor is entitled for any additional amounts, the same shall be paid to the Contractor only against a claim supported by documentary evidence to the satisfaction of the Employer. If due to such Change in Law, the Employer is entitled to recover any amount, the same shall be recovered from the Contractor as a debt due and payable by the Contractor to the Employer.

38. Force Majeure

- 38.1 **"Force Majeure**" shall mean any event or circumstance or combination of events or circumstances in India which: (i) is beyond the reasonable control of the affected Party; (ii) the affected Party could not reasonably have anticipated or provided for before entering into the SO Documents; (iii) could not have been prevented by Good Industry Practice; (iv) is not suffered by a Sub-Contractor; (v) is unavoidable notwithstanding the reasonable care of the Party affected; and (vi) has not resulted from the negligence of the affected Party or the failure of such Party to perform its obligations under the SO Documents and which, or any consequence of which, has a direct, material and adverse effect upon the performance by the affected Party of its relevant obligations under the SO Documents and shall be restricted to the following events:
 - (a) war, hostilities or warlike operations (whether a state of war be declared or not), invasion, act of foreign enemy, terrorism and civil war; or
 - (b) earthquake, volcanic activity, fire, flood or inundation, tidal wave, typhoon or cyclone, hurricane, storm, lightning, or nuclear or other natural disaster, epidemic, pandemic, lock downs imposed by government authorities.
- 38.2 Notwithstanding the foregoing, an event of Force Majeure shall not include:
 - (a) any Site condition or event arising therefrom;
 - (b) the occurrence of any manpower, material or equipment shortage;
 - (c) inability to procure funding by the Contractor;
 - (d) any increase in cost, prices, rates, wages, commissions, fees, duties or other levies;
 - (e) any hindrance created by any third party in respect of any access right or right of use in respect of the Site;
 - (f) inability of a Party to pay any amounts due pursuant to the SO Documents;
 - (g) conditions caused by the negligence or wrongful acts of the affected Party;
 - (h) a breach of any provision of the SO Documents or any default or failure by a third party in any agreement entered into by the affected Party with such third party;
 - any delay, default or failure (direct or indirect) in obtaining materials, equipment or performing services by any Sub-Contractor, any workers or agents thereof, performing the Scope of Work or any part thereof; or
 - (j) disruption of access to the Site due to road conditions.
- 38.3 If either Party is prevented, hindered or delayed from or in performing any of its obligations under the SO Documents by an event of Force Majeure, then it shall notify the other in writing of the occurrence of such event and the circumstances thereof immediately following the date of commencement of any event of Force Majeure and in any event within seven (7) days of the occurrence of such event. Such notice shall be a pre-condition to an affected Party claiming relief for an event of Force Majeure and, if such notice has not been provided, the affected Party shall be precluded from claiming any loss pursuant to an event of Force Majeure.

- 38.4 The Party giving such notice shall be excused from the performance of its obligations under the SO Documents for so long as the relevant event of Force Majeure continues, and to the extent that such Party's performance is prevented, hindered or delayed. The Completion Schedule shall be extended for the time period during which such event of Force Majeure exists and, in such case, both Parties shall mutually discuss and arrive at the further course of action for the performance of their respective obligations. The Party invoking such event of Force Majeure as a cause for such delay shall promptly submit to the other Party proof of the nature of such delay and its effect upon the time for performance of its obligations.
- 38.5 Delay or non-performance by either Party hereto caused by the occurrence of any event of Force Majeure shall not constitute a default or breach of the SO Documents or give rise to any claim for damages or additional cost or expense. However, the affected Party shall mitigate the effect thereof upon its performance of the SO Documents and to fulfil its obligations under the SO Documents, including recourse to alternate acceptable sources of the Works, Equipment and Materials and other resources, but without prejudice to either Party's right to terminate the SO Documents under Clause 40.
- 38.6 If the performance of the SO Documents is substantially prevented, hindered or delayed for either a period of more than one hundred and twenty (120) consecutive days or an aggregate period of more than fifty percent (50%) of the total Completion Schedule, on account of one or more events of Force Majeure during the currency of the SO Documents, the Parties shall attempt to develop a mutually satisfactory solution, failing which the Employer may terminate the SO Documents by giving a notice to the Contractor. In the event of termination pursuant to this Clause, the rights and obligations of the Employer and the Contractor shall be as set out in Clause 40.2.

39. Suspension

- 39.1 The Employer may, by issuing a notice to the Contractor, order the Contractor to suspend performance of any or all of its obligations under the SO Documents. Such notice shall specify the obligation of which performance is to be suspended, the date of suspension and the reasons thereof. The Contractor shall forthwith:
 - (a) suspend performance of such obligation (except those obligations necessary for the care or preservation of the Works), until ordered in writing to resume such performance by the Employer;
 - (b) place no further subcontracts or orders for goods, supplies, services, work or facilities in respect of the Scope of Work, except to the extent expressly requested by the Employer; and
 - (c) unless otherwise directed by the Employer, use all endeavours to suspend on the most favourable terms available to the Contractor all orders, contracts, subcontracts and agreements to the extent affected by such suspension and otherwise minimise any additional costs associated with such suspension.
- 39.2 The Employer shall issue orders for suspension or reinstatement of the SO Documents to the Contractor in writing, as may be required. In the event of any suspension, the Completion Schedule shall be extended suitably by the Employer, which in any case shall not be more than for a period equal to the duration of suspension.
- 39.3 During a suspension, the Contractor shall not be entitled to payment of the SO Price which would have otherwise been ordinarily payable during the relevant period of such suspension, except for such part of the Scope of Work which has been completed prior to the date of suspension specified in the notice of suspension. Upon resumption by the Contractor of all activities affected by a suspension, the Employer shall resume payments of the SO Price with the payment dates adjusted to reflect the period during which scheduled payments were not made.
- 39.4 The Employer shall reimburse the Contractor any necessary, reasonable, proper, verified and demonstrable costs incurred as a direct result of such suspension of the Scope of Work, provided such costs are substantiated to the Employer's satisfaction. The Employer shall not be responsible for any costs and liabilities, if suspension or delay is due to default by the Contractor or its Sub-Contractors.



40. Termination

- 40.1 *Termination for the Contractor's Default*
 - (a) The Employer may, without prejudice to any other rights or remedies it may possess, terminate the SO Documents forthwith and with no compensation, by giving a notice of termination, if the Contractor:
 - becomes bankrupt or insolvent, has a receiving order issued against it, compounds with its creditors, or, if the Contractor is a corporation, a resolution is passed or order is made for its winding up (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), a receiver is appointed over any part of its undertaking or assets, or if the Contractor takes or suffers any other analogous action in consequence of debt;
 - (ii) assigns or transfers the SO Documents or any right or interest therein, except as provided under the SO Documents;
 - (iii) in the judgment of the Employer, has engaged in corrupt or fraudulent practices in competing for or in execution of the SO Documents; or
 - (iv) delays performance of any obligation under the SO Documents, resulting in the maximum ceiling of the liquidated damages as stipulated in the SO Documents being reached.
 - (b) The Employer may, without prejudice to any other rights or remedies it may possess, terminate the SO Documents by giving the Contractor a termination notice of fifteen (15) days, with no compensation to the Contractor, if the Contractor:
 - (i) abandons or repudiates the SO Documents;
 - (ii) fails to commence work on the Scope of Work promptly or has suspended the progress of performance of its obligations under the SO Documents for more than thirty (30) days after receiving a written instruction from the Employer to proceed;
 - (iii) fails to execute the SO Documents in accordance with the terms and conditions therein, or neglects to carry out its obligations under the SO Documents; or
 - (iv) refuses or is unable to provide sufficient materials, services or labour to execute and complete the performance of the Works in a manner specified in the programme furnished under Clause 12 at such rates of progress that give assurance to the Employer that the Contractor can complete the Works in accordance with the Completion Schedule,

and the Contractor fails to remedy, or to take steps to remedy, such default within fourteen (14) days of its receipt of a notice from the Employer requiring the Contractor to cure such default.

(c) Termination for Cross Default

The Contractor agrees and acknowledges that the Contractor and/or its Affiliates have been awarded separate service orders and/or purchase orders in addition to this Service Order. The division of the scope of work under the respective orders that are awarded to the Contractor and/or its Affiliates, shall not be construed to limit their respective liabilities or responsibilities thereunder. The Contractor further agrees that, in the event of any breach or default by the Contractor and/or its Affiliates under any such order awarded to it, which would either result in a termination of or give rise to a termination right under such order, such breach or default shall be construed to be a breach or default under the SO Documents and the Employer shall, without prejudice to any other rights or remedies as it may possess, have the right to terminate all the orders in accordance with the provisions of termination contained under such other orders, at the risk and cost of the Contractor, by giving a notice of termination to the Contractor.

- (d) Upon receipt of the notice of termination under Clause 40.1(a), Clause 40.1(b) or Clause 40.1(c), as the case may be, the Contractor shall, either immediately or upon such date as is specified in the notice of termination:
 - (i) cease all further work, except for such work as the Employer may specify in the notice of termination for the sole purpose of protecting that part of the Works already executed;



- (ii) deliver to the Employer parts of the Works (or parts thereof) executed by the Contractor up to the date of termination;
- (iii) terminate all sub-contracts, except those to be assigned to the Employer;
- (iv) to the extent legally possible, assign to the Employer all rights, titles and benefits of the Contractor to the Works as on the date of termination and, as may be required by the Employer, in any sub-contracts concluded between the Contractor and its Sub-Contractors; and
- (v) deliver to the Employer all Drawings and Documents, Specifications and all other documents prepared in connection with the Scope of Work by the Contractor or its Sub-Contractor, as on the date of termination.
- (e) Upon such termination in terms of Clause 40.1, the Employer may take possession of the Site, expel the Contractor and complete the Scope of Work by itself or by employing any third parties in accordance with Clause 33.
- (f) Subject to Clause 40.1(g) below, the Contractor shall be paid the SO Price attributable to the Works (or part thereof) as executed by the Contractor and accepted by the Employer, as on the date of termination. If the Employer instructs the Contractor to provide for safekeeping of the Works, any reasonable costs incurred by the Contractor with respect to protection of the Works shall be paid by the Employer to the Contractor. Any sums due to the Employer from the Contractor and accruing prior to the date of termination shall be deducted from any amounts to be paid to the Contractor under the SO Documents.
- (g) Pursuant to termination of the SO Documents in accordance with Clause 40.1, if the Employer completes the Scope of Work (or any part thereof) under the SO Documents, the cost of completing such Scope of Work by the Employer shall be determined, as under:
 - (i) if the sum that the Contractor is to be paid, pursuant to Clause 40.1(f), plus the reasonable costs incurred by the Employer in completing the Works, exceeds the SO Price, the Contractor shall be liable to pay to the Employer such excess amounts incurred by the Employer;
 - (ii) if such excess is greater than the sums due to the Contractor under Clause 40.1(f), the Contractor shall pay the balance to the Employer; and
 - (iii) for termination due to the defaults by the Contractor, the Employer reserves the right to get the balance work done by other agencies at the risk and cost of the Contractor.
- 40.2 *Termination for the Employer's Convenience*
 - (a) The Employer may, at any time, terminate the SO Documents for any reason whatsoever, by giving the Contractor a ten (10) days' notice of termination.
 - (b) Upon receipt of the notice of termination under Clause 40.2(a), the Contractor shall take all measures as specified in Clause 40.1(d).
 - (c) In the event of termination of the SO Documents under Clause 40.2(a), the Employer shall pay the following amounts to the Contractor:
 - (i) the SO Price, properly attributable to the Works executed by the Contractor and accepted by the Employer, as on the date of termination; and
 - (ii) the reasonable cost of termination of sub-contracts between the Contractor and its Sub-Contractors, subject to the Contractor submitting documentary evidence of such termination to the Employer's satisfaction.
- 40.3 In this Clause 40, in calculating any amounts due from the Employer to the Contractor, any sum previously paid by the Employer to the Contractor under the SO Documents, including any advance payment paid pursuant to the terms of payment under the SO Documents, shall be taken into account.

41. Governing Laws

The SO Documents shall be governed by and interpreted in accordance with the laws of the Republic of India.



42. Settlement of Disputes

- 42.1 If any dispute whatsoever arises between the Employer and the Contractor in connection with or arising out of the SO Documents, including without prejudice to the generality of the foregoing, any question regarding its existence, validity, termination or the execution of the Scope of Work, whether during the progress of the Scope of Work or after Completion of the Works and whether before or after the termination, abandonment or breach of the SO Documents, the Parties shall seek to resolve any such dispute by referring the matter to an authorized representative of the Employer. Such representative shall provide his decisions within thirty (30) days of the referral of such dispute in accordance with Clause 42.2, within thirty (30) days of such decision.
- 42.2 All disputes arising hereunder and remaining unresolved in terms of Clause 42.1, shall be referred to the courts at Ahmedabad, Gujarat, India and such courts shall have exclusive jurisdiction on all matters arising out of or relating to the SO Documents.
- 42.3 Notwithstanding reference of any dispute to the Employer's representative or to the courts, the Parties shall continue to perform their respective obligations under the SO Documents, unless otherwise agreed by the Parties in writing. Further, each Party agrees to pay to the other Party, all such undisputed amounts due under the SO Documents, provided that such amounts due are not a subject matter of such dispute.
- 42.4 Notwithstanding anything to the contrary contained herein but subject to Clause 42.2, the Contractor acknowledges that damages may not be an adequate remedy for a breach of the SO Documents and that the Employer shall have a right to seek injunctive relief or specific performance, as a remedy for any actual or threatened breach. The Contractor agrees to the Employer seeking grant of injunctive relief to restrain any conduct or threatened conduct which is or shall be in breach of the SO Documents, as a remedy for any actual or threatened breach to perform its obligations under the SO Documents, as a remedy for any actual or threatened breach which shall be in addition to any other remedies available to the Employer.

43. Assignment and Subcontracting

- 43.1 The Employer shall be entitled to assign the whole or any part of the SO Documents or any benefit or interest herein without the Contractor's consent. The Contractor particularly consents to the grant and creation by the Employer of a security interest in and assignment of the SO Documents and any and all of the Employer's rights, titles and interests in and under the SO Documents in favour of any lender, security agent or trustee. In furtherance of and to give effect to such security interest and assignment, the Contractor agrees to enter into such contracts, direct agreements, consents and deliver such legal opinions as are reasonably customary and as may be required by any of the lenders or their representatives.
- 43.2 The Contractor shall not be entitled to assign or subcontract any part of the SO Documents or any benefit or interest in or under the SO Documents, without the prior written approval of the Employer.
- 43.3 The Contractor shall be responsible for all acts, omissions and defaults of any Sub-Contractor, as if such acts, omissions and defaults were committed by the Contractor and any assignment or subcontracting shall not relieve the Contractor of any of its responsibilities under the SO Documents or at law.

44. Confidentiality

- 44.1 All information including, without limitation, oral and written information, disclosed by the Employer, the Employer's representative (including any experts appointed by the Employer) or Employer's personnel ("Disclosing Party") to the Contractor or any Person acting for and on behalf of the Contractor ("Receiving Party") is deemed to be confidential, restricted and proprietary to the Disclosing Party ("Confidential Information").
- 44.2 Except as specified in the SO Documents, the Confidential Information supplied is not to be reproduced in any form except as required to accomplish the intent of, and in accordance with the terms and conditions of the SO Documents. The Receiving Party shall provide the same care as it provides to protect its own similar proprietary confidential information to avoid disclosure or unauthorized use of the Confidential Information. All Confidential Information shall be retained by the Receiving Party in a secure place with access limited to only such of the Receiving Party's personnel, employees or agents who need to know such Confidential Information for the purposes of completing the Scope of Work, performance

of obligations under the SO Documents and to such third parties as the Disclosing Party has consented to by prior written approval. Unless otherwise specified in writing, all Confidential Information, including all copies thereof: (a) remains the property of the Disclosing Party; (b) shall be used by the Receiving Party only for the purpose for which it was intended; and (c) shall be returned to the Disclosing Party or destroyed after the Receiving Party's need for it has expired or upon request of the Disclosing Party, and, in any event, upon expiration or termination of the SO Documents. At the request of the Disclosing Party, the Receiving Party shall furnish a certificate certifying that any Confidential Information not returned to Disclosing Party has been destroyed. For the purposes hereof, Confidential Information does not include information that:

- (a) is already published or otherwise in public domain before it was communicated to the Receiving Party without any fault or negligence of the Receiving Party;
- (b) prior to disclosure, was already in the Receiving Party's legitimate possession without having been obtained directly or indirectly from the Disclosing Party;
- (c) is lawfully obtained from an independent source that had neither direct nor indirect obligation of confidentiality towards the Disclosing Party;
- (d) is independently developed by the Receiving Party, by itself or through parties who have not had, either directly or indirectly, access to or knowledge of such information; or
- (e) is obligated to be produced under order of a court of competent jurisdiction or other similar requirement of a government authority, provided that the Receiving Party provides the Disclosing Party with prior notice of such order or requirement for disclosure of such information.
- 44.3 The Contractor shall, and ensure that its personnel shall, comply with the applicable laws prohibiting insider trading and shall not, at any point in time, use the Confidential Information for the purposes of trading in the securities market, either by itself or through others.
- 44.4 Any document other than the SO Documents itself that contains Confidential Information, shall remain the Employer's property and all copies thereof shall be returned to the Employer upon completion of the Scope of Work.

45. Adjustments

- 45.1 The Contractor agrees that the Employer shall have a right to set-off payments due and payable to the Contractor against payments due and receivable from the Contractor in terms of the SO Documents. If the Employer is unable to adjust or set-off any payments due and receivable from the Contractor, the Employer shall have the right to raise a credit note on the Contractor to claim any reimbursements that may be due from the Contractor.
- 45.2 It is agreed between the Parties that all payments by the Contractor in respect of any payment obligations of the Contractor in terms of the SO Documents shall be made without any deductions or set-off. If the Contractor is prevented by applicable law or otherwise from making, or causing to be made, such payments without deduction, the Contractor shall gross-up such payments by such amounts as may be necessary for the Employer to receive the full payments it would be entitled to receive, had such payments been made without such deduction.

46. Anti-Bribery and Anti-Corruption

The Contractor covenants that neither the Contractor nor any of its Affiliates, Sub-Contractors, employees, agents or representatives shall make, offer or agree to give any bribe, commission, gift or inducement to: (i) any government official; (ii) any officer, employee, agent or representative of the Employer or its Affiliates; or (iii) any other Person, in relation to the obtaining or execution of the SO Documents or performance of obligations hereunder. Such an act by the Contractor or any of its Affiliates, Sub-Contractors, employees or representatives shall, in addition to any criminal liability which the Contractor may be subject to under applicable law, provide a right to the Employer to terminate: (i) the SO Documents in accordance with Clause 40.1(a); and/or (ii) any other contract that may have been entered into between the Parties. The Contractor shall also be liable for payment of any loss or damages suffered by the Employer due to any such termination, which the Employer may, at its option, deduct and/or set off from the amounts otherwise due to the Contractor under the SO Documents or any other contract or as a debt due and payable. Any dispute as to the breach by the Contractor of its obligations under this Clause shall be determined by the Employer in such manner and

on such evidence or information as available to the Employer, and the Employer's decision in this regard shall be final and conclusive.

47. Amendment

No modification of the terms of the SO Documents shall be effective unless it is in writing, is dated, expressly refers to the SO Documents and is agreed to and signed by duly authorised representatives of the Parties.

48. Constitution

The Contractor shall not alter, modify or change its constitution, without the Employer's prior written approval.

49. Language of Communication

All documents, writing and notices pertaining to and submitted in terms of the SO Documents and provided by one Party to the other shall be in the English language. If any writing or document, including any document issued or certified by any Person, is not in English, then it shall be translated into English and notarised, by the Party in possession of such writing and the English version of such writing shall govern and prevail.

50. Severability

If any provision or condition of the SO Documents is prohibited, rendered invalid or becomes unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the SO Documents.

51. Independent Contractor

The Parties acknowledge and accept that the Contractor shall act and perform its obligations under the SO Documents as an independent contractor and that the Contractor shall not be regarded as an employee, agent or partner of the Employer. The Contractor shall not have any power or authority to enter into any contract, agreement or arrangement for or on behalf of the Employer.

52. Non-Solicitation

The Contractor shall not, during the Term and for a period of one (1) year thereafter, directly or indirectly offer employment to or employ/hire the employees of the Employer.

53. Waiver

Any waiver of a Party's rights, powers or remedies under the SO Documents shall be in writing, dated and signed by such Party or its authorized representative granting such waiver. A Party granting such waiver shall specify the right and the extent to which it is being waived.

54. Survival

Notwithstanding anything to the contrary in the SO Documents, the termination, cancellation or expiration of the SO Documents for any reason shall not relieve either Party of any obligations or liabilities for loss or damage to the other Party arising out of or caused by acts or omissions of such Party, prior to the effectiveness of such termination, cancellation or expiration, as the case may be. The provisions of Clause 21 (*Insurance*), Clause 25 (*Liquidated Damages*), Clause 30 (*Defect Liability*), Clause 32 (*Representations and Warranties*), Clause 34 (*Intellectual Property Rights*), Clause 35 (*Indemnity*), Clause 36 (*Limitation of Liability*), Clause 40 (*Termination*), Clause 41 (*Governing Laws*), Clause 42 (*Settlement of Disputes*), Clause 44 (*Confidentiality*) and Clause 54 (*Survival*) shall survive termination, cancellation or expiration of the SO Documents, in addition to any other provisions that by their content are intended to survive the performance, termination, expiration or cancellation of the SO Documents.

55. Entire Agreement

The SO Documents constitute the entire agreement between the Parties with respect to the Scope of Work set out thereunder and supersedes all prior agreements, understandings, negotiations, letters of intent/award and correspondence, whether oral or written, between the Parties, with respect to the Scope of Work.

Safety Requirements

The Employer is committed to achieve its goal of 'zero' zero fatality, zero injuries and zero excuses. In order to achieve this, every Contractor is responsible and accountable to ensure zero tolerance to any violation with respect to the safety protocols of the Employer. In the process of undertaking the Scope of Work, the Contractor shall ensure strict compliance with applicable safety standard requirements and all business specific standards or procedures as may be provided by the Employer. In the event of any inconsistency between the provisions stipulated herein and the requirements specified in any other documents provided by the Employer, the provisions stipulated herein shall prevail, to the extent of such inconsistency. Critical safety requirements which are required to be complied by the Contractor are as follows:

1. Work Permit System (PTW)

The Contractor shall be familiar with permit requirements and shall be responsible for ensuring compliance with such permit requirements. No work shall be carried out without work permits authorized by the Employer unless exempted at the Site. There is an integrated work permit for all nonroutine activities (except work pertaining to operation and maintenance which may have SAP generated PTW) which takes care of all related safety standards. The work permit shall be issued with a validity of only one shift which can be renewed shift-wise. However, the Employer shall have the right to issue the work permit for a longer duration, based on the nature of work. Except in the cases of routine jobs, where an integrated work permit is provided, no work permit shall be issued unless the Contractor has a written job safety analysis (JSA) approved by the Employer, preferably in the local language prevalent at the Site. All the non-routine work (except work pertaining to operation and maintenance) performed after 10pm shall require a separate 'night work permit' to be issued by the Employer and the same has to be procured and acknowledged by the Contractor. For avoidance of doubt, it is clarified that when night work is required a period of 'overlap' shall be scheduled such that the day and night engineers can discuss the work and align themselves on the Work to be performed under such night work permit. For Sunday and holidays, separate work permit shall be required which shall be authorized by the Employer's concerned line manager and/or safety officer.

2. Work at Height (W@H)

2.1. The Contractor shall have a written plan for W@H, in addition to the relevant certificate(s), certifying the right to W@H. Such plan shall ensure that:

- (a) Height works above one point eight (1.8) metres have safe access, egress, and safe platform. Otherwise people shall be secured through use of full body harness with double lanyard including shock absorber and sufficient strengthened lifeline support.
- (b) Working platform shall have hand rail, mid rail and toe board. Certified horizontal life line shall be used, preferably 8mm wire rope.
- (c) Working at more than five (5) metres (e.g. transmission tower, truck covering etc.), or requiring different body posture even at lesser height shall require "Fall Arrestor" (for vertical movement).
- (d) Falling objects safety net shall be installed to arrest such objects.
- (e) Step ladder / platform should be used if any personnel intends to work at height. Use of empty drums to climb up is banned. People taking tools for working at height shall have tool kits to facilitate three (3) point contact during access and egress.
- (f) Employer's floor-hole cover policy shall be complied with and hole covers shall be fabricated as per such policy and design.
- 2.2. All the personnel involved in designing fall prevention measures or fall protection measures shall be subject to formal competency checks by the Contractor, prior to the personnel commencing the assigned work, to ensure that such personnel have the necessary training, experience and qualification to perform the assigned work. The Contractor shall also have a rescue plan in writing, which provides for, *inter alia*, the manner and mechanism in which all persons at the Site, including people working at a height, are to be rescued.

3. Scaffolds

Contractor shall ensure compliance with standard practices for all scaffold related activities. Some of them are:

- (a) Every scaffold and its support shall be of good construction and be of suitable and sound material and strength. Use of wood and bamboo scaffolds are banned.
- (b) All elevated structures/ working platform areas should be guarded on all sides with railings and toe board as described.



- (c) Scaffolds shall be designed to support at least four (4) times the anticipated weight of men and material. It shall have standard inclined ladder / staircase for access and egress.
- (d) Landing platform shall be provided at every nine (9) meters of height. Extra support can be taken from existing nearby structure. Maintain a safe distance from power lines.
- (e) Fall protection when erecting, dismantling, modifying scaffolds shall be under the direction of a competent person.
- (f) Scaffold shall be designed, erected, and certified for use by competent persons. Ready for use scaffolding shall be tagged with green board while other scaffolding shall be tagged with red tag and shall not be used pending certification.

4. Portable Ladders

- 4.1. The Contractor shall ensure that:
 - (a) only commercially available and approved ladders of metal / aluminium / fibreglass are allowed to be used.
 - (b) metal ladders shall not be used by persons performing electric welding or working near energized electric lines or services, unless otherwise approved in writing by the Employer for a specific job.
 - (c) painted ladders are not permitted.
 - (d) all ladders shall be inspected by a qualified person or inspection agency as per the statutory requirements or requirements of the Employer.
 - (e) bends, dents, cracks, loose or missing rivets, disconnected braces, condition of steps and corrosion seriously weaken a ladder. Destroy or repair any defective ladders immediately in accordance with manufacturers' recommendations

5. Barricades and Signs

5.1. The Contractor shall furnish, erect and dismantle all barricades as required for indicating (warning) and protecting from hazards such as excavated area, opening of a platform, crane swing area, fabrication yard, overhead work, to carry out work on road and such other locations. Protective barricades shall be made of sheet metal or 40 NB pipe, painted with yellow and black stripes or red and white stripes, with caution signage on it and strong enough, to resist a force of one hundred (100) kilograms, for excavated pit more than one (1) metre depth. For warning, indicative barricades can be made of fluorescent tape, cable and ropes with signs affixed. No excavated pit shall be left unprotected or without signs indicating caution during the job till backfilling is completed. Caution tape shall be used to highlight hazards to other personnel that may need to access the area.

- 5.2. Any barricade must be at least one point five (1.5) meters from the edge of the excavation or opening. No overburden soil, or vehicle movement shall be allowed within one point five (1.5) m of an excavated pit.
- 5.3. Barricades, in areas with night traffic by vehicles or people, must be lit with warning flashers (red or yellow) every fifty (50) meters and there shall be caution boards and warning flags.

6. Confined Space (CS)

The Contractor shall:

- (a) confirm with site engineer about working in confined spaces and follow Site specific confined space entry procedure if any.
- (b) prepare safe entry procedure and obtain entry and work permits.
- (c) provide on the job training to persons entering into confined spaces and have stand-by person and rescue team for any incidents.
- (d) ensure proper ventilation (forced or exhaust), illumination using 24 V power supply
- (e) carry out checks for presence of toxic/ flammable gases, monitor the oxygen content in confined spaces and ensure availability of communication media between stand-by confined spaces attendant and people inside confined spaces
- (f) ensure availability of self-contained breathing apparatus or equivalent and use of all relevant personal protective equipment as per JSA and PTW.
- (g) ensure that all persons exit from the confined space upon completion of the work. To ensure such exit, head count of the men entering and exiting such confirm spaces shall be performed and a record maintained in a register.

7. Excavation

- 7.1. Before an excavation begins, the Contractor shall verify Site specific conditions such as traffic, vibrations, proximity of structures, soil, surface water and groundwater, chemical contamination of water, water table, overhead and underground utilities along with Site map, weather condition etc.
- 7.2. Minimal precautions required are:
 - (a) provision of high visibility jacket for persons exposed to traffic.
 - (b) remove or stabilize all surface impediments including by way of removal of loose rock or soil that could fall and create hazards to persons.
 - (c) erect either warning barricades (with depth of less than one (1) metres) or rigid, protective barricades (with depth of more than one (1) metre) to avoid leaving an excavation hazard unprotected. However, a spoil pile at least one point five (1.5) meter high can be used as a barricade on one side of the excavation.
 - (d) keep spoil dirt and any material or equipment that may fall into an excavation at least one point five (1.5) meter from the edge.
 - (e) Excavated pits deeper than one point five (1.5) meters will have a maximum height of vertical wall of one point five (1.5) meters with sloped edges at forty five degrees (450).
 - (f) protect, support, or remove underground installations (e.g., electrical ducts, water lines, sewer lines, or fire lines).
 - (g) prohibit personnel from working or passing under the loads of lifting or digging equipment inside the pit.
 - (h) provide support systems such as shoring, bracing, or underpinning to ensure the stability of adjoining buildings, walls or structures, particularly if depth is more than one (1) metre. In such cases, confined space entry shall be obtained and safe access / egress path shall be provided.
 - that no worker shall be allowed to work alone in a trench at any time.

8. Hot Job

8.1. The Contractor shall obtain and adhere to written work permit while carrying out any hot work involving welding, cutting, brazing, polishing or

heating a metal drum, barrel, or tank. Sealed container, cylinder etc. must not be welded or gas cut in any case.

- 8.2. All operators involved in hot work shall be trained on the hazard and risk control measures as per JSA and should be qualified. Flammable source must be removed or protected from heat using fire retardant mat(s). There shall be flash back arrester both at cylinder and torch, precaution related to gas cylinder safety shall be adhered to and welding machine shall be certified by Employer's electrical engineer for suitability and integrity. The Contractor shall not use AC transformer type welding machine and only generator / rectifier type machine shall be used. Electrical DB supply must be fitted with ELCB/RCCB set for thirty milli-ampere (30mA). Spatters generated from hot work must be arrested and the area shall be barricaded if hot work is performed at height. The Contractor shall ensure availability and use of recommended PPEs as outlined in the JSA and PTW. A trained fire watcher must be placed for all critical hot work. Job and machine grounding must be ensured. In case of hot job in Confined Space, atmospheric test must be carried out by an authorized person.
- 8.3. The Contractor shall provide fire extinguisher during hot work which shall be periodically inspected and checked for the purposes of being fit to use.

9. Electrical installation

The Contractor shall ensure that:

- (a) any temporary power distribution system including the source shall be designed and approved by Employer's electrical engineer.
- (b) all cables overhead should be more than two point five (2.5) metres on insulated or wooden support and no temporary cable shall be laid over the ground.
- (c) all electrical installations, distribution box and welding machines should be prominently marked for identifications with hazard signs and following information shall be provided: identification number, name of the Contractor/Subcontractor, source of incoming /outgoing power and danger sign in case of 440V DB.
- (d) power supply points are of adequate capacity, provided with proper switch and fuse arrangement and installed at strategic locations.



- (e) panel rooms/ distribution box pathways are clear and free from any obstructions.
- (f) while working near the live electrical conductors, arc flash suit of sufficient rating, as per JSA and PTW, shall be used.
- (g) temporary electrical installations must meet the same electrical code requirements as permanent installation, i.e. proper earthing, glands and seals at electrical boxes and cable repairs equal to the original cable insulation.
- (h) Earth Leakage Circuit Breaker (ELCB) or Residual Current Circuit Breaker (RCCB): earth protection for personnel on the Sites shall be provided by a thirty milli-ampere (30mA) ELCB/RCCB. It should not be replaced by MCB.
- the Electricity Rules, 2005 and safety requirements specified under the applicable regulations issued by the Central Electricity Authority are complied with and the following are adhered to:
 - engage a wire-man and technician or engineer (license holder) to work on all electrical installations;
 - ensure that only industrial type plug and sockets are used and proper earth is provided on electrical installations;
 - (iii) electrical distribution boxes are installed on mountings at predetermined locations with its nomenclature;
 - (iv) rain protections are provided on electrical installations and DBs;
 - (v) only three core double insulated cables are used for any temporary wiring or portable/ hand held tools or lightings;
 - (vi) use authorized cable jointers / connectors to join the cables;
 - (vii) handles/ body of portable electrical tools shall be of rubber or insulating material; and
 - (viii) electrical system shall be handled by a competent and authorized person for the voltage as per authorization and in line with the applicable statutory requirements.

10. Portable Tools and Equipment

- 10.1. The Contractor shall ensure that tools and equipment requiring a formal periodic inspection must be tagged, marked, labelled, tested, certified and calibrated (as applicable) to indicate that the formal inspection has been performed. All formal inspections must have inspection records. The Contractor shall be required to ensure use of all certified, adequately insulated, tested, checked and quality manufactured tools and tackles including cutting, brazing, welding, cutting torch, rock breaker, driller, lifting gear etc.
- 10.2. Any tools and equipment found defective or in need of inspection must be tagged with a "defective" tag and returned to the appropriate person for repair or inspection. The tool or equipment must be removed from the Site until repaired or inspected. All portable grazing / grinding equipment must have adequate and valid wheel, insulation, guard cover and good quality wire. The Contractor shall ensure that cables for all power tools shall be without any cable joints and 2 Pin/3 Pin shall be used for power connection.

11. Hoisting/ Mobile lifting equipment

- 11.1. The Contractor's personnel are forbidden to ride on any hook, load, or headache ball. Equipment operator certifications shall be submitted to the Employer's Site team. Unauthorized lifts (including tandem lifts) are not permitted. The Employer's site engineer must be notified prior to any critical lift (a critical lift is any lift that exceeds eighty percent (80%) of the design capacity of the lifting device/or exceeds 02 tons) being carried out.
- 11.2. All lifting equipment, tools and tackles and devices shall be tested, certified and maintained to manufacturer specifications. For man lift and other industrial lifts, the Contractor shall ensure that the Contractor, prior to deployment of the lifting equipment, tools and tackles and devices at the Site, procures a certificate from third party inspection agencies as per the statutory requirements, certifying the successful testing of such lifts at Site..

12. Lifting Equipment

12.1. The Contractor shall ensure that different man and material lifting equipment (different cranes, winch machine, hydraulic lift, etc.), tools and tackles proposed to be used at the Sites are suitable for the job and approved for use by the site team. The Contractor shall use the Employer's site checklist of different cranes / heavy vehicle etc. before hiring or bringing any such equipment to Site for use. After that the Contractor shall use periodic and daily



checklist to ensure continued suitability. These equipment and tools should have all valid legal documents and maintenance record available with them. The operator shall have necessary statutory certification, training record on manufacturer's training and refresher training of every three (3) years with minimum experience of five (5) years in the job before coming to the Site. All cranes used at the Site must have safe load indicator, over run cutoff switch (anti-two block switch) and audio-visual alarms.

- 12.2. The safe working load, date of last testing and due date for next testing should be clearly marked on the body. Use of first generation hydra at the Sites are banned.
- 12.3. All material lift job should have a documented plan as approved by the Site team and for any critical lifts (with weight of more than two (2) tons, as minimum normal practice but can be different as agreed by Site team) should have detail material lift plan validating soil compactness, crane placement, man and material locations, detail sling specification, angle of lift, approval and presence of competent mechanical engineer during lift. Critical lifts are normally not permitted at night at the Sites.

13. Machine Guarding

13.1. Contractor shall be responsible for ensure guarding of rotating machines adequately to prevent exposure of personnel.

14. LOTO

- 14.1. The Contractor's supervisor shall ensure that lockout and tag-out is performed according to the plan and no personnel works beyond the facilities protected through lockout and danger tags.
- 14.2. All people involved directly or indirectly in the work associated with hazardous energy sources shall be involved in the control of these hazards. This involvement may include developing and / or reviewing the lockout plan, placing the locks and danger tag on isolation devices or group locks system or at least verifying the lock/tag on the equipment on which they are supposed to work. The Contractor shall ensure that its personnel will try to ensure proper isolation before allowing people to work on the equipment. After ensuring proper lockout and tag-out, key to the lock shall be made available to the concerned supervisor or the engineer in-charge.

15. Winch Machine Safety

15.1. The winch machine shall be fit for the purpose in terms of its integrity, rope size, diameter and

quality, brakes liners, electrical integrity, condition of isolators, double earth for motor and panels, overloading relay setting with respect to rated current of the motor, solid support in its installation –either through a concrete column or steel column. Machine shall be locked with the column with the help of wire rope or foundation bolt and shall have interlocking arrangement in case of sudden increase in speed. Total lifting process of the rope shall be done in the multiple of thirty (30) meters.

16. Concreting

- 16.1. Formwork shall be in line with the current version of approved, released and accepted drawing. The Contractor shall be responsible for adherence to 'Bar Bending Schedule' and 'Concreting Plan' and shall submit and obtain approval for method statement, shuttering and staging plan including rebar spacing and chair design. Formwork shall be inspected by a competent person before pouring of concrete begins. All projected reinforcement bars shall be covered / bent when work is being carried out overhead. Any timber form work shall be carefully inspected for cracks and excessive knots before use. Tubular steel shall be inspected for rusting, dents, damaged welds etc. before it is erected. All vertical supports shall be vertically braced and cross bar support. Footings under the support shall be set on firm soil or other suitable materials which assures stability and the prop shall be of full length and not of two or three pieces joined together.
- 16.2. During pouring of concrete there should be continuous inspection of centring wedges and adjustment screws. Before removing the forms, the Contractor shall ensure that the concrete has developed sufficient strength to support itself and all loads that will be impinging on it.
- 16.3. Formwork structure shall have sufficient catwalks and other secure access for inspection.

17. Motor Vehicle

17.1. All motor vehicles to be used in the performance of the Scope of Work shall be strictly fit for the purpose. Following must be ensured: a valid driving license and vehicle insurance, adequate road worthiness (vehicles less than ten (10) years old for heavy vehicle and less than five (5) years for passengers vehicle, good tyre, engine condition, working front and back lights, horn and reverse horn, three (3) way mirrors, registration number clearly visible, good body condition, good brake system, fail safe brake system, retractable three (3) point seat belt, ABS and air bags for passenger vehicle). Vehicle should have periodic maintenance



record as per OEM. The driver shall not be less than twenty five (25) years of age with minimum of five (5) years of driving experience with good eyesight. Drivers shall not be allowed to drive for more than twelve (12) hours. Vehicles utilised for hazardous goods transportation shall comply with all statutory obligation including approval from Chief Controller of Explosives, Transport Emergency (TREM) card and training.

- 17.2. Transportation of passengers shall only be permitted in the passenger compartment of vehicles. All the passengers and driver shall use seat belt irrespective of their sitting position and the driver shall not be driving using mobile phone or under influence of alcohol, drugs or any other narcotic or hallucinogenic substance.
- 17.3. The driver shall not exceed the posted speed limit. The speed limit on the Site for construction vehicles/ cranes is fifteen (15) km/h. Any load being dispatched from or received at the Site shall not exceed the carrying capacity of the vehicle.
- 17.4. Tractor trailers while being used for the work of the Employer shall not be used for transporting passengers unless agreed and approved by Site team. These tractors (with trailer/ tanker) shall be driven at a speed of less than twenty (20) KMPH or should have fitted speed governors, should have four (4) wheeled tanker with capacity more than two thousand (2000) litres. The tractor trolley connector pin (coupling) should be either auto-disconnector type or three sixty degree (3600) rotation type.

18. Heavy Earth Moving Equipment (HEME)

18.1. All HEME supplied or used at the Sites shall have all mandatory attributes for safe operation including rollover protection structure (ROPS), fall-over protection structure (FOPS), reverse and side camera, automatic reverse alarm, fire extinguisher, functional wipers, heating and air conditioning vent as applicable, illumination lamp etc. Operators must be trained sufficiently for keeping it away from over-head power line, not allowing anybody within 10 m radius from the vehicle. Driver shall be required to stop engine and come-out from cabin for any discussion. Wearing all PPEs, movement against edge from trenches / excavated area, parking the vehicle with all levers in locked condition and daily and periodic inspection by the operator shall be mandatory and should be trained accordingly.

19. Concrete Vibrators

19.1. Vibrating unit shall be completely enclosed and belt transmitting the power to the unit adequately

guarded. Electrically operated compactor vibrators shall be totally enclosed and be protected against overloads by suitable overload relays and shall be effectively earthed. Sufficient length of cable to the vibrator shall be ensured. Needle load shall be firmly locked while inserting in the vibrator and inner core shall be adequately lubricated.

20. Concrete Mixers

- 20.1. All gears, chains and rollers of concrete mixer should be adequately guarded to prevent damage / danger.
- 20.2. Concrete mixer hopper shall be protected by side railing to prevent workers from passing under them and operators shall make sure before lowering the skip bucket that no one is there. Hopper hoist, wire rope and anchoring brake, skip hoist clutch, has to be checked for its condition and adjusted periodically. Nothing should be kept inside the motor enclosure.
- 20.3. The Operator shall ensure that motor fan guard is secured firmly, wiring is properly connected and insulated and double earthing is done for electric mixers.

21. Access Control Security System

The Contractor shall be responsible to provide valid identity card as approved by the Employer's site team to its personnel. This should indicate basic detail about the Contractor's personnel. These should be issued only when the Contractor's personnel have attended safety orientation / induction and passed health screening.

22. Personnel Access, Vehicle and Material/Equipment Movement Control

- 22.1. All personnel, vehicles and materials moving in and out of the Site shall move only through the designated security check points.
- 22.2. All personnel must register their ingress and egress by going through the security checkpoint to ensure that they are accounted for.
- 22.3. Materials/equipment moving in and out of the Site shall be accompanied by approved gate pass.
- 22.4. All personnel bringing their property such as personal computers, tools, equipment and samples must declare at the security check points using the Material/Equipment Gate Pass before entering the Site.
- 22.5. Approval will be required from the authorized signatories before bringing out any personal



property from the Site which was not previously declared at the security checkpoints.

23. Education and Training

- 23.1. All Contractors, and Subcontractors are required to attend Site safety orientation/induction training, prior to entry to the Site.
- 23.2. The information provided during the orientation shall include:
 - (a) Job rules, personal safety and conduct;
 - (b) Adani Life Saving Safety Rules, hazards reporting;
 - (c) reporting of injuries/pre-existing conditions; emergency procedures;
 - (d) working with chemicals;
 - (e) firefighting;
 - (f) safety activities and program including disciplinary measure and incentives; and
 - (g) JSA and PTW as outlined above.
- 23.3. Site and job specific training shall be imparted as per the Specifications.

24. Appointment of Safety Resources, Supervisors and Safety Stewards

24.1. The Contractor shall appoint necessary and agreed competent safety resources for the job. The Contractor shall ensure availability of one safety supervisor in case of up to one hundred (100) deployed personnel and an additional safety supervisor for personnel numbering between one hundred (100) and two hundred (200). However, if deployed personnel are more than two hundred (200), then a minimum of one safety officer is required to be deployed and for every additional one hundred (100) personnel, an additional safety supervisor shall be required. The Contractor should also deploy trained safety stewards at the rate of one for every fifty (50) personnel for ensuring safety vigilance.

25. Supervisor's Role in Worker's Orientation

25.1. The attitude of personnel toward accident prevention depends a great deal upon the attitude of the supervisor and therefore the following action steps shall be taken as a part of the supervisor's orientation of a new worker:

- (a) Ask about last job and describe the new job;
- (b) Show worker around work area;
- (c) point out hazards;
- (d) introduce worker to others and describe basic rules;
- (e) procure history of previous training and provide understanding on JSA;
- (f) Give worker a test run on tools and equipment;
- (g) monitor new personnel's safety, health and environmental performance;
- (h) provide coaching where necessary; and
- (i) check back to see how the worker is progressing.
- 25.2. The Contractor shall establish systems to check competency of skilled worker / supervisors.

26. Pre-Employment Site Personnel

Contractor shall ensure appointment of personnel for the Site (engineers/ supervisor/ and skilled/ semiskilled/ unskilled tradesmen) based on such personnel's previous performance and background. The said personnel shall possess the desired licenses issued by the governmental authorities or competent person; electrician wireman, driving (LMV/HMV), equipment operators, radiography, sand blasting or any other as per statutory requirement.

27. Pre- Employment Medical check up

- 27.1. The Contractor shall carry out a pre-employment medical check-up for all its personnel and shall be able to produce the certificate of fitness to the Employer prior to the deployment of such personnel at Site. The Contractor shall also organize periodical medical check-up (six monthly) for the following category persons:
 - (a) drivers and equipment operator: check for vision and hearing.
 - (b) height workers: check for vision, hearing, vertigo and acrophobia.
 - (c) dangerous substances handlers: effect of chemicals and substances.

28. Personal Protective Equipment (PPEs) Protocol

- 28.1. The Contractor shall ensure availability and use of suitable quality personal protective equipment to its personnel. Use of safety helmets, safety shoes, high visibility jackets and safety eye wear shall be mandatory. Based on the job requirement, other PPEs like gum-boot, electrically insulated hand gloves, electrical safety shoes, respiratory mask for dust nuisance or other chemical fumes protection, hand gloves or leather hand gloves, full body harness with lifeline support, retractable fall arrester, safety net, PVC suit, arc flash suit, cotton blue dress, flame retardant cloths, welder's masks with suitable screen numbered visor, gas cutter goggles, runner etc., shall be used as indicated in Work Permit and Job Safety Analysis.
- 28.2. All the PPEs used by the personnel shall, at all times, be in accordance with at least one of the following internationally recognized standards: (i) ANSI; (ii) ISO; (iii) BS; (iv) IS or (v) EU. The Contractor shall take prior approval of the Employer, for any deviation in the PPE standards proposed to be used for the performance of the Scope of Work.

29. Working Over or Near to Water Bodies

29.1. The Contractor shall comply with Employer's standard requirement on working over or near to water bodies including medical suitability, necessary statutory certification, use of life jacket, involving skilled team, rescue system in case person falls in the water and use of insulated powered tools.

30. Pre-Startup Safety Reviews (PSSR)

30.1. PSSR is a process to validate whether: (i) the construction and equipment installed are in accordance with design specifications, (ii) the risks associated with operation of the plant has been identified, studied and discussed, (iii) the preventive and corrective actions have been completed, and (iv) any emergency actions which can be required, has been understood, documented and that the plant / facility is complete in all safety aspects, before the start-up of the facility. The Contractor shall be responsible to re-work based on the findings coming out of the PSSR.

31. Notice Boards/ Caution Boards/ Safety Awareness Boards

31.1. There must be a safety board which must contain following items:- manpower numbers; date of last incident occurred; total number of injuries, incidences and near-miss case reporting; million man-hours injury free recorded; and details of contact persons in case of emergency, 'Current Severity Index', and numbers of 4s and 5s severity unsafe acts and conditions.

31.2. The Contractor shall also display a Site layout, indicating the project manager's details, Contractor's details, job details, date of start and expected end date of job, path-way, first-aid post, drinking water, change room, toilet, entry and exit point, parking etc. A general background colour coding of different messages are: blue – mandatory, red - prohibited, yellow - danger, green - safe condition.

32. Safety Awareness Campaign/ Program

32.1. The Contractors are encouraged to organize safety promotional programs in support of the Employer's program. The Employer's team at Site shall provide the appropriate emergency rescue, first aid and medical staff, facilities and procedures necessary to respond to anticipated onsite emergencies.

33. Medical/First Aid Treatment

- 33.1. The Contractor shall maintain first aid box and/or medical centre as per statutory requirement and shall have a tie-up with nearby good specialty hospital to manage medical emergencies. A medical attendant shall administer first-aid care to injured personnel using established standards of practice, or as directed by the local consulting physician. When an injury occurs at the Site and requires treatment beyond the limits of the medical attendant, the Contractor shall ensure that such personnel is transported to the nearest hospital.
- 33.2. If the Employer has a first-aid centre and other similar facilities at the Site, the Employer may, at its option, make available such facilities for the treatment of the Contractor's personnel, who have been injured or have become ill while being engaged in the performance of the Scope of Work.

34. Accident Investigation and Reporting

- 34.1. The Employer's policy requires that all incidents and environmental releases, regardless of severity, are reported immediately to the Employer's project manager and safety manager first by verbal and then by a written "preliminary" First Incident Report (FIR). Subsequently, a joint written investigation should be conducted by incident investigation team, with an initial report issued in writing within twenty four (24) hours, even where no injuries occur. The Employer's team shall record these incidents online at the Adani Gensuite or such other platform designate by the Employer.
- 34.2. Where the actual or potential severity of the incident or behaviour is significant or occurs



frequently, the Project Head shall appoint a committee to investigate, the accident/incident, verifying the information and complete a root cause analysis. All corrective actions shall be carried out, monitored by the project/construction SHE Department and initialled/dated on the original report.

35. Contractor Inspections and Audits

35.1. The Contractor/Subcontractors' supervisors are responsible for ensuring that regular inspections are made of work areas / activities. Project safety managers or their designates shall regularly audit project facilities and report deviations to Employer. This audit shall also involve the 'Safety Risk Field Audit' (SRFA) based on the severity index.

36. Contractor Safety Assurance Audit

36.1. Copies of the 'Weekly SRFA' and inspection reports shall be forwarded to the respective project manager and to Contractor's site management for corrective actions. The respective Contractor site management must take immediate corrective actions as may be required.

37. Daily/Periodic Safety Inspection

37.1. The Contractor and Site supervisors shall conduct routine periodic safety inspections and monitoring. Inspections shall make note of; hazardous material, unsafe acts/conditions observations and corrections, equipment, rigging, electrical, scaffolding, ladder inspections, etc.

38. Safe-Work Practice Assessments

38.1. The project safety managers shall conduct periodic assessments of compliance with site safety practices and procedures to ensure that such site safety practices and procedures are effective and are being followed.

39. Fire Prevention and Protection

39.1. Fire prevention policies of the Employer require prevention and mitigation training on fire emergency, segregated storage area for flammable and combustible material, safety in welding and burning operation, high risk welding operations, etc. and shall be complied with by the Contractor.

40. Hazard Communication

40.1. The Contractor shall ensure correct hazard communication to working team on - hazardous chemicals and their safety data sheets, precautions while handling and storage of gas cylinder, performing hot job, entering and working in

confined space, working in an excavated pit, identify and correct use of quality personal protective equipment, high noise and vibration. These communication should be carried out through verbal, written, JSA, Work Permit, training, tool box talk, symbol display, practical display and mock demonstration.

41. Housekeeping Guidelines

- 41.1. The Contractors shall be responsible for maintaining very high standard of housekeeping including clearly defined walkways and stairways, keeping clean unobstructed pathway free of tripping hazards, prohibit storage of materials and equipment in aisles or under stairways, posting signs or barricades to warn tripping or slipping hazards, maintaining adequate lighting, having well-marked first aid/assembly points and not allowing loose material at height (placing them in cage/box).
 - (a) Storage Areas

The Contractor shall clearly identify purpose of area and define boundary by barricades, provide adequate size as per provision and discourage excess material and equipment. All material shall be stored in a neat, safe and orderly fashion with proper labelling.

(b) Trash removal plan

All Contractors shall ensure that trash is removed, accumulated and dumped at the designated disposal area on a daily basis. Collected trash and bins shall be cleared once a week to identified dumping area. No trash shall be thrown from height and shall be handled through a chute. As a best practice, the Employer appreciates the concept of "generator should be the cleaner".

(c) Rest Rooms and Drinking Water

The Contractor shall ensure availability of toilet facility and drinking water for their personnel in a hygienic manner as per the statutory requirements. These facilities should be separate for all genders. If the Employer has developed such facilities at the Site, the Employer may, at its option, make available such facilities to the Contractor's personnel.

42. Governance System

42.1. The Contractor shall be responsible for constituting a site level safety committee involving management and workmen under chairmanship of the Contractor's site in-charge and shall review safety

performance including leading (training, severity index, reported UA/UC/NM cases) and lagging indicators (FAC, MTC, RWC, 'Lost Time Injuries', 'High Potential Incidences' etc.) on a weekly basis. The committee shall be responsible for submitting safety related MIS to the concerned site in-charge.

43. Emergency Response Plan

- 43.1. The Contractor shall prepare an emergency plan in line with foreseen emergency situation and shall be communicated to its staff as part of training. The preparedness should be checked for its effectiveness by conducting mock-drill. The emergency plan shall be approved by the Site Incharge.
- 43.2. An emergency rescue plan along with adequately trained team must be in place while working at height, working in confined spaces, hot job etc. The Contractor shall submit such emergency rescue plan to the Employer for inclusion in the site-specific emergency response procedure.

44. General

- 44.1. The Contractor shall provide proper illumination at the work location as per the statutory requirements and/or the requirements of the Employer.
- 44.2. The Contractor shall coordinate and procure requisite approvals from the statutory authorities prior to any blasting work that is to be executed at the Site.
- 44.3. Labour Camp (if applicable): The Contractor shall, and shall procure that its personnel shall, ensure compliance with the requirements pertaining to health and sanitation, including requirement of maintaining hygiene on Site. The Contractor shall be responsible to comply with all the statutory EHS requirements inside the labour camp.

45. Reward and Damages for Safety Violations

- 45.1. In case of any violation by the Contractor with respect to the safety requirements specified herein, the Employer can levy the following liquidated damages:
 - (a) Violation with respect to lack of valid gatepass, basic PPEs and/or other traffic violations: Indian Rupees One Thousand Only (INR 1000) per violation.
 - (b) Violation with respect to work at height, electrical, confined space entry, excavation, hot jobs, barricading, heavy motor vehicle, crane: Indian Rupees Five Thousand Only (INR 5000) per violation with a ceiling of Indian

Rupees One Lakh Only (INR 1,00,000) per contract exceeding which the Employer can terminate the Contract.

- (c) Fatal accident: Indian Rupees Fifteen Lakhs Only (INR 15,00,000) or five percent (5%) of the SO Price, whichever is less, for the first fatality and Indian Rupees Twenty Lakhs Only (INR 20,00,000) or five percent (5%) of the SO Price, whichever is less, for the second fatality. For any further fatalities, the Employer may at its discretion levy appropriate damages or may choose to terminate the SO Documents/SO at the risk and cost of the Contractor.
- (d) Lost time injury (on 24 hours basis) or nonreporting of incidents: Indian Rupees Fifty Thousand Only (INR 50,000) for each lost time injury or incident not reported.
- (e) Serious (grievous) injury, such as loss of limb or a loss of more than twenty one (21) man-days: Indian Rupees Five Lakhs (INR 5,00,000) or five percent (5%) of the SO Price, whichever is less, for the first grievously injured person; and Indian Rupees Seven Lakhs (INR 7,00,000) or five percent (5%) of the SO Price, whichever is less, for every subsequent grievously injured person. For the purpose of levying these damages, "grievous injury" shall have the meaning ascribed to the term in the Employee's Compensation Act, 1923.
- (f) Dangerous occurrences: Indian Rupees One Lakh (INR 1,00,000) or five percent (5%) of the SO Price, whichever is less, for the first violation and Indian Rupees Two Lakh (INR 2,00,000) or five percent (5%) of the SO Price, whichever is less, for subsequent violations.
- (g) Procedural violation, including absence of method statement, staging and shuttering plan, concreting plan, erection/dismantling plan or non-compliance with any statutory requirement: Indian Rupees Fifty Thousand (INR 50,000) or zero point zero five percent (0.05%) of the SO Price.
- (h) Any incident involving injury to a member of the public: Indian Rupees Fifty Thousand (INR 50,000) or five percent (5%) of the SO Price, whichever is less for first violation and Indian Rupees One Lakh (INR 1,00,000) or five percent (5%) of the SO Price, whichever is less, for subsequent violations.
- 45.2. There will be a reward system for reporting and correcting UA/UC/NM cases, achievement of targeted severity index and excellent contribution in maintaining safety and housekeeping.

Human Resources and Industrial Relations Requirements

During the performance of the Scope of Work by the Contractor under the SO Documents, the Contractor shall ensure strict compliance with applicable laws relating to human resources and industrial relations and any additional requirements that may be provided by the Employer in this respect. The Contractor shall also abide by the laws that are applicable in the particular State in which the Scope of Work is being performed, including the State in which the Site or the Project is located. In the event of any inconsistency between the requirements specified herein in this document and in the other documents provided by the Employer, the terms provided herein shall prevail to the extent of such inconsistency. The critical requirements pertaining to human resources and industrial relations which are to be complied by Contractor include:

- Prior to commencement of mobilisation at the Site for performance of the Scope of Work, the Contractor shall appoint a competent and experienced person to serve as the designated supervisor of its personnel, manpower and labourers and shall inform the same to the Employer or the Employer's Representative, in writing. Such supervisor shall directly report to the Employer's Representative.
- The Employer has the right to conduct regular meetings between the Contractor and the Employer, at the Site or at any other location as may be notified by the Employer, to develop a common understanding and to ensure smooth performance of the Contractor's obligations in respect of the Scope of Work. The Contractor shall ensure that its representative(s) and supervisor(s) attend such meetings.
- The Employer shall, at its option, provide formal training courses to the designated personnel of the Contractor, including the supervisor(s). The Contractor shall ensure that the Contractor and its personnel attend all such training courses held by the Employer.
- The Contractor shall not confiscate or withhold any valuable items of its personnel, including their identity documents, travel documents, work permits or any such personal documents of the personnel.
- The Contractor shall have valid registration numbers and/or code numbers, necessary to provide social security benefits to its personnel, including provident fund,

employee state insurance and other analogous social security benefits, to its personnel, as required under the Applicable Laws. The Contractor shall also obtain all requisite licenses from the relevant Government Authority(ies) as required under the Applicable Laws, to perform the Scope of Work. The Contractor shall submit all such licenses, registration numbers or code numbers to the Employer, before entering the Site for performance of the Scope of Work. In the event the Contractor fails to procure and/or submit such licenses, registration numbers or code numbers to the Employer, then the Employer shall have the right to deny access to the Site, to the Contractor and its personnel, till the time such licenses, registration numbers or code numbers are correctly procured by the Contractor. Any resultant delay in performance of the Scope of Work and consequent levy of fines by a statutory authority or liquidated damages by the Employer due to such delay shall be to the Contractor's account.

- 6. If the Employer is liable to pay to the Government Authority, on behalf of the Contractor, any labour or other statutory fees or charges, including contributions in respect of employee state insurance, provident fund, national pension scheme or such other social security scheme, then the Contractor shall reimburse such charges to the Employer within seven (7) days from the date the charges were due from the Employer to the Government Authority. On failure by the Contractor to reimburse such charges to the Employer within the time prescribed above, the Employer shall have the right to deduct such charges from the Running Account Bills. All such charges deducted shall also carry interest at the rate of eighteen percent (18%) per annum, on such charges, till the date such charges are reimbursed by the Contractor to the Employer.
- 7. The Contractor shall, in no case, pay wages to its personnel, lower than the minimum wages as prescribed under the Applicable Laws. The Contractor shall also provide to its personnel, all such benefits as prescribed under the Applicable Laws, including statutory bonus and gratuity, within the period as prescribed by the Applicable Laws or within seven (7) days from the last working day of the personnel, whichever is earlier.
- The Contractor shall pay to its personnel, salary, wages or other amounts owed to its personnel, on time, as prescribed under the Applicable Laws. In case the Applicable Laws

do not provide for a due date for the payment of salary or wages, then the Contractor shall make all such payments before the seventh (7th) day of the conclusion of the wage period or the period of service in relation to which the payment of salary or wages is due to be paid by the Contractor.

- 9. The Contractor, shall not, directly or indirectly, deduct salary or wages, discontinue schemes or reduce benefits that are available to its personnel due to any liability that the Contractor may have in respect of any charges payable under the Applicable Laws. The Contractor shall, at all times, act in good faith with its personnel.
- 10. Further, in the event of imposition of any fine or penalty upon the Employer by any Government Authority as a result of failure by the Contractor to fulfil its obligations, as prescribed by the Applicable Laws, in respect of its personnel, including labourers, workmen, employees or any other personnel for whom the Contractor is responsible for, then the Contractor shall reimburse such impositions to the Employer, within seven (7) days from the date such charges were imposed upon the Employer.
- 11. The Contractor shall ensure that its personnel do not indulge in any unlawful activity at the Site, including illegal stoppage, strikes and/or violence. The Contractor shall promptly inform and consult with the Employer, in case of any incidence of such unlawful activity by the Contractor's personnel at the Site.
- 12. The Contractor shall ensure that its personnel follow the escalation mechanism as may be provided by the Employer, for the purposes of notifying any issues that such personnel may face while performing the Scope of Work, including any issues relating to industrial relations, violence, sabotage, espionage, injury to person, damage to the Employer's property or other problems pertaining to trade unions.
- 13. In case any of the requirements as mentioned in this Human Resources and Industrial Relations Requirements are violated, then in addition to deducting direct losses incurred by the Employer as a result of such violation, the Employer shall have a right to levy liquidated damages on the Contractor for an amount of Rupees fifty thousand only (Rs. 50,000/-) per violation. The Employer shall have a right to adjust and set-off such liquidated damages from any

payments that may be due and payable to the Contractor.

14. Compliance with Contract Labour Management System

The Contractor shall comply with the requirements of the workforce management solutions software, as may be prescribed by the Employer. The Contractor shall, as a part of the aforesaid compliance requirement and for the benefit of its personnel, *inter alia*:

- sign up on the workforce management solutions software;
- enter in, and update regularly, in such software, the details of its personnel relating to the qualification, skill, contact number, department, shift patterns, location, bank account and universal account number;
- (iii) insert details relating to statutory requirements, including the employee state insurance, provident fund, minimum wages, labour license, employee insurance and employee's compensation;
- (iv) upload the list of holidays on such software;
- (v) provide details for training of users;
- (vi) ensure optimal labour coverage for every shift, to ensure provision of the right talent at the right place at the right time;
- (vii) record the attendance and track the time and activity of the personnel and its Sub-Contractors in such software. In this regard, the Employer reserves the right to withhold payments due to the Contractor against any Running Account Bill(s), if the Contractor's personnel does not record its attendance as per the Employer's software system for contract labour management.
- (viii) integrate the access system with such software and print passes for the visitors; and
- (ix) adhere strictly to the requirements of the Employer with respect to any management tools and software, as may be prescribed by the Employer to ensure efficient contract labour management.

TFS General Terms and Conditions

With reference to your quotation, and based on the discussions and email communications, we had with you. We are pleased to award the contract for the above mentioned works as per the drawings, specifications & bill of quantities (BOQ) prepared by the COMPANY/Architect and shared with you for our Project. The Terms and conditions which have been mutually discussed and agreed between us are enlisted below:

Definitions:

Except where this Agreement otherwise expressly provides, the following word and expressions shall have the meaning hereby assigned to them:

Agreement means this agreement and any schedules and annexure thereto, and shall include any modifications, alterations or deletions thereto agreed by the parties in writing;

Approvals means authorizations, consents, licenses, permits, clearances and permissions required or to be obtained for the purposes of the Project;

Authority means any regulatory, executive or other governmental body, any agency, department, commission, office, authority or a statutory body constituted pursuant to any legislation of the Government of India or of any political sub-division thereof, including planning and local government authorities and any authority having control over the grant of any Approval;

Authorized Representative means the Company's representative under this Agreement, Project Head or such other person [s] as may be designated in writing. For all practical purposes, the Authorized Representative shall act in close co-ordination with PMC being appointed.

Applicable Law means all applicable Indian statutes, enactments, acts of the state legislature or Parliament, laws, ordinances, rules, bye-laws, regulations, notifications, guidelines, policies, directions, directives and orders of any Governmental authority, statutory authority, tribunal, board, court, as may be applicable;

Defects Liability Period is 12 Months from the date of Virtual Completion for commercial operations or such (extended period) beyond the said one year as may be needed for rectification of defective Works during which period the CONTRACTOR shall continue to be liable and responsible for all costs, expenses, claims including without limitation third party liabilities of whatsoever nature arising out of any defect or deficiency in the said Works carried out by the CONTRACTOR.

Final Completion means the date by which a final certificate has been issued by the COMPANY following completion of snag list and handover and completion of defect rectification work in all respects, and following which the COMPANY can draw up a final account in respect of the Project concerned;

Other Consultants means collectively all other consultants apart from the Consultant engaged by the Company for the purposes of the Projects, including but not limited to the PMC, the M & E concept consultant, design consultants, amongst others;

Party/Parties means either the COMPANY or the CONTRACTOR and collectively as the 'Parties'

Project means the design, construction, installation, supervision, rectification and all other work and services required whatsoever to be carried out on behalf of the Company with regard to the fit out of the Premises including Works on the Premises;

Project Manager / Project Manager Consultant (PMC) means the person or company appointed as such to act as the PMC (the "PMC") and is authorized to act on behalf of the Company in all day-to-day activities including the management, supervision, progress monitoring and certification of all invoices for the entire project. The PMC shall be the single point of contact for taking clearances and making decisions in consultation with the Company's Representative/Consultants.

Virtual Completion shall mean completion of all works, clearing the work site, handing over and de-mobilization of all equipment and enabling works all to satisfaction of PMC/Company.

Works / Products means the rendering, performance and/or delivery of all of the goods and/or services collectively to be rendered, performed and/or delivered by the CONTRACTOR for the purposes of the Project, which may include but shall not be limited to design, development, manufacture, supply, carriage or transportation, delivery, assembly, construction, fabrication, installation, modification, commissioning and/or complete testing.

1. Execution of the Works

a. The CONTRACTOR shall duly execute and complete the Works in accordance with this Agreement, including, inter-alia, construction program, drawings and specifications to the reasonable satisfaction of the Company/PMC and in conformity with all reasonable instructions and rules regulating the due performance of the Works. The Contractor shall do and perform all other acts

and things mentioned or described or may be necessary for the completion of the Work and at the times and in the manner and subject to the terms and conditions or stipulations mentioned in this Agreement.

b. If the rate of progress of the Works or any section thereof is at any time, in the sole opinion of the Authorized Representative/PMC, unsatisfactory such that the CONTRACTOR may not be able to ensure completion by the date as specified in the Schedule or any agreed extended date, the Authorized Representative/PMC may so inform the CONTRACTOR in writing and the CONTRACTOR shall within Three (3) days take such steps and provide such additional resources as necessary to expedite the completion of the Works or any section thereof. The CONTRACTOR shall inform the PMC / Company in writing of such proposed steps and such additional resources.

c. If in the sole opinion of the Authorized Representative/PMC, the steps being taken or proposed and the additional resources being provided or proposed by the CONTRACTOR are or may not be adequate to ensure completion by the date as specified in the Schedule or any agreed extended date, the Authorized Representative/PMC shall either direct the CONTRACTOR to take such further steps or provide such additional resources as the Authorized Representative/PMC considers necessary.

d. The CONTRACTOR shall not be entitled to additional payment in complying with Clause 1 (b) and/or 1 (c).

e. In the event of failure by the CONTRACTOR to comply with the Authorized Representative's / PMC's direction within three (3) days being given pursuant to Sub-Clause (b), the PMC may on behalf of the Company, take such steps and/or provide such additional resources and the costs thereof shall be borne by the CONTRACTOR. The Company shall deduct the costs of the same from any sums payable to or due to the Contractor under the terms of this Contract.

Notwithstanding any steps or provision of additional resources by the PMC under the provisions of this Clause, the Contractor shall remain fully responsible for all its obligations under the terms of this Contract including for such steps or additional resources called for by the PMC.

f. Time is the essence of this contract. The Contractor shall ensure the completion of the works within the stipulated time frame, provided however that all decisions, drawings, details and approval on material, mockup, samples etc are given within 2-3 day's time from the date of receipt by the PMC/Authorized Representative. Similarly any specialized items to be provided by contractor under this work order should be available within a lead time of maximum one month and such item should be finalized by all concerned within 3-4 days time from the issuance of this work order. The Contractor shall submit to the Company a bar chart indicating date wise programs for completion of various items of work. In case of deviation from the bar chart at any stage action should be taken in accordance with clause 1 (a), 1 (b), and 1 (c) to cover up the delay, if any, for which no extra claims will be entertained.

g. If the progress of work is not satisfactory in the sole opinion of the Authorized Representative/PMC, and the CONTRACTOR is unable to take necessary concrete steps or additional resource to expedite and complete the work according to the dates mentioned in master construction schedule or bar chart which is submitted by CONTRACTOR then the PMC shall be free to recommend to the Company to terminate the contract and/or carry out the remaining works through another agency at the CONTRACTOR's risk and cost.

2. Scope of work:

Scope of work covered under this contract shall be to provide all materials, labor, tools and tackles, scaffolding as required at the Premises. Final negotiated BOQs is attached as annexure - I. Items of work required to be carried out shall be, briefly, but not limited to, providing and applying / laying, installing, testing and commissioning including the following:

a. Contractor shall be responsible for the accuracy of successful execution of BOQ as per approved drawings.

b. All the work is strictly to be executed in accordance with the detailed drawings and BOQ items and specifications, issued by Architects, and the relevant Indian Standard specification in force from time to time unless the contract documents provide for any special specifications and manufacturer's specifications for the specialized item. Please refer Annexure I attached to and forming part of this Agreement for requirements as given by Semolina kitchen Pvt Ltd

c. CONTRACTOR's services shall include the following:

Execution and issue management

- Undertake preparatory activities at site such as demolition of wall, dismantling of wooden partition, false ceiling, conduits etc., amongst others, as required for commencement of Works, which will be subject to the final GFC drawing package officially circulated by the client.
- Ensure materials used are identical in terms of quantity and quality as mentioned in the Bill of Quantity or Approved by Architect/COMPANY.
- Manage the Works site and execute Works as defined in drawings and BOQ. CONTRACTOR to execute site Works as
 per the construction schedule instruction from the COMPANY.
- Escalate issues / bottlenecks and concerns to Authorized Representative/PMC on the same day and provide support in expediting the same. Any delay in raising issues / bottlenecks and concerns on part of the CONTRACTOR shall not be

- considered as part of agreed time schedule.
- Escalate site requirements to Authorized Representative/PMC.

Billing

 Request Authorized Representative/PMC to take joint measurements for the purpose of preparation of bills by CONTRACTOR.

Commissioning and support during commissioning

- Test, prove performance and commission developed Works, if applicable.
- . Support COMPANY in commissioning of the entire scope of work in this contract for Project

Maintaining site and security of material/inventory

- Ensure site is maintained in the given condition without damage to property.
- . Maintain security of material and inventory stored at site.

3. Contract Value :

The value of this contract is estimated as mentioned in the purchase Order on the basis of estimated quantities of work and rates, and the discount agreed to between us, as per attached BOQ/Annexure to this work order and summary appended.

It is being clarified that for the Materials where Basic Rate is provided in BOQ, the Contractor will provide rates in case of an increase in the rate as against to the rates as specified in the BOQ at-least 10 days before procuring the material. If Company is in a position to arrange the material from an alternate vendor at a lower rate as compared to those provided by Contractor then Contractor can be asked to procure the material from such alternate vendor. The Company will organize comparative quotes from reputed vendors for assured quality. The final value of the contract shall be arrived at, based on the actual quantities of work executed reckoned at agreed unit rates and such lower rates as applicable for Materials where Basic Rate is provided in BOQ.

The final value of the contract shall be arrived at, based on the actual quantities of work executed reckoned at agreed unit rates and such lower rates as applicable for Materials where Basic Rate is provided in BOQ.

The rates quoted in the annexed BOQ are inclusive of cost of material, transport charges, labor, storage facilities, site offices, standing scaffoldings, overheads, profit, safety compliances, airport compliances, labour law compliances, coordination charges for nominated sub-contractors' works etc. Cost of preparation of Shop Drawings of item indicated, As Built Drawings, Guarantees, Warrantees and any all documentation required is included in the rates and forms part of this Work Order. Similarly, all costs for rectification and reconstruction of items for work during construction and during the period of Defects Liability shall be deemed to be included in the rates quoted in the BOQ.

It is also expressly understood that CONTRACTOR has taken into account all factors for completing the Works in all respects while fixing the rates for different items. No amount other than what is agreed hereunder shall become payable to the CONTRACTOR and the CONTRACTOR alone shall be exclusively responsible and liable for the same.

4. Work Schedule :

The CONTRACTOR shall complete the Works as follows:

Date of completion period	:	as per the from award of work order.	
Date of Commencement :		Within 3 days of Intimation	
Period of Completion of work	:	Works must be completed and handed over to the satisfaction of Company within committed deadlines as agreed in this Work Order.	
		This completion period includes all holidays including weekly holidays, local and public holidays and other non-working days and also includes time required for getting passes and other pre-preparatory works required for commencing the Project. Closure of airport by CISF due to unforeseen circumstances / VIP movement will not be included in the completion period.	
Defects Liability Period	:	12 Months from the date of Virtual Completion or such extended period beyond the said months as may arise from start date of rectification of defective Works as stated in the Definition of the term 'Defects Liability Period.'	

The Scheduled dates are the maximum periods for completion of the Works as specified. However, on analysis of the detailed execution activities, to be submitted by the CONTRACTOR, the Scheduled dates may be adjusted in writing, based on mutual consent between the COMPANY and the CONTRACTOR

5. Payment Terms:

Running Account Bill for actual work done at site shall be raised at 15 days cycle which shall be paid within 15 days after submission

subject to the verification by the Employer.

RA Bill shall accompany the following documents:

(a) Draft invoice followed by Tax Invoice, including details such as item number, Contractor's GST identification number and

permanent account number: one (1) set of original and two (2) sets of copies;

- (b) Basic Cost / Base Rate variation statement
- (c) Inspection release note and/or measurement sheets duly certified by the Employer's representative;
- (d) Reconciliation statement of Free Issue Materials/ Adhoc Payments / Advance (if applicable);
- (e) Copy of insurance policies to be procured by the Contractor; and

(f) Copy of statutory registrations as required for performance of the Works under the SO Documents.

Final Bill: Final Bill shall be submitted within 30 days from Commissioning, handing over the site to Employer and on submission of

the following documents:

- (a) [invoice/Final Invoice]: one (1) set of original and two (2) sets of copies;
- (b) Basic Cost / Base Rate variation statement
- (c) Provisional Acceptance Certificate issued by the Employer.
- (d) final reconciliation statement of Free Issue Material/ Adhoc Payments / Advance (if applicable);
- (e) [no-claim certificate for release of final payment]; and
- (f) fundertaking for compliance with labour lawsl.

6. Measurements & Billing Process:

A – Measurements

Joint measurements shall be conducted to evaluate the Work performed. The CONTRACTOR shall intimate the Authorized Representative/PMC for joint measurement dates, 2 (two) days in advance. The Authorized Representative/PMC will certify the invoice based on the certification / notations indicating the actual work performed

The CONTRACTOR shall raise Running Account (RA) bills on the COMPANY, through the completion of the Works. The invoice shall be supported with:

- A covering note outlining the work performed and references to the corresponding progress reports along with dates for joint measurement with alternatives, to measure work, claimed to have been performed.
- Work measurement sheets duly approved by Authorized Representative/PMC.

<u>B – Billing</u>

CONTRACTOR shall submit all invoices in Original duly certified by Authorized Representative/PMC for payment. The invoices should be a Tax Invoice wherever applicable and should bear a unique serial number. Invoice should clearly indicate suppliers address, GST Nos (from where the delivery is being done), HSN Codes, Service Tax No / PAN No.

All Invoices should clearly mention the site address along with the billing address of the Company. All invoices should clearly split the amount of billing into the Basic amount and all types of tax components identified separately. All invoices shall be supported with original purchase bills for the material purchased by the CONTRACTOR and billed against the invoice. The COMPANY reserves the right to call for all original delivery challans of all materials and supplies duly reconciled with final measurement sheets. CONTRACTOR shall ensure that all delivery challans and material returns notes are acknowledged/ approved by Authorized Representative/PMC

COMPANY can ask again to take joint measurement by CONTRACTOR and PMC in case of any discrepancy found.

Final bill – after completion of all Works along with submission of approved measurements, completion of hand over including resolution of snag list, O & M Manuals (if any), As built drawings, Guarantees, Warranty and all other submission as required. Final bill to be submitted within 30 (Thirty) days of completion of all Works including snag list resolution. The same shall be paid within 30 working days from the date of submission of Project Manager/PMC certified Final Bill by CONTRACTOR to Authorised Representative. PMC will be instructed to certify Final Bill within 7 to 10 days of submission by Contractor.

Any running / final invoice not conforming to the requirements stipulated above will be returned for resubmission after correction.

4. Extra Items:

Extra items means items of work not covered in the BOQ. The CONTRACTOR shall take prior approval from COMPANY before commencing any work related to any extra Item. Company may ask rate analysis of all such items. The CONTRACTOR shall execute the Work only after rates for such Extra Items are duly approved by the COMPANY. Payment for such Extra Items shall be made along with RA Bills.

It is hereby noted that the CONTRACTOR have clearly examined and understood the overall BOQ of this Work Order for the above mentioned project. It is agreed that both Contractor & TFSPL will make best efforts and bring down the outflow spend arising from such extra items.

5. Retention:

Retention shall be deducted at 5% (Five Percent) of the contract value from the final bill. The retention shall be returned against the retention bank guarantee (of amount equal to retention) to be furnished by the Contractor of the amount being returned or the end of Defects Liability Period, as defined in clause 4. The retention bank guarantee shall be valid upto 12 Months from the Virtual Completion or such extended period to cover the Defect Liability period

6. Payments:

Once the invoice is received by Authorised Representative at Corporate Office, and is complete in all respects, after it is checked and certified, applicable payments shall be released as per clause no 7 and 8. The payment shall be subject to deduction of tax at source under Direct and Indirect Tax Acts, as applicable from time to time.

7. Liquidated Damages:

The CONTRACTOR shall pay liquidated damages as under, for any delay in the physical completion of the works

5% of the contract value for delay during Week 1

7.5% of the contract value for delay during Week 2

10% of the contract value per week for delay from Week 3 onwards.

The CONTRACTOR agrees that the liquidated damages are a genuine pre-estimate of the loss suffered by the Company and not in the nature of penalty.

Liquidated damages shall be levied after having given sufficient time to contractor for providing their justification and clarification to Client's management against any deduction and written consent of contractor agreeing to the deductions.

Except for following delay not attributed to the Contracter/Vendor

- Any delay due to Airport related issues like stoppage of work due to VIP movements, security, Permissions, etc will be considered.
- Also delay due to Decision makings, approvals will be considered.
- If any extra work beyond BOQ is assigned , extra working days might be provided.

8. Reporting & Escalation Matrix:

The CONTRACTOR shall also have to report any deviations, issues and bottlenecks to the Authorized Representative/PMC as appointed by the company and same applies for our representative while corresponding with the Vendor

However in case any deviations, issues and bottlenecks is not getting resolved within given timeframe and causing delay in meeting project deadlines, the authorized representative of either companies can escalate the subject matter to higher management for solutions and completion of work as per escalation matrix below.

9. Specifications:

The CONTRACTOR shall adhere to the drawings, specifications and BOQ as prepared and circulated by COMPANY / Architects on behalf of Company. The CONTRACTOR shall be bound to deliver the quality standards defined by the COMPANY / COMPANY'S representatives / Architects. It is understood that the CONTRACTOR shall implement all quality standards required and deemed necessary to ensure quality of finished Works of highest standards.

10. Other contractors at Site:

The CONTRACTOR shall co-ordinate and co-operate with other contractors, sub-contractors etc. at site, if any, and facilitate coordination, facilities and assistance to execute the sequential work in this Project. No claim for compensation whatsoever shall be entertained by the Company for delay of work on this account. It is incumbent on the part of the Contractor to be physically present on site once a week for weekly review of progress made by the project team and to take such remedial measures for course correction as may be required.

11. Contractor's Responsibility:

The CONTRACTOR shall take utmost care to control the noise levels at site. The CONTRACTOR shall be responsible for all the activities of the employees / workers at the construction site. Any complaints arising out of CONTRACTOR activities at site including injury or damage to the third party or his property etc. shall be the sole responsibility of the CONTRACTOR and the Contractor shall protect itself and the Company by covering the aforesaid risks with adequate comprehensive all risks insurance. CONTRACTOR shall take CAR policy for the said works. In addition the Contractor shall comply with all the applicable provisions of law governing such contracts including applicable provisions of labor laws as provided hereunder.

12. Labor Law:

The CONTRACTOR shall comply and abide in all respects with the provisions of all statutes, Rules, and Regulations applicable to the Contractor's employees, labour, and workers and to its subcontractors including but not limited to, Minimum Wages Act, Payment of Wages Act 1948, Employees Liability Act 1938, Employees Compensation Act 1923, Industrial Disputes Act 1947, Contract Labor (Regulation & Abolition) Act 1970, Employee State Insurance Act 1948, Employees Provident Fund and Miscellaneous Provisions Act 1952, Payment of Bonus Act 1972, Factories Act, Workmen Compensation Act, and the Rules made thereunder etc. The Contractor is further presenting that there is no inquiry /investigation pending by the Police as against the Contractor or its employees. As per the labor welfare legislation, the Contractor has separate code number under the schemes of Provident Fund and Employee State Insurance. The Contractor shall be solely responsible for payment of salaries, wages and other legal dues of the employees, labour and workers employed by the Contractor for the purpose of rendering services under this Agreement. The CONTRACTOR shall indemnify the COMPANY against any and all legal action, proceedings, claims and expenses arising from any non compliance in this respect and in respect of any payments to be made under the said Law.

The CONTRACTOR shall maintain proper books, accounts, records, and documents and and comply with all statutory Rules and Regulations which are applicable to the Contractor for fulfillment of the terms of this Agreement. The Contractor shall maintain all required statutory registers and records under various labor rules and clause to submit all returns to appropriate authorities as required under law. The CONTRACTOR shall submit the details of labor employed every day, trade wise if so desired by the COMPANY. The CONTRACTOR shall be solely responsible for adequacy of workmen to execute the work within the stipulated period and according to the program of the work and increase the strength whenever required at his own cost, to speed up the work if it be lagging behind. CONTRACTOR shall not employ any Child Labor at site.

The CONTRACTOR shall take an Insurance Policy covering the entire scope of work at their own cost, against all risks including without limitations, risks of third party liabilities such as personal injury, loss of life and any damages caused during the performance and upto the successful completion of defect liability period. A copy of the policy shall be submitted to the COMPANY. The Contractor shall be responsible to meet any liability arising out of bodily injury or death of his employees/workmen and shall take Workmen Compensation adequately covering any compensation that may be due to such injured/deceased employee or workmen. The Contractor to submit the copies of all the Insurance policies like Workmen Compensation & Third party liability before commencement of work.

13. Safety Precautions:

The CONTRACTOR shall take all the necessary, mandatory and standard safety precautions for the safety of his workmen and obtain insurance cover for the work, workmen and any possible damages associated with the Project.

- The CONTRACTOR shall depute HSE person and shall ensure is available on site round the clock.
- . The CONTRACTOR shall always maintain hazard free and safe working environment.
- The CONTRCATOR shall ensure all the workers are wearing safety shoes, jackets, harnesses, helmets etc. all time within the construction premises.
- Safety guideline annexure attached, contractor will have to sign this prior to commencement of work.
- The CONTRCATOR shall ensure its employees, labour, and workers and to its subcontractors including but not limited to, shall maintain neat and clean working environment and surroundings of the airport free from any clutter, garbage, damages, spillage and any other such which shall act as hindrance and nuisance to airport environment.
- The CONTRACTOR shall ensure its employees, labour, and workers and to its subcontractors including but not limited to, possess and consume any type of illicit product such as alcohol, tobacco, pan & gutkha, drugs or any such products at the working site and in the premises of the airport.
- The CONTRACTOR shall be responsible and borne all the liabilities, penalties, fines etc. towards any safety violations by its employees, labour, and workers and to its subcontractors including but not limited to, for non-adherence of airport safety guidelines. A fine of INR 500/- will be levied per instance of any violation in HSE requirement.
- Separate Annexure has been attached for Covid 19 guidelines and checklist to be followed during execution of the works.

It is expressly understood that CONTRACTOR'S representatives have visited the site of work and have acquainted themselves of the conditions thereof. The COMPANY shall hand over the site to the CONTRACTOR and CONTRACTOR shall remain responsible throughout the Contract execution period to keep the site free of any encroachments or encumbrances, to enable the CONTRACTOR to execute the Works peacefully.

The COMPANY shall provide the following facilities to the CONTRACTOR:

- Paid one point of temporary Power supply will be given. Further distribution and temporary meter along with ELCB shall be done by CONTRACTOR at his own cost, to be reimbursed by the client as per actuals.
 - Paid one point of temporary Water supply. Further distribution along with pump, storage facility etc. would be done by CONTRACTOR at his own cost, to be reimbursed by the client as per actuals

The COMPANY shall give routine site instructions to the CONTRACTOR which will be recorded in Site Instruction Book and signed by the Authorized Representative/PMC. No verbal instructions will be entertained or paid for by the COMPANY. The CONTRACTOR shall coordinate with the Authorized Representative/PMC for execution related queries.

15. Handover to COMPANY

The COMPANY will prepare a snag list of defective and pending items to be completed by the CONTRACTOR. Handover of the Works to the COMPANY will be done when the snag list is resolved in its entirety and the Project shall be deemed to be complete only on and from the date of rectification of the snag list. It is, however, agreed between the parties hereto that the Company shall be entitled to commence its commercial operations at and from the Project Premises even if the snags have not been completely rectified.

16. Copyright and confidentiality :

All information, materials (printed or otherwise), data and drawings furnished / disclosed by the COMPANY to the CONTRACTOR or howsoever obtained by the CONTRACTOR, shall belong to and shall always remain the property of the COMPANY and shall be treated by those who receive or obtain the same including without limitation the CONTRACTOR, its agents, sub-contractors and servants, as confidential and the said information, materials (printed or otherwise), data and drawings, shall not be used, distributed or disclosed by them without obtaining the prior written consent of the COMPANY except where such disclosure is made for the purpose utilizing the same in connection with the execution, operation and maintenance of the Works or where such disclosure is mandated by law or by an order of a court possessing competent jurisdiction

17. Indemnity

The CONTRACTOR agrees and undertakes to indemnify and hold harmless the COMPANY, its directors, officers, employees and agents, from and against any actions, claims, demands, proceedings, fines, penalties, liabilities, loss, cost, damages or expenses sustained either by the Company or any third party as a result of any breach by the Contractor, its employees, labour, workers, and sub-contractors, of any law, representation, obligations, warranties's or covenants contained in this Agreement or default or negligence or improper performance or disturbance caused by itself or by any of its sub-contractors, suppliers or associates in connection with the Works and/or the Project.

18. Assignment

The CONTRACTOR shall not assign this Contract or subcontract any portion of the work hereunder without the prior written consent of the Company including assigning or subcontracting the technical consultancy on the Services.

19. Liens

The CONTRACTOR represents that deliverables under this Contract as per Scope of Work shall be performed, finished, and delivered to the COMPANY free from all claims, liens and charges of any kind whatsoever within the spirit and intendment of this Contract.

20. Identification

The CONTRACTOR shall not use of the name or any trademark, logo or trade name of the COMPANY or its affiliated companies in its advertising or promotional material unless it obtains prior written permission from the COMPANY.

21. Settlement of Disputes

a. The parties shall attempt to amicably settle all disputes arising out of and relating to this Agreement and the obligations there under (the "Dispute") through negotiations and consultations with each other. In the event, the Dispute is not settled amicably, either party may give written notice of dispute to the other party within ten (10) days of such non-settlement of the dispute

- b. a. If such Dispute arising between the parties is not amicably settled as stated above, such Dispute shall be referred to and finally settled by Arbitration. The said Arbitration shall be conducted in accordance with the (Indian) Arbitration and Conciliation Act, 1996. The Parties agree:
 - (i) That the arbitration proceedings will be conducted in Mumbai and proceedings shall be in English language; and
 - (ii) The arbitration shall be referred to a sole Arbitrator and in case the parties fail to agree to the name of the sole Arbitrator, each party shall appoint 1(one) arbitrator. The Arbitrator so appointed shall mutually appoint a third arbitrator who shall be the presiding arbitrator.
- c. The decision of the arbitrators on the dispute shall be final and binding on the parties.
- d Notwithstanding the commencement of any dispute resolution, the parties must without delay continue to perform their respective obligations under this Agreement in accordance with its provisions except, where a party has acted reasonably and bona fide in relation to the dispute or difference, to the extent that the matter, which is the subject of the dispute or difference and matters necessarily dependent on it cannot be proceeded with until the dispute or difference has been determined.
- e. All costs and expenses (including the counsels' fees) in relation to such arbitration proceedings shall be borne by the respective Parties.

22. This Agreement shall be governed by and construed in accordance with the laws of India and shall be subject to the jurisdiction of courts in Mumbai.

23. Services during Defects Liability Period:

The CONTRACTOR agrees and undertakes to provide the agreed services during the defects liability period for all Works undertaken by the CONTRACTOR for execution under this contract. The CONTRACTOR shall be bound by the same terms and conditions as contained under this Contract.

24. Warranty

The CONTRACTOR represents and warrants that:

- a it shall have the sole right, title and interest in in the Products to be utilized in execution of the Works and shall be fully entitled to transfer the completed Project and the Products free of any liens or encumbrances to the COMPANY;
- b the CONTRACTOR shall be legally entitled to sell, transfer and dispose of the Products, Works to be executed / Installed to COMPANY;
- c the Products, Works to be executed / Installed shall be free from defects in material and workmanship at the time of hand
- d Commencing with Delivery and ending upon completion of the Defects Liability Period, the CONTRACTOR shall, at its sole cost and expense, promptly repair (or, at COMPANY'S Option, replace) any defective Products or remedy any deficiency in service.

25. Compliance With Laws :

The CONTRACTOR represents, warrants, and covenants that its shall comply with all applicable laws, regulations, ordinances or other rules in relation to the Works including in relation to the sale, packing, transportation & execution/ installation of Works & the Products. The CONTRACTOR warrants that no applicable law or regulation will be violated in the manufacture, procurement, sale, delivery and installation of any of the products pursuant to this Contract / Agreement. The CONTRACTOR further warrants that compliance with applicable law and regulations there under will be and has been maintained at all times. The Contractor will ensure its subcontractors, agents, directors, officers, personnel and others acting through or on behalf of the Contractor comply with all applicable laws relating to the Works, and it shall obtain from the local authorities all permissions and approvals required, and the Contractor shall give all notices and pay all fees and charges that are and that can be demanded by law thereunder. Payment of all such fees and charges will be at the Contractor's cost. The CONTRACTOR agrees to indemnify and hold COMPANY fully indemnified and harmless from all damages, losses, liabilities, claims, costs, and expenses including legal fees arising from the failure of the Contractors its employees, labour, workmen, and sub-contractors to comply with this clause. The provision of this Clause shall survive completion or termination of the Work Order / Agreement

26. Intellectual Property Indemnity

CONTRACTOR agrees to indemnify and hold COMPANY fully indemnified and harmless from all damages, losses, liabilities, claims, costs, and expenses including attorneys' fees arising from any infringement or claimed infringement of any intellectual property

including know how, business methods, images, design rights or analogous rights thereto (or misappropriation of any trade secret) in connection with the use or sale by COMPANY or its clients and customers of the Products. CONTRACTOR agrees that it will, upon request of COMPANY and at its own expense, defend or assist in the defense of any action that may be brought against COMPANY or its clients for such infringement or claimed infringement. The provision of this Clause shall survive completion or termination of the Work Order / Agreement.

27. Termination

COMPANY may terminate this contract at any time by giving 7 (seven) days advance notice to the CONTRACTOR in the event that the COMPANY finds the CONTRACTOR'S work dissatisfactory (whether with regard to quality, adherence to time-schedule, adherence to the terms, conditions, and stipulations of the contract or otherwise). In the event of such termination, COMPANY shall not be liable to pay any amount to the CONTRACTOR over and above the amounts already approved, paid towards works already executed up to the date of termination based on monthly invoices raised (as per Clause 7 above) and no claim for any money or any other amounts shall lie against the COMPANY except proportionate retention money. The Company shall, in the event of terminating this contract under this provision, be fully entitled to receive the unrecovered advance, paid to the Contractor, from the Contractor and thereafter the Company shall return back the undated cheque submitted by the Contractor. The Contractor agrees not to raise any dispute or objection in this regard. Upon termination hereunder the CONTRACTOR shall forthwith handover the Project on as is where basis to the Company or to any other contractor designated by the COMPANY. Save as provided herein, neither party shall be entitled to terminate this contract.

This work order / Agreement is subscribed in duplicate by the parties. Each party retains one copy thereof.

Activities to be undertaken by the CONTRACTOR & Material Specification

Service Quality Standards

I. Development Standards and Requirements

1 Indian Standard Codes

Confirm to the relevant code for the specific aspect of development. The Indian Standard Codes are a comprehensive range of Standards and practices as per Bureau of Indian Standards, to be adopted in all aspects of design and construction in India.

- 2 Statutory Agency Requirements Meet all requirements of the statutory agencies, including Ministry of Environment & Forests, Pollution Control Board.
- 3 Applicable Laws:

Adhere to all conditions, regulations, measures and all requirements of whatever kind imposed by local bye-laws and other applicable Central, State and Local Government laws.

II. Operations and maintenance standards and requirements

Ensure that the appropriate category of rescue and fire fighting services shall be made available and maintained in accordance with the relevant law

III. Miscellaneous Compliances

The following miscellaneous terms and conditions are also to be adhered to by the Contractor:

(1) The Contractor shall not use naked light of any kind in the Premises.

(2) The Contractor shall provide construction methodology statement and detailed schedule within 3 days upon receipt of this work order and GFC drawing package.

(3) The Contractor shall maintain all the test certificates for all the items entering the site and prior approval needs to be taken from BIAL and BLR for all the items to be procured.

(4) The Contractor shall maintain detail log register for all the workers, material, tools and tackles.

(5) The Contractors shall take all the necessary steps to obtain airport passes and any expenses arising out for obtaining passes need to be borne by the contractor. BLR shall however assist in obtaining passes.

(6) Cable should not be laid on the false ceiling or on the partition wall. Cables, where required, should be laid only on metal cable trays. The Contractor shall use fire retardant power cables.

(7) Miniature circuit breaker and metal clad distribution board should only be used for electrical installation and distribution. ELCB should also be incorporated in the circuit.

(8) Main switch board, electric meter, distribution board should not be fixed on the combustible material nor in the combustible panels.

(9) Over loading of the circuit is prohibited and no temporary connection should be made,.

(10)Combustible material should not be stored under/ close to the electric switch board/ distribution board/ meters and approach to electrical board should be kept clear.

(11)Debris etc. shall be immediately cleaned and taken away.

(12) Existing False ceiling should not be damaged and wherever damaged shall be restored immediately.

(13) Caution board / lights to be provided at site during working period.

(14) Adequate precaution for fire fighting to be taken and existing fire fighting system not to be disturbed

Activities to be undertaken by the Contractor

Annexure II

- 1 Contractor shall ensure that a detailed Work Schedule is prepared and submitted by it to the Company for approval. Upon approving the same, the Contractor shall strictly adhere to the same at all times until the completion of the Project.
- 2 Contractor agrees to communicate the Company on a weekly basis the update with regards to the work completed at the Project site. The same shall be accompanied with photographs of the work completed. The said weekly submission shall be in terms of the approved Work Schedule without any deviation.
- 3 Contractor shall ensure that it appoints a Project Manager who shall be responsible for the said Project. Moreover, for each of the specialized job work including but not limited to electrical works, plumbing, civil work, carpentry, etc, the Contractor shall engage a Supervisor for each of the said specialized areas.
- 4 The contractors Health, safety & Environmental policy statement from will be rigorously enforced by the site Management Team. All operatives undertaking are to be familiar with said policy statements and associated documents/ processes and are to strictly follow them.
- 5 Appointment of project supervisor for Carpentry & Civil works from your company's side will be only after necessary concern from TFS Projects.
- 6 Contractor shall not use the project site, its nearby surrounding premises or its equipments for labour stay, cooking food, cleaning utensils, washing & drying clothes, toileting etc.
- 7 Contractor shall ensure that utmost care will be taken by his staff to keep the project premises and its surrounding clean and hygienic, safe and secure.
- 8 All the COVID 19 guidelines to be followed at site rigorously.

1. Safety Compliance

1.1. **General Safety**: The Contractor agrees to comply with all applicable safety laws, regulations, and industry standards to ensure a safe working environment at the project site. This includes but is not limited to, the Occupational Safety and Health Administration (OSHA) regulations, local building codes, and any other safety standards relevant to the project.

1.2. Site Safety Plan: The Contractor shall develop and implement a comprehensive site safety plan that outlines safety procedures, emergency response protocols, and measures to prevent accidents and injuries. The Client shall review and approve this plan before work commences.

1.3. **Safety Training**: The Contractor shall ensure that all personnel engaged in the Work are adequately trained in safety procedures, the proper use of safety equipment, and hazard recognition. The Contractor shall maintain records of this training.

2. Safety Responsibilities

2.1. **Client Responsibilities**: The Client agrees to cooperate with the Contractor in matters related to safety. This includes providing access to the project site, ensuring the site is clear of hazards not related to the construction, and promptly addressing any safety concerns brought to their attention by the Contractor.

2.2. **Incident Reporting**: In the event of any accident, injury, or near miss on the project site, the Contractor shall immediately report it to the Client and relevant authorities as required by law. The Contractor shall also cooperate fully in any investigation related to such incidents.

3. Safety Inspections

3.1. **Regular Inspections**: The Contractor shall conduct regular safety inspections of the project site to identify and address potential hazards. The Client may also request safety inspections at any time.

3.2. **Corrective Action**: If any safety issues are identified during inspections, the Contractor shall take immediate corrective action to address them and prevent further risks.

4. Indemnification

4.1. **Indemnification**: The Contractor agrees to indemnify and hold the Client harmless from any liability, claims, damages, losses, or expenses arising out of or in connection with any breach of safety obligations by the Contractor or its personnel.

5. Termination for Safety Violations

5.1. Termination: If the Contractor fails to comply with safety requirements outlined in this Contract, the Client reserves the right to

terminate this Contract immediately without any further liability.

6. Insurance

6.1. **Insurance**: The Contractor shall maintain appropriate liability insurance, including but not limited to workers' compensation and general liability insurance, to cover any injuries or damages resulting from the Work.

7. Emergency Procedures

7.1. **Emergency Procedures**: The Contractor shall establish clear emergency procedures and evacuation plans and communicate them to all personnel working on the project site. The Client shall be informed of these procedures.

Including a safety clause like the one above demonstrates a commitment to safety and helps ensure that safety practices are an integral part of the project. However, it's crucial to consult with legal counsel to ensure that the safety clause is compliant with local laws and regulations and adequately addresses the specific safety needs of your project.

Governing Law

This contract shall be governed by and construed in accordance with the laws of the State of [State/Country], without regard to its conflict of law principles.

Jurisdiction

Any legal action or proceeding arising under or in connection with this contract shall be brought exclusively in the state or federal courts located within the State of [State/Country], and the Parties consent to the personal jurisdiction of such courts.

Venue

The Parties agree that the appropriate venue for any legal action or proceeding shall be the [County/City] County, [State/Country] if brought in state court or the [District/Federal Court Name] if brought in federal court.

This clause specifies that the laws of a particular state or country will govern the contract and also designates the jurisdiction where any legal disputes related to the contract will be heard. The choice of governing law should consider factors such as where the project is located, where the parties are based, and any relevant legal requirements or preferences. It's important to consult with legal counsel when choosing the governing law to ensure that it aligns with the specific circumstances of your contract and any applicable local laws and regulations.

Including an emergency procedure clause in a contract document is a responsible and safety-conscious practice, especially in construction contracts where unexpected emergencies can occur. This clause outlines the steps and responsibilities of both parties in case of emergencies to ensure the safety of all individuals involved. Below is a sample emergency procedure clause that you can include in your contract document:

Emergency Procedure

1. Emergency Contact Information

1.1. **Emergency Services**: In the event of a medical emergency, fire, natural disaster, or other critical incident, the Contractor shall immediately contact the appropriate emergency services (e.g., 911) to request assistance.

1.2. Client Contact: The Contractor shall also promptly inform the Client of the emergency situation and provide details on the nature and extent of the emergency.

2. Evacuation and Safety Measures

2.1. **Immediate Action**: In the case of an emergency requiring evacuation, the Contractor shall take immediate steps to ensure the safety of all individuals at the project site. This includes guiding personnel to safe assembly points and providing first aid, if necessary, within the scope of the Contractor's capabilities.

2.2. **Communication**: The Contractor shall maintain a means of communication (e.g., two-way radios or mobile phones) to coordinate emergency response and communicate with emergency services.

3. Notification of Authorities

3.1. **Regulatory Agencies**: The Contractor shall notify any relevant regulatory agencies or authorities as required by local laws and regulations in the event of an emergency or incident that may have legal implications.

4. Documentation

4.1. Incident Reporting: The Contractor shall document the details of any emergency, including the date, time, nature of the incident,

individuals involved, and actions taken. This documentation may be requested by the Client and may also be required for insurance or legal purposes.

5. Review and Training

5.1. **Periodic Review**: The Contractor and the Client shall periodically review the emergency procedures to ensure their effectiveness and make necessary updates as needed.

5.2. **Training**: The Contractor shall ensure that all personnel working on the project site are trained in the emergency procedures and understand their roles and responsibilities during emergencies.

6. Indemnification

6.1. **Indemnification**: The Contractor agrees to indemnify and hold the Client harmless from any liability, claims, damages, losses, or expenses arising out of or in connection with the Contractor's failure to comply with emergency procedures or responsibilities outlined in this Contract.

This clause establishes a clear framework for responding to emergencies, ensuring the safety of individuals, and complying with legal requirements. It's crucial to consult with legal counsel to tailor this clause to the specific needs and risks of your project, taking into account local laws and regulations related to emergency procedures and safety. Additionally, both parties should understand and agree to these procedures before signing the contract.

Child Labor Policy

1. Introduction

Your Organization is committed to upholding ethical labor practices and ensuring the welfare of all individuals involved in our projects. This includes a firm stance against child labor. We expect all contractors, subcontractors, and suppliers to adhere to the principles outlined in this Child Labor Policy.

2. Definitions

Child: A person under the age of 18 years.

Child Labor: Any work or employment that deprives children of their childhood, interferes with their ability to attend regular schools, and is mentally, physically, socially, or morally harmful.

3. Compliance with Applicable Laws

All contractors and subcontractors engaged in work related to projects awarded by [Your Organization's Name] must comply with all relevant local, national, and international laws and regulations regarding child labor. This includes but is not limited to:

Compliance with International Labour Organization (ILO) Convention No. 182 concerning the Worst Forms of Child Labour and ILO Convention No. 138 on the Minimum Age for Admission to Employment. Adherence to applicable child labor laws and regulations of the host country.

4. Prohibition of Child Labor

Contractors shall not employ children under the age of 18 for any work related to projects awarded by [Your Organization's Name]. This prohibition includes, but is not limited to, direct employment, apprenticeships, internships, or any other form of work arrangement.

5. Due Diligence

Contractors are responsible for conducting due diligence to ensure that child labor is not used at any level of the supply chain associated with the project. This may include:

- Verifying the age of workers through appropriate documentation. Periodic audits of the supply chain to detect and prevent child labor.
- Implementing mechanisms to report and address any instances of suspected child labor promptly.

6. Reporting

Contractors must report any suspected or confirmed cases of child labor to [Your Organization's Name] immediately. The contractor shall cooperate fully with any investigation related to such cases.

7. Consequences of Non-Compliance

Failure to comply with this Child Labor Policy may result in the termination of the contract and potential legal action. [Your Organization's Name] reserves the right to take appropriate action against any contractor found in violation of this policy.

8. Certification of Compliance

Contractors may be required to provide a certification of compliance with this Child Labor Policy as part of the tender submission process.

By submitting a tender for our projects, contractors acknowledge and agree to adhere to this Child Labor Policy and to take all necessary measures to ensure compliance throughout the project's duration.

Including a child labor policy in your tender document demonstrates your organization's commitment to ethical labor practices and social responsibility. It also sets clear expectations for contractors and subcontractors regarding child labor prevention. Ensure that contractors understand and agree to comply with this policy before awarding them a tender. Additionally, consult with legal experts to ensure that the policy complies with relevant laws and regulations.

Safe Work Guidelines

Safety is of primary importance to us in our profession. To be forewarned is forearmed. By paying close attention to the below mentioned safety guidelines you will be contributing in warding off any damage and injuries.

GEARING UP FOR SAFETY

- * Always wear appropriate clothing and shoes respective to your job
- * Wear Non Skid Foot Gear Hard shoes
- * A hard hat will protect you if there is a risk of falling objects
- * Wear Gloves if you are handling sharp objects/tools
- * Wear Goggles if work poses hazard to your eyes
- * Wear Safety Harness when working at an elevated location
- * Ensure Work Site is kept Clean
- * Fire Extinguishers must be available and readily attainable
- * First Aid Kits must be available and readily attainable
- * Report any Unsafe Condition to your Supervisor immediately

You are hereby advised to strictly adhere to referred safety guidelines while at work. In addition, ensure all workers follow airport security procedures at all times.