



**ONE TRANSFORMER SUBSTATION  
SIZE 5000 x 6800  
- INTERNAL DIMENSIONS**

**LEGEND**

- - - - - RAISED FLOOR LINE
- RAISED FLOOR AREA
- 54W T5 FLUORESCENT LUMINAIRE WITH RUGGED ELECTRONIC BALLAST (EQUAL TO TRIDONIC ATCO PC T5 OR EQUIVALENT)

**PLAN VIEW**

**NOTES TO BUILDER/CONTRACTOR**

5. THE FOLLOWING EQUIPMENT IS TO BE SUPPLIED AND INSTALLED BY THE BUILDER/CONTRACTOR:  
 1 OFF COMPACT CONSUMER SWITCHBOARD, SIMILAR TO CLIPSAL TYPE 4C11FD COMPLETE WITH 1 X 40A 10KA SINGLE POLE MAIN SWITCH, 1 X 10A 10KA SINGLE POLE LIGHTING RCD MCB, 1 X 16A 10KA SINGLE POLE GPO RCD MCB.  
 3 OFF 1 X 54W FLUORESCENT FITTINGS FITTED WITH RUGGED ELECTRONIC BALLAST EQUAL TO TRIDONIC ATCO PC INDUSTRY T5 OR SIMILAR, 2 OFF 2-WAY FULL PLATE LIGHT SWITCHES, 1 OF 10A DOUBLE GENERAL PURPOSE OUTLET (GPO). ASSOCIATED PVC CONDUIT, FITTINGS AND CABLE FOR LIGHT AND POWER CIRCUITS AS REQUIRED.

6. THE CONTRACTOR SHALL WIRE THE LIGHTS AND GPO COMMENCING FROM THE SWITCHBOARD IN ACCORDANCE WITH THE REQUIREMENTS OF AS 3000.

7. ALL ELECTRICAL EQUIPMENT MENTIONED ABOVE SHALL BE INSTALLED IN THE APPROXIMATE POSITION SHOWN.

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 SUSPENDED AT APPROXIMATELY 3000mm ABOVE SUBSTATION FLOOR.

8. ALL WIRING TO BE IN PVC CONDUIT , CONDUITS MAY BE EITHER SURFACE RUN OR CAST IN WALLS OR CEILINGS.

9. 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.

10. LIGHT SWITCH IS TO INCORPORATE ELECTROMECHANICAL TIMER TO PROVIDE 3 X 8hr ON PERIODS AFTER INITIAL SWITCH ON AND OFF. SIMILAR TO CLIPSAL TYPE 56SWT216. LOCATE TIMER NEAR PERSONNEL ENTRANCE AS PART OF LIGHT SWITCH.

1. THE CONTRACTOR SHALL PROVIDE POWER TO THE LIGHT AND POWER SWITCHBOARD. INSTALL A 63A HRC FUSE IN A TOP CONNECTED 63A "RED SPOT" FUSE BASE, CONNECTED TO THE LINE SIDE PALM OF THE TRANSFORMER CIRCUIT BREAKER. A MINIMUM 16sq.mm DOUBLE INSULATED CABLE SHALL BE WIRED FROM THE TRANSFORMER CIRCUIT BREAKER TO THE 63A FUSE, THE LENGTH OF THE CABLE BEING NO GREATER THAN 500mm. 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 SHALL ALSO BE A MINIMUM 16sq.mm DOUBLE INSULATED CABLE AND THE MAIN EARTH 6sq.mm.

2. EACH ENTRANCE TO THE SUBSTATION SHALL HAVE SAFETY SIGNS INSTALLED ON THE OUTSIDE FACE OF THE DOOR. REFER TO DWG. S02-2-7-04.

3. EMERGENCY EXIT SIGNS SHALL BE INSTALLED ON THE INTERNAL FACE OF ALL PERSONNEL DOORS. REFER TO DWG. No. S02-2-7-04.

4. AFTER INSTALLATION OF THE HV SWITCHGEAR, THE REMAINING OPEN SECTIONS OF THE HV PIT TO BE COVERED BY A GALVANIZED GRILL FLOOR. ALL PANELS SHALL BE EARTHED WITH 70sqmm YELLOW/GREEN INSULATED CABLE WITH ADEQUATE CABLE LENGTH TO REMOVE THE GRILL FLOOR TO THE NEAREST WALL WITHOUT THE REMOVAL OF THIS EARTH.

NO	DESCRIPTION	DRN	DATE	CKD	APPD
2	NOTES AND DIMENSIONS AMENDED	A.T.	JAN'14	A.T.	B.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.
<b>AMENDMENTS</b>					



DES	I. PURVES	POWER STANDARD DRAWING		
DRN	G.R./A.D.	<b>ONE TRANSFORMER INDOOR SUBSTATION SURFACE CHAMBER - OPTION 3 MISCELLANEOUS DETAILS</b>		
CKD	S. LEACH			
APPD	F. ROBSON			
SCALE	N.T.S.			
ISSUED	MARCH '98	<b>A3</b>	<b>DRAWING NUMBER</b>	<b>S2-2-7-58</b>
ALL DIM.	IN mm			
DRAFTING STANDARD TO A.S.1100		CAD PRODUCT - DO NOT AMEND MANUALLY		