



PLAN VIEW
SCALE 1:50
TWO TRANSFORMER SUBSTATION
SUBSTN SIZE 12600 x 4600
- INTERNAL DIMENSIONS

- LEGEND**
- RAISED FLOOR LINE
 - ▨ RAISED FLOOR AREA
 - 2X36W T8 FLUORESCENT LUMINAIRES WITH RUGGED ELECTRONIC BALLAST

NOTES TO BUILDER/CONTRACTOR

1. THE FOLLOWING EQUIPMENT IS TO BE SUPPLIED AND INSTALLED BY THE BUILDER/CONTRACTOR :
1 OFF COMPACT CONSUMER SWITCHBOARD, SIMILAR TO CLIPSAI TYPE 4C6F COMPLETE WITH 1 X 8A, 1 X 6A AND 5 X 1A MCCB.
5 OFF 2X36W T8 FLUORESCENT LUMINAIRES WITH RUGGED ELECTRONIC BALLAST. 2 OFF 2-WAY FULL PLATE LIGHT SWITCHES, 1 OFF 10A DOUBLE GENERAL PURPOSE OUTLET (GPO). ASSOCIATED PVC CONDUIT, FITTINGS AND CABLE FOR LIGHT AND POWER CIRCUITS AS REQUIRED.
2. THE CONTRACTOR SHALL WIRE THE LIGHTS AND GPO COMMENCING FROM THE SWITCHBOARD IN ACCORDANCE WITH THE REQUIRMENTS OF AS 3000 SAA WIRING RULES. PWA STAFF WILL WIRE THE SUPPLY TO THE SWITCHBOARD, INCLUDING INSTALLATION OF THE MAIN EARTH.
3. ALL ELECTRICAL EQUIPMENT MENTIONED ABOVE SHALL BE INSTALLED IN THE APPROXIMATE POSITION SHOWN, WHICH ARE DRAWN TO SCALE.

- MOUNTING HEIGHTS FOR THE EQUIPMENT SHALL BE :
- SWITCHES - 1500 FROM THE SUBSTATION FLOOR
 - GPO - 500mm FROM THE SUBSTATION FLOOR, DIRECTLY UNDER SWITCHBOARD OR IN CLOSE PROXIMITY.
 - SWITCHBOARD - 1800mm FROM SUBSTATION FLOOR
 - LIGHTS - ON SUBSTATION CEILING, IF CEILING HEIGHT IS GREATER THAN 3000mm, LIGHTS TO BE CHAIN SUSPENDED AT APPROX. 3000mm ABOVE SUBSTATION FLOOR.

4. ALL WIRING TO BE IN PVC CONDUIT , CONDUITS MAY BE EITHER SURFACE RUN OR CAST IN WALLS OR CEILINGS.
5. NO FIRE DETECTORS ARE REQUIRED IN THE SUBSTATION. IN BUILDINGS HAVING FIRE DETECTOR SYSTEMS, THE SUBSTATION IS NOT TO BE INCLUDED IN THE PROTECTED AREA.
6. LIGHT SWITCH IS TO INCORPORATE ELECTROMECHANICAL TIMER TO PROVIDE 3 X 8hr ON PERIODS AFTER INTIAL SWITCH ON AND OFF. SIMILAR TO CLIPSAI TYPE TC15/15/24. LOCATE TIMER NEAR PERSONNEL ENTRANCE AS PART OF LIGHT SWITCH.

NOTES TO POWER WATER STAFF

1. PWC STAFF TO PROVIDE POWER TO THE LIGHT AND POWER SWITCHBOARD. INSTALL A 63A HRC FUSE, (TO BE USED AS A FAULT CURRENT LIMITER FOR THE MCCB'S IN THE SWITCHBOARD) AS CLOSE TO THE LINE SIDE CONNECTIONS OF TRANSFORMER CIRCUIT BREAKER AS PRACTICAL. NOTE A MINIMUM 16sq.mm DOUBLE INSULATED CABLE SHALL BE WIRED FROM THE LINE SIDE OF THE TRANSFORMER CIRCUIT BREAKER TO THE 63A FUSE, THE LENGTH OF THE CABLE BEING NO GREATER THAN 500mm IN LENGTH. THIS SAME CABLE SHALL BE USED FROM THE 63A FUSE TO THE SWITCHBOARD. IF NECESSARY, INSTALL THE CABLE IN PVC CONDUIT FOR MECHANICAL PROTECTION. THE MAIN NEUTRAL TO BE SIZED TO THE ACTIVE CONDUCTOR AND THE MAIN EARTH 6sq.mm.
2. AT EACH ENTRANCE TO THE SUBSTATION, THE FOLLOWING SAFETY SIGN SHALL BE INSTALLED, ON THE OUTSIDE FACE OF THE DOOR. "DANGER HIGH VOLTAGE AUTHORISED PERSONS ONLY". THE NOTICES SHALL CONSIST OF BOLD LETTERS NOT LESS THAN 40mm HIGH.
3. THE FOLLOWING SIGNS SHALL BE INSTALLED ON THE INSIDE FACE OF EACH PERSONNEL DOOR: "EXIT" AND "CAUTION - OUTWARD OPENING DOOR OPEN WITH CARE."
4. AFTER INSTALLATION OF THE HV SWITCHGEAR, THE REMAINING OPEN SECTIONS OF THE HV PIT TO BE COVERED BY A PWC APPROVED PIT COVERING.
5. PWC STAFF TO INSTALL ONE HIGH PERFORMANCE DRY CHEMICAL FIRE EXTINGUISHER (eg 6A:80B:(E)) IN EACH SUBSTATION, ADJACENT TO ONE OF THE PERSONNEL DOORS.
6. THE EXTINGUISHERS SHOULD BE INSTALLED SUCH THAT EGRESS BY STAFF IN AN EMERGENCY WILL NOT BE IMPEDED. HOWEVER, FOR OPTION 2 SUBSTATIONS, THE EXTINGUISHER MUST NOT BE INSTALLED IN THE ENTRANCE CHAMBER.

NO	DESCRIPTION	DRN	DATE	CKD	APPD
4	UPDATE LIGHTING AND HV PIT COVER REQUIREMENTS	H.E.	SEP'20	B.C.	B.V.
3	TITLEBLOCK & DRAWING NUMBER FORMATTED	K.T.	FEB'19	C.C.	C.C.
2	NOTE 1 CHANGED	A.S.	JUN'08	R.C.	C.C.
1	NOTE 1 63A CHANGED TO 60A.NOTE 5 CHANGED.NOTE 6 WORD EGRESS CHANGED TO "EXIT"	K.I.	MAR'05	R.C.	C.C.



DES	I.PURVES	POWER STANDARD DRAWING	
DRN	G.R./A.D.	THREE TRANSFORMER INDOOR SUBSTATION SURFACE CHAMBER - OPTION 1 MISCELLANEOUS DETAILS	
CKD	S.LEACH		
APPD	F.ROBSON		
SCALE	1:50		
ISSUED	MARCH '98		
ALL DIM. IN mm		A3	DRAWING NUMBER S02-02-07-54
DRAFTING STANDARD TO A.S.1100		CAD PRODUCT - DO NOT AMEND MANUALLY	

