

## भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान पुणे

#### INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH ( IISER ) PUNE

(An Autonomous Institution of the Ministry of HRD, Govt. of India) Main Building, Dr. Homi Bhabha Road, Pashan, Pune – 411 008.

Tender for "Expansion of Substation for managing future load demand of the Institute (SITC of 1 X 2000 KVA Transformer, 11KV/415V Substation) "

NIT Number: 147/IISER/PUNE/2019-20

Date of Issue: 15.01.2020

#### MINUTES OF PRE-BID MEETING

### Pre bid Meeting Held at Office of IISER-Pune on 13th January, 2020 at 11.00hrs

IISER PUNE	Representatives of bidders
1. Col. G. Raja Sekhar, Registrar, IISER	As per attendance sheet
Pune.	
2. Er. C. B. Bhoyar, EE, IISER Pune.	
3. Er. Nilesh Kulkarni, EE, IISER Pune	
4. Mr. Surendra Yadav, Architect	
Consultant, M/s CRN.	
5. Mr. V. P. Gaikwad, Electrical	
Consultant.	
6. Er. Manoj Mane, JE(Elect), IISER,	
Pune.	

Pre bid Meeting for the above work was held at 11 00 hrs on 13 1 2020 at IISER Pune, in the presence of above said members and representative of the bidders. The original tender document, terms and conditions uploaded on website shall stands modified to the extent of modifications defined in this MOM including attached Annexures & this MOM shall form part of tender document. Bidders are requested to take note of modifications & work out their market rates considering the modifications listed in the MOM and terms and other terms and conditions in the bid documented. The bidders are further requested to take note of above modifications & quote their rates accordingly. Soft copies of MOM are uploaded on https://eprocure.gov.in/eprocure/app & IISER Pune website. The following points raised by the intending bidders were discussed and clarified to the bidders by IISER Pune.

Sr. No.	Ref. to NIT/ BOQ	Point Discussed	IISER Clarification
1	General	EMD and Tender cost exemption	No change in tender clause.
2	BOQ item No 6	HT PANEL:- All protection & specification will be considered for HT Panel as per Tender Single line diagram reference No :- IISER /CRN/EMEA/SLD/EL-02	SLD will be uploaded on https://eprocure.gov.in/eprocure/app and Institute website www.iiserpune.ac.in with Minutes of Prebid meeting
		Single line diagram not attached to the tender document.	

3	BOQ item no. 9 and 10	L.T. SWITCHGEAR ASSEMBLE:- Refer SLD Number :- IISER /CRN/EMEA/SLD/EL- 04  SLD Drawing No:- IISER/CRN/EMEA/SLD/EL-05  Single line diagram not attached to the	SLD will be uploaded on <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a> and Institute website www.iiserpune.ac.in with Minutes of Prebid meeting
4	BOQ Item No.	tender document.  PANEL REFERENCE : 350 KVAR APFC PANEL -01	SLD will be uploaded on https://eprocure.gov.in/eproc
		Refer SLD Number:- IISER/CRN/EMEA/SLD/06  Single line diagram not attached to the tender document.	ure/app and Institute website www.iiserpune.ac.in with Minutes of Prebid meeting
5	BOQ Item No.	Provide size of pipe and length of Exhaust	To be provided as per recommendation of OEM specification and CPCB norms.
6	BOQ item no. 14	Class-C as shown on SLD : SLD : IISER/CRN/EMEA/SLD/01 SLD not found with the tender document.	SLD will be uploaded on https://eprocure.gov.in/eprocure/app and Institute website www.iiserpune.ac.in with Minutes of Prebid meeting
7	BOQ item no. 52 & 53	Please clarify whether the supply of G.I. pipe is included in the item.	Quoted rate shall be inclusive of all the material and labour as mentioned in the BOQ including GI pipe.
8	BOQ item no. 59	Is backfilling material like charcoal/salt in supply scope.	No change in BOQ item. Item is inclusive of supply of charcoal/salt as per CPWD specifications.
9	BOQ item no. 63	Whether price of GI suspenders is included in this item or not.	No change in BOQ item. Item is inclusive of GI suspenders.
10	BOQ item no. 75 and 76	Provide specification of Group A & Group B wiring. Also provide average length.	BOQ item are as per CPWD specification which is available free of cost at CPWD website.
11	BOQ item no. 104	Supplying and fixing stiff pendent with 300 mm long, 20 mm dia X 1.6 mm thick steel conduit, aluminium cast back plate and brass holder complete, including wiring the down rod with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable and painting etc. as required.	BOQ item are as per CPWD specification which is available free of cost at CPWD website.

		Please clarify.	
12	BOQ item no. 105	Providing and fixing 16/0.20mm (0.50sqmm) twin flat flexible, FR PVC insulated, copper cable, in PVC sleeve of suitable size on the floor/ wall, or side of the table/ door etc. as required	BOQ item are as per CPWD specification which is available free of cost at CPWD website.
13	BOQ item no. 106	Please clarify.  Installation, testing and commissioning of pre-wired, fluorescent fitting/ compact fluorescent fitting of all types, with all accessories and tube etc., including	BOQ item are as per CPWD specification which is available free of cost at CPWD website.
		supplying and fixing ball and socket arrangement, 2 no. down rods of 20 mm dia X1.6 mm thick steel conduit upto 30 cm length, painting and wiring the down rods and connection with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable and earthing etc. as required	
		Please clarify the scope.	
14	BOQ item no. 125, 126, 127, 128	Please clarify	BOQ item are as per CPWD specification which is available free of cost at CPWD website.
15	General	Liasoning	As per tender conditions.
16	Volume II : Page no 23	Defect Liability period. (Different period mentioned on both pages.)	Defect Liability is 3 Years
17	General	Make list There are two make list. 1.Approved make list. 2.Additional Electrical make list. Please clarify whether to use any one of them	For Electrical work, Please refer approved make from "Tender Technical Specification And Data Sheet". For civil works, please refer approved make as per annexure III.
18	Page no. 52	On page No. 52, Clause No. 22  A) Contractor must ensure to quote percentage rate of in the financial bid.  B) Tenderer shall quote the percentage rate above or below two places of decimals only.  C) The tenderer shall quote only one over all percentage rate above or below on the designated place, which shall be applicable on both Civil and E&M components.  Wheteher is it Item rate or % rate tender?	Tender is item rate, modified Clause no. 22,  A) Contractor must ensure to Item rate in the financial bid.  B) Tenderer shall quote the item rate in the respective items as per BOQ.  C) The tenderer shall quote only one rate for respective item on the designated place.

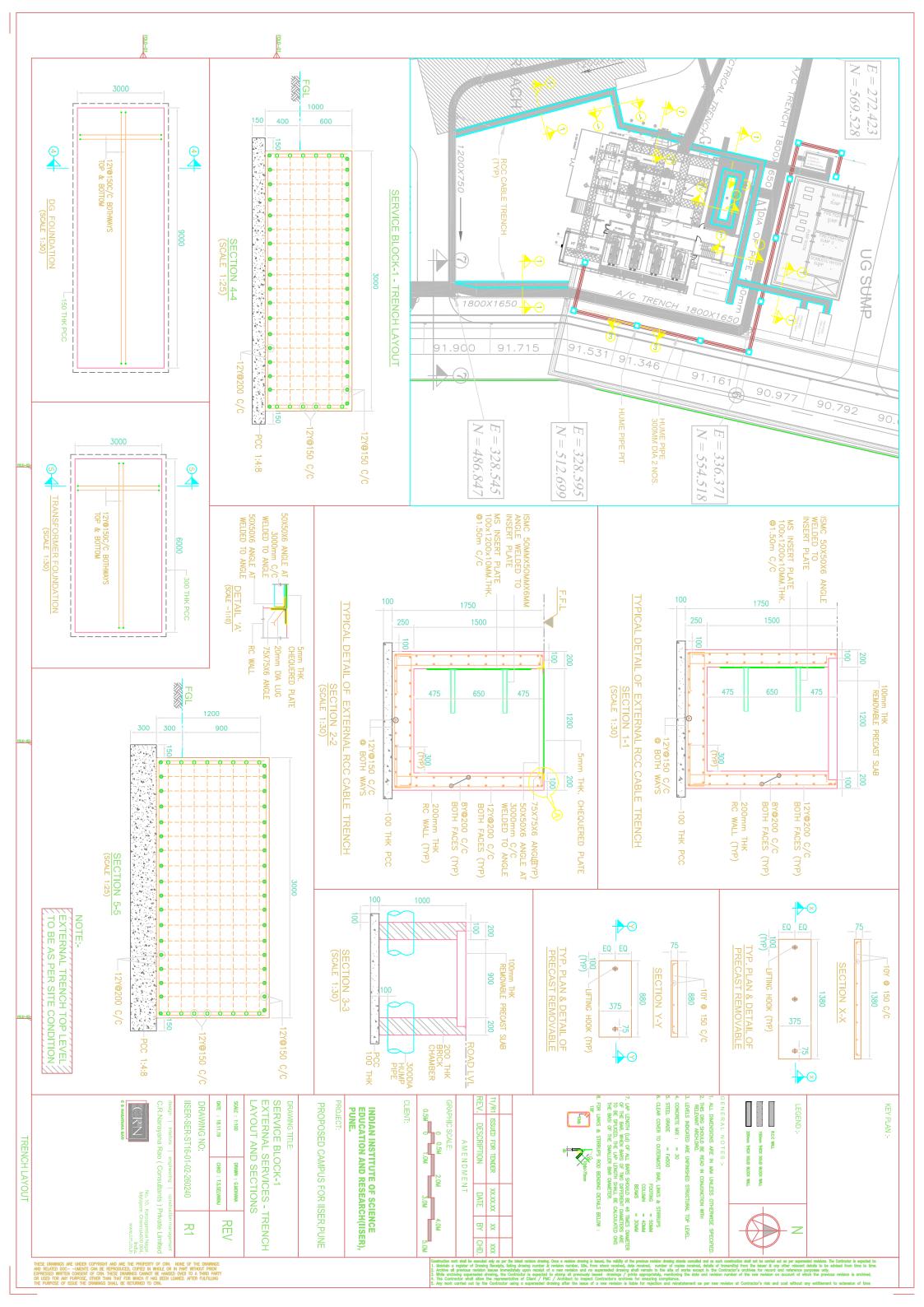
19	Page No. 8	On Page no. 8, Clause no. 2, point no. C  C) Should have had average financial turnover of at least Rs 450 lakhs on construction works during the immediate last three consecutive financial years ending 31, March, 2019. No enhancement in the value of turnover for the past years shall be made for bringing them to current turnover level.  Whether is it financial turnover on construction OR Electrical OR Similar work required?	Modified as,  C) Should have had average financial turnover of at least Rs 450 lakhs on works during the immediate last three consecutive financial years ending 31. March, 2019. No enhancement in the value of turnover for the past years shall be made for bringing them to current turnover level	
20	General	JCB can be used for excavation , please confirm	No change in BOQ item	
21	General	Excavated debris where to relocate? In campus or outside Campus, please confirm.	Excavated debris relocate inside campus as per direction of Engineer In charge.	
22	General	APFC panel vendor would be of same as of LT panel builder make please Confirm.	Please refer approved mak list for electrical works. Fo APFC panel vendor shall b Similar to LT pane manufacturer.	
23	General	Extension of HT panel would be of OEM Make or System house for example vidyut controls? Please Confirm.		
24	General	Form B of bankers 'certificate from A scheduled Bank – is this form applicable for pvt ltd company also? Please confirm	It is applicable to all.	
25	General	Existing HT Panel Drawing, specification, BOM etc of existing arrangements not highlighted in the tender	Existing arrangement/ structure is available at site.	

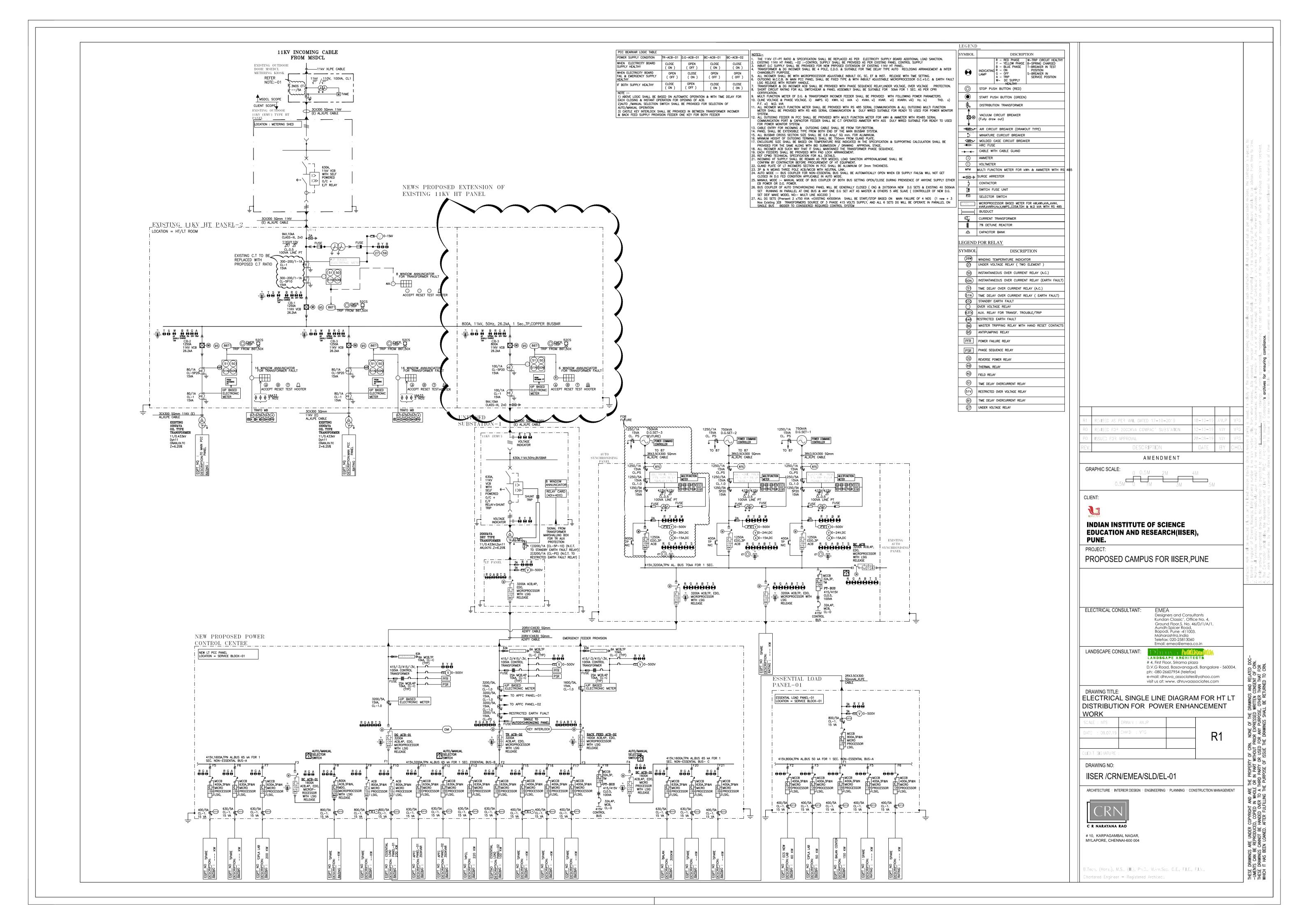
Consultant

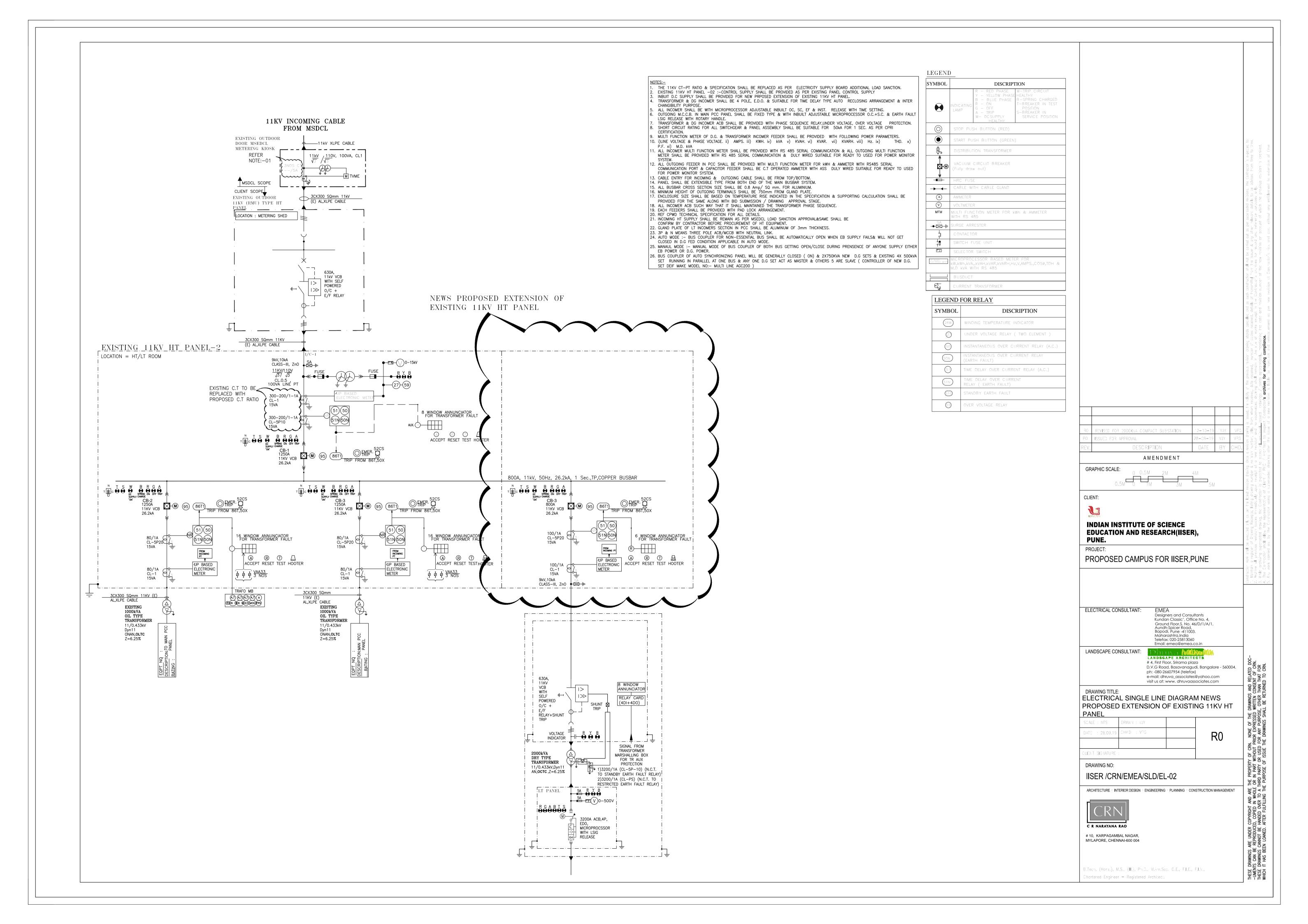
Executive Engineer (Civil)

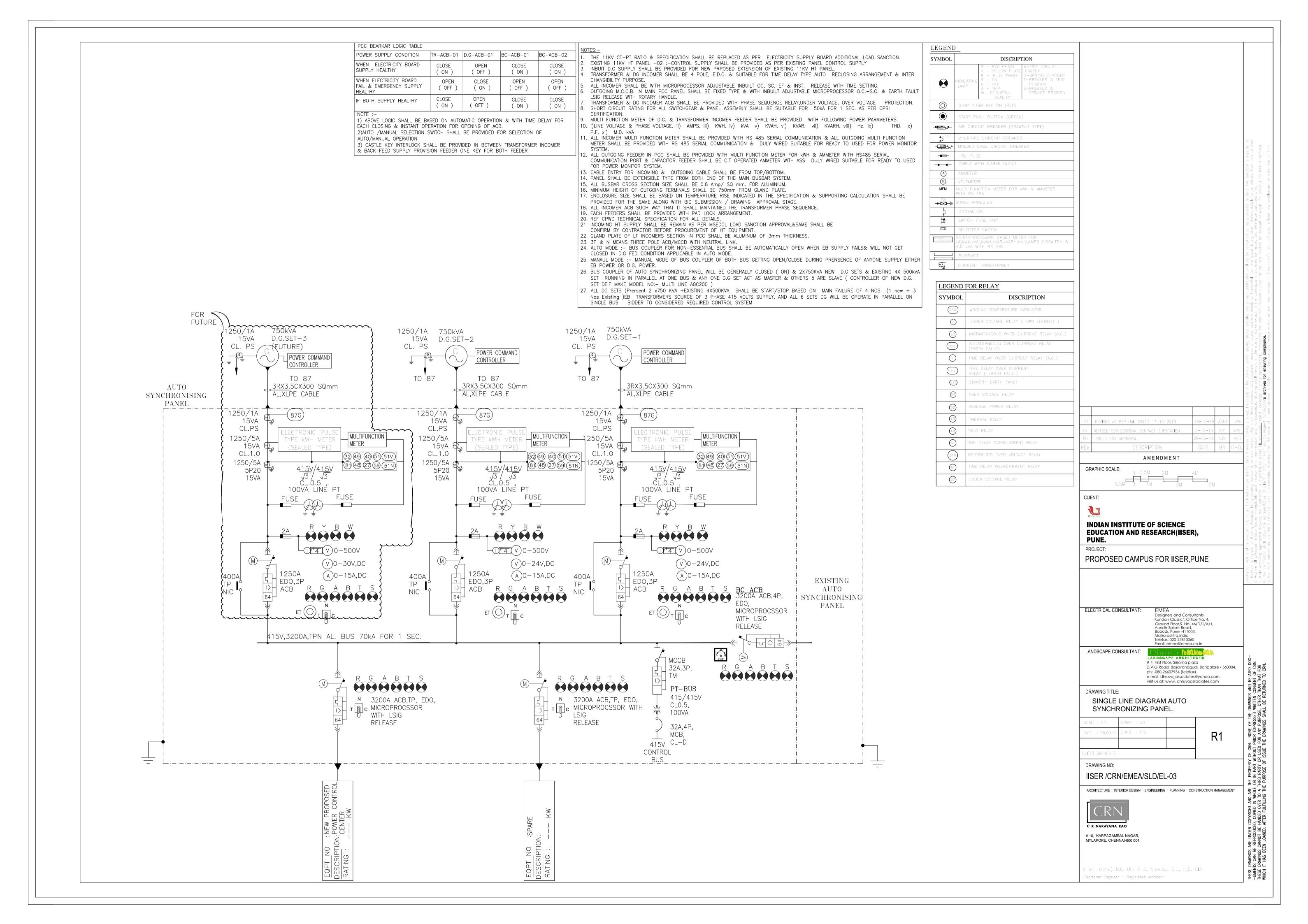
Executive Engineer (E&M)

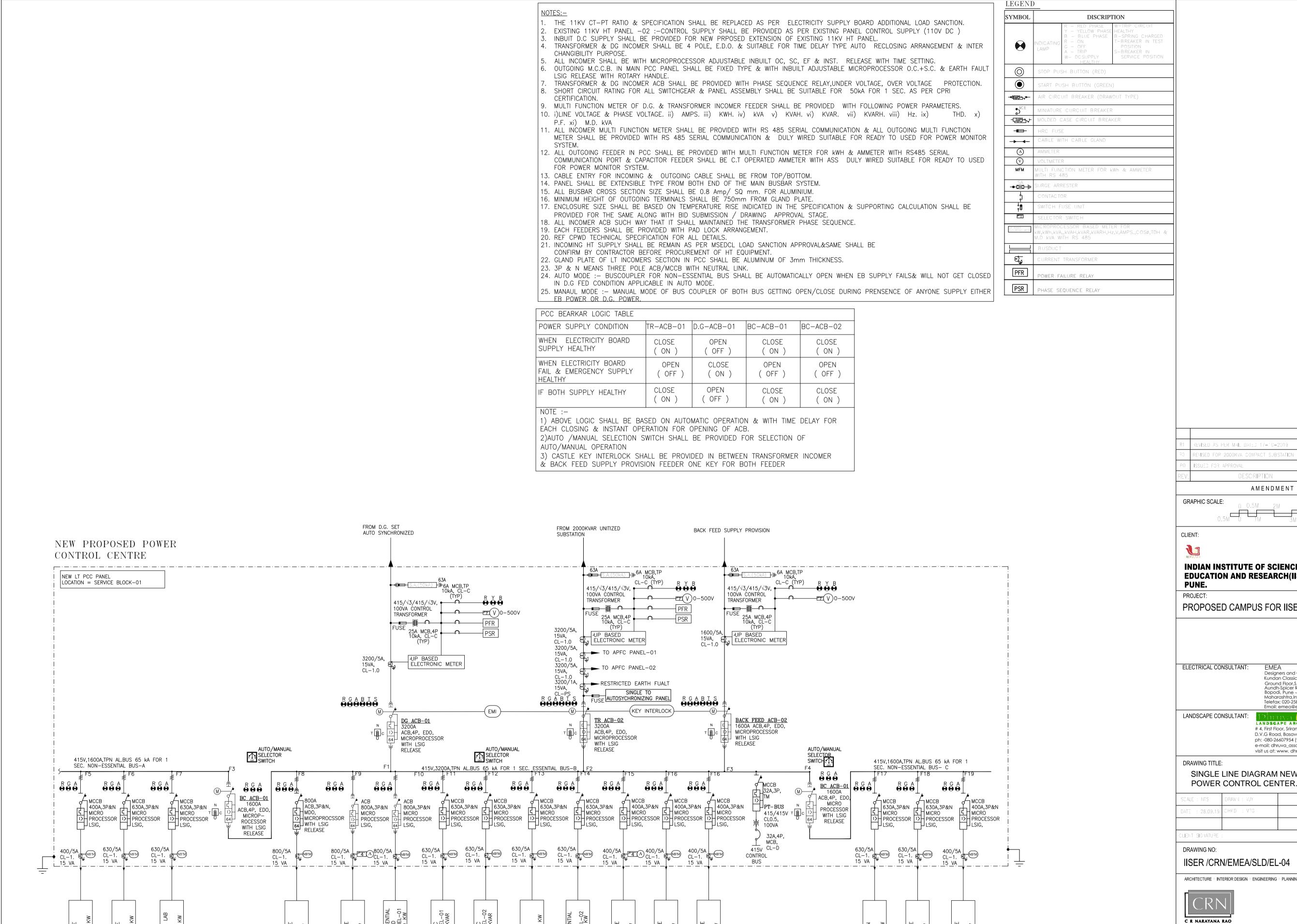
Engineer in Charge IISER, Pune











EVISED AS PER MAIL DATED 17-10-2019 REVISED FOR 2000KVA COMPACT SUBSTATION

INDIAN INSTITUTE OF SCIENCE **EDUCATION AND RESEARCH(IISER),** 

PROPOSED CAMPUS FOR IISER, PUNE

Designers and Consultants Kundan Classic', Office No. 4, Ground Floor, S. No. 46/D/1/A/1, Aundh-Spicer Road, Bopodi, Pune -411003. Maharashtra,India Telefax: 020-25813060 Email: emea@emea.co.in

# 4, First Floor, Srirama plaza D.V.G Road, Basavanagudi, Bangalore - 560004. ph: -080-26607954 (telefax) e-mail: dhruva\_associates@yahoo.com visit us at: www. dhruvaassociates.com

THESE DRAWINGS ARE UNDER COPYRIGHT AND ARE THE PROPERTY OF CRN. NONE OF THE DRAWINGS —UMENTS CAN BE REPRODUCED, COPIED IN WHOLE OR IN PART WITHOUT PRIOR EXPRESSED WRITTEN (THESE DRAWINGS CANNOT BE HANDED OVER TO A THIRD PARTY OR USED FOR ANY PURPOSE, OTHER WHICH IT HAS BEEN LOANED. AFTER FULFILLING THE PURPOSE OF ISSUE THE DRAWINGS SHALL BE RE

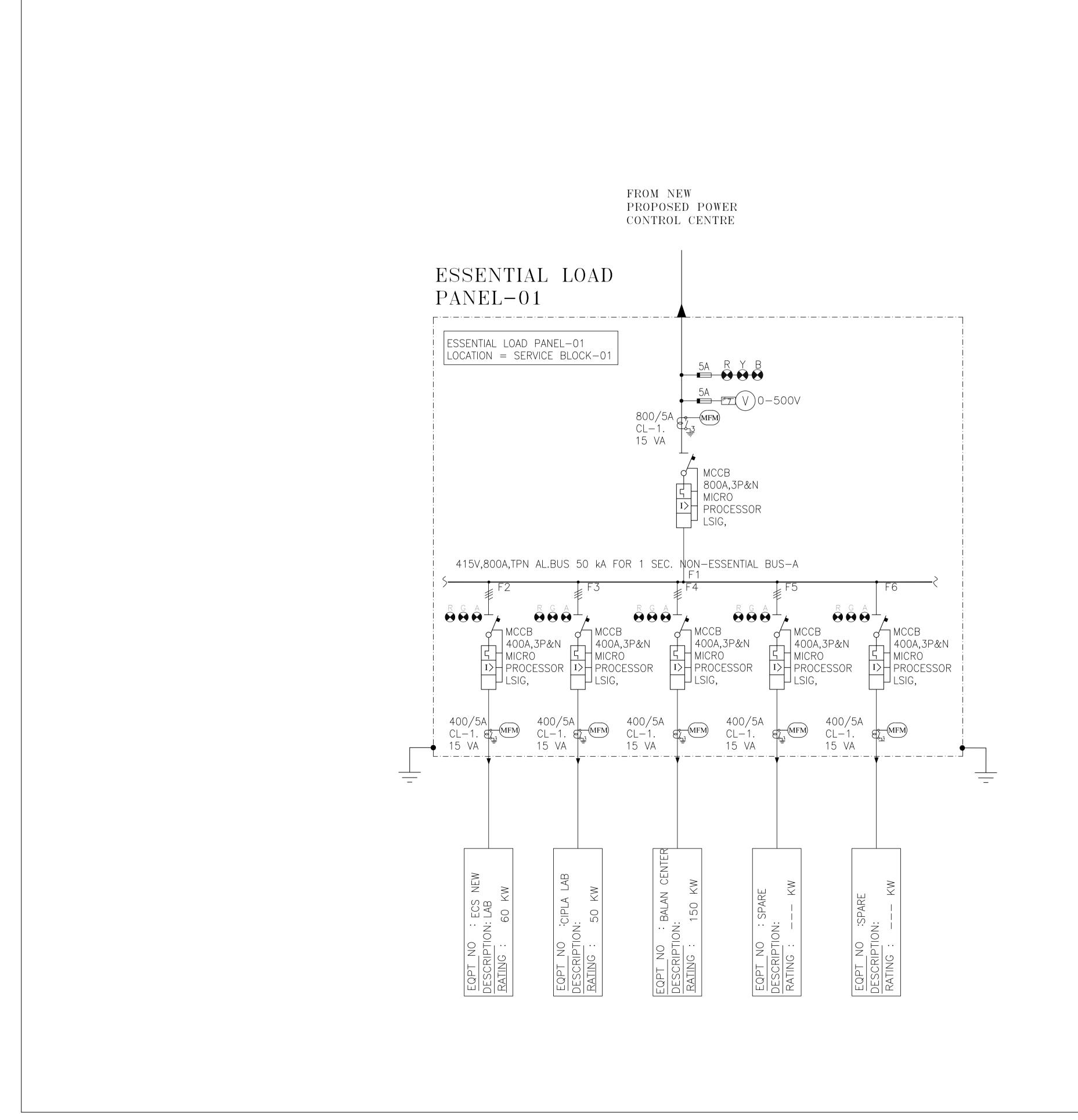
SINGLE LINE DIAGRAM NEW PROPOSED

R1

ARCHITECTURE | INTERIOR DESIGN | ENGINEERING | PLANNING | CONSTRUCTION MANAGEMENT

# 10, KARPAGAMBAL NAGAR, MYLAPORE, CHENNAI-600 004

B.Tech, (Hors.), M.S., (III.), Ph.D., M.Am.Soc. C.E., F.I.E., F.I.V.,



# LEGEND

SYMBOL	DISCRIPTION			
	INDIC ATING LAMP	R — RED PHASE Y — YELLOW PHASE B — BLUE PHASE R — ON G — OFF A — TRIP W— DC SUPPLY HEALTHY	W-TRIP CIRCUIT HEALTHY B-SPRING CHARGED T-BREAKER IN TEST POSITION S-BREAKER IN SERVICE POSITION	
	MOLDED CASE CIRCUIT BREAKER			
-	HRC FUSE			
<b></b>	CABLE WITH CABLE GLAND			
A	AMMETER			
V	VOLTMETER			

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Telefax: 020-25813 Email: emea@em  LANDSCAPE CONSULTANT:  LANDSCAPE ARCH # 4, First Floor, Srirama D.V.G. Road, Basavan ph: -080-26607954 (tel e-mail: dhruva_associ	a 3060 nea.co.in  WWW.AAAAA HITECTS ap plaza nagudi, Bangak lefax) iates@yahoo.c	om	004.	RELATED DOC— NT OF CRN.
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#### NOTE

- 1. ALL ACB & MCCB SHALL BE 50kA THERMAL MAGNETIC TYPE WITH ROTARY HANDLE FOR MCCB.
  2. ALL OUTGOING ACB/MCCB SHALL BE TPN .
- 3. MINIMUM HEIGHT OF OUTGOING TERMINALS SHALL BE 750mm FROM GLAND PLATE.

  4. ENCLOSURE SIZE SHALL BE BASED ON TEMPERATURE RISE INDICATED IN THE SPECIFICATION & SUPPORTING CALCULATION SHALL BE PROVIDED FOR THE SAME ALONG WITH BID SUBMISSION.
- 5. EACH FEEDERS SHALL BE PROVIDED WITH PAD LOCK ARRANGEMENT.
- 6. CONTROL SUPPLY OF APFC RELAY SHALL BE DERIVED /TAP FROM LT TRANSFORMER ACB INCOMER.
  7. AUTOMATIC POWER FACTOR CONTROLLER MUST BE SUITABLE FOR 3 PHASE UNBALANCED SYSTEM.
  8. ALL CONTACTOR SHALL BE POWER DUTY.
- 9. THE CAPACITOR SHALL BE HEAVY DUTY, APP TYPE, RATED FOR 480 VOLTS.
- 10. CENTRALIZED SELECTOR SWITCH FOR SELECTION OF MANUAL & AUTO OPERATION SHALL BE PROVIDED AT INCOMER. HOWEVER SEPARATE PUSH BUTTON SHOULD BE PROVIDED FOR ON/OFF PURPOSE & SEPARATE INDICATION FOR CONTACTOR ON/OFF SHOULD BE PROVIDED

  11. CAPACITOR MUST BE PROTECTED AGAINST HIGH VOLTAGE BY INSTANTLY SWITCHING OFF THE CAPACITOR
- STEP & NOT ALLOWED TO RESTART OR RESWITCH ON TILL NORMAL CONDITION ARE RESTORE & THIS CONDITION PERSIST FOR MINIMUM 10 SEC. (i.e. TIMER CIRCUIT FOR EACH STAGE.)

  12. ON OFF INDICATION FOR EACH CAPACITOR STAGE SHALL BE DERIVED FROM AUXILIARY CONTACT OF
- SWITCH/MCCB.

  13. ON OFF PUSH BUTTON FOR MANUAL SWITCHING FOR EACH CONTACTOR IN CASE OF FAILURE OF APFC
- RELAY.

  14. INCOMING & OUTGOING CABLE ENTRY FROM TOP.
- 15. INCOMER SHOULD BE TP EDO WITH U/V & O/V PROTECTION WITH ON DELAY TIMER
  16. CONTROL SUPPLY OF INCOMER SHOULD BE SUCH THAT IT WILL BE ON(CLOSE) DURING EB
  SOURCE & OFF (OPEN) WHEN NO EB SOURCE.
- 17. TYPE OF CONSTRUCTION OF PANEL SHALL BE COMPARTMENTALIZE AS PER IS 8623
  18. REFER TECHNICAL SPECIFICATION FOR PANELS/APFC SPECIFICATION.

## LEGEND

SYMBOL		DISCRIPTION	
	INDIC ATING LAMP	R - RED PHASE Y - YELLOW PHASE B - BLUE PHASE R - ON G - OFF A - TRIP	
	STOP PUSH	BUTTON (RED)	
•	START PUSH	START PUSH BUTTON (GREEN)	
\( \frac{1}{3}	CURRENT TI	CURRENT TRANSFORMER	
	AIR CIRCUIT BREAKER (DRAWOUT TYPE)		
•) <sup>MCB</sup>	MINIATURE	MINIATURE CURCUIT BREAKER	
	MOLDED CA	MOLDED CASE CIRCUIT BREAKER	
-	HRC FUSE		
$\rightarrow$	CABLE WITH CABLE GLAND		
A	AMMETER		
v	VOLTMETER	VOLTMETER	
<del>'</del> 7	7 POSITION	VOLTMETER SELECTOR SWITCH	
r <del>*</del> 4	4 POSITION	AMMETER SELECTOR SWITCH	
7000000	7% DETUNE REACTOR		
<b>X</b>	CAPACITOR	CAPACITOR BANK	
°I	CONTACTOR		



APHIC SCALE: 0 0.5M 2M 4M

AMENDMENT

CLIENT:

PUNE.

INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH(IISER),

PROPOSED CAMPUS FOR IISER, PUNE

ELECTRICAL CONSULTANT:

EMEA

Designers and Consultants
Kundan Classic', Office No. 4,
Ground Floor, S. No. 46/D/1/A/1,
Aundh-Spicer Road,
Bopodi, Pune -411003.
Maharashtra India

LANDSCAPE CONSULTANT:

# 4, First Floor, Srirama plaza
D.V.G Road, Basavanagudi, Bangalore - 560004.
ph: -080-26607954 (telefax)
e-mail: dhruva\_associates@yahoo.com
visit us at: www. dhruvaassociates.com

Telefax: 020-25813060 Email: emea@emea.co.in

DRAWING TITLE:
SINGLE LINE DIAGRAM FOR 350kVAR APFC
PANEL

SCALE : NTS	DRAWN : VJY	
DATE : 09.07.19	CHKD : VPG	R1
		1 1 1
CLIENT SIGNATURE		

DRAWING NO:

IISER /CRN/EMEA/SLD/EL-06

ARCHITECTURE | INTERIOR DESIGN | ENGINEERING | PLANNING | CONSTRUCTION MANAGEMENT



# 10, KARPAGAMBAL NAGAR, MYLAPORE, CHENNAI-600 004

B.Tech, (Hons.), M.S., (III.), Ph.D., M.Am.Soc. C.E., F.I.E., F.I.V., Chortered Engineer — Registered Architect.

