LIST OF ELECTRICAL DRAWINGS

S.NO.	DRAWING TITLE	SHEET	DRAWING NO.	REVISION
01	LIST OF ELECTRICAL DRAWINGS	SHEET 1 OF 1	JP-TD-EL-10CC-1001	RO
02	LEGEND & NOTES	SHEET 1 OF 1	JP-TD-EL-10CC-1002	RO
03	MAIN SINGLE LINE DIAGRAM	SHEET 1 OF 1	JP-TD-EL-10CC-1003	RO
04	SINGLE LINE DIAGRAM FOR ECS PANELS	SHEET 1 OF 7	JP-TD-EL-10CC-1004	RO
05	SINGLE LINE DIAGRAM FOR ECS PANELS	SHEET 2 OF 7	JP-TD-EL-10CC-1005	RO
06	SINGLE LINE DIAGRAM FOR ECS PANELS	SHEET 3 OF 7	JP-TD-EL-10CC-1006	R0
07	SINGLE LINE DIAGRAM FOR ECS PANELS	SHEET 4 OF 7	JP-TD-EL-10CC-1007	R0
08	SINGLE LINE DIAGRAM FOR ECS PANELS	SHEET 5 OF 7	JP-TD-EL-10CC-1008	R0
09	SINGLE LINE DIAGRAM FOR ECS PANELS	SHEET 6 OF 7	JP-TD-EL-10CC-1009	R0
10	SINGLE LINE DIAGRAM FOR ECS PANELS	SHEET 7 OF 7	JP-TD-EL-10CC-1010	R0
11	ELECTRICAL LAYOUT ANCIALLARY BUILDING UNDERGROUND & SERVICE CORRIDOR LEVEL	SHEET 1 OF 3	JP-TD-EL-10CC-1201	R0
12	ELECTRICAL LAYOUT ANCIALLARY BUILDING GROUND LEVEL	SHEET 2 OF 3	JP-TD-EL-10CC-1201	RO
13	ELECTRICAL LAYOUT ANCIALLARY BUILDING TERRACE LEVEL PLAN	SHEET 3 OF 3	JP-TD-EL-10CC-1203	RO
14	ELECTRICAL LAYOUT CONCOURSE LEVEL	SHEET 1 OF 4	JP-TD-EL-10CC-1301	RO
15	ELECTRICAL LAYOUT CONCOURSE LEVEL	SHEET 2 OF 4	JP-TD-EL-10CC-1302	R0
16	ELECTRICAL LAYOUT CONCOURSE LEVEL	SHEET 3 OF 4	JP-TD-EL-10CC-1303	RO
17	ELECTRICAL LAYOUT CONCOURSE LEVEL	SHEET 4 OF 4	JP-TD-EL-10CC-1304	RO
18	ELECTRICAL LAYOUT PLATFORM LEVEL	SHEET 1 OF 3	JP-TD-EL-10CC-1401	RO
19	ELECTRICAL LAYOUT PLATFORM LEVEL	SHEET 2 OF 3	JP-TD-EL-10CC-1402	R0
20	ELECTRICAL LAYOUT PLATFORM LEVEL	SHEET 3 OF 3	JP-TD-EL-10CC-1403	RO
21	ELECTRICAL LAYOUT UNDERCROFT LEVEL	SHEET 1 OF 3	JP-TD-EL-10CC-1501	R0
22	ELECTRICAL LAYOUT UNDERCROFT LEVEL	SHEET 2 OF 3	JP-TD-EL-10CC-1502	RO
23	ELECTRICAL LAYOUT UNDERCROFT LEVEL	SHEET 3 OF 3	JP-TD-EL-10CC-1503	RO
24	SCHEMATIC DIAGRAM FOR PROTECTIVE EARTHING SYSTEM-ASS-1 & 2	SHEET 1 OF 2	JP-TD-EL-10CC-1601	RO
25	SCHEMATIC DIAGRAM FOR CLEAN EARTHING SYSTEM	SHEET 2 OF 2	JP-TD-EL-10CC-1602	RO

	GENERAL NOTES: 1. ALL DIMENSIONS ARE IN		REVISIONS									Authorised Signatory for DDC. JP/EW/1B/DDC01 Project Manager	DELHI METRO RAIL CORPORATION L Metro Bhawan , Fire Brigade Lane, Barakhamba Road, New Delph-110001				
TY OF ION LTD.	2. ALL DIMENSIONS ARE TO BE READ AND NOT MEASURED. 2. ALL DIMENSIONS ARE TO BE READ AND NOT MEASURED. 2. ALL DIMENSIONS ARE TO BE READ AND NOT MEASURED. 3. ALL DOMENSIONS OF BEAD IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, PLUMBINGS & FIRE FIGHTING. 3. ALL DOGRAMINOW OUT ALL INITIAL LEVELS ARE MEASURED FROM MAIN FLOOR FINISHED LEVELS. 4. REFERENCE DRAWINGS		DE OF THE		DMRC APPROVAL	MGR/ARCH	DY CA (UG)-III	CAVARCH	Architecture Design In-charge/ Coordinator	PHASE 1B JAIPUR METRO PROJECT							
ROPER							DY CSTE/TELECOM	CSTE-I	DY CE/DESIGN	CE/TECH	DETAIL DESIGN CONSULTANT (DDC) FOR CIVIL, ARCHITECTURAL & BUILDING WORKS OF TWO UNDERGROUND STATION			STATION: CHOTI CHOUPAR			
IS THE F					ED/S&T	CSO	(CHOTI CHOUF	DRAWING TITLE: LIST OF ELECTRICAL DRAWINGS DRAWN BY: CHECKED BY: VERIFIED BY:									
AWING TETRO R	Drg. No.	Description					DY CSTE/SIGNALLING	CSTE-III	GM/O	GM/M	OF PHASE 1B OF JAIPUR METRO			SURJEET DATE: REV		H.O.B	L.R.S O
THIS DR	THE DR						DY CE/PLANNING	DY CEE/E&M	DY CEE/ECS	ED/ELEC -II	ayesa Engineering. Information. Imagination.			31-03-2015 DRAWING NUMBER:	R0	N.T.S.	FOR TENDER 80 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
			PARTICULARS DRN.	CHD.	VER. DATE ISSUE DATE	REV. FOR CONSTRUCTION	DY CEE/(E)UG-TR	CGM(E) UG-TR	PM	СРМ	56, Indo-Asia House, Institutional Area, sector-44 Gurgaon - 122002 (Haryana)				D-EL-10CC-1001 pied or otherwise reproduced in		NE A1 P36-0017 5 1 purpose without the prior written permission of DMRC.

Abbreviations

ACB — Air circuit breaker - Automatic transfer switch

MCCB — Moulded Case Circuit Breaker MCB - Miniature Circuit Breaker

— Thermo magnetic

MPCB - Motor Protection Circuit Breaker RCCB - RESIDUAL CURRENT CIRCUIT BREAKER

Legend (AS APPLICABLE) :-Motorised Draw out type air Circuit Breaker Moulded case Circuit Breaker (MCCB) 60 Miniature Circuit Breaker $\lceil \cdot \rceil$ Motor Protection Circuit Breaker(MPCB) Control Fuse (CF) Current transformer Thermal O/L relay Indicating lamp Ammeter Ass Ammeter selector switch Voltmeter Voltmeter selector switch Vss MFM Multi Function Meter W/S Working / Stand by Selector Switch A/L/R Auto / Local / Remote Selector Switch L/R Local / Remote Selector Switch X Star Delta Starter s.s Soft Starter DOL Direct On Line Starter P TNC TNC Switch (Trip/Neutral/Close) A/M Auto Manual Selector Switch (T) SPPR Single Phase prevention relay ESTOP Emergency Stop Push Button AC-3 Contactor Н Hoote Trip Circuit Healthy Indication TCH Spring Charge Indication DV Double volt meter DF Double Frequency Meter SCS Synchroscope Hm

LEGEND FOR ELECTRICAL

1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. ALL DIMENSIONS ARE TO BE READ AND NOT MEASURED.
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DIMES BEFORE EXECUTION OF THE WORK AT SITE.
1. THIS DEAVINES MUST BE READ IN COUNLINCTION WITH ALL RELEVAN
ARCHITECTURAL, STRUCTURAL, THUMBING AT PICE FIGHTINS,
ELECTRICAL AND TWAPTIO MANAGEMENT DRAYINGS.
3. ALL DOOR/WINDOW OLL AL WITEL EVELS ARE MEASURED
FROM MAIN FLOOR PROBLED LEVELS.

Description

Drg. No.

THIS DRAY DELHI ME

Hour Meter

Window Annunciator

Reset Push Button

Test Push Button

ACCEPT Push Button

On Line Selection Switch

Restricted Earth Fault Relay

AUNC

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ACCEP1

SYMBOL		
		POWER CABLE TRAY TELECOM DATA CABLE TRAY TELECOM POWER CABLE TRAY VAC & TVS CABLE TRAY SCADA CABLE TRAY
惠	P1	32A 3 PHASE 5PIN INDUSTRIAL SOCKET OUTLET(IP65)
<u> </u>	P2	16A 1 PHASE 3PIN INDUSTRIAL SOCKET OUTLET(IP54)
	P4	6/16A 1 PHASE 6PIN MODULAR TYPE SOCKET OUTLET
lpha	P5	ADVT. POINT

REVISIONS

DRN. CHD. VER. DATE ISSUE DATE REV. FOR CONSTRUC

S.N.	LIGHT		
	NAME	SYMBOL	DESCRIPTION
1	А		BASIC BATTEN LUMINARIES (SIMILAR TO PHILIPS CATALOGUE NO. TMS 122 2X28 T5 OR KESELEC CATALOG NO.RAILUX 2X28 HF) FOR "TLD FLUORESCENT LAMP (T5 LAMP)
2	В	-	BASIC BATTEN LUMINARIES (SIMILAR TO PHILIPS CATALOGUE NO. TMC 122 / 1X28 OR KESELEC CATALOG NO RAILUX 1X28 HF) FOR 'TL'D FLUORESCENT LAMP (T5 LAMP)
3	С	—	BASIC BATTEN LUMINARIES (SIMILAR TO PHILIPS CATALOGUE NO. TMS 122 / 22X8W OR KESELEC CATALOG NO. INDILUX V 228 HF WITH VITECOUS ENAMELLED REFLECTOR) FOR "TL'D FLUORESCENT LAMP (T5 LAMP)
4	E		EFFICIENT, LOW GLARE, SURFACE MOUNTED LUMINARIES (SIMILAR TO PHILIPS CATALOGUE NO. MPF 922 / 1 X 70W) WITH INTEGRAL GEAR, ELECTROCHEMICALLY BRIGHTENED AND ANODIZED HIGH PURITY ALUMINIUM REFLECTOR OF ASYMMETRICAL TYPE.
5	Н		BATTEN LUMINARIES (SIMILAR TO PHILIPS CATALOGUE.NO. TCW 450 / 1X28 OR KESELEC CATALOG NO.RAILUX 1X28 HF) FOR 'TL'D FLUORESCENT LAMP (T5 LAMP)
6	_	•	RECESSED CIRCULAR DOWN LIGHT LUMINARIES (SIMILAR TO PHILIPS CATALOGUE.NO FBH 145 / 218 OR KESELEC CATALOG NO.NOVA 2X18 (G))
7	J		MIRROR OPTIC, RECESSED MOUNTED LUMINARIES (SIMILAR TO PHILIPS CATALOGUE.NO TBS 255 TCS 228 OR KESELEC CATALOG NO.PHARMA 2X28 HF)
8	К		MIRROR OPTIC RECESS MOUNTED LUMINARIES (SIMILAR TO PHILIPS CATALOGUE.NO TBS 669 / 228 D6 OR KESELEC CATALOG NO.CT LUX 2X28 HF)
9	L		MIRROR OPTIC RECESS MOUNTED LUMINARIES (SIMILAR TO PHILIPS CATALOGUE.NO TBS 669 / 128 D6 OR KESELEC CATALOG NO.CT LUX DL 1X28 HF)
10	PL		PL-STREET LIGHT LUMINAIRE WITH AESTHETICALLY DESIGENED DIE CAST ALUMINUM HOUSING POT OPTIC REFLECTOR AND TOUCHENED FLAT GLASS IP 65 (SMILAR TO PHILIPS CATALOGUE NO.CRP330/2x150W SON-T/ CDM-TT INCLUDING LAMP AS REQUIRED ON 9 M POLE DOUBLE ARM POLE
11	SL	\otimes	SL-STREET LIGHT LUMINAIRE WITH AESTHETICALLY DESIGENED DIE CAST ALUMINIUM HOUSING POT OPTIC REFLECTOR AND TOUGHENED FLAT GLASS 19 65 (SMILAR TO PHILIPS CATALCGUE NO.CRP330/1450W SON-T/ CDM-TT INCLUDING LAMP AS REQUIRED ON 9 M POLE SINGLE ARM POLE
12	Р	2	BULK HEAD LUMINARIES (SIMILAR TO PHILIPS CATALOGUE NO FXC 101 OR KESELEC CATALOG NO. KBH 1X9 W) SUITABLE FOR MOUNTING ON WALL / CEILING
13	Q		2X28W FTL LAMP (T5 LAMP) PREWRED UPTO A TERMINAL BOX WITH LAMP. HAVING IP 65 (SIMILAR TO PHILIPS CATALOGUE NO. TCW 097 \ 2X28W D6 HF OR KESELEC ZUMTOBEL MAKE FZ 2X28W HF) AND SUPPLIED WITH 2 NOS 28W TUBULAR FLUORESCENT LAMP (T5 LAMP).
14	FL		COMPACT, STURDY, GENERAL PURPOSE FLOODLIGHT LUMINARIES (SIMILAR TO PHILIPS CATALOGUE. NO TEMPO3 SWF 330 SK TYPE) WITH INTEGRAL GEAR, ELECTROCHEMICALLY BRIGHTENED AND ANODIZED HIGH PURITY ALUMINIUM REFLECTOR OF SYMMETRICAL TYPE.
15	-		DISTRIBUTION BOARD

AS PER IEC

CROSS SECTIONAL AREA OF PHASE CONDUCTORS (Sq.mm)	CROSS SECTIONAL AREA OF EARTHING OR CIRCUIT PROTECTIVE CONDUCTOR (Sq.mm)
2.5	2.5
4	4
6	6
10	10
16	16
25	16
35	16
50	25
70	35
95	50
120	70
150	70
185	95
240	120
300	150

AS PER BOQ & SPECIFICATIONS

AS PER BUQ & SPECIE	-ICATIONS
CROSS SECTIONAL AREA OF PHASE CONDUCTORS (Sq.mm)	CROSS SECTIONAL AREA OF EARTHING OR CIRCUIT PROTECTIVE CONDUCTOR (Sq.mm)
2.5	2.5
4	4
6	6
10	10
16	16
25	25
35	35
50	50
70	70
95	95
120	120
150	150
185	185
240	240
300	300

DMRC APPROVAL

DY CSTE/TELECOM

DY CSTE/SIGNALLING

DY CEE/(E)UG-TR

DY CSTE/AFC

MGR/ARCH

CSTE-I

CSTE-III

DY CEE/E&M

CGM(E) UG-TR

APPROVAL BY DMRC

CA/ARCH

CE/TECH

CSO

GM/M

CPM

ED/ELEC -I

DY CA (UG)-III

DY CE/DESIGN

ED/S&T

GM/O

PM

DY CEE/ECS

GENERAL NOTES:

1, THE ENTIRE ELECTRICAL INSTALLATION SHALL BE IN COMPLIANCE WITH THE CURRENT EDITION OF THE RELEVANT STANDARDS: CODE OF PRACTICES AND THE AUTHORITIES REQUIREMENTS 2. UNLESS OTHERWISE INDICATED. THE MOUNTING HEIGHTS FROM FINISHED FLOOR LEVEL, FOR THE VARIOUS

ITEMS OF ELECTRICAL WIRING ACCESSORIES / EQUIPMENT SHALL BE AS FOLLOWS: LIGHTING SWITCHES - 1400mm AFEL (TO BOTTOM OF BOY)

P4 TYPE SWITCH SOCKET OUTLETS - 1400/IIIIN AFFL (TO BOTTOM OF BOX) IN ALL AREAS P1,P2 TYPE SWITCH SOCKET OUTLETS 1200mm AFFL IN ALL AREAS

PUBLIC TELEPHONE OUTLETS - REFER TO RELEVANT DRAWINGS.

- TO SUIT ROOM LAYOUTS. DISTRIBUTION BOARDS

THE CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS AND CO-ORDINATE AT SITE FOR EXACT SETTING OUT THE ACCESSORIES / EQUIPMENTS.

3. ALL FLUORESCENT LIGHT FITTINGS SHALL BE COMPLETE WITH LOW LOSS BALLAST, COLOUR RENDERING INDEX IN EXCESS OF 80 AND COLOUR TEMPERATURE OF 4000°K FOR TUNNEL LIGHTS AND 4000°K FOR STATION LIGHTING UNLESS OTHERWISE SPECIFIED.

4. LOCATION OF ALL LUMINAIRES, LIGHTING SWITCHES, SWITCH SOCKET OUTLETS ETC., SHOWN ON DRAWINGS ARE FOR GENERAL GUIDANGE ONLY, EXACT POSITIONS SHALL BE DETERMINED & APPROVED BY THE ARCHITECT! VENDIECE BEFORE CHANGE OF WORK.

5 ES/SWA/FIRE SURVIVAL (STEEL WIRE ARMOURED) LSZH

LOW SMOKE ZERO HALOGEN) CABLES WILL BE PROVIDED FOR CIRCUITS INDICATED BELOW FOR ALL TUNNELS:
a) TUNNEL LIGHTING , BLUE LIGHTS, BUFFER LIGHTS AND TUNNEL SOCKETS.

b) CROSS PASSAGE.
 FS/SWA/LSZH CABLES WILL BE PROVIDED FOR TUNNEL SUMP PUMPS.

6. ALL UNDERGROUND CABLES SHALL BE OF ARMOURED TYPE CABLE IN PIPE AS SPECIFIED AND ENCASED IN CONCRETE FOR HARD GROUND/ PAVEMENT

IN CONCRETE FOR HARD GROUND PAYEMENT.

7. ALL FINAL CIRCUIT WIRINGS TO BE IN CONCEALED/SURFACE G.I CONDUITS. NO PVC CONDUIT SHALL BE ALLOWED FOR THE WHOLE ELECTRICAL INSTALLATION. GI CONDUIT / CONTAINMENT SHALL BE PROVIDED AT PSD 1.8M EARTH FREE ZONE AND OTHER WET AREA SUCH AS SPRINKLER TANK.

8 SPACE FACTOR OF CONDUIT. TRUNKING AND CARLE TRAY SHALL COMPLY WITH CURRENT FOITION OF RELEVANT SPECIFICATIONS & STANDARDS

9. PROVISION OF CABLES WITH ADDITIONAL LENGTH OF 5m FOR ALL EXTERNAL / LANDSCAPE LIGHTING POINTS SHALL BE INCLUDED 10. SEPARATE CABLE CONTAINMENT SHALL BE PROVIDED FOR DUAL - FEED CABLES.

11. ALL CABLE OPENINGS ON FLOOR SLABS AND WALLS TO BE SEALED WITH FIRE-STOPPING MATERIAL OF THE SAME FIRE-RATING TO RELEVANT AUTHORITY'S APPROVAL.

12, PROVISION OF LOCKING DEVICES / ACCESSORIES FOR ALL MCCB/MCB, ISOLATOR, ETC, SHALL BE PROVIDED.

13, THE ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL ALL LIGHT FITTINGS AS SHOWN IN THE DRAWINGS, LIGHT FITTING S SHALL HAVE THEIR OWN INDEPENDENT SUPPORT REGARDLESS OF SURFACE , RECESS OR SUSPENDED MOUNTING METHOD.

14. THE ELECTRICAL CONTRACTOR SHALL BALANCE THE LOADS AND LABEL ALL EQUIPMENT AND SWITCHGEAR THROUGHOUT THE INSTALLATION.

15. FOR DISTRIBUTION BOARDS IP 54 PROTECTION SHALL BE PROVIDED COMPLETE

WITH LOCKS AND VENTILATION OPENING. ALL THE CABLES SHALL BE BOTTOM ENTRY WITH APPROVED WATER TIGHT CABLE GLAND AND SEALING.

16. THE ELECTRICAL CONTRACTOR MUST CO-ORDINATE WITH THE OTHER SERVICES FOR THE ACTUAL ELECTRICAL LOAD AND EXACT LOCATION OF THE SUPPLY BEFORE INSTALLATION.

17. INFORMATION ON CONNECTED LOAD (CL), MAXIMUM DEMAND (MD), FAULT CURRENT RATING, CABLE SIZES, SIZES OF ALL CABLE INFORMATION OF STEM, CABLE ROUTES ETC., SHOWN ON DRAWNING WIND, SHALL BE FOR REFERENCE AND INDICATES OILY. CONTRACTOR SHALL BE RESPONSIBLE TO SUBMIT ALL DETAILS, CALCULATIONS AND DRAWNINGS FOR NOTICE OF NO OBJECTION PRIOR TO COMMENCEMENT OF WORK ON SITE.

18. ALL FR AND FS CABLES FOR FINAL SUB-CIRCUIT WIRINGS WITHIN TRUNKING AND CONDUITS SHALL BE MULTI-STRAND COPPER CTORS & INSULATION COLOR OF THE CABLES SHALL COMPLY WITH THE REQUIREMENT STIPULATED IN THE LATEST SS CP5 AND AS ACCEPTED BY AUTHORITY.

19. ALPHA-NUMERIC CABLE TAGS SHALL BE PROVIDED AT 10M INTERVAL ON THE CABLE AND TERMINAL ENDS.

20. ALL UNDERGROUND CABLE SHALL BE LAID AT LEAST 1000mm BELOW GROUND AND PROTECTED WITH CABLE SLAB CABLE MARKER SHALL BE PROVIDED WHERE CABLE CHANGES DIRECTIONS AND ON STRAIGHT RUNS AT INTERVALS OF NO MORE THAN 50MTR. PIPE (150 sq.mm) CAST IN CONCRETE SHALL BE USED FOR CABLES CROSSING ROAD OR HARDSTANDING AREA.

21. THE RESISTANCE FOR THE EARTHING SYSTEM (ELECTRICAL) PER EACH EARTHING MAT SHALL BE LESS THAN 1 ohm AND IN ANY CASE SHALL COMPLY WITH IEEE-80 AND ELECTRIC SUPPLY AUTHORITY'S LATEST REQUIREMENT.

22. EACH FINAL CIRCUIT SHALL BE TESTED FOR INSULATION RESISTANCE BETWEEN LINE CONDUCTORS, LINE CONDUCTORS TO EARTH BY MEANS OF AN INSULATION RESISTANCE TESTING INSTRUMENT WHICH REQUIRES VOLTAGE OF NOT LESS THAN 500V D.C. UPON CIRCUIT UNDER TEST, TEST VOLTAGE FOR SUBMAIN CABLE SHALL NOT BE LESS THAN 1000V D.C.

23. ALL ELECTRICAL CONDUITS INSTALLED FOR PUBLIC AREA SHALL BE CONCEALED FOR THOSE AREAS WITH TILE OR OTHER ARCHITECTURAL FINISHES.

24. ALL HANDICAP TOILETS SHALL BE PROVIDED WITH LIGHT FITTINGS.SWITCH BOARDS AND SOCKETOUTLETS

25. NOT WITHSTANDING WHATEVER SHOWING ON DRAWINGS, ALL SOCKET OUTLETS TO BE INSTALLED IN NON-PUBLIC AREAS SHALL BE METAL-CLAD. SOCKET OUTLETS AT TILE AREAS AND ROOMS WITH ARCHITECTURAL FINISHES TO BE MATT-CHROME TYPE.

26. NOT WITHSTANDING WHATEVER SHOWING ON DRAWINGS, ALL SOCKET OUTLETS TO BE INSTALLED IN PUBLIC AREAS SHALL BE MATCHED WITH ARCHITECTURAL FINISHES.

27. ALL EQUIPMENT AND INSTALLATION SHALL BE IN COMPLIANCE WITH BOQ, SPECIFICATIONS AND CONTRACT CONDITION.

1. EARTHING RESISTIVITY WILL BE TESTED UPON COMPLETION OF EACH

2. EARTH RESISTIVITY TEST SHALL BE CARRIED AT EACH EARTHING POINT.

3. ALL TAPE/CABLES/CLAMP CONTACT SURFACE SHALL BE HEAVILY TINNED PRIOR TO CONNECTIONS

5. IMMEDIATELY UPON COMPLETION OF EACH GROUP OF EARTH POINT INSTALLATION, TEST SHALL BE CARRIED OUT TO ESTABLISH THE EARTH RESISTANCE. THE TEST RESULTS SHALL BE SUBMITTED TO ENGINEER / AUTHORITY FOR APPROVAL.

28 FS/SWA(FIRE SURVIVAL)

CABLES SHALL BE PROVIDED FOR ALL MAIN, SUBMAIN AND FINAL CIRCUITS INDICATED BELOW:

a) BMS b) UPS c) Scada d) Fire Alarm e) TVS f) Fire Fighting

29. NO PVC TYPE MATERIAL SHALL BE ALLOWED UNLESS OTHERWISE SPECIFIED.

30. CONTRACTOR SHALL BE RESPONSIBLE TO DESIGN, SUPPLY AND INSTALL THE COMPLETE FLOOR STANDING STEEL FRAME WITH PROPER ANCHOR AT BOTH FLOOR AND CEILING TO PROPER SUPPORT AND FIX ALL THE WALL MOUNTED DISTRIBUTION BOARDS, CABLE CONTAINMENT, CONTROL PANELS, ETC, AT THE LOCATION, WHERE DRY WALL SYSTEM HAS BEEN USED, FOR EXAMPLE CAVITY WALL BY THE D-WALL.

31. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL THE NECESSARY CABLE CONTAINMENT, CONDUITS, TRUNKING AND ASSOCIATED ACCESSORIES, WHICH IS NOT SHOWN IN THE DRAWING BUT DEEMED NECESSARY FOR THE CONSTRUCTION AND COMPLETION OF THE INSTALLATION.

LIGHTNING PROTECTION SYSTEM

1. THE LIGHTNING PROTECTION SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH LATEST EDITION OF IS 2309

2. THE WHOLE OF THE LIGHTNING PROTECTION SYSTEM SHOULD HAVE A COMBINED RESISTANCE TO EARTH NOT EXCEEDING 10 OHMS BEFORE ANY BONDING HAS BEEN EFFECTED TO METAL IN OR ON A STRUCTURE OR TO SERVICES BELOW GROUND.

3. ALL EXPOSED METALWORK UNDER CONTRACT EXCEPT ELECTRICAL EQUIPMENT SHALL BE ELECTRICALLY BONDED TO THE LIGHTNING PROTECTION SYSTEM.

4. THE POSITIONS OF THE EARTH ELECTRODE PITS AS SHOWN ON DRAWINGS ARE APPROXIMATE ONLY. THE EXACT LOCATIONS SHALL BE DETERMINED & APPROVED BY THE ARCHITECT / ENGINEER BEFORE COMMENCEMENT OF WORK, ELECTRICAL CON SHALL LIASE WITH CIVIL CONTRACTOR FOR INSTALATION OF THE ENTIRE LIGHTNING PROTECTION SYSTEM.

5. ALL PENETRATIONS THROUGH ROOF TO BE MADE WATERTIGHT AFTER INSTALLATION OF DOWN CONDUCTORS, CABLE, ETC AND MUST BE VETTED / APPROVED BY THE ARCHITECT / ENGINEER

6. ALL EXPOSED METALLIC STRUCTURES, VENT PIPES, COOLING TOWER, RAILINGS, WATER TANKS & ETC ON OR ABOVE THE ROOF SHALL BE BONDED TO AND FORM PART OF THE LIGHTNING PROTECTION SYSTEM.

7. ELECTRICAL CONTRACTOR TO CO-ORDINATE WITH THE CIVIL CONTRACTOR ON THE BONDING REQUIREMENT AND ENSURE THAT IT MEETS IS, REQUIREMENTS.

ELECTRICAL BOARDS & COMPONENTS

ALL MCCBs INSTALLED SHALL BE COMPLETED WITH ELECTRONICS TYPE ADJUSTABLE
THERMAL OVERLOAD & INSTANTANEOUS TRIP UNIT AS PER SPECIFICATIONS.

2. ALL MCBs USED FOR PROTECTION OF INDUCTION LOADS SHALL BE OF TYPE C CHARACTERISTIC AND MOTOR LOAD SHALL BE OF TYPE D CHARACTERISTIC.

3. ALL BUSBAR TRUNKINGS SHALL BE OF FULL SIZE NEUTRAL WITH CONTINUOUS INTEGRAL EARTHING BAR.

4. THERE SHALL BE A COMMON EARTH BAR IN EACH DISTRIBUTION BOARD.

5. ALL NEUTRAL LINKS AND EARTH BARS IN THE DISTRIBUTION BOARDS SHALL BE LOCATED AT AN EASILY ACCESSIBLE POSITION AND SHALL BE KEPT CLEAR OF ANY OBSTRUCTIONS.

6. NEUTRAL AND EARTH BARS SHALL HAVE SUFFICIENT NUMBER OF WAYS TO MATCH THE NUMBER OF SUB-CIRCUITS WITH SPACES.

7. ALL ELECTRICAL EQUIPMENT AND ACCESSORIES THAT ARE EXPOSED TO WEATHER SHALL BE OF WEATHERPROOF TYPE TO IP65, UNLESS OTHERWISE STATED.

8. IDMTL OVERCURRENT AND EARTH FAULT RELAYS SPECIFIED SHALL BE COMPLETE WITH HIGH SET ELEMENT.

9. MOUNTING LEVEL OF DISTRIBUTION BOARDS SHALL BE MEASURED FROM THE FINISHED FLOOR LEVEL TO THE BOTTOM OF THE BOARDS.

10.UNLESS OTHERWISE STATED, ALL CIRCUITS SERVING FIRE SAFETY

EQUIPMENT AND EMERGENCY LIGHTING SHALL BE OF FS CABLES.

11, 25% SPARE BREAKER SHALL BE PROVIDED FOR ALL THE ELECTRICAL DISTRIBUTION BOARDS AND SUB-BOARDS. AS PER SPECIFICATIONS.

AS PER SPECIFICATIONS.

AS PER SPECIFICATIONS.

AS PER SPECIFICATIONS.

AND METHOD SHALL BE COORDINATED AND DETERMINED AT SITE, ALL COST INCURRED ON THE ALTERNA MOUNTING SHALL BE INCLUDED IN THE CONTRACT.

EARTHING SYSTEM

EARTHING POINT INSTALLATION BEFORE INTERCONNECTION OF THE EARTH POINT

Certified that this document has been designed and checked

PROPRIETARY CADWELD CONNECTION SHALL BE USED FOR CONNECTING EACH CABLE TO EARTHING POINT STRICTLY IN ACCORDANCE TO THE INSTRUCTION OF THE SPECIALIST.

in accordance with BBO quality / issurance i	ian.
	ructure esign In-charge/ Coordinator
BUILDING WOF	ISULTANT (DDC) FOR (RKS OF TWO UNDERGI & BADI CHOUPAR), SI
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CIVIL, ARCHITECTURAL & ROUND STATION SHAFT AND TUNNELS OF PHASE 1B OF JAIPUR METRO

Authorised Signatory for DDC.

Design In-charge/ Coordinator

JP/EW/1B/DDC01 Project Manage



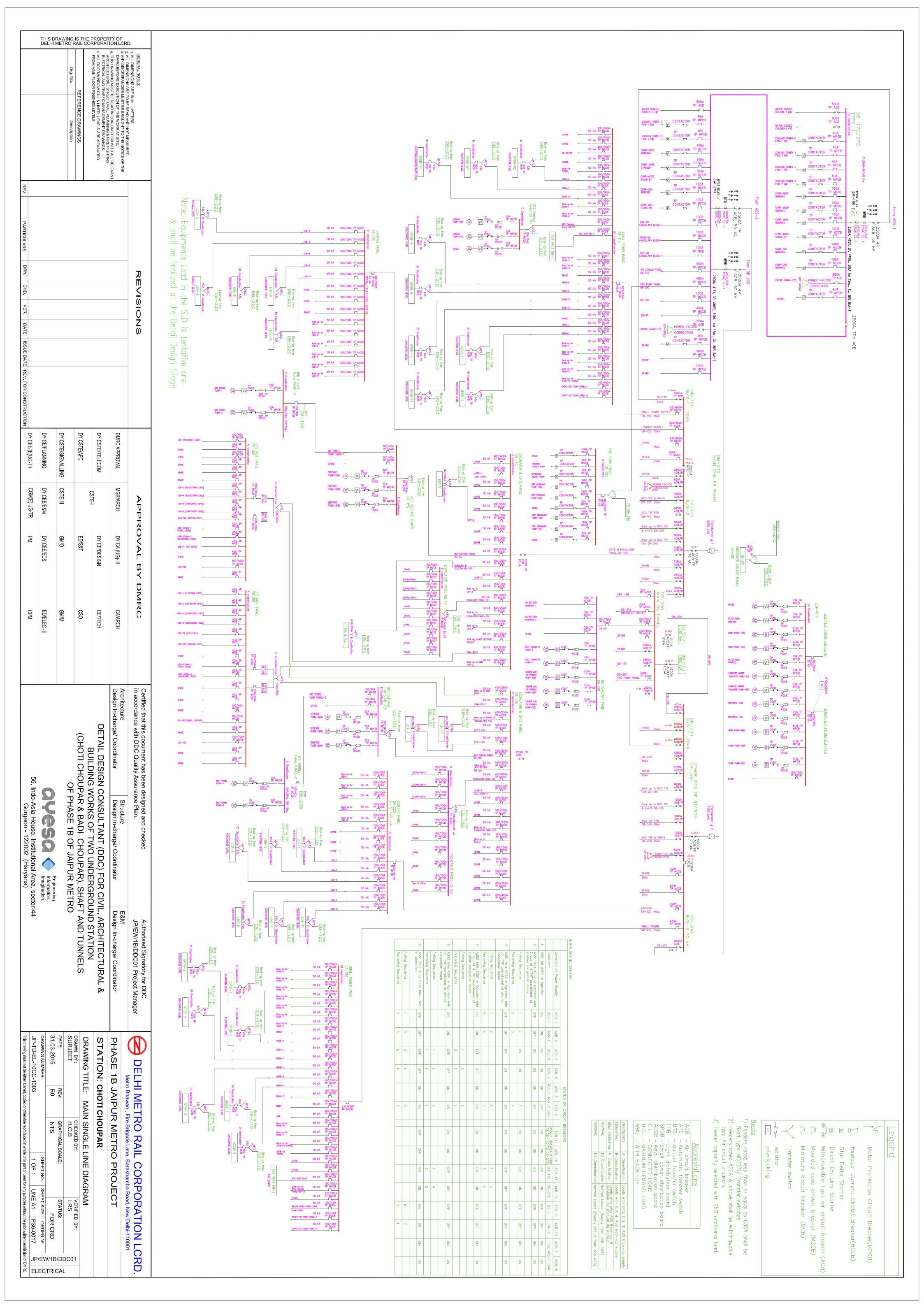
STATION: CHOTI CHOUPAR DRAWING TITLE: LEGENDS, NOTES AND ABBREVIATION

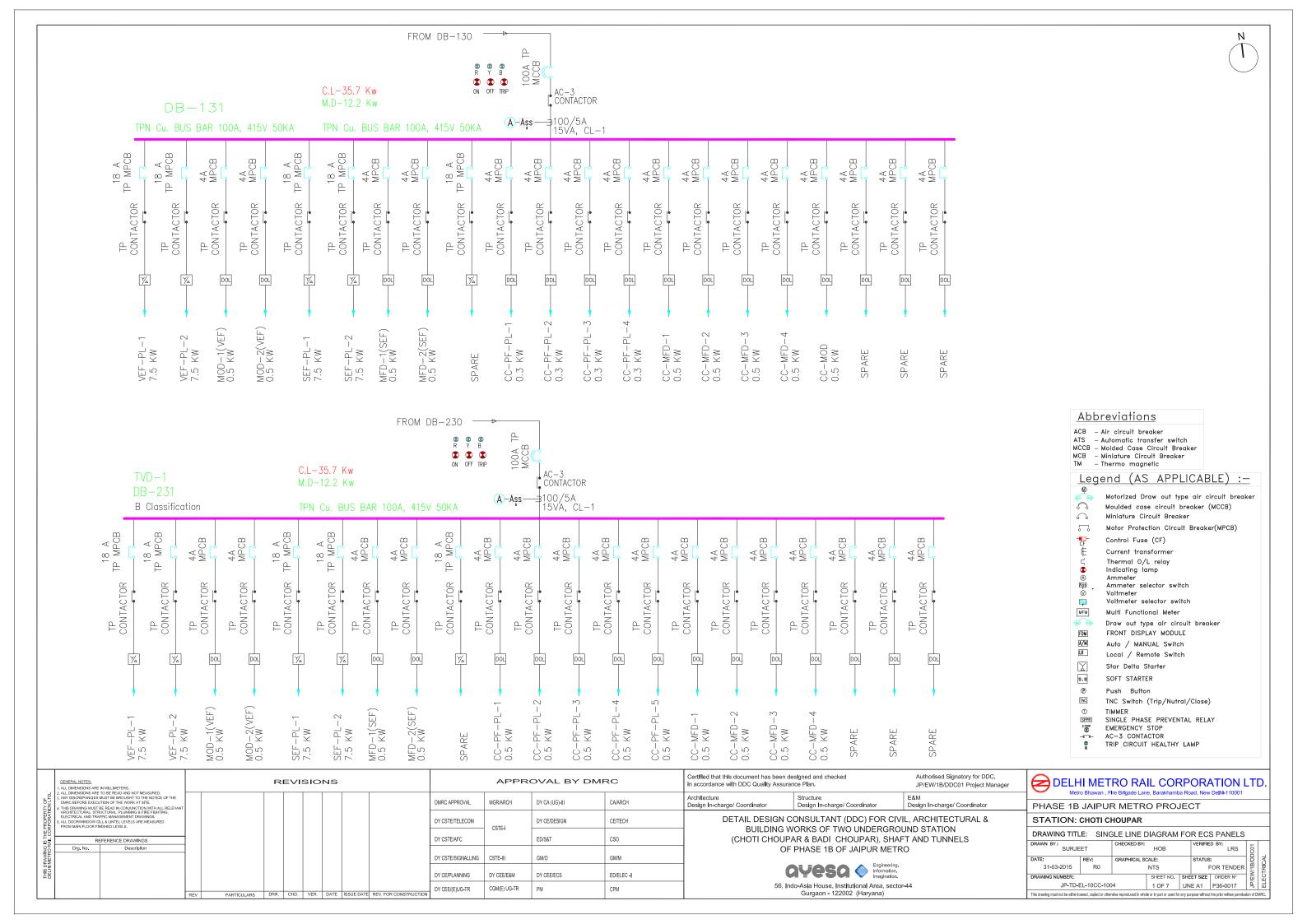
PHASE 1B JAIPUR METRO PROJECT

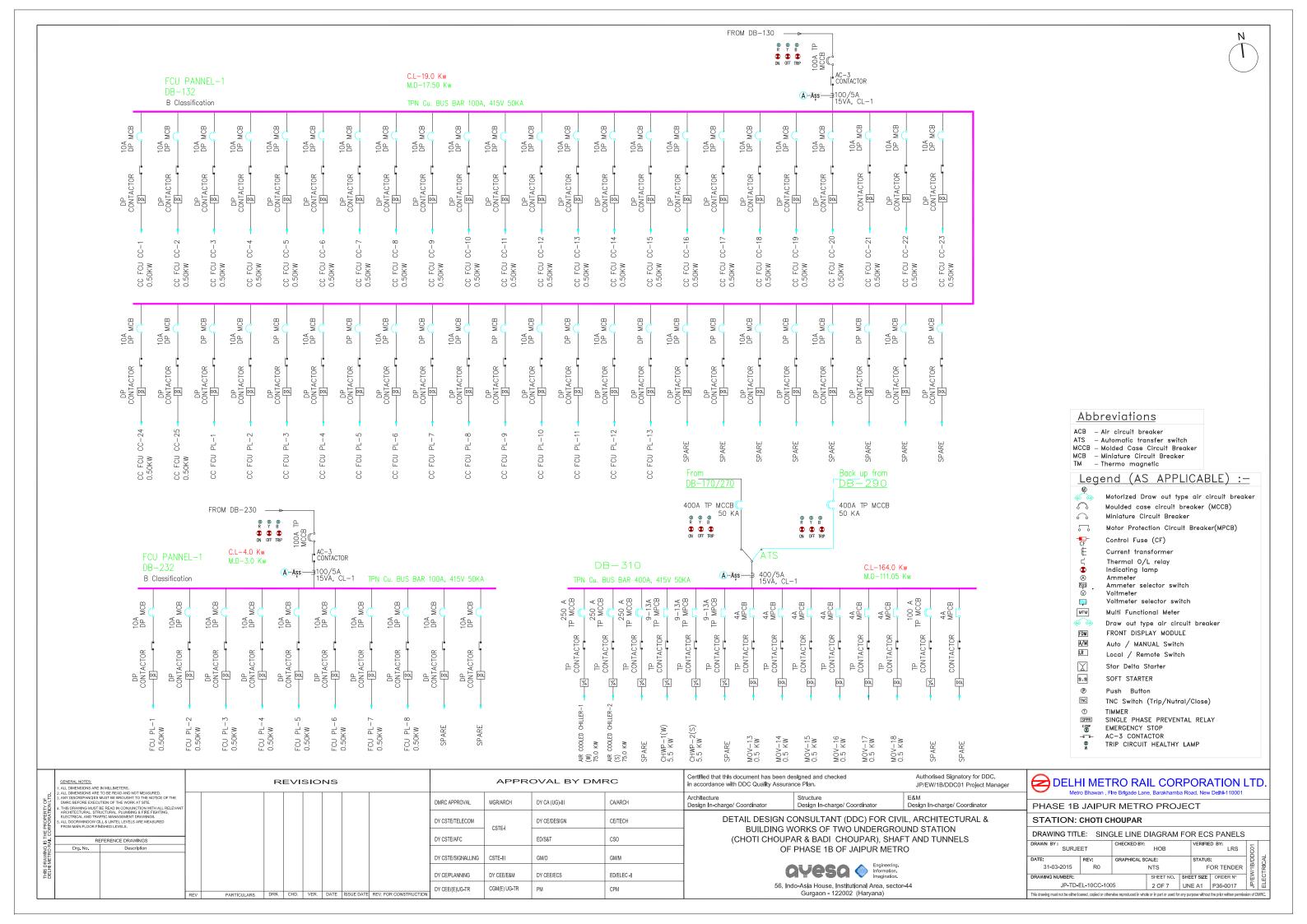
DELHI METRO RAIL CORPORATION LTD

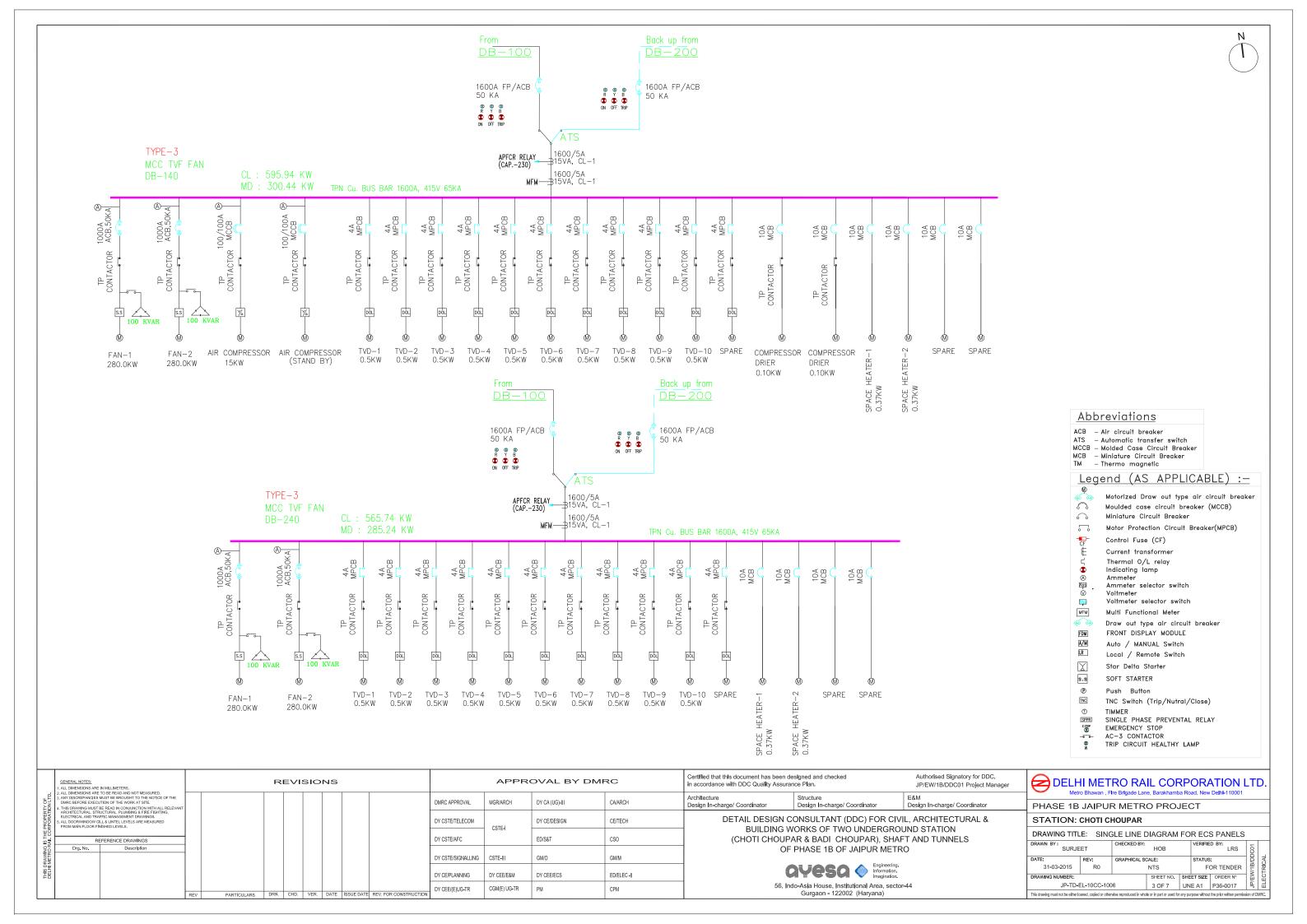
Metro Bhawan , Fire Brigade Lane, Barakhamba Road, New Delhi-110

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ı	This drawing must not be either loaned conied or otherwise reproduced in whole or in part or used for any purpose without the prior written permission of DMP										

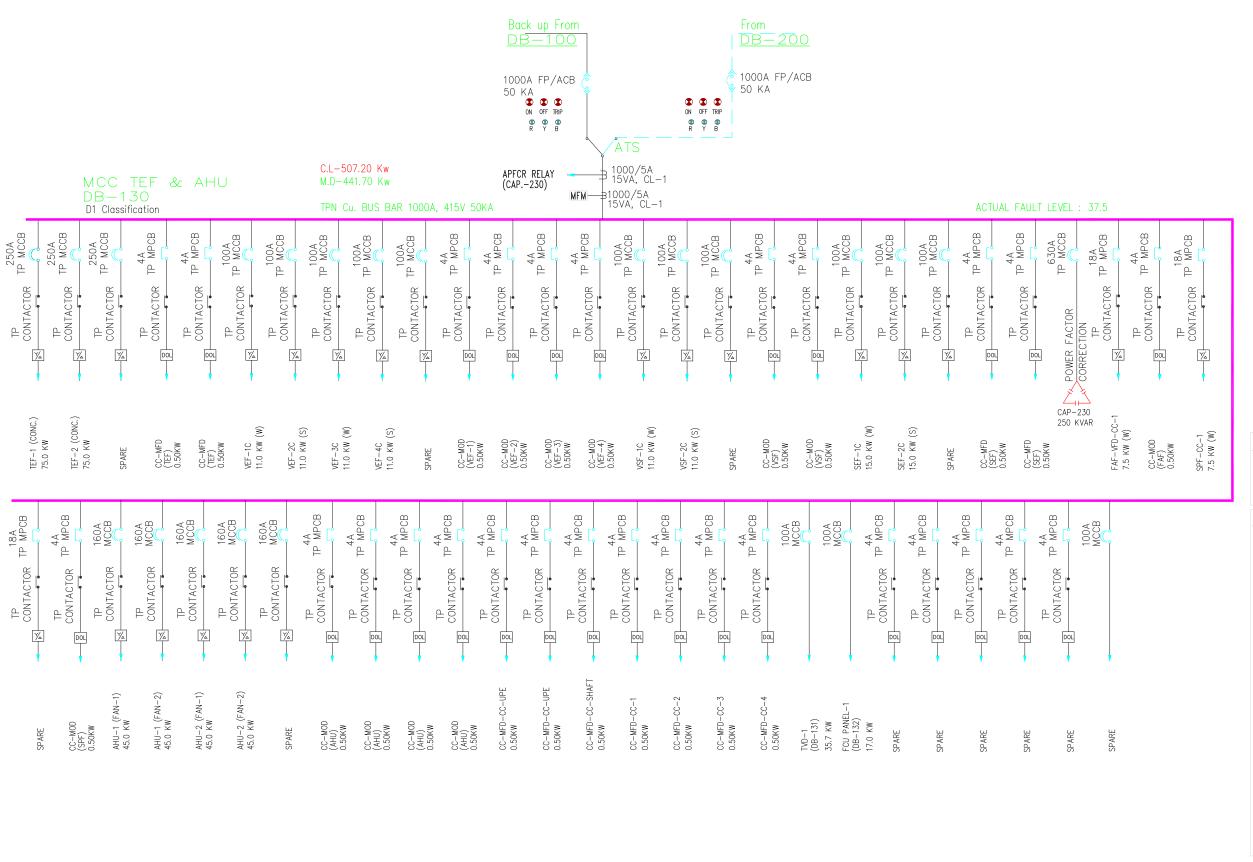












Abbreviations

ACB — Air circuit breaker

ATS — Automatic transfer switch MCCB - Molded Case Circuit Breaker

— Miniature Circuit Breaker - Thermo magnetic

Legend (AS APPLICABLE) :-

Moulded case circuit breaker (MCCB) 60 Miniature Circuit Breaker

Motor Protection Circuit Breaker(MPCB)

Motorized Draw out type air circuit breaker

Control Fuse (CF)

Current transformer Thermal O/L relay

Indicating lamp Ammeter Ammeter selector switch

Voltmeter Voltmeter selector switch

Multi Functional Meter Draw out type air circuit breaker

FRONT DISPLAY MODULE Auto / MANUAL Switch

Local / Remote Switch X Star Delta Starter

s.s SOFT STARTER

Push Button TNC TNC Switch (Trip/Nutral/Close)

SINGLE PHASE PREVENTAL RELAY EMERGENCY STOP SPPR ESTOP &

AC-3 CONTACTOR TRIP CIRCUIT HEALTHY LAMP

NTES: ONS ARE IN MILLIMETERS.	REVISIONS							APPR	OVAL BY DMF		Certified that this document has been de in accordance with DDC Quality Assuran	Authorised Signatory for DDC. JP/EW/1B/DDC01 Project Manager	
ONS ARE TO BE READ AND NOT MEASURED. PANCIES MUST BE BROUGHT TO THE NOTICE OF THE RE EXECUTION OF THE WORK AT SITE. RG MUST BE READ IN CONJUNCTION WITH ALL RELEVANT							DMRC APPROVAL	MGR/ARCH	DY CA (UG)-III	CAVARCH	Architecture Design In-charge/ Coordinator	Structure Design In-charge/ Coordinator	E&M Design In-charge/ Coordinator
IRAL, STRUCTURAL, PLUMBING & FIRE FIGHTING, AND TRAFFIC MANAGEMENT DRAWINGS. INDOW CILL & LINTEL LEVELS ARE MEASURED FLOOR FINISHED LEVELS.							DY CSTE/TELECOM	CSTE-I	DY CE/DESIGN	СЕ/ТЕСН	DETAIL DESIGN CONSULTANT (DDC) FOR CIV BUILDING WORKS OF TWO UNDERGRO		
REFERENCE DRAWINGS							DY CSTE/AFC	G31E=1	ED/S&T	CSO		STATION FT AND TUNNELS	

GM/O

PM

DY CEE/ECS

GM/M

CPM

ED/ELEC -II

CSTE-III

DY CEE/E&M

CGM(E) UG-TR

DY CSTE/SIGNALLING

DY CEE/(E)UG-TR

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Drg. No.

Description

OF PHASE 1B OF JAIPUR METRO ayesa

Engineering Information. Imagination. 56. Indo-Asia House. Institutional Area, sector-44

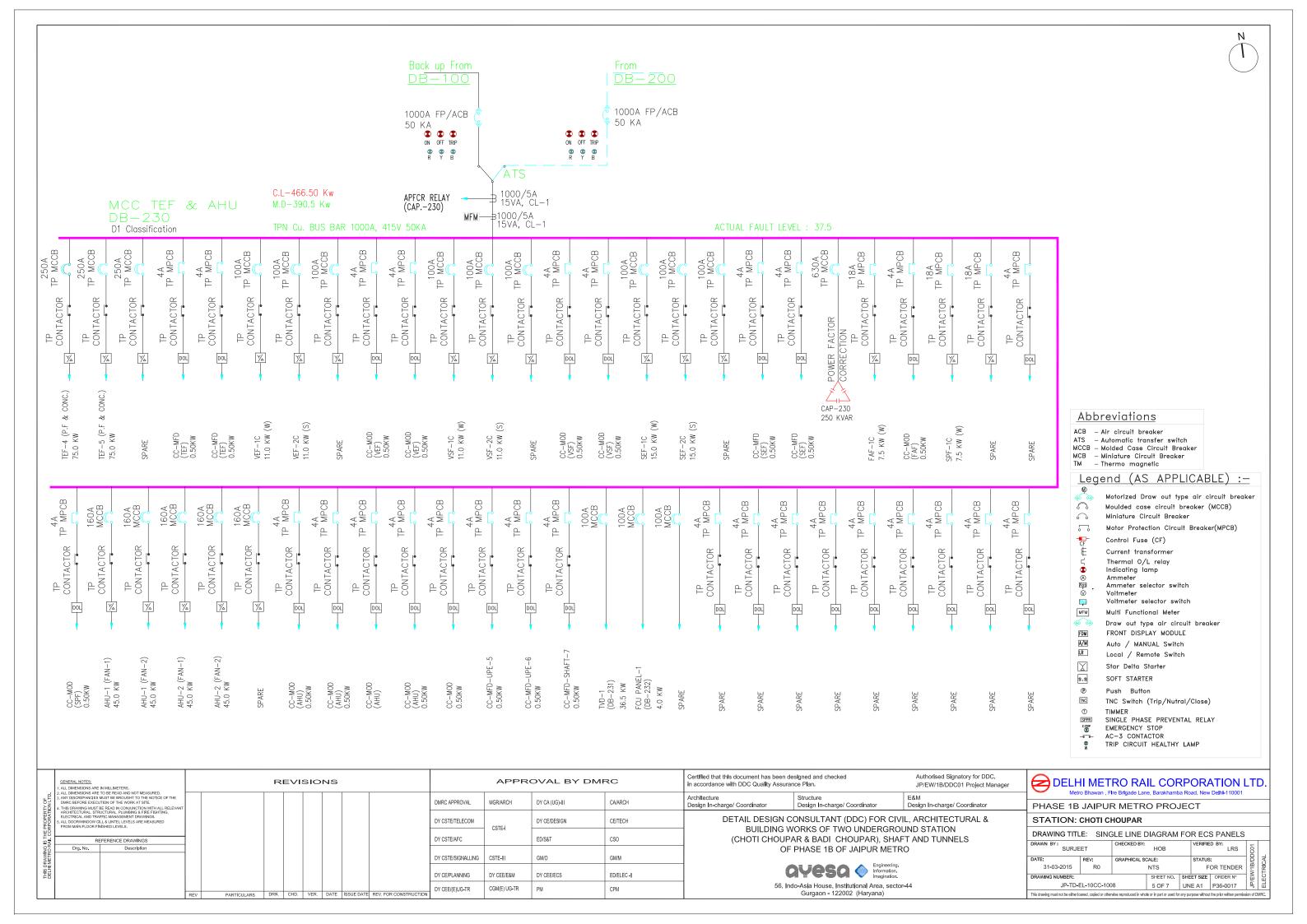
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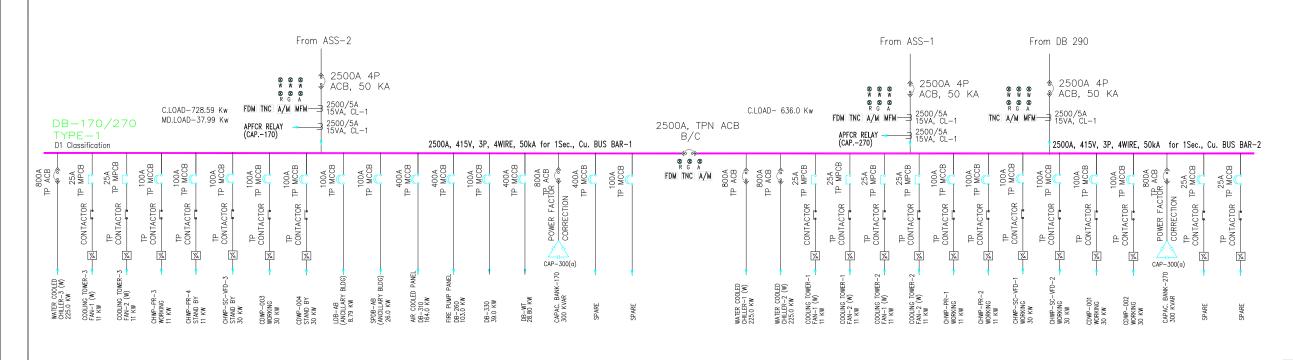
PHASE 1B JAIPUR METRO PROJECT

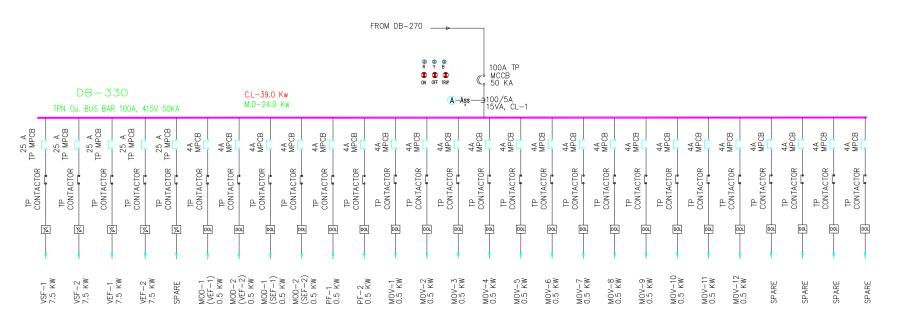
ATION: CH	OTI CHOUPAR	
AWING TITLE:	SINGLE LINE DIAGRAM FOR ECS DANELS	

DRAWING TITL	E: SINC	SLE LINE D	DIAGRAM	FO	R EC	S PANELS				
DRAWN BY: SURJE	ET	CHECKED BY:	НОВ	VERIFIE)C01					
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CGM(E) UG-TR

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ACB — Air circuit breaker
ATS — Automatic transfer switch
MCCB — Molded Case Circuit Breaker

MCB — Miniature Circuit Breaker TM — Thermo magnetic

Legend (AS APPLICABLE):—

Motorized Draw out type air circuit breaker

Moulded case circuit breaker (MCCB)

Miniature Circuit Breaker

Motor Protection Circuit Breaker(MPCB)

Control Fuse (CF)

Thermal O/L relay
Indicating lamp

Ammeter

Ammeter selector switch

Voltmeter

Voltmeter selector switch

Current transformer

Multi Functional Meter

Traw out type air circuit breaker
FIN FRONT DISPLAY MODULE

Auto / MANUAL Switch

Local / Remote Switch
Star Delta Starter
S.S SOFT STARTER

Push Button

TNC Switch (Trip/Nutral/C

TNC Switch (Trip/Nutral/Close)

SINGLE PHASE PREVENTAL RELAY
EMERGENCY STOP

AC-3 CONTACTOR
TRIP CIRCUIT HEALTHY LAMP

GENERAL NOTES: 1. ALL DIMENSIONS ARE IN MILLIMETERS.	REVISIONS		APPR	OVAL BY DM	RC	Certifled that this document has been de in accordance with DDC Quality Assuran	
2. ALL DIMENSIONS ARE TO BE READ AND NOT MEASURED. 3. ANY DISCREPANCIES MUST BE BROUGHT TO THE NOTICE OF THE DMRC BEFORE EXECUTION OF THE WORK AT SITE. 2. ALL DIMENSIONS ARE TO BE READ AND NOT MEASURED. 3. ANY DISCREPANCIES MUST BE READ AND NOT MEASURED. 4. THIS DRAWING MUST BE READ AND NOT MICHAEL RELEVANT		DMRC APPROVAL	MGR/ARCH	DY CA (UG)-III	CA/ARCH	Architecture Design In-charge/ Coordinator	Structure Design In-charge/ Coo
ARCHITECTURAL, STRUCTURAL, PLUMBING & FIRE FIGHTING, ELECTRICAL AND TRAFFIC MANAGEMENT DRAWINGS. 5. ALL DOOR/WINDOW CILL & LINTEL LEVELS ARE MEASURED FROM MAIN FLOOR FINISHED LEVELS.		DY CSTE/TELECOM	CSTE-I	DY CE/DESIGN	СЕ/ТЕСН	DETAIL DESIGN C	,
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Authorised Signatory for DDC.

JP/EW/1B/DDC01 Project Manager



Gurgaon - 122002 (Haryana)

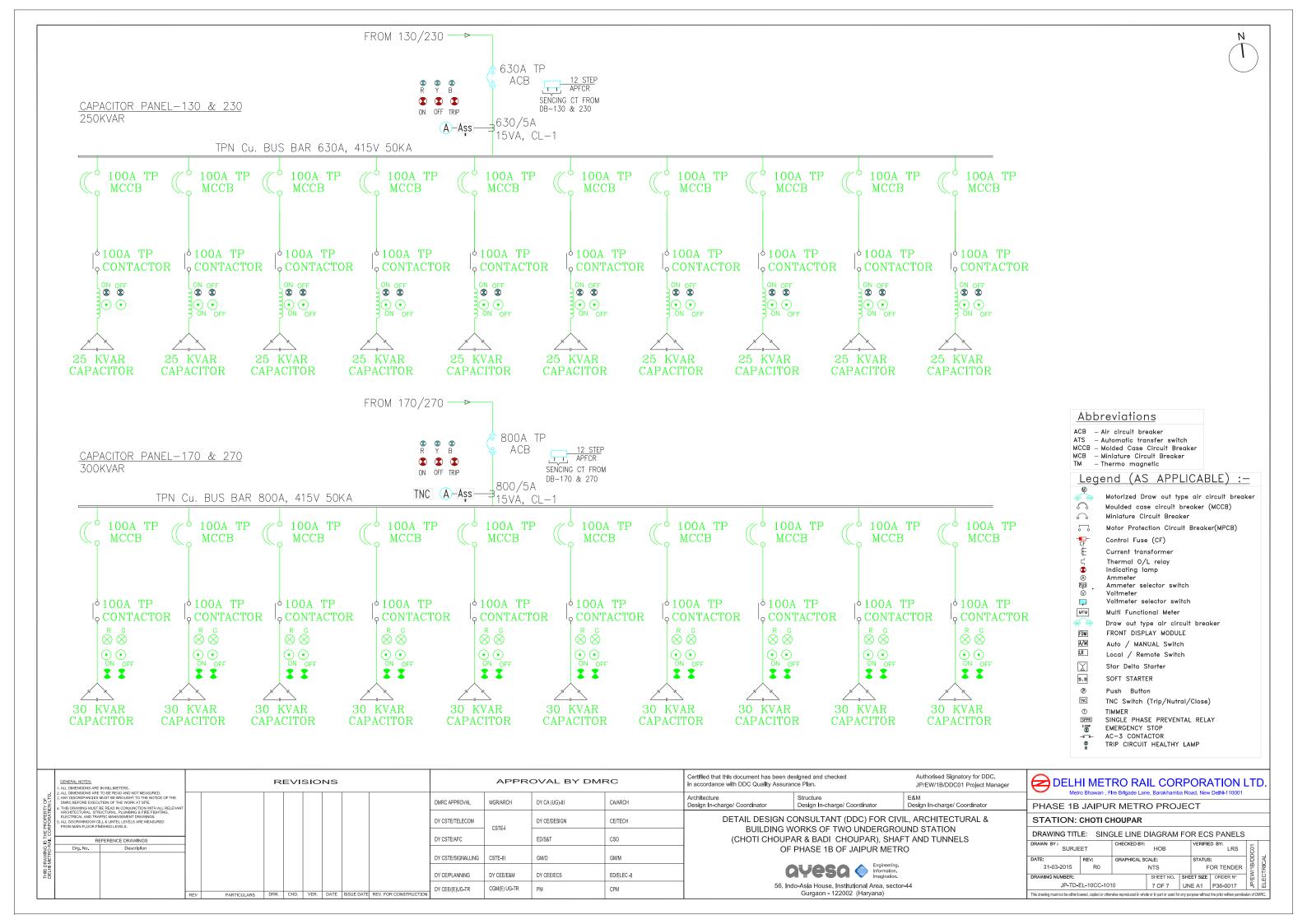
	DELHI METRO RAIL CORPORATION LTD. Metro Bhawan . Fire Brioade Lane. Barakhamba Road. New Delhi-110001
-	Metro Bhawan , Fire Brigade Lane, Barakhamba Road, New Delhi-110001

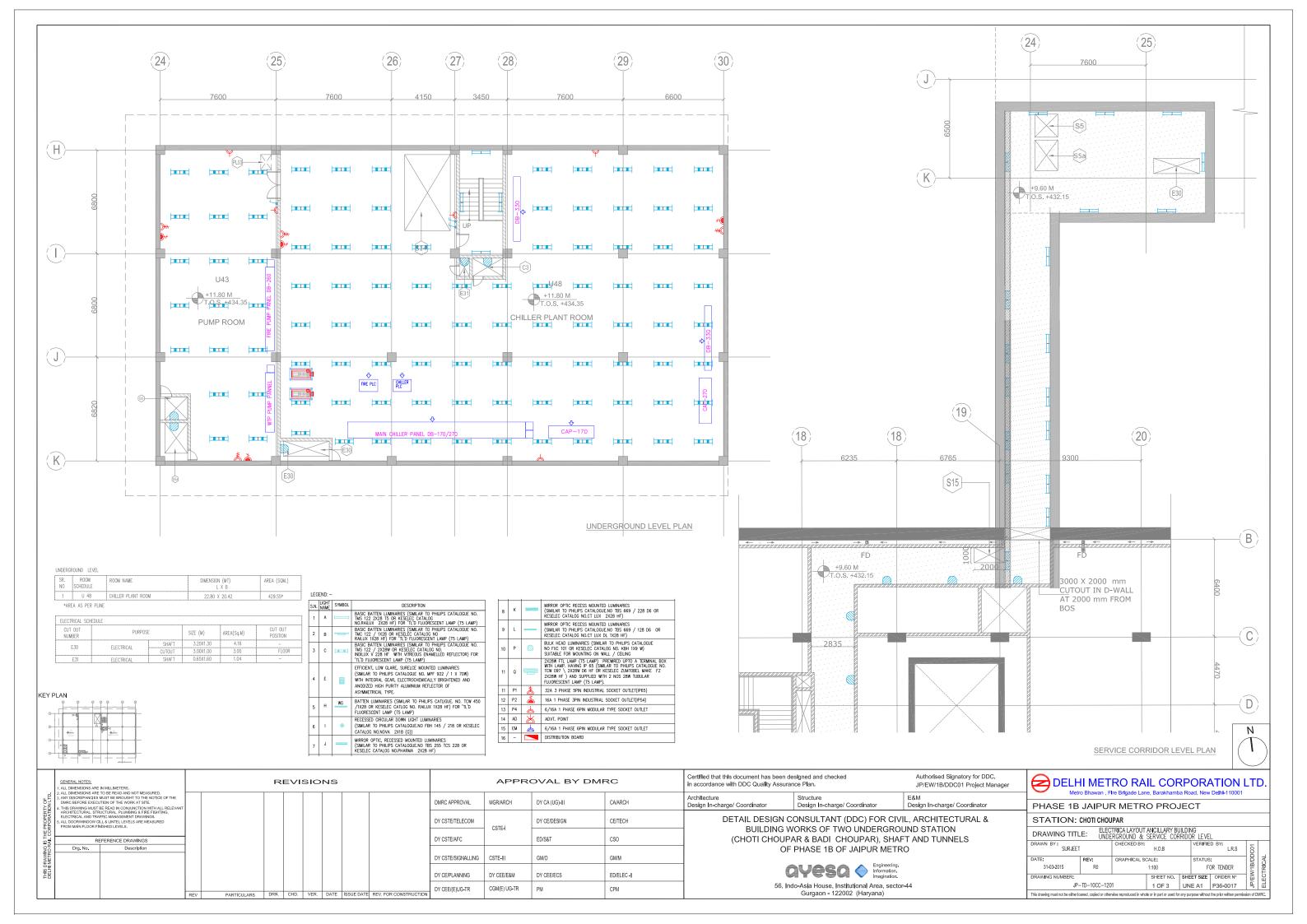
PHASE 1B JAIPUR METRO PROJECT

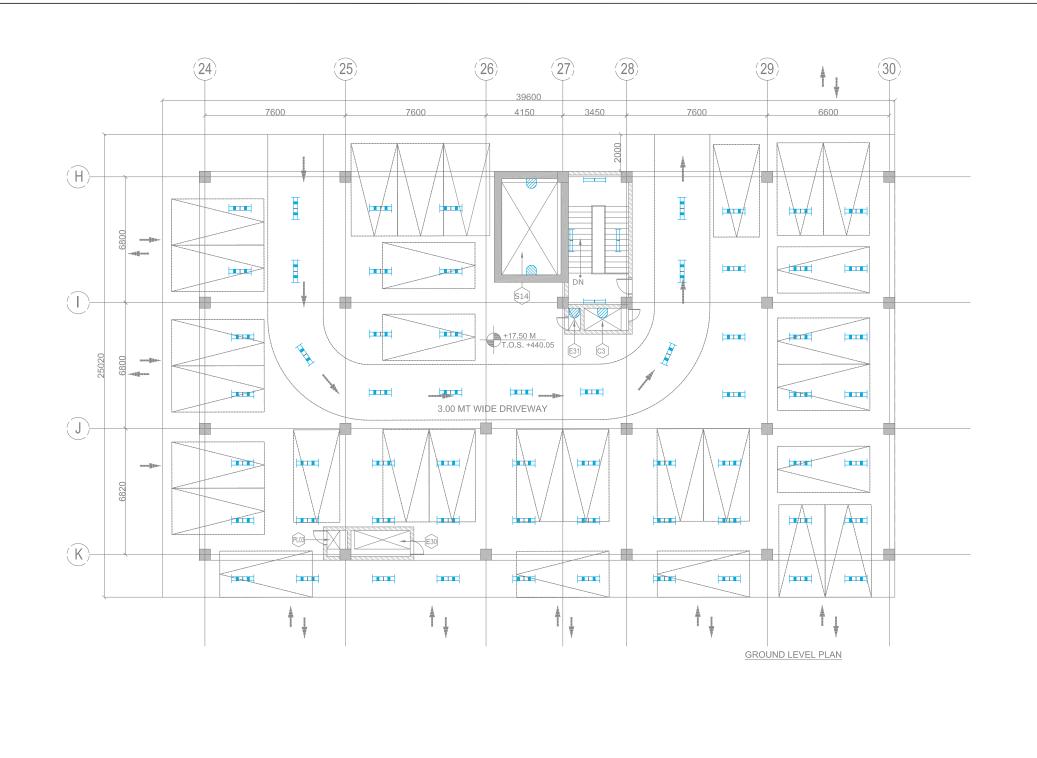
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STATION: CH	OTI CHOUPAR
RAWING TITLE:	SINGLE LINE DIAGRAM FOR ECS DANELS

DRAWING TITL	E: SINC	SLE LINE D	DIAGRAM	FO	R EC	S PANELS			
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S.N.	LIGHT	SYMBOL	DESCRIPTION
1	A		BASIC BATTEN LUMINARIES (SIMILAR TO PHILIPS CATALOGUE TMS 122 2X28 T5 OR KESELEC CATALOG NO.RAILUX 2X28 HF) FOR 'TL'D FLUORESCENT LAMP (T5 LAI
2	В	Ī	BASIC BATTEN LUMINARIES (SIMILAR TO PHILIPS CATALOGUE TMC 122 / 1X28 OR KESELÈC CATALOG NO RAILUX 1X28 HF) FOR 'TL'D FLUORESCENT LAMP (T5 LAMP)
3	С		BASIC BATTEN LUMINARIES (SIMILAR TO PHILIPS CATALOGUE TMS 122 / 2X28W OR KESELEC CATALOG NO. INDILUX V 228 HF WITH VITREOUS FRAMELLED REFLECTOR) "TL'D FLUORESCENT LAMP (T5 LAMP)
4	E		EFFICIENT, LOW CLARE, SURELCE MOUNTED LUMINARIES (SMILAR TO PHILIPS CATALOGUE NO. MPF 922 / 1 x 70W) WITH INTEGRAL GEAR, ELECTROCHEMICALLY BRIGHTENED AND ANODIZED HIGH PURITY ALUMINIUM REFLECTOR OF ASYMMETRICAL TYPE.
5	н	WG	BATTEN LUMINARIES (SIMILAR TO PHILIPS CATLIGUE, NO. TCW /1X28 OR KESELEC CATLOG NO. RAILUX 1X28 HF) FOR 'TL'D FLUORESCENT LAMP (T5 LAMP)
6	1	•	RECESSED CIRCULAR DOWN LIGHT LUMINARIES (SIMILAR TO PHILIPS CATALOGUE.NO FBH 145 / 218 OR KESI CATALOG NO.NOVA 2X18 (G))
7	J		MIRROR OPTIC, RECESSED MOUNTED LUMINARIES (SIMILAR TO PHILIPS CATALOGUE.NO TBS 255 TCS 228 OR KESELEC CATALOG NO.PHARMA 2X28 HF)
8	к	SIMME	MIRROR OPTIC RECESS MOUNTED LUMINARIES (SIMILAR TO PHILIPS CATALOGUE.NO TBS 669 / 228 D6 OR KESELEC CATALOG NO.CT LUX 2X28 HF)
9	L		MIRROR OPTIC RECESS MOUNTED LUMINARIES (SIMILAR TO PHILIPS CATALOGUE.NO TBS 669 / 128 D6 OR KESELEC CATALOG NO.CT LUX DL 1X28 HF)
10	Р	2	BULK HEAD LUMINARIES (SIMILAR TO PHILIPS CATALOGUE NO FXC 101 OR KESELEC CATALOG NO. KBH 1X9 W) SUITABLE FOR MOUNTING ON WALL / CEILING
11	Q		2X28W FT. LAMP (TS LAMP) PREWRED UPTO A TERMINAL B WITH LAMP, HANNE IP 85 (SMILAR TO PHILIPS CATALOGUE TOW 097 \ 2X28W DB HF OR KESELEC ZUMTOBEL MAKE FZ 2X28W HF) AND SUPPLIED WITH 2 NOS 28W TUBULAR FLUORESCENT LAMP (TS LAMP).
11	P1	***	32A 3 PHASE 5PIN INDUSTRIAL SOCKET OUTLET(IP65)
12	P2	<u></u>	16A 1 PHASE 3PIN INDUSTRIAL SOCKET OUTLET(IP54)
13	P4	P	6/16A 1 PHASE 6PIN MODULAR TYPE SOCKET OUTLET
14	AD	K	ADVT. POINT
15	ЕМ		6/16A 1 PHASE 6PIN MODULAR TYPE SOCKET OUTLET
16	_	V	DISTRIBUTION BOARD

KEY PLAN	
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ELECTRICAL SCH	EDULE				
CUT OUT NUMBER	PURPOSE		SIZE (M)	AREA(Sq.M)	CUT OUT POSITION
E30	ELECTRICAL	SHAFT	3.20X1.30	4.16	-
		CUTOUT	3.00X1.00	3.00	FLOOR
E31	ELECTRICAL	SHAFT	0.65X1.60	1.04	-

Certified that this document has been designed and checked

<u>S.</u> S ARE IN MILLIMETERS.	R	EVISIOI	NS		APPR	OVAL BY DMI	RC	Certified that this document has been do in accordance with DDC Quality Assura		Authorised Signatory for DDC. JP/EW/1B/DDC01 Project Mana
IS ARE TO BE READ AND NOT MEASURED. VICIES MUST BE BROUGHT TO THE NOTICE OF THE EXECUTION OF THE WORK AT SITE. MUST BE READ IN CONJUNCTION WITH ALL RELEVANT				DMRC APPROVAL	MGR/ARCH	DY CA (UG)-III	CAVARCH	Architecture Design In-charge/ Coordinator	Structure Design In-charge/ Coordinator	E&M Design In-charge/ Coordinator
I., STRUCTURAL, PLUMBING & FIRE FIGHTING, D TRAFFIC MANAGEMENT DRAWINGS. DOW CILL & LINTEL LEVELS ARE MEASURED DOR FINISHED LEVELS.				DY CSTE/TELECOM	CSTE-I	DY CE/DESIGN	CE/TECH	1	ONSULTANT (DDC) FOR CIV	
REFERENCE DRAWINGS				DY CSTE/AFC	CSTE-I	ED/S&T	CSO CSO	(CHOTI CHOUP.	/ORKS OF TWO UNDERGRO AR & BADI CHOUPAR), SHAI	FT AND TUNNELS
. Description				DV OCTE/CICNALING	COTE III	CMO	CMM	OF	PHASE 1B OF JAIPUR METE	(O

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56, Indo-Asia House, Institutional Area, sector-44 Gurgaon - 122002 (Haryana)

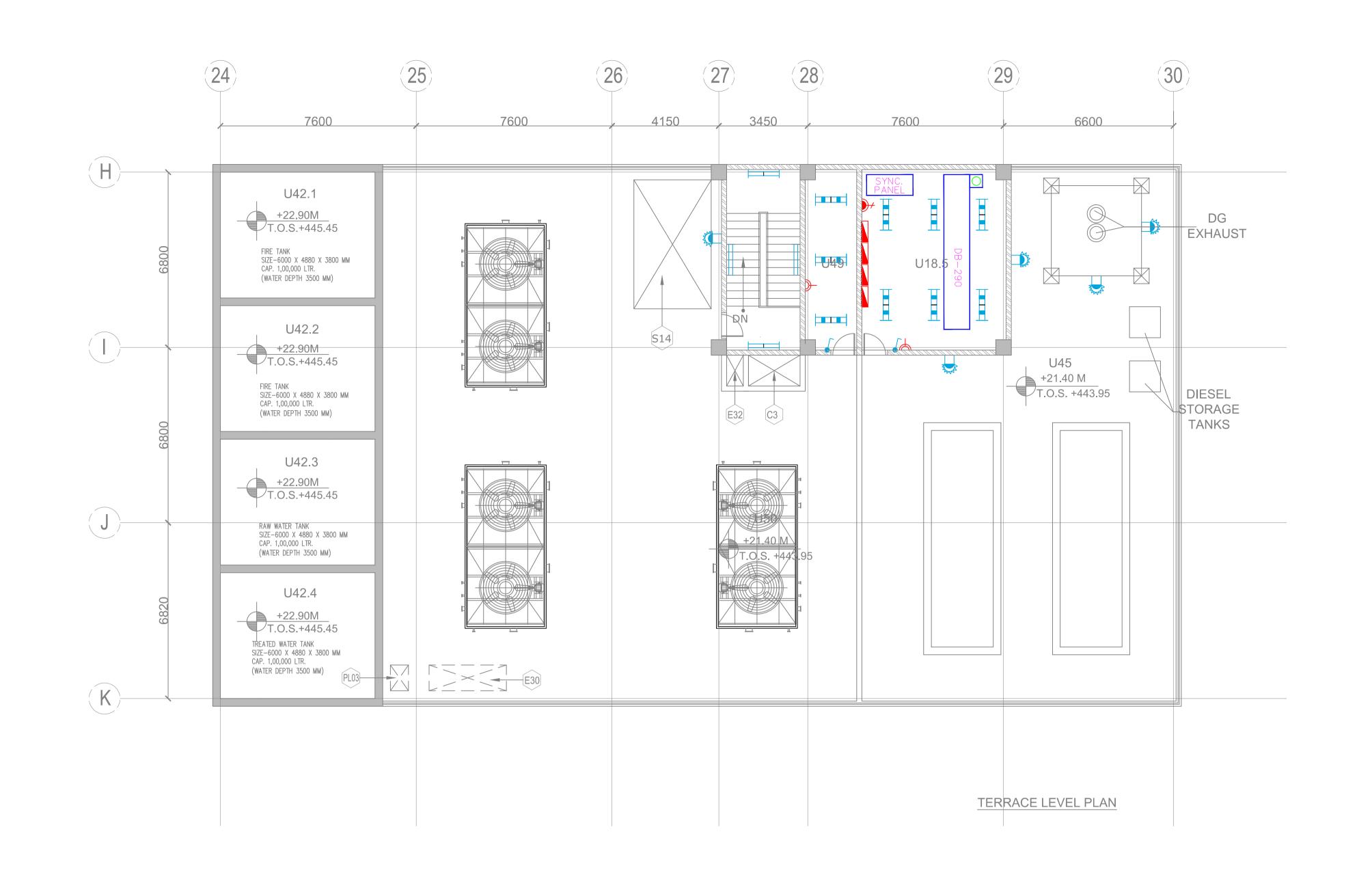
Authorised Signatory for DDC.

6	DE	ELHI METRO RAIL CORPORATION LTD
١,		Metro Bhawan , Fire Brigade Lane, Barakhamba Road, New Delhi-110001

PHASE 1B JAIPUR METRO PROJECT

STATION: CHOT	1 CHOUPAR
	FLECTRICA LAYOUT ANCILLARY BUILDING

	DRAWING TITL		TR I CA LAYOUT IND LEVEL PL		JILDII	NG			
	DRAWN BY: SURJEET		CHECKED BY:	H.O.B		VERIFIE	D BY: L.R.S	0001	Ι.
ı	DATE:	REV:	GRAPHICAL SO	CALE:		STATUS	:	B/DD	ΙĶ
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SR. NO	ROOM SCHEDULE	ROOM NAME	DIMENSION (MT) L X B	AREA (SQM.)
1	U 18.5	DB AND CHILLER PANEL ROOM	5.60 X 7.00	38.88*
2	U 42.1	TREATED WATER TANK	6.00 X 4.88	29.28
3	U 42.2	RAIN WATER TANK	6.00 X 4.88	29.28
4	U 42.3	FIRE TANKS	6.00 X 4.88	29.28
5	U 42.4	FIRE TANKS	6.00 X 4.88	29.28
6	U 45	DG SET	12.20 X 20.62	209.80*
7	U 49	CHEMICAL DOSING PLANT ROOM	2.00 X 7.00	13.68*
8	U 50	COOLING TOWERS	18.00 X 20.62	317.19*

*AREA AS PER PLINE

LEGEND: -

LEG	END: –		
S.N.	LIGHT NAME	SYMBOL	DESCRIPTION
1	Α		BASIC BATTEN LUMINARIES (SIMILAR TO PHILIPS CATALOGUE NO. TMS 122 2X28 T5 OR KESELEC CATALOG NO.RAILUX 2X28 HF) FOR 'TL'D FLUORESCENT LAMP (T5 LAMP)
2	В		BASIC BATTEN LUMINARIES (SIMILAR TO PHILIPS CATALOGUE NO. TMC 122 / 1X28 OR KESELEC CATALOG NO RAILUX 1X28 HF) FOR 'TL'D FLUORESCENT LAMP (T5 LAMP)
3	С		BASIC BATTEN LUMINARIES (SIMILAR TO PHILIPS CATALOGUE NO. TMS 122 / 2X28W OR KESELEC CATALOG NO. INDILUX V 228 HF WITH VITREOUS ENAMELLED REFLECTOR) FOR 'TL'D FLUORESCENT LAMP (T5 LAMP)
4	E		EFFICIENT, LOW GLARE, SURELCE MOUNTED LUMINARIES (SIMILAR TO PHILIPS CATALOGUE NO. MPF 922 / 1 X 70W) WITH INTEGRAL GEAR, ELECTROCHEMICALLY BRIGHTENED AND ANODIZED HIGH PURITY ALUMINIUM REFLECTOR OF ASYMMETRICAL TYPE.
5	Н	WG	BATTEN LUMINARIES (SIMILAR TO PHILIPS CATLIGUE. NO. TCW 450 /1X28 OR KESELEC CATLOG NO. RAILUX 1X28 HF) FOR 'TL'D FLUORESCENT LAMP (T5 LAMP)
6	ı	•	RECESSED CIRCULAR DOWN LIGHT LUMINARIES (SIMILAR TO PHILIPS CATALOGUE.NO FBH 145 / 218 OR KESELEC CATALOG NO.NOVA 2X18 (G))
7	J		MIRROR OPTIC, RECESSED MOUNTED LUMINARIES (SIMILAR TO PHILIPS CATALOGUE.NO TBS 255 TCS 228 OR KESELEC CATALOG NO.PHARMA 2X28 HF)
8	К	1777TV	MIRROR OPTIC RECESS MOUNTED LUMINARIES (SIMILAR TO PHILIPS CATALOGUE.NO TBS 669 / 228 D6 OR KESELEC CATALOG NO.CT LUX 2X28 HF)
9	L		MIRROR OPTIC RECESS MOUNTED LUMINARIES (SIMILAR TO PHILIPS CATALOGUE.NO TBS 669 / 128 D6 OR KESELEC CATALOG NO.CT LUX DL 1X28 HF)
10	Р		BULK HEAD LUMINARIES (SIMILAR TO PHILIPS CATALOGUE NO FXC 101 OR KESELEC CATALOG NO. KBH 1X9 W) SUITABLE FOR MOUNTING ON WALL / CEILING
11	Q		2X28W FTL LAMP (T5 LAMP) PREWRED UPTO A TERMINAL BOX WITH LAMP. HAVING IP 65 (SIMILAR TO PHILIPS CATALOGUE NO. TCW 097 \ 2X28W D6 HF OR KESELEC ZUMTOBEL MAKE FZ 2X28W HF) AND SUPPLIED WITH 2 NOS 28W TUBULAR FLUORESCENT LAMP (T5 LAMP).
11	P1	#	32A 3 PHASE 5PIN INDUSTRIAL SOCKET OUTLET(IP65)
12	P2	<u>*</u>	16A 1 PHASE 3PIN INDUSTRIAL SOCKET OUTLET(IP54)
13	P4		6/16A 1 PHASE 6PIN MODULAR TYPE SOCKET OUTLET
14	AD	\mathbb{X}	ADVT. POINT
15	EM	P	6/16A 1 PHASE 6PIN MODULAR TYPE SOCKET OUTLET
16	-		DISTRIBUTION BOARD

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TY OF ON LTD.	ANY DISCREPANCIES I DMRC BEFORE EXECU THIS DRAWING MUST I	TO BE READ AND NOT MEASURED. MUST BE BROUGHT TO THE NOTICE OF THE ITION OF THE WORK AT SITE. BE READ IN CONJUNCTION WITH ALL RELEVANT					DMRC APPROVAL	MGR/ARCH	DY CA (UG)-III	CA/ARCH	A D
PROPER' RPORATI	ELECTRICAL AND TRA	UCTURAL, PLUMBING & FIRE FIGHTING, FFIC MANAGEMENT DRAWINGS. LL & LINTEL LEVELS ARE MEASURED NISHED LEVELS.					DY CSTE/TELECOM	- CSTE-I	DY CE/DESIGN	CE/TECH	
IS THE RAIL CO		FERENCE DRAWINGS					DY CSTE/AFC	33121	ED/S&T	cso	
RAWING METRO F	Drg. No.	Description					DY CSTE/SIGNALLING	CSTE-III	GM/O	GM/M	
THIS DRAY DELHI ME							DY CE/PLANNING	DY CEE/E&M	DY CEE/ECS	ED/ELEC -II	
				 DDM CHD	VED	DATE LICEUE DATE DEV FOR CONCEDUCTION	DY CEE/(E)UG-TR	CGM(E) UG-TR	PM	CPM	

PARTICULARS DRN. CHD. VER. DATE ISSUE DATE REV. FOR CONSTRUCTION

Certified that this document has been designed and checked in accordance with DDC Quality Assurance Plan.

Architecture
Design In-charge/ Coordinator

DETAIL DESIGN CONSULTANT (DDC) FOR CIVIL, ARCHITECTURAL & RUIL DING WORKS OF TWO LINDERGROUND STATION

DETAIL DESIGN CONSULTANT (DDC) FOR CIVIL, ARCHITECTURAL 8
BUILDING WORKS OF TWO UNDERGROUND STATION
(CHOTI CHOUPAR & BADI CHOUPAR), SHAFT AND TUNNELS
OF PHASE 1B OF JAIPUR METRO

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56, Indo-Asia House, Institut	ional	Area,	sector-

Gurgaon - 122002 (Haryana)

DELHI METRO RAIL CORPORATION LTD.

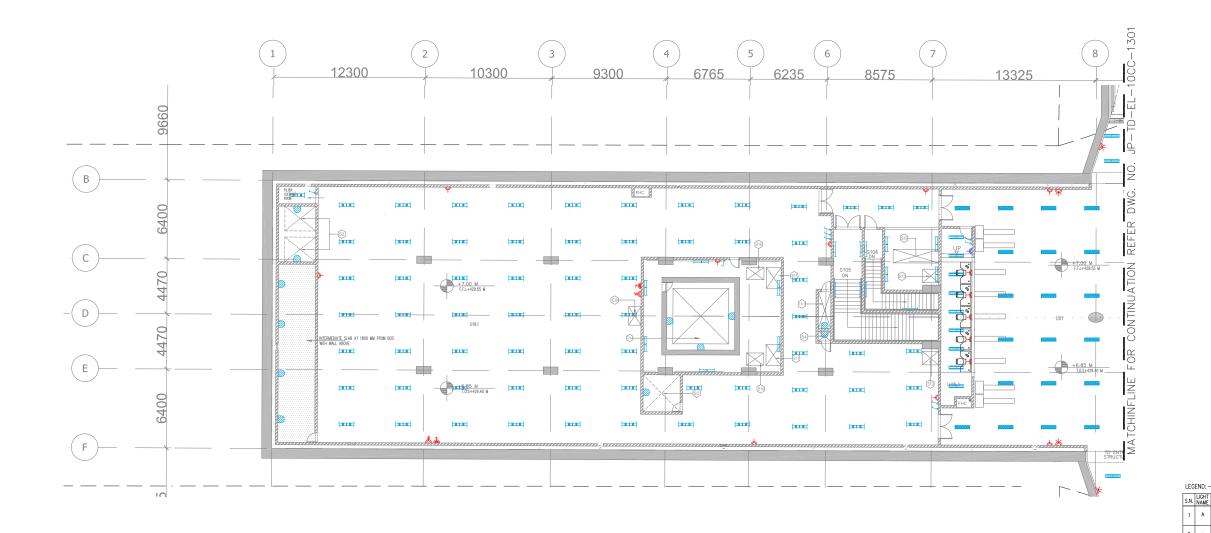
Metro Bhawan , Fire Brigade Lane, Barakhamba Road, New Delhi-110001

PHASE 1B JAIPUR METRO PROJECT

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DRAWING TITLE: ELECTRICA LAYOUT ANCILLARY BUILDING TERRACE LEVEL PLAN											
DRAWN BY: SURJEET		CHECKED BY: H.O.B			VERIFIE	D BY: L.R.S	DC01				
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This drawing must not be either lo	aned copied or other	wise reproduced in who	le or in part or used fo	r anv nu	roose without	the prior written permis	ssion of D	MRC			





KEY	PLAN	
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S.NO.	ROOM SCHEDULE	ROOM NAME	DIMENSION (Mt.) (LxW)	AREA (Sgm.)
- 1	U01	UNPAID AREA	, , ,	1035.90*
2	U02	PAID AREA		1497.75*
3	U03	STATION CONTROL ROOM (SCR)	7.700 x 7.050	54.29
4	U04	STATION MANAGER ROOM (SMR)	4.300 x 7.035	29.37*
5	U05.1	TICKET OFFICE (TOM)	2.500 x 14.34	34.80*
6	U05.2	TICKET OFFICE (TOM)	2.500 x 14.34	34.80*
7	U07.1	EXCESS FARE OFFICE (EFO)	2.500 x 3.000	7.50
8	U07.2	EXCESS FARE OFFICE (EFO)	2.500 x 3.000	7.50
9	U09	SECURITY ROOM 1	1.700X2.000	3.40
10	U10	STATION STORE ROOM	7.100 x 5.260	37.35
11	U12	CLEANER'S ROOM	1.700 x 2.000	3.40
12	U14	STAFF TOILET	1.700 x 2.475	4.21
13	U15.1	PUBLIC TOILETS (Male)	5.850 x 4.675	27.32
14	U15.2	PUBLIC TOILETS (Female)	4.100 x 5.550	23.50*
15	U16	MESS ROOM	5.280 x 6.100	32.21
16	U18.1	DB ROOM	8.100 x 7.085	53.74*
17	U18.2	DB ROOM	6.000 x 7.065	41.24*
18	U19.1	ECS PLANT ROOM (ECS)	50.350 x 20.740	803.05*
19	U19.2	ECS PLANT ROOM (ECS)	53.300 x 20.740	804.05*
20	U22	SIGNALLING EQUIPMENT ROOM (SER)	6.820 x 10.715	72.60
21	U23	TELECOM EQUIPMENT ROOM (TER)	5.000 x 10.715	53.58
22	U24	UPS ROOM for S&T	4.400 x 10.715	46.72*
23	U46	HANDICAP TOILET	1.750 x 2.250	3.94
24	U47	PD AREA	32.25 x 20.00	637,26*

ELECTRICAL & S&T SCHEDULE											
CUT OUT NUMBER	PURPOSE	SIZE (M)	AREA(Sq.M)	CUTOUT POSITION							
ES10	ELECTRICAL SHAFT & CUTOUT- 2NOS	1.00X3.00	3.00	FLOOR							
E24	BATTERY RACK - 4NOS.	0.20X0.20	0.04	FLOOR							
E25	2NOS. CUTOUT FOR BMS/ECS	0.30X0.30	0.09	FL00R							
E26	ELECTRICAL CUTOUT	1.00X0.50	0.50	FLOOR							
E29	TVS ELECTRICAL CUT OUT	1.00X1.50	1.50	FL00R							
S6	S & T SHAFT & CUT OUT	1.90X0.63	1.20	FL00R							

Y OF ON LTD.	GENERAL NOTES: 1. ALL DIMENSIONS ARE IN MILLIMETERS. 2. ALL DIMENSIONS ARE TO BE READ AND NOT MEASURED.			REVISIONS							APPROVAL BY DMRC			
	3. ANY DISCREPANCIES MUST BE BROUGHT TO THE NOTICE OF THE DMRC BEFORE EXECUTION OF THE WORK AT SITE. 4. THIS DRAWING MUST BE READ IN CONJUNCTION WITH ALL RELEVANT										DMRC APPROVAL	MGR/ARCH	DY CA (UG)-III	CAVARCH
PROPERTY OF RPORATION L	ELECTRICAL AND TRA	IUCTURAL, PLUMBING & FIRE FIGHTING, FFIC MANAGEMENT DRAWINGS. ILL & LINTEL LEVELS ARE MEASURED NISHED LEVELS.									DY CSTE/TELECOM	- CSTE-I	DY CE/DESIGN	CE/TECH
IS THE I	RI	REFERENCE DRAWINGS									DY CSTE/AFC	03124	ED/S&T	CSO
THIS DRAWING IS THE DELHI METRO RAIL CO	Drg. No.	Description									DY CSTE/SIGNALLING	CSTE-III	GM/O	GM/M
THIS DE											DY CE/PLANNING	DY CEE/E&M	DY CEE/ECS	ED/ELEC -II
			REV	PARTICULARS	DRN.	CHD.	VER.	DATE	ISSUE DATE	REV. FOR CONSTRUCTION	DY CEE/(E)UG-TR	CGM(E) UG-TR	PM	СРМ

Authorised Signatory for DDC. Certified that this document has been designed and checked in accordance with DDC Quality Assurance Plan. JP/EW/1B/DDC01 Project Manager Architecture
Design In-charge/ Coordinator Structure
Design In-charge/ Coordinator Design In-charge/ Coordinator

DETAIL DESIGN CONSULTANT (DDC) FOR CIVIL, ARCHITECTURAL & BUILDING WORKS OF TWO UNDERGROUND STATION (CHOTI CHOUPAR & BADI CHOUPAR), SHAFT AND TUNNELS OF PHASE 1B OF JAIPUR METRO



	DELHI METRO RAIL CORPORATION LTD. Metro Bhawan , Fire Brigade Lane, Barakhamba Road, New Delhi-110001
┨ `	Metro Bhawan , Fire Brigade Lane, Barakhamba Road, New Delhi-110001

DESCRIPTION

BASIC BATTEN LUMINARIES (SIMILAR TO PHILIPS CATALOGUE NO. TIMS 122 2X28 H5 OR KESSLEC CATALOG.

BASIC BATTEN LUMINARIES (SIMILAR TO PHILIPS CATALOGUE NO. NORALUX 2X28 HF) FOR TILD FLUORESCENT LAMP (T5 LAMP)

BASIC BATTEN LUMINARIES (SIMILAR TO PHILIPS CATALOGUE NO. TIME 127 / 1X28 OR KESSLEC CATALOGUE NO. TIME 127 / 1X28 OR KESSLEC CATALOGUE NO. TIME 127 / 1X29 W FW H1 HT REUS ENAMELED REFLECTOR) FOR TILD FLUORESCENT LAMP (T5 LAMP)

EFFOLNT, LOW CLARE, SURELCE MOUNTED LUMINARIES (SIMILAR TO PHILIPS CATALOGUE NO. MFF 922 / 1 X 70W)

WITH INTEGRAL CEAR, ELECTROCHEMICALLY BRIGHTENED AND ANOUZED HOP FURTH YALUMINA REFLECTOR OF ASYMMETRICAL TYPE.

BATTEN LUMINARIES (SIMILAR TO PHILIPS CATUGUE, NO, TCW 450 /1/12/8 OR KESELEC CATUGS NO, RAILUX 13/28 HF) FOR "TL"O FLUORESCENT LAMP (TS LAMP)
RECESSED CIRCULAR DOWN LIGHT LUMINARIES (SIMILAR TO PHILIPS CATALOGUE,NO FBH 145 / 218 OR KESELEC CATALOGUE,NO FBH 145 / 218 OR KESELEC

MIRROR OPTIC, RECESSED MOUNTED LUMINARIES (SIMILAR TO PHILIPS CATALOGUE.NO TBS 255 TCS 228 OR KESELEC CATALOG NO.PHARMA 2X28 HF) MIRROR OPTIC RECESS MOUNTED LUMINARIES (SIMILAR TO PHILIPS CATALOGUE.NO TBS 669 / 228 D6 OR KESELEC CATALOG NO.CT LUX 2X28 HF) MIRROR OPTIC RECESS MOUNTED LUMINARIES
(SIMILAR TO PHILIPS CATALOGUE.NO TBS 669 / 128 D6 OR KESELEC CATALOG NO.CT LUX DL 1X28 HF)

RESERVE CAPACION CONTROL TO AN ELECTRIC PHYSICAL
6/16A 1 PHASE 6PIN MODULAR TYPE SOCKET OUTLET

CATALOG NO.NOVA 2X18 (G))

11 P1 👗 32A 3 PHASE 5PIN INDUSTRIAL SOCKET OUTLET(IP65) 12 P2 👗 16A 1 PHASE 3PIN INDUSTRIAL SOCKET OUTLET(IP54)

15 EM & 6/16A 1 PHASE 6PIN MODULAR TYPE SOCKET OUTLET
16 - DISTRIBUTION BOARD

DESCRIPTION

PHASE 1B JAIPUR METRO PROJECT

STATION: CHOTI CHOUPAR

14 AD 🕍 ADVT. POINT

DRAWING TITLE: ELECTRICAL LAYOUT CONCOURSE LEVEL

DRAWN BY: SURJE	ET	CHECKED BY: H.O.B			VERIFIED BY: LRS		C01	
DATE:	REV:	GRAPHICAL SCALE:		STATUS: FOR TENDER		//1B/DE	뒫	
31-03.2015	R0	1:150					RICAL	
DRAWING NUMBER:		SHEET NO.	SHE	ET SIZE	ORDER N°	🕍	ᇤ	
JP-TD-	1	1 OF 4	UNE A1		P36-0017	9	<u> </u>	

