LEGEND:

SYMBOL	LUMINAIRE REFERENCE	DESCRIPTION
	A1	1x11.3W CEILING RECESSED ADJUSTABLE WIDE BEAM DOWNLIGHT
	A2	1x11.3W CEILING RECESSED ADJUSTABLE MEDIUM BEAM DOWNLIGHT
	A3	1x3W IP RATED CEILING RECESSED ADJUSTABLE WIDE BEAM PUKLIGHT
	A4	1x11.3W IP RATED CEILING RECESSED ADJUSTABLE WIDE BEAM DOWNLIGHT
	A5	1x3W CEILING RECESSED ADJUSTABLE WIDE BEAM PUKLIGHT
	A6	1x18W CEILING RECESSED DOWNLIGHT
	B1	1x14.4W LINEAR LED STRIPS INTEGRATED INTO COVES
	C1	3x14W CEILING SUSPENDED DECORATIVE LIGHT
	C2	1x20W CEILING SUSPENDED DECORATIVE LIGHT
	C3	1x20W CEILING SUSPENDED DECORATIVE LIGHT
	C4	1x14W CEILING SUSPENDED DECORATIVE LIGHT
	C5	1x14W CEILING SUSPENDED DECORATIVE LIGHT
	E1	1x1W SHELF INTEGRATED ADJUSTABLE PUKLIGHT
	E2	1x1W NICHE INTEGRATED PUKLIGHT
	E3	1x7.2W SHELF INTEGRATED LINEAR LED
	I2	1x14 TABLE MOUNTED DECORATIVE LIGHT
	I3	1x14 FLOOR MOUNTED DECORATIVE LIGHT
	I4	1x14 TABLE MOUNTED DECORATIVE LIGHT
	J1	1x7.2 LINEAR LED STRIP INTEGRATED INTO FURNITURE

LEGEND:

SYMBOL	DESCRIPTION
	ONE GANG ONE WAY 6A SWITCH
E	1 GANG 6A SWITCH (EMERGENCY)
D	2x28W T5 LUMINARE
DE	2x28W T5 LUMINARE (EMERGENCY)
	1 WAY LOOP
	1 WAY LOOP (EMERGENCY)
	LIGHTING & POWER DISTRIBUTION BOARD (LPDB)
	LED LIGHT (EMERGENCY)
	DOWN LIGHT
	UP-LIGHT (FLOOR MOUNTED)

LEGEND:

SYMBOL	LUMINAIRE REFERENCE	DESCRIPTION
	A1	1x10.7W CEILING RECESSED ADJUSTABLE WIDE BEAM DOWNLIGHT
	A1a	1x10.7W CEILING RECESSED ADJUATBLE WIDE BEAM DOWNLIGHT
	A6	1x14.8W CEILING RECESSED DOWNLIGHT
	A7	1x21.6W CEILING RECESSED ADJUSTABLE MEDIUM BEAM DOWNLIGHT
	A8	1x12.4W CEILING RECESSED MEDIUM BEAM ADJUSTABLE DOWNLIGHT
	A9	1x30W CEILING RECESSED DOWNLIGHT
	B1	1x14.4W LINEAR LED STRIPS INTEGRATED INTO COVES
	C6	1x500W CEILING SUSPENDED DECORATIVE LIGHT
	C7	1x100W CEILING SUSPENDED DECORATIVE LIGHT
	C8	1x100W CEILING SUSPENDED DECORATIVE LIGHT
	E3	WALL MOUNTED DECORATIVE LIGHT
	G1	1x1W FLOOR DEEP RECESSED NARROW BEAM UPLIGHT

LEGEND:

SYMBOL	LUMINAIRE REFERENCE	DESCRIPTION
	C1	1x60W TREE SUSPENDED DECORATIVE FIXTURE
	I1	1x3W SPIKE MOUNTED UPLIGHT
	I2	1x10W SPIKE MOUNTED UPLIGHT
	I3	1x20W LINEAR LED SURFACE MOUNTED STRIP LIGHT ENCASED IN A CHANNEL
	I4	1x23W SURFACE MOUNTED DECORATIVE GLOBES
	F1	1x18W TREE CLAMPED SURFACE MOUNTED ADJUSTABLE SPOT LIGHT
	F2	1x18W TREE CLAMPED SURFACE MOUNTED ADJUSTABLE SPOT LIGHT
	F3	1x18W TREE CLAMPED SURFACE MOUNTED ADJUSTABLE SPOT LIGHT WITH GOBO
	G1	1x28W GROUND BURIED LINEAR ASSYMETRIC WALL GRAZER
	G2	1x70W GROUND BURIED FLOOD BEAM UPLIGHT WITH ACCESSORIES
	J1	1x14.4 WFURNITURE INTEGRATED LINEAR LED LIGHT

LEGEND:

SYMBOL	DESCRIPTION
	6A SINGLE SWITCHED SOCKET OUTLET
2	6A TWIN SWITCHED SOCKET OUTLET OUTLET
	6/16A SINGLE SWITCHED SOCKET OUTLET
2	6/16A SINGLE SWITCHED SOCKET OUTLET
	6A SINGLE SWITCHED SOCKET OUTLET ON UPS
2	6A TWIN SWITCHED SOCKET OUTLET ON UPS
	6/16A SINGLE SWITCHED SOCKET OUTLET ON UPS
2	6/16A TWIN SWITCHED SOCKET OUTLET ON UPS
	6/16A UN-SWITCHED SOCKET OUTLET
	6/16A UN-SWITCHED SOCKET OUTLET
	6/16A UN-SWITCHED SOCKET OUTLET ON UPS
	ISOLATOR
	TELEPHONE POINT (RJ11)
	DATA POINT (RJ45)
	ONE GANG ONE WAY 6A SWITCH
	CCTV CAMERA
	JUNCTION BOX

SCHEMATIC LEGEND:-

SYMBOL	DESCRIPTION
	DIESEL GENERATOR
	TRANSFORMER
	FEEDER PILLAR
	VCB/SF6
	PANEL EARTHING
	BUSBARS
	TAP OFF UNIT
	SURGE PROTECTION DEVICE
	SURGE PROTECTION DEVICE IN ENCLOSURE
	BUSBARS END CAP
	CURRENT TRANSFORMER
M	M- METER SHALL DISPLAY FOLLOWING PARAMETERS kWH, PF, 3ø V, 3ø I.
UM	UTILITY METER
R Y B	PHASE INDICATOR
ON OFF TRIP	ON/OFF/TRIP OF BREAKER INDICATION
ON OFF	ON/OFF ISOLATOR INDICATOR
	FUSE
	MCB
	NEUTRAL LINK
	MCCB
	MCCB IN ENCLOSURE
	MOTORISED MCCB
M	MOTORISED & DRAW-OUT ACB
	DRAW OUT ACB
	FIXED ACB
	SWITCH FUSE UNIT
	ISOLATOR WITHIN PANEL
	THREE PHASE ISOLATOR
DOL	DOL
Y/Δ	STAR DELTA
SS	SOFT STARTER
JB	JUNCTION BOX
N 2 1	AUTO TRANSFER SWITCH
	RCBO
	RCCB
	SINE WAVE INVERTER
BATTERY	BATTERY
ESPB	EMERGENCY STOP PUSH BUTTON
SS / DOL / Y/Δ	CONTROL PANELS LOCATED NEAR EQUIPMENT
SITC	SUPPLY, INSTALLATION, TESTING & COMMISSIONING

STANDARD NOTES :

1. THE INSTALLATION SHALL GENERALLY BE CARRIED OUT IN CONFORMITY WITH THE REQUIREMENTS OF THE INDIAN ELECTRICITY RULES, 1956 LATEST EDITION CEA REGULATION 2010 AS AMENDED FROM TIME TO TIME, AND ALSO THE RELEVANT REGULATIONS OF THE ELECTRICAL SUPPLY AUTHORITY.
2. GUIDANCE ON ELECTRICAL INSTALLATION WORKS SHALL BE FROM THE INDIAN NATIONAL ELECTRICAL CODE [NEC] 2011 (SP 30:2011) IN TERMS OF:
   2.1. STANDARD GOOD PRACTICE,
   2.2. RECOMMENDATIONS RELATING TO SAFETY
   2.3. GENERAL SAFETY PROCEDURES
   2.4. ETC
3. CABLE COLOR IDENTIFICATION SHALL BE AS PER NEC 2011, PART 1, TABLE 3/4.
4. ALL MATERIALS, FITTINGS, EQUIPMENT AND THEIR ACCESSORIES, ETC, USED IN THIS ELECTRICAL INSTALLATION SHALL CONFORM TO INDIAN STANDARDS WHEREVER THEY EXIST. IN CASE AN INDIAN STANDARD DOES NOT EXITS, THE MATERIALS AND OTHER ITEMS SHALL BE COMPLIED LATEST IEC CODE.
5. SUPPLY CHARACTERISTICS:
   5.1. VOLTAGE: 415/240V (±10%) AC SUPPLY
   5.2. FREQUENCY: 50Hz (tolerance governed by Indian Electrical Rules)
   5.3. EARTHING: TN-S
6. THE BUILDING SHALL BE LOCATED IN MUMBAI WHICH IS CLASSIFIED AS A SEISMIC ZONE 3 AREA.
7. UNLESS OTHERWISE EXEMPTED UNDER THE INDIAN ELECTRICAL RULES, THE WORK ON THE ELECTRICAL INSTALLATION SHALL BE CARRIED OUT UNDER THE SUPERVISION OF A PERSON HOLDING A CERTIFICATE OF COMPETENCY ISSUED BY A RECOGNIZED AUTHORITY. THE WORKMEN SHALL ALSO HOLD THE APPROPRIATE CERTIFICATES OF COMPETENCY.
8. DO NOT SCALE THE DRAWINGS.
9. ALL ELECTRICAL CABLING SHALL BE FR/FS PH120.
10. ALL BUILDING SERVICES DRAWINGS TO BE READ IN CONJUNCTION WITH ALL OTHER DISCIPLINES DRAWINGS, SCHEDULES AND SPECIFICATIONS. SHOULD ANY DISCREPANCIES BE FOUND WITH THIS DRAWING AND ANY OTHER ASSOCIATED DRAWINGS/SPECIFICATIONS/REPORT THIS SHOULD BE BROUGHT TO THE ATTENTION OF THE LODHA IMMEDIATELY.
11. THIS DRAWING SHALL ONLY BE USED FOR THE SPECIFIC SERVICES INTENDED.
12. UNLESS OTHERWISE STATED ALL DIMENSIONS IN MILLIMETERS.
13. DIMENSIONS TO BE CHECKED ON SITE BEFORE ANY WORK IS PUT IN HAND OR PREFABRICATED.
14. FINAL ACCESS AND SETTING OUT OF SERVICES TO BE AGREED WITH ARCHITECT.
15. ALL POWER OUTLETS FOR APARTMENTS TO BE COORDINATED BY THE CONTRACTOR WITH FINAL INTERIOR DESIGN LAYOUT.
16. FINAL LOCATION OF ALL FITTINGS TO BE CO-ORDINATED BY THE CONTRACTOR WITH THE FINAL EQUIPMENT LAYOUTS & FINAL LAYOUTS ISSUED BY LANDSCAPE, INTERIOR DESIGN & ARCHITECT.

EMC SPECIFIC NOTES :

1. EMC ZONING FOR THE PROJECT
   a. THE PURPOSE OF EMC ZONING IS TO DIVIDE THE DEVELOPMENT INTO DIFFERENT AREAS ON THE LIKELY ELECTROMAGNETIC PHENOMENA, WHICH WILL BE ENCOUNTERED BY THE ELECTRONIC AND ELECTRICAL EQUIPMENT INSTALLED AND LOCATED WITHIN THE BUILDING.
   b. FOR THE PURPOSES OF THIS PROJECT APARTMENT AREAS SHALL BE CLASSIFIED AS A "LIGHT INDUSTRIAL / COMMERCIAL / RESIDENTIAL" EMC ENVIRONMENT.
   c. THE CONTRACTOR SHALL BE OBLIGED TO ENSURE THE EMC CHARACTERISTICS FOR EACH ITEM OF EQUIPMENT PROPOSED FOR THIS PROJECT DOES NOT OFFEND THE PRESCRIBED LIMITS IN THE GENERIC STANDARDS AND PRODUCT CODES NOTED BELOW:
      - IEC 61000-6-1
      - IEC 61000-6-3
      - EQUIVALENT PRODUCT CODES
2. THE STANDARDS ABOVE HIGHLIGHT THE MINIMUM TEST STANDARDS REQUIRED TO ENSURE THE PROCURED EQUIPMENT WILL MEET MINIMUM REQUIREMENTS FOR THE LOCAL EMC ENVIRONMENT.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THEIR EQUIPMENT SUPPLIERS DOCUMENTATION DEMONSTRATES COMPLIANCE WITH EMC EMISSIONS/IMMUNITY BASED ON RELEVANT STANDARDS ABOVE AND SHALL BE RESPONSIBLE FOR OBTAINING, COLLATING AND CHECKING DECLARATIONS OF CONFORMITY (DOC) FOR ALL ITEMS ITEM OF EQUIPMENT BEING INSTALLED.
4. THE CONTRACTOR SHALL RESPONSIBLE FOR ENSURING BUILDERS WORKS AND SHOP DRAWINGS, AS WELL AS THE PLANNING AND EXECUTION OF THE ENTIRE WORKS CONFORM TO IEC 61000-5-7 FOR EMC INSTALLATION AND MIGRATION GUIDELINES.

ABBREVIATIONS:-

AFFL	ABOVE FINISHED FLOOR LEVEL
UPS	UNINTERRUPTIBLE POWER
LPDB	LIGHTING POWER DISTRIBUTION BOARD
ELPDB	EMERGENCY LIGHTING POWER DISTRIBUTION BOARD
FTTH	FIBER TO THE HOME
VDP	VIDEO DOOR PHONE
DTH	DIRECT TO HOME
WP	WEATHER PROOF
NTS	NOT TO SCALE

SMALL POWER SPECIFIC NOTES :

1. THE ELECTRICAL INSTALLATION WITHIN THE DEVELOPMENT SHALL BE FULLY IN ACCORDANCE WITH NEC 2011.
2. UNLESS OTHERWISE AGREED WITH LODHA ALL CONDUITS SHALL BE EMBEDDED IN THE STRUCTURE, SURFACE RUNS OF CABLE CONTAINMENT WILL NOT BE ALLOWED.
3. THE LOCATION OF POWER POINTS SHOWN ARE INDICATIVE. PRIOR APPROVAL SHALL BE TAKEN FROM CLIENT / ARCHITECT BEFORE INSTALLATION.
4. WIRES FOR DIFFERENT PHASES SHALL NOT RUN IN THE SAME CONDUIT.
5. FINAL MOUNTING HEIGHTS FOR THE ELECTRICAL OUTLETS WILL BE AGREED WITH THE ARCHITECT.
6. THE NECESSARY CHIPPING FOR LAYING OF CONDUITS, FIXING OF SOCKETS SHALL BE UNDERTAKEN BY THE CONTRACTOR.
7. THE CONTRACTOR SHALL CO-ORDINATE WITH OTHER SYSTEM CONTRACTORS LIKE PLUMBING, SPRINKLER, HVAC ETC. DURING INSTALLATION / LAYING OF ELECTRICAL ACCESSORIES / CONDUIT IN THE WALL / PARTITION / CEILING.
8. THE CONTRACTOR SHALL MAKE ALLOWANCE FOR SEISMIC EXPANSION / BUILDING EXPANSION JOINTS TO ALL CABLE CONTAINMENT THAT CROSSES SEISMIC / BUILDING EXPANSION JOINTS. PLEASE REFER TO ARCHITECTURAL DRAWINGS FOR ALL SEISMIC EXPANSION JOINT LOCATIONS. JOINTING OF ELECTRICAL CABLES SHALL NOT BE PERMITTED. IF CABLING IS DAMAGED DURING INSTALLATION IT SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.
9. ALL CABLE PENETRATIONS THROUGH WALLS, FLOORS, CEILING ETC SHALL BE FIRE SEALED TO THE DEGREE OF FIRE RESISTANCE OF THE ELEMENT CONCERNED (BOTH AROUND THE CABLE CONTAINMENT AND WITHIN THE CABLE CONTAINMENT).
10. ALL LOAD ABOVE 1KW SHALL BE CONTROLLED VIA ON ISOLATOR SWITCH OR MCB.
11. ALL CABLING SHALL BE FR/FS PH120.
12. ALL PLUGS AND SOCKET SHALL BE OF 3 PIN TYPE.
13. SOCKET OUTLETS SHALL INCORPORATE AUTOMATIC SCREENING ON WITHDRAWAL OF PLUG.
14. CLEARANCE IN FRONT OF PANEL BOARDS SHALL BE 1000MM MINIMUM.
15. SAFETY SIGNAGE SHALL BE INSTALLED AT ALL THREE PHASE PANELS AND AT SWITCH PLATES CONTAINING MIXED PHASES WARNING OF "DANGER 415 VOLTS".
16. THE WIRING OF THE INSTALLATION SHALL ENSURE THE NEUTRAL IS NEVER BROKEN BUY A FUSE, SWITCH, MCB ETC.
17. ALL NON-ELECTRICAL METALWORK INCLUDING METAL PIPES, SINKS, TANKS, MECHANICAL EQUIPMENT ETC SHALL BE BONDED TOGETHER AND EARTHED.

CONTAINMENT SPECIFIC NOTES :

1. CONDUITS SHALL COMPLY WITH IS 14930 (PART 1). THE MINIMUM ACCEPTABLE CONDUIT SIZE SHALL BE 20mmø. STEEL CONDUITS SHALL BE TO IS 9537 (PART 2). PVC CONDUIT SHALL CONFORM TO RELEVANT INDIAN STANDARDS.
2. A DRAW WIRE SHALL BE INSTALLED IN ALL CONDUITS.
3. ALL CABLING SHALL BE MECHANICALLY PROTECTED AND SUPPORTED ALONG ITS ENTIRE LENGTH SUCH THAT IT DOES NOT SUFFER MECHANICAL STRESS AND SUPPORTS ARE PROVIDED SUCH THAT CABLING WILL NOT BE DAMAGED DUE TO THEIR OWN WEIGHT.
4. LOW VOLTAGE CIRCUITS SHALL BE SEPARATED FROM EXTRA-LOW VOLTAGE CIRCUITS.
5. FIRE ALARM AND EMERGENCY LIGHTING CIRCUITS SHALL BE SEPARATED FROM ALL OTHER CABLES AND FROM EACH OTHER.
6. ALL METALLIC CABLE CONTAINMENT SHALL BE BONDED. EMC BRAIDED STRAPS SHALL BE APPLIED ACROSS ALL JOINTS. WHERE CABLE IS SUPPLIED WITH ARMOUR THE ARMOUR SHALL BE SECURELY BONDED AT BOTH ENDS.
7. CIRCUITS FOR LIGHTING AND SMALL POWER SHALL NOT BE RUN IN THE SAME CONDUIT.
8. IN ALL CASES THE NEUTRAL AND EARTH CABLE ASSOCIATED WITH ANY CIRCUIT SHALL BE RUN IN THE SAME CONDUIT AS THE PHASE CONDUCTOR(S) FOR THAT CIRCUIT.
9. JUNCTION BOX SHALL BE PROVIDED IF MORE THAN TWO 90 DEGREE BENDS IN A SINGLE RUN OF PVC CONDUIT AND AS PER SITE CONDITION.
10. ALL PVC CONDUIT LAID CONCEALED IN CONCRETE FLOOR/CEILING SLAB TO BE MINIMUM 20mmø HMS PVC CONDUIT UNLESS OTHERWISE NOTED & FOR ALL EXPOSED USE G.I. CONDUIT.
11. FOR STRAIGHT RUNS OF CONDUIT , BACK BOX / PULL BOX TO BE PROVIDED FOR EVERY 10 METER.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING ACCURATELY DIMENSIONED RECORD DRAWINGS OF THE ENTIRE CONDUIT INSTALLATION. (AS PER IS 732, SECTION 26.5.5)
13. THE RADIUS OF EVERY CONDUIT BEND SHALL BE SUCH AS TO ALLOW COMPLIANCE WITH IS 732, SECTION 8.9.2.1 & 8.9.2.3. EMBEDDED CONDUITS SHALL BE INSTALLED SUCH THAT THE DIAMETER OF THE CONDUIT AND THE RADIUS OF EACH BEND DOES NOT SUFFER DAMAGE DURING INSTALLATION.
14. EMBEDDED CONDUIT SHALL BE POSITIONED FIRMLY BY TYING THE CONDUIT TO THE REINFORCEMENT BEFORE CONNECTING. WHEN SHUTTERS ARE REMAINS AFTER CONNECTING THE CONDUITS ENDS SHALL BE GIVEN SUITABLE ANTI-CORROSIVE TREATMENT & HOLES & CONDUIT OUTLET BOXES BLOCKED OFF BY PUTTIES OR CAPS TO PROTECT CONDUITS FROM BEING BLOCKED. ALL CONDUIT OPENING & JUNCTION BOX OPENING SHALL BE PROPERLY PROTECTED AGAINST ENTRY OF MORTAR, CONCRETE ETC DURING CONSTRUCTION.
15. CONDUITS WHEN CROSSING, SHALL CROSS AT RIGHT ANGLES.
16. THE CONTRACTOR SHALL OBSERVE THE FOLLOWING SPACING BETWEEN CABLE CONTAINMENT CONTAINING DIFFERENT SERVICES.

SEPARATION DISTANCES AS FOLLOWS



SCHEMATIC SPECIFIC NOTES :

1. THIS SCHEMATIC IS INDICATIVE OF THE TYPICAL INSTALLATION FROM EACH TRANSFORMER ONWARDS.
2. THE DRAWING SHALL BE READ IN CONJUNCTION WITH THE CONTRACT SPECIFICATION. IF A CONFLICT ARISES BETWEEN THE SPECIFICATION DOCUMENTS AND DRAWINGS THE CONTRACTOR SHALL ALLOW FOR THE MOST ONEROUS TASK DETAILED. FURTHER CLARIFICATION SHALL BE SOUGHT IN WRITING FROM THE CLIENT TO RESOLVE.
3. THE FINAL INSTALLATION POSITIONS SHALL BE CONFIRMED ON SITE AS PER APPROVED VFC SHOP DRAWINGS AND READ IN CONJUNCTION WITH THE FINAL CONSTRUCTION/CONTRACT ISSUE BUILDING AND EXTERNAL LAYOUTS ISSUED BY THE ARCHITECT AND STRUCTURAL ENGINEER.
4. ALL EQUIPMENT SUPPLIED AND INSTALLED SHALL MEET THE RELEVANT INDIAN AND IEC STANDARDS. COPIES OF THESE'S COMPLIANCE DOCUMENTS SHALL BE CONTAINED IN THE O&M MANUALS WITH THE APPROVED INSTALLATION DRAWINGS.
5. ALL WORKS TO BE DONE IN CONJUNCTION WITH THE PROJECT APPROVED PROGRAM OF WORKS.
6. CONTRACTOR TO CO-ORDINATE WITH GENERATOR CONTRACTOR FOR TESTING FULL ALLOWANCE FOR ACCEPTANCE OF MAINS TO GENERATOR CHANGEOVER OF THE SWITCHBOARD ACB'S SHALL BE MADE POWER FACTOR CORRECTION (PFC) & (AHC) UNIT TO BE DISCONNECTED FROM THE SUPPLY WHEN THE GENERATORS ARE RUN.
7. DIGITAL MULTI-PHASE METERS TO PROVIDE THE FOLLOWING, ALL ACCESSED THROUGH BUTTONS ON THE METER FASCIA FOR ENERGY INSTRUMENTATION METERING AT EACH OUTGOING WAY TO RECORD, VOLTAGE, CURRENT, POWER FACTOR, KW, KVA, KVAR, FREQUENCY, MAXIMUM & MINIMUM DEMAND. IN ADDITION TO THE ABOVE MAIN LV SWITCHBOARD SHALL BE PROVIDED WITH A DIGITAL MULTI-PHASE METER TO RECORD HARMONIC CURRENT, VOLTAGE AND FREQUENCY.
8. EACH SMDB PANEL SHALL BE FORM PROTECTION 3b, TYPE 2 ALL PANELS, COMPONENTS AND DEVICES TO BE RATED AS INDICATED ON DRAWINGS. THE GENERATORS SHALL CONTROL THE MAINS INCOMING AND GENERATORS ACB'S CLOSED/ON OPEN/OFF EACH ACB/MCCB REQUIRED TO BE REMOTELY OPERATED BY THE GENERATOR ELECTRONIC CONTROL PANEL (ECP) SHALL BE FITTED WITH VOLT FREE NORMALLY OPEN (N/O) AND NORMALLY CLOSED (N/C) SET OF 5A VOLT FREE CONTACTS AND INTEGRAL AUTOMATIC WINDING MOTORS TO ENABLE THE DEVICE TO BE CONTROLLED MULTIPLE TIMES.
9. THE MAIN BUSBARS SHALL BE FULLY RATED WITH 100% NEUTRAL.
10. THERE IS NO PROVISION TO PARALLEL THE STANDBY GENERATOR TO THE UTILITY SUPPLY. ELECTROMECHANICAL INTERLOCKING SHALL BE PROVIDED TO THE UTILITY AND GENERATOR INCOMING ACB'S. ALL ACB'S TO BE CONTROLLED SHALL BE PROVIDED WITH AUTOMATICALLY RECHARGING SPRING CONTROL MOTORS FED FORM THE LIVE SIDE OF THE RESPECTIVE INCOMING SUPPLY.
11. ALL EQUIPMENT AND PANEL WIRING SHALL BE APPROVED PRIOR TO ORDER AND MANUFACTURE THE CONTRACTOR ALL MAKE FULL ALLOWANCE AND CO-ORDINATION THIS ELEMENT OF THE WORKS, INCLUDING BUT NOT LIMITED TO, SUBMISSION OF PANEL CONTROL WIRING DRAWINGS FOR REVIEW,FACTORY ACCEPTANCE TESTING (FAT) FOR TEST AND SIGN OFF, WITNESS TESTING AND COMMISSIONING ON SITE.
12. CONNECTION TO MAIN PANELS SHALL BE ACHIEVED VIA TOP ENTRY. THE GENERATOR FEEDS SHALL BE BY FLEXIBLE CONDUCTORS PER PHASE AND NEUTRAL.
13. AT THE GENERATOR INCOMER OF THE ELECTROMECHANICAL INTERLOCK, THE CONTRACTOR SHALL PROVIDE PRE-DRILLED BUSBARS (OR EQUIVALENT) AND REMOVABLE GLAND PLATE FOR THE INSTALLATION OF THIS FLEXIBLE CABLING.
14. PROVIDE THE FOLLOWING MONITORING AT EACH ACB: GENERATOR, MAIN SUPPLY ON EACH MAIN LV SWITCHBOARD WITH APPROPRIATE FUTURE CONNECTION TO A BMS SYSTEMS. THE STATUS OF ALL ACB'S SHALL BE MONITORED AND REPORTED TO THE BMS 'OPEN', 'CLOSED', 'TRIPPED'. TRIPPED WILL RAISE AN ALARM.PHASE FAILURE RELAYS ARE REQUIRED TO MONITOR AND REPORT EACH MAINS SUPPLY STATUS ON THE SUPPLY SIDE OF THE INCOMING ACB – FOR EACH PHASE 'HEALTHY OR FAILED', 'FAILED STATUS WILL RAISE AN ALARM. ACB LOAD SIDE VOLTAGE DETECTION FOR EACH SECTION OF THE SWITCHBOARD. 'ACTUAL VOLTAGE'. NO VOLTAGE WILL RAISE AN ALARM.
15. ALL EQUIPMENT SUPPLIED UNDER THESE WORK SHALL COMPLY WITH EMC DIRECTIVE REQUIREMENTS.
16. ALL MAIN SWITCHGEAR SHALL BE 3 POLE WITH SOLID FIXED NEUTRAL UNLESS OTHERWISE STATED.
17. WHERE UTILITY AND OWNER EQUIPMENT OCCUPY THE SAME CLOSET, LOCKABLE METAL FENCING SHALL BE PROVIDED TO SECURE ACCESS TO UTILITY EQUIPMENT AND METERS.
18. CONTRACTOR TO ALLOW FOR CURRENT SURGE SUPPRESSORS – TO IEC 61643 -1 AT THE TAP OFF FROM BUILDING REBAR TO ISOLATE BODY EARTHING BAR & NEUTRAL EARTHING BAR FROM LIGHTNING PROTECTION PATH. UNITS TO COME WITH INDICATOR.
19. PROTECTION TRANSFORMERS FOR PROTECTION RELAYS SHALL CONFORM TO 15VA 5P10 CLASS PT. FOR METERING, CURRENT TRANSFORMERS SHALL CONFORM TO IS 2705/15VA AND ACCURACY CLASS 1.
20. REFER MECHANICAL, PLUMBING & FIRE PROTECTION EQUIPMENT SCHEDULE FOR TYPES OF STARTERS. CONTRACTOR TO QUOTE PRICES INCLUDING STARTERS AS PER EQUIPMENT SCHEDULE.
21. PROVISION TO BE MADE IN ALL PANELS SUCH THAT THEY SHOULD BE ABLE TO INTERFACE WITH FIRE ALARM PANELS.
22. EMERGENCY LIGHTING & POWER DB TO BE PROVIDED ALONG WITH BATTERY & INVERTER AS PER SCHEMATIC & SPECIFICATION.
23. CONTRACTOR TO PROVIDE ALL PANELS (INC HVAC/PLUMBING/FIRE PROTECTION/MLPT/GENERATOR BACKED PANELS) WITH N/O, N/C CONTACT TO ALLOW FOR INTERFACE TO FIRE ALARM SYSTEM.

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HEALTH AND SAFETY INFORMATION

IN ADDITION TO THE HAZARDS/RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING

CONSTRUCTION.

MAINTENANCE/CLEANING/OPERATION.

DECOMMISSIONING/DEMOLITION.

Notes

ARCHITECTURE REFERENCE DRAWING

SL.	DRAWING NO.	FROM	DATE	REV
-	-	-	-	-

STRUCTURAL REFERENCE DRAWING

SL.	DRAWING NO.	FROM	DATE	REV
-	-	-	-	-

MEP REFERENCE DRAWINGS

SL.	DRAWING NO.	FROM	DATE	REV
-	-	-	-	-

Key Plan



Rev	Description	Date	Drn	Ch'd
02	IFC	DEC 2015	JV	JV
01	IFC	NOV 2015	JV	JV
00	TENDER	OCT 2015	SS	JV

IFC

Status of drawing

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Architect ARCHITECT HAFEEZ CONTRACTOR
Project LODHA KOLSHET,THANE
Drg Title ELECTRICAL-GENERAL NOTES & LEGEND

Scales@A0 NTS
Drawn by JV
Checked by JV
Date DEC 2015

Job No. 033629
Drawing No. BH-ZSG-STD-E-4000
Rev 02

Save: C:\Users\JV\Desktop\033629_Lodha Lakeview Kolshet\Revit\033629_Lodha Lakeview Kolshet_Revit_Central_JV.rvt