

CORRIGENDUM-1

IFB NO. CDI7774P25

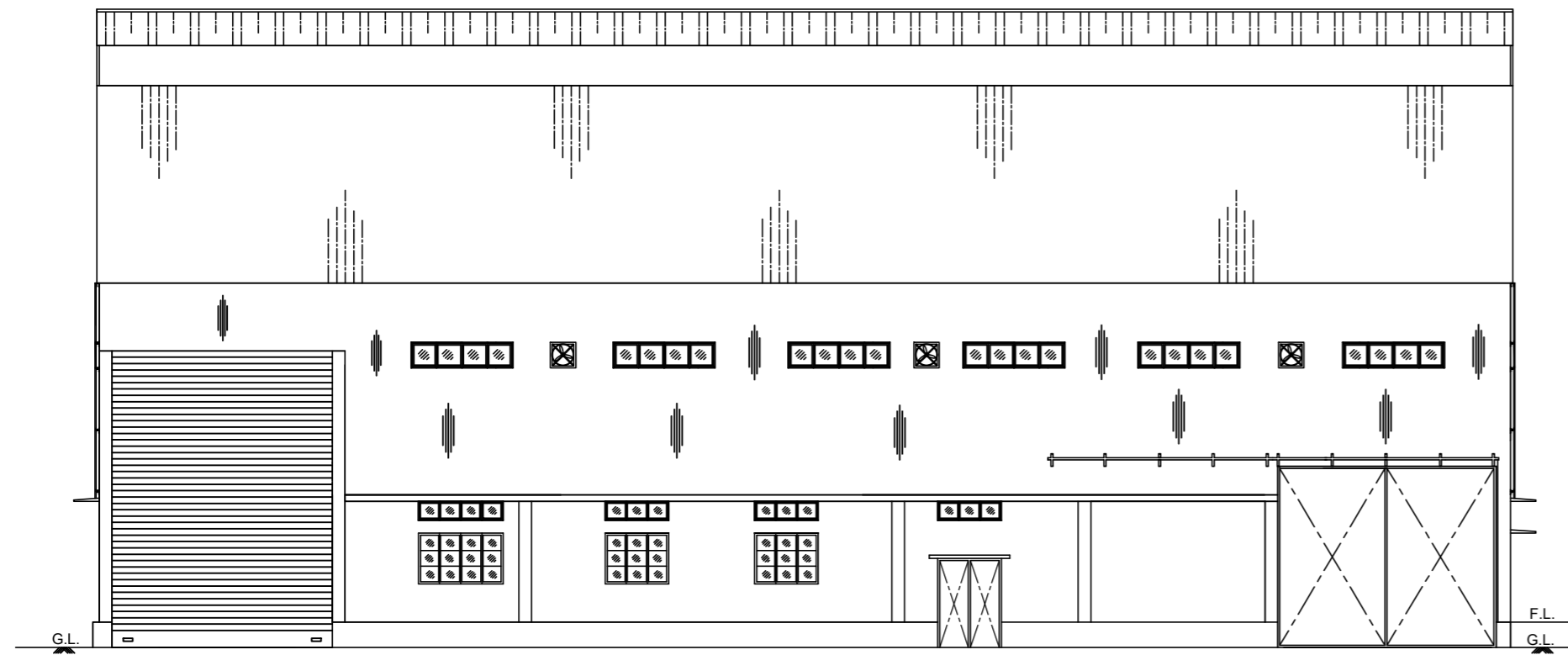
This Corrigendum No. 1 dated 29.11.2024 to IFB No. CDI7774P25 for “**Engineering, Procurement, Construction and Commissioning of Electrical Cable Handling Workshop with EOT Crane Facility including internal electrification and supply of all materials, at Electrical Engineering Department, OIL, Duliajan.**” is issued to notify the following changes to the tender:

- i) Schedule of Quantity (SOQ) for Electrical Items against the tender has been uploaded under “Amendments” folder in OIL’s e-tender portal. Bidders are advised to take the SOQ into account and participate in the tender.
- ii) To publish the Concept drawings of electrical workshop along with tender documents. Bidders are requested to go through the concept drawings, which are for reference only, while participating the bid.
- iii) Bid Closing Date & Time : Extended up to **10.12.2024 [14:00 Hrs. (IST)]**
- iv) Bid Opening Date & Time : Extended up to **10.12.2024 [14:30 Hrs. (IST)]**

All other terms and conditions of the Bid Document (including any amendment issued thereof) remain unchanged. Details can be viewed at www.oil-india.com.

BIKU
KUMAR
MAZUMDER
CIVIL ENGINEER-CONTRACTS

Digitally signed
by BIKU KUMAR
MAZUMDER
Date: 2024.11.29
11:11:47 +05'30'



ELEVATION

BRIEF SPECIFICATIONS -

- FOUNDATION** — 75 THK. CEMENT CONCRETE (1: 3 : 6) BELOW COL. FOUNDATION, TIE BEAM & 100 THK. C.C. FOR PLINTH WALL FOUNDATION.
- D. P. C.** — 40 THK. D. P. C. (1: 2: 4) CEMENT CONCRETE MIXED WITH 3% CICO.
- SKIRTING** — 25 THK. x 150 HIGH SKIRTING (1: 3) TO ALL INSIDE BRICK WALLS.
- FLOORING** — i) 75 THK. FLAT BRICK SOLING BELOW 100 THK. GRANOLITHIC FLOOR - 25 THK. GRANOLITHIC (1:1:1½) TOPPING OVER 75 THK. C.C. (1:3:6)
- BRICK WORK** — ALL BRICK WORK IN (1: 4) CEMENT MORTAR WITH 1st CLASS LOCAL BRICKS.
- R. C. C. WORK** — ALL R. C. C. WORKS (1: 1½ : 3) IN ACCORDANCE WITH IS : 456 - 2000.
- PLASTERING** — i) 6 THK. C. PLASTER (1: 3) TO ALL EXPOSED R.C.C. WORKS.
ii) 12 THK. C. PLASTER (1: 4) TO ALL INSIDE AND OUTSIDE FACES OF BRICK WALLS, BUT OUTSIDE FACES OF BRICK WALL PLASTER SHALL BE WATER PROOFING COMPOUND.
iii) 12 THK. C. PLASTER (1: 3) WITH NEAT CEMENT PUNNING IN ALL EXPOSED FRONT PLINTH WALLS (FROM GL. TO FFL.) INCLUDING FLOORING AND DRAIN.
- RENDERING** — i) 3 COATS OF WHITE WASHING TO ALL INSIDE PLASTERED SURFACES OF BRICK WALLS .
ii) 2 COATS OF CEMENT BASE PAINTS TO ALL OUT SIDE PLASTERED SURFACES OVER ONE COAT OF WHITE WASH.
iii) 2 COATS OF ENAMEL PAINTS TO ALL STEEL STRUCTURE INCLUDING WALL FRAMING, SLIDING DOORS, VENTILATORS AND X.P.M. JALLI OVER ONE COAT OF RED OXIDE PRIMER.
iv) VARNISHING TO ALL WOODEN DOORS & FRAMINGS.
- DRAIN** — STD. SURFACE DRAIN TO PROVIDED.
- DRAIN SIDE GAG** — 50 THK. DRAIN SIDE GAP - 38 THK. C.C. (1: 3 : 6) & 12 THK. C. PLASTER (1:3) ON TOP.

NOTES -

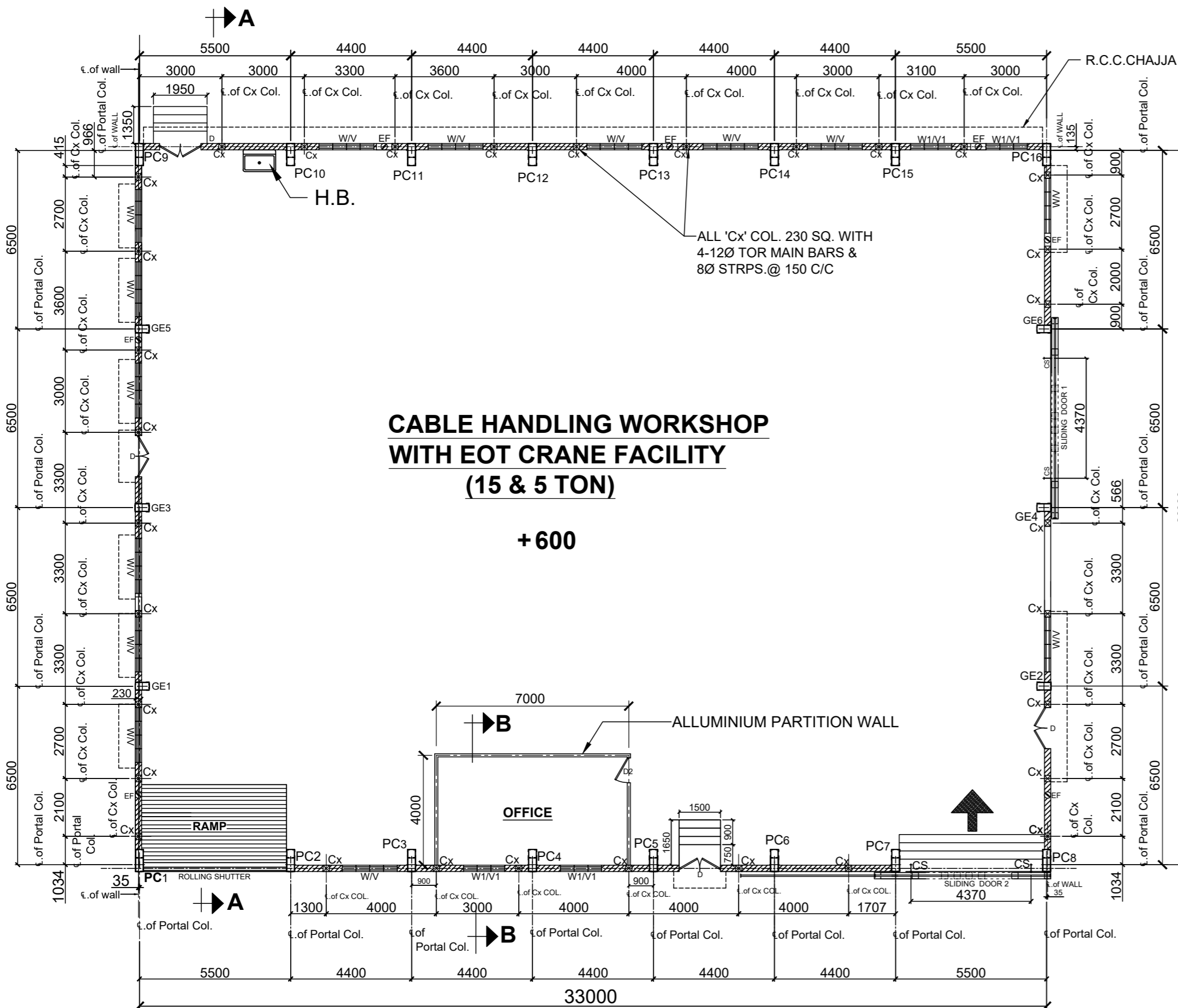
- Clear cover to reinforcement as per is 456-2000
i) In beam - 25mm
ii) In column-40mm
iii) In footing :50mm
- Lap length - **54d** for m. s. and **56d** for torsteel.
- Reinforcements -
i) HYSD bars grade fe500 conforming to is : 1786 - 1985.
- All Structural Steel Works shall conform to IS: 800 - 1984
- Flat Steel conforming to IS: 1731 - 1971.
- All Hex. Bolts, Screws & Nuts to conform to IS: 1363 (Part 1) - 2002
- Hook Bolts for Dyna Roof Sheet Roofing shall be as per IS: 730 - 1978.
- Welding Works shall conform to IS: 816 -1969.
- Timber Works shall be 1st. class Seasoned dressed timber.
- X.P.M. Sheet as per IS: 412-1975.
- All aluminium works shall conform to is:1948.
- Column and beam detailing will be as per is:13920
- Not more than 50 percent of the bars shall be spliced at one section.
- Pre constructional Anti Termite treatment shall be as per IS: 6313 (part 1) - 1981 and IS: 6313 (part 2) -2001.

SCHEDULE OF DOORS / WINDOWS / VENTS.

REF. NO	DESCRIPTION	SIZES	AS PER IS:	REQD. NO	REMARKS
D	DOOR - 35 THK. FLUSH DOOR	1500 x 2100	—	4	ON 100 x 75 TIMBER FRAMING
D1	ALLUMINIUM DOOR	900 x 2100	—	1	
W	WINDOW - METAL GLAZED - FOUR/L	1200 x 2000	—	14	
W1	WINDOW - METAL GLAZED - D/ L	1200 x 1500	—	4	TO BE GUARDED WITH 75 MESH x 5 DIA. IRC JALI
V	VENTILATOR - METAL GLAZED C / H	450 x 2000	—	14	
V1	VNTILATOR - METAL GLAZED C / HE	450 x 1500	—	4	
V2	VNTILATOR - METAL GLAZED C / HE	600 x 2400	—	21	
EF	EXHAUST FAN	—	—	9	
RS	ROLLING SHUTTER	5000 x 7000	—	1	
SD1	SLIDING DOOR 1	4275 x 4370	—	1	
SD2	SLIDING DOOR 2	4275 x 4370	—	1	

REFERENCE DRG. -

- FOR DETAILS OF COLUMN FOUNDATION REFER DRG. NO. OIL /11172
- FOR DETAILS OF PORTAL & ISMB COLUMNS BASE REFER DRG. NO. OIL /11173
- FOR DETAILS OF PORTAL FRAME AND CRANE GIRDER REFER DRG. NO. OIL/11174
- FOR DETAILS OF SIDE WALL PURLINS REFER DRG. NO. OIL /11175
- FOR DETAILS OF FRONT AND BACK WALL PURLIN REFER DRG. NO. OIL /11176
- FOR DETAILS OF ROOF PURLIN REFER DRG. NO. OIL /11177
- FOR DETAILS OF SECTION REFER DRG. NO. OIL / 11264
- FOR CONNECTION DETAILS OF ROOF AND CABLE HANDLING FRAME REFER DRG. NO. OIL / 11265
- FOR DETAILS OF SLIDING DOOR REFER DRG. NO. OIL / 11266
- FOR SITE PLAN REFER DRG. NO. OIL / 11157



CABLE HANDLING WORKSHOP WITH EOT CRANE FACILITY (15 & 5 TON)

+ 600

PLAN

ALL DIMENSIONS ARE MILLIMETERS.

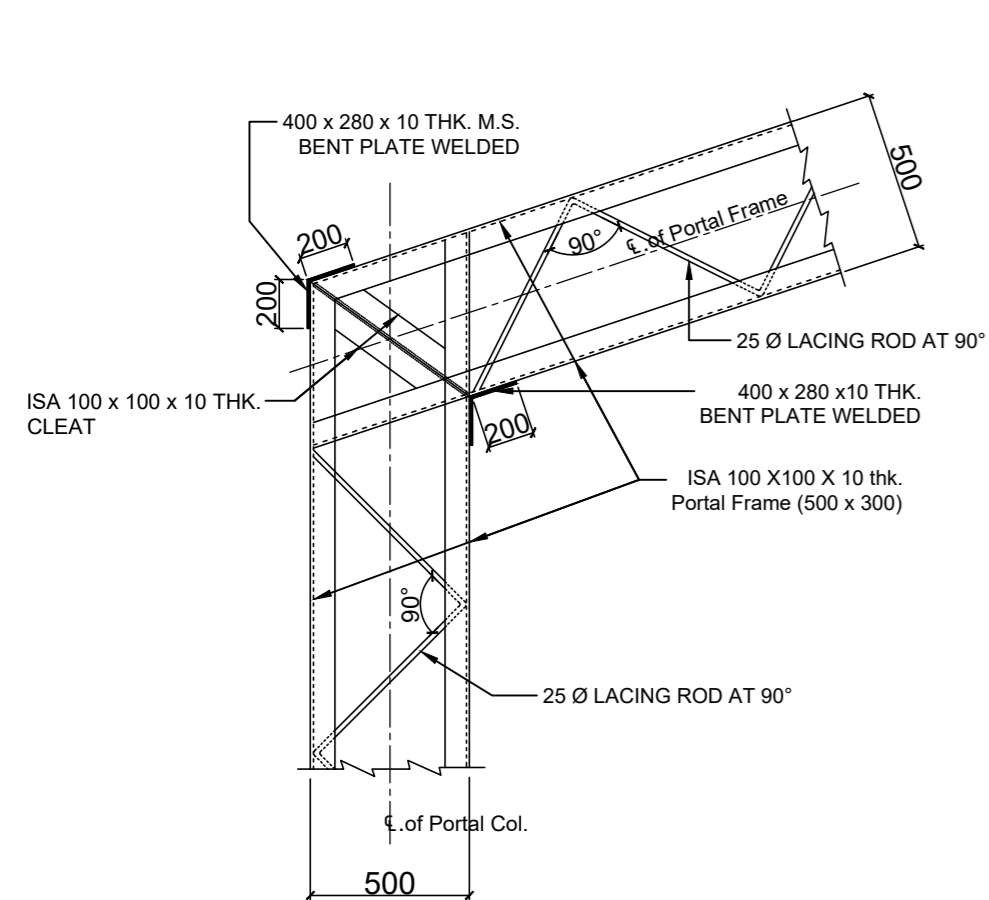
APPROVED BY - _____ NAME - _____

DESIGNATION - _____ DEPARTMENT - _____

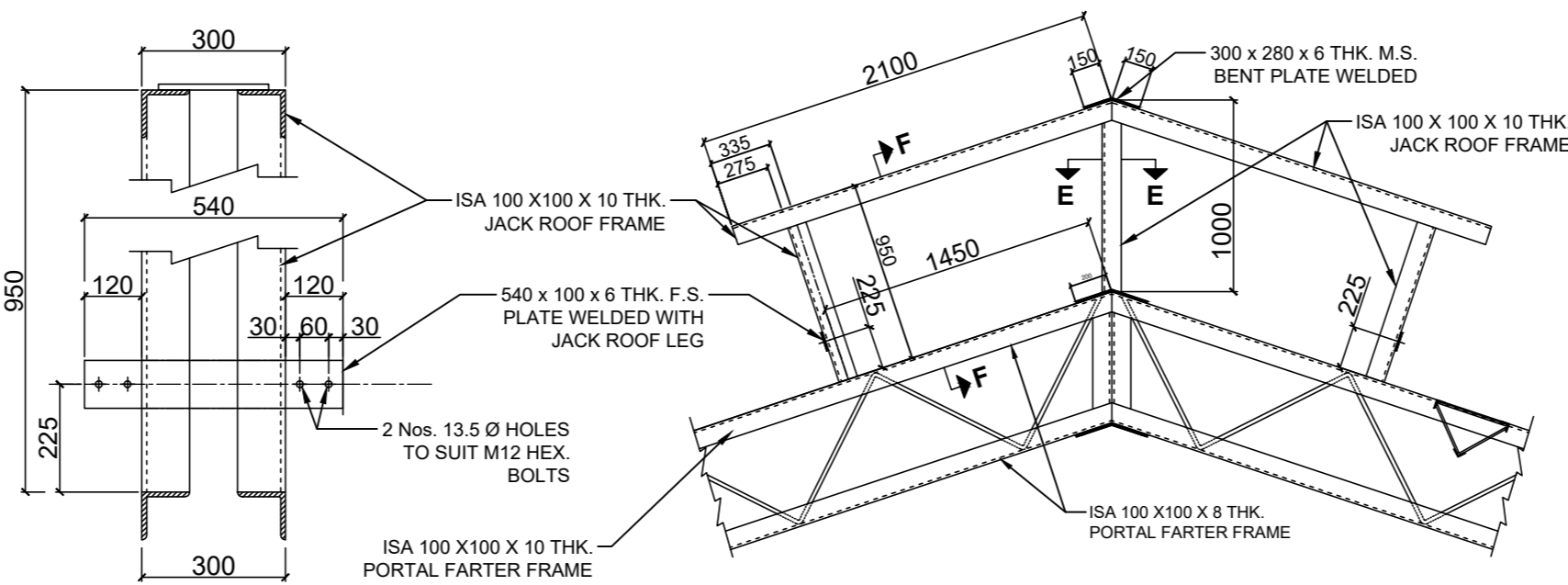
DATE - _____

REV.	DATE	ZONE	BRIEF RECORD	APPROVED

	OIL INDIA LIMITED DRAWING OFFICE DULIAJAN	NAME	DATE
		DESIGNED	
		DRAWN	DOLLY CHETIA 21.06.21
		DRAWING CHECKED	
SCALE N.T.S	TITLE	DRG NO	
	CABLE HANDLING WORKSHOP FOR ELECTRICAL DEPARTMENT (GENERAL ARRANGEMENTS)	OIL / 11171	

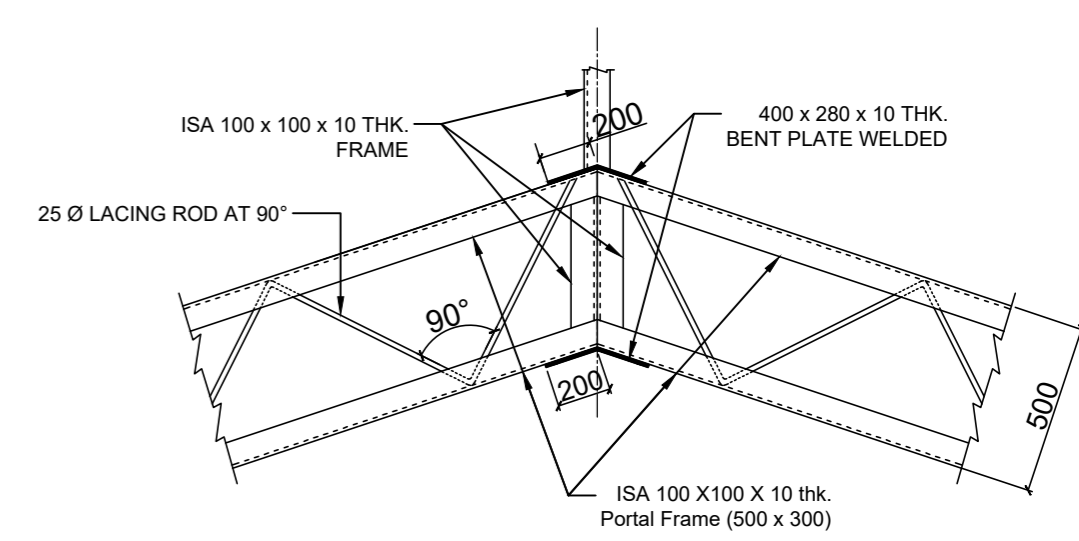


ENLGD. DETAILS AT 'A'

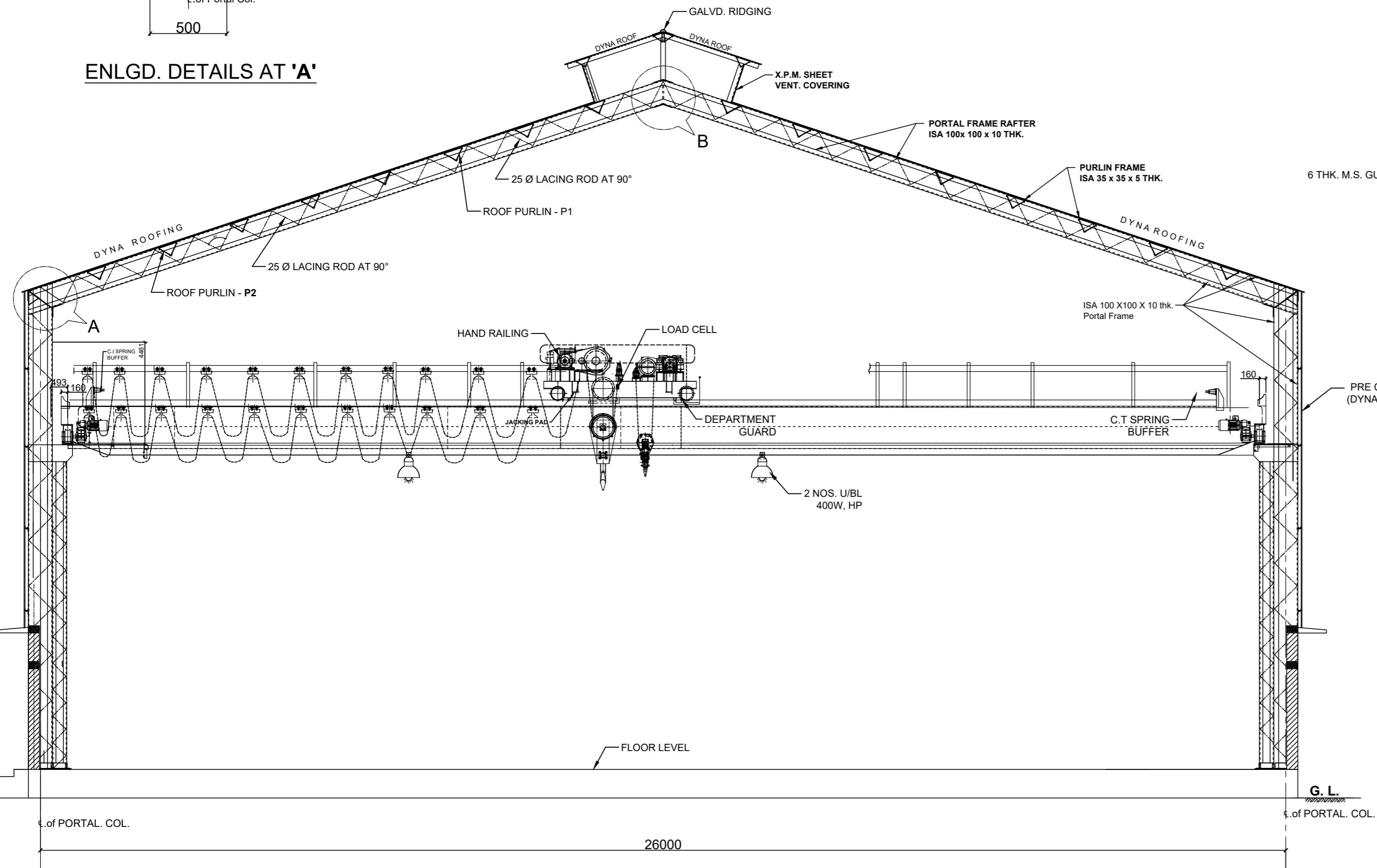


ENLGD. SEC. ON 'F - F'

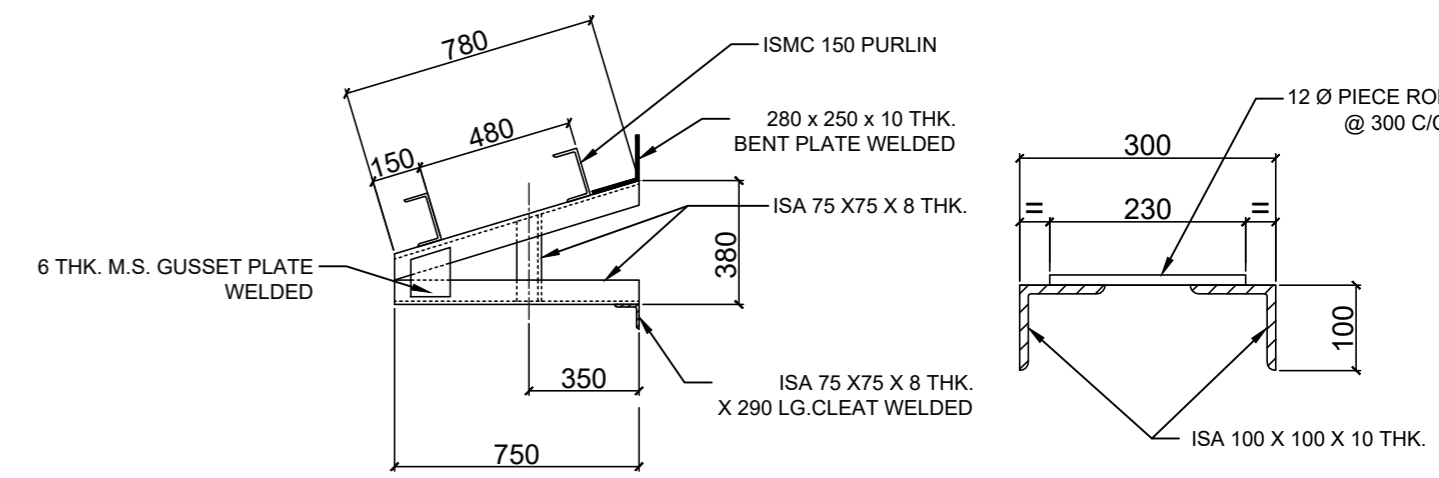
ENLGD. DETAIL OF JACK ROOF



ENLGD. DETAILS AT 'B'



ELEVATION



DETAIL OF VENT BRACKET

ENLGD. SEC. ON 'E-E'

REFERENCE DRGS. -

- FOR GENERAL ARRANGEMENT REFER DRG. NO. OIL / 11171

	OIL INDIA LIMITED DRAWING OFFICE DULIAJAN	DESIGNED	NAME	DATE
		DRAWN	GAURAB DAS	10.12.21
		DRAWING CHECKED		
		DRAWING APPROVED		
SCALE N.T.S	TITLE CABLE HANDLING WORKSHOP FOR ELECTRICAL DEPARTMENT (CONNECTION DETAILS OF ROOF AND CABLE HANDLING FRAME)	DRG NO OIL / 11265		

REV.	DATE	ZONE	BRIEF RECORD	APPROVED

Minimum quantity of electrical items required to be supplied, installed and commissioned as per table below:

SOQ for electrical items of Cable Handling Yard				
S/line No	Short Description	Abbreviated Nomenclature / Description of Item	Unit	Quantity
10	Point wiring with 3x1.5 sq. mm in PVC conduit	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 3 nos Single core 1.5 sq.mm size FRLS PVC insulated copper cable in recessed using medium grade ISI approved 25mm size PVC conduit & accessories, suitable GI box as required.(Colour codes – Phase –R/Y/B; Neutral –Black & Earth- Green)). Concealed Point wiring includes laying of PVC conduit in the roof/Wall also.	Point	8
20	Light plug point wiring with 3x1.5 sq. mm PVC wire in PVC conduit	Wiring for light plug point with 3 nos Single core 1.5 sq.mm size FRLS PVC insulated copper cable in recess using medium grade ISI approved 25mm size PVC conduit & accessories, etc as required.(Colour codes – Phase –R/Y/B; Neutral –Black & Earth-Green)).Concealed wiring includes laying of PVC conduit in the roof/Wall also.	M	30
30	Circuit wiring with 3x2.5 sq. mm PVC wire in PVC conduit	Wiring for circuit/ sub main from MCB DB to desired Switch Board with 3 nos Single core 2.5 sq.mm size FRLS PVC insulated copper cable in recess using medium grade ISI approved 25mm size PVC conduit & accessories, (Colour codes : Phase –R/Y/B; Neutral – Black & Earth- Green)).Concealed circuit wiring includes laying of PVC conduit in the roof/Wall also.	M	60
40	Power wiring with 3 x 4sq.mm PVC wire PVC wire in PVC conduit	Wiring for circuit/ sub main/Power wiring from MCB DB to desired Switch Board/power point with 3 nos Single core 4 sq.mm size FRLS PVC insulated copper cable in recess using medium grade ISI approved 25mm size PVC Conduit & accessories, (Colour codes : Phase –R/Y/B; Neutral –Black & Earth- Green). Concealed circuit wiring includes laying of PVC conduit in the roof/Wall also.	M	40

50	Supplying and fixing of 6 A S/Socket	Supplying and fixing 3 module GI box with modular plate and cover in front on recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection etc. as required. Modular type switch shall be ISI marked switch modular, unenclosed, push / piano type suitable for flush mounting with screw type terminals suitable for 250V, 50Hz. supply and conforming to IS: 3854/1997 Reaffirmed 2007. Modular socket outlet, flush type mounting, non-shuttered type for 250V,50Hz. supply and conforming to IS:1293/ 2005 with amendments No.1,2&3.The dimensions shall be as per annexure `A of IS: 1293/2005 with amendments No.1,2&3 Note:-Dimensions and withdrawal force values for 2-pin sockets and 5-pin sockets shall be as per IS:1293.	No	6
60	Supplying and fixing 16 A S/Socket	Supplying and fixing 3 module GI box with modular plate and cover in front on recess, including providing and fixing 6 pin 5/6 & 15/16 amps modular socket outlet and 15/16 amps modular switch, connection etc. as required.Modular type switch shall be ISI marked switch modular, unenclosed, push / piano type suitable for flush mounting with screw type terminals suitable for 250V, 50Hz. supply and conforming to IS: 3854/1997 Reaffirmed 2007. Modular socket outlet, flush type mounting, non-shuttered type for 250V,50Hz. supply and conforming to IS:1293/ 2005 with amendments No.1,2&3.The dimensions shall be as per annexure `A of IS: 1293/2005 with amendments No.1,2&3 Note:-Dimensions and withdrawal force values for 2-pin sockets and 5-pin sockets shall be as per IS:1293.	No	4
70	Supply and Fixing of 10 A Industrial Switch Socket	Supplying and installation of 10A metallic plug/socket DB complete with 10A Plug and Socket and 10 A DP RCBO, 30 mA sensitivity for 1 phase power supply.	No	24
80	Supply and Fixing of 20 A Industrial Switch Socket	Supplying and installation of 20A metallic plug/socket DB complete with 20A Plug and Socket and 20 A DP RCBO, 30 mA sensitivity for 1 phase power supply.	No	10

90	Supply and installation of 32A 3P 5 Pin Industrial Switch Socket	Supplying and installation of 32A metallic plug/socket DB complete with 32A Plug and Socket and 32 A 4P RCBO, 30 mA sensitivity for 3 phase power supply.	No	2
100	Supply and Fixing of 8 Module Switchboard	Supply and Fixing of 8 Module type Switch Board. Box shall be made out of steel sheet of min 1.20 mm thickness and complete finished box should be duly pretreated, zinc coated & passivated or made of GI sheet of 1.2mm thickness to accommodate specified number of electrical accessories and suitable for indoor electrical installation with provision for earthing terminal. Frame Plate with matching Cover Plate suitable for above Switch Board Box suitable to accommodate specified number of electrical accessories. Frame Plate shall be made out of polycarbonate. The configurations for the relevant plate are defined as under: A- Number of Rows: 1 B- Number of openings: 8 C- Size of opening: 1M	No	2
110	Supply & fixing of 6 A Modular switch	Supply and fixing of 6 A Modular switch in the existing modular boxes. Modular type switch shall be ISI marked modular, unenclosed, push / piano type suitable for flush mounting with screw type terminals suitable for 250V, 50Hz. supply and conforming to IS: 3854/1997 Reaffirmed 2007.	No	8
120	Supply and fixing of modular type blanking plate	Supply and fixing of Blank Plate	No	6
130	Supply and fixing of ceiling rose	Supplying and fixing 3 pin, 5 amp ceiling rose	No	8

140	Supply and fixing of Modular Regulator 100 W	Supply and fixing 1 Module step Fan Regulator 100W.Electronic Fan regulator step type (Capacitor Type) with minimum 4 steps(5 position) flush mounting type to IS:11037/1984(Reaffirm 2005) suitable for electric ceiling fan of voltage 230V, AC,50 Hz having wattage up to 100 Watts Max. The capacitor used shall be of standard make.	No	2
150	Supply and fixing of Hexagonal Fan Box	Supplying and fixing of Mild steel hexagonal/Round fan box with 12mm Rod ,18G in the fan position.	No	2
160	Supply, Installation, testing and commissioning of Ceiling Fan, 1400 mm	Supply, Installation, testing and commissioning of 1400 mm sweep ceiling fan without modular step regulator, including wiring the down rods of standard length (upto 30 cm).Fan shall have double bearing with minimum air delivery shall be 230 CMM. Minimum Power input shall be 60 W .	No	2
170	Supply, Installation, testing and commissioning of Industrial Wall Fan, 600 mm (minimum)	Supply, Installation, testing and commissioning of Industrial Wall Fan, minimum 600 mm sweep, 900±10% RPM heavy duty metallic wall mounted fan, including making necessary arrangement for fixing the fan on the wall.	No	12
180	Supply, Installation, testing and commissioning of Industrial Exhaust Fan, 600 mm (minimum)	Supply, Installation, testing and commissioning of Industrial Exhaust Fan, minimum 600 mm sweep, 900±10% RPM heavy duty metallic exhaust fan, including making necessary hole to suit the size of the above fan and fixing of the fan on the wall.	No	12

190	Supply,Installation, testing and commissioning of LED 2x2 Luminaires	Supply,Installation, testing and commissioning of recessed type LED CRCA powder coated luminaire complete with all mounting accessories for fixing in the POP type ceiling including supplying, fixing arrangement and connection with 3x1.5 sq. mm FR PVC insulated,copper conductor, single core cable and earthing etc. as required.Minimum output Lumen shall be 3600 and colour temperature shall be 5500K to 6500K. Luminaire Efficacy of each light unit shall be minimum 100 lumens/Watt. Power factor>0.9, THD < 10% , IEC Compliant for safety.	No	6
200	Supply,Installation, testing and commissioning of LED Highbay Luminaires	Supply,Installation, testing and commissioning of LED Highbay Luminaires of minimum 20000 lumen output. Luminaire Efficacy of each light unit shall be minimum 100 lumens/Watt. Luminaire Shall be IP 65/66 category. Colour temperature: Cool white 6500+/- 500 ° K. CRI of the luminaire shall be more than 70%. Light shall be suitable for mounting height of minimum 8 meters. Necessary fixing arrangement from the roof truss has to be done for the luminaries with suitable angle iron support and GI clamps.	No.	30
210	Supply,Installation, testing and commissioning of Lighting Controller DB (3-phase)	3-phase 4 pole 63Amps (minimum) contactor of 415 volts operating coil with stop/start push button complete with sheet metal enclosure and complete internal wiring for locally switching ON/OFF the highbay luminaries. Provisions to be made in the controller DB for providing power supply to 3 nos. of SPN DBs which shall finally feed power to the luminaries.	No.	1
220	Supply and Fixing of 200 mm X 250 mm X 100 mm deep metal box	Supplying and fixing metal box of 200 mm X 250 mm X 100 mm on surface or in recess with suitable size of phenolic laminated sheet cover in front including painting etc as required.	No	8
230	Supply and Fixing of 150 mm X 150 mm X 60 mm deep	Supplying and fixing metal box of 150 mm X 150 mm X 60 mm on surface or in recess with suitable size of phenolic laminated sheet cover in front including painting etc as required.	No	2

240	Supply,Installation,Testing & commissioning of Single phase 63 A MCB DB, 16 way-double door	Supply,Installation,Testing & commissioning of 16 WAY SPN MCB DB with double door , single pole and neutral, sheet steel, MCB distribution board, 240 volts, on surface , complete with 100 A tinned 12 way copper busbar, 12 way neutral busbar, 12 way earth bar, din bar, detachable gland plate, interconnections, phosphatized and powder painted including earthing etc. as required.DB shall have following as incomer :63 A RCBO, sensitivity 100mA -1 nos.Outgoings are 10 A MCB ,C curve-6 nos,20 A MCB,C curve- 6 nos.Make of RCBO, MCBs and box shall be of same make. All accessories like Lugs/Thimble etc .required for installation shall be supplied by Contractor.	No	7
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250	Supply,Installation,Testing & commissioning of 3 Phase 12 way VTPN DB	<p>Supply,Installation,Testing & commissioning 160 A, 12 W, VTPN MCCB DB</p> <p>Supply of 3 Phase, 12 WAY, vertical TPN MCCB DB, as per the following specifications:</p> <p>A. Incoming:</p> <p>a. 160 A Thermal adjustable MCCB: 1 no</p> <p>b. Rating: 4 pole, 160 A, 25kA, 50Hz, 415VAC</p> <p>c. Protection: Thermal and Magnetic Protection</p> <p>B. Outgoing Feeders:</p> <p>a. 63 A TP C curve MCB: 8 nos</p> <p>b. 63 A SP C curve MCB: 12 nos</p> <p>c. All outgoing MCBs shall be 'C' curve, 240v AC, 10kA breaking capacity, with DMC housing, suitable for class-II tropicalisation (as per IEC) & approved by ISI or IEC. MCBs shall have integrated label holder, biconnect upper & lower terminals & air channels for low temperature rise.</p> <p>C. Bus bar: 250 A, Tinned Copper</p> <p>D. Constructional details of DB:</p> <p>DB shall be as per IS-8623 with latest amendment. DB shall have external earth terminal & mounting holes. Cable ties & wire leads for wiring incomer MCCB to respective phase & neutral buses shall be supplied and wired with single core 35 sqmm stranded copper cable with tinned copper lugs. Enclosure shall be IP-43& IK-09 with double door. DB shall have detachable cable entry gland plate on top and bottom side for keeping spare length of cables. All wires inside DB shall have ferrules for identification of circuit number. All unused openings shall be fitted with Blanking Plates. The DB shall be provided with 250 amp tinned copper bus bar for phase & neutral. Neutral & Earth bar shall be 8 way each & suitable for termination of wires with pin type cable lugs.</p> <p>All accessories like Gland/Lugs/Thimble etc .required for installation shall be supplied by Contractor.</p>	No	1
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260	Supply of 3C x 2.5 mm sq XLPE ARMOURED Cu Cable	Supply of 3C x 2.5 mmsq XLPE 1100v grade, Heavy duty, XLPE insulated, PVC sheathed, galvanised steel wire armoured cable with stranded, Copper conductor. Cable should be fixed with proper size of saddles at suitable interval. All core insulations shall be colour coded with red,black and green colours. All insulated cores laid up together, covered with inner sheath of extruded black PVC compound, galvanised steel wire armour and black PVC outer sheath. Sufficient filler shall be used to give overall circular shape to the cable. The cable shall be approved by IS: 1554 with latest amendments. PVC insulation should be as per IS-5831. Armour should be as per IS-3975. Conductor should be as per IS-8130. Manufacturer's name, cable size, voltage grade, ISI mark should be marked on the cable outer sheath in permanent manner at regular interval. Sequential marking should be provided on the cable outer sheath at every one meter length for measurement during use.	M	800
270	Supply of 3C x 4 mm sq XLPE ARMOURED Cu Cable	Supply of 3C x 4 mmsq XLPE 1100v grade, Heavy duty, XLPE insulated, PVC sheathed, galvanised steel wire armoured cable with stranded, Copper conductor. Cable should be fixed with proper size of saddles at suitable interval. All core insulations shall be colour coded with red,black and green colours. All insulated cores laid up together, covered with inner sheath of extruded black PVC compound, galvanised steel wire armour and black PVC outer sheath. Sufficient filler shall be used to give overall circular shape to the cable. The cable shall be approved by IS: 1554 with latest amendments. PVC insulation should be as per IS-5831. Armour should be as per IS-3975. Conductor should be as per IS-8130. Manufacturer's name, cable size, voltage grade, ISI mark should be marked on the cable outer sheath in permanent manner at regular interval. Sequential marking should be provided on the cable outer sheath at every one meter length for measurement during use.	M	200

280	Supply of 3C x 10 mm sq XLPE ARMoured Cu Cable	Supply of 3C x 10 mmsq XLPE 1100v grade, Heavy duty, XLPE insulated, PVC sheathed, galvanised steel wire armoured cable with stranded, Copper conductor. Cable should be fixed with proper size of saddles at suitable interval. All core insulations shall be colour coded with red,black and green colours. All insulated cores laid up together, covered with inner sheath of extruded black PVC compound, galvanised steel wire armour and black PVC outer sheath. Sufficient filler shall be used to give overall circular shape to the cable. The cable shall be approved by IS: 1554 with latest amendments. PVC insulation should be as per IS-5831. Armour should be as per IS-3975. Conductor should be as per IS-8130. Manufacturer's name, cable size, voltage grade, ISI mark should be marked on the cable outer sheath in permanent manner at regular interval. Sequential marking should be provided on the cable outer sheath at every one meter length for measurement during use.	M	400
290	Supply of 4C x 16 mm sq XLPE ARMoured Cu Cable	Supply of 4C x 16 mmsq XLPE 1100v grade, Heavy duty, XLPE insulated, PVC sheathed, galvanised steel wire armoured cable with stranded, Copper conductor. Cable should be fixed with proper size of saddles at suitable interval. All core insulations shall be colour coded with red, yellow, blue and black colours. All insulated cores laid up together, covered with inner sheath of extruded black PVC compound, galvanised steel wire armour and black PVC outer sheath. Sufficient filler shall be used to give overall circular shape to the cable. The cable shall be approved by IS: 1554 with latest amendments. PVC insulation should be as per IS-5831. Armour should be as per IS-3975. Conductor should be as per IS-8130. Manufacturer's name, cable size, voltage grade, ISI mark should be marked on the cable outer sheath in permanent manner at regular interval. Sequential marking should be provided on the cable outer sheath at every one meter length for measurement during use.	M	200
300	Supply of 1C x 16 mm sq XLPE Cu Cable	Supply of 1C x16 mmsq XLPE 1100v grade, Heavy duty, XLPE insulated, Black PVC sheathed cable with stranded, Copper conductor. The cable shall be approved by IS: 1554 with latest amendments. XLPE insulation should be as per IS-5831. Manufacturer's name, cable size, voltage grade, ISI mark should be marked on the cable outer sheath in permanent manner at regular interval. Sequential marking should be provided on the cable outer sheath at every one meter length for measurement during use.	M	400

310	Fixing of 1.1 KV grade XLPE Armoured/ Unarmoured Cu Cable on cable tray (upto size 16 sqmm)	Fixing of 1.1 KV grade XLPE Armoured/ Unarmoured Cu Cable (upto size 16 sqmm) with proper size of GI saddles at suitable interval upon the cable tray	M	2000
320	Supply of cable tray (Dimension: 150mm X 50mmx1.6mm)	GI perforated cable tray, hot dip galvanised with all required accessories like coupling plates, nuts, bolts, washers etc. Size: 16 SWG. Dimension: 150mm X 50mmx1.6mm. Length: 7-meter average or as available. Shape of perforation/ hole: oval/round shape	M	500
330	Fixing of cable tray	GI Trays shall be mounted on columns and laid horizontally/vertically between columns for laying cables. MS angles and straps shall be fixed lengthwise, by clamp or welding (if feasible), between columns for supporting trays. Trays shall be fixed with screw to the angle and strap.	M	500

340	Supply of 3.5C x 70mm sq XLPE ARMOURED Al Cable	Supply of 3.5C x70 mmsq XLPE 1100v grade, Heavy duty, XLPE insulated, PVC sheathed, galvanised steel wire armoured cable with stranded, Aluminium conductor. Cable should be fixed with proper size of saddles at suitable interval. All core insulations shall be colour coded with red, yellow ,blue and black colours. All insulated cores laid up together, covered with inner sheath of extruded black PVC compound, galvanised steel wire armour and black PVC outer sheath. Sufficient filler shall be used to give overall circular shape to the cable. The cable shall be approved by IS: 1554 with latest amendments. PVC insulation should be as per IS-5831. Armour should be as per IS-3975. Conductor should be as per IS-8130. Manufacturer's name, cable size, voltage grade, ISI mark should be marked on the cable outer sheath in permanent manner at regular interval. Sequential marking should be provided on the cable outer sheath at every one meter length for measurement during use.	M	100
350	Supply of 1C x 25 mmsq XLPE Al cable	Supply of 1C x 25 mmsq XLPE 1100v grade, Heavy duty, XLPE insulated, Black PVC sheathed cable with stranded, Aluminium conductor. The cable shall be approved by IS: 1554 with latest amendments. PVC insulation should be as per IS-5831. Manufacturer's name, cable size, voltage grade, ISI mark should be marked on the cable outer sheath in permanent manner at regular interval. Sequential marking should be provided on the cable outer sheath at every one meter length for measurement during use.	M	100
360	Laying of cable and Cable Trench	Making of cable trench in the soil as per following details:- The trench will be made in soil along the route decided in consultation with OIL. The trench will be 750mm deep, 400mm wide. The trench bottom will be filled with 75mm thick layer of clean sand and levelled to give flat bedding for cable. The cable shall be laid on this sand bed. After laying the cable in the trench the trench will be filled with another layer of clean sand of thickness 75mm. This sand layer will be leveled and complete trench length covered with A- Class bricks. The bricks will be placed perpendicular to the cable route closely without any gap. The trench will then filled with soil and the soil surface shall be dressed properly.	CUM	50
370	Supply and fixing of Earth electrode	Supply and fixing of Earthing with G.I. earth pipe 3 metre long, 100 mm dia (Conforming to BIS:1239) including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.	No	4

380	Supplying and laying GI strip connection -	Supplying and laying 50 mm X 3 mm G.I strip at over ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required.(Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)	M	50
390	Supply and fixing of lightning arrester	Providing and fixing of lightning conductor finial, made of 25 mm dia 300 mm long, G.I. tube, having single prong at top, with 85 mm dia 6 mm thick G.I. base plate including holes etc. complete with nuts and bolts for overhead lightning protection	No	2
400	EOT Crane	Design, fabrication, supply, erection, testing & commissioning of EOT crane as per specification of SCC	No	1