**LEGEND:**

	W	WALL MOUNTED LAMPS
	P	LAMPS SUSPENDED FROM CEILING
	E	LAMPS WITH EMERGENCY LIGHTING UNIT
		LIGHTING SWITCH
	F/C	FAN CONTROL PANEL
	LRTU	LV MONITORING PANEL
		MCB BOARD
		300x300x200(D) RECESS AT TRENCH BOTTOM FOR SUMP PIT

K	CABLE TRENCH SIZE REVISED
J	SWAP POSITION OF MASTER CHECK METER AND BATTERY CHARGER, RECESS FOR SUMP PIT ADDED.
H	SYMBOLS, G.I. SLEEVE SIZE AND DEPTH OF CABLE TRENCH UPDATED. MASTER CHECK METER ADDED.
G	FUSE CUTOFF ADDED, DOOR, TRANSFORMER, HV SWITCHGEAR AND G.I. SLEEVE SIZE UPDATED. EMERGENCY LIGHTING ADDED.
F	CHAIN BOX ADDED AND CABLE TRENCH LADDER DELETED
E	UPDATED PHASE IDENTIFICATION, CABLE TRENCH LADDER AND E. LIGHTING ADDED
D	EMERGENCY LIGHTING UNIT DELETED. AIR INTAKE LOUVRE AND FAN CONTROL PANEL RELOCATED.
C	LRTU ADDED
B	GENERAL LAYOUT REVISION



REVS.	3.4.03	3.12.04	21.12.05	3.1.06	08.08.07	16.12.09	22.03.12	18.03.14	23.02.17	10.06.20	
INITIAL	A	B	C	D	E	F	G	H	J	K	L
	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	H.T.YU	H.T.YU	H.T.YU	

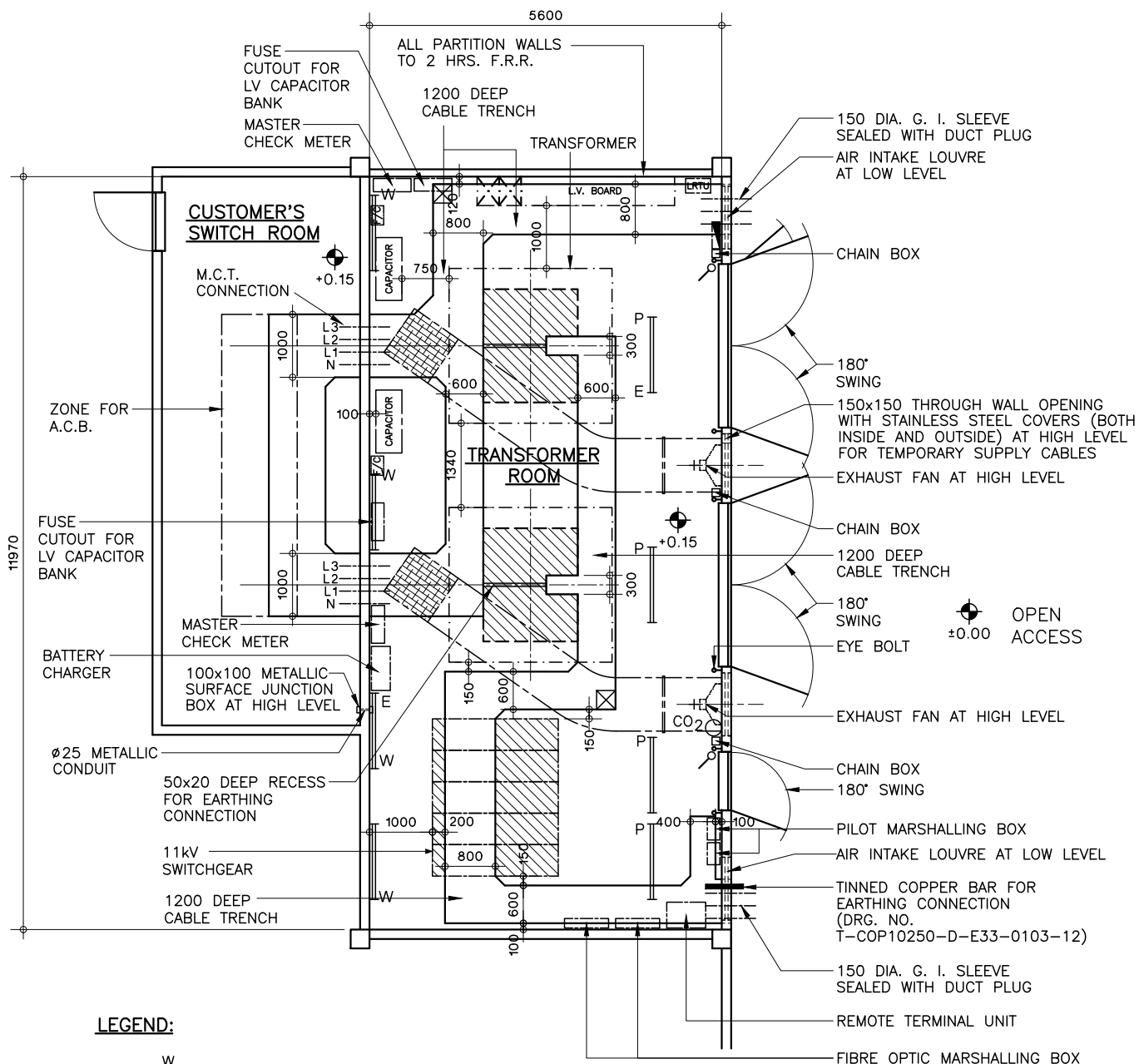
TITLE :

TYPICAL GROUND FLOOR SUBSTATION LAYOUT FOR ONE TRANSFORMER AND 11kV SWITCHGEAR

DRAWN: S. C. TO	DATE: 18-07-2002
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: 1 : 100 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 0 2 K A



K	UPDATED THE NAME OF CAPACITOR BANK
J	GENERAL LAYOUT REVISION
H	SYMBOL, G.I. SLEEVE SIZE AND DEPTH OF CABLE TRENCH UPDATED. MASTER CHECK METER ADDED.
G	FUSE CUTOUT ADDED, DOOR, TRANSFORMER, HV SWITCHGEAR AND G.I. SLEEVE SIZE UPDATED. EMERGENCY LIGHTING ADDED.
F	CHAIN BOX ADDED AND CABLE TRENCH LADDER DELETED
E	UPDATED PHASE IDENTIFICATION, CBAL TRENCH LADDER AND E. LIGHTING ADDED.
D	EMERGENCY LIGHTING UNIT DELETED. AIR INTAKE LOUVRE AND FAN CONTROL PANEL RELOCATED.
C	LRTU ADDED



REVS.	3.4.03	6.12.04	21.12.05	3.1.06	08.08.07	16.12.09	22.03.12	18.03.14	18.05.17	15.06.20	
INITIAL	A	B	C	D	E	F	G	H	J	K	L
	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	H.T.YU	H.T.YU	H.T.YU	

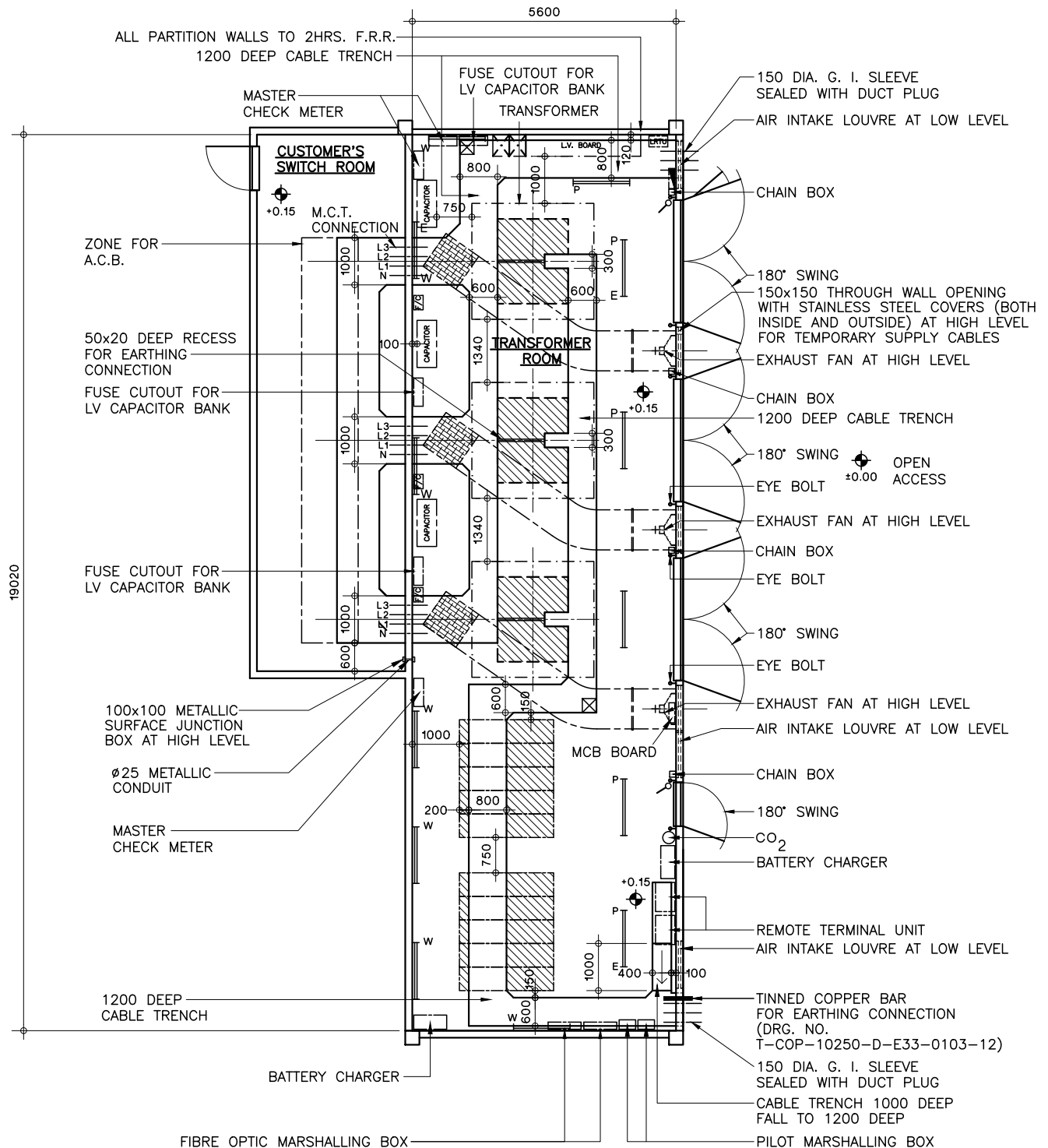
TITLE :

TYPICAL GROUND FLOOR SUBSTATION LAYOUT FOR TWO TRANSFORMERS AND 11kV SWITCHGEAR

DRAWN: S. C. TO	DATE: 19-07-2002
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: 1 : 100 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 0 3 K A

**LEGEND:**

	LIGHTING SWITCH (2-WAY/INTERMEDIATE SWITCHING CONTROL FOR MULTIPLE ENTRANCE DOORS)
	LAMPS SUSPENDED FROM CEILING
	WALL MOUNTED LAMPS
	FAN CONTROL PANEL

	LAMPS WITH EMERGENCY LIGHTING UNIT
	LV MONITORING PANEL
	MCB BOARD
	300x300x200(D) RECESS AT TRENCH BOTTOM FOR SUMP PIT

L UPDATED THE NAME OF CAPACITOR BANK



REVS.	3.4.03	30.11.04	21.12.05	3.1.06	13.4.06	13.8.07	16.12.09	23.03.12	18.03.14	23.02.17	15.06.20
INITIAL	A	B	C	D	E	F	G	H	J	K	L
	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	H.T.YU	H.T.YU	H.T.YU

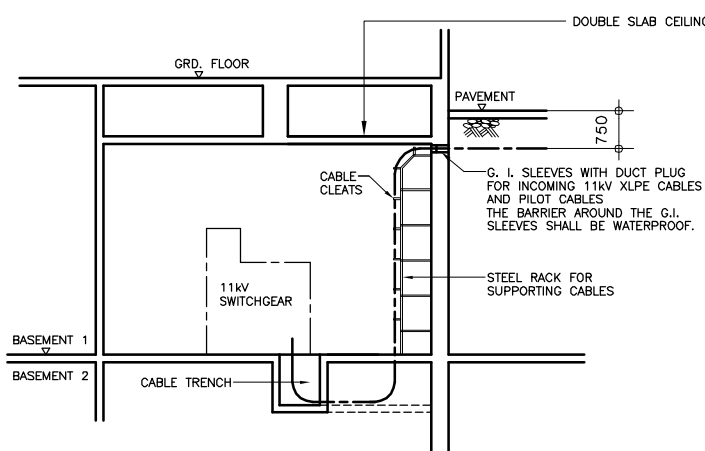
TITLE :

TYPICAL GROUND FLOOR SUBSTATION LAYOUT FOR THREE TRANSFORMERS AND 11kV SWITCHGEAR

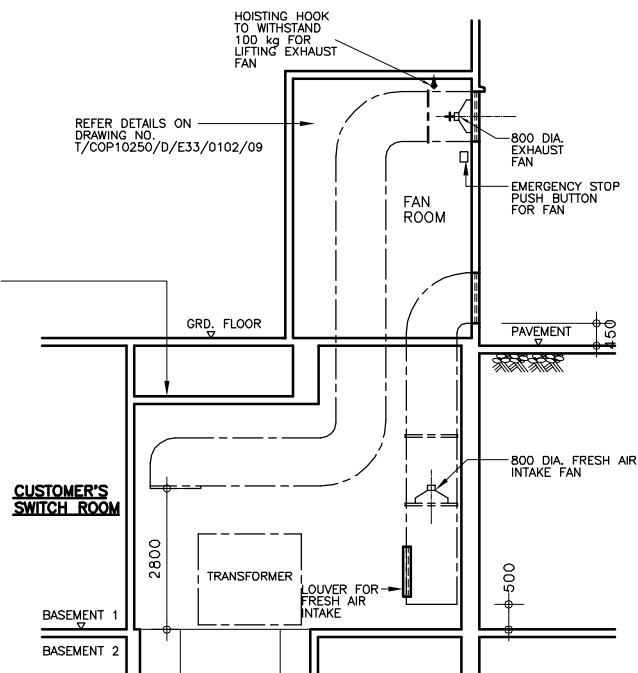
DRAWN: S. C. TO	DATE: 19-07-2002
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: 1 : 125 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

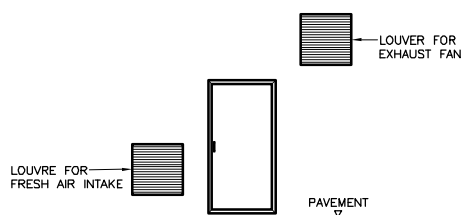
DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 0 4 L A



TYPICAL SECTIONAL VIEW OF CABLE RACK FOR BASEMENT SUBSTATION



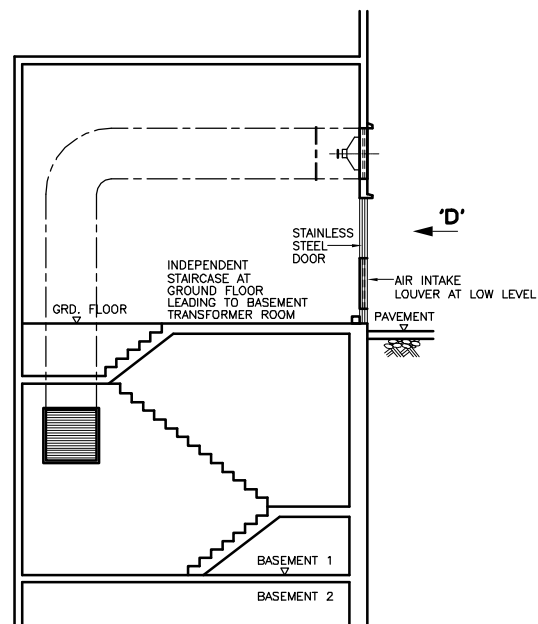
TYPICAL SECTIONAL VIEW OF AIR DUCTS FOR BASEMENT SUBSTATION



TYPICAL VENTILATION LOUVRE ELEVATION

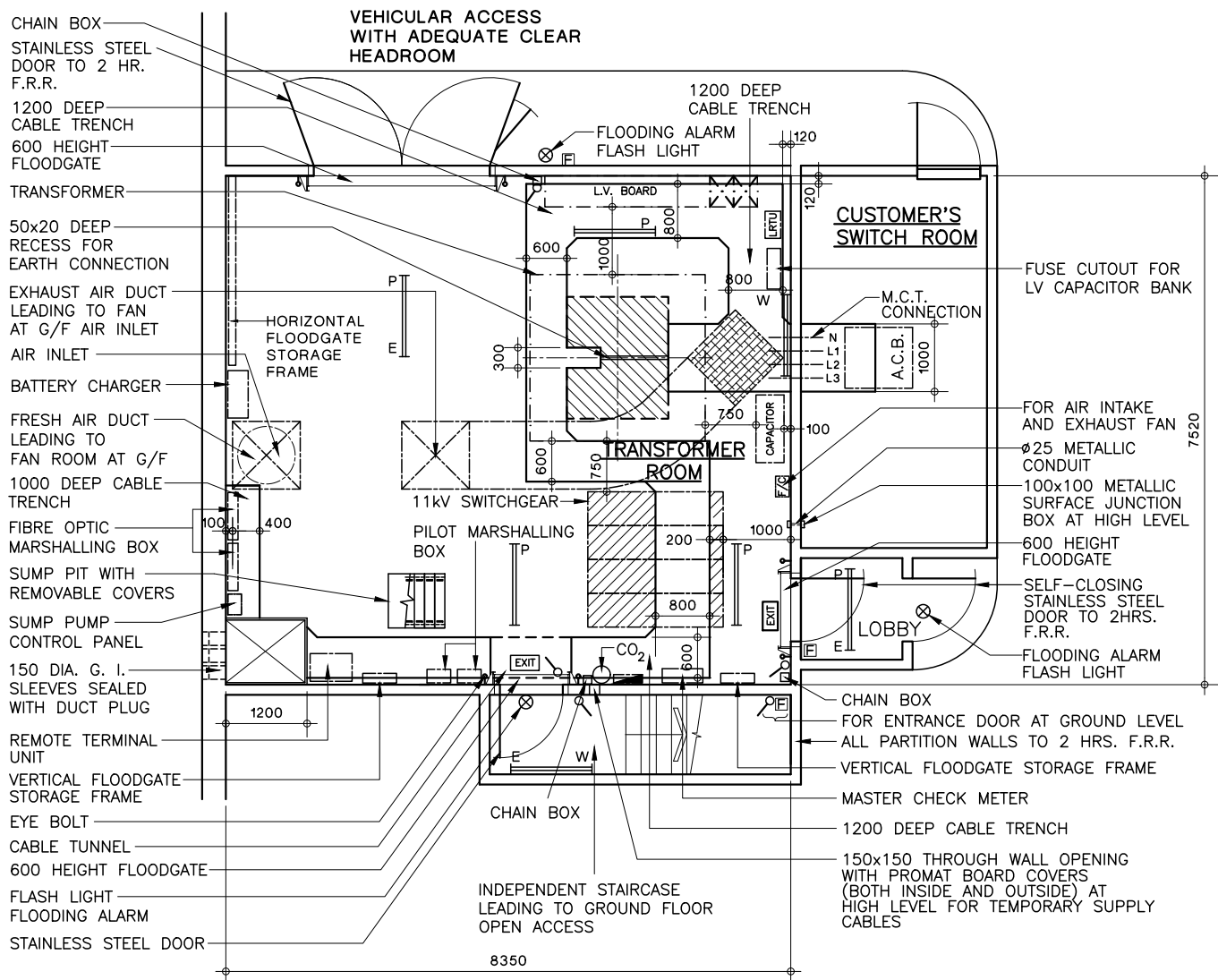
NOTE:

MECHANICAL VENTILATION SYSTEM SHALL BE INSTALLED TO ADEQUATELY VENTILATE THE ACCESS CORRIDOR AND STAIR LEADING TO BASEMENT SUBSTATION.



TYPICAL SECTION OF STAIRS FOR SUBSTATION ACCESS

F		WATERPROOF REQUIREMENT FOR G.I. SLEEVES ADDED				E		LOUVER LEVEL UPDATED.				D		SCALE CHANGED TO NOT TO SCALE								
C		DOUBLE SLAB CEILING ADDED				B		NOTES ADDED				A		VENT. AIR DUCT ADDED IN STAIRCASE								
<div>CLP 中電</div>						REVS.		14.09.04	13.08.07	08.01.10	22.03.12	18.03.14	23.02.17									
						INITIAL		K.C.C.	K.C.C.	K.C.C.	K.C.C.	H.T.YU	H.T.YU									
						TITLE :																
DRAWN: S. C. TO						DATE: 22-07-2002						TYPICAL BASEMENT SUBSTATION SECTIONS										
CHECKED: K. C. CHENG						APPROVED: W. C. HO																
SCALE: N. T. S.						SHEET(S) IN SET:																
ASSET MANAGEMENT						DRG. NO. T/COP10250/D/E33/0101/05/F/A																

**LEGEND:**

	WALL MOUNTED LAMPS
	LAMPS SUSPENDED FROM CEILING
	LAMPS WITH EMERGENCY LIGHTING UNIT
	LIGHTING SWITCH (2-WAY/INTERMEDIATE SWITCHING CONTROL FOR MULTIPLE ENTRANCE DOORS)
	FAN AUTO/MANUAL OPERATION SWITCH
	FAN CONTROL PANEL
	LV MONITORING PANEL
	MCB BOARD

K	FLOODGATE AND STORAGE FRAME ADDED
J	GENERAL LAYOUT REVISION
H	SYMBOLS, G.I. SLEEVE SIZE AND DEPTH OF CABLE TRENCH UPDATED. MASTER CHECK METER ADDED.
G	FUSE CUTOUT ADDED, DOOR, TRANSFORMER, HV SWITCHGEAR AND G.I. SLEEVE SIZE UPDATED
F	CHAIN BOX ADDED AND CABLE TRENCH LADDER DELETED
E	PHASE IDENTIFICATION UPDATED SECTIONAL VIEWS AND CABLE TRENCH LADDER ADDED.
D	FAN CONTROL PANEL FOR AIR INTAKE AND EXHAUST FAN RELOCATED
C	LRTU ADDED
B	GENERAL LAYOUT REVISION



REVS.	03.08.04	08.12.04	21.12.05	5.10.06	08.08.07	16.12.09	26.03.12	18.03.14	24.02.17	12.06.20	
INITIAL	A	B	C	D	E	F	G	H	J	K	L
	K.C.C	K.C.C	K.C.C	K.C.C	K.C.C	K.C.C	K.C.C	H.T.YU	H.T.YU	H.T.YU	

TITLE :

TYPICAL BASEMENT SUBSTATION LAYOUT FOR ONE TRANSFORMER AND 11kV SWITCHGEAR

DRAWN: S. C. TO	DATE: 22-07-2002
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: 1 : 100 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT	DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 0 6 K A
------------------	----------------------------------------------------

VEHICULAR ACCESS WITH ADEQUATE CLEAR HEADROOM

STAINLESS STEEL
DOOR TO 2 HRS.
F.R.R.

CHAIN BOX

600 HEIGHT
FLOODGATE

EYE BOLT

1200 DEEP
CABLE TRENCH

TRANSFORMER
HORIZONTAL
FLOODGATE
STORAGE FRAME

EXHAUST AIR DUCT
LEADING TO FAN
ROOM AT GROUND
FLOOR LEVEL

FRESH AIR DUCT
LEADING TO FAN
ROOM AT GROUND
FLOOR LEVEL

AIR INLET

BATTERY CHARGER

CABLE TRENCH
1200 DEEP

SUMP PUMP
CONTROL PANEL

REMOTE TERMINAL UNIT

SUMP PIT WITH
REMOVABLE COVERS

PILOT MARSHALLING
BOX

150 DIA. G. I.
SLEEVES SEALED
WITH DUCT PLUG

MASTER CHECK METER

VERTICAL FLOODGATE
STORAGE FRAME

CHAIN BOX

CABLE TUNNEL

600 HEIGHT FLOODGATE

STAINLESS STEEL DOOR

8350

FLOODING ALARM
FLASH LIGHT

CUSTOMER'S
SWITCH ROOM

FAN CONTROL
PANEL FOR AIR
INTAKE AND
EXHAUST FAN

1200 DEEP
CABLE TRENCH

M.C.T.
CONNECTION

ZONE FOR A.C.B.

FUSE CUTOFF FOR
LV CAPACITOR BANK

1200 DEEP
CABLE TRENCH

50x20 DEEP
RECESS FOR
EARTHING
CONNECTION

FUSE CUTOFF FOR
LV CAPACITOR BANK

Ø25 METALLIC
CONDUIT

SURFACE JUNCTION
BOX AT HIGH LEVEL

600 HEIGHT
FLOODGATE

SELF-CLOSING
STAINLESS STEEL
DOOR TO 2HRS.
F.R.R.

FLOODING ALARM
FLASH LIGHT

LOBBY

CHAIN BOX
11kV SWITCHGEAR

ALL PARTITION WALLS
TO 2 HRS. F.R.R.

1200 DEEP CABLE TRENCH

VERTICAL FLOODGATE STORAGE FRAME

MASTER CHECK METER

FOR ENTRANCE DOOR AT GROUND LEVEL







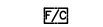

150x150 THROUGH WALL OPENING
WITH PROMAT BOARD COVERS
(BOTH INSIDE AND OUTSIDE) AT
HIGH LEVEL FOR TEMPORARY SUPPLY
CABLES

FIBRE OPTIC
MARSHALLING BOX

INDEPENDENT STAIRCASE
LEADING TO GROUND FLOOR
OPEN ACCESS

FLOODING ALARM FLASH LIGHT

LEGEND:

	WALL MOUNTED LAMPS
	LAMPS SUSPENDED FROM CEILING
	LAMPS WITH EMERGENCY LIGHTING UNIT
	LIGHTING SWITCH (2-WAY/INTERMEDIATE SWITCHING CONTROL FOR MULTIPLE ENTRANCE DOORS)
	FAN AUTO/MANUAL OPERATION SWITCH
	FAN CONTROL PANEL
	LV MONITORING PANEL
	MCB BOARD

K	FLOODGATE AND STORAGE FRAME ADDED
J	GENERAL LAYOUT REVISION
H	SYMBOLS, G.I. SLEEVE SIZE AND DEPTH OF CABLE TRENCH UPDATED, FIRE EXTINGUISHER ADDED, MASTER CHECK METER ADDED.
G	FUSE CUTOFF ADDED, DOOR, TRANSFORMER, HV SWITCHGEAR AND G.I. SLEEVE SIZE UPDATED
F	CHAIN BOX ADDED AND CABLE TRENCH LADDER DELETED
E	PHASE IDENTIFICATION UPDATED, FAN SWITCH AND CABLE TRENCH LADDER ADDED
D	FAN CONTROL PANEL FOR AIR INTAKE AND EXHAUST FAN RELOCATED

CLP 中電

REVS.	03-9-04	09-12-04	21-12-05	5-1-06	16.08.07	16.12.09	26.03.12	18.03.14	23.02.17	12.06.20	
INITIAL	A	B	C	D	E	F	G	H	J	K	L
	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	H.T.YU	H.T.YU	H.T.YU	

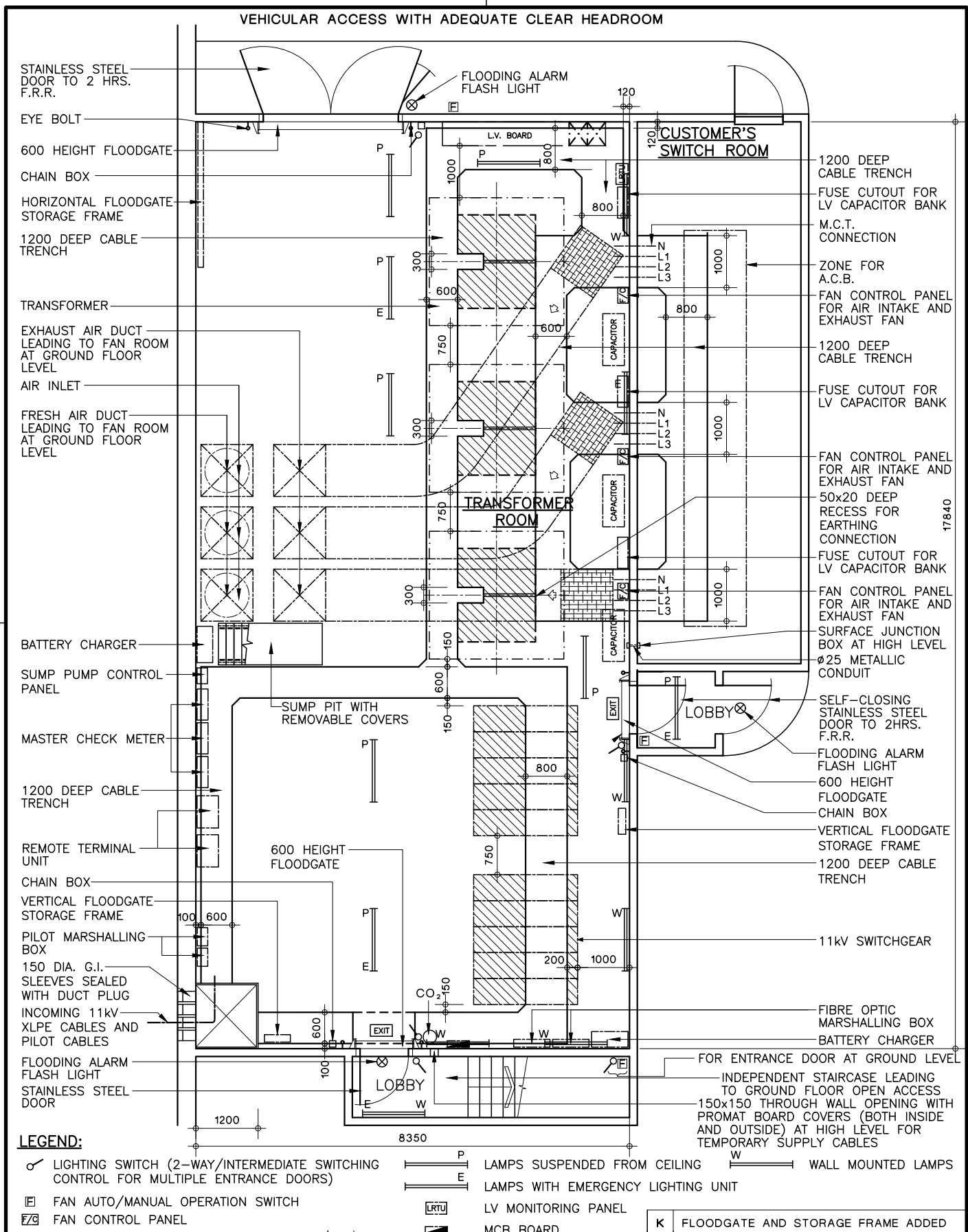
TITLE :

TYPICAL BASEMENT SUBSTATION LAYOUT FOR TWO TRANSFORMERS AND 11kV SWITCHGEAR

DRAWN: S. C. TO	DATE: 22-07-2002
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: 1 : 100 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 0 7 K A



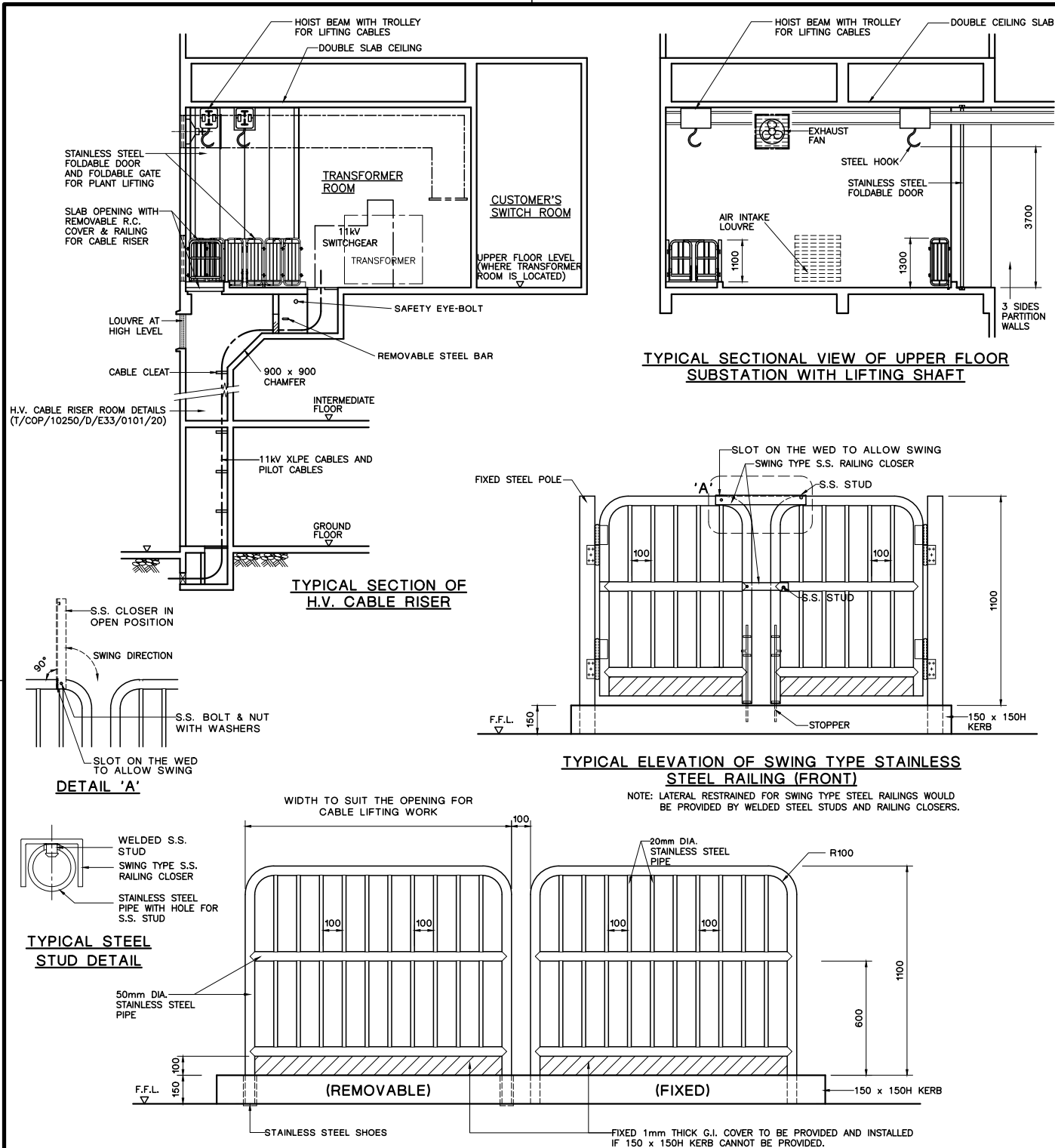
REVS.	3.4.03	1.12.04	21.12.05	5.1.06	16.08.07	16.12.09	26.03.12	18.03.14	24.02.17	12.06.20
INITIAL	A	B	C	D	E	F	G	H	J	K
	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	H.T.YU	H.T.YU	H.T.YU

TITLE :

TYPICAL BASEMENT SUBSTATION LAYOUT FOR THREE TRANSFORMERS AND 11kV SWITCHGEAR

DRAWN:	S. C. TO	DATE:	22-07-2002
CHECKED:	K. C. CHENG	APPROVED:	W. C. HO
SCALE:	1 : 100 (mm)	SHEET(S) IN SET:	

ASSET MANAGEMENT DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 0 8 K A



NOTES:

- ALL METAL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE DISTRIBUTION BOARD WITH COPPER CONNECTOR NOT LESS THAN 6mm².
- ALL DIMENSIONS ARE IN mm.
- THE DESIGN OF STEEL RAILING SHALL COMPLY WITH THE REQUIREMENT FOR PROTECTIVE BARRIERS IN THE BUILDING (CONSTRUCTION) REGULATION TABLE 3.

NOTE: REMOVABLE RAILING IS USED FOR WORKING PLATFORM ONLY.
REFER TO DRG. NO. T/COP/10250/D/E33/0102/03

E	GENERALLY UPDATED
D	DETAILS OF HOIST BEAM & AIR TRUNK UPDATED
C	TYPICAL DETAIL OF REMOVABLE RAILING AND NOTE ADDED.

F	HATCH OPENING AND RAILING DESIGN UPDATED
---	------------------------------------------



REVS.	08.01.10	26.03.12	18.03.14	17.03.17	22.01.19	18.03.20						
INITIAL	A	B	C	D	E	F	G	H	J	K	L	
	KCC	KCC	H.T.YU	H.T.YU	ED.YU	H.T.YU						

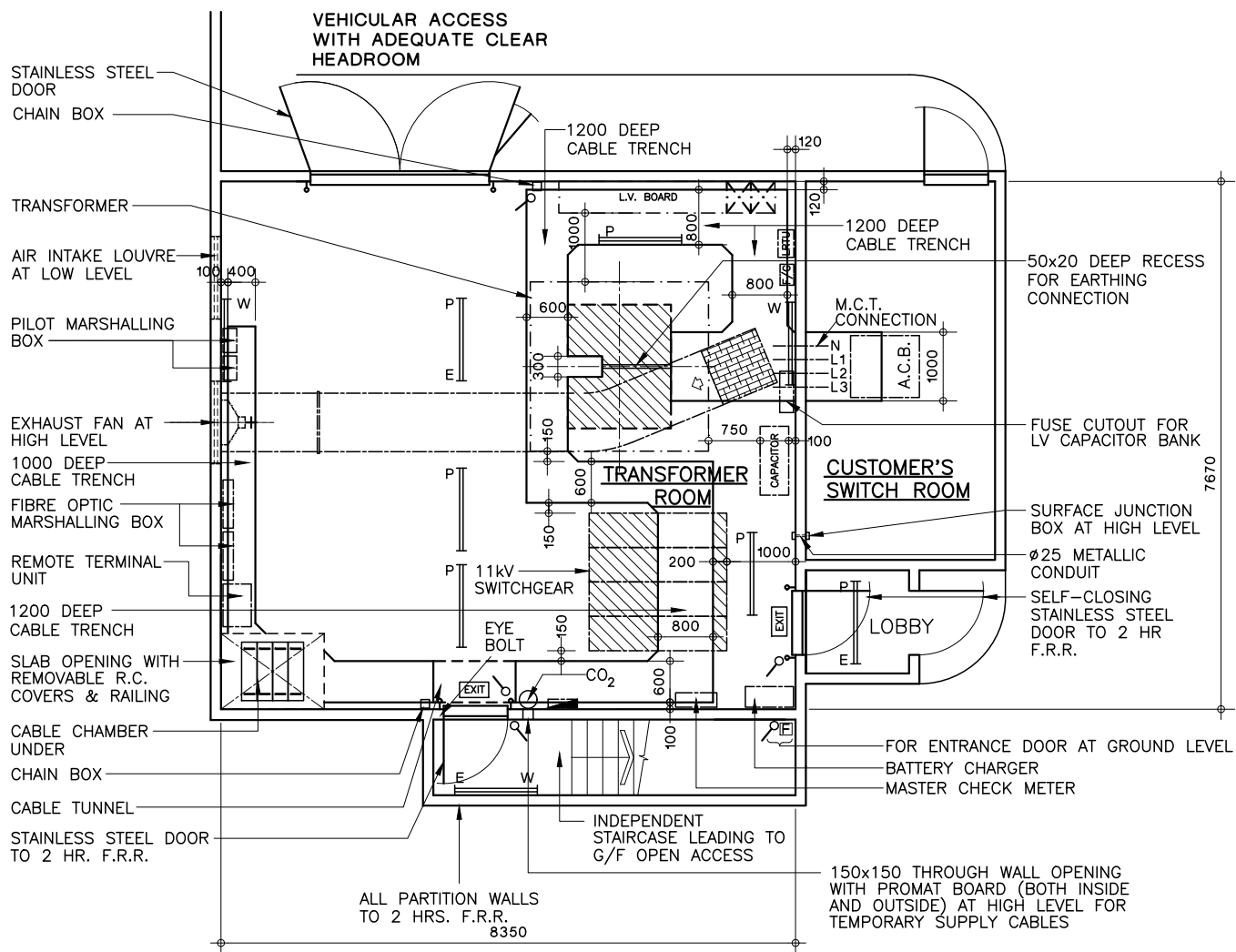
TITLE :

TYPICAL UPPER FLOOR SUBSTATION SECTIONS









DRAWN: S. C. TO	DATE: 22-07-2002
CHECKED: K. C. CHENG	APPROVED: K. W. WONG
SCALE: N. T. S.	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T/COP/10250/D/E33/0101/09/F/A



LEGEND:

- | | |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
|  | WALL MOUNTED LAMPS |
|  | LAMPS SUSPENDED FROM CEILING |
|  | LAMPS WITH EMERGENCY LIGHTING UNIT |
|  | LIGHTING SWITCH (2-WAY/INTERMEDIATE SWITCHING CONTROL FOR MULTIPLE ENTRANCE DOORS) |
|  | FAN CONTROL PANEL |
|  | LV MONITORING PANEL |
|  | MCB BOARD |
|  | FAN AUTO/MANUAL OPERATION SWITCH |

K	UPDATED THE NAME OF CAPACITOR BANK
J	GENERAL LAYOUT REVISION
H	SYMBOLS, DEPTH OF CABLE TRENCH UPDATED. FIRE EXTINGUISHER, MASTER CHECK METER ADDED.
G	FUSE CUTOFF ADDED, DOOR, TRANSFORMER, HV SWITCHGEAR AND G.I. SLEEVE SIZE UPDATED
F	CHAIN BOX ADDED AND CABLE TRENCH LADDER DELETED
E	PHASE IDENTIFICATION UPDATED AND CABLE TRENCH LADDER ADDED
D	AIR INTAKE LOUVRE AND FAN CONTROL PANEL RELOCATED
C	LRTU ADDED
B	GENERAL LAYOUT REVISION



REVS.	7.9.04	9.12.04	21.12.05	5.1.06	16.08.07	16.12.09	26.03.12	18.03.14	23.02.17	15.06.20	
	A	B	C	D	E	F	G	H	J	K	L
INITIAL	K.C.C	K.C.C	K.C.C	K.C.C	K.C.C	K.C.C	K.C.C	H.I.YU	H.I.YU	H.I.YU	

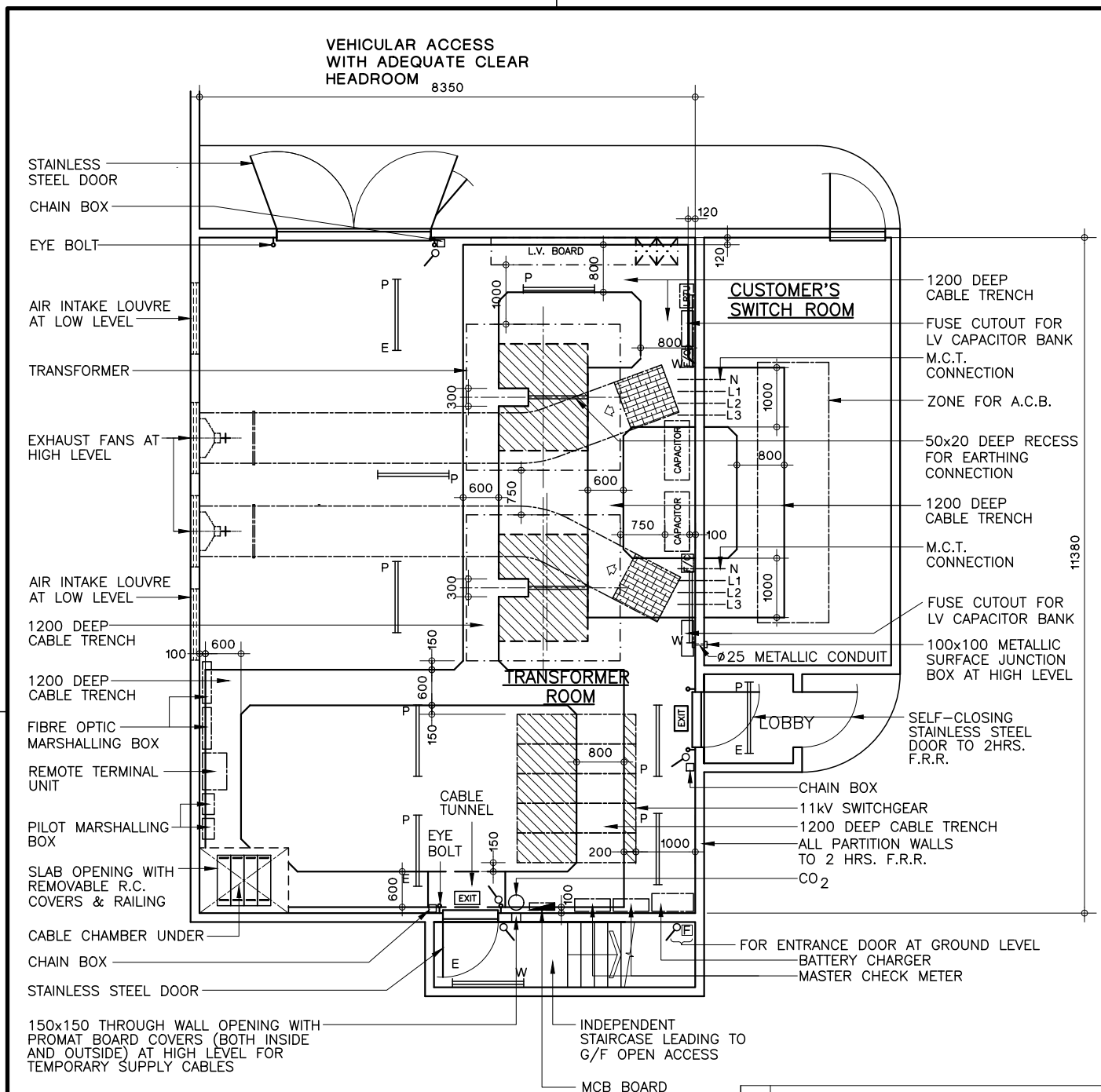
TITLE :

TYPICAL UPPER FLOOR SUBSTATION LAYOUT FOR
ONE TRANSFORMER AND 11kV SWITCHGEAR
(INDEPENDENT STAIRCASE)

DRAWN: S. C. TO	DATE: 22-07-2002
CHECKED: K. C. CHENG	APPROVED: W.C.HO
SCALE: 1 : 100 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

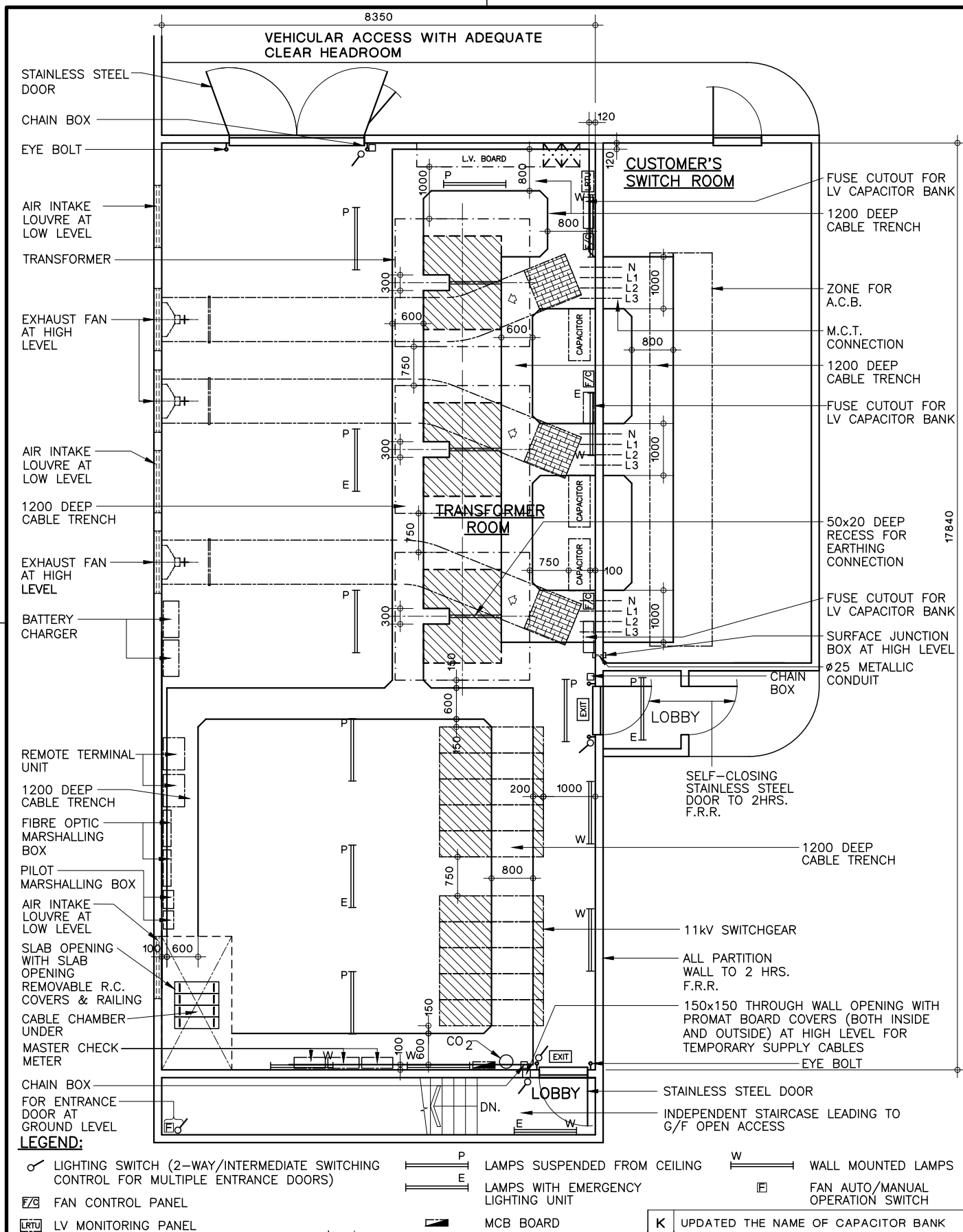
DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 1 0 K A



DRAWN: S. C. TO	DATE: 22-07-2002
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: 1 : 100 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 1 1 K A



REVS.	3.4.03	10.12.04	21.12.05	5.1.06	20.08.07	16.12.09	26.03.12	18.03.14	23.02.17	15.06.20	
INITIAL	A	B	C	D	E	F	G	H	J	K	L
	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	H.T.YU	H.T.YU	H.T.YU	

TITLE :

TYPICAL UPPER FLOOR SUBSTATION LAYOUT FOR
THREE TRANSFORMERS AND 11kV SWITCHGEAR
(INDEPENDENT STAIRCASE)

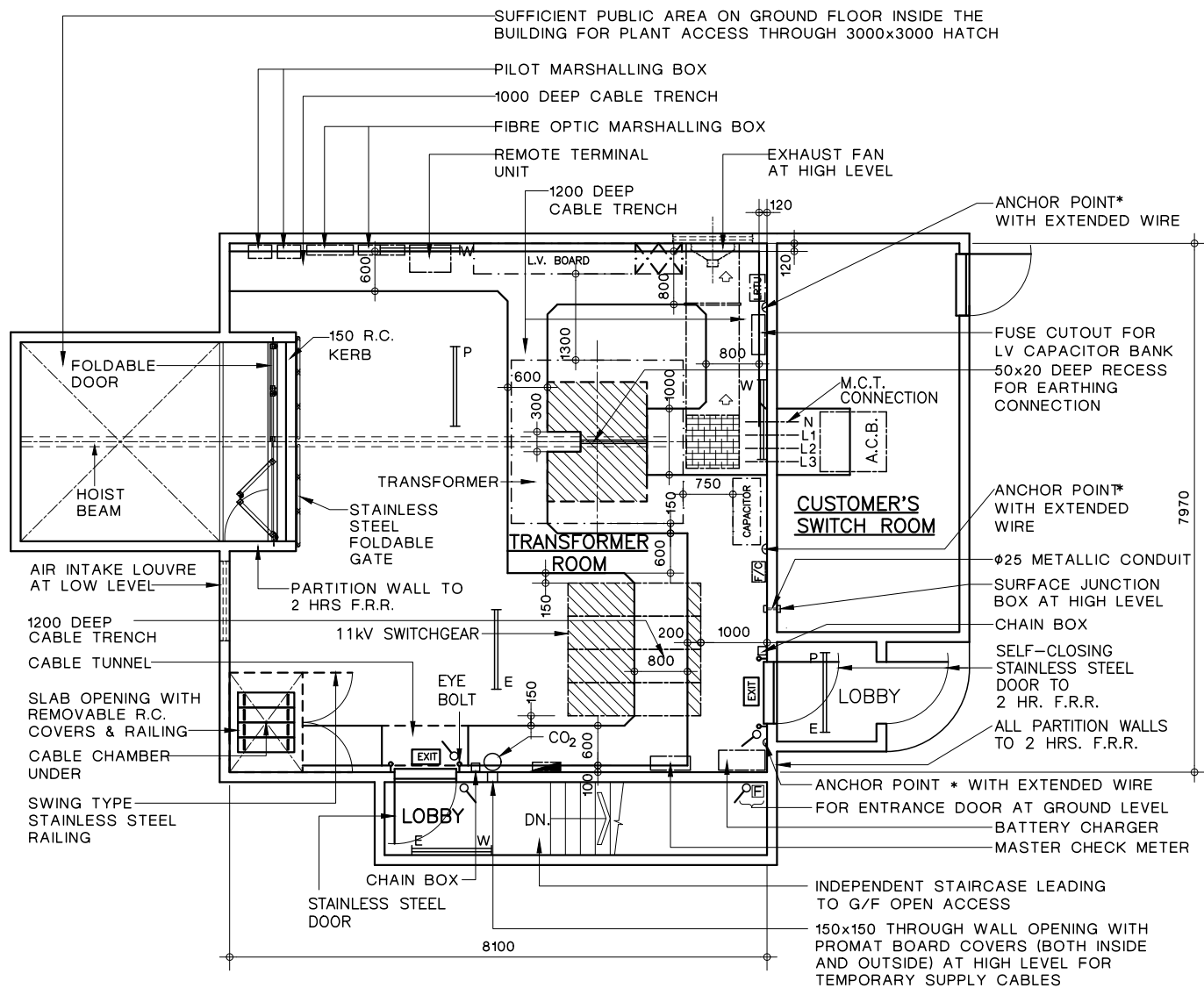
DRAWN: S. C. TO DATE: 22-07-2002

CHECKED: K. C. CHENG APPROVED: W. C. HO

SCALE: 1 : 100 (mm) SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 1 2 K A

**LEGEND:**

	W	WALL MOUNTED LAMPS
	P	LAMPS SUSPENDED FROM CEILING
	E	LAMPS WITH EMERGENCY LIGHTING UNIT
		LIGHTING SWITCH (2-WAY/INTERMEDIATE SWITCHING CONTROL FOR MULTIPLE ENTRANCE DOORS)
	F/G	FAN CONTROL PANEL
	LRTU	LV MONITORING PANEL
		MCB BOARD
		FAN AUTO/MANUAL OPERATION SWITCH
		FIXED RAILING
		REMOVABLE RAILING

NOTES:

1. DESIGN OF FALL RESTRAINT SYSTEM SHALL FOLLOW THE TYPICAL DRAWING T/COP/10250/D/E33/0103/38.
2. IF THE PROVISION OF FALL RESTRAINT SYSTEM IS NOT REASONABLY PRACTICABLE, FALL ARREST SYSTEM SHALL BE PROVIDED AS THE LAST RESORT.
3. DESIGN OF STAINLESS STEEL FOLDABLE DOOR AND FOLDABLE GATE REFER TO DWG NO. T/COP/10250/D/E33/0103/43.
4. ALTERNATIVE ACCESS BY LIFT IN THE PUBLIC AREA INSIDE BUILDING SHALL BE PROVIDED.
5. IF HIGHER THAN 2 HOURS F.R.R. PARTITION WALL IS REQUIRED, PROTECTED LOBBY FOR PLANT ACCESS WILL BE REQUIRED.

L	ACCESS FOR PLANT LIFTING UPDATED
K	ANCHOR POINT AND FIXED RAILING, NOTE ADDED.
J	GENERAL LAYOUT REVISION
H	SYMBOLS, DEPTH OF CABLE TRENCH CONDUIT, FIRE EXTINGUISHER, MASTER CHECK METER ADDED.



REVS.	7.9.04	7.12.04	21.12.05	5.1.06	16.08.07	16.12.09	26.03.12	18.03.14	23.02.17	17.12.18	20.03.20
INITIAL	A	B	C	D	E	F	G	H	J	K	L
	K.C.C	K.C.C	K.C.C	K.C.C	K.C.C	K.C.C	K.C.C	H.T.YU	H.T.YU	H.T.YU	H.T.YU

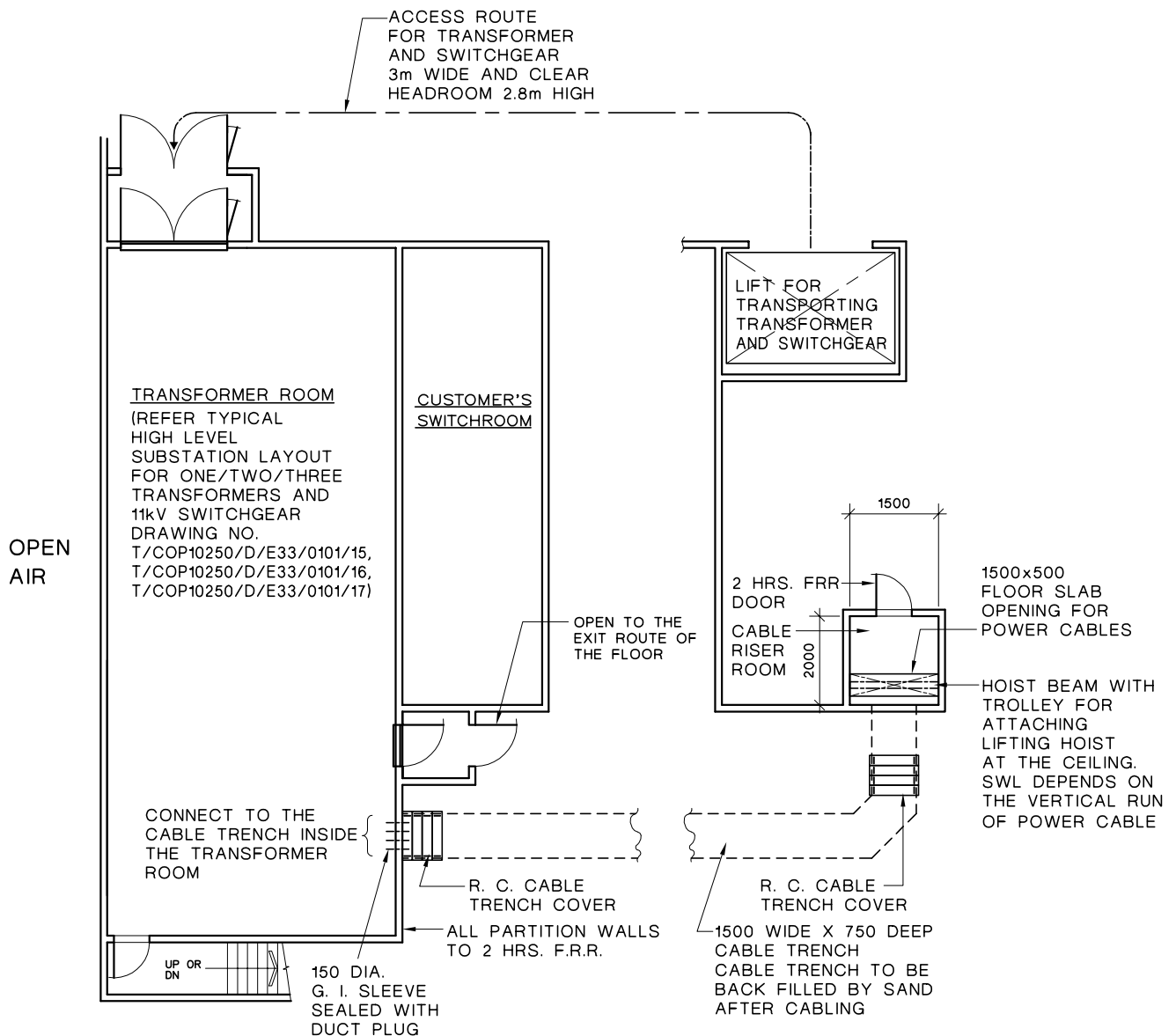
TITLE :

TYPICAL UPPER FLOOR SUBSTATION LAYOUT FOR HOUSING ONE TRANSFORMER WITHOUT VEHICULAR ACCESS (INDEPENDENT STAIRCASE)

DRAWN: S. C. TO	DATE: 22-07-2002
CHECKED: K. C. CHENG	APPROVED: W.C.HO
SCALE: 1 : 100 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 1 3 L A

**NOTES:**

1. THE TRANSFORMER ROOM SHALL BE LOCATED ON THE PERIPHERY OF THE BUILDING.
2. ALL FLOOR OPENINGS IN THE CABLE RISER ROOM TO BE SEALED UP BY CUSTOMER AFTER CABLING.
3. HOIST BEAM WITH TROLLEY FOR ATTACHING LIFTING HOIST TO BE PROVIDED BY CUSTOMER.

A GENERAL AMENDMENT



REV.	18.03.14												
INITIAL	A	B	C	D	E	F	G	H	J	K	L		

TITLE :

TYPICAL HIGH LEVEL SUBSTATION LAYOUT FOR
ONE/TWO/THREE TRANSFORMERS AND
11kV SWITCHGEAR IN HIGH RISE BUILDING

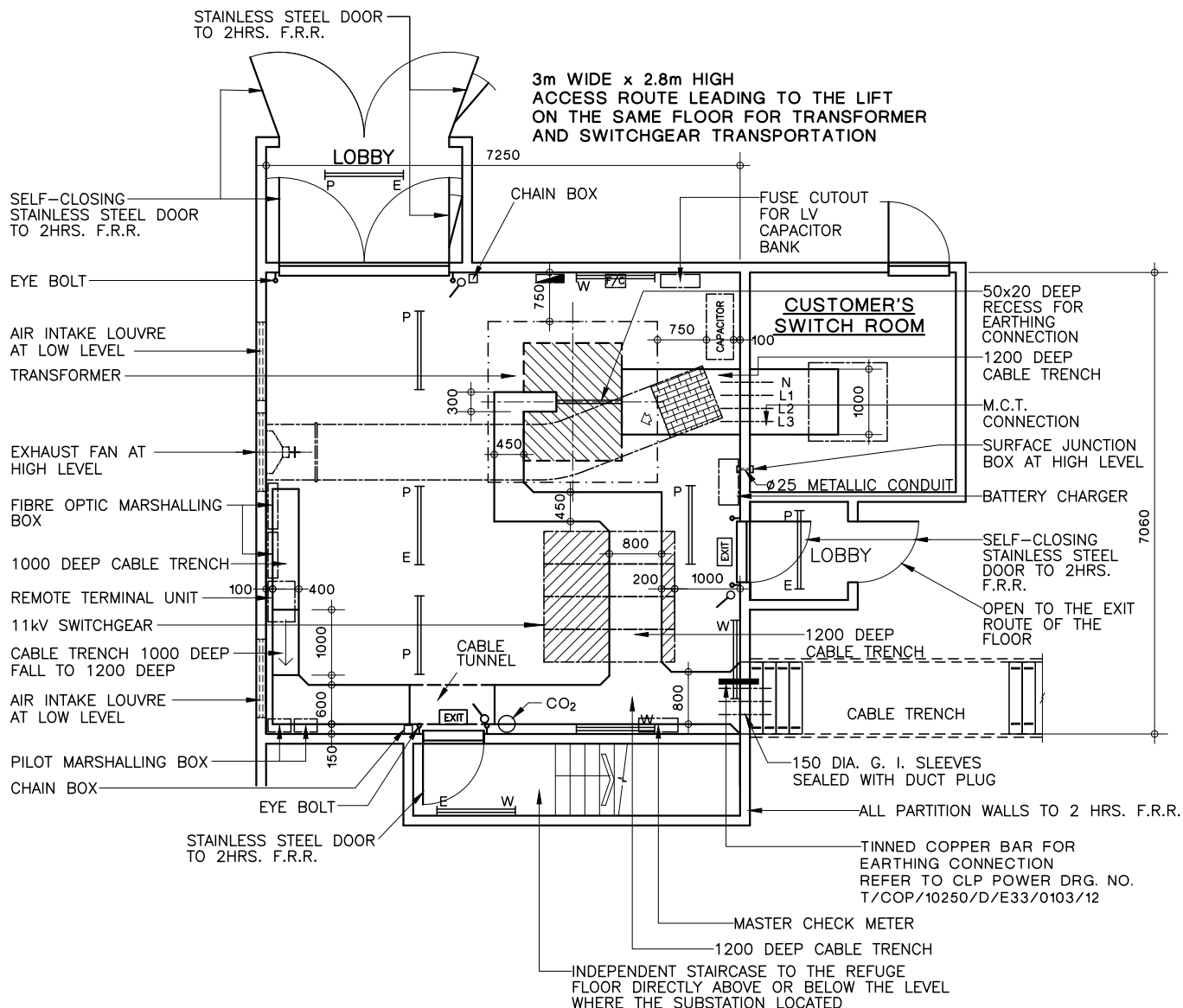
DRAWN: T. Y. IP DATE: 24-07-2002

CHECKED: K. C. CHENG APPROVED: K. W. WONG

SCALE: N.T.S. SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T/COP10250/D/E33/0101/14A/A

**LEGEND:**

	W	WALL MOUNTED LAMPS
	P	LAMPS SUSPENDED FROM CEILING
	E	LAMPS WITH EMERGENCY LIGHTING UNIT
		LIGHTING SWITCH (2-WAY/INTERMEDIATE SWITCHING CONTROL FOR MULTIPLE ENTRANCE DOORS)
	F/C	FAN CONTROL PANEL
		MCB BOARD

NOTES:

WIND SHIELD DESIGN SHALL BE PROVIDED TO THE LOUVRES IN HIGH LEVEL FLOOR OF THE BUILDING IN ORDER TO PREVENT RAIN WATER INGRESS CAUSED BY STRONG WIND.

H	GENERAL LAYOUT REVISION
G	MASTER CHECK METER, FIRE EXTINGUISHER ADDED, SYMBOLS, G.I. SLEEVE SIZE AND DEPTH OF CABLE TRENCH UPDATED.

F	FUSE CUTOUT ADDED, DOOR, TRANSFORMER, HV SWITCHGEAR AND G.I. SLEEVE SIZE UPD.
E	CHAIN BOX ADDED AND CABLE TRENCH LADDER DELETED
J	UPDATED THE NAME OF CAPACITOR BANK



REVS.	3.4.03	8.12.04	5.1.06	16.08.07	17.12.09	26.03.12	18.03.14	24.02.17	15.06.20		
INITIAL	A	B	C	D	E	F	G	H	J	K	L
	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	H.T.YU	H.T.YU	H.T.YU		

TITLE :

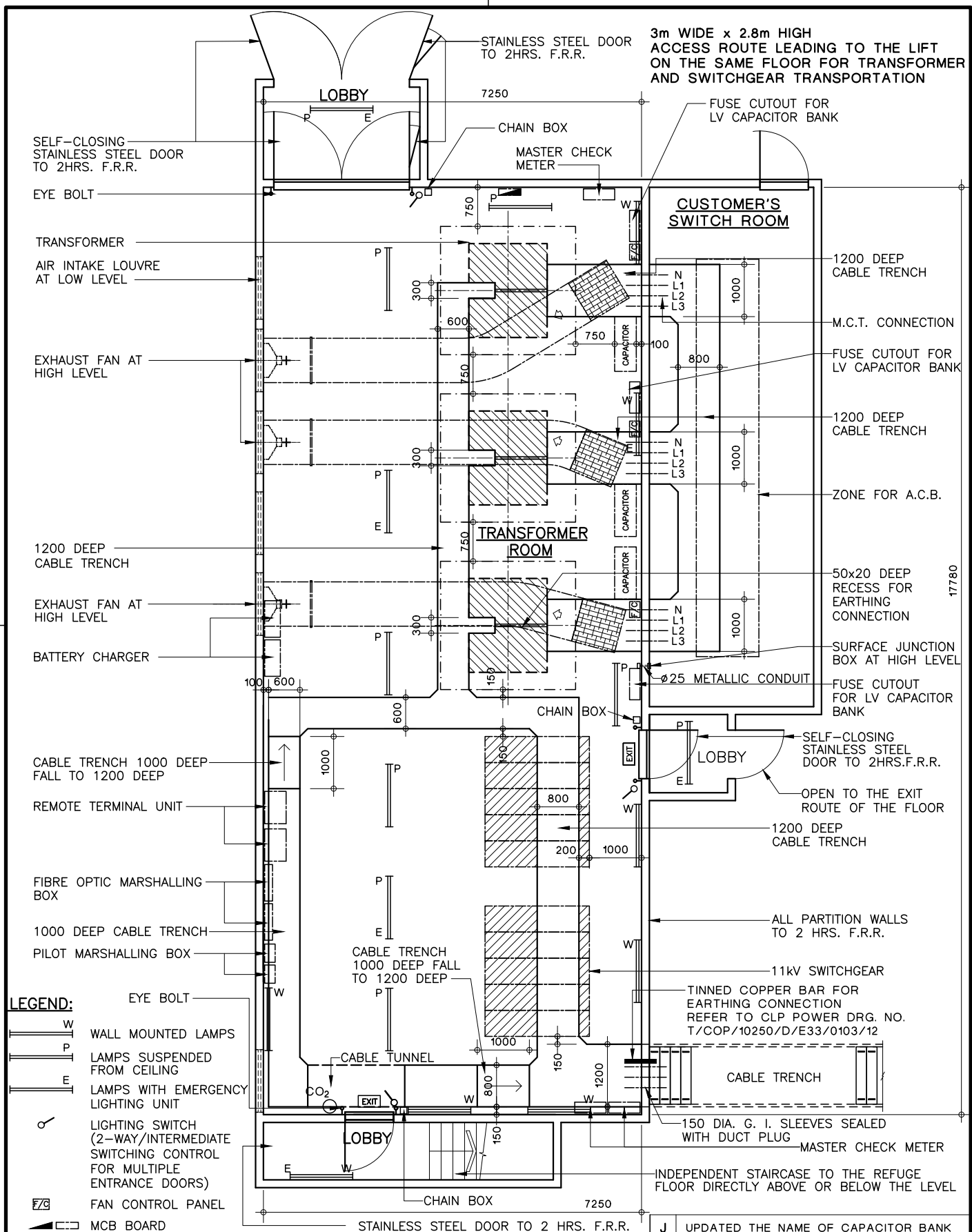
TYPICAL HIGH LEVEL SUBSTATION LAYOUT FOR ONE TRANSFORMER AND 11kV SWITCHGEAR IN HIGH RISE BUILDING

DRAWN: S. C. TO	DATE: 8-8-2002
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: 1 : 100 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T/COP/10250/D/E33/0101/15/J/A





REVS.	3.4.03	10.12.04	5.1.06	16.08.07	17.12.09	26.03.12	18.03.14	23.02.17	15.06.20		
INITIAL	A	B	C	D	E	F	G	H	J	K	L
	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	K.C.C.	H.T.YU	H.T.YU	H.T.YU		

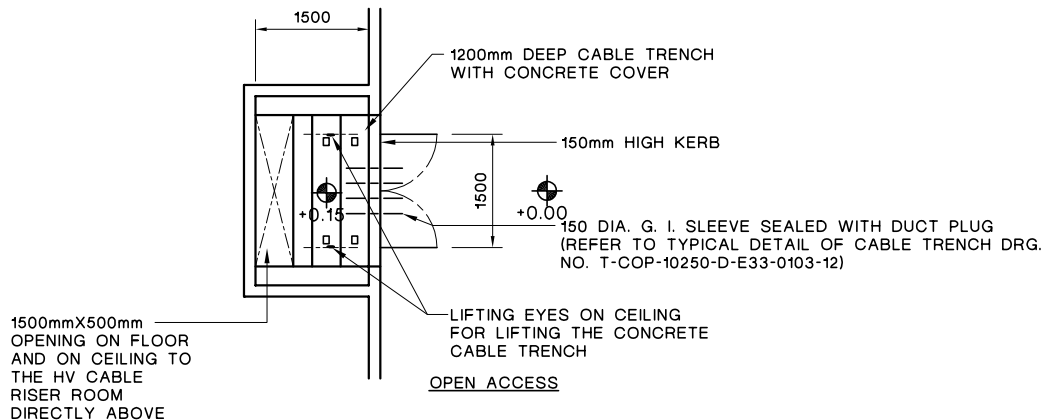
TITLE :

TYPICAL HIGH LEVEL SUBSTATION LAYOUT FOR
THREE TRANSFORMERS AND 11kV SWITCHGEAR
IN HIGH RISE BUILDING

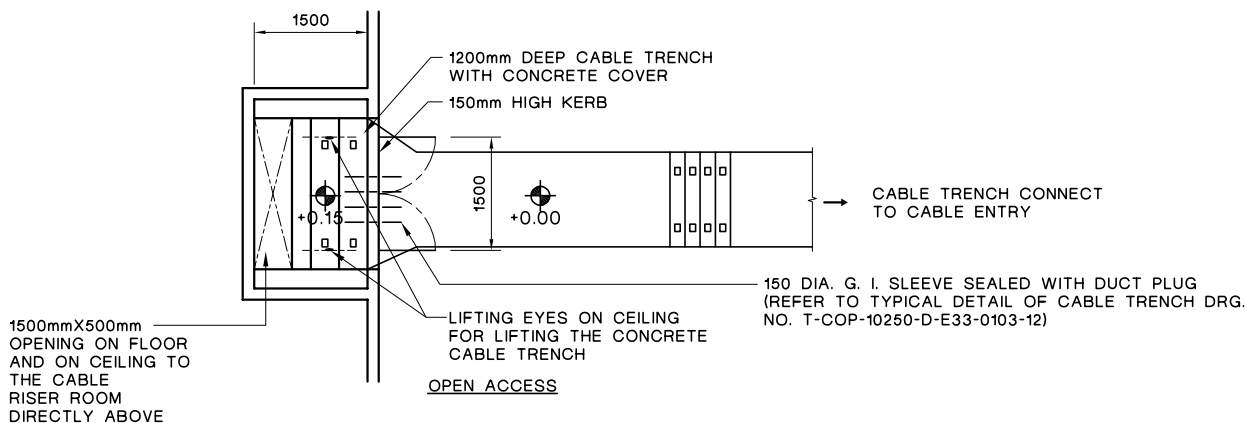
DRAWN: S. C. TO	DATE: 8-8-2002
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: 1 : 100 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

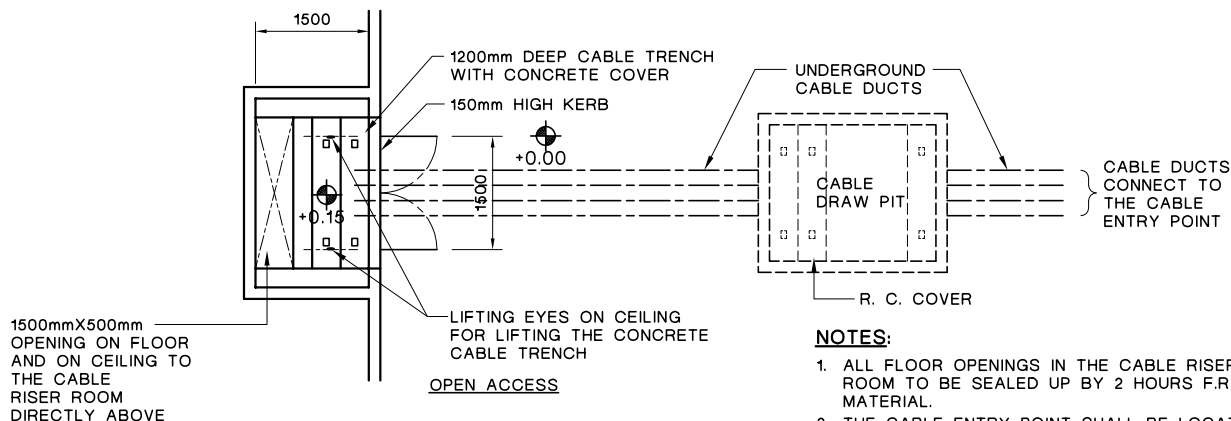
DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 1 7 J A



**PART PLAN OF CABLE RISER ROOM LOCATED
ON GROUND FLOOR AND PERIPHERY OF THE BUILDING**



**PART PLAN OF CABLE RISER ROOM LOCATED
ON GROUND FLOOR OF THE BUILDING AND
CONNECTED TO CABLE ENTRY POINT BY CABLE TRENCH**



**PART PLAN OF CABLE RISER ROOM LOCATED
ON GROUND FLOOR OF THE BUILDING AND
CONNECTED TO CABLE ENTRY POINT
BY UNDERGROUND CABLE DUCTS**

NOTES:

1. ALL FLOOR OPENINGS IN THE CABLE RISER ROOM TO BE SEALED UP BY 2 HOURS F.R.R. MATERIAL.
2. THE CABLE ENTRY POINT SHALL BE LOCATED AT THE SITE BOUNDARY OF THE CUSTOMER'S SITE.
3. THE DIMENSIONS AND LAYOUT OF THE CABLE TRENCH AND UNDERGROUND CABLE DUCTS CONNECTING TO THE CABLE ENTRY POINT OF THE SITE TO BE DETERMINED SUBJECT TO THE NUMBER OF CABLE LAYING TO THE HIGH LEVEL SUBSTATION.

C G.I. SLEEVE SIZE UPDATED.



REVS.	3.4.03	09.07.12	09.06.14										
INITIAL	A K.C.C.	B E. YU	C H.T.YU	D	E	F	G	H	J	K	L		

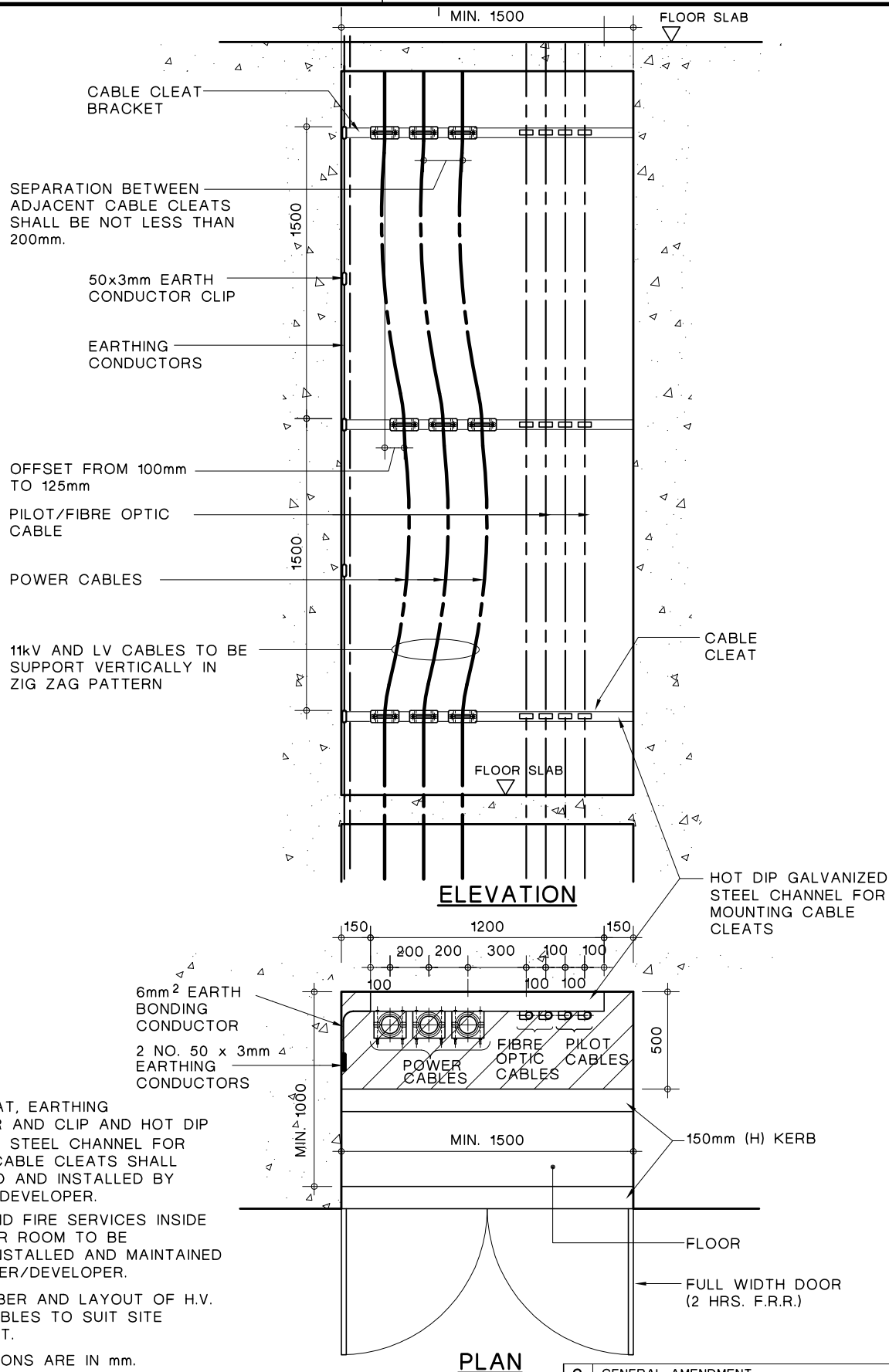
TITLE :

TYPICAL PLAN OF CABLE RISER ROOM ON GROUND
FLOOR OR FLOOR LEVEL WHERE CABLE ENTRY
(SHEET 1 OF 4)

DRAWN: T. Y. IP DATE: 9-8-2002
CHECKED: K. C. CHENG APPROVED: K. W. WONG
SCALE: 1 : 100 (mm) SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 1 8 C A

**NOTES :-**

1. CABLE CLEAT, EARTHING CONDUCTOR AND CLIP AND HOT DIP GALVANIZED STEEL CHANNEL FOR MOUNTING CABLE CLEATS SHALL BE SUPPLIED AND INSTALLED BY CUSTOMER/DEVELOPER.
2. LIGHTING AND FIRE SERVICES INSIDE CABLE RISER ROOM TO BE SUPPLIED, INSTALLED AND MAINTAINED BY CUSTOMER/DEVELOPER.
3. EXACT NUMBER AND LAYOUT OF H.V. AND L.V. CABLES TO SUIT SITE REQUIREMENT.
4. ALL DIMENSIONS ARE IN mm.



DRAWN: T. C. AU	DATE: 17-09-2002
CHECKED: K. C. CHENG	APPROVED: K. W. WONG
SCALE: 1 : 30 (mm)	SHEET(S) IN SET:

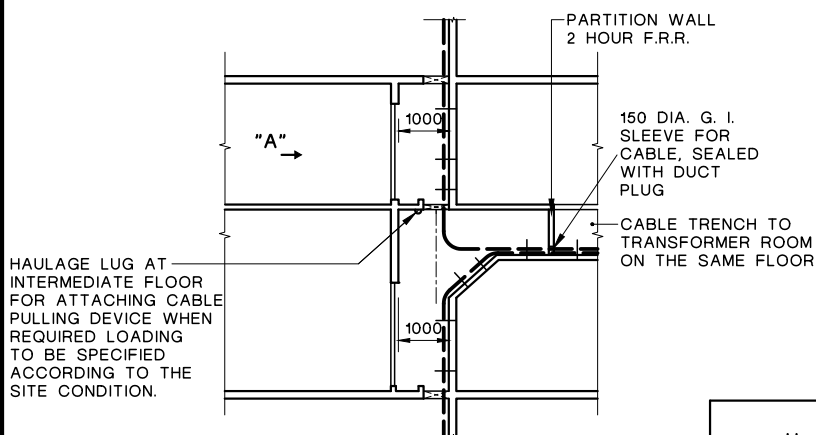
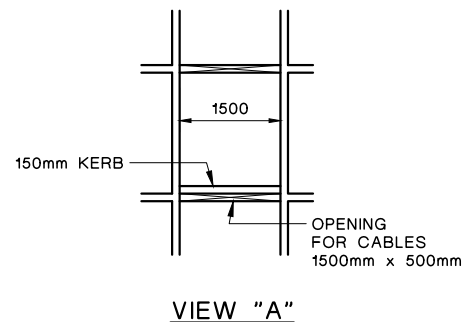
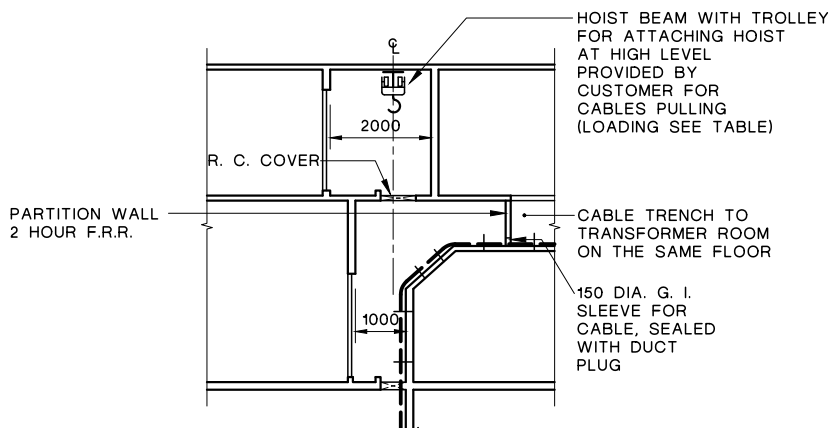
REVS.	30-7-08	02-05-12	18.03.14										
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	KCC	KCC	H.T.YU										

TITLE :

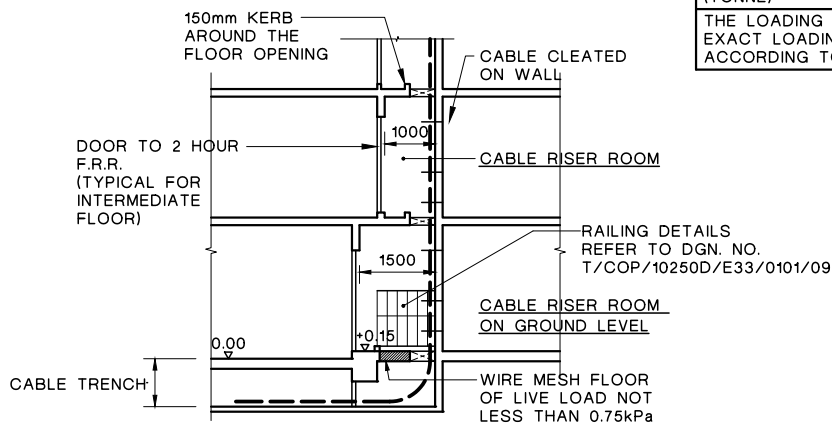
TYPICAL LAYOUT OF CABLE RISER ROOM
(SHEET 2 OF 4)

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 1 9 C A



LOADING OF HOIST BEAM IN THE H. V. CABLE RISER ROOM FOR CABLE PULLING								
TOTAL VERTICAL CABLE RISER LENGTH (m)	10	20	30	60	130	200	260	330
HOIST BEAM LOADING (TONNE)	0.5	1	2	3	4	5	6	7
THE LOADING ARE FOR REFERENCE ONLY. EXACT LOADING TO BE DETERMINED BY CLPP ACCORDING TO SITE CONDITIONS AND CABLE USED.								



D	G.I. SLEEVE SIZE UPDATED.	F	RAILING DETAIL UPDATED	E	REMOVABLE RAILING, WIRE MESH FLOOR ADDED AND TABLE UPDATED.
C	G.I. SLEEVE SIZE UPDATED.	B	HAULAGE LUG ADDED.		



REVS.	03.12.04	30.10.07	09.07.12	09.06.14	17.03.17	20.03.20						
INITIAL	A	B	C	D	E	F	G	H	J	K	L	
	K.C.C	K.C.C	E. YU	H.T.YU	H.T.YU	H.T.YU						

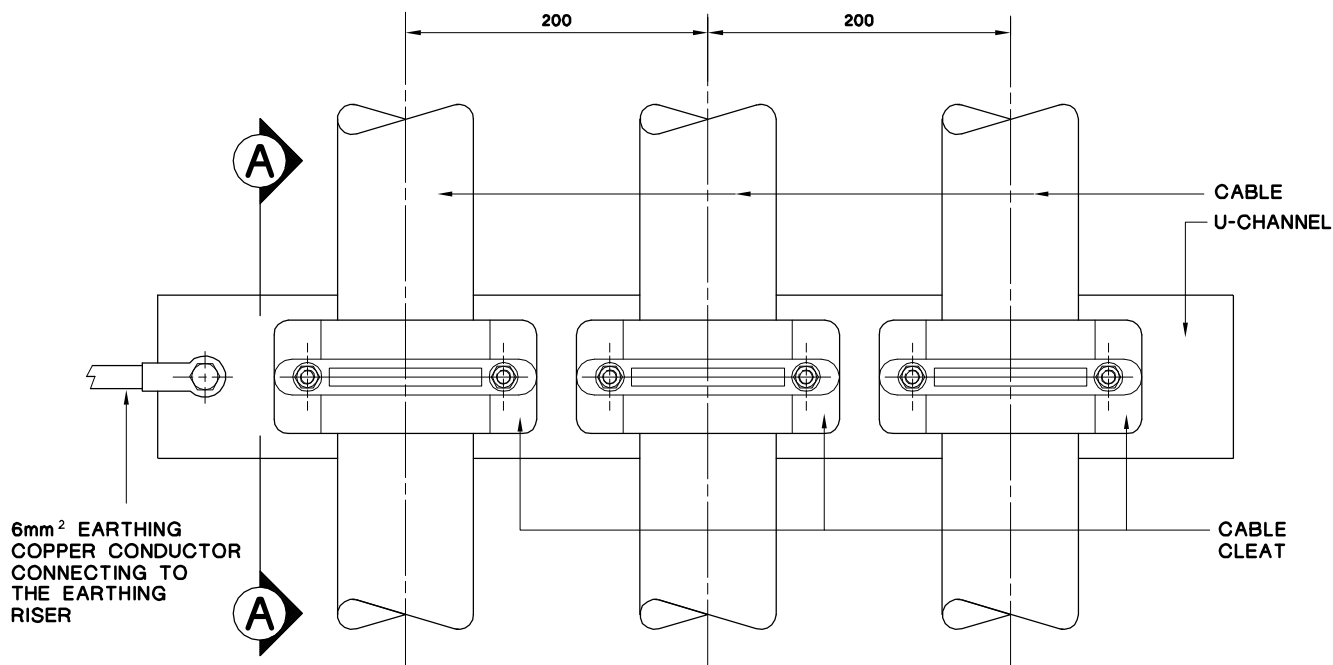
TITLE :

TYPICAL SECTIONS OF CABLE RISER ROOM (SHEET 3 OF 4)

DRAWN: T. W. LAU	DATE: 12-8-2002
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: 1 : 150 (mm)	SHEET(S) IN SET:

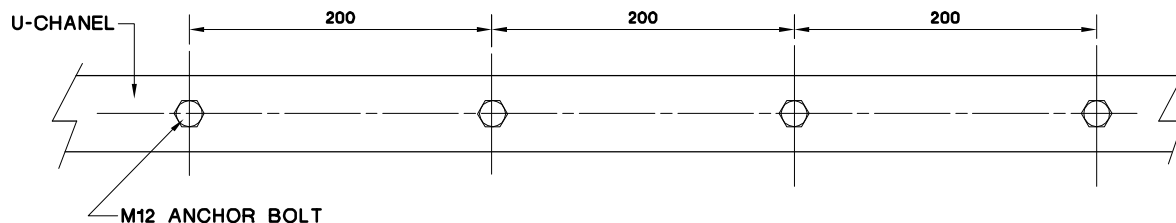
ASSET MANAGEMENT

DRG. NO. T/COP/10250D/E33/0101/20/F/A



SCALE 1 : 5

ELEVATION VIEW

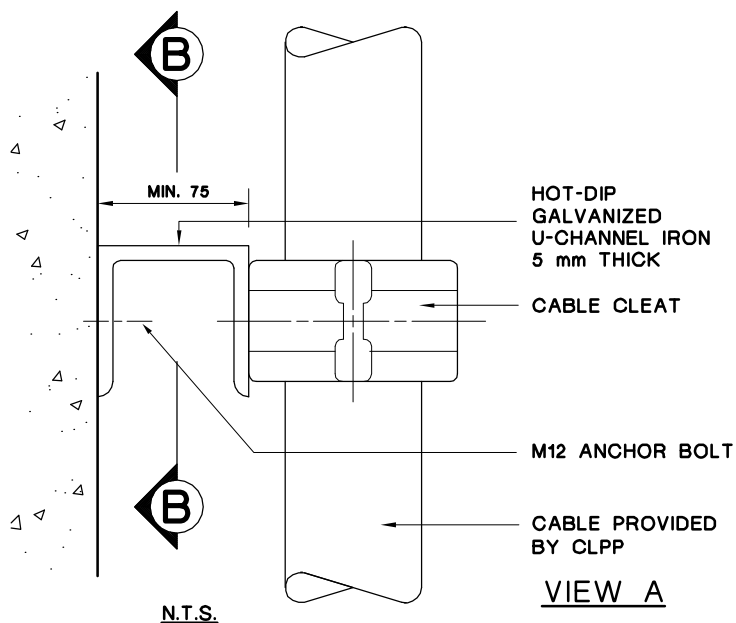


VIEW B

SCALE 1 : 5

NOTES :

1. TECHNICAL INFORMATION AND SAMPLES OF CABLE CLEATS SHALL BE SUBMITTED TO CLPP FOR APPROVAL.
2. WEIGHT OF POWER CABLE SHALL BE 16kg/m.
3. MATERIAL OF CABLE CLEAT AND THE ASSOCIATED BOLTS, NUTS, WASHER AND SPRING WASHERS, ETC. TO BE ALUMINIUM ALLOY OR OTHER METALS OR ALLOY WITH CORROSION RESISTANT COATING/PLATING.
4. EACH CABLE CLEAT SHALL BE TYPE TESTED TO WITHSTAND A VERTICAL SAFE WORKING LOAD (SWL) OF NOT LESS THAN 360kg (i.e. 15 x 16 kg/m x 1.5m).
5. THE HORIZONTAL MOUNTING STEEL CHANNEL SHALL BE OF HOT DIP GALVANISED STEEL OR OTHER CORROSION RESISTANT MATERIAL AND BE DESIGNED AND CONSTRUCTED TO WITHSTAND A VERTICAL SWL OF THE TOTAL NUMBER CABLE ON IT.
6. ALL DIMENSIONS ARE IN mm



VIEW A

B GENERAL LAYOUT REVISION

CLP 中電

REVS.	3.4.03	23.02.17											
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	K.C.C.	H.T.YU											

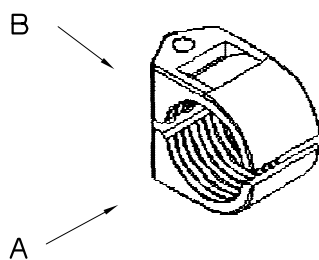
TITLE :

TYPICAL LAYOUT OF CABLE RISER ROOM
CABLE MOUNTING DETAILS (SHEET 4 OF 4)

DRAWN: T. W. LAU DATE: 1-11-2002
CHECKED: K. C. CHENG APPROVED: K. W. WONG
SCALE: AS SHOWN SHEET(S) IN SET:

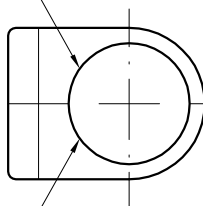
ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 2 1 B A

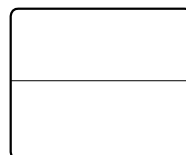


PILOT CABLE DIAMETER
32mm - 46mm

FIBRE OPTIC CABLE
DIAMETER 16mm - 25mm

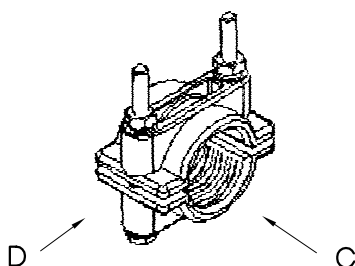


VIEW A

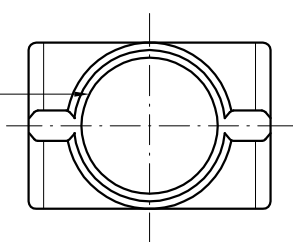


VIEW B

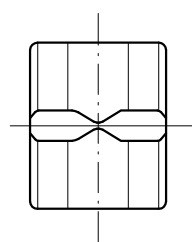
PILOT AND FIBRE OPTIC CABLE CLEATS



CABLE DIAMETER
70mm - 90mm



VIEW C



VIEW D

HV CABLES CLEATS



REVS.

INITIAL

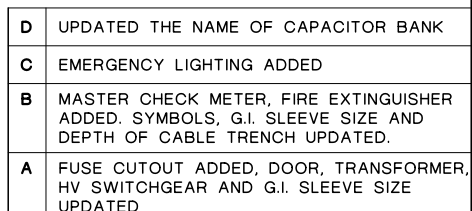
TITLE :

TYPICAL CABLE CLEATS FOR HV CABLES,
PILOT CABLES AND FIBRE OPTIC CABLES

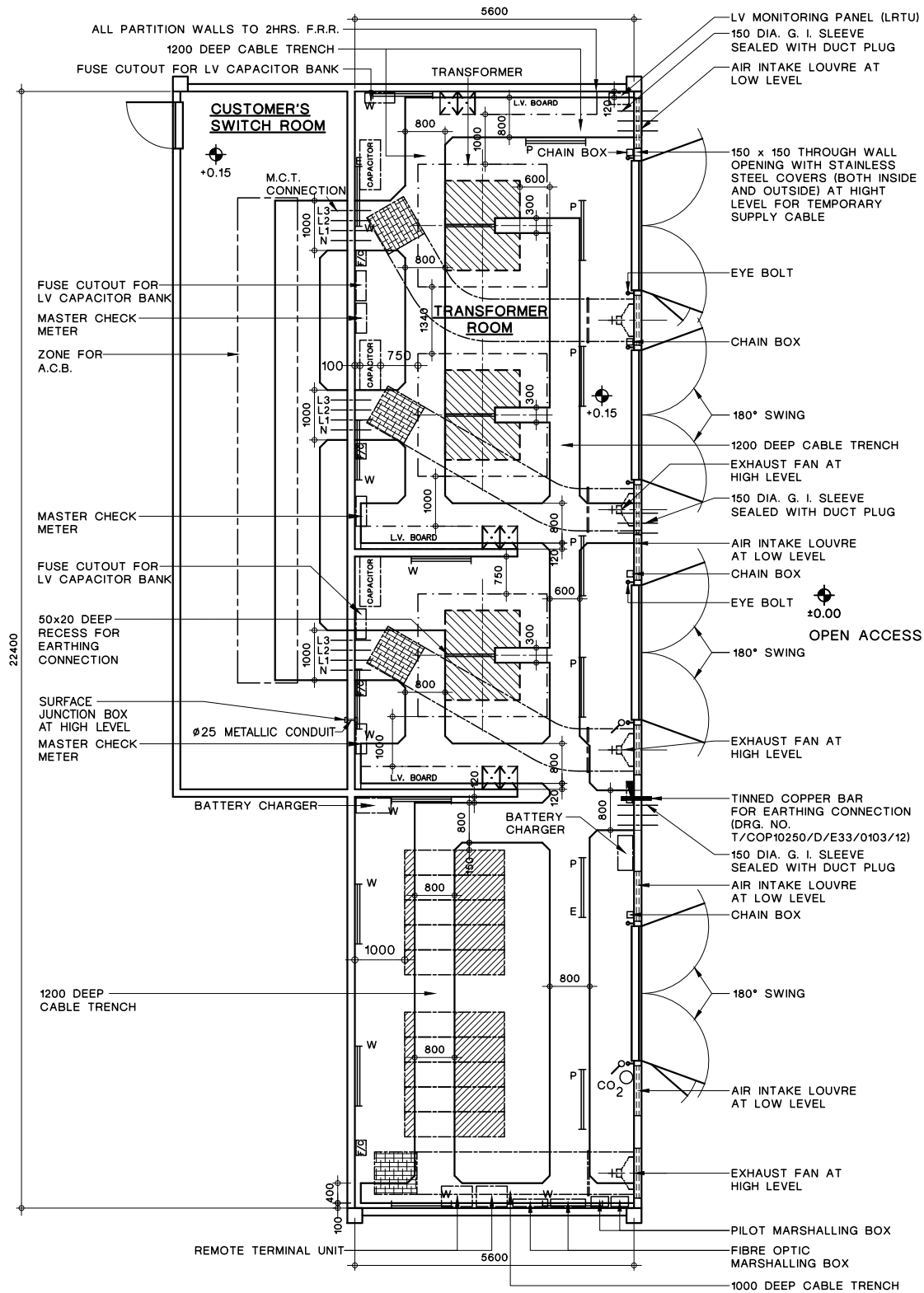
DRAWN: T. W. LAU	DATE: 21-9-2004
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: N.T.S	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 2 2 - A



DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 2 3 D A

**LEGEND:**

- W WALL MOUNTED LAMPS
- P LAMPS SUSPENDED FROM CEILING
- E LAMPS WITH EMERGENCY LIGHTING UNIT
- ⏻ LIGHTING SWITCH (2-WAY/INTERMEDIATE SWITCHING CONTROL FOR MULTIPLE ENTRANCE DOORS)

- F/F FAN CONTROL PANEL
- LRTU LV MONITORING PANEL
- MCB MCB BOARD

C	GENERAL LAYOUT REVISION
B	MASTER CHECK METER, FIRE EXTINGUISHER ADDED. SYMBOLS, G.I. SLEEVE SIZE AND DEPTH OF CABLE TRENCH UPDATED.
D	UPDATED THE NAME OF CAPACITOR BANK



REVS.	24.4.12	18.03.14	23.02.17	15.06.20									
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	K.C.C.	H.T.YU	H.T.YU	H.T.YU									

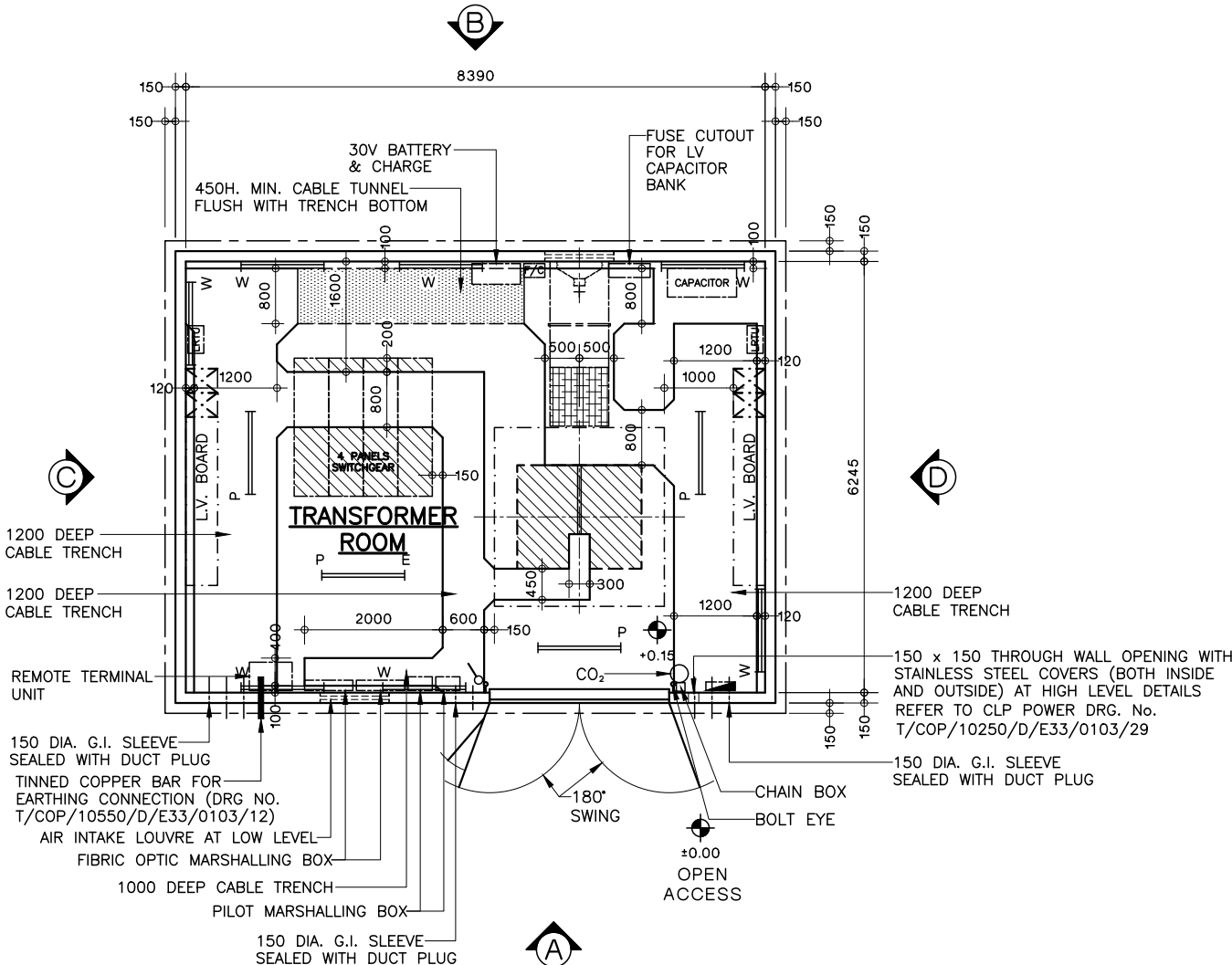
TITLE :

**TYPICAL GROUND FLOOR SUBSTATION
LAYOUT FOR THREE TRANSFORMERS AND
11kV SWITCHGEAR (WITH THREE LV BOARDS)**








DRAWN: C W WONG	DATE: 17 SEP., 2009
CHECKED: K C CHENG	APPROVED: W C HO
SCALE: 1 : 125 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

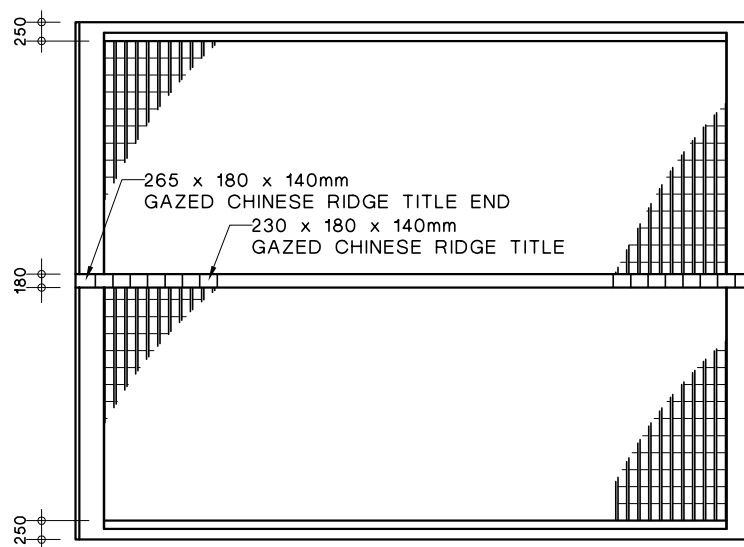
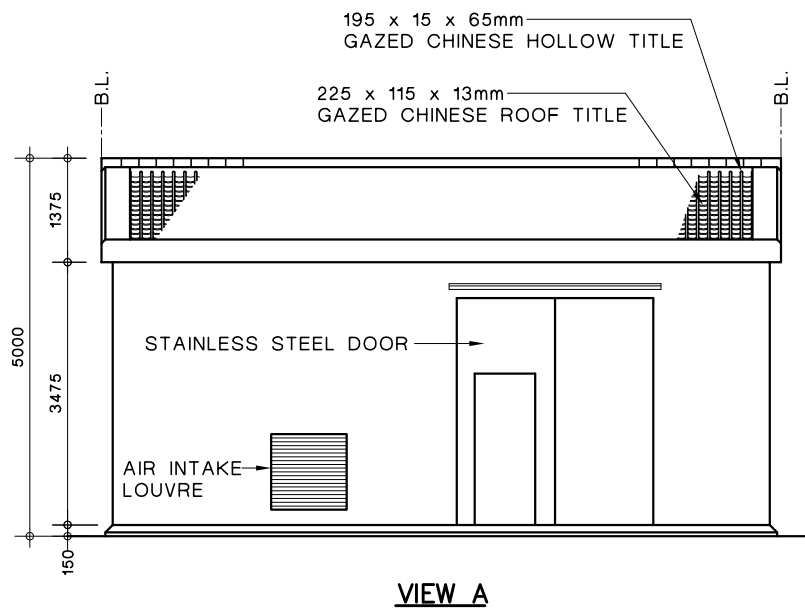
DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 2 4 D A



LEGEND:

- | | |
|-------------------------------------------------------------------------------------|------------------------------------|
|  | WALL MOUNTED LAMPS |
|  | LAMPS SUSPENDED FROM CEILING |
|  | LAMPS WITH EMERGENCY LIGHTING UNIT |
|  | LIGHTING SWITCH |
|  | FAN CONTROL PANEL |
|  | LV MONITORING PANEL |
|  | MCB BOARD |

C UPDATED THE NAME OF CAPACITOR BANK			B GENERAL LAYOUT REVISED			A SYMBOLS, G.I. SLEEVE SIZE AND DEPTH OF CABLE TRENCH UPDATED.																					
<div>CLP 中電</div>						REVS.		18.03.14	20.03.17	15.06.20																	
								A	B	C	D	E	F	G	H	J	K	L									
						INITIAL		H.T.YU	H.T.YU	H.T.YU																	
						TITLE : TYPICAL DRAWING FOR STANDALONE SUBSTATION (SHEET 1 OF 3)																					
DRAWN: C W WONG			DATE: 16 APR., 2012																								
CHECKED: EDMOND YU			APPROVED: W. C. HO																								
SCALE: 1 : 100 (mm)			SHEET(S) IN SET:																								
A S S E T M A N A G E M E N T						DRG. NO.	T	C	O	P	1	0	2	5	0	D	E	3	3	0	1	0	1	2	5	C	A



DRAWN: C W WONG	DATE: 16 APR., 2012
CHECKED: EDMOND YU	APPROVED: W. C. HO
SCALE: 1 : 100 (mm)	SHEET(S) IN SET:

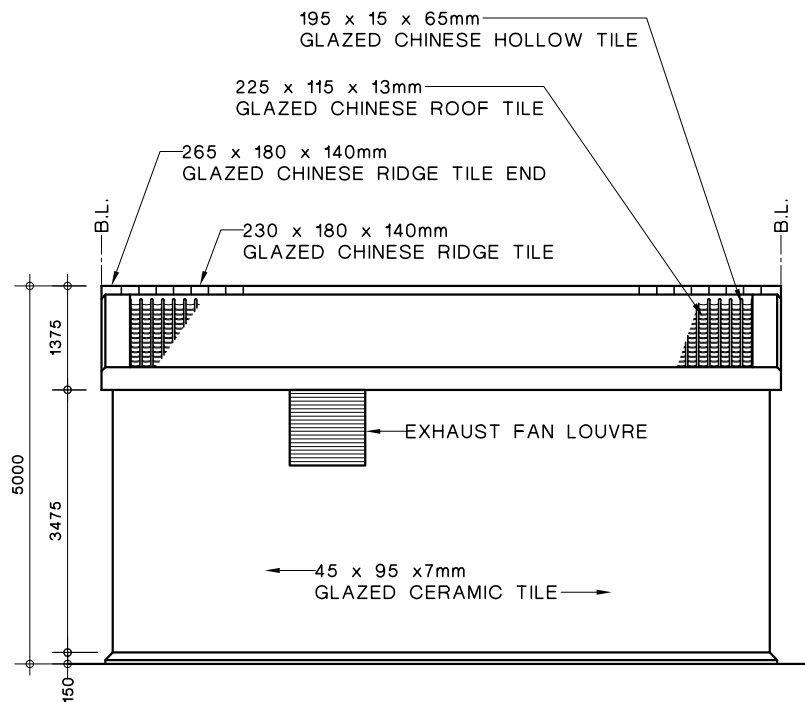
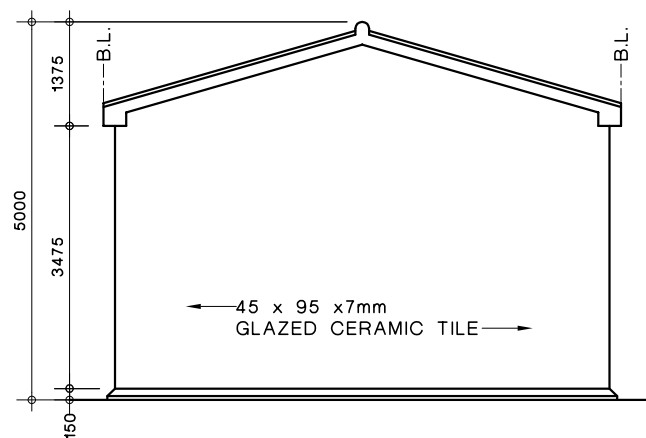
REVS.	A	B	C	D	E	F	G	H	J	K	L
INITIAL											

TITLE :

**TYPICAL DRAWING FOR STANDALONE
SUBSTATION (SHEET 2 OF 3)**

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 2 6 - A

VIEW BVIEW C & D

DRAWN: C W WONG	DATE: 16 APR., 2012
CHECKED: EDMOND YU	APPROVED: W. C. HO
SCALE: 1 : 100 (mm)	SHEET(S) IN SET:

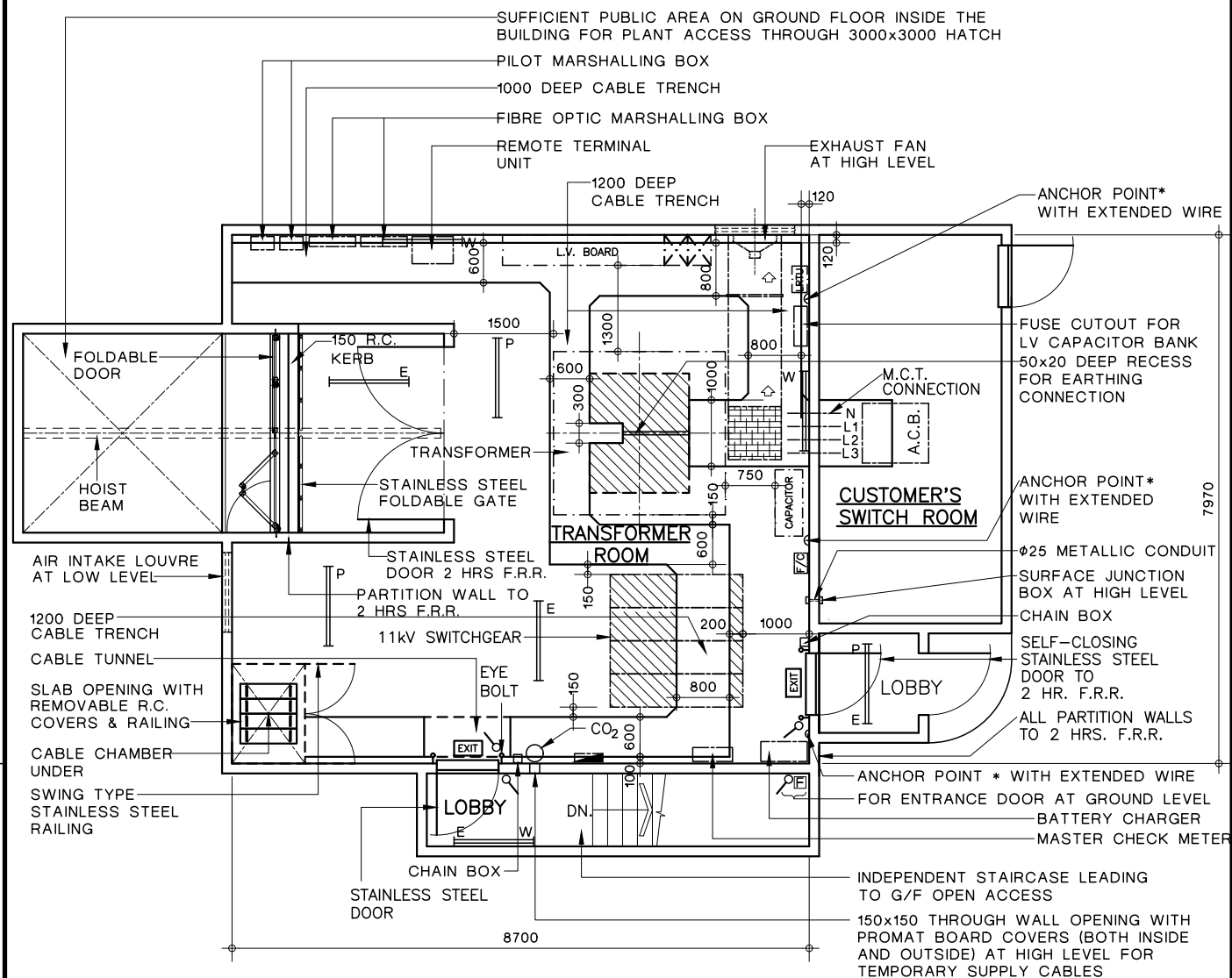
REVS.	A	B	C	D	E	F	G	H	J	K	L
INITIAL											

TITLE :

TYPICAL DRAWING FOR STANDALONE
SUBSTATION (SHEET 3 OF 3)

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 2 7 - A

**LEGEND:**

	W	WALL MOUNTED LAMPS
	P	LAMPS SUSPENDED FROM CEILING
	E	LAMPS WITH EMERGENCY LIGHTING UNIT
		LIGHTING SWITCH (2-WAY/INTERMEDIATE SWITCHING CONTROL FOR MULTIPLE ENTRANCE DOORS)
	F/C	FAN CONTROL PANEL
	LRTU	LV MONITORING PANEL
		MCB BOARD
	E	FAN AUTO/MANUAL OPERATION SWITCH
		FIXED RAILING
		REMOVABLE RAILING

NOTES:

- DESIGN OF FALL RESTRAINT SYSTEM SHALL FOLLOW THE TYPICAL DRAWING T/COP/10250/D/E33/0103/38.
- IF THE PROVISION OF FALL RESTRAINT SYSTEM IS NOT REASONABLY PRACTICABLE, FALL ARREST SYSTEM SHALL BE PROVIDED AS THE LAST RESORT.
- DESIGN OF LAMINATED DOOR, STAINLESS STEEL FOLDABLE DOOR AND FOLDABLE GATE REFER TO DWG NO. T/COP/10250/D/E33/0103/45.
- ALTERNATIVE ACCESS BY LIFT IN THE PUBLIC AREA INSIDE BUILDING SHALL BE PROVIDED.

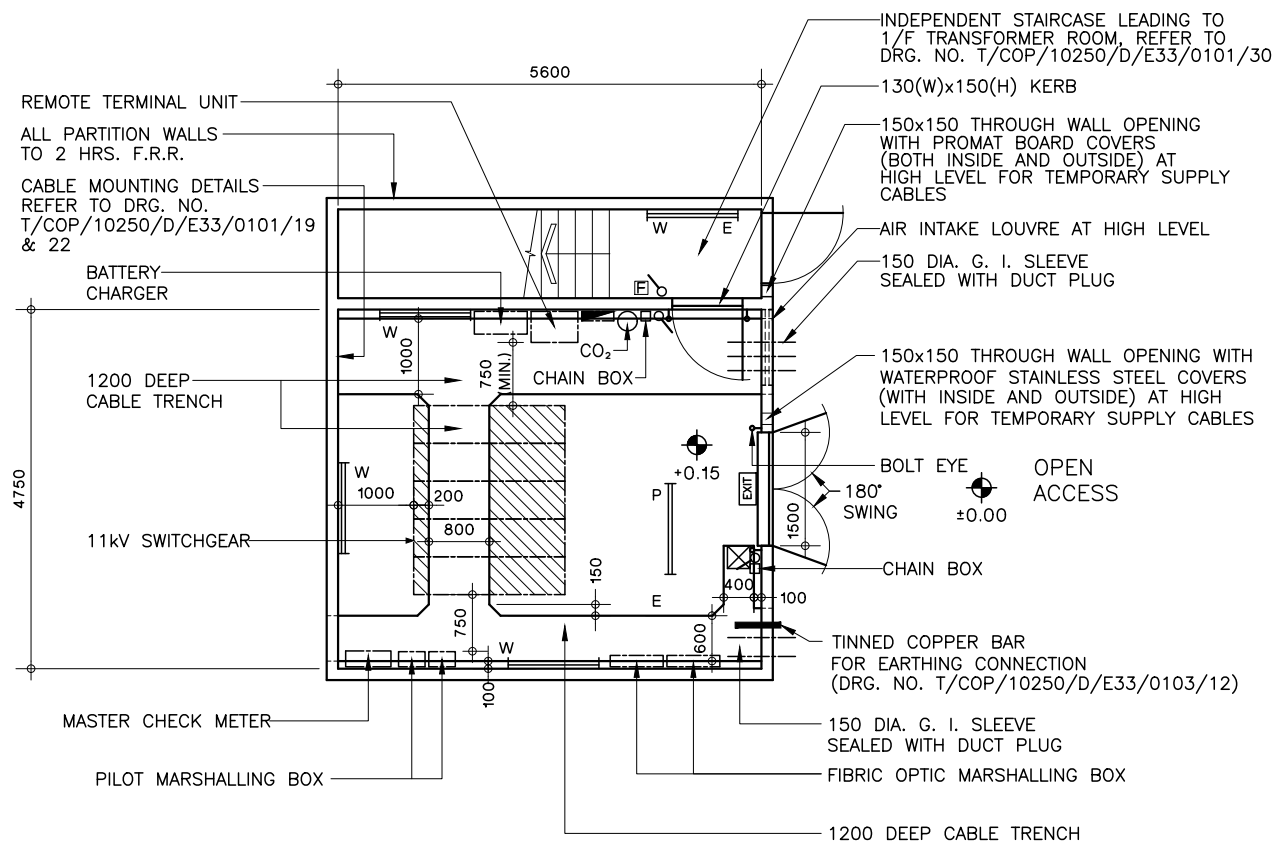


DRAWN: C. W. WONG	DATE: 20 MAR., 2020
CHECKED: EDMOND YU	APPROVED: Y. S. YEUNG
SCALE: 1 : 100 (mm)	SHEET(S) IN SET:

REVS.	A	B	C	D	E	F	G	H	J	K	L
INITIAL											

TITLE : TYPICAL UPPER FLOOR SUBSTATION LAYOUT FOR HOUSING ONE TRANSFORMER WITHOUT VEHICULAR ACCESS (INDEPENDENT STAIRCASE & PROTECTED LOBBY)

ASSET MANAGEMENT	DRG. NO. T/COP/10250/D/E33/0101/28-A
------------------	--------------------------------------

**LEGEND:**

- | | |
|--|-----------------------------------------------------|
| | WALL MOUNTED LAMPS |
| | LAMPS SUSPENDED FROM CEILING |
| | LAMPS WITH EMERGENCY LIGHTING UNIT |
| | LIGHTING SWITCH |
| | FAN AUTO/MANUAL OPERATION SWITCH |
| | LV MONITORING PANEL |
| | MCB BOARD |
| | 300x300x200(D) RECESS AT TRENCH BOTTOM FOR SUMP PIT |



REVS.	A	B	C	D	E	F	G	H	J	K	L
INITIAL											

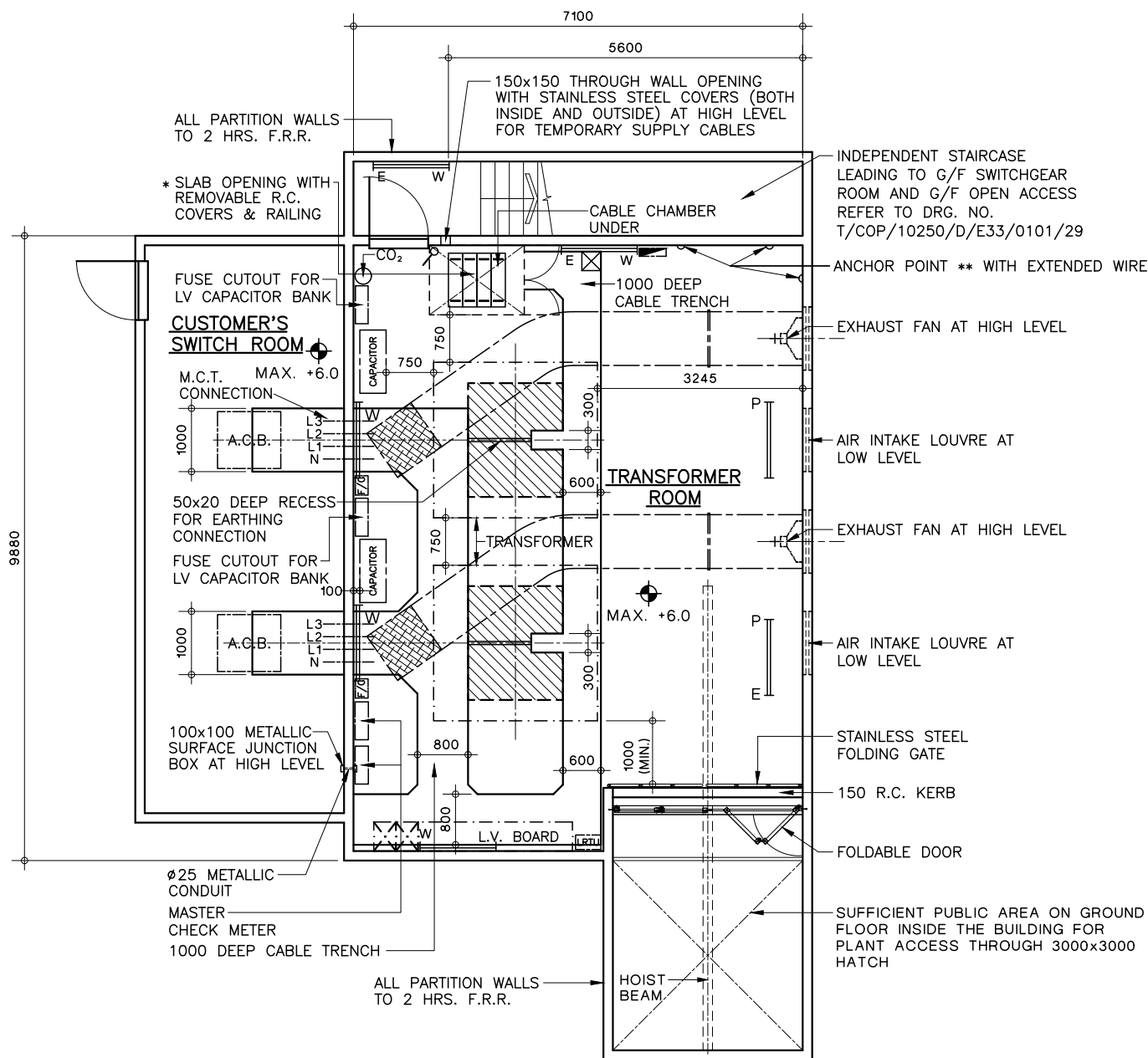
TITLE :

TYPICAL LAYOUT FOR GROUND FLOOR 11kV SWITCHGEAR ROOM

DRAWN: C. W. WONG	DATE: 28 APR., 2020
CHECKED: EDMOND YU	APPROVED: Y. S. YEUNG
SCALE: 1 : 100 (mm)	SHEET(S) IN SET: 1

ASSET MANAGEMENT

DRG. NO. T/COP/10250/D/E33/0101/29-A

**LEGEND:**

	WALL MOUNTED LAMPS
	LAMPS SUSPENDED FROM CEILING
	LAMPS WITH EMERGENCY LIGHTING UNIT
	LIGHTING SWITCH (2-WAY/INTERMEDIATE SWITCHING CONTROL FOR MULTIPLE ENTRANCE DOORS)
	FAN CONTROL PANEL
	LV MONITORING PANEL
	MCB BOARD
	300x300x200(D) RECESS AT TRENCH BOTTOM FOR SUMP PIT

NOTES:

- * 1. HAULAGE LUG WITH SAFETY LOAD 2 TONS SHALL BE PROVIDED ON TOP OF CABLE CHAMBER FOR CABLE LIFTING WORK. THE LUG SHOULD BE POSITIONED AT 2800mm FROM THE FLOOR LEVEL.
- ** 2. DESIGN OF FALL RESTRAINT SYSTEM SHALL FOLLOW THE TYPICAL DRAWING T/COP/10250/D/E33/0103/38.
3. IF THE PROVISION OF FALL RESTRAINT SYSTEM IS NOT REASONABLY PRACTICABLE, FALL ARREST SYSTEM SHALL BE PROVIDED AS THE LAST RESORT.
4. DESIGN OF STAINLESS STEEL FOLDABLE DOOR AND FOLDABLE GATE REFER TO DWG NO. T/COP/10250/D/E33/0103/43.
5. IF HIGHER THAN 2 HOURS F.R.R. PARTITION WALL IS REQUIRED, PROTECTED LOBBY FOR PLANT ACCESS WILL BE REQUIRED.



REVS.	A	B	C	D	E	F	G	H	J	K	L
INITIAL											

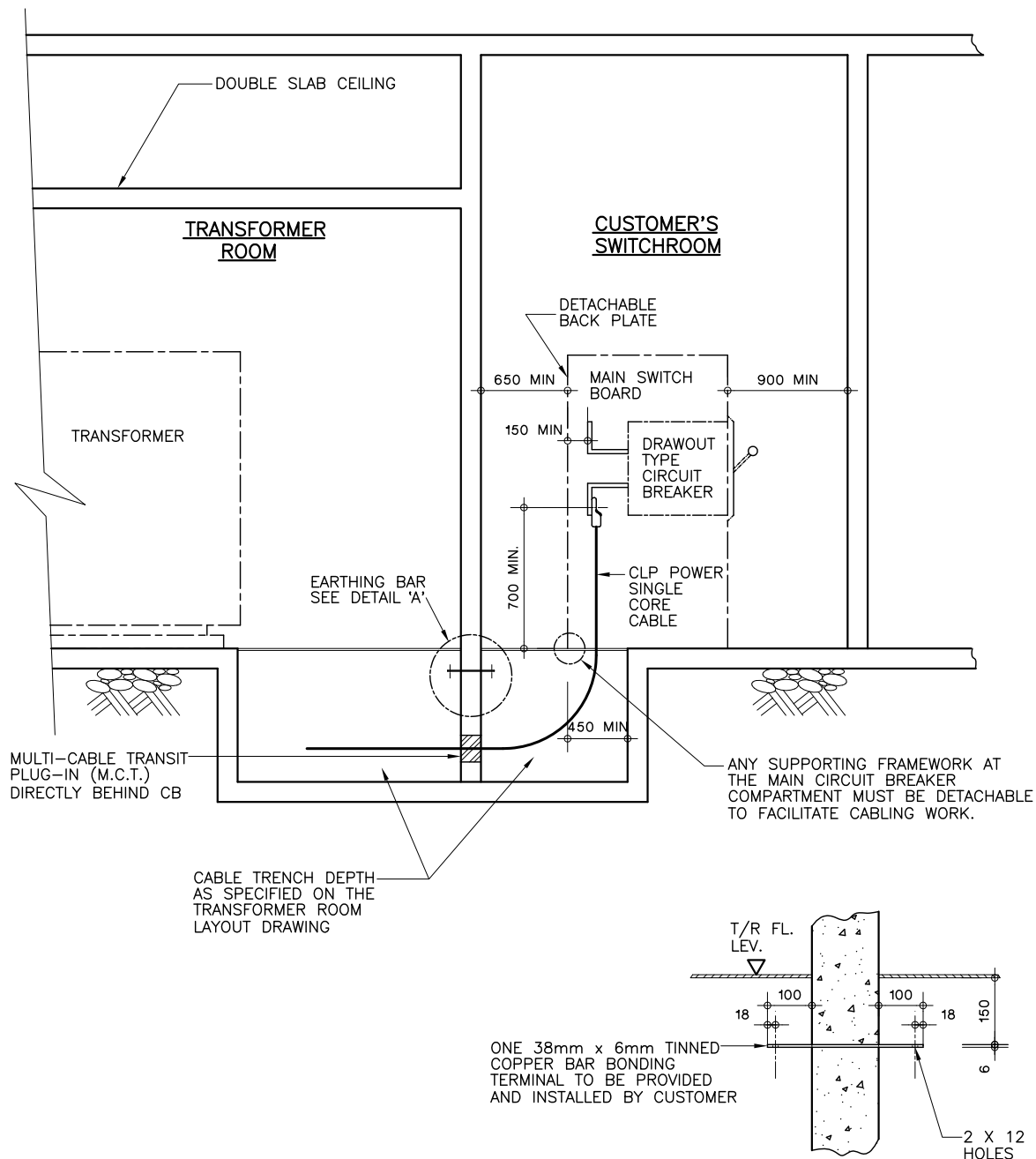
TITLE :

TYPICAL LAYOUT FOR FIRST FLOOR TRANSFORMER ROOM WITH TWO TRANSFORMERS

DRAWN: C. W. WONG	DATE: 28 APR., 2020
CHECKED: EDMOND YU	APPROVED: Y. S. YEUNG
SCALE: 1 : 100 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T/COP/10250/D/E33/0101/30-A



DETAIL 'A'
SCALE 1 : 15

NOTES:

1. EXACT POSITION OF ALL MAIN INCOMING CIRCUIT BREAKERS AND DETAILED CABLE TRENCH LAYOUT WITHIN CUSTOMER'S SWITCHROOM MUST BE SUBMITTED TO CLP POWER FOR APPROVAL PRIOR TO INSTALLATION.
2. REFER TO DRAWING NO. T/COP/10250/D/E33/0103/13 FOR THE CLEARANCE BEHIND THE MAIN SWITCH BOARD.
3. WATERPROOFING SHALL BE APPLIED TO THE SLAB BETWEEN THE CEILING OF THE SUBSTATION AND THE VOID.
4. DRAIN SHALL BE PROVIDED IN THE VOID TO DRAIN AWAY WATER LEAKED INTO THE VOID.
5. NO DRAIN OR OTHER WATER SERVICES PIPE SHALL RUN INTO OR CONCEAL IN THE CEILING SLAB OF THE SUBSTATION.

D	GENERAL AMENDMENT
C	DOUBLE SLAB HEIGHT CHANGED
B	DOUBLE SLAB CEILING ADDED
A	NOTE 2 ADDED



REVS.	21.11.07	08.01.10	26.03.12	23.05.17										
	A	B	C	D	E	F	G	H	J	K	L			
INITIAL	K.C.C.	K.C.C.	K.C.C.	H.T.YU										

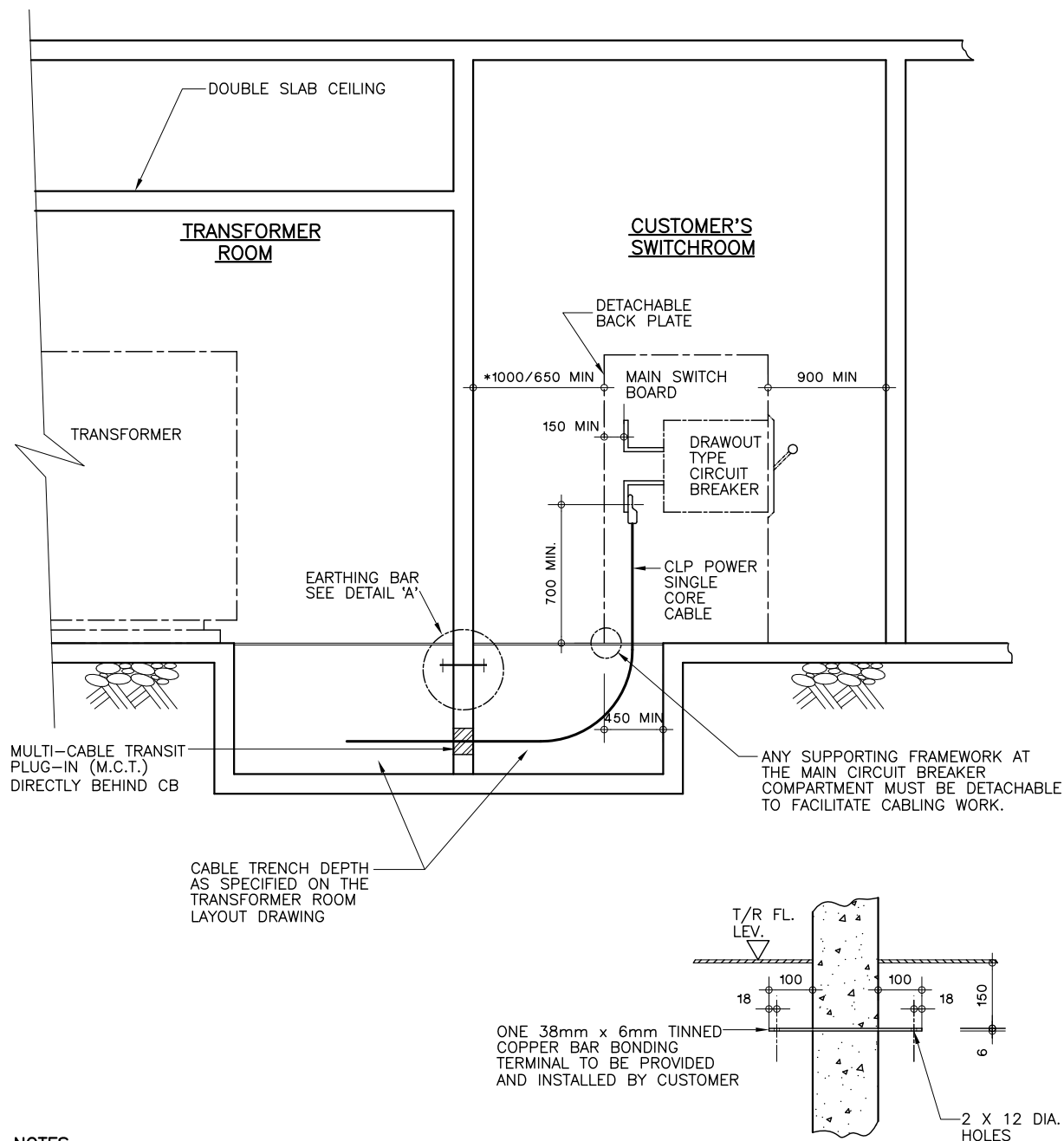
TITLE :

MINIMUM REQUIREMENTS FOR CUSTOMER MAIN SWITCHROOM ADJACENT TO SUBSTATION FOR SINGLE TRANSFORMER INSTALLATION

DRAWN:	S. C. TO	DATE:	12-8-2002
CHECKED:	K. C. CHENG	APPROVED:	K. W. WONG
SCALE:	1 : 50 (mm)	SHEET(S) IN SET:	

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 2 0 1 D A

**NOTES:**

1. EXACT POSITION OF ALL MAIN INCOMING CIRCUIT BREAKERS AND DETAILED CABLE TRENCH LAYOUT WITHIN CUSTOMER'S SWITCHROOM MUST BE SUBMITTED TO CLP POWER FOR APPROVAL PRIOR TO INSTALLATION.
 2. REFER TO DRAWING NO. T-COP-10250-D-E33-0103-13 FOR THE CLEARANCE BEHIND THE MAIN SWITCH BOARD.
 3. WATERPROOFING SHALL BE APPLIED TO THE SLAB BETWEEN THE CEILING OF THE SUBSTATION AND THE VOID.
 4. DRAIN SHALL BE PROVIDED IN THE VOID TO DRAIN AWAY WATER LEAKED INTO THE VOID.
 5. NO DRAIN OR OTHER WATER SERVICES PIPE SHALL RUN INTO OR CONCEAL IN THE CEILING SLAB OF THE SUBSTATION.
- * IF THE POSITION OF THE DRAWOUT TYPE CIRCUIT BREAKER IS NOT IN LINE WITH THE RESPECTIVE TRANSFORMER, THE MINIMUM DISTANCE SHALL BE KEPT AT 1000mm.

DETAIL 'A'

SCALE 1 : 15

E	GENERAL AMENDMENT
D	NOTE ADDED
C	DOUBLE SLAB HEIGHT CHANGED
B	DOUBLE SLAB CEILING ADDED
A	NOTE 2 ADDED



REVS.	21.11.07	08.01.10	26.03.12	04.06.14	23.05.17						
INITIAL	A	B	C	D	E	F	G	H	J	K	L
	K.C.C.	K.C.C.	K.C.C.	H.T.YU	H.T.YU						

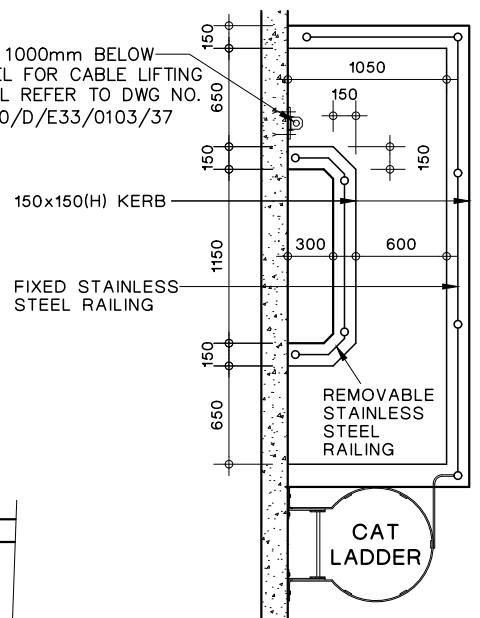
TITLE :

MINIMUM REQUIREMENTS FOR CUSTOMER MAIN SWITCHROOM ADJACENT TO SUBSTATION FOR MULTI-TRANSFORMER INSTALLATION

DRAWN: T. Y. IP	DATE: 19-07-2002
CHECKED: K. C. CHENG	APPROVED: K. W. WONG
SCALE: 1 : 50 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 2 0 2 E A



200

50

6

2 x 12 DIA.
HOLES AT BOTH
ENDS OF
COPPER BAR

18

100

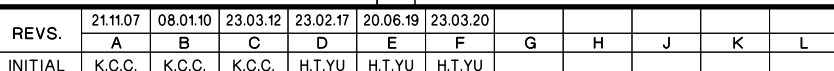
M.C.T.

TRENCH
BOTTOM LEV.
IN SW. RM

ONE 38mm x 6mm
TINNED COPPER BAR
BONDING TERMINAL
TO BE PROVIDED AND
INSTALLED BY
CUSTOMER

NOTES:

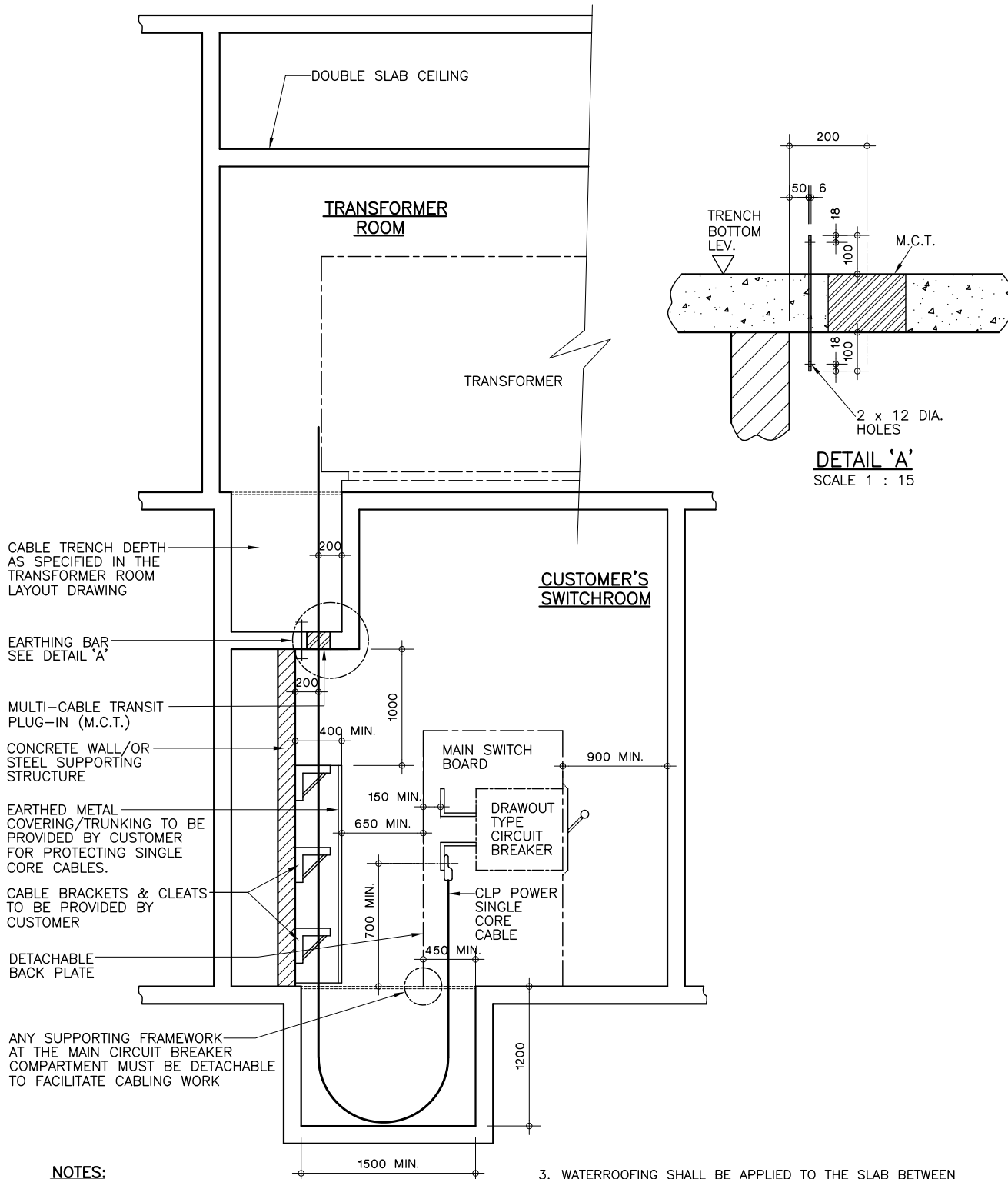
- | | |
|----------|------------------------------------------------------------------------------------|
| F | R.C. WORKING PLATFORM ADDED |
| E | CONCRETE WALL OR STEEL SUPPORTING STRUCTURE ADDED TO OPTIMISE CABLE ROUTING |
| D | CABLE TRENCH AND FACILITY FOR CUSTOMER MAIN SWITCHROOM UPDATED |
| C | DIMENSION OF CABLE TRENCH ADDED AND DOUBLE SLAB HEIGHT CHANGED |
| B | DOUBLE SLAB CEILING ADDED |



MINIMUM REQUIREMENTS FOR CUSTOMER MAIN SWITCHROOM ABOVE TRANSFORMER ROOM

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 2 0 3 F A

**NOTES:**

1. EXACT POSITION OF ALL MAIN INCOMING CIRCUIT BREAKERS AND DETAILED CABLE TRENCH LAYOUT WITHIN CUSTOMER'S SWITCHROOM MUST BE SUBMITTED TO CLP POWER FOR APPROVAL PRIOR TO INSTALLATION.
2. REFER TO DRAWING NO. T-COP-10250-D-E33-0103-13 FOR THE CLEARANCE BEHIND THE MAIN SWITCH BOARD.
3. WATERPROOFING SHALL BE APPLIED TO THE SLAB BETWEEN THE CEILING OF THE SUBSTATION AND THE VOID.
4. DRAIN SHALL BE PROVIDED IN THE VOID TO DRAIN AWAY WATER LEAKED INTO THE VOID.
5. NO DRAIN OR OTHER WATER SERVICES PIPE SHALL RUN INTO OR CONCEAL IN THE CEILING SLAB OF THE SUBSTATION.

C DIMENSION OF CABLE TRENCH ADDED AND DOUBLE SLAB HEIGHT CHANGED

D CABLE TRENCH AND FACILITY FOR CUSTOMER MAIN SWITCHROOM UPDATED.

E CONCRETE WALL OR STEEL SUPPORTING STRUCTURE ADDED TO OPTIMISE CABLE ROUTING



REVS.	21.11.07	08.01.10	23.03.12	17.03.17	20.09.19						
INITIAL	A	B	C	D	E	F	G	H	J	K	L
	K.C.C.	K.C.C.	K.C.C.	H.T.YU	H.T.YU						

TITLE :

MINIMUM REQUIREMENTS FOR CUSTOMER MAIN SWITCHROOM BELOW TRANSFORMER ROOM

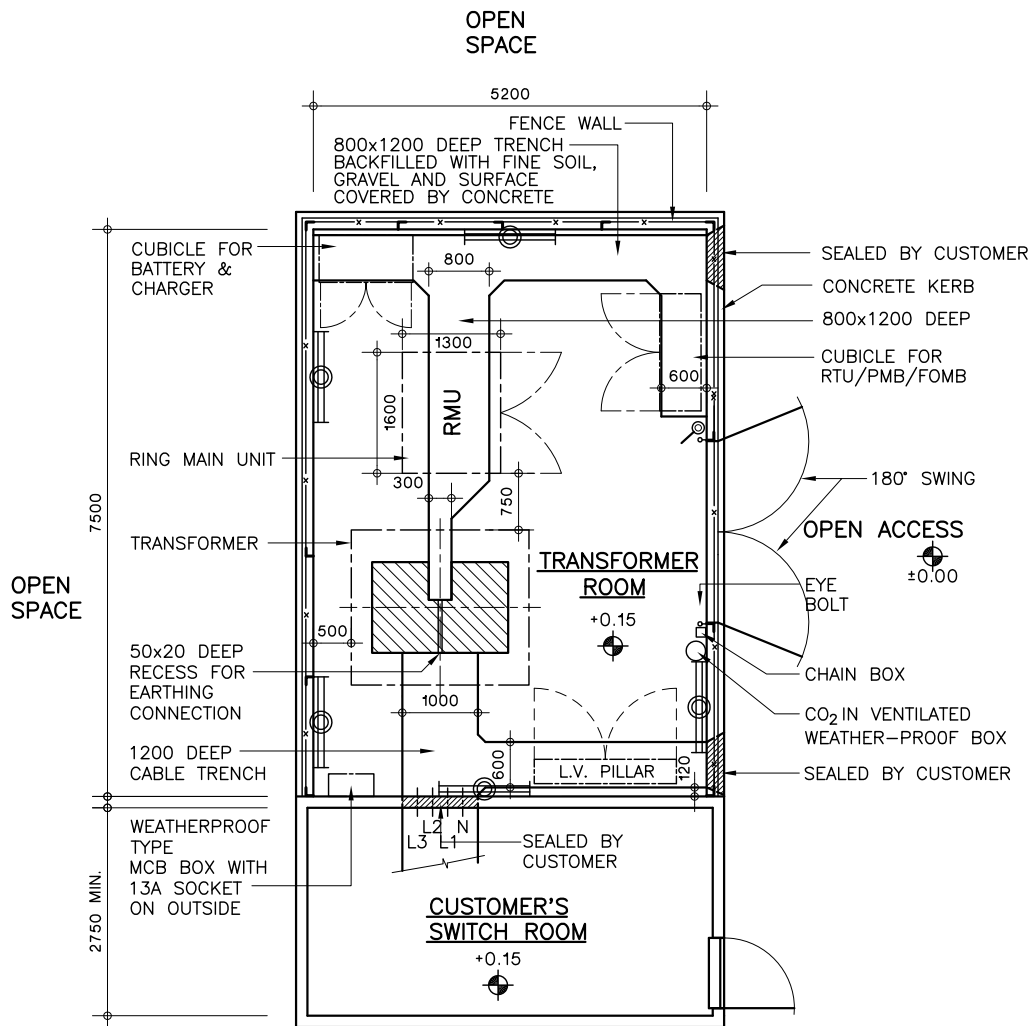
DRAWN: T. Y. IP DATE: 19-07-2002

CHECKED: K. C. CHENG APPROVED: K. W. WONG

SCALE: 1 : 50 (mm) SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 2 0 4 E A

**LEGEND:**

WEATHERPROOF FLUORESCENT LAMPS



WEATHERPROOF LIGHTING SWITCH

E	SIZE OF RMU UPDATED.
D	DEPTH OF CABLE TRENCH AND DOOR SIZE UPDATED.
C	CHAIN BOX ADDED
B	PHASE IDENTIFICATION UPDATED



REVS.	3.4.03	16.08.07	16.12.09	18.03.14	28.06.17						
INITIAL	A	B	C	D	E	F	G	H	J	K	L
	K.C.C.	K.C.C.	K.C.C.	H.T.YU	H.T.YU						

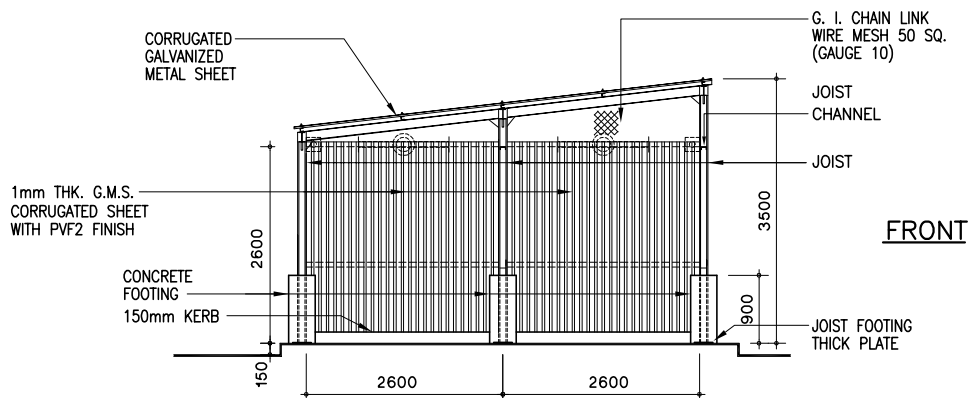
TITLE :

TYPICAL TEMPORARY OUTDOOR SUBSTATION
LAYOUT FOR ONE TRANSFORMER AND 11kV
RING MAIN UNIT

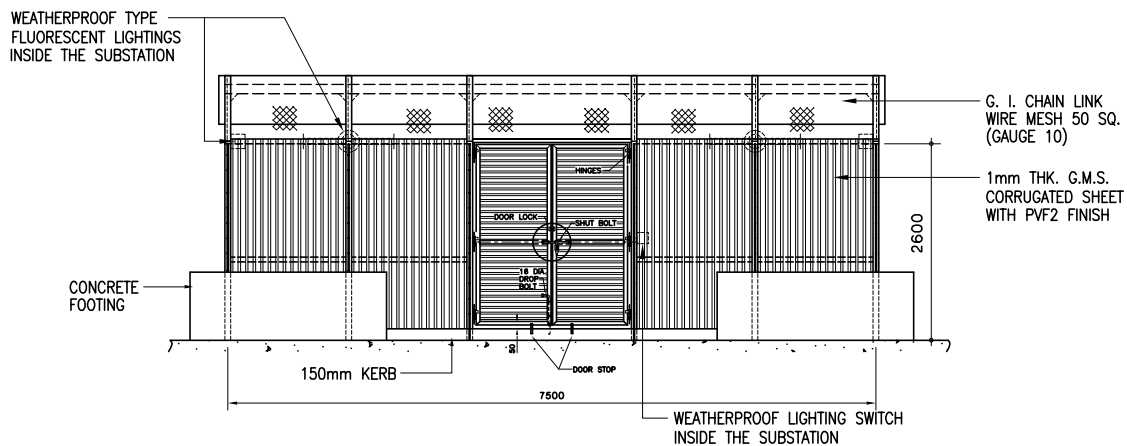
DRAWN: S. C. TO	DATE: 18-07-2002
CHECKED: K. C. CHENG	APPROVED: K. W. WONG
SCALE: 1 : 100 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 1 0 1 E A



SIDE VIEW

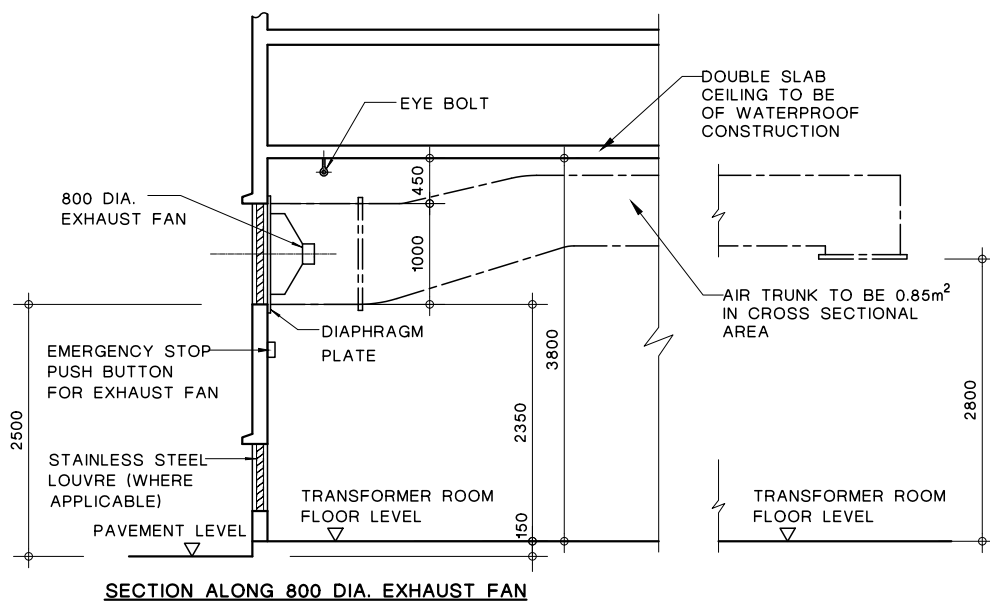
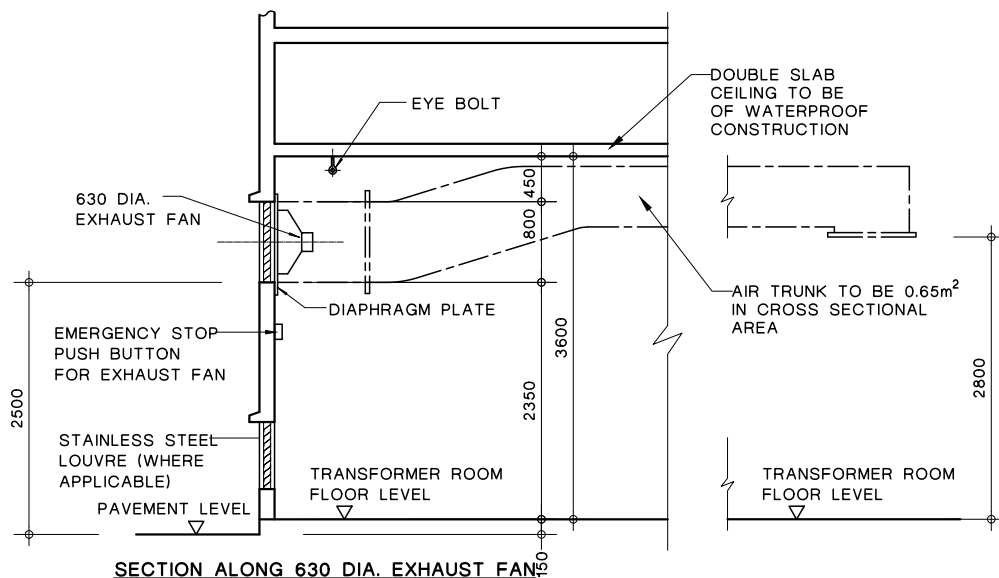


FRONT VIEW

NOTES:

1. DETAIL STRUCTURE SHALL BE DESIGNED BY COMPETENT PROFESSIONAL HIRED BY THE CUSTOMER/DEVELOPER.
2. DETAILS OF METAL GATE, DRAIN PIPE, EARTHING BAR ARRANGEMENT REFER TO DRG. NO. T-COP-10250-D-E33-0104-01
3. SUPPORTING METAL STRUCTURE SHALL BE APPLIED WITH ANTI-RUST PAINTING.
4. FLOORESCENT LIGHTINGS (WEATHERPROOF TYPE) SHALL BE INSTALLED INSIDE THE SUBSTATION.

C		DIMENSION UPDATED.				B		CHANGE FENCE WALL MATERIAL				A		CHANGE FENCE WALL													
<div>CLP 中電</div>						REVS.	21.12.05	16.08.07	18.03.14																		
							A	B	C	D	E	F	G	H	J	K	L										
						INITIAL	K.C.C.	K.C.C.	H.T.YU																		
						TITLE :																					
						COVER FOR OUTDOOR SUBSTATION LOCATED INSIDE CONSTRUCTION SITE																					
						DRAWN: T. Y. IP		DATE: 21 Dec., 2005																			
						CHECKED: K. C. CHENG		APPROVED: W. C. HO																			
						SCALE: 1 : 100 (mm)		SHEET(S) IN SET:																			
A S S E T M A N A G E M E N T						DRG. NO.	T	C	O	P	1	0	2	5	0	D	E	3	3	0	1	0	2	0	5	C	A

**NOTES:**

1. WATERPROOFING SHALL BE APPLIED TO THE SLAB BETWEEN THE CEILING OF THE SUBSTATION AND THE VOID.

2. DRAIN SHALL BE PROVIDED IN THE VOID TO DRAIN AWAY WATER LEAKED INTO THE VOID.

3. NO DRAIN OR OTHER WATER SERVICES PIPE SHALL RUN INTO OR CONCEAL IN THE CEILING SLAB OF THE SUBSTATION.

F DIMENSION UPDATED

E AIR TRUNK UPDATED

D GENERAL AMENDMENT



REVS.	16.08.07	08.01.10	26.04.12	06.06.14	23.02.17	10.06.20						
INITIAL	A K.C.C.	B K.C.C.	C K.C.C.	D H.T.YU	E H.T.YU	F H.T.YU	G	H	J	K	L	

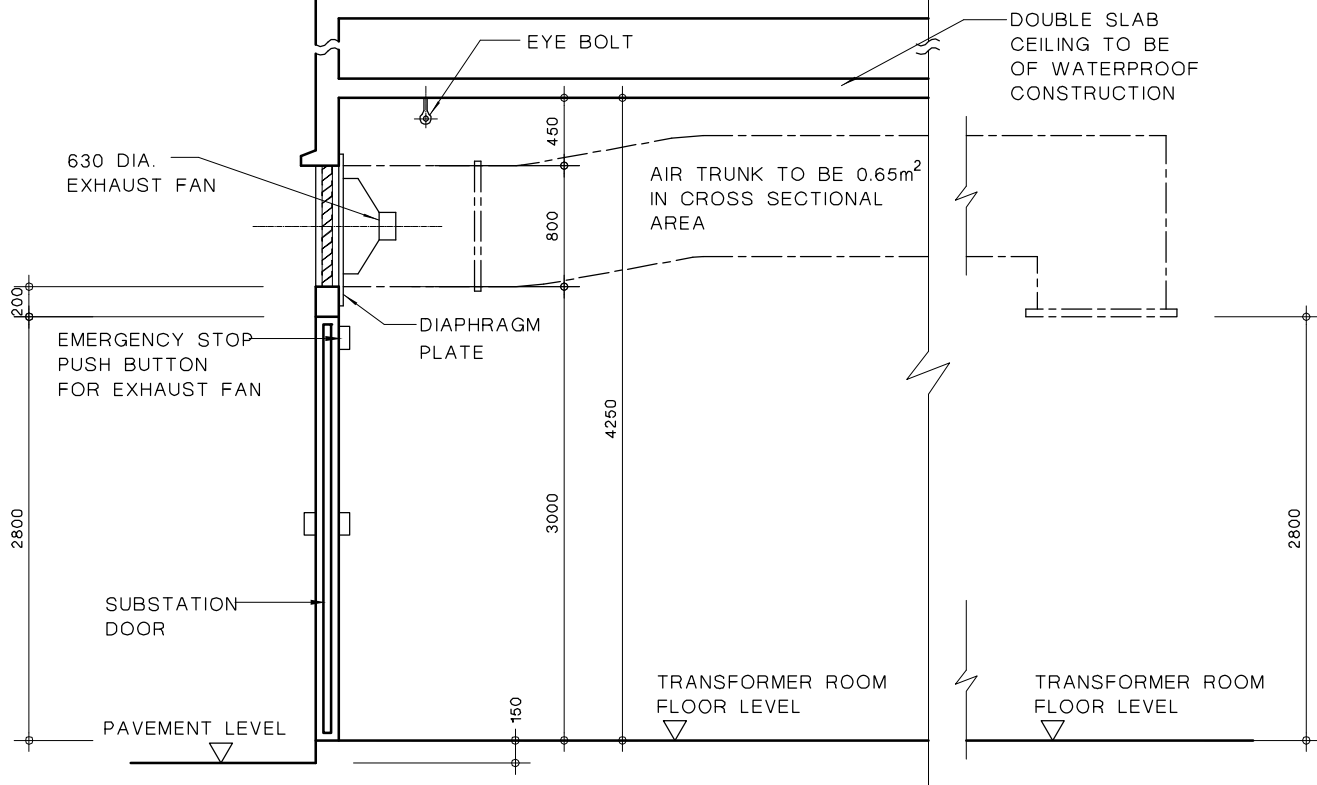
TITLE :

TYPICAL SECTIONS OF TRANSFORMER ROOM AT EXHAUST FAN POSITION (NOT DIRECTLY ABOVE SUBSTATION DOOR) (SHEET 1 OF 3)

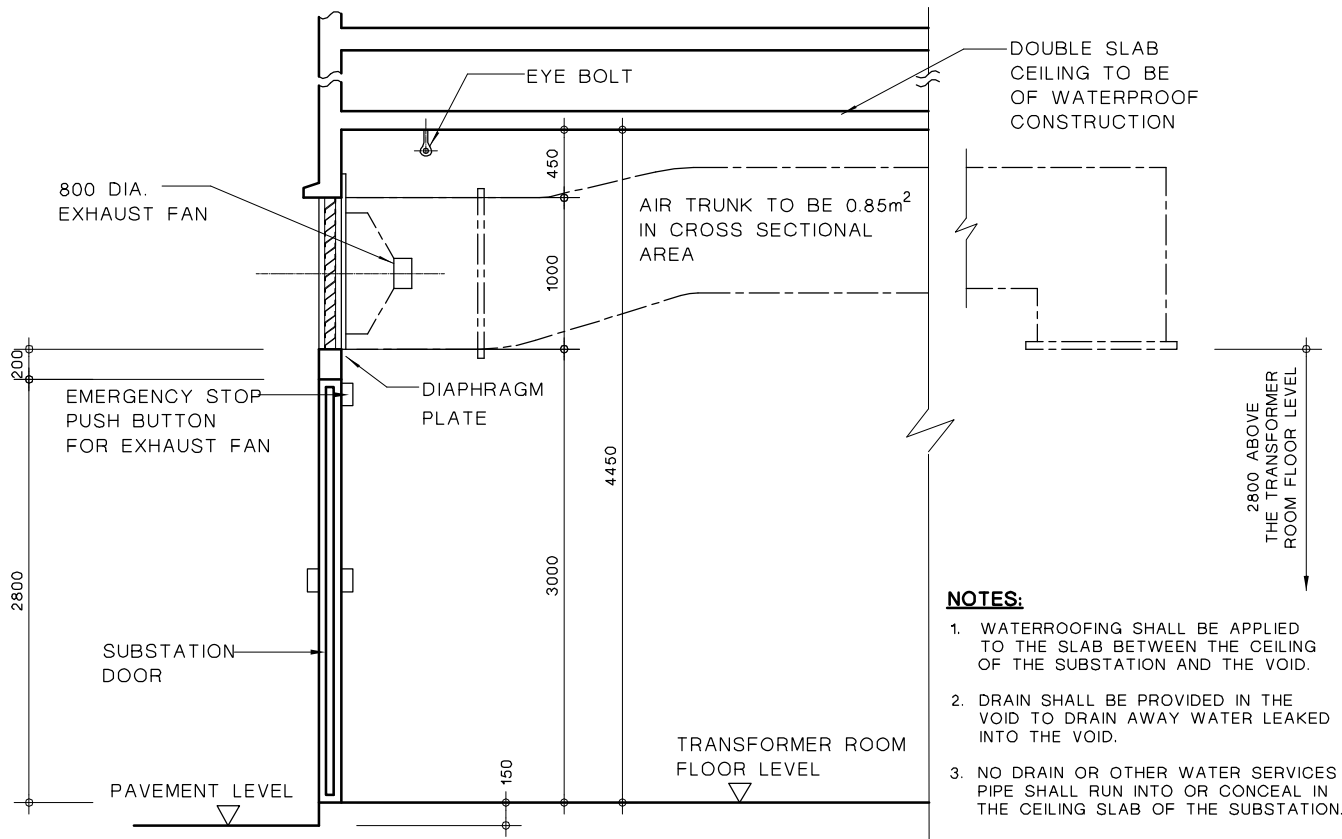
DRAWN: S. C. TO	DATE: 23-07-2002
CHECKED: K. C. CHENG	APPROVED: K. W. WONG
SCALE: 1 : 75 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 2 0 7 F A



SECTION ALONG 630 DIA. EXHAUST FAN



SECTION ALONG 800 DIA. EXHAUST FAN

NOTES:

1. WATERPROOFING SHALL BE APPLIED TO THE SLAB BETWEEN THE CEILING OF THE SUBSTATION AND THE VOID.
2. DRAIN SHALL BE PROVIDED IN THE VOID TO DRAIN AWAY WATER LEAKED INTO THE VOID.
3. NO DRAIN OR OTHER WATER SERVICES PIPE SHALL RUN INTO OR CONCEAL IN THE CEILING SLAB OF THE SUBSTATION.

C GENERAL AMENDMENT

B DOUBLE SLAB HEIGHT CHANGED

D AIR TRUNK UPDATED



REV.	08.01.10	02.05.12	18.03.14	23.02.17									
INITIAL	A K.C.C	B K.C.C	C H.T.YU	D H.T.YU	E	F	G	H	J	K	L		

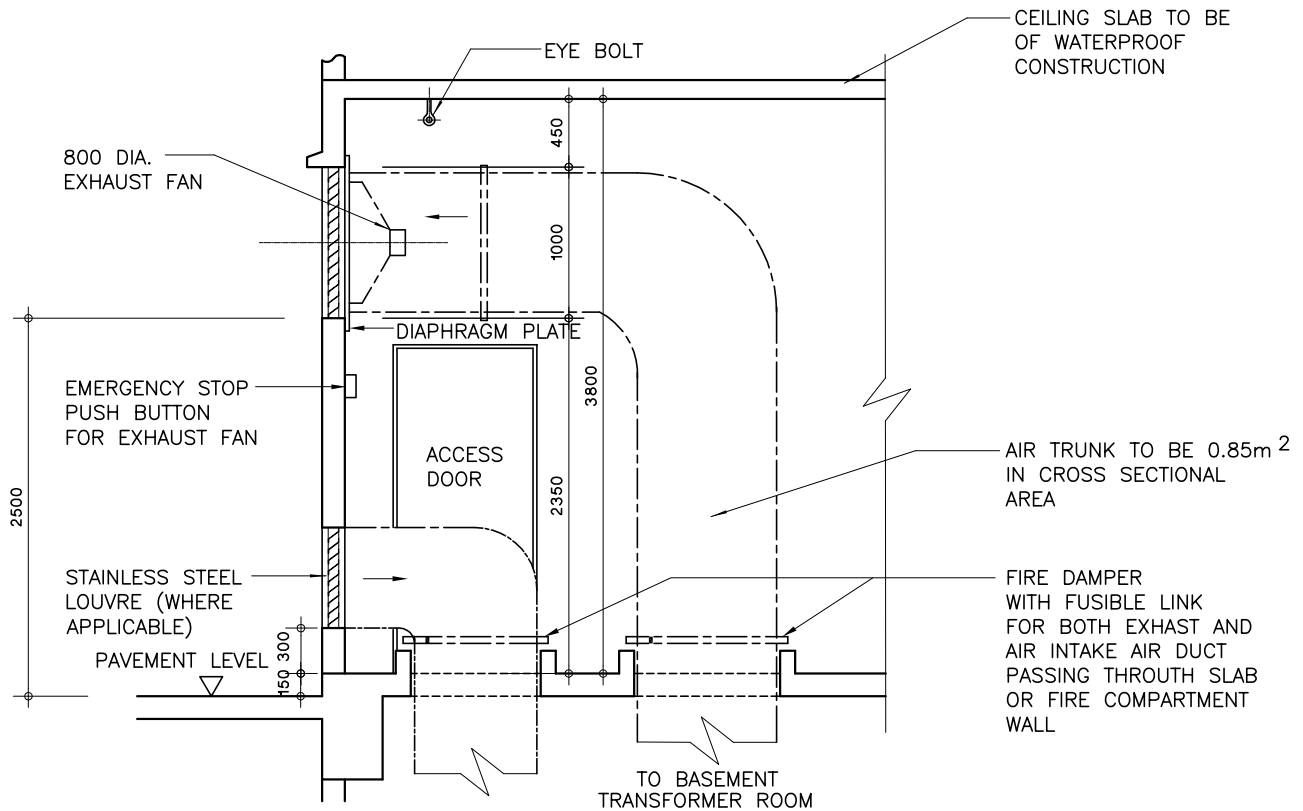
TITLE :

TYPICAL SECTIONS OF TRANSFORMER ROOM AT
EXHAUST FAN POSITION (DIRECTLY ABOVE
SUBSTATION DOOR) (SHEET 2 OF 3)

DRAWN: S. C. TO DATE: 23-07-2002
CHECKED: K. C. CHENG APPROVED: K. W. WONG
SCALE: 1 : 50 (mm) SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 2 0 8 D A



SECTION ALONG 800 DIA. EXHAUST FAN

NOTES:

THE FOLLOWING ITEMS SHALL BE PROVIDED FOR THE FAN ROOM:

1. ACCESS DOOR WITH PROPER NOTICE
2. ADEQUATE WORKING SPACE FOR MAINTENANCE
3. ADEQUATE LIGHTING AND POWER SOCKET
4. FIRE DAMPER CAN BE OMITTED WHEN FIRE RESISTANCE AIR DUCT IS USED IN ACCORDANCE WITH THE REGULATIONS

B	LOUVRE REVISED
A	NOTE 4 ADDED



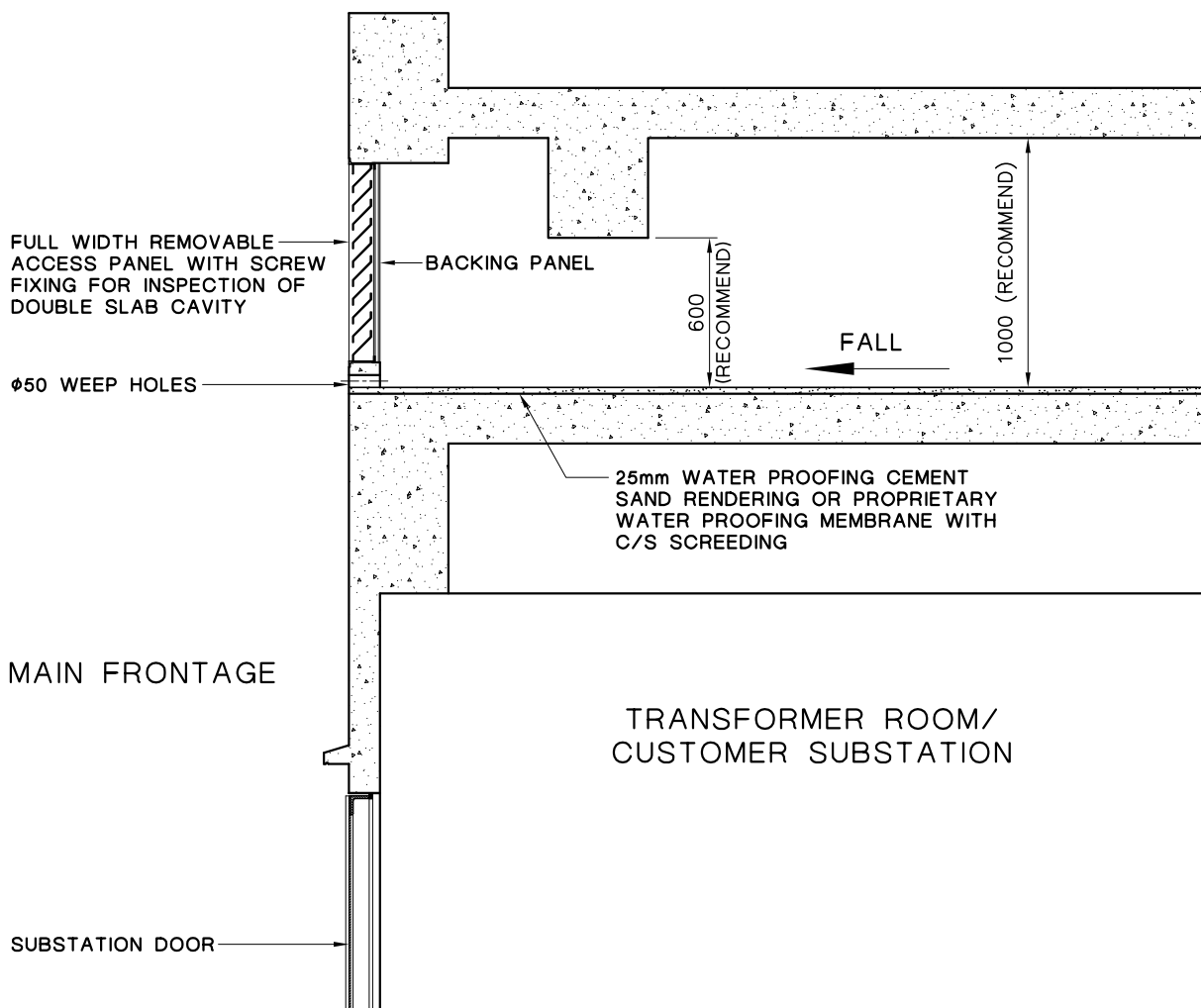
REVS.	01.12.04	16.08.07												
INITIAL	A	B	C	D	E	F	G	H	J	K	L			
	K.C.C	K.C.C												

TITLE :

TYPICAL SECTION OF FAN ROOM
(SHEET 3 OF 3)

DRAWN: S. C. TO	DATE: 23-07-2002
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: 1 : 50 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT	DRG. NO. T	C	O	P	1	0	2	5	0	D	E	3	3	0	1	0	2	0	9	B	A
------------------	------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---



NOTES:

1. NO LEFT IN TIMBER FORM WORK INSIDE THE VOID AFTER CASTING THE CONCRETE.
2. 50mm DIAMETER WEEP HOLE IS REQUIRED AT THE LOWER POINT OF FALL OR AT LEAST 2 HOLES TO BE PROVIDED WHEN IT IS NOT FALLING TO A SINGLE POINT. ALLOW AT LEAST A SLEEVE OPENING FOR EACH VOID COMPARTMENT.
3. THE FOLLOWING TESTS SHALL BE CARRIED OUT AT THE TIME OF SUBSTATION INSPECTION:
 - i. SEAL ALL OUTLETS AND CONSTRUCT SUITABLE DAM WALLS TO COMPARTMENTALISE THE TEST AREAS. DO NOT PERMIT ANY DEBRIS TO ENTER INTO DRAINAGE PIPEWORKS;
 - ii. CAREFULLY FLOOD THE LEVELS NO LESS THAN 50mm FOR UPPER SLAB AND 150mm FOR LOWER SLAB AND MAINTAIN FOR 24 HOURS;
 - iii. MARK THE TOP WATER LEVEL AT CLEARLY VISIBLE LOCATIONS AND REGULARLY INSPECT FOR LEAKS;
 - iv. SLOWLY DRAIN AND REMOVE ALL OUTLET BLOCKAGES AFTER LEST.
4. ALL DIMENSIONS ARE IN mm.

A GENERAL NOTES ADDED.



REVS.	18.03.14												
INITIAL	A	B	C	D	E	F	G	H	J	K	L		

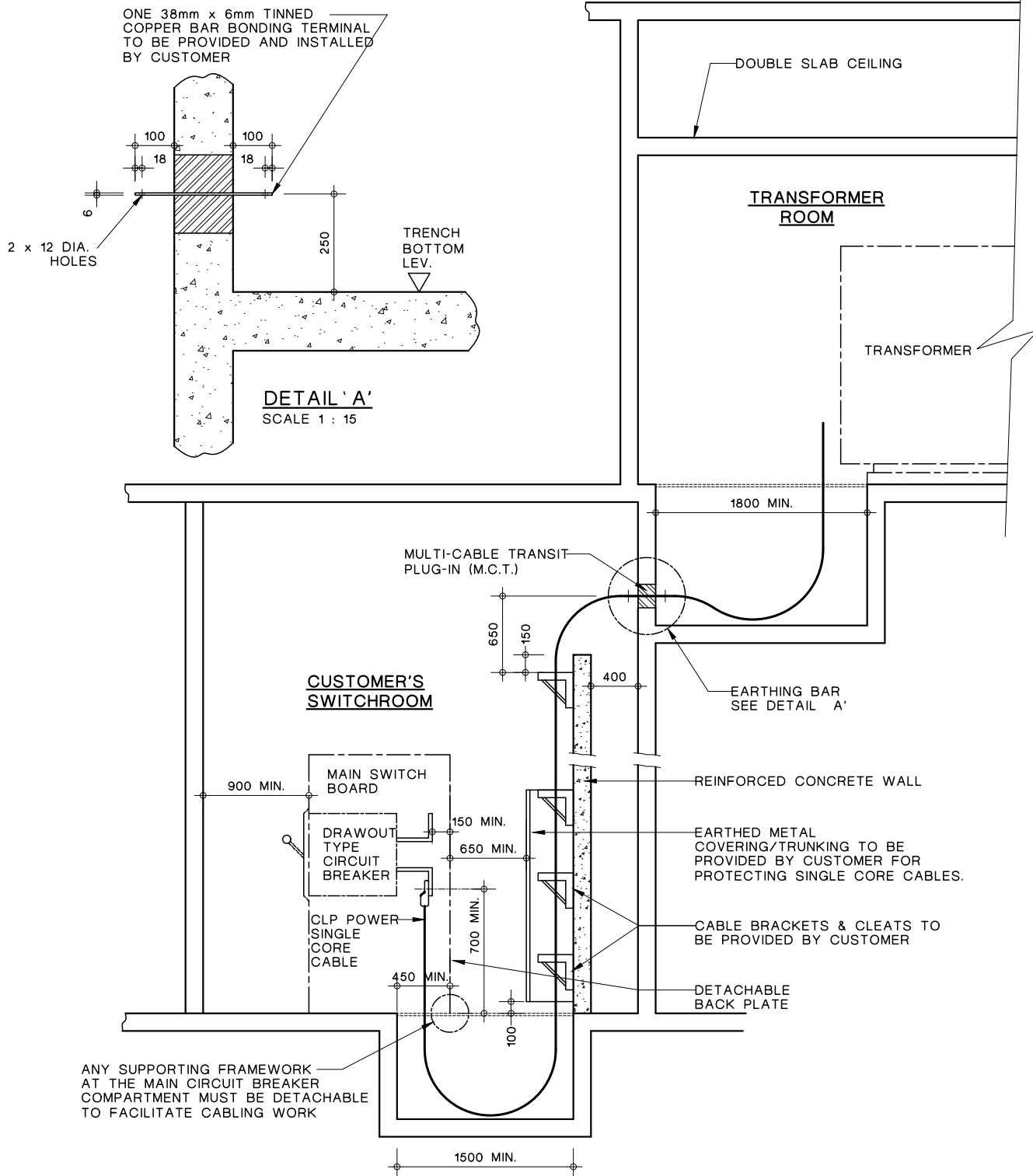
TITLE :

DOUBLE SLAB ARRANGEMENT FOR
TRANSFORMER ROOM

DRAWN: C W WONG	DATE: 2 APR., 2012
CHECKED: GARY KWOK	APPROVED: GARY KWOK
SCALE: N. T. S.	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 2 1 0 A A

**NOTES:**

- EXACT POSITION OF ALL MAIN INCOMING CIRCUIT BREAKERS AND DETAILED CABLE TRENCH LAYOUT WITHIN CUSTOMER'S SWITCHROOM MUST BE SUBMITTED TO CLP POWER FOR APPROVAL PRIOR TO INSTALLATION.
- REFER TO DRAWING NO. T-COP-10250-D-E33-0103-13 FOR THE CLEARANCE BEHIND THE MAIN SWITCH BOARD.
- WATERPROOFING SHALL BE APPLIED TO THE SLAB BETWEEN THE CEILING OF THE SUBSTATION AND THE VOID.
- DRAIN SHALL BE PROVIDED IN THE VOID TO DRAIN AWAY WATER LEAKED INTO THE VOID.
- NO DRAIN OR OTHER WATER SERVICES PIPE SHALL RUN INTO OR CONCEAL IN THE CEILING SLAB OF THE SUBSTATION.
- REINFORCED CONCRETE WORKING PLATFORM SHALL BE PROVIDED IF THE HEADROOM OF CUSTOMER'S SWITCHROOM IS GREATER THAN 4 METERS.

A REINFORCED CONCRETE WALL SUPPORTING STRUCTURE ADDED TO OPTIMISE CABLE ROUTING AND NOTE UPDATED



REVS.	23.03.20													
INITIAL	A	B	C	D	E	F	G	H	J	K	L			

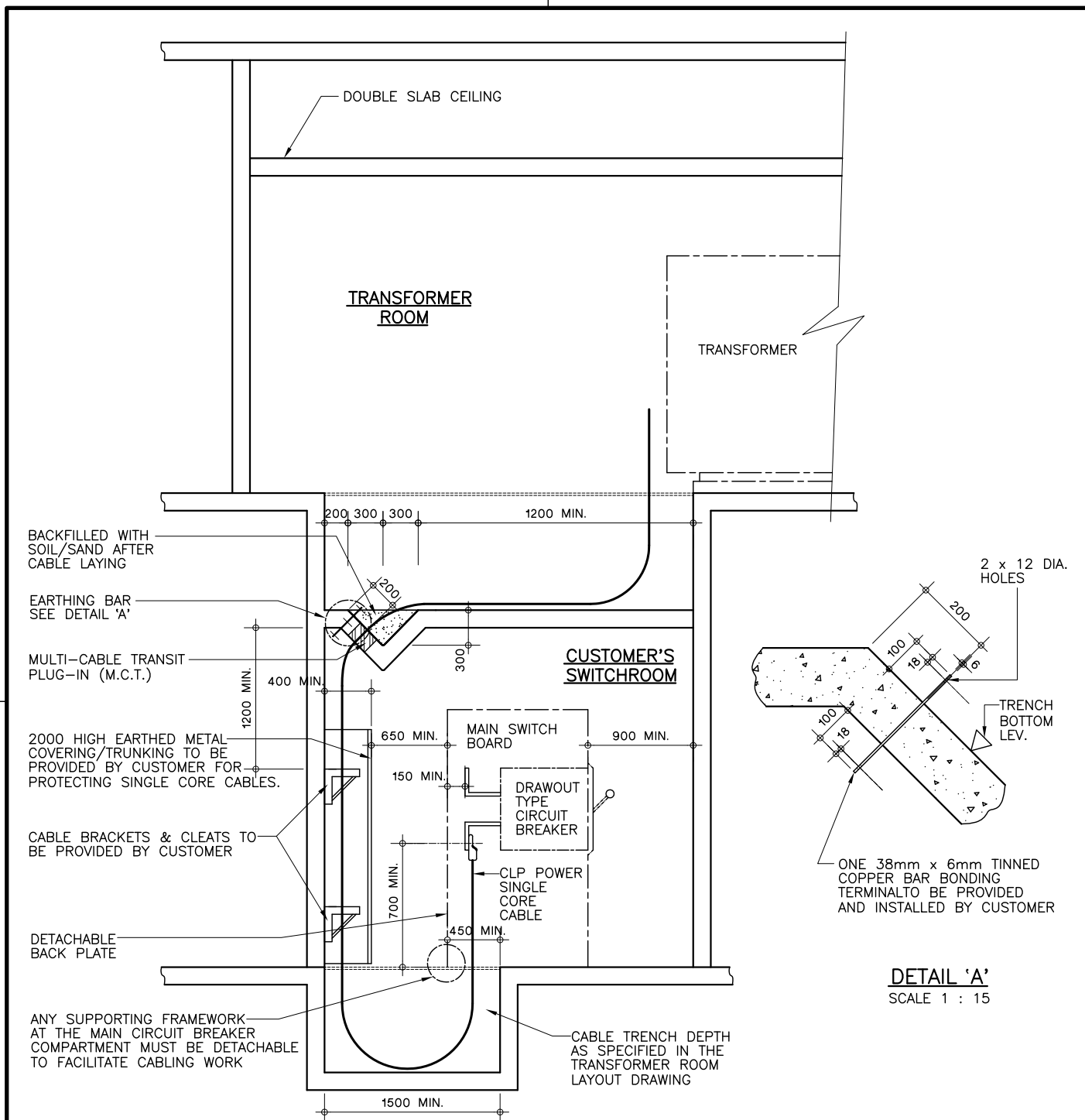
TITLE :

MINIMUM REQUIREMENTS FOR CUSTOMER
MAIN SWITCH ROOM NOT DIRECT BELOW
TRANSFORMER ROOM (SHEET 1 OF 2)

DRAWN: C W WONG	DATE: 7 APR., 2017
CHECKED: EDMOND YU	APPROVED: W C HO
SCALE: 1 : 50 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 2 1 1 A A

**NOTE:**

1. EXACT POSITION OF ALL MAIN INCOMING CIRCUIT BREAKERS AND DETAILED CABLE TRENCH LAYOUT WITHIN CUSTOMER'S SWITCHROOM MUST BE SUBMITTED TO CLP POWER FOR APPROVAL PRIOR TO INSTALLATION.
2. REFER TO DRAWING NO. T-COP-10250-D-E33-0103-13 FOR THE CLEARANCE BEHIND THE MAIN SWITCH BOARD.
3. WATERPROOF SHALL BE APPLIED TO THE SLAB BETWEEN THE CEILING OF THE SUBSTATION AND THE VOID.
4. DRAIN SHALL BE PROVIDED IN THE VOID TO DRAIN AWAY WATER LEAKED INTO THE VOID.
5. NO DRAIN OR OTHER WATER SERVICES PIPE SHALL BE RUN INTO OR CONCEAL IN THE CEILING SLAB OF THE SUBSTATION.



DRAWN: T. W. LAU DATE: 11-05-2017

CHECKED: EDMOND YU APPROVED: W. C. HO

SCALE: 1 : 50 (mm) SHEET(S) IN SET:

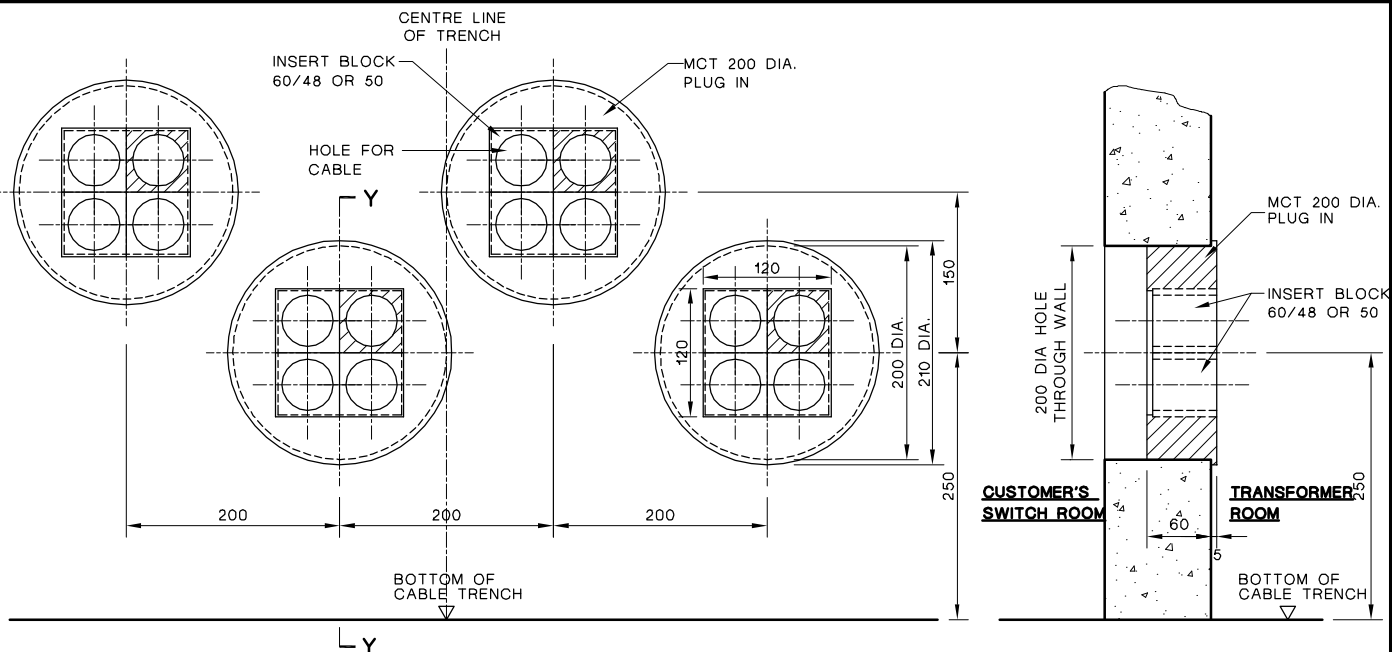
REVS.	A	B	C	D	E	F	G	H	J	K	L
INITIAL											

TITLE :

MINIMUM REQUIREMENTS FOR CUSTOMER MAIN SWITCHROOM NOT DIRECT BELOW TRANSFORMER ROOM (SHEET 2 OF 2)

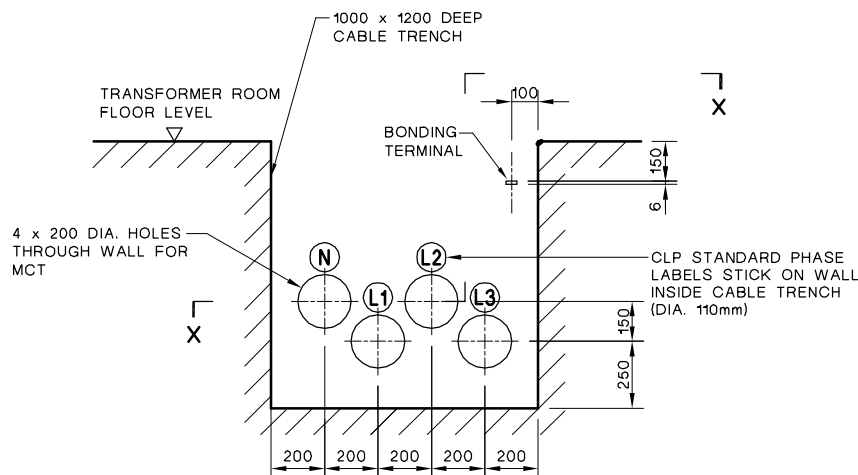
ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 2 1 2 - A

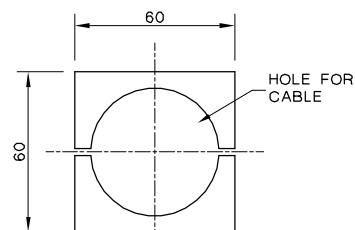


ARRANGEMENT OF MULTI-CABLE TRANSIT
(VIEW LOOKING TOWARDS WALL INSIDE TRANSFORMER ROOM)

SECTION Y-Y



ELEVATION NOTE: CHEQUER PLATE
(VIEW IN TRANSFORMER ROOM) NOT SHOWN



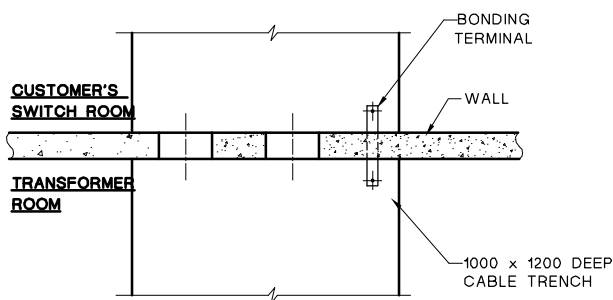
**DETAIL FOR INSERT
BLOCK 60/48 OR 50**

PHASE IDENTIFICATION:

- L1 (BROWN)
- L2 (BLACK)
- L3 (GREY)
- N : (NEUTRAL/BLUE)

NOTES:

1. MULTI-CABLE TRANSIT PLUG-IN TO BE PROVIDED AND INSTALLED BY CLP POWER.
2. THE 4 x 200 DIA. HOLES THROUGH WALL TO BE PROVIDED BY CUSTOMER.
3. SOLID CABLE $\phi 48$, STRANDED CABLE $\phi 50$.
4. ☒ USE SPARE INSERT BLOCK 30/0 WHEN ONLY 3 CABLES PER PHASE ARE USED.
5. PHASE IDENTIFICATION LABELS TO BE APPLIED ON TRANSFORMER RM. AND CUSTOMER MAIN SWITCH RM.
6. ALL DIMENSIONS ARE IN mm.



SECTION X-X

C SPARE INSERT BLOCK DELETED

B PHASE LABELS ADDED

A PHASE IDENTIFICATION UPDATED



REVS.	20.08.07	12.10.09	23.02.17										
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	K.C.C.	K.C.C.	H.T.YU										

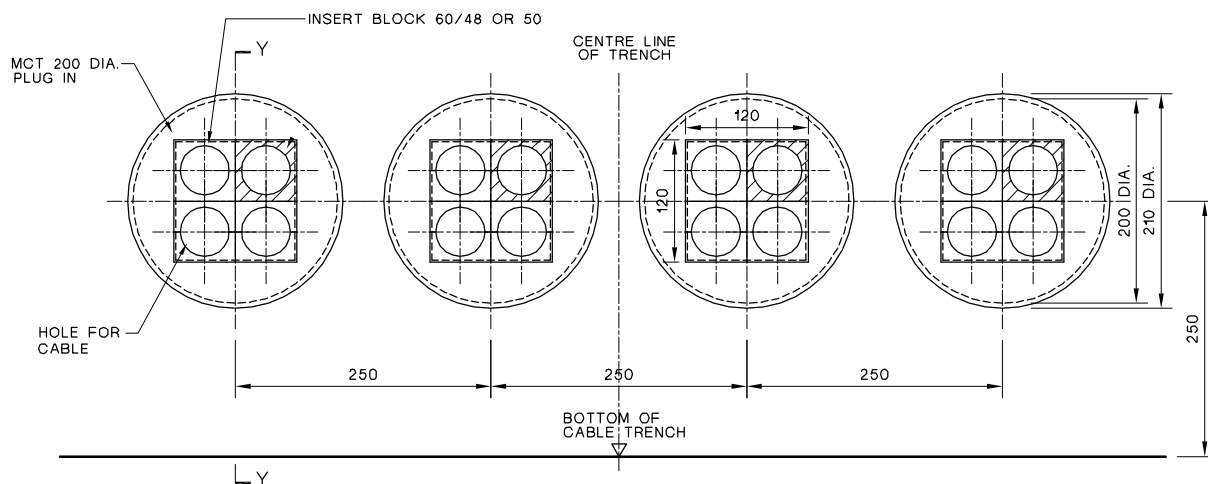
TITLE :

INSTALLATION OF FOUR "MULTI-CABLE TRANSIT"
PLUG-IN IN CABLE TRENCH IN TWO LAYERS
(FOR FULL NEUTRAL ARRANGEMENT)

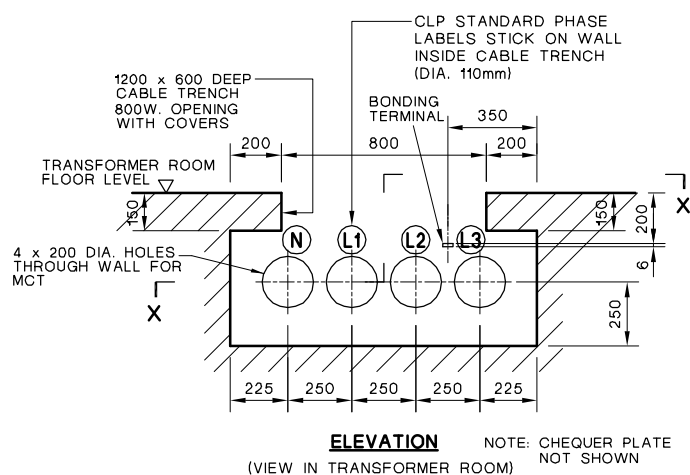
DRAWN: S. C. TO DATE: 22-07-2002
CHECKED: K. C. CHENG APPROVED: K. W. WONG
SCALE: N.T.S. SHEET(S) IN SET:

ASSET MANAGEMENT

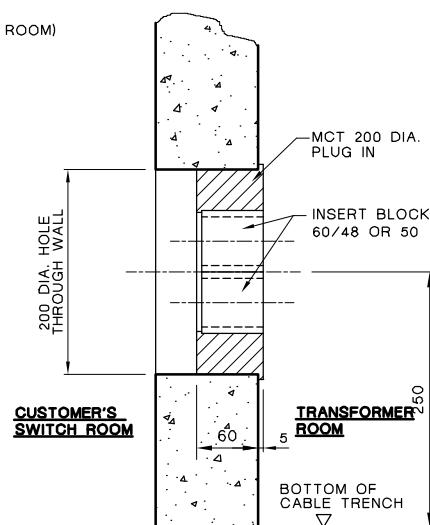
DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 0 1 C A



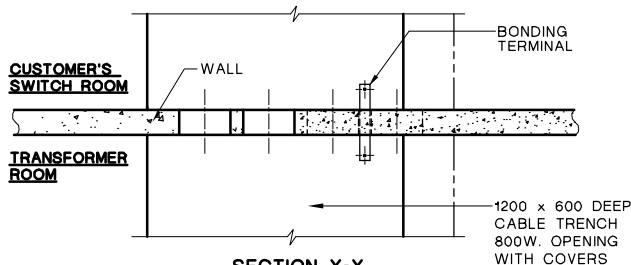
ARRANGEMENT OF MULTI-CABLE TRANSIT
(VIEW LOOKING TOWARDS WALL INSIDE TRANSFORMER ROOM)



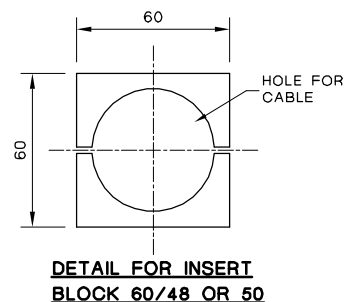
ELEVATION NOTE: CHEQUER PLATE NOT SHOWN
(VIEW IN TRANSFORMER ROOM)



SECTION Y-Y



SECTION X-X



DETAIL FOR INSERT BLOCK 60/48 OR 50

NOTES:

- MULTI-CABLE TRANSIT PLUG-IN TO BE PROVIDED AND INSTALLED BY CLP POWER.
- THE 4 x 200 DIA. HOLES THROUGH WALL TO BE PROVIDED BY CUSTOMER.
- SOLID CABLE $\phi 48$, STRANDED CABLE $\phi 50$.
- ☐ USE SPARE INSERT BLOCK 30/0 WHEN ONLY 3 CABLES PER PHASE ARE USED.
- PHASE IDENTIFICATION LABELS TO BE APPLIED ON TRANSFORMER RM. AND CUSTOMER MAIN SWITCH RM.
- ALL DIMENSIONS ARE IN mm.

PHASE IDENTIFICATION:

- L1 (BROWN)
L2 (BLACK)
L3 (GREY)
N : (NEUTRAL/BLUE)

C	SPARE INSERT BLOCK DELETED
A	PHASE IDENTIFICATION UPDATED



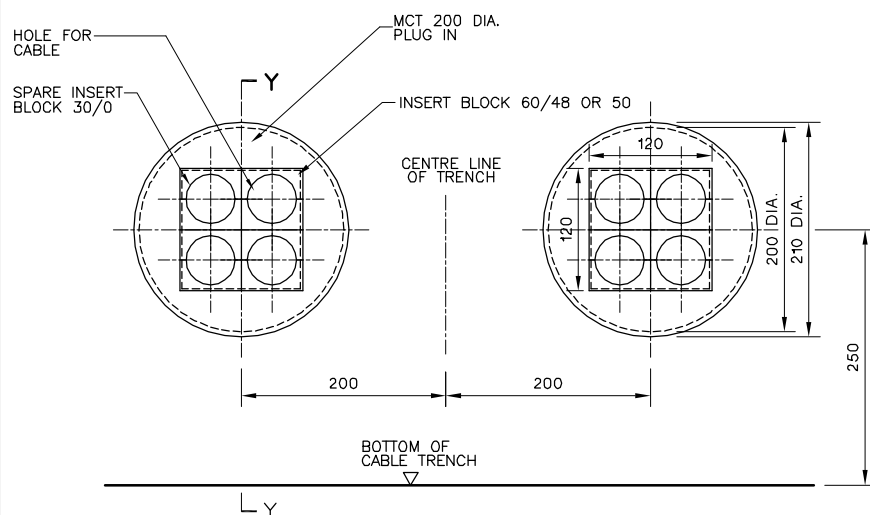
REVS.	20.08.07	12.10.09	23.02.17										
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	K.C.C.	K.C.C.	H.T.YU										

TITLE :

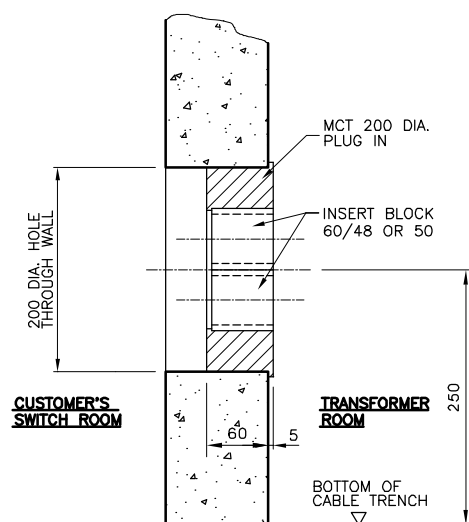
INSTALLATION OF FOUR "MULTI-CABLE TRANSIT" PLUG-IN IN CABLE TRENCH IN LINE (FOR FULL NEUTRAL ARRANGEMENT)

DRAWN: S. C. TO	DATE: 26-07-2002
CHECKED: K. C. CHENG	APPROVED: K. W. WONG
SCALE: N. T. S.	SHEET(S) IN SET:

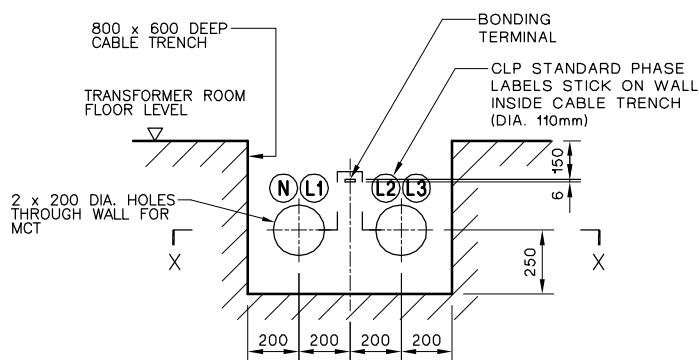
ASSET MANAGEMENT	DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 0 2 C A
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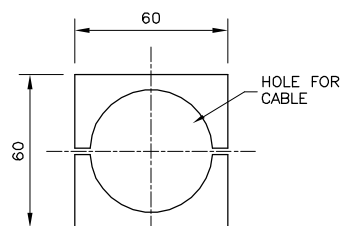
ARRANGEMENT OF MULTI-CABLE TRANSIT
(VIEW LOOKING TOWARDS WALL INSIDE TRANSFORMER ROOM)



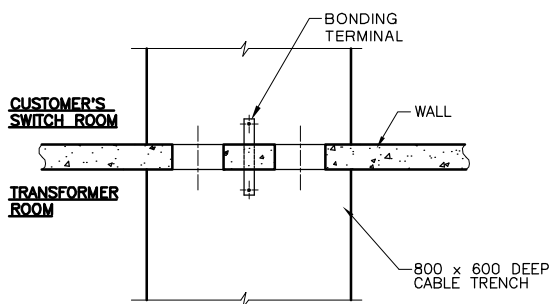
SECTION Y-Y



ELEVATION NOTE: CHEQUER PLATE NOT SHOWN
(VIEW IN TRANSFORMER ROOM)



DETAIL FOR INSERT BLOCK 60/48 OR 50



SECTION X-X

PHASE IDENTIFICATION:

- L1 (BROWN)
- L2 (BLACK)
- L3 (GREY)
- N : (NEUTRAL/BLUE)

NOTES:

1. MULTI-CABLE TRANSIT PLUG-IN TO BE PROVIDED AND INSTALLED BY CLP POWER.
2. THE 2 x 200 DIA. HOLES THROUGH WALL TO BE PROVIDED BY CUSTOMER.
3. SOLID CABLE $\phi 48$, STRANDED CABLE $\phi 50$.
4. PHASE IDENTIFICATION LABELS TO BE APPLIED ON TRANSFORMER RM. AND CUSTOMER MAIN SWITCH RM.
5. ALL DIMENSIONS ARE IN mm.

B	NOTES UPDATED	A	PHASE LABELS ADDED
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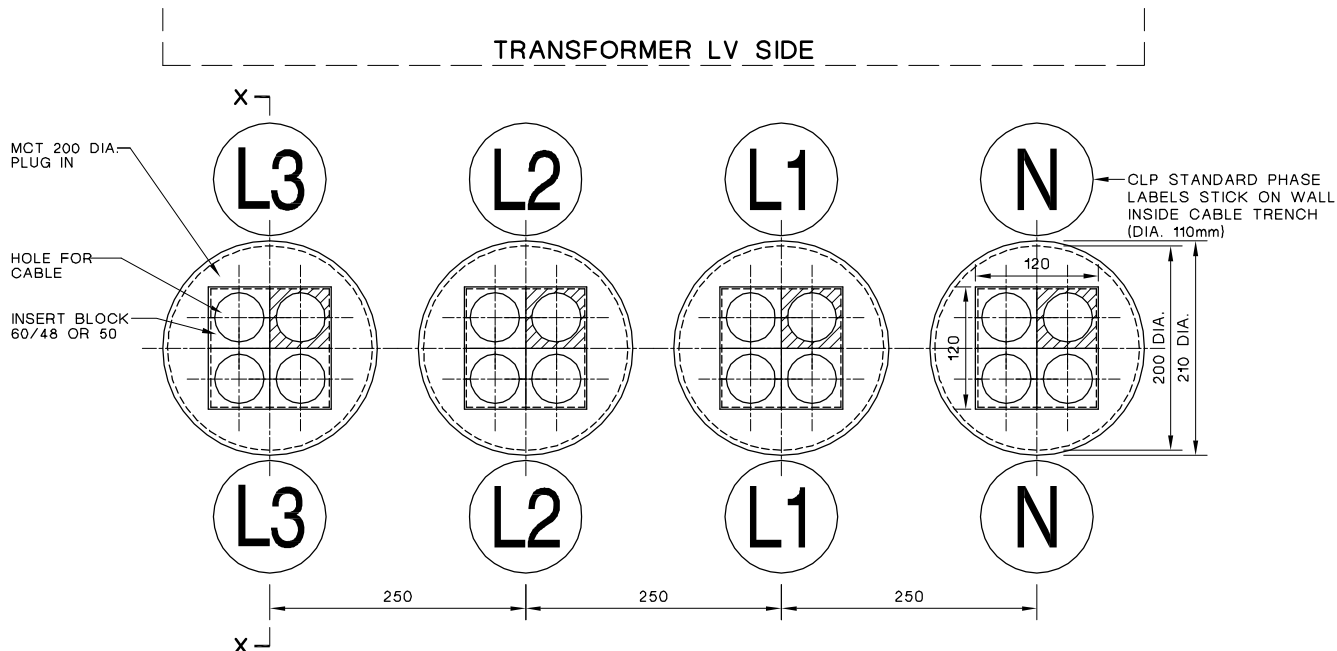
REVS.	12.10.09	23.02.17											
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	K.C.C.	H.T.YU											

TITLE :

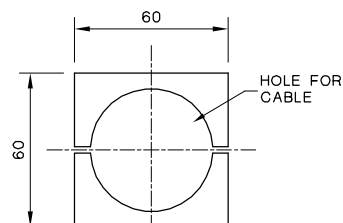
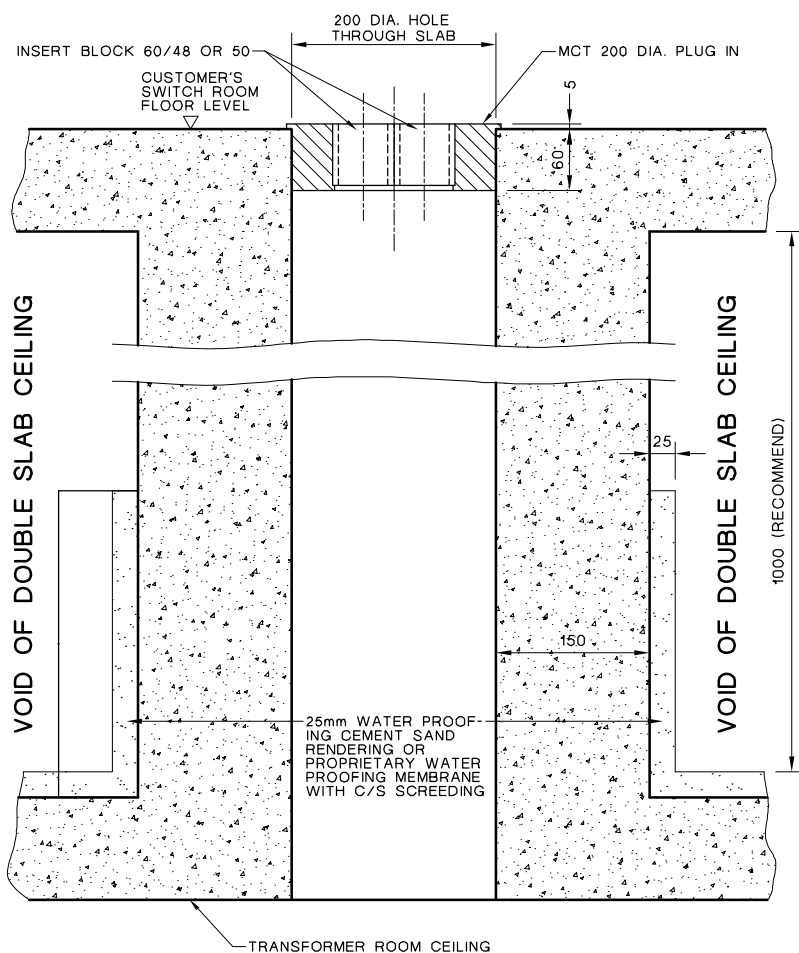
INSTALLATION OF TWO "MULTI-CABLE TRANSIT"
PLUG-IN IN CABLE TRENCH IN LINE
(1000kVA OR BELOW TRANSFORMER)

DRAWN:	S. C. TO	DATE:	12-8-2002
CHECKED:	K. C. CHENG	APPROVED:	K. W. WONG
SCALE:	N.T.S.	SHEET(S) IN SET:	

ASSET MANAGEMENT	DRG. NO. T	C	O	P	1	0	2	5	0	D	E	3	3	0	1	0	3	0	3	B	A
-------------------------	------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---



PLAN VIEW SHOWING ARRANGEMENT OF MULTI-CABLE TRANSIT
(LOOKING TOWARDS FLOOR INSIDE CUSTOMER SWITCHROOM)



DETAIL FOR INSERT BLOCK 60/48 OR 50

PHASE IDENTIFICATION:

- L1 (BROWN)
L2 (BLACK)
L3 (GREY)
N : (NEUTRAL/BLUE)

NOTES:

- MULTI-CABLE TRANSIT PLUG-IN TO BE PROVIDED AND INSTALLED BY CLP POWER.
- THE 4 x 200 DIA. HOLES THROUGH WALL TO BE PROVIDED BY CUSTOMER.
- SOLID CABLE $\phi 48$, STRANDED CABLE $\phi 50$.
- ☒ USE SPARE INSERT BLOCK 30/0 WHEN ONLY 3 CABLES PER PHASE ARE USED.
- PHASE IDENTIFICATION LABELS TO BE APPLIED ON TRANSFORMER RM. AND CUSTOMER MAIN SWITCH RM.
- DETAIL AND LOCATION OF EARTHING BAR REFER TO DRAWING NO. T/COP/10250/D/E33/0102/03.
- ALL DIMENSIONS ARE IN mm.

C NOTE 7 ADDED, SECTION X-X REVISED

E SPARE INSERT BLOCK DETELED

D GENERAL AMANDMENT



REVS.	20.08.07	12.10.09	23.03.12	18.03.14	23.02.17						
INITIAL	A	B	C	D	E	F	G	H	J	K	L
	K.C.C.	K.C.C.	E. YU	H.T.YU	H.T.YU						

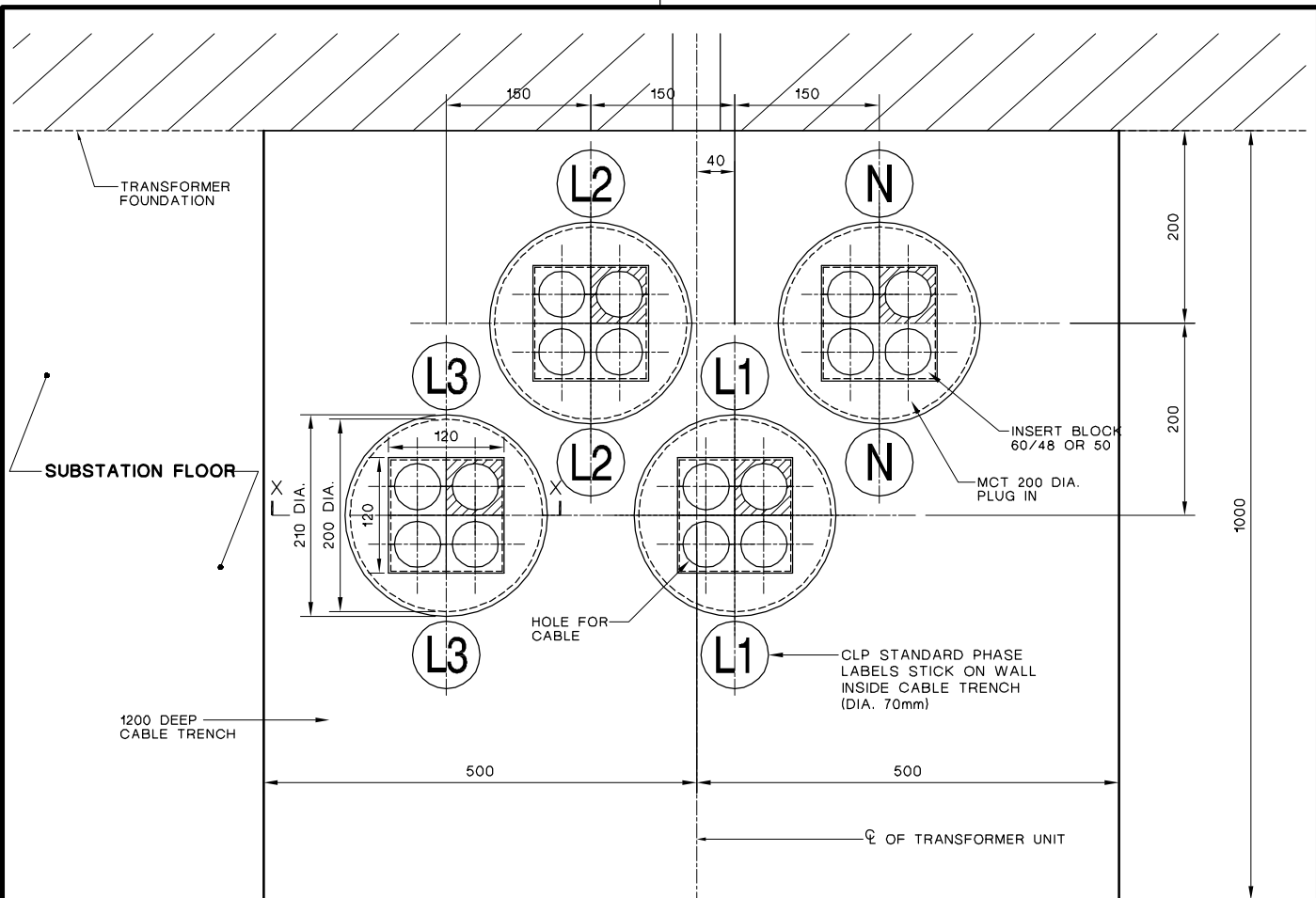
TITLE :

**INSTALLATION OF "MULTI-CABLE TRANSIT"
PLUG-IN THROUGH SUBSTATION CEILING**

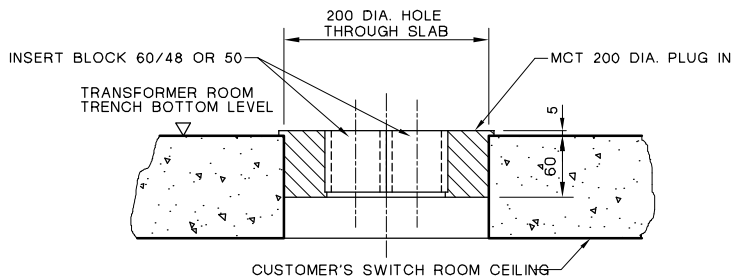
DRAWN: S. C. TO DATE: 22-07-2002
CHECKED: K. C. CHENG APPROVED: K. W. WONG
SCALE: N. T. S. SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T/COP/10250/D/E33/0103/04/E/A



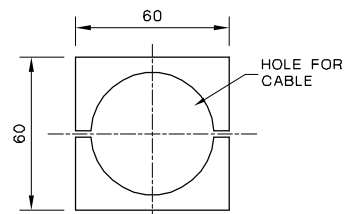
PLAN VIEW SHOWING ARRANGEMENT OF MULTI-CABLE TRANSIT
(VIEW TOWARDS FLOOR INSIDE TRANSFORMER ROOM)



SECTION X - X


PHASE IDENTIFICATION:

L1 (BROWN)
L2 (BLACK)
L3 (GREY)
N : (NEUTRAL/BLUE)

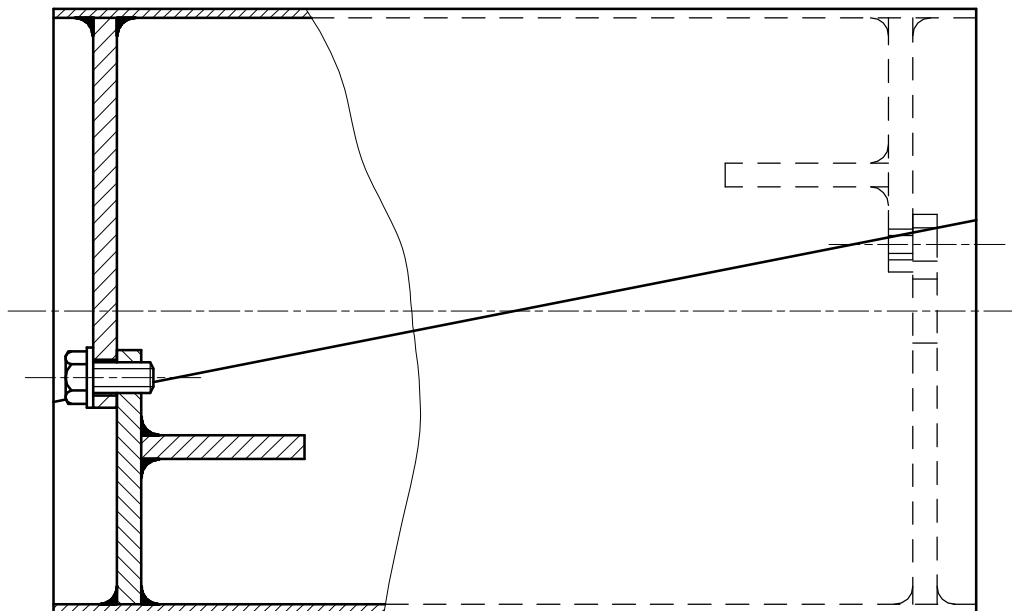
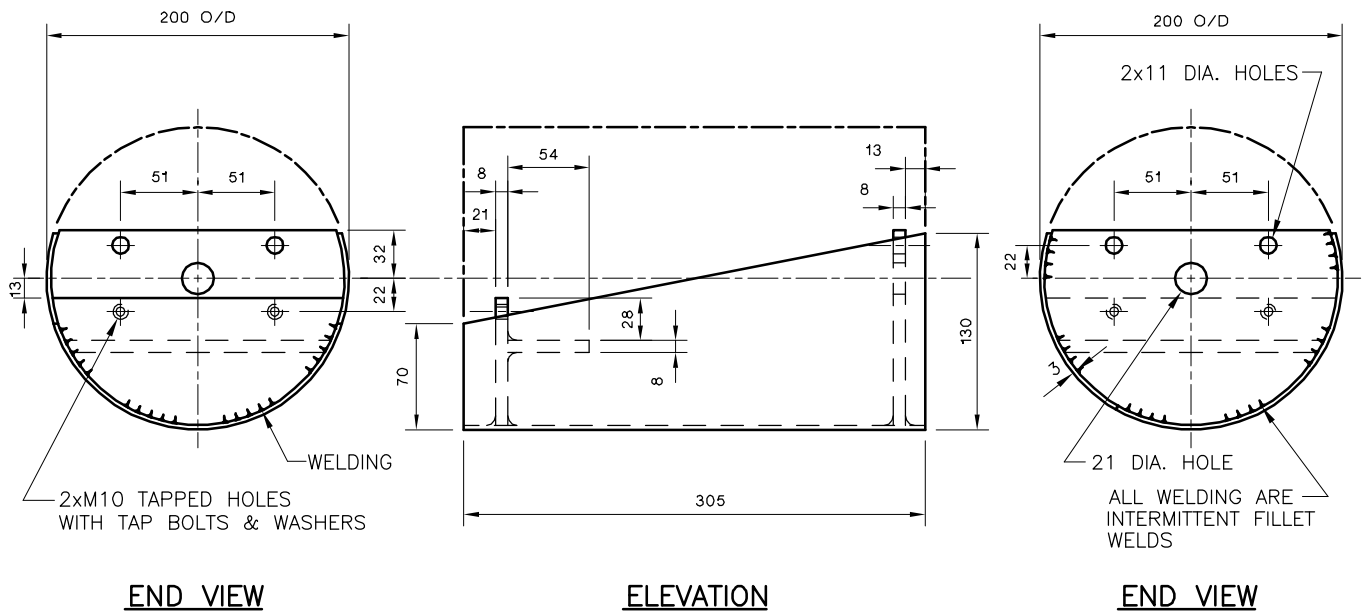


DETAIL FOR INSERT
BLOCK 60/48 OR 50

NOTES:

1. MULTI-CABLE TRANSIT PLUG-IN TO BE PROVIDED AND INSTALLED BY CLP POWER.
2. THE 4 x 200 DIA. HOLES THROUGH WALL TO BE PROVIDED BY CUSTOMER.
3. SOLID CABLE $\phi 48$, STRANDED CABLE $\phi 50$.
4.  USE SPARE INSERT BLOCK 30/0 WHEN ONLY 3 CABLES PER PHASE ARE USED.
5. PHASE IDENTIFICATION LABELS TO BE APPLIED ON TRANSFORMER RM. AND CUSTOMER MAIN SWITCH RM.
6. DETAIL AND LOCATION OF EARTHING BAR REFER TO DRAWING NO. T/COP/10250/D/E33/0102/04.
7. ALL DIMENSIONS ARE IN mm.

C		NOTE 7 ADDED				B		PHASE LABELS ADDED				D		SPARE INSERT BLOCK DELETED				
<div>CLP 中電</div>						REVS.		16.08.07	12.10.09	23.03.12	23.02.17							
								A	B	C	D	E	F	G	H	J	K	L
						INITIAL		K.C.C.	K.C.C.	K.C.C.	H.T.YU							
						TITLE :												
						INSTALLATION OF "MULTI-CABLE TRANSIT" PLUG-IN THROUGH SUBSTATION FLOOR												
DRAWN:		S. C. TO		DATE:		22-07-2002												
CHECKED:		K. C. CHENG		APPROVED:		K. W. WONG												
SCALE:		N. T. S.		SHEET(S) IN SET:														
ASSET MANAGEMENT						DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 0 5 D A												



ASSEMBLY VIEW (PART SECTIONED)

SCALE: 1 : 2.5

NOTE:

THE COMPLETE FORMER CONSISTS OF TWO IDENTICAL HALVES.

A NOTES 2 DELETED



REVS.	23.02.17												
INITIAL	A	B	C	D	E	F	G	H	J	K	L		

TITLE :

STEEL FORMER FOR 200mm DIA.
"MULTI-CABLE TRANSIT" HOLE

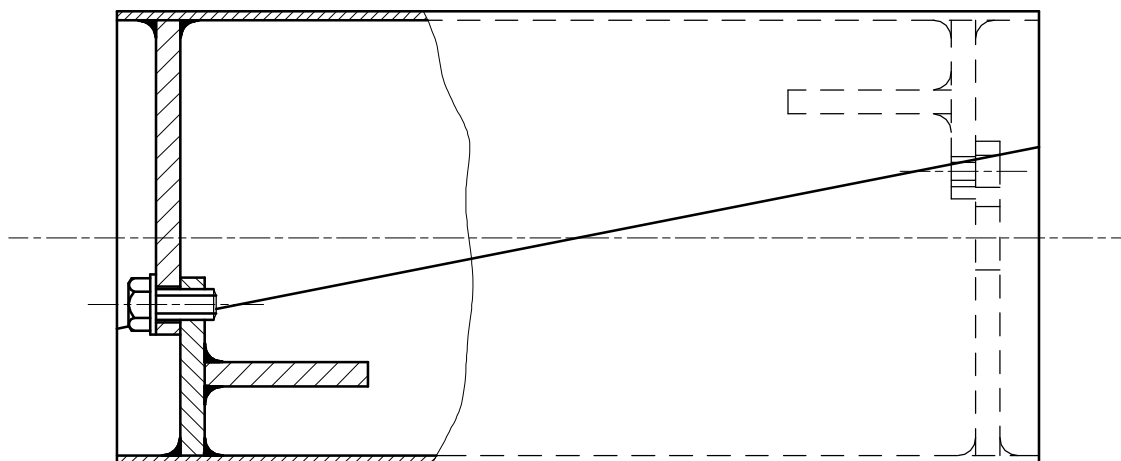
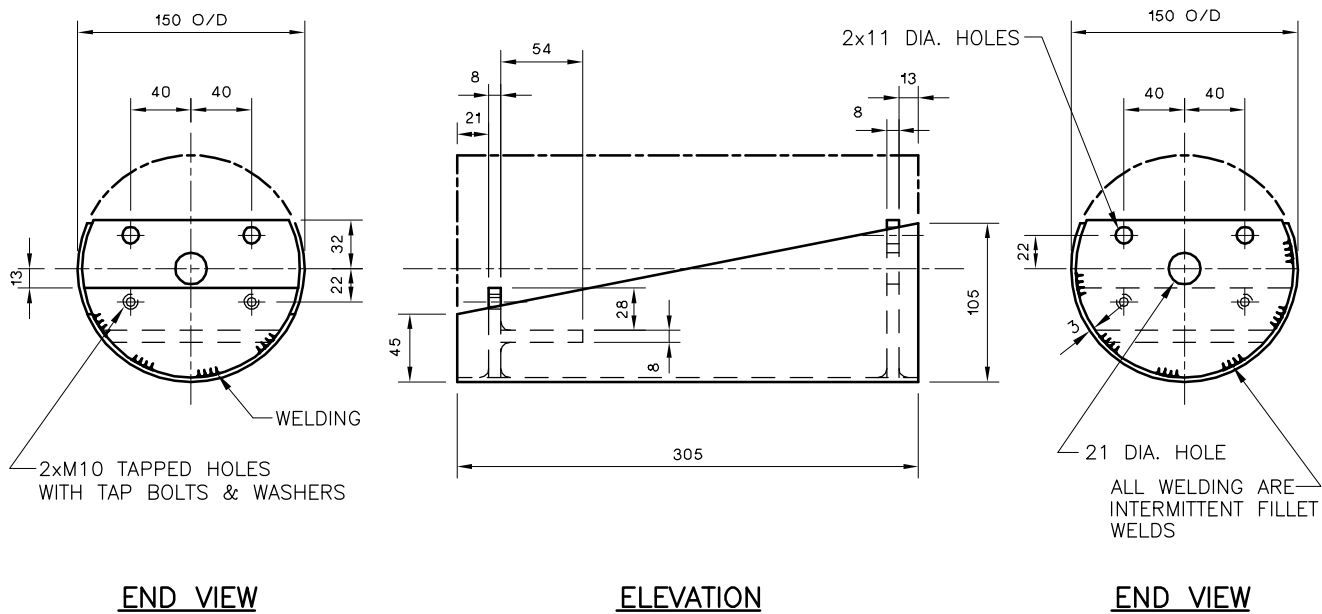
DRAWN: S. C. TO DATE: 12-8-2002

CHECKED: K. C. CHENG APPROVED: K. W. WONG

SCALE: 1 : 5 (mm) SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 0 6 A A



ASSEMBLY VIEW (PART SECTIONED)

SCALE: 1 : 2.5

NOTE:

THE COMPLETE FORMER CONSISTS OF TWO IDENTICAL HALVES.

A NOTES 2 DELETED



REVS.	23.02.17												
INITIAL	A	B	C	D	E	F	G	H	J	K	L		

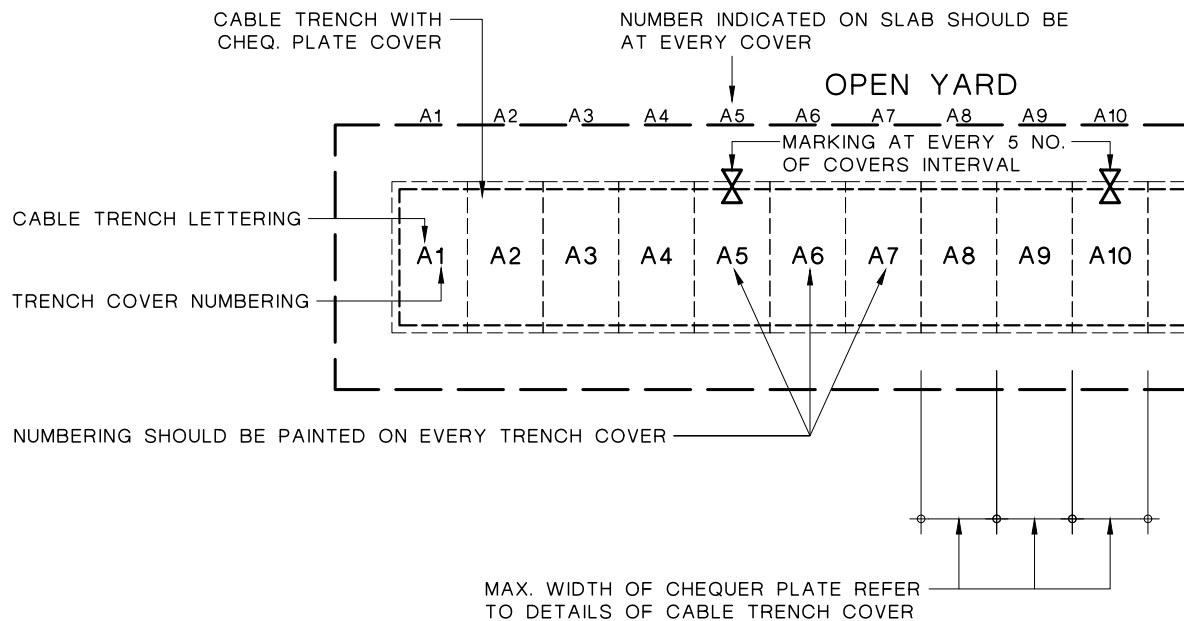
TITLE :

STEEL FORMER FOR 150mm DIA.
"MULTI-CABLE TRANSIT" HOLE

DRAWN: S. C. TO	DATE: 12-8-2002
CHECKED: K. C. CHENG	APPROVED: K. W. WONG
SCALE: 1 : 5 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 0 7 A A



C	NUMBER INDICATED ON SLAB UPDATED.	B	STEP IRON DELETED
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REVS.	30.10.05	16.08.07	23.03.20										
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	K.C.C.	K.C.C.	H.T.YU										

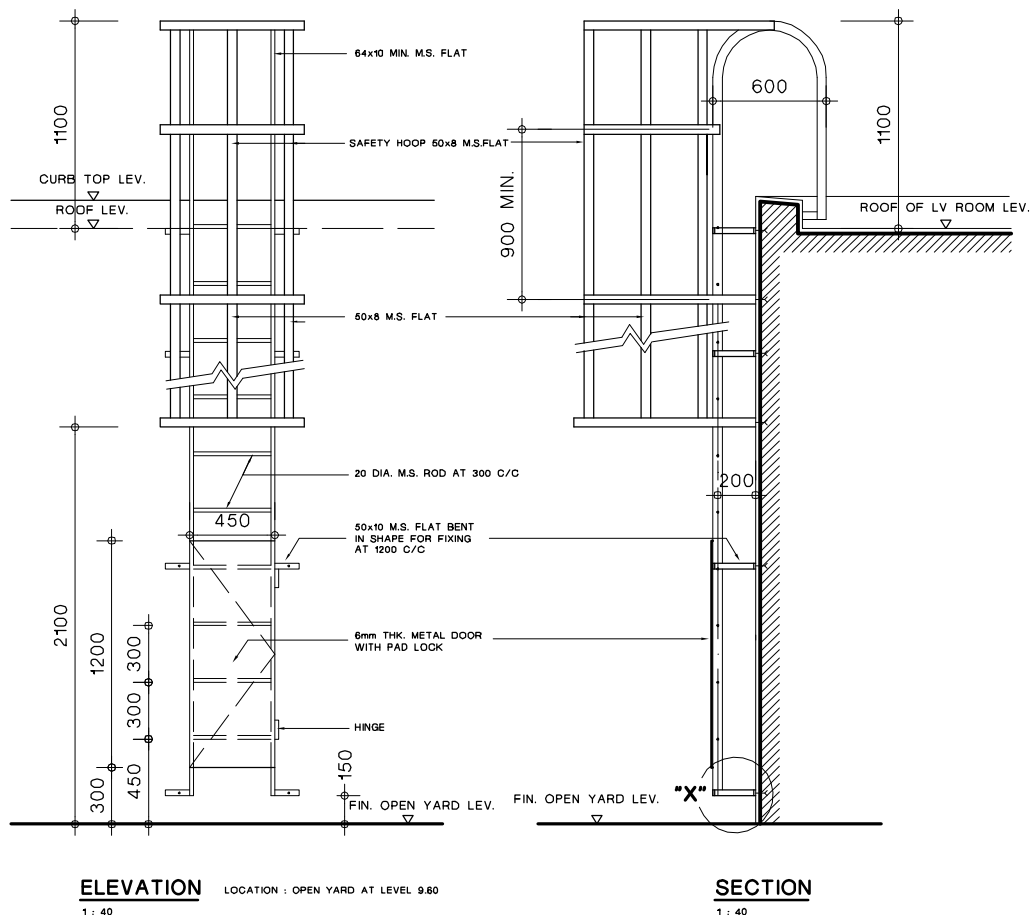
TITLE :

TYPICAL DETAILS OF NUMBER MARKED ON
THE CABLE TRENCH COVER

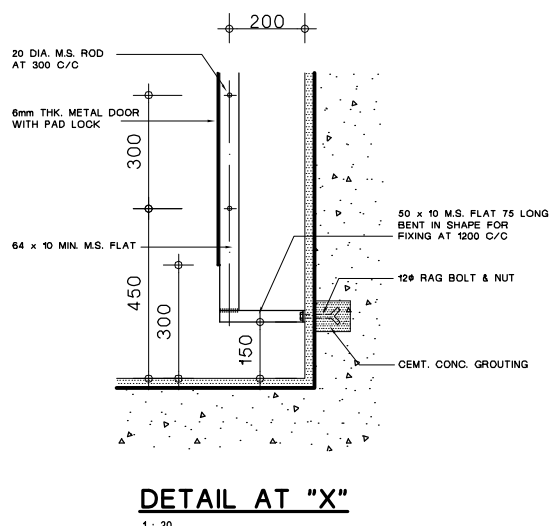
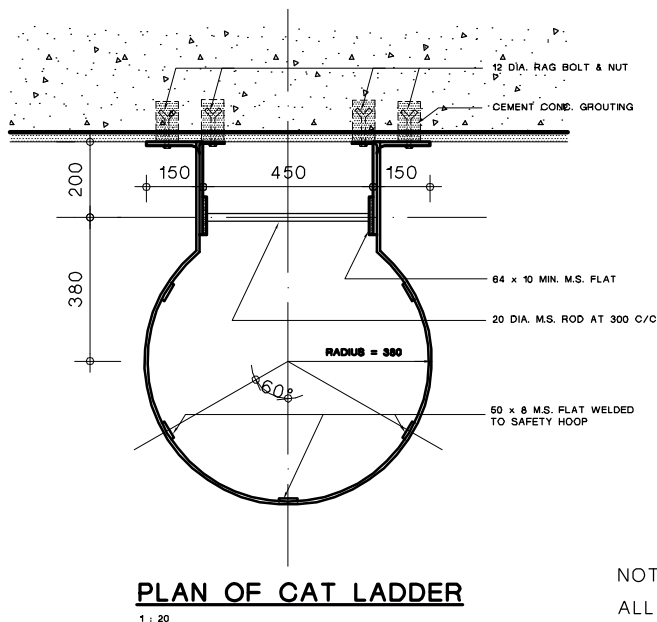
DRAWN: C. W. WONG	DATE: 16 Sep., 2002
CHECKED: K. C. CHENG	APPROVED: K. W. WONG
SCALE: N. T. S.	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 0 8 C A



CAT LADDER WITH SAFETY HOOP AT OPEN YARD (TYPE '1')

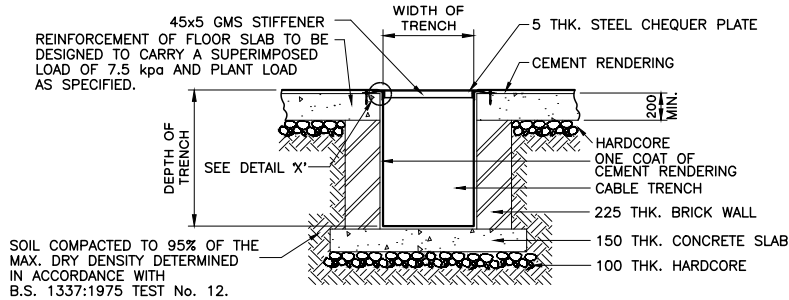


NOTE:

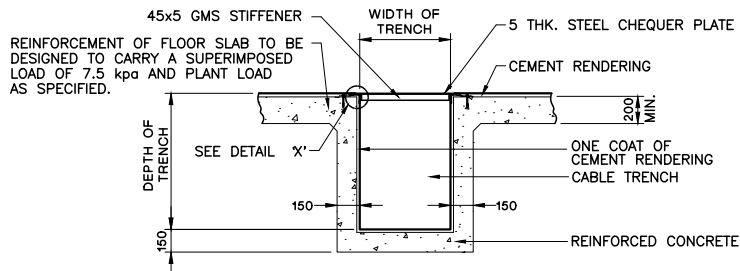
ALL METAL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE DISTRIBUTION BOARD WITH COPPER CONDUCTOR NOT LESS THAN 6mm².

D GENERAL AMENDMENT		C GENERAL NOTES ADDED.				B BRACE HOOP INTERNAL									
		REVS.	13.09.04	13.08.07	18.03.14	23.02.17									
		INITIAL	A K.C.C.	B K.C.C.	C H.T.YU	D H.T.YU	E	F	G	H	J	K	L		
CLP 中電 DRAWN: T. Y. IP DATE: 17-09-2002 CHECKED: K. C. CHENG APPROVED: W. C. HO SCALE: 1 : 20 (mm) SHEET(S) IN SET:		TITLE :													
		TYPICAL DETAILS OF CAT LADDER													
		ASSET MANAGEMENT													
		DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 0 9 D A													



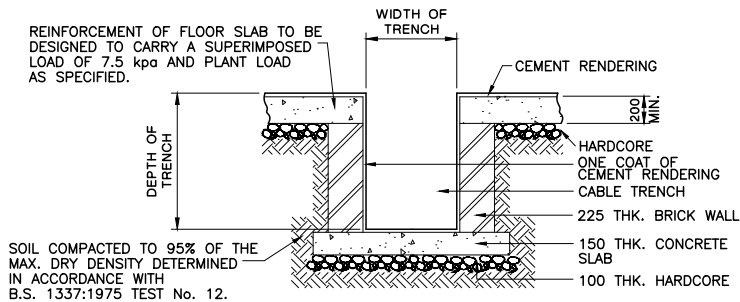


TYPICAL CROSS SECTION OF TRENCH ON SOLID GROUND

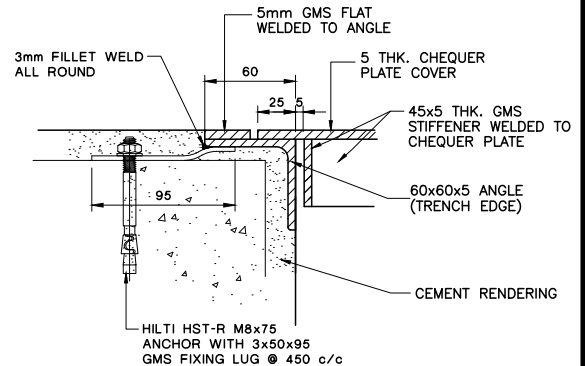


CABLE TRENCH FOR INDOOR SUBSTATION

TYPICAL CROSS SECTION OF SUSPENDED TRENCH

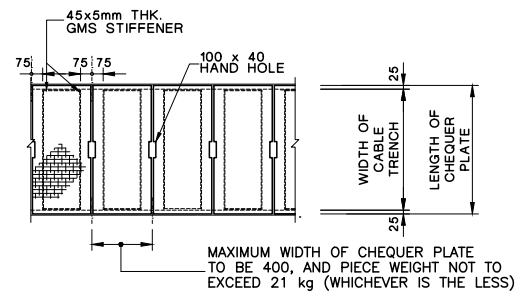


TYPICAL CROSS SECTION OF TRENCH ON SOLID GROUND

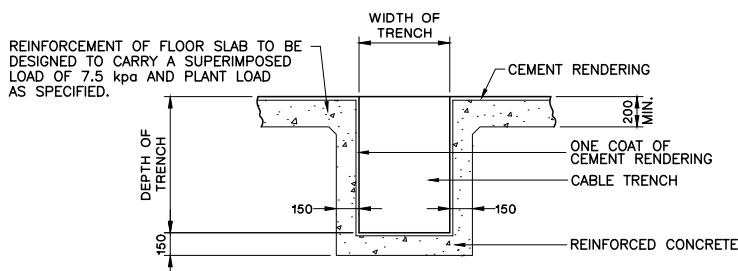


DETAIL AT 'X' (SCALE 1 : 5)

NOTE: TYPICAL FIXING DETAIL FOR CABLE TRENCH EDGE ANGLE



DETAIL OF CHEQUER PLATE



CABLE TRENCH FOR OUTDOOR SUBSTATION

TYPICAL CROSS SECTION OF R.C. TRENCH

NOTES:

- CHEQUER PLATE TO BE CUT TO SIZE AND FITTED IN POSITION UNDER THE DIRECTION OF CLP POWER ON SITE.
- ALL CHEQUER PLATES SHALL BE NUMBERED IN SEQUENCE.
- ALL STEELWORK SHALL BE HOT DIP GALVANISED AND FINISHED WITH ONE COAT OF CALCIUM PLUMBATE OR ZINC PHOSPHATE PRIMER AND TWO FINISHING COATS OF SYNTHETIC PAINT.
- CONCRETE STRENGTH MINIMUM 30N/mm² IN 28 DAYS.

D	GENERAL REVISED
C	NOTES 5 DELETED & TRENCH COVER REVISED



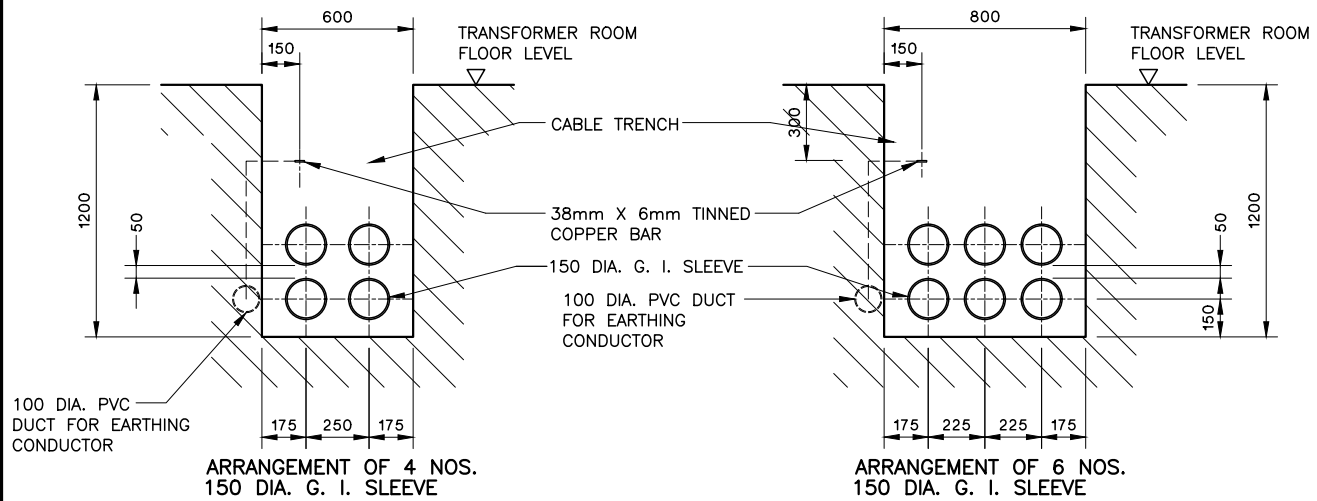
REVS.	13-9-04	15.11.07	25.05.17	25.05.20										
INITIAL	A	B	C	D	E	F	G	H	J	K	L			
	K.C.C	K.C.C	MS FONG	MS FONG										

TITLE :

TYPICAL DETAILS OF CABLE TRENCH
(SHEET 2 OF 3)

DRAWN:	M. S. FONG	DATE:	25-05-2020
CHECKED:	M. S. FONG	APPROVED:	GARY KWOK
SCALE:	AS SHOWN	SHEET(S) IN SET:	

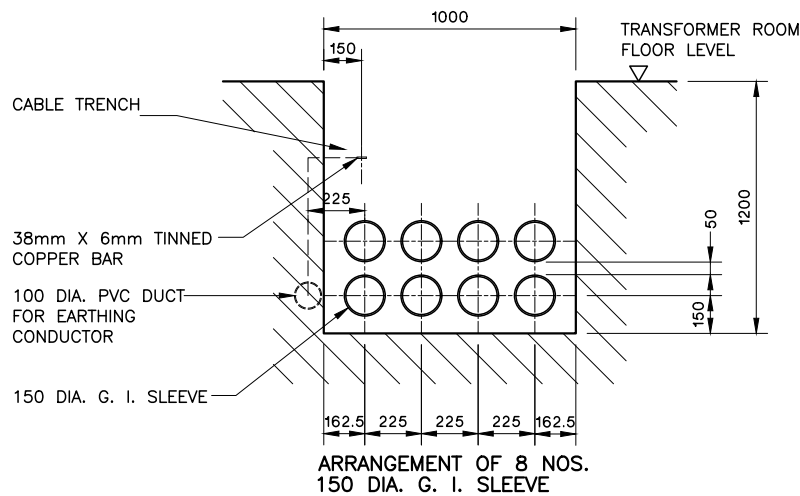
ASSET MANAGEMENT	DRG. NO.	T	C	O	P	1	0	2	5	0	D	E	3	3	0	1	0	3	1	1	D	A
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**ELEVATION**

(LOOKING FROM INSIDE OF TRANSFORMER ROOM)

ELEVATION

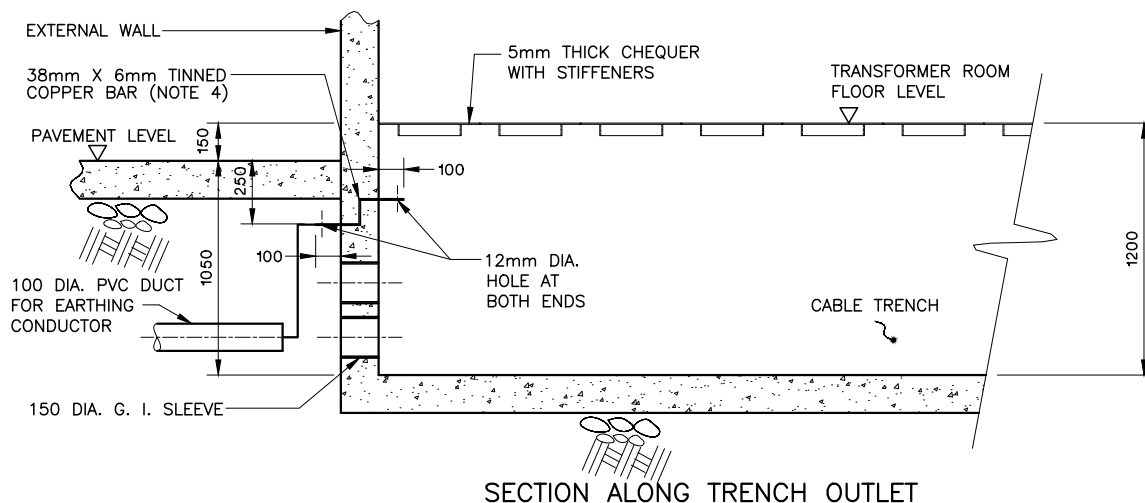
(LOOKING FROM INSIDE OF TRANSFORMER ROOM)

**ELEVATION**

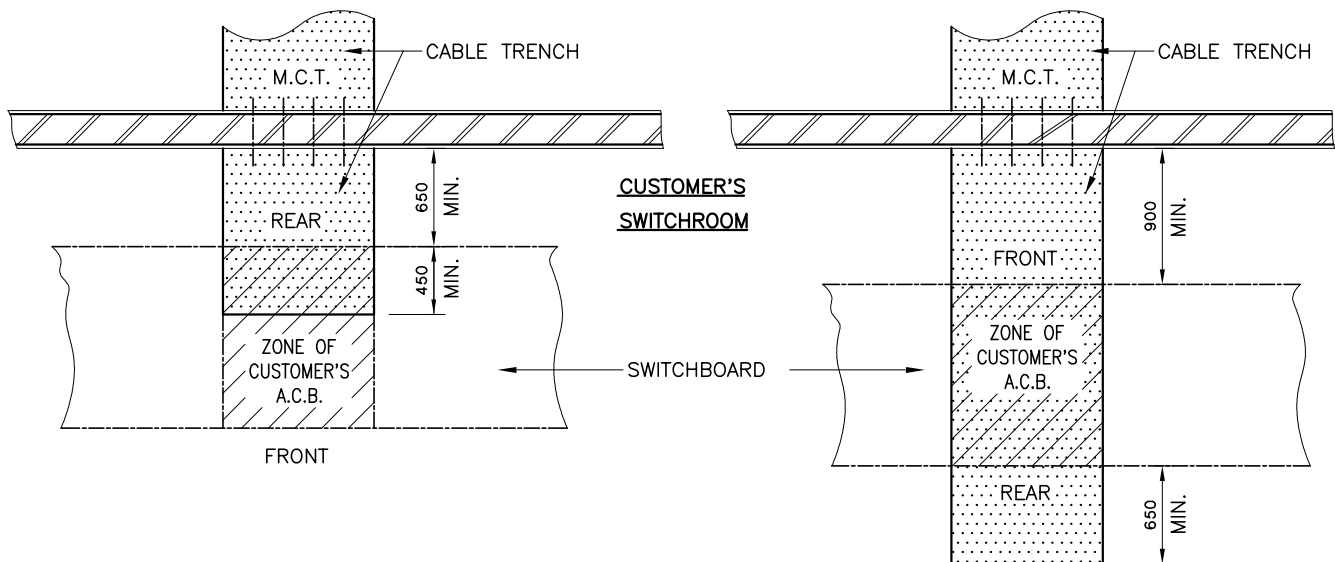
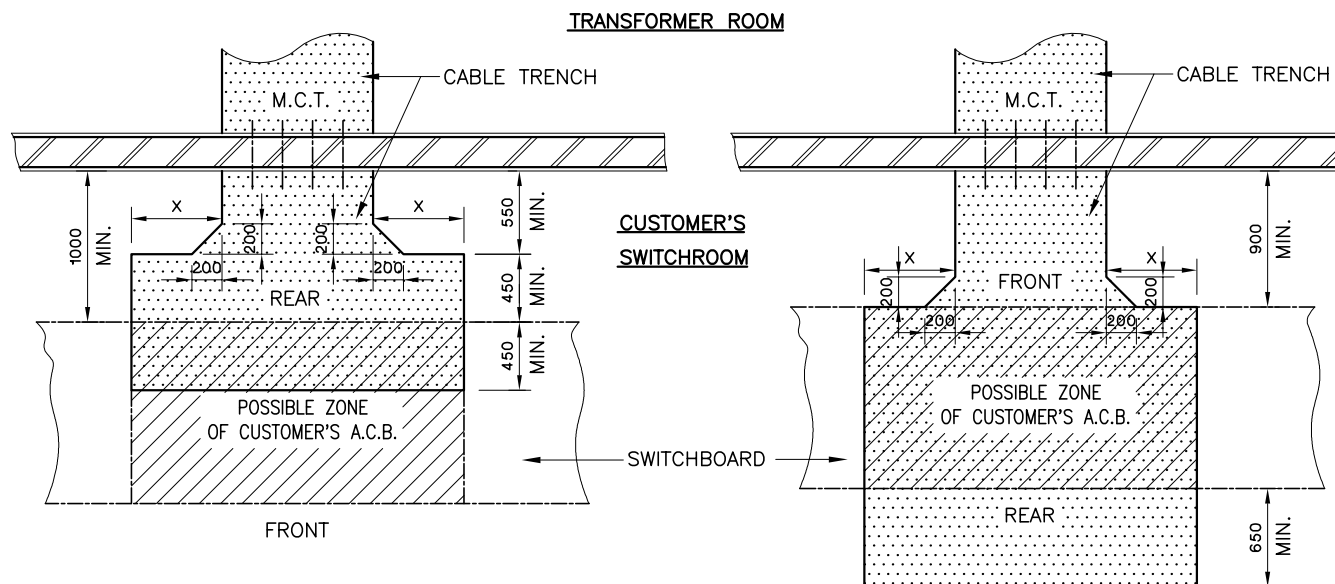
(LOOKING FROM INSIDE OF TRANSFORMER ROOM)

NOTES:

1. THE BARRIER AROUND THE G. I. SLEEVES SHALL BE WATERPROOF.
2. 38mm X 6mm TINNED COPPER EARTHING BAR TO BE PROVIDED AND INSTALLED BY CUSTOMER.
3. DEPTH OF CABLE TRENCH IS 1200mm ACCORDING TO THE TRANSFORMER ROOM LAYOUT PLAN.
4. AN EARTHING CONDUCTOR NOT LESS THAN 38mm X 6mm IN SIZE SHALL BE EXTENDED VIA DUCTS TO THE FIRST CABLE DRAW PIT INSIDE THE SITE OWNED BY THE CUSTOMER.



G		CHEQUER PLATE WIDTH UPDATED				F		CHEQUER PLATE DETAILS REVISED				E		G.I. SLEEVE SIZE AND DEPTH OF CABLE TRENCH UPDATED. EARTHING DETAIL ADDED.							
<div>CLP 中電</div>						REVS.		14-9-04	28-01-05	05-11-07	26-03-12	18.03.14	25.03.17	25.05.20							
							A	B	C	D	E	F	G	H	J	K	L				
						INITIAL	K.C.C	K.C.C	K.C.C	K.C.C	H.T.YU	MS FONG	MS FONG								
<div>DRAWN: M. S. FONG</div> <div>DATE: 20-05-2020</div> <div>CHECKED: M. S. FONG</div> <div>APPROVED: GARY KWOK</div> <div>SCALE: AS SHOWN</div> <div>SHEET(S) IN SET:</div>						TITLE :															
						TYPICAL DETAILS OF CABLE TRENCH (SHEET 3 OF 3)															
ASSET MANAGEMENT						DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 1 2 G A															

TRANSFORMER ROOM**CUSTOMER'S A.C.B. IN LINE WITH M.C.T.****CUSTOMER'S A.C.B. NOT IN LINE WITH M.C.T.****NOTES:**

1. X TO BE EXTENDED TO THE POSSIBLE ZONE OF CUSTOMER'S MAIN A.C.B..
2. WIDTH AND DEPTH OF CABLE TRENCH, IF NOT SPECIFIED, SHOULD CORRESPOND TO THAT IN THE TRANSFORMER ROOM.



REVS.	A	B	C	D	E	F	G	H	J	K	L
INITIAL											

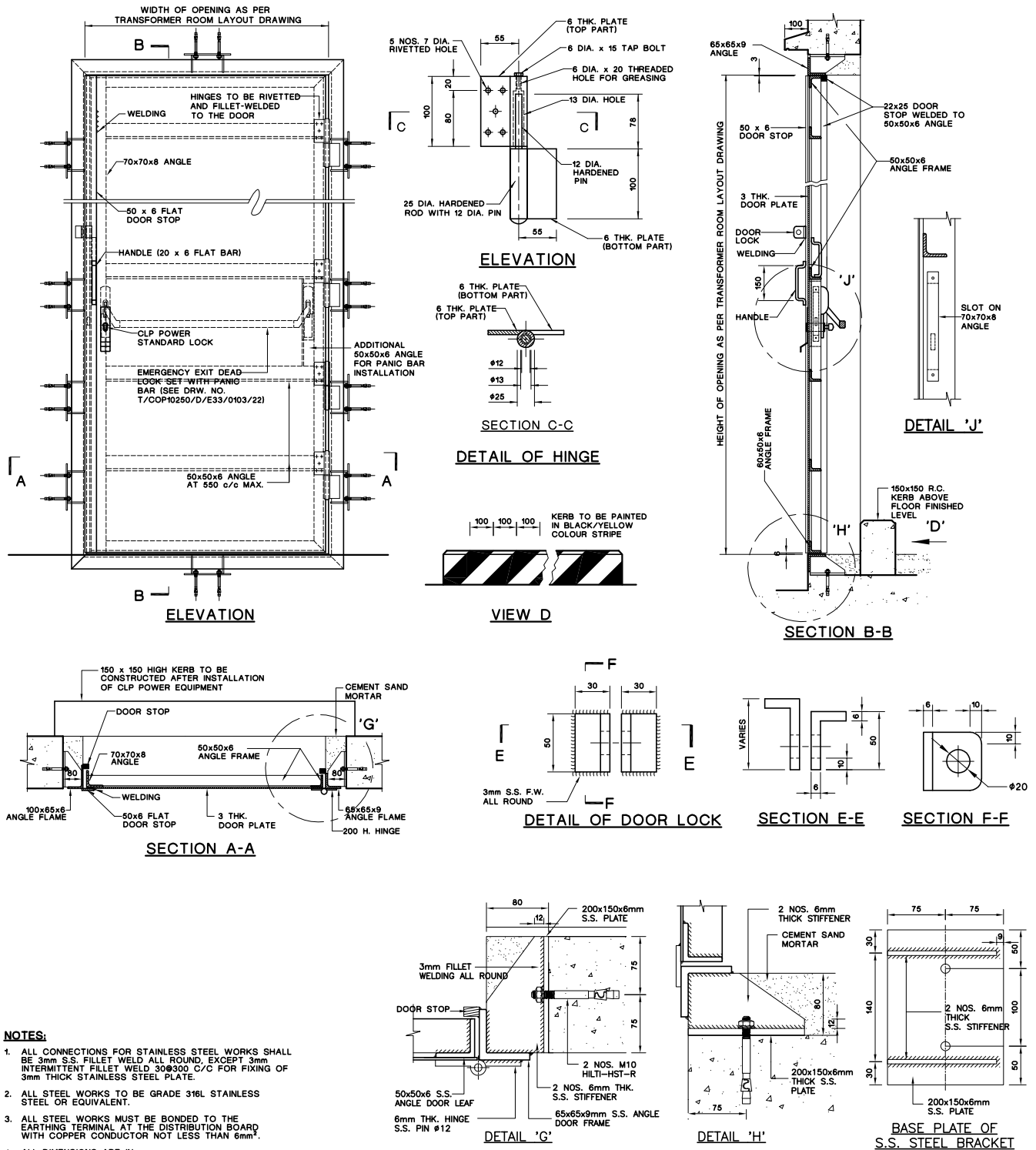
TITLE :

CABLE TRENCH FOR ACCOMMODATING CLP
POWER SINGLE-CORE CABLES IN CUSTOMER
MAIN SWITCHROOM

DRAWN: S. C. TO	DATE: 26-07-2002
CHECKED: K. C. CHENG	APPROVED: K. W. WONG
SCALE: 1 : 50 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

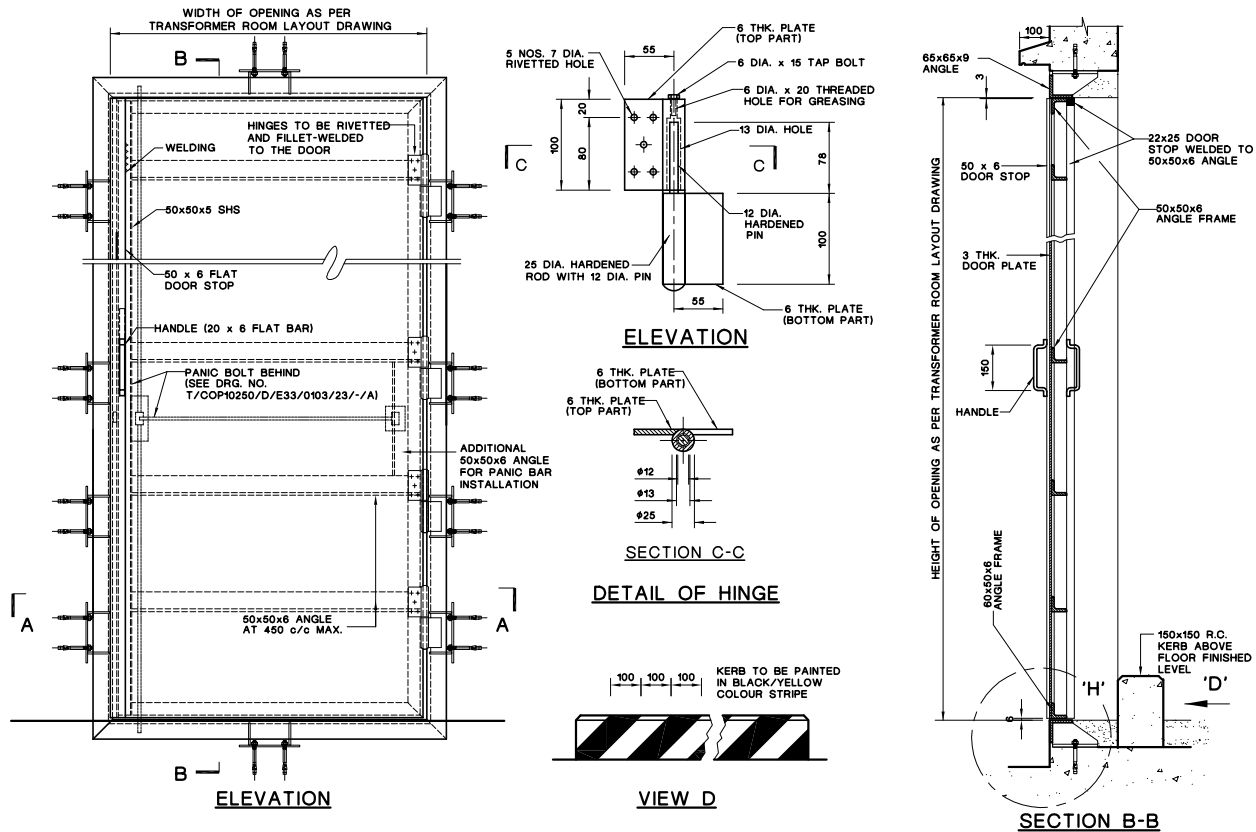
DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 1 3 - A



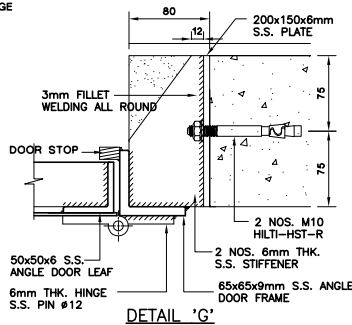
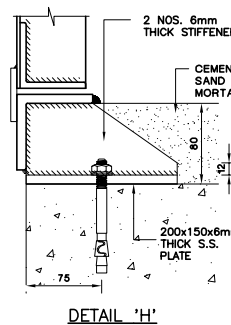
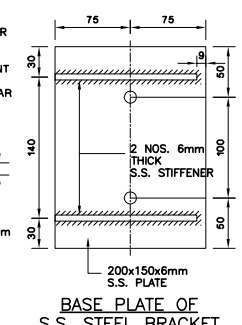
TYPICAL STEEL BRACKET FIXING DETAIL

NOTE: SPACING OF STEEL BRACKET TO BE 450 c/c.

ON WIND EFFECTS HONG KONG 2004.										D				GENERALLY REVISED																					
C				AMENDMENT OF DESCRIPTION TO VIEW 'C'				B				S.S. ANGLE BRACKETS ON DOOR ADDED				A				PAINTING ON THE DOOR KERB AND DOOR LOCK DETAIL ADDED															
<div>CLP 中電</div>										REVS.		13.9.04		13.10.09		18.03.14		01.06.17																	
												A		B		C		D				E		F		G		H		J		K		L	
										INITIAL		K.C.C		K.C.C		H.T.YU		M.S.FONG																	
<div>DRAWN: M. S. FONG</div> <div>CHECKED: M. S. FONG</div> <div>SCALE: AS SHOWN</div>										<div>DATE: 1-3-2016</div> <div>APPROVED: GARY KWOK</div> <div>SHEET(S) IN SET:</div>										TITLE :															
																				TYPICAL DETAILS OF SINGLE LEAF STAINLESS STEEL DOOR															
A S S E T M A N A G E M E N T										DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 1 4 D A																									

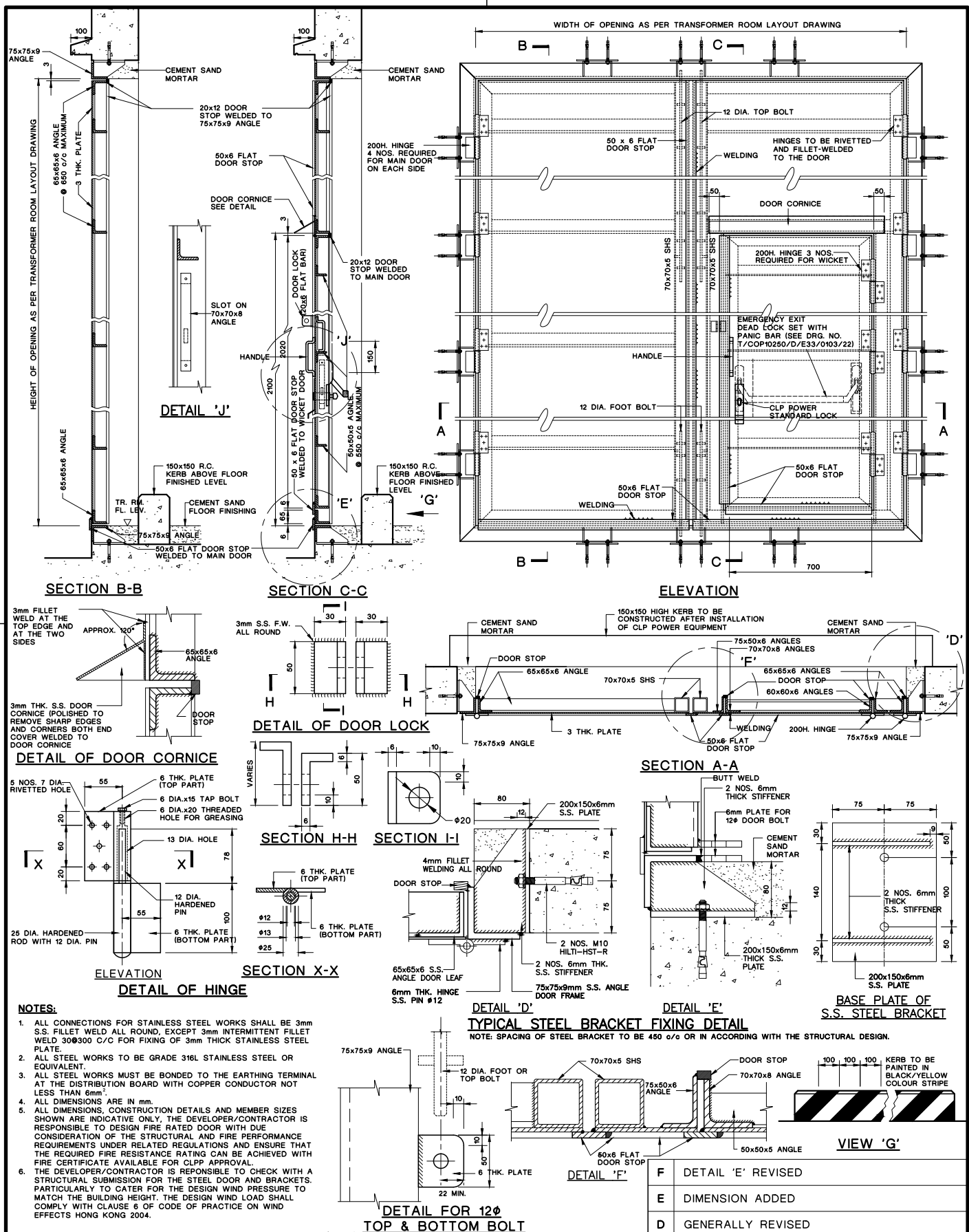
**NOTES:**

1. ALL CONNECTIONS FOR STAINLESS STEEL WORKS SHALL BE 3mm S.S. FILLET WELD ALL ROUND EXCEPT 3mm INTERMITTENT FILLET WELD 300x300 C/C FOR FIXING OF 3mm THICK STAINLESS STEEL PLATE.
2. ALL STEEL WORKS TO BE GRADE 316L STAINLESS STEEL OR EQUIVALENT.
3. ALL STEEL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE DISTRIBUTION BOARD WITH COPPER CONDUCTOR NOT LESS THAN 6mm².
4. ALL DIMENSIONS ARE IN mm.
5. ALL DIMENSIONS, CONSTRUCTION DETAILS AND MEMBER SIZES SHOWN ARE INDICATIVE ONLY. THE DEVELOPER/CONTRACTOR IS RESPONSIBLE TO DESIGN FIRE RATED DOOR WITH DUE CONSIDERATION OF THE STRUCTURAL AND FIRE PERFORMANCE REQUIREMENTS UNDER RELATED REGULATIONS AND ENSURE THAT THE REQUIRED FIRE RESISTANCE RATING CAN BE ACHIEVED WITH FIRE CERTIFICATE AVAILABLE FOR CLP APPROVAL.
6. THE DEVELOPER/CONTRACTOR IS RESPONSIBLE TO CHECK WITH A STRUCTURAL SUBMISSION FOR THE STEEL DOOR AND BRACKETS. PARTICULARLY TO CATER FOR THE DESIGN WIND PRESSURE TO MATCH THE BUILDING HEIGHT. THE DESIGN WIND LOAD SHALL COMPLY WITH CLAUSE 6 OF CODE OF PRACTICE ON WIND EFFECTS HONG KONG 2004.

DETAIL 'G'**DETAIL 'H'****BASE PLATE OF S.S. STEEL BRACKET****TYPICAL STEEL BRACKET FIXING DETAIL**

NOTE: SPACING OF STEEL BRACKET TO BE 450 c/c.

				D				GENERALLY REVISED			
C				B				A			
AMENDMENT OF DESCRIPTION TO VIEW 'C'				S.S. ANGLE BRACKETS ON DOOR ADDED				PAINTING ON THE DOOR KERB AND DOOR LOCK DETAIL ADDED			
				REV.	13.9.04	13.10.09	18.03.14	01.06.17			
				INITIAL	A	B	C	D	E	F	G
					K.C.C	K.C.C	H.T.YU	M.S.FONG			
				TITLE :							
				TYPICAL DETAILS OF SINGLE LEAF STAINLESS STEEL DOOR FOR WITHOUT LOCK							
DRAWN: M. S. FONG				DATE: 01-03-2016							
CHECKED: M. S. FONG				APPROVED: GARY KWOK							
SCALE: AS SHOWN				SHEET(S) IN SET:							
ASSET MANAGEMENT				DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 1 5 D A							



REVS.	13-9-04	10-8-09	18-03-14	01.06.17	25.06.19	08.06.20						
INITIAL	A	B	C	D	E	F	G	H	J	K	L	
	K.C.C.	K.C.C.	H.T.YU	M.S.FONG	H.T.YU	H.T.YU						

TITLE :

TYPICAL DETAILS OF DOUBLE LEAF
STAINLESS STEEL DOOR WITH WICKET ON
THE RIGHT

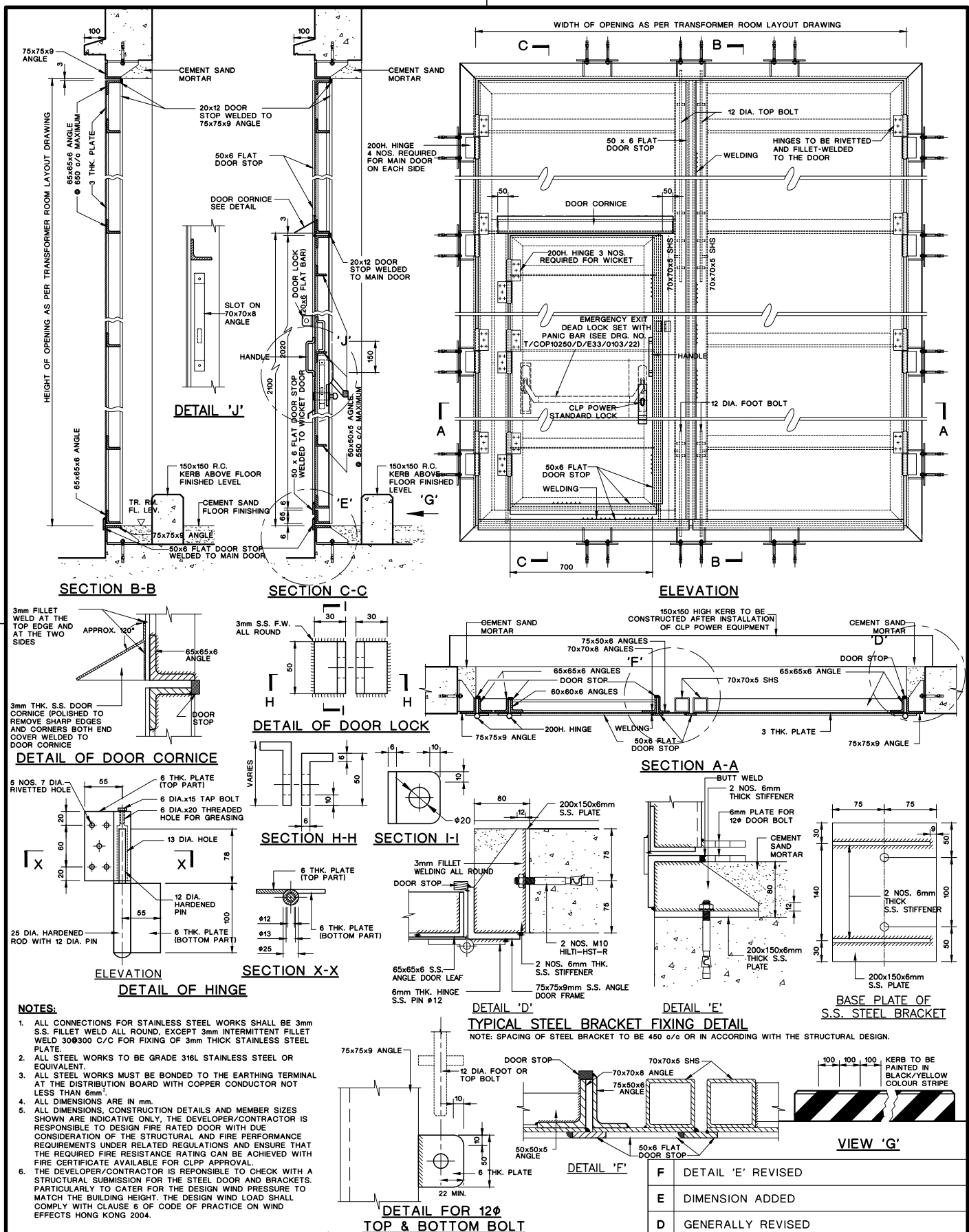
DRAWN: FONG, MING SUM	DATE: 01-03-2016
CHECKED: FONG, MING SUM	APPROVED: GARY KWOK
SCALE: N. T. S.	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 1 6 F A

INFORMATION CLASS: PROPRIETARY

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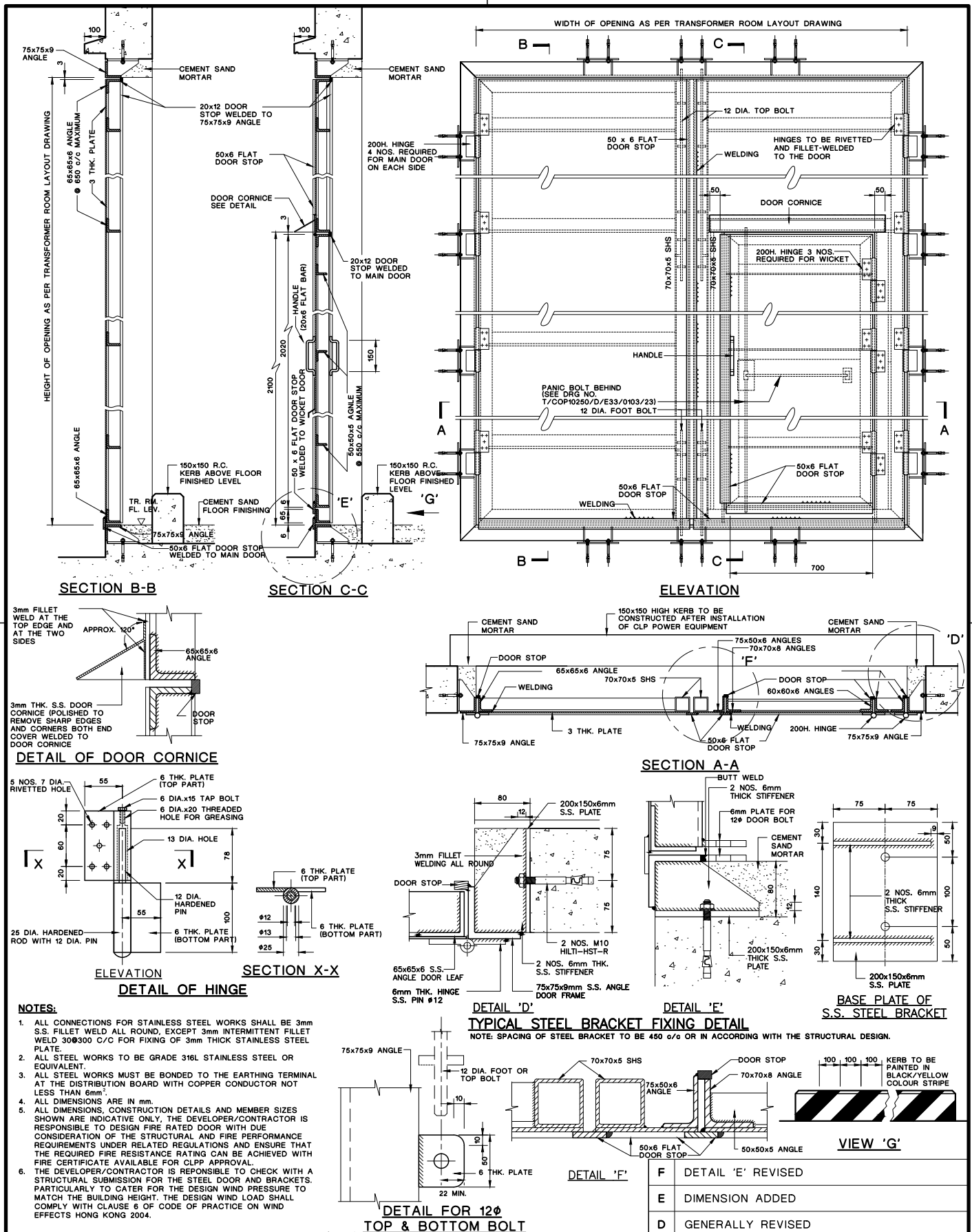
REVS.	13-9-04	10-8-09	18-03-14	01-06-17	25-06-19	08.06.20					
	A	B	C	D	E	F	G	H	J	K	L
INITIAL	K.C.C.	K.C.C.	H.T.YU	M.S.FONG	H.T.YU	H.T.YU					

TITLE :

TYPICAL DETAILS OF DOUBLE LEAF
STAINLESS STEEL DOOR WITH WICKET ON
THE LEFT

DRAWN: FONG, MING SUM	DATE: 01-03-2016
CHECKED: FONG, MING SUM	APPROVED: GARY KWOK
SCALE: N. T. S.	SHEET(S) IN SET:

ASSET MANAGEMENT										DRG. NO.	T	C	O	P	1	0	2	5	0	D	E	3	3	0	1	0	3	1	7	F	A
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DRAWN: FONG, MING SUM	DATE: 01-03-2016
CHECKED: FONG, MING SUM	APPROVED: GARY KWOK
SCALE: N. T. S.	SHEET(S) IN SET:

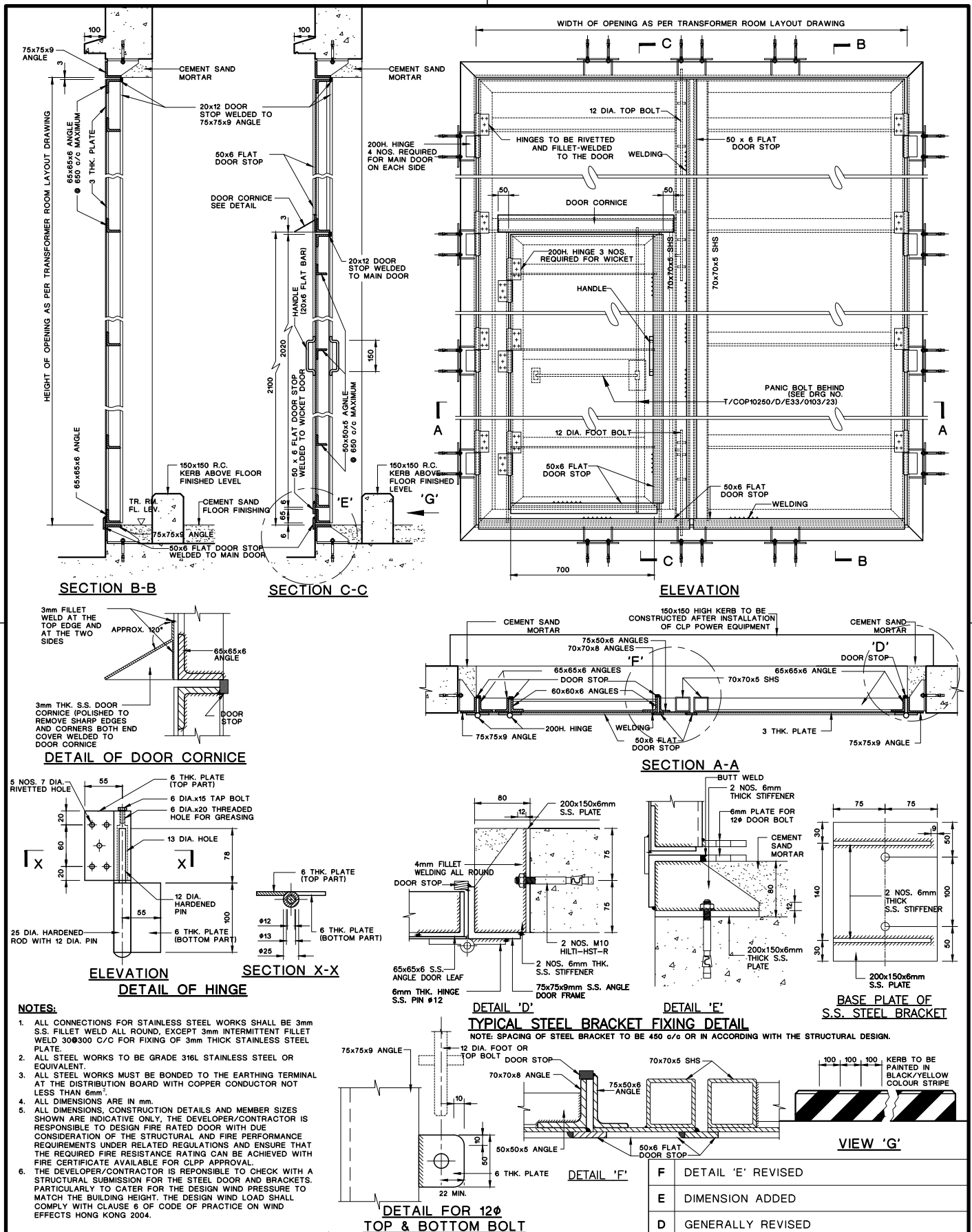
ASSET MANAGEMENT

REVS.	13-9-04	10-8-09	18-03-14	01-06-17	25-06-19	08.06.20							
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	K.C.C.	K.C.C.	H.T.YU	M.S.FONG	H.T.YU	H.T.YU							

TITLE :

TYPICAL DETAILS OF DOUBLE LEAF
STAINLESS STEEL DOOR WITH WICKET ON
THE RIGHT AND WITHOUT LOCK

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 1 8 F A



DRAWN: FONG, MING SUM	DATE: 01-03-2016
CHECKED: FONG, MING SUM	APPROVED: GARY KWOK
SCALE: N. T. S.	SHEET(S) IN SET:

REVS.	13-9-04	10-8-09	18-03-14	01-06-17	25-06-19	08.06.20							
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	K.C.C.	K.C.C.	H.T.YU	M.S.FONG	H.T.YU	H.T.YU							

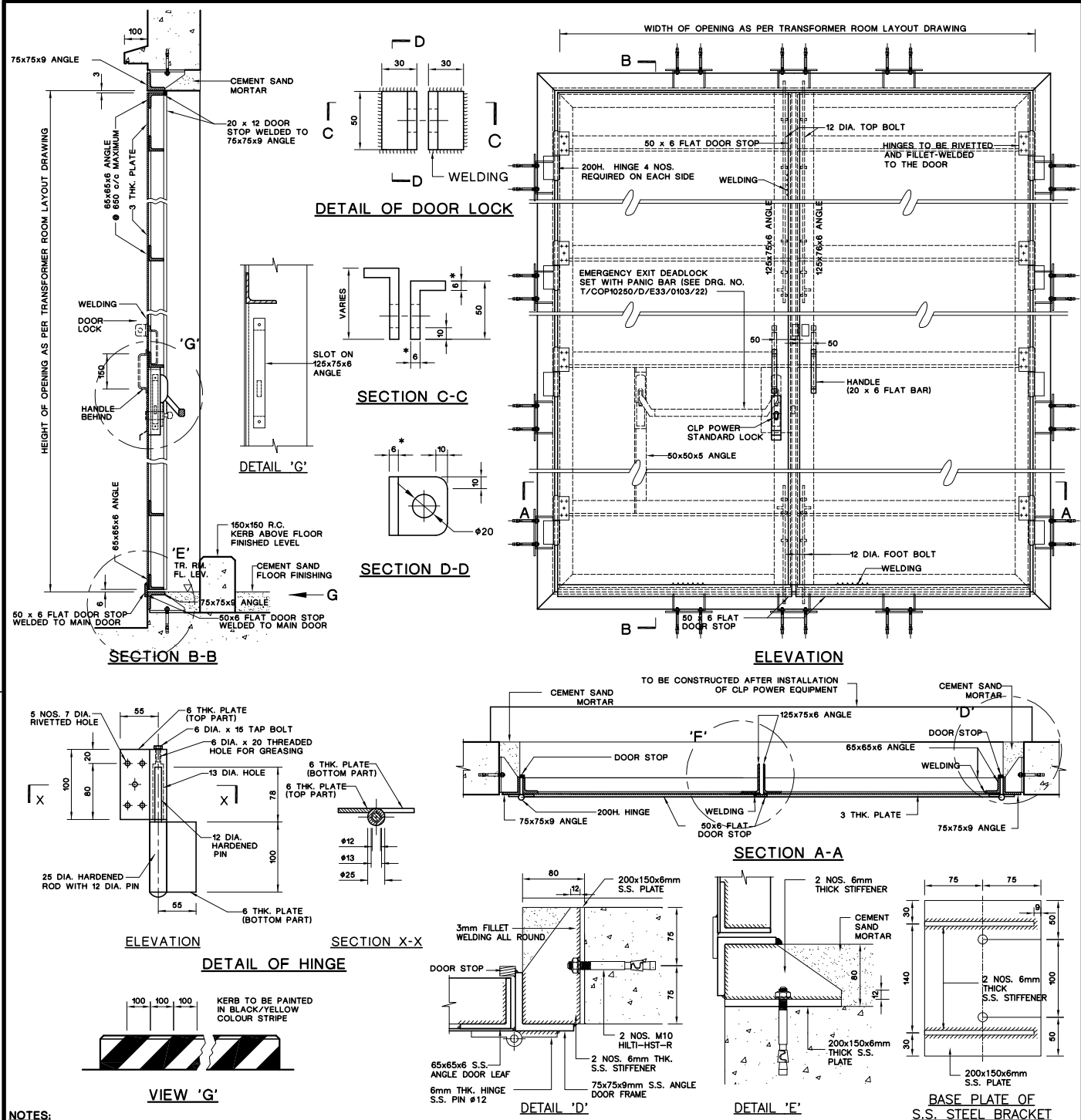
TITLE :

TYPICAL DETAILS OF DOUBLE LEAF
STAINLESS STEEL DOOR WITH WICKET ON
THE LEFT AND WITHOUT LOCK

ASSET MANAGEMENT	DRG. NO. T	COP	10250	D	E33	0103	19	F	A
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INFORMATION CLASS: PROPRIETARY

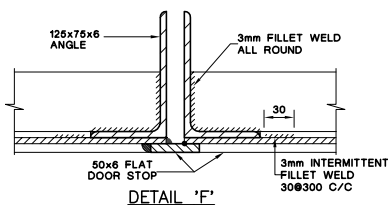
ALL RIGHTS RESERVED AND REPRODUCTION IN ANY FORM MUST BE APPROVED BY CLP POWER



- NOTES:**
1. ALL CONNECTIONS FOR STAINLESS STEEL WORKS SHALL BE 3mm S.S. FILLET WELD ALL ROUND, EXCEPT 3mm INTERMITTENT FILLET WELD 308300 C/C FOR FIXING OF 3mm THICK STAINLESS STEEL PLATE.
 2. ALL STEEL WORKS TO BE GRADE 316L STAINLESS STEEL OR EQUIVALENT.
 3. ALL STEEL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE DISTRIBUTION BOARD WITH COPPER CONDUCTOR NOT LESS THAN 6mm².
 4. ALL DIMENSIONS ARE IN mm.
 5. ALL DIMENSIONS, CONSTRUCTION DETAILS AND MEMBER SIZES SHOWN ARE INDICATIVE ONLY. THE DEVELOPER/CONTRACTOR IS RESPONSIBLE TO DESIGN THE RATED DOOR WITH DUE CONSIDERATION OF THE STRUCTURAL AND FIRE PERFORMANCE REQUIREMENTS UNDER RELATED REGULATIONS AND ENSURE THAT THE REQUIRED FIRE RESISTANCE RATING IS ACHIEVED WITH FIRE CERTIFICATE AVAILABLE FOR CLIP APPROVAL.
 6. THE DEVELOPER/CONTRACTOR IS RESPONSIBLE TO CHECK WITH A STRUCTURAL SUBMISSION FOR THE STEEL DOOR AND BRACKETS, PARTICULARLY TO CATER FOR THE DESIGN WIND PRESSURE TO MATCH THE BUILDING HEIGHT, THE DESIGN WIND LOAD SHALL COMPLY WITH CLAUSE 8 OF CODE OF PRACTICE ON WIND EFFECTS HONG KONG 2004.

TYPICAL STEEL BRACKET FIXING DETAIL

NOTE: SPACING OF STEEL BRACKET TO BE 450 c/c



F	DETAIL 'F' REVISED
E	GENERALLY REVISED
D	AMENDMENT OF DESCRIPTION TO VIEW 'C'
C	DISTANCE BETWEEN HANDLES ADJUSTED



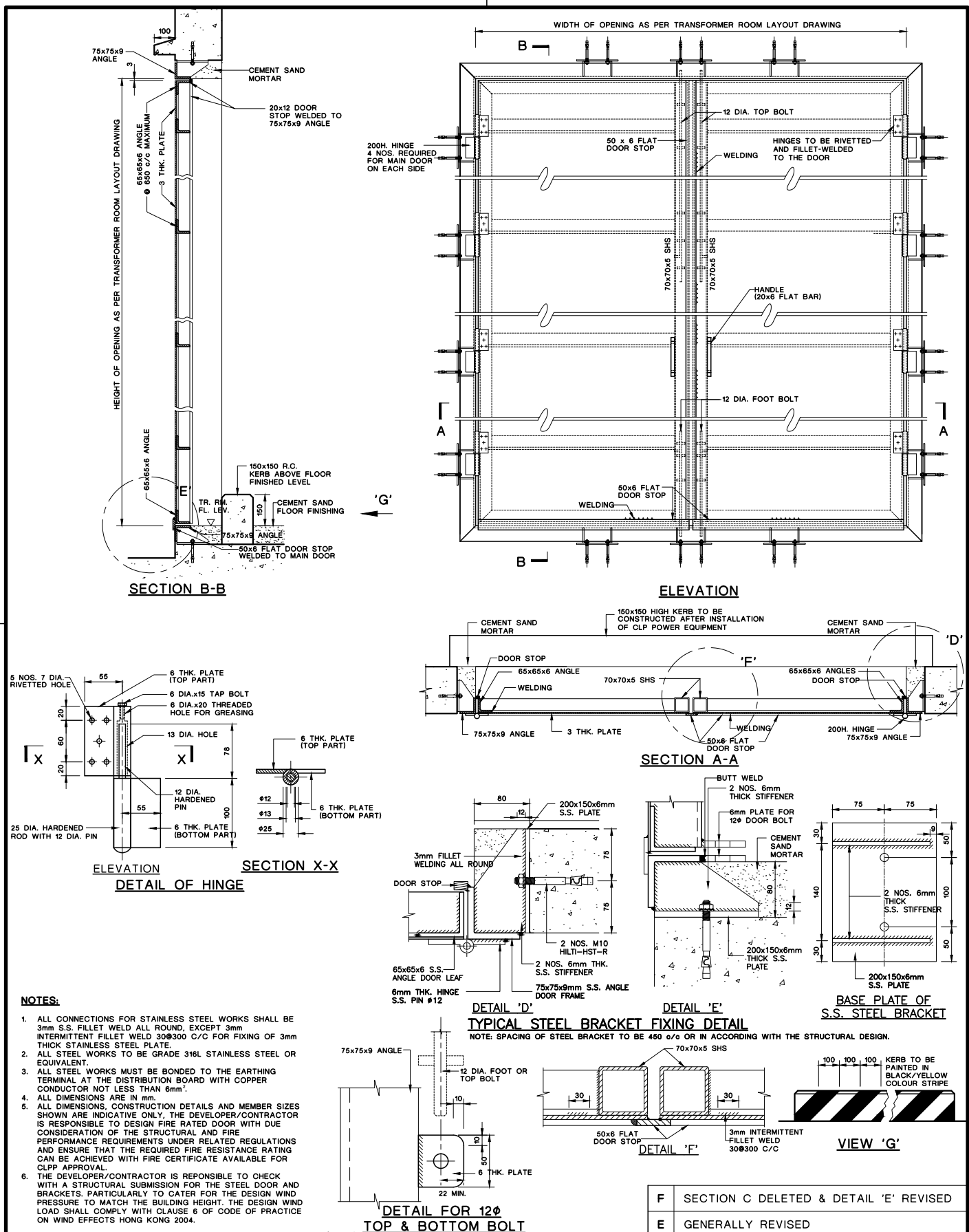
DRAWN: M. S. FONG	DATE: 13 Nov. 2018
CHECKED: M. S. FONG	APPROVED: GARY KWOK
SCALE: AS SHOWN	SHEET(S) IN SET:

REVS.	21.9.04	13.10.09	26.03.12	18.03.14	01.03.16	13.11.18					
	A	B	C	D	E	F	G	H	J	K	L
INITIAL	K.C.C.	K.C.C.	K.C.C.	H.T.YU	M.S.FONG	M.S.FONG					

TITLE :

TYPICAL DETAILS OF DOUBLE LEAF STAINLESS
STEEL DOOR (1500W x 2500H) FOR H. V.
SWITCHGEAR ROOM

ASSET MANAGEMENT DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 2 0 F A



F	SECTION C DELETED & DETAIL 'E' REVISED
E	GENERALLY REVISED

CLP 中電

REVS.	13-9-04	13-10-09	26-03-12	18-03-14	01-06-17	26-05-20					
	A	B	C	D	E	F	G	H	J	K	L
INITIAL	K.C.C.	K.C.C.	K.C.C.	H.T.YU	M.S.FONG	M.S.FONG					

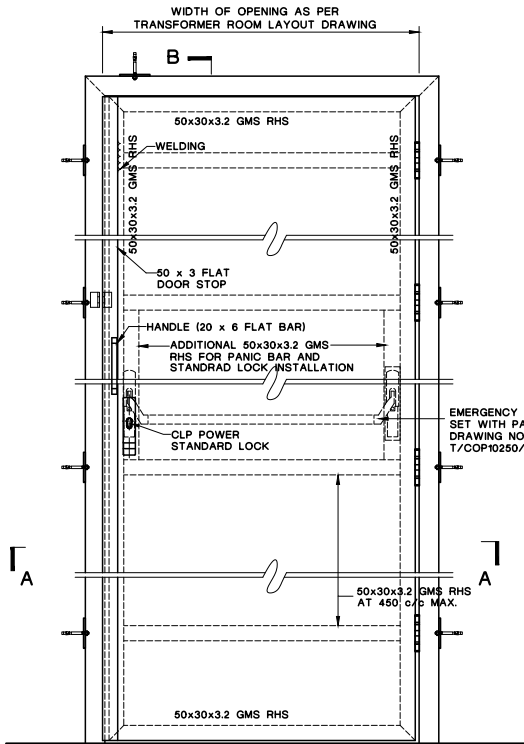
TITLE :

TYPICAL DETAILS OF DOUBLE LEAF STAINLESS STEEL DOOR WITHOUT LOCK

DRAWN: FONG, MING SUM	DATE: 26-05-2020
CHECKED: FONG, MING SUM	APPROVED: GARY KWOK
SCALE: N. T. S.	SHEET(S) IN SET:

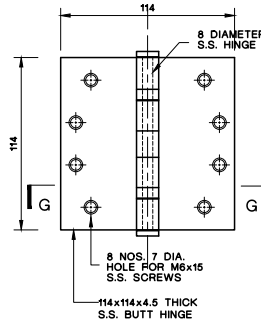
ASSET MANAGEMENT										DRG. NO.	T	C	O	P	1	0	2	5	0	D	E	3	3	0	1	0	3	2	1	F	A
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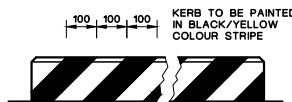
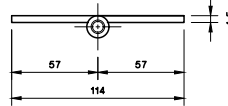


ELEVATION

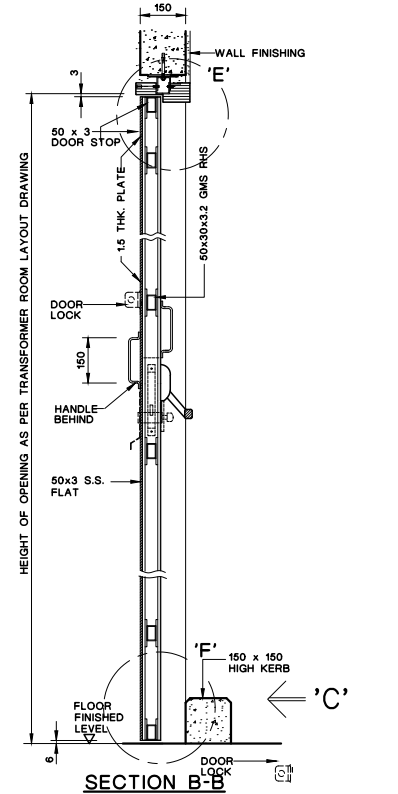
DETAIL OF S.S. BUTT HINGE



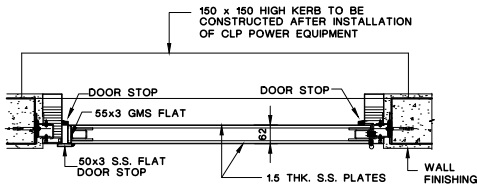
SECTION G-G



VIEW C

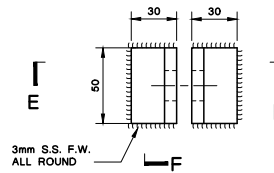


SECTION B-B

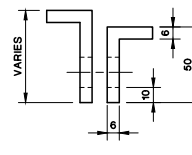


SECTION A-A

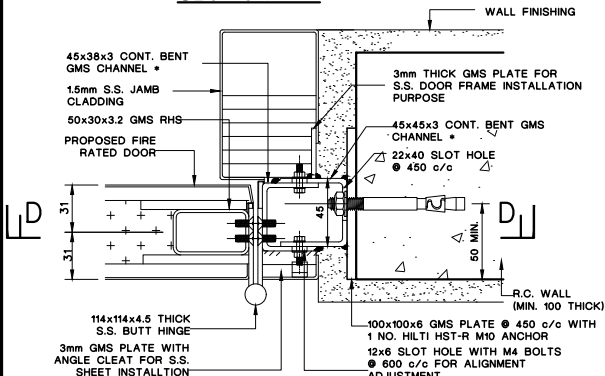
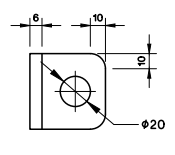
DETAIL OF DOOR LOCK



SECTION E-E



SECTION F-F

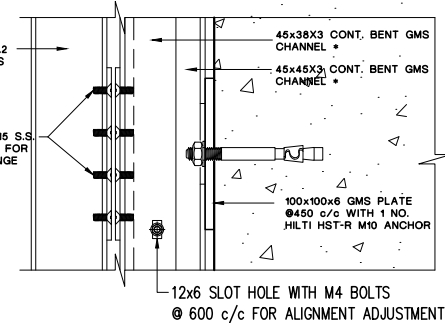


DOOR JAMB/FRAME FIXING DETAIL

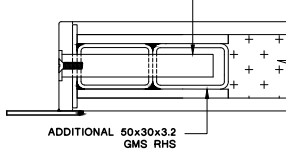
NOTES: 1. * DENOTES SIZE OF STEEL CHANNEL TO SUIT THE EXACT DIMENSION OF S.S. BUTT HINGE SCREW POSITION.
2. S.S. JAMB CLADDING SUPPORTING DETAIL SHALL BE DESIGNED BY THE CONTRACTOR.

NOTES:

- ALL CONNECTIONS FOR STAINLESS AND G.M.S. STEEL WORKS SHALL BE 3mm S.S. FILLET WELD, OR 3mm FILLET WELDED FOR G.M.S. ALL ROUND.
- ALL STEEL WORKS TO BE GRADE 316L STAINLESS STEEL OR EQUIVALENT.
- ALL STEEL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE DISTRIBUTION BOARD WITH COPPER CONDUCTOR NOT LESS THAN 6mm².
- ALL DIMENSIONS ARE IN mm.
- ALL DIMENSIONS, CONSTRUCTION DETAILS AND MEMBER SIZES SHOWN ARE INDICATIVE ONLY. THE DEVELOPER/CONTRACTOR IS RESPONSIBLE TO DESIGN FIRE RATED DOOR WITH DUE CONSIDERATION OF THE STRUCTURAL AND FIRE PERFORMANCE REQUIREMENTS UNDER RELATED REGULATIONS AND ENSURE THAT THE REQUIRED FIRE RESISTANCE RATING CAN BE ACHIEVED WITH FIRE CERTIFICATE AVAILABLE FOR CLPP APPROVAL.
- THE DEVELOPER'S CONSULTANT SHOULD ENSURE THAT THE RELEVANT FIRE CERTIFICATE IS AVAILABLE AT PRELIMINARY DESIGN STAGE FOR THE FRR DOOR (WHERE APPLICABLE) SUCH THAT THE PROPOSED FRR DOOR WOULD COMPLY WITH ALL OTHER RELEVANT REGULATIONS, SUCH AS WIND LOAD REQUIREMENTS WHEN THE DOOR IS FACING EXTERNAL AIR.



SECTION D-D



TYPICAL DETAIL FOR STANDARD LOCK

B	NOTE 6 ADDED
A	STANDARD LOCK ADDED



REVS.	18.10.18	19.06.20												
INITIAL	A	B	C	D	E	F	G	H	J	K	L			
	H.T.YU	H.T.YU												

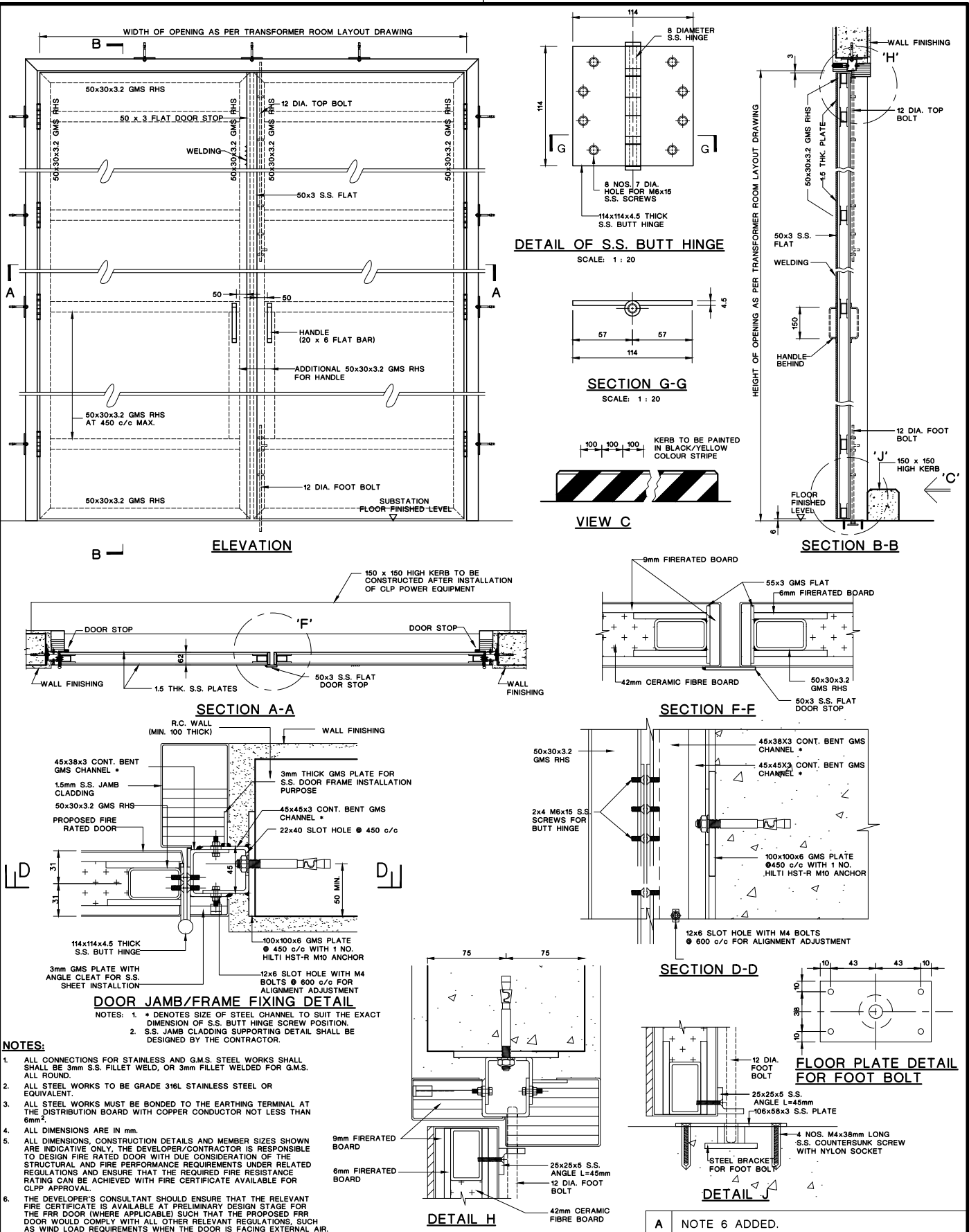
TITLE :

FOR FIRE RATED DOOR WITH INSULATION
TYPICAL DETAILS OF SINGLE LEAF LAMINATED
STEEL DOOR

DRAWN: FONG, MING SUM	DATE: 01-03-2016
CHECKED: FONG, MING SUM	APPROVED: GARY KWOK
SCALE: AS SHOWN	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 3 4 B A



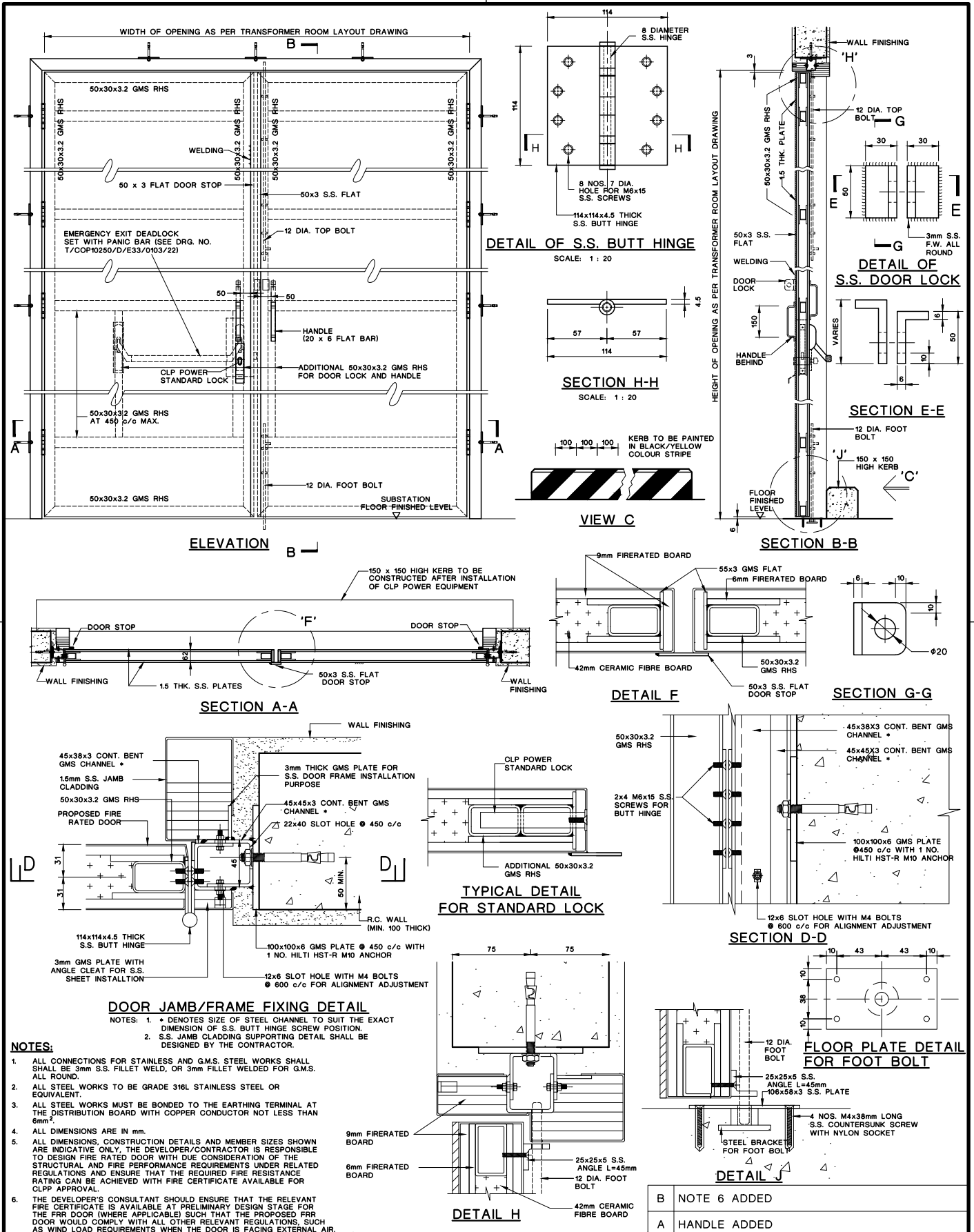
REVS.	19.06.20													
INITIAL	A	B	C	D	E	F	G	H	J	K	L			

TITLE :

FOR FIRE RATED DOOR WITH INSULATION
TYPICAL DETAILS OF DOUBLE LEAF
LAMINATED STEEL DOOR AND WITHOUT LOCK

DRAWN: M. S. FONG	DATE: 01-03-2016
CHECKED: M. S. FONG	APPROVED: GARY KWOK
SCALE: N.T.S.	SHEET(S) IN SET:

ASSET MANAGEMENT	DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 3 5 A A
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CLP 中電

DRAWN: M. S. FONG DATE: 01-03-2016

CHECKED: M. S. FONG APPROVED: GARY KWOK

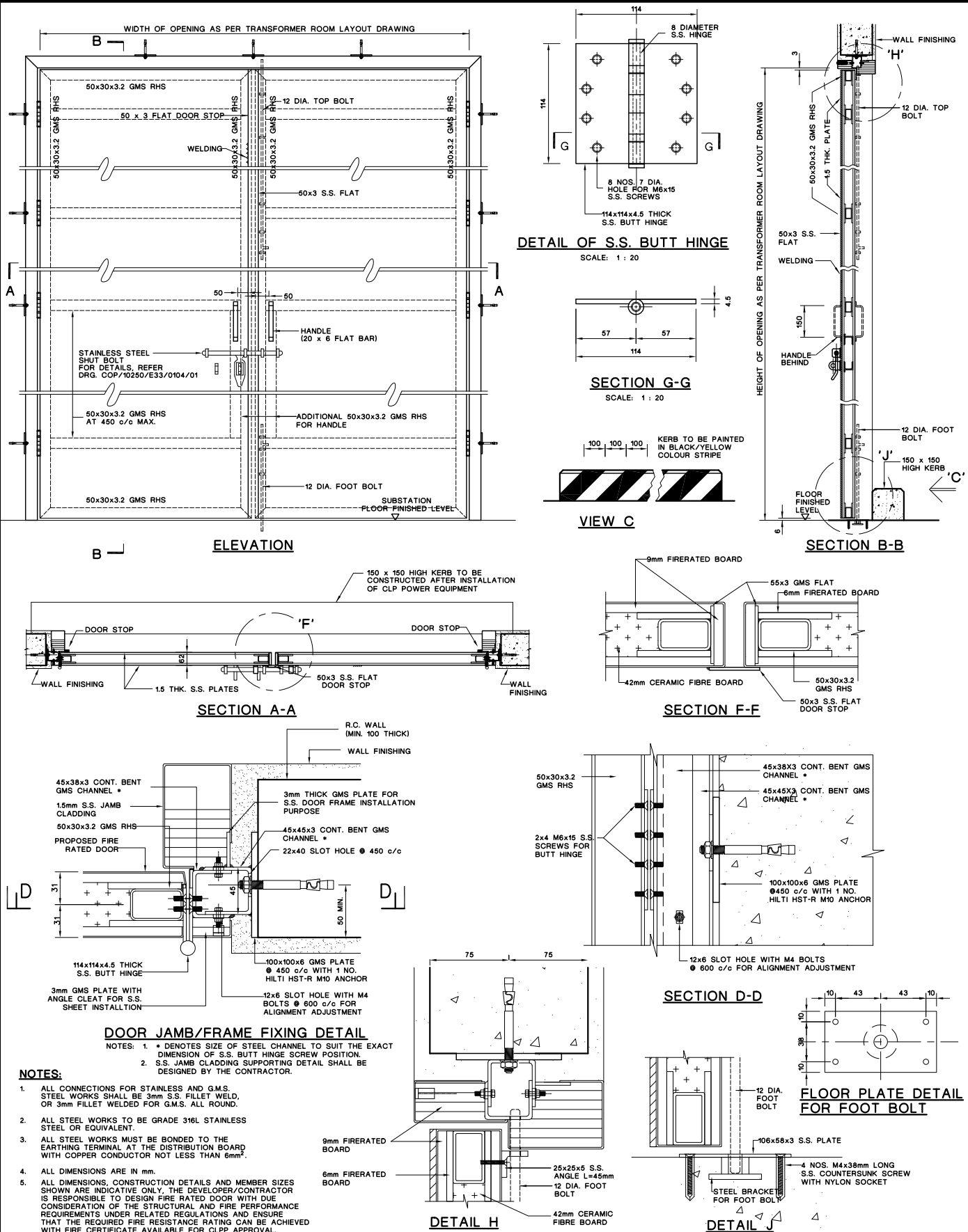
SCALE: AS SHOWN SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 3 6 B A

INFORMATION CLASS: PROPRIETARY

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REVS.

INITIAL

TITLE :

FOR FIRE RATED DOOR WITH INSULATION
TYPICAL DETAILS OF DOUBLE LEAF
LAMINATED STEEL DOOR WITH SHUT BOLT

DRAWN: M. S. FONG

DATE: 01-03-2016

CHECKED: M. S. FONG

APPROVED: GARY KWOK

SCALE: N.T.S.

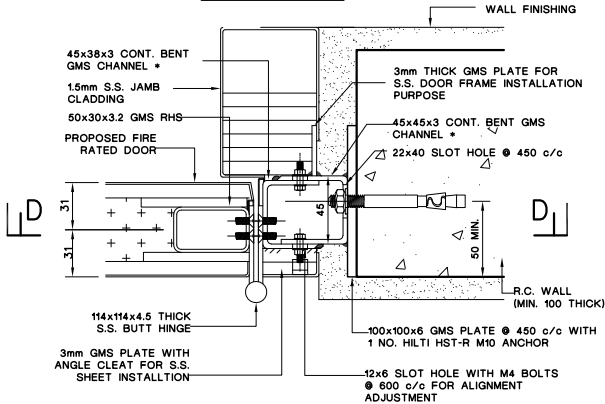
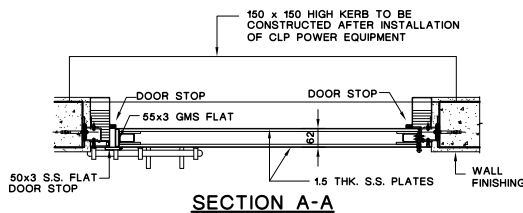
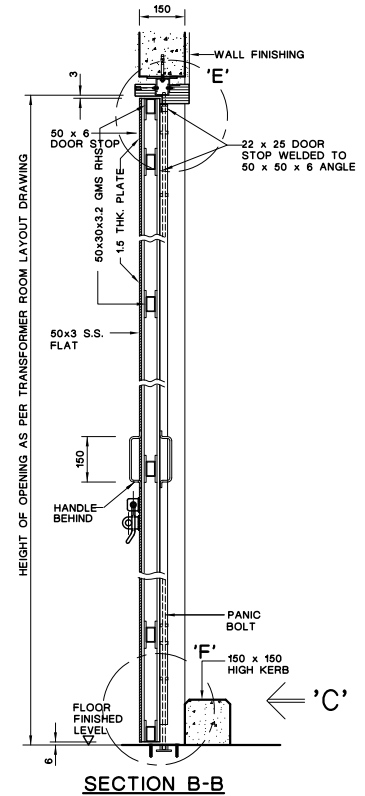
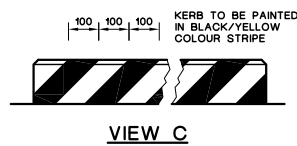
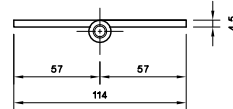
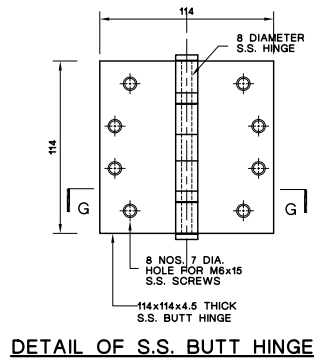
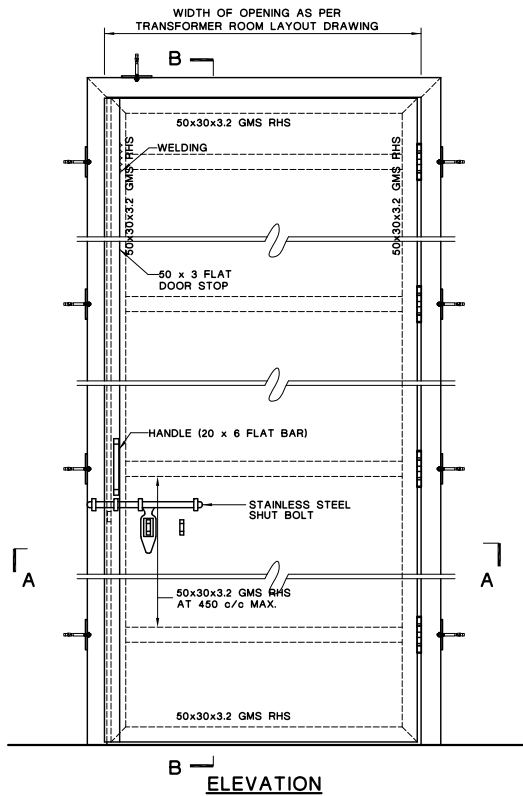
SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 4 1 - A

INFORMATION CLASS: PROPRIETARY

ALL RIGHTS RESERVED AND REPRODUCTION IN ANY FORM MUST BE APPROVED BY CLP POWER

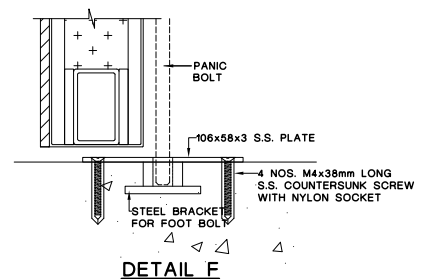
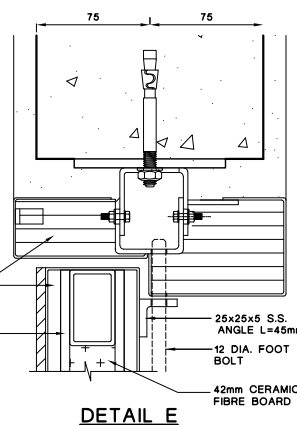
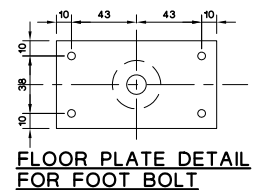
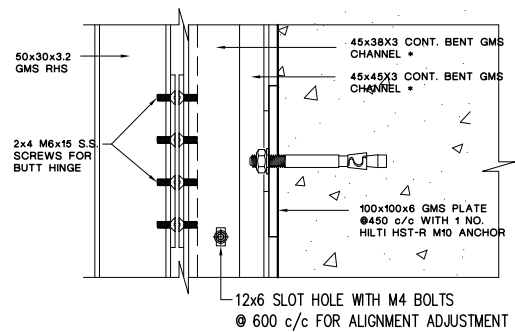


DOOR JAMB/FRAME FIXING DETAIL

- NOTES: 1. * DENOTES SIZE OF STEEL CHANNEL TO SUIT THE EXACT DIMENSION OF S.S. BUTT HINGE SCREW POSITION.
2. S.S. JAMB CLADDING SUPPORTING DETAIL SHALL BE DESIGNED BY THE CONTRACTOR.

NOTES:

- ALL CONNECTIONS FOR STAINLESS AND GMS. STEEL WORKS SHALL BE 3mm S.S. FILLET WELD, OR 3mm FILLET WELDED FOR GMS. ALL ROUND.
- ALL STEEL WORKS TO BE GRADE 316L STAINLESS STEEL OR EQUIVALENT.
- ALL STEEL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE DISTRIBUTION BOARD WITH COPPER CONDUCTOR NOT LESS THAN 6mm².
- ALL DIMENSIONS ARE IN mm.
- ALL DIMENSIONS, CONSTRUCTION DETAILS AND MEMBER SIZES SHOWN ARE INDICATIVE ONLY. THE DEVELOPER/CONTRACTOR IS RESPONSIBLE TO DESIGN FIRE RATED DOOR WITH DUE CONSIDERATION OF THE STRUCTURAL AND FIRE PERFORMANCE REQUIREMENTS UNDER RELATED REGULATIONS AND ENSURE THAT THE REQUIRED FIRE RESISTANCE RATING CAN BE ACHIEVED WITH FIRE CERTIFICATE AVAILABLE FOR CLPP APPROVAL.



REVS.

INITIAL

TITLE :

FOR FIRE RATED DOOR WITH INSULATION
TYPICAL DETAILS OF SINGLE LEAF LAMINATED
STEEL DOOR WITH SHUT BOLT

DRAWN: LAU, TZE WAH DATE: 11-09-2019

CHECKED: EDMOND YU APPROVED: W.C.HO

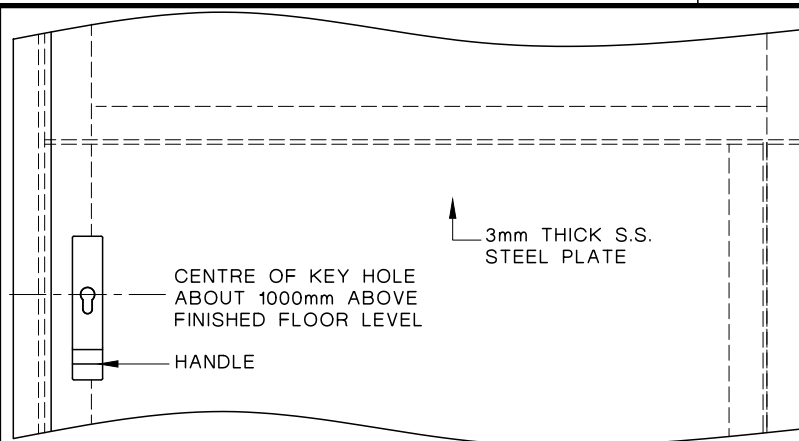
SCALE: AS SHOWN SHEET(S) IN SET:

ASSET MANAGEMENT

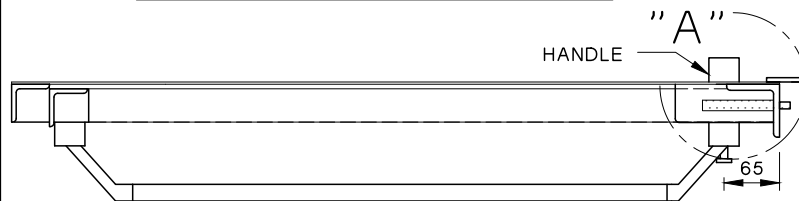
DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 4 2 - A

INFORMATION CLASS: PROPRIETARY

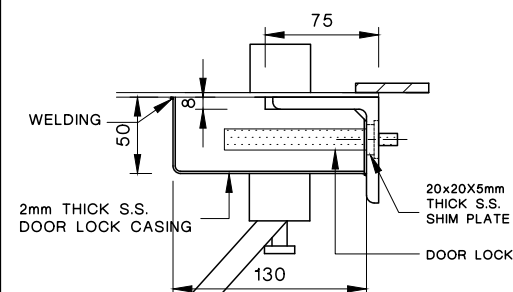
ALL RIGHTS RESERVED AND REPRODUCTION IN ANY FORM MUST BE APPROVED BY CLP POWER



EXTERNAL FACE OF STEEL DOOR

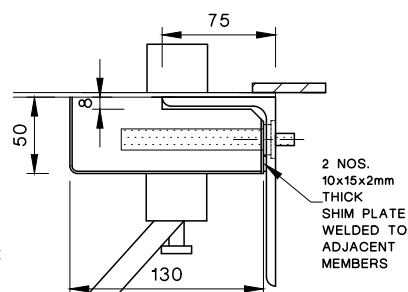


SECTION



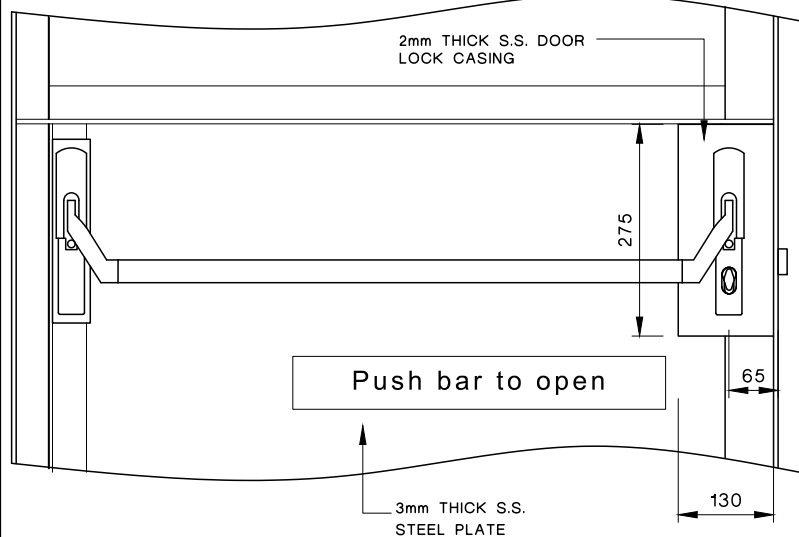
DETAIL "A"

(NOTE: Detail for 70x70x8 Angle)

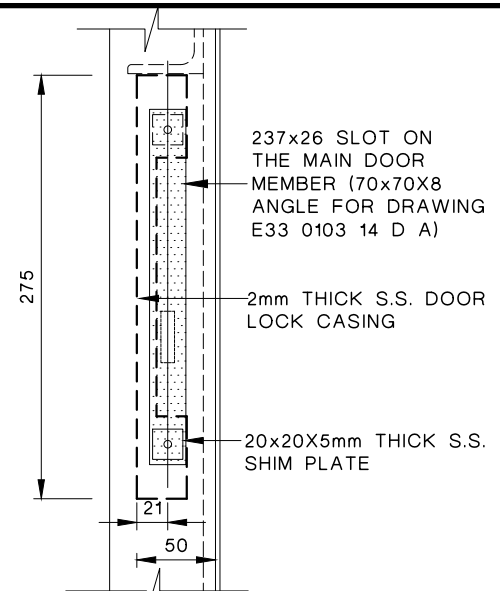


DETAIL "A"

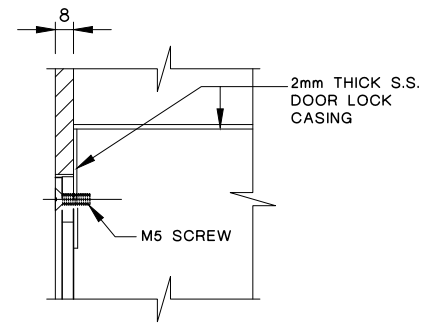
(NOTE: Detail for 125x75x6 Angle Drawing E33 0103 20 F A)



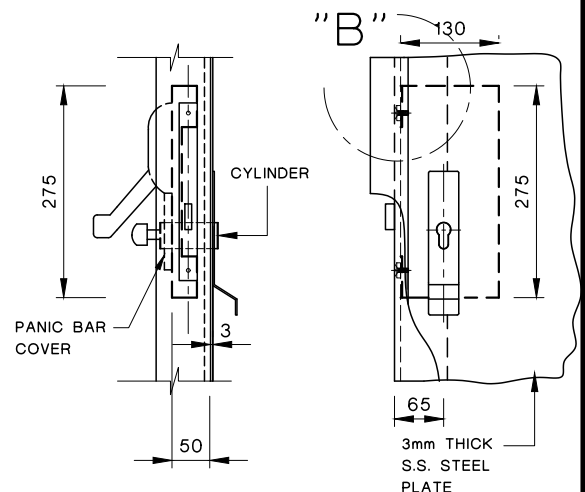
INSIDE FACE OF STEEL DOOR



INSTALLATION DETAIL FOR DOOR LOCK



DETAIL "B"



SIDE VIEW OF DOOR LOCK

FRONT VIEW OF DOOR LOCK

A GENERALLY REVISED

CLP 中電

REVS.	13.11.18												
INITIAL	A	B	C	D	E	F	G	H	J	K	L		

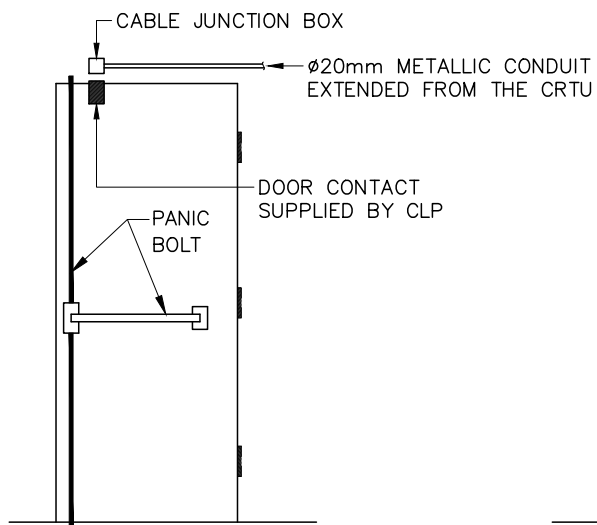
TITLE :

DETAILS OF EMERGENCY EXIT DEADLOCK SET WITH PANIC BAR

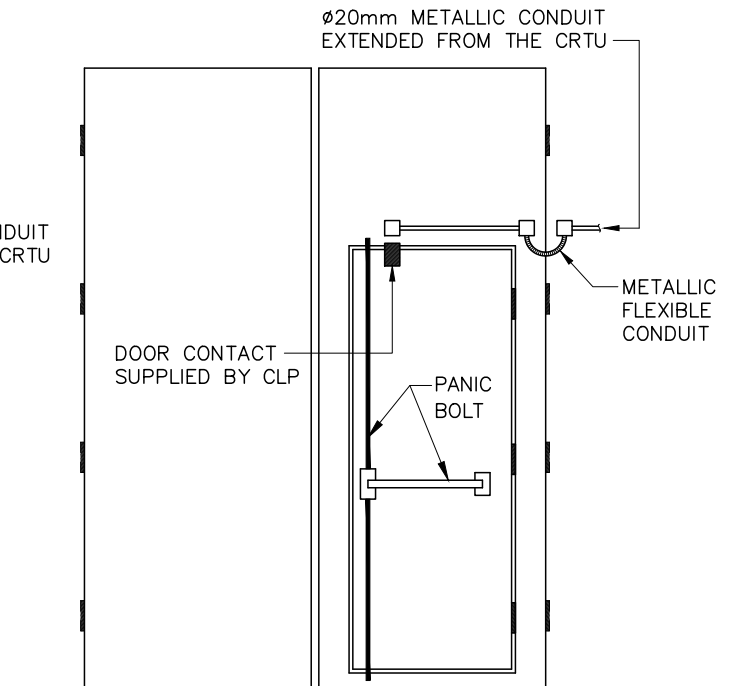
DRAWN: M. S. FONG	DATE: 13 Nov. 2018
CHECKED: M. S. FONG	APPROVED: GARY KWOK
SCALE: N. T. S.	SHEET(S) IN SET: 1

ASSET MANAGEMENT

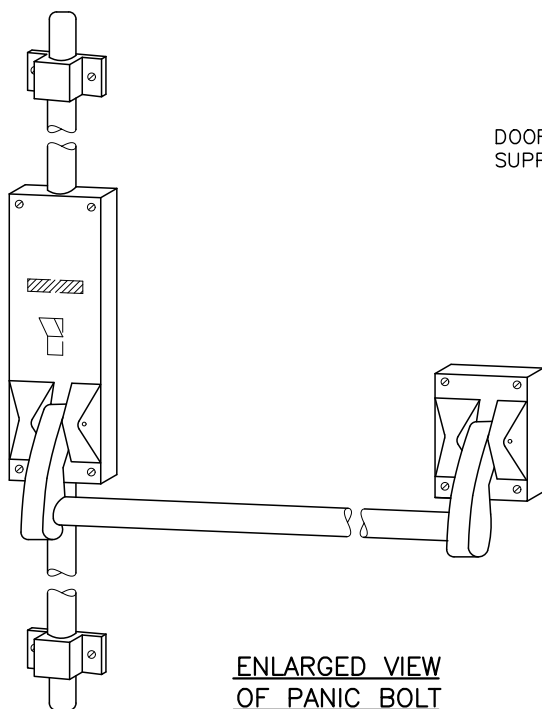
DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 2 2 A A



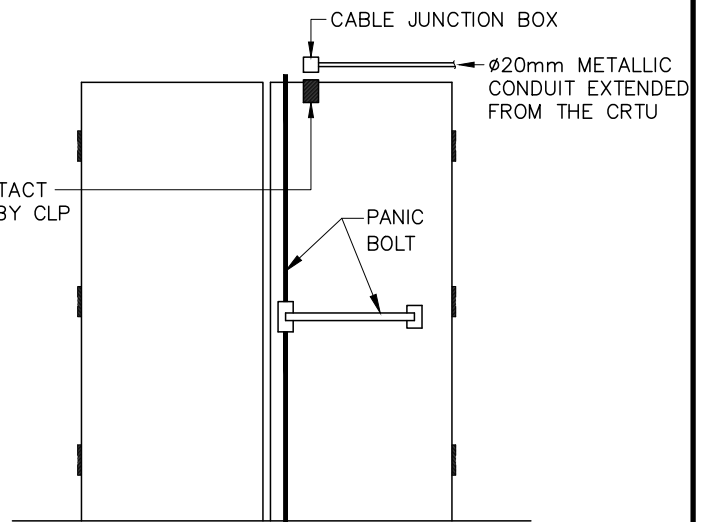
**PANIC BOLT FOR
SINGLE STEEL DOOR**
(LOOKING FROM INSIDE
OF TRANSFORMER RM.)



**PANIC BOLT FOR
WICKET OF DOUBLE
LEAF DOOR**
(LOOKING FROM INSIDE
OF TRANSFORMER RM.)



**ENLARGED VIEW
OF PANIC BOLT**



**PANIC BOLT FOR
DOUBLE LEAF
STAINLESS STEEL DOOR**
(LOOKING FROM INSIDE
OF TRANSFORMER RM.)

B	UPDATE THE TERMINATION OF CONDUIT TO CRTU	A	GENERAL REVISION
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REVS.	08.05.12	18.06.20												
INITIAL	A	B	C	D	E	F	G	H	J	K	L			
	E. YU	H.T.YU												

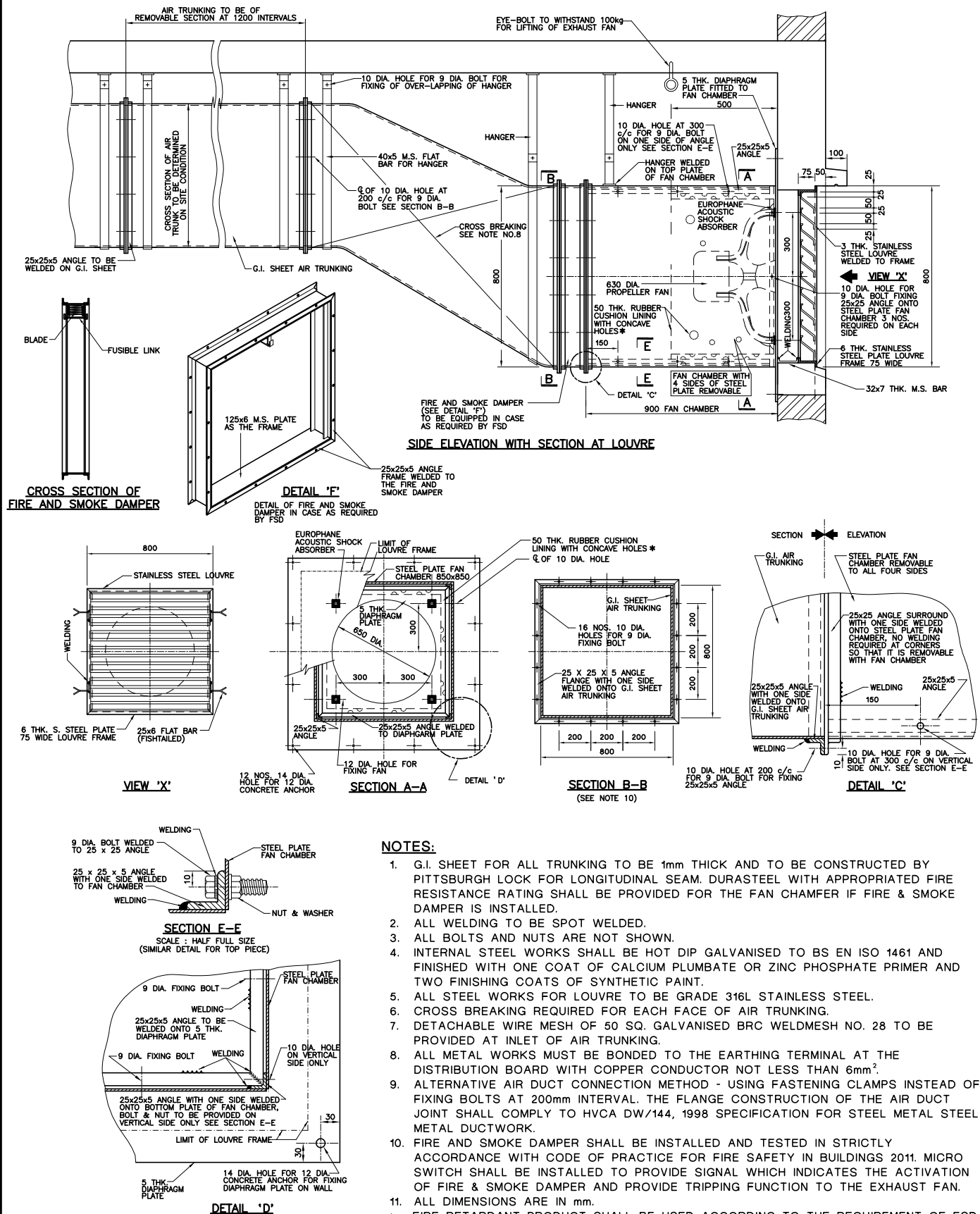
TITLE :

TYPICAL ARRANGEMENT OF PANIC BOLT
AND DOOR CONTACT INSTALLATION FOR
TRANSFORMER ROOM DOORS

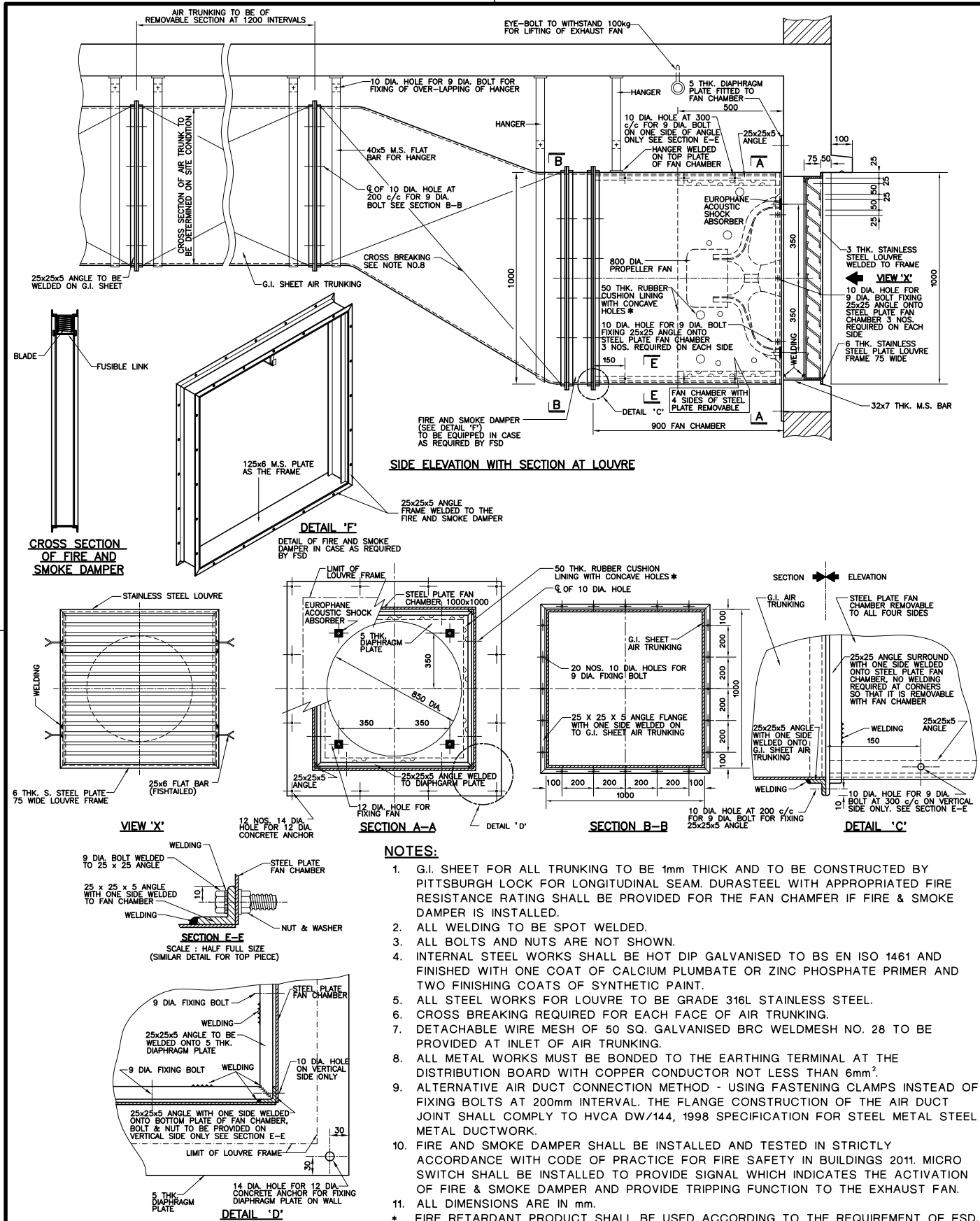
DRAWN: S. C. TO	DATE: 26-07-2002
CHECKED: K. C. CHENG	APPROVED: K. W. WONG
SCALE: N. T. S.	SHEET(S) IN SET: 1

ASSET MANAGEMENT

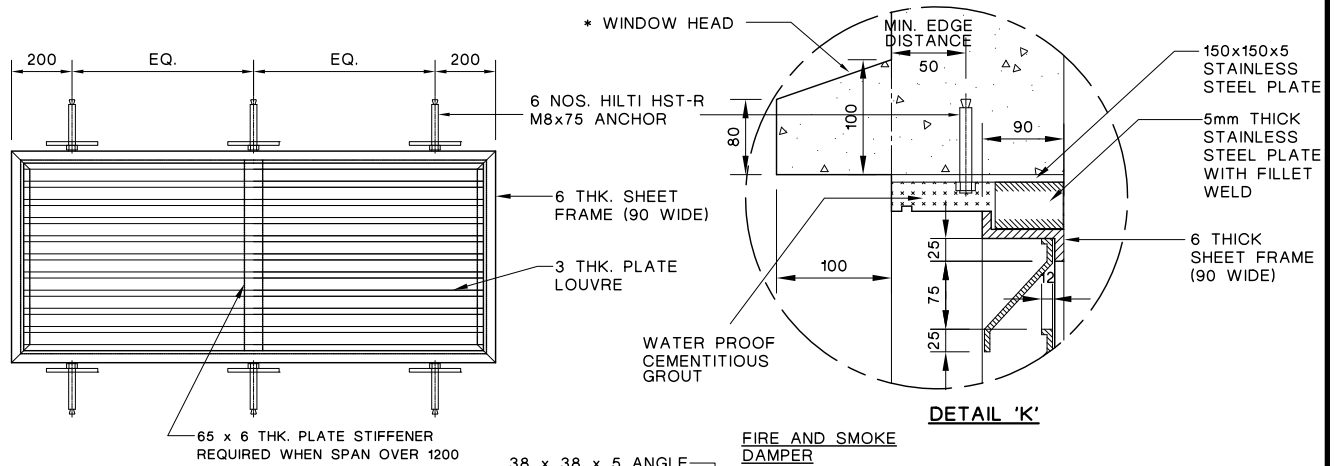
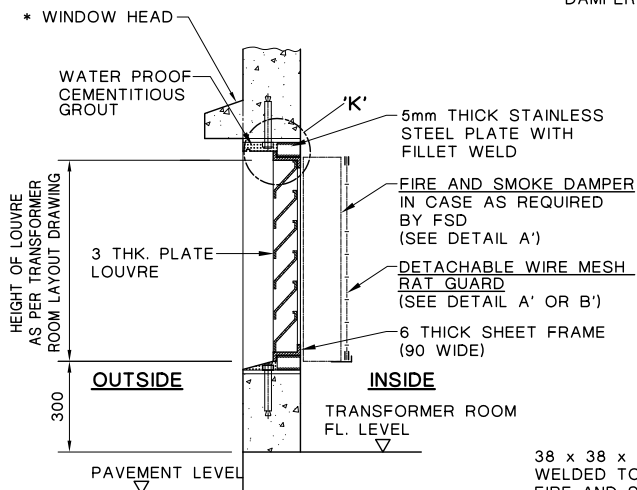
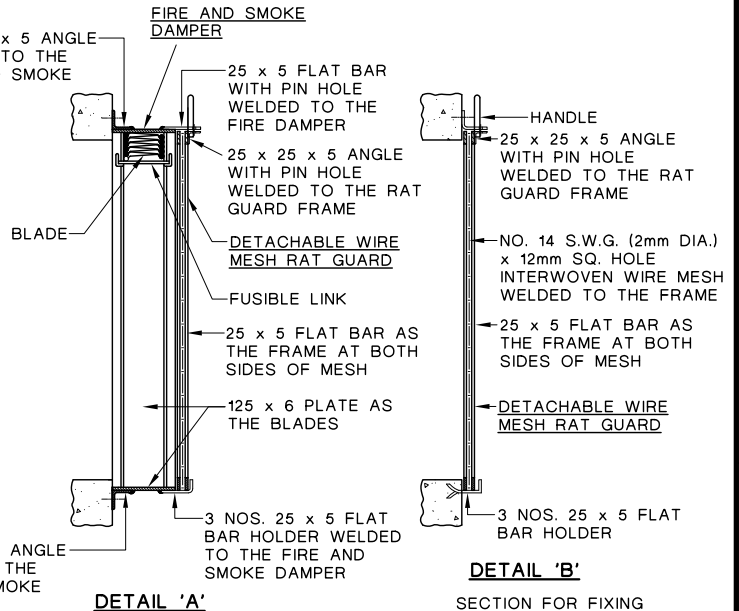
DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 2 3 B A



C	FIRE AND SMOKE DAMPER ADDED				B	ZINC PRIMER AND NOTE 10 ADDED.				A	LOUVRE BLADES REVISED															
<div>CLP 中電</div>					REV.S.	21.12.05	15.11.07	07.04.17																		
						A	B	C	D	E	F	G	H	J	K	L										
					INITIAL	K.C.C.	K.C.C.	E. YU																		
					TITLE : TYPICAL DETAILS OF METAL TRUNKING & STAINLESS STEEL LOUVRE FOR 630mm DIA. WALL MOUNTED EXHAUST FAN																					
DRAWN:		S. C. TO			DATE:		21 Dec., 2005																			
CHECKED:		K. C. CHENG			APPROVED:		W. C. HO																			
SCALE:		AS SHOWN			SHEET(S) IN SET:																					
A S S E T M A N A G E M E N T					DRG. NO.	T	C	O	P	1	0	2	5	0	D	E	3	3	0	1	0	3	2	4	C	A



C	FIRE AND SMOKE DAMPER ADDED				B	ZINC PRIMER AND NOTE 10 ADDED				A	LOUVRE BLADES REVISED																				
<div>CLP 中電</div>										REVS.	21.12.05	15.11.07	09.09.16																		
											A	B	C	D	E	F	G	H	J	K	L										
										INITIAL	K.C.C.	K.C.C.	E. YU																		
										TITLE :																					
										TYPICAL DETAILS OF METAL TRUNKING & STAINLESS STEEL LOUVRE FOR 800mm DIA. WALL MOUNTED EXHAUST FAN																					
DRAWN:		S. C. TO			DATE:		21 Dec., 2005																								
CHECKED:		K. C. CHENG			APPROVED:		W. C. HO																								
SCALE:		AS SHOWN			SHEET(S) IN SET:																										
A S S E T M A N A G E M E N T										DRG. NO.	T	C	O	P	1	0	2	5	0	D	E	3	3	0	1	0	3	2	5	C	A

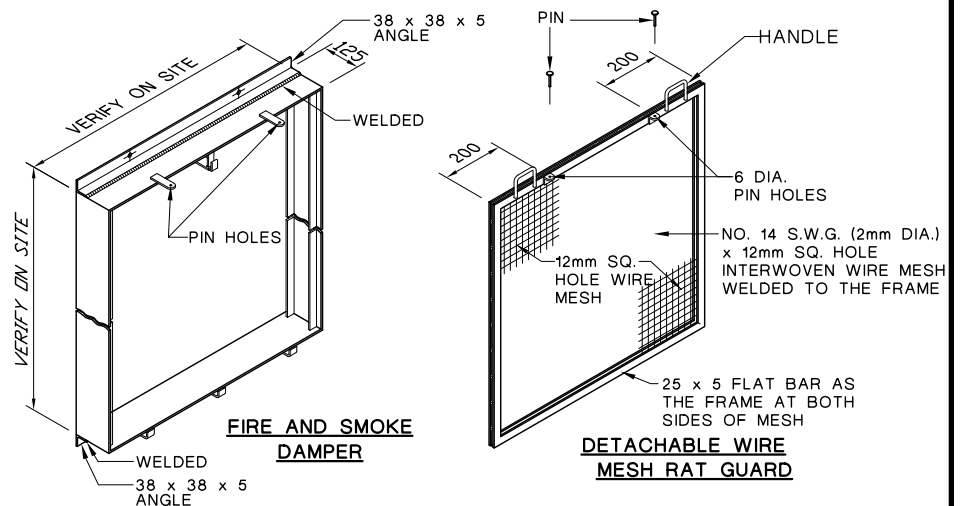
**ELEVATION****DETAIL 'K'****CROSS SECTION OF WALL SHOWING STAINLESS STEEL LOUVRE****DETAIL 'A'****DETAIL 'B'**

SECTION FOR FIXING FIRE AND SMOKE DAMPER & WIRE MESH RAT GUARD (SCALE 1 : 15) IN CASE AS REQUIRED BY FSD

SECTION FOR FIXING WIRE MESH RAT GUARD ONLY (SCALE 1 : 15)

NOTES:

1. * IF THE WINDOW HEAD IS PROJECTED BEYOND THE SITE BOUNDARY AND THE HEIGHT IS LESS THAN 2.5 METRES, THIS PORTION OF WINDOW HEAD MAY BE OMITTED.
2. ALL CONNECTIONS OF STAINLESS STEEL WORKS TO BE 3mm S.S. FILLET WELDED ALL ROUND.
3. ALL STEEL WORKS TO BE GRADE 316L STAINLESS STEEL.
4. ALL STEEL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE DISTRIBUTION BOARD WITH COPPER CONDUCTOR NOT LESS THAN 6 mm².
5. FIRE AND SMOKE DAMPER SHALL BE INSTALLED AND TESTED IN STRICTLY ACCORDANCE WITH CODE OF PRACTICE FOR FIRE SAFETY IN BUILDINGS 2011.

**ISOMETRIC VIEW AND ASSEMBLY OF FIRE AND SMOKE DAMPER & WIRE MESH RAT GUARD (NOT TO SCALE)**

B FIRE AND SMOKE DAMPER, WINDOW HEAD ADDED A LOUVRE BLADES REVISED



REVS.	21.12.05	17.03.17												
INITIAL	A	B	C	D	E	F	G	H	J	K	L			
	K.C.C.	H.T.YU												

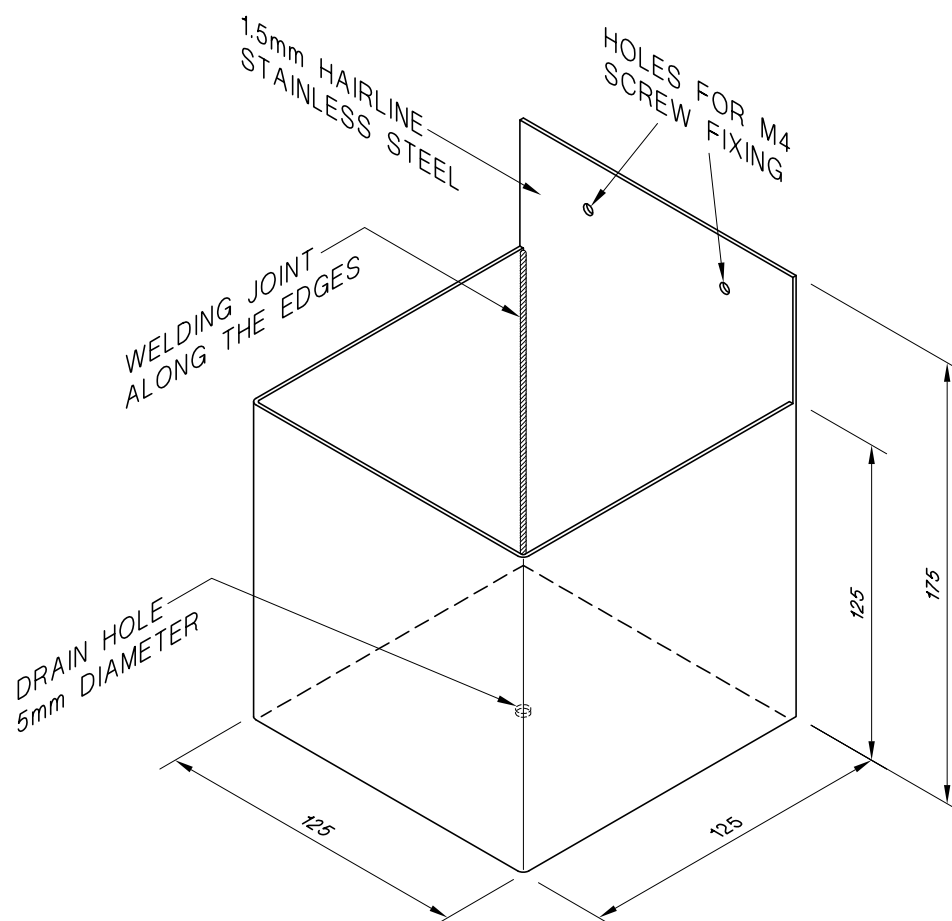
TITLE :

TYPICAL DETAILS OF STAINLESS STEEL LOUVRE

DRAWN: S. C. TO	DATE: 21 Dec., 2005
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: 1 : 25 (mm)	SHEET(S) IN SET: 1

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 2 6 B A



REVS.	A	B	C	D	E	F	G	H	J	K	L
INITIAL											

TITLE :

PLASTIC CHAIN STORAGE BOX

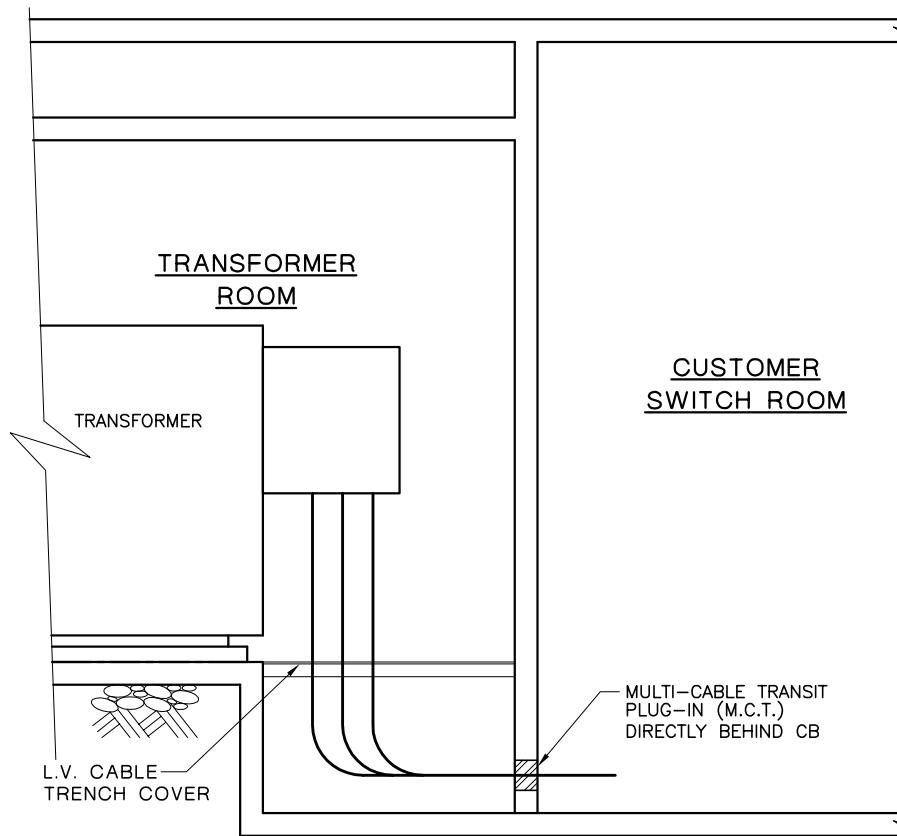
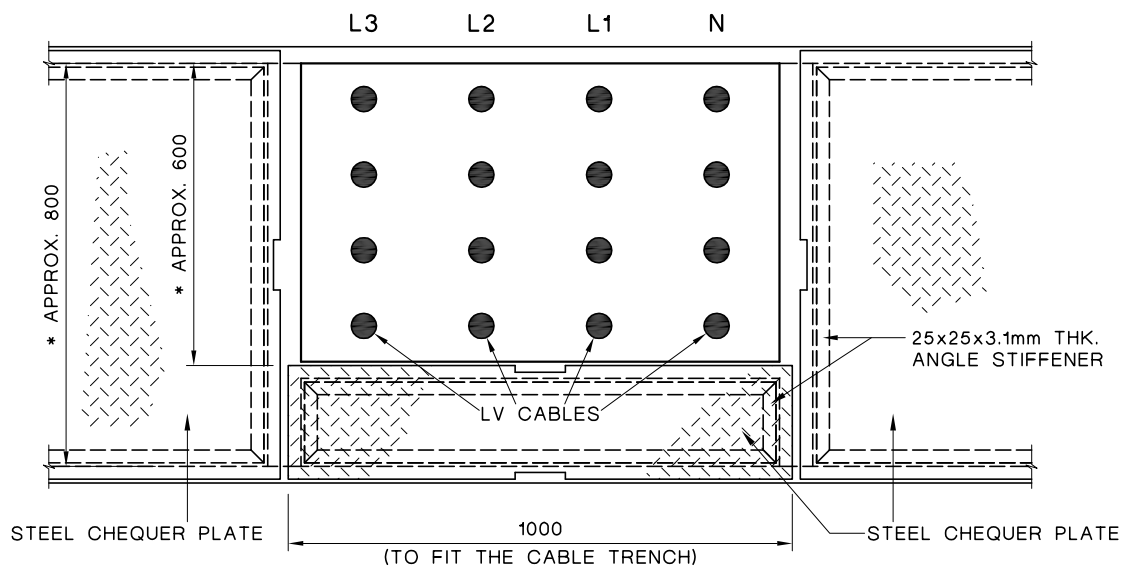
DRAWN: C W WONG DATE: 9 Jul., 2007

CHECKED: K C CHENG APPROVED: W C HO

SCALE: 1 : 3 SHEET(S) IN SET: 1

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 2 7 - A

**NOTES:**

1. * EXACT DIMENSION TO BE DETERMINED ACCORDING TO SITE CONDITIONS.
2. ALL DIMENSIONS ARE IN mm

B CONFIGURATION OF CHEQUER PLATE
UPDATED



REVS.	26.03.12	18.03.14												
INITIAL	A K.C.C.	B H.T.YU	C	D	E	F	G	H	J	K	L			

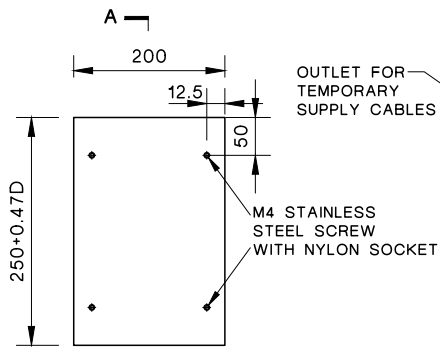
TITLE :

CABLE TRENCH COVER FOR
L.V. CABLES DROPPING FROM TRANSFORMER
L.V. TERMINALS INTO THE CABLE TRENCH

DRAWN: C W WONG	DATE: 21 Aug., 2007
CHECKED: K C CHENG	APPROVED: W C HO
SCALE: N. T. S.	SHEET(S) IN SET:

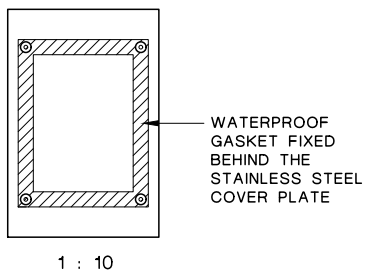
ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 2 8 B A

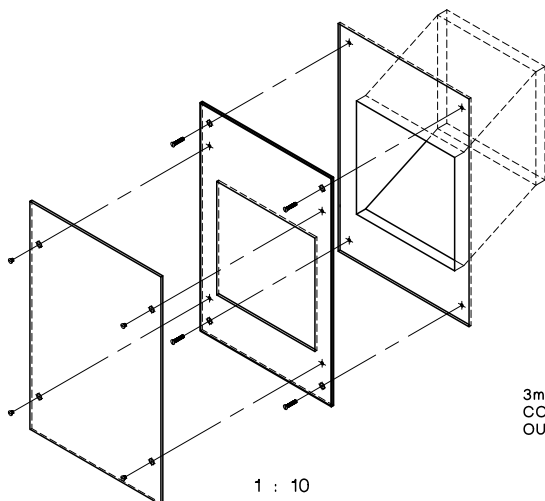


A 
1 : 10

FRONT VIEW OF
STAINLESS STEEL COVER



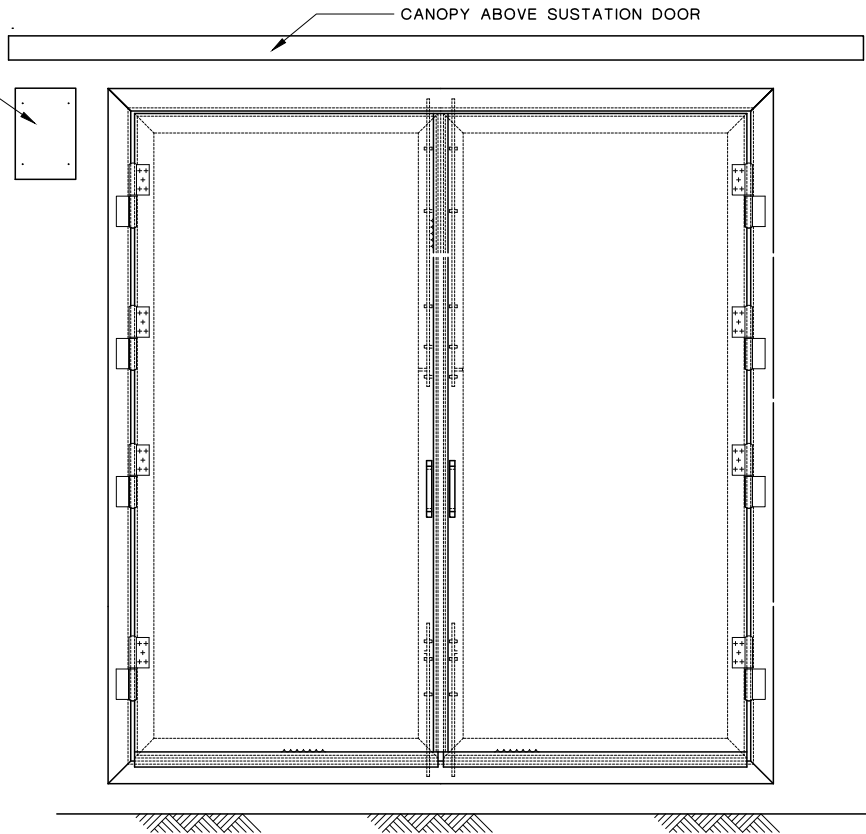
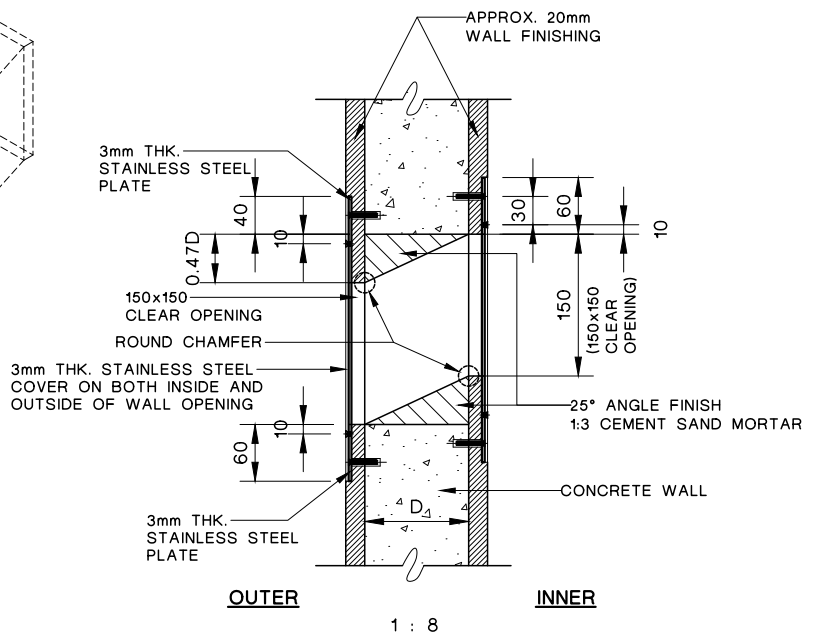
BACK VIEW OF
STAINLESS STEEL COVER



ISOMATIC VIEW FOR OUTLET FIXING

NOTES:

1. HAIRLINE STAINLESS STEEL SHALL BE USED FOR THE COVER AND FRAME, IN CASE THE OUTLET IS LOCATED INSIDE THE INDEPENDENT STAIRCASE, FIRE RATED PROMAT BOARD SHALL BE USED FOR THE COVER.
2. STAINLESS STEEL FIXING SCREW SHALL BE USED
3. ALL DIMENSIONS ARE IN mm

ELEVATION

SECTION A - A

C	ANGLE FINISH UPDATED					B	OUTLET OF TEMPORARY SUPPLY CABLES UPDATED						
	REVS.	17.03.17	22.08.19	23.03.20									
		A	B	C	D	E	F	G	H	J	K	L	
	INITIAL	H.T.YU	H.T.YU	H.T.YU									

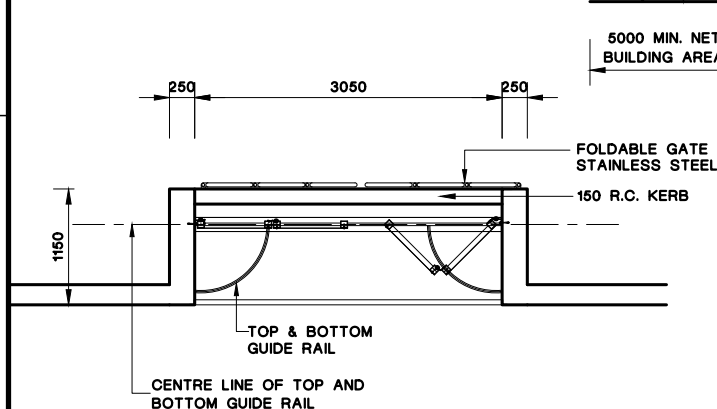
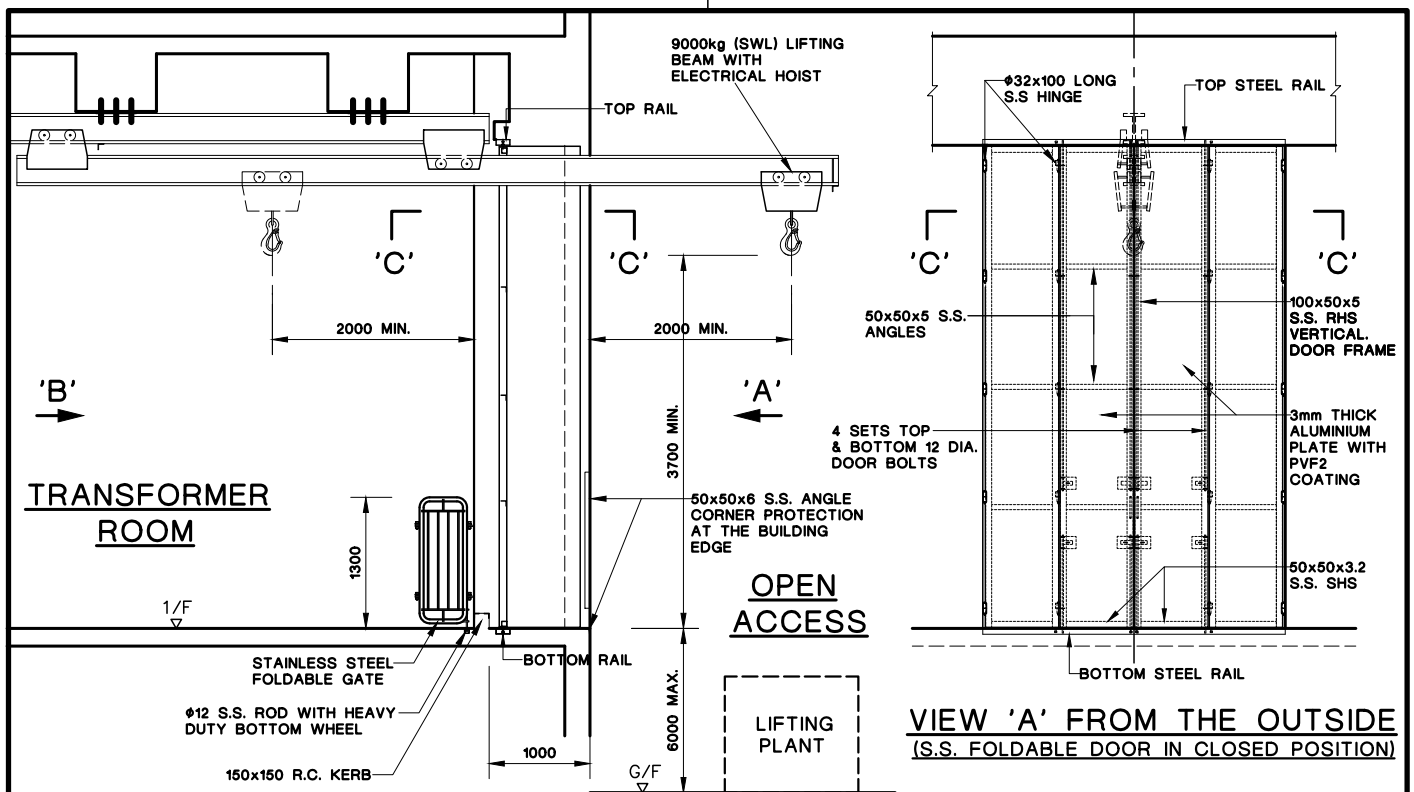


TITLE :

DETAILS OF OUTLET FOR TEMPORARY SUPPLY CABLES

DRAWN:	T. W. LAU	DATE:	14-09-2007
CHECKED:	K. C. CHENG	APPROVED:	W. C. HO
SCALE:	N.T.S.	SHEET(S) IN SET:	

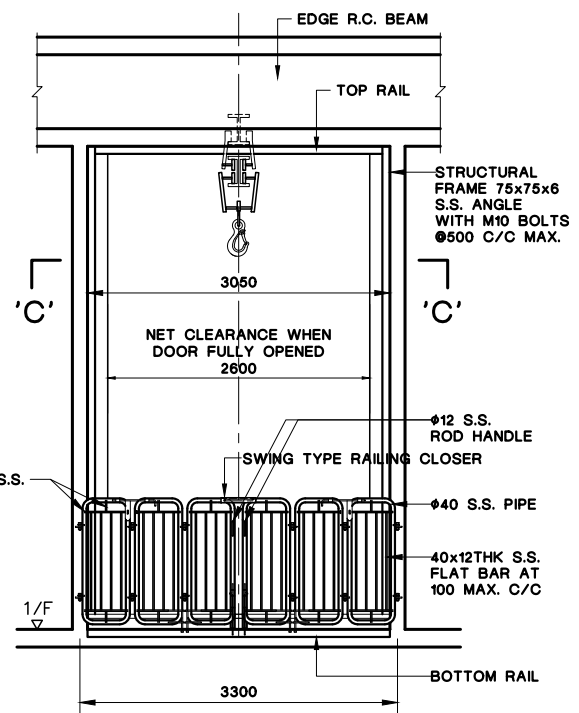
ASSET MANAGEMENT DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 2 9 C A



NOTE: STEEL FOLDABLE DOOR IN CLOSED AND SEMI-OPEN POSITION.

NOTES:

- ALL CONNECTIONS FOR STAINLESS AND G.M.S. STEEL WORKS SHALL BE 3mm S.S. FILLET WELD, OR 3mm FILLET WELDED FOR G.M.S., ALL ROUND.
- ALL STEEL WORKS TO BE GRADE 316L STAINLESS STEEL OR EQUIVALENT.
- ALL STEEL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE DISTRIBUTION BOARD WITH COPPER CONDUCTOR NOT LESS THAN 6mm.
- ALL DIMENSIONS AND MEMBER SIZES SHOWN ARE INDICATIVE ONLY, THE CONTRACTOR IS RESPONSIBLE TO CHECK AND SUBMIT THE DESIGN ACCORDING TO MATCH THEIR GENERAL BUILDING PLAN AND THEIR PROPOSED FIRE RATED DOOR.
- RUBBER WEATHER PROOF STRIPES SHALL BE PROVIDED TO PREVENT INGRESS OF RAIN WATER DURING THE SEVERE RAINING CONDITION.
- DESIGN OF FALL RESTRAINT SYSTEM SHALL FOLLOW THE TYPICAL DRAWING T-COP-10250-D-E33-0103-38.
- IF THE PROVISION OF FALL RESTRAINT SYSTEM IS NOT REASONABLY PRACTICABLE, FALL ARREST SYSTEM SHALL BE PROVIDED AS THE LAST RESORT.
- ALL DIMENSIONS ARE IN mm.



B	MAXIMUM HEIGHT OF UPPER FLOOR SUBSTATION UPDATED.	A	ANCHOR POINTS DELETED, NOTE ADDED.
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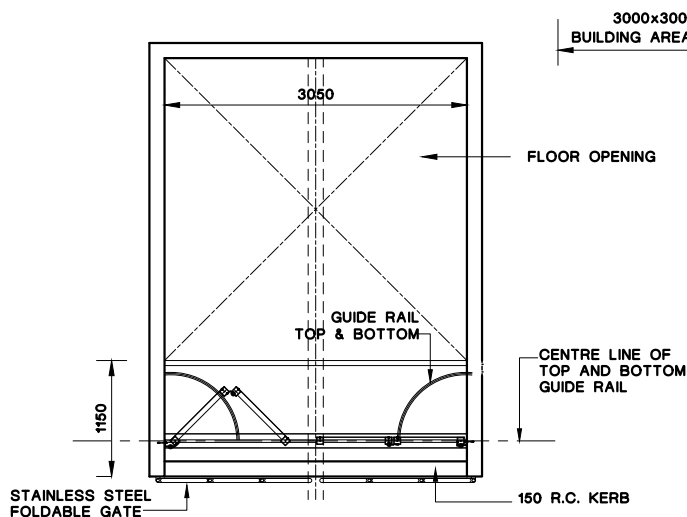
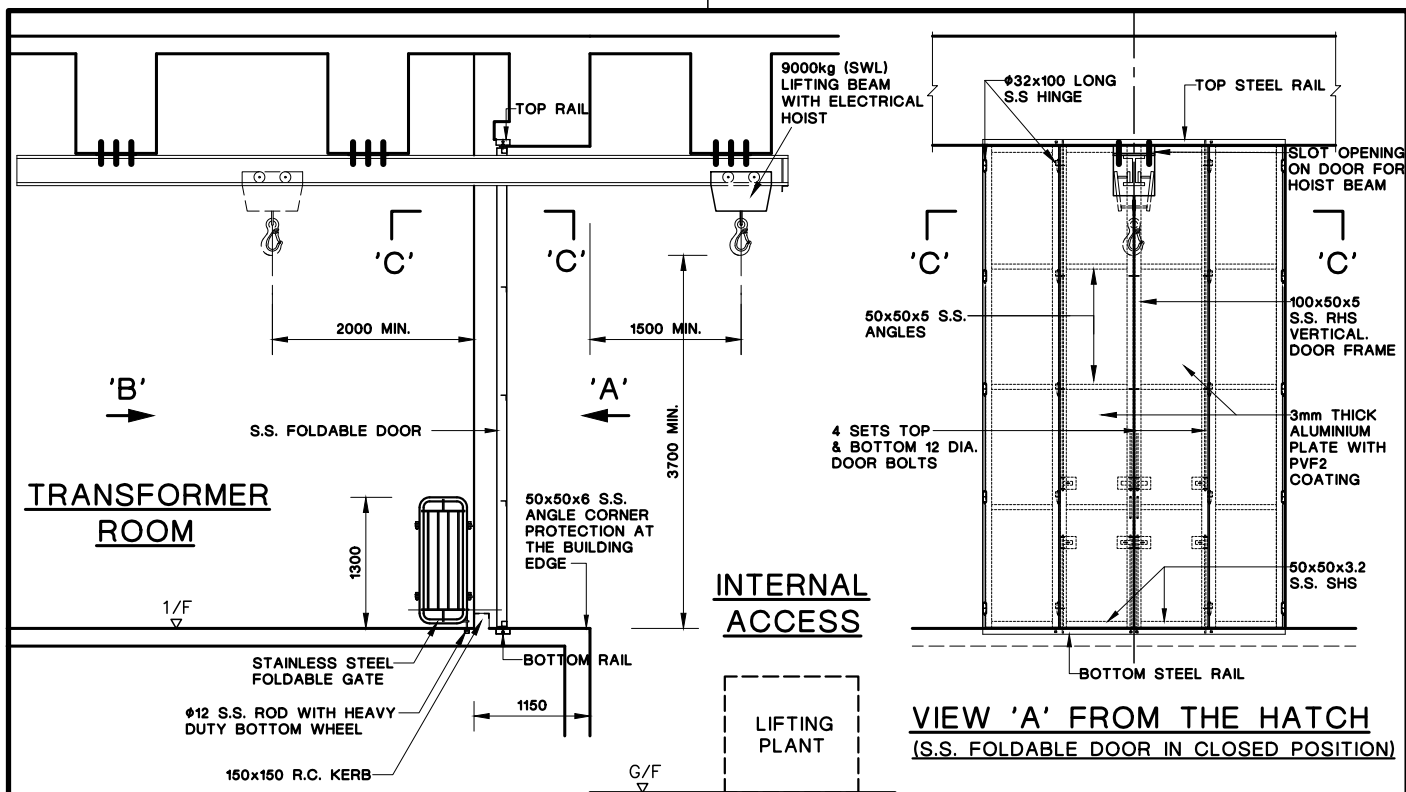
REVS.	17.12.18	20.03.20												
INITIAL	A	B	C	D	E	F	G	H	J	K	L			
	H.T.YU	H.T.YU												

TITLE :

TYPICAL DETAILS FOR UPPER FLOOR SUBSTATION WITH RETRACTABLE HOIST BEAM AND TROLLEY

DRAWN: M. S. FONG	DATE: 27 APR., 2017
CHECKED: M. S. FONG	APPROVED: GARY KWOK
SCALE: 1 : 75	SHEET(S) IN SET: 1

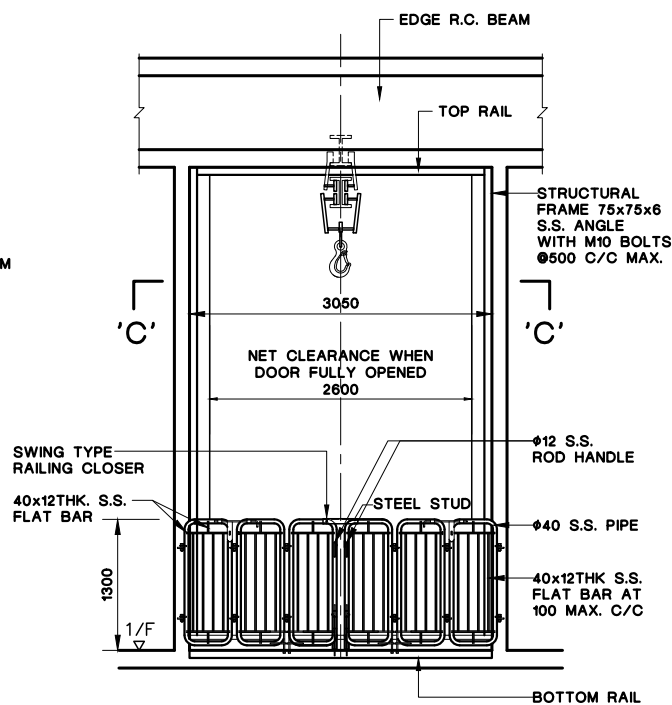
ASSET MANAGEMENT	DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 3 2 B A
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NOTE: STEEL FOLDABLE DOOR IN CLOSED AND SEMI-OPEN POSITION.

NOTES:

- ALL CONNECTIONS FOR STAINLESS AND G.M.S. STEEL WORKS SHALL BE 3mm S.S. FILLET WELD, OR 3mm FILLET WELDED FOR G.M.S., ALL ROUND.
- ALL STEEL WORKS TO BE GRADE 316L STAINLESS STEEL OR EQUIVALENT.
- ALL STEEL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE DISTRIBUTION BOARD WITH COPPER CONDUCTOR NOT LESS THAN 6mm².
- ALL DIMENSIONS AND MEMBER SIZES SHOWN ARE INDICATIVE ONLY, THE CONTRACTOR IS RESPONSIBLE TO CHECK AND AND SUBMIT THE DESIGN ACCORDING TO MATCH THEIR GENERAL BUILDING PLAN AND THEIR PROPOSED FIRE RATED DOOR.
- RUBBER WEATHER PROOF STRIPES SHALL BE PROVIDED TO PREVENT INGRESS OF RAIN WATER DURING THE SEVERE RAINING CONDITION.
- DESIGN OF FALL RESTRAINT SYSTEM SHALL FOLLOW THE TYPICAL DRAWING T-COP-10250-D-E33-0103-38.
- IF THE PROVISION OF FALL RESTRAINT SYSTEM IS NOT REASONABLY PRACTICABLE, FALL ARREST SYSTEM SHALL BE PROVIDED AS THE LAST RESORT.
- ALL DIMENSIONS ARE IN mm.



REVS.

INITIAL

TITLE :

**TYPICAL DETAILS FOR UPPER FLOOR
SUBSTATION WITH HOIST BEAM AND
TROLLEY**

DRAWN: C. W. WONG

DATE: 20 MAR., 2020

CHECKED: EDMOND YU

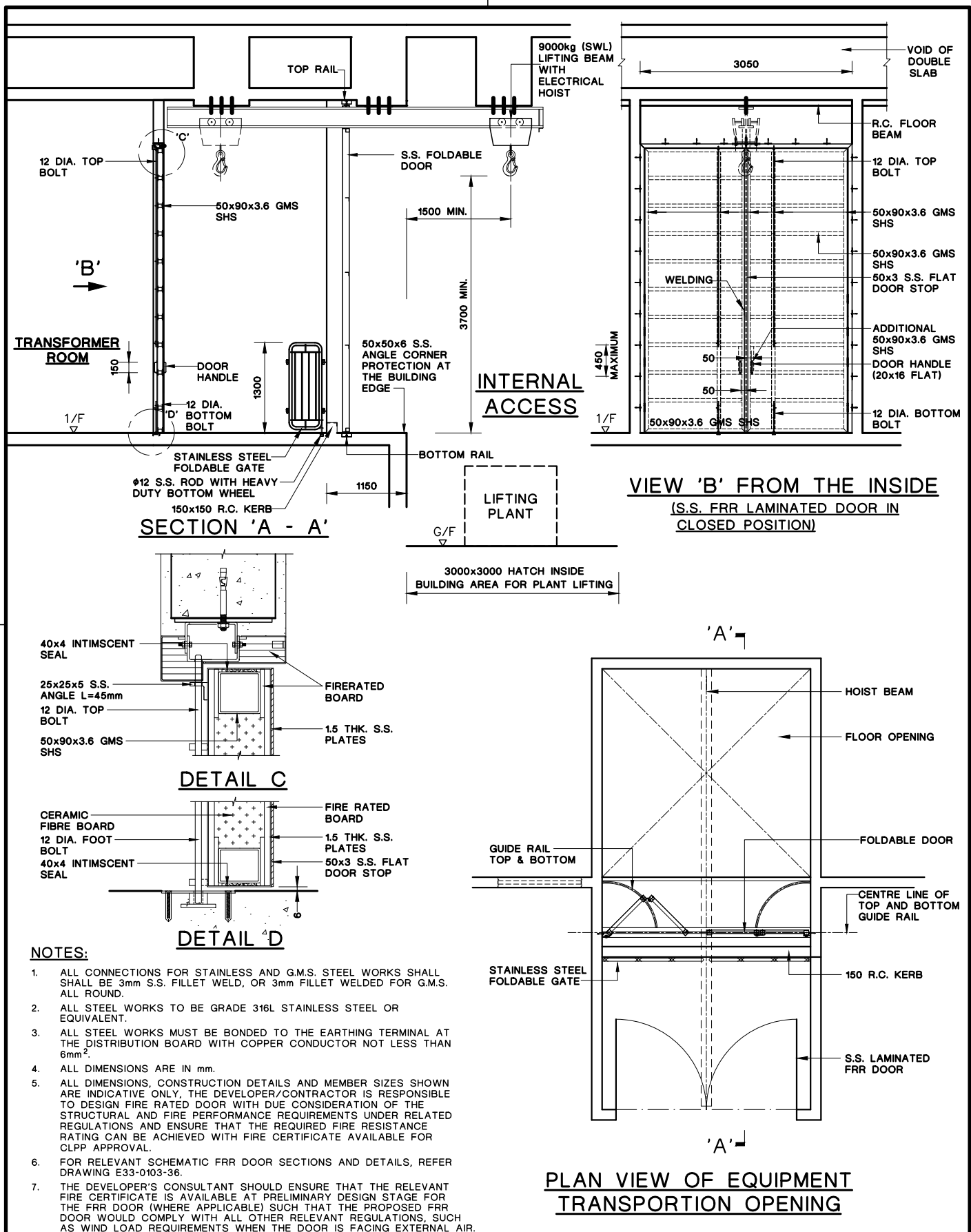
APPROVED: Y. S. YEUNG

SCALE: 1 : 75

SHEET(S) IN SET: 1

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 4 3 - A



REVS.	A	B	C	D	E	F	G	H	J	K	L
INITIAL											

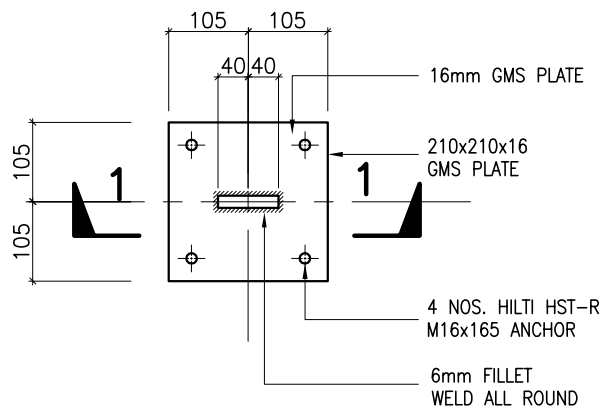
TITLE :

TYPICAL DETAILS FOR UPPER FLOOR
SUBSTATION WITH HOIST BEAM
AND TROLLEY AND PROTECTED LOBBY

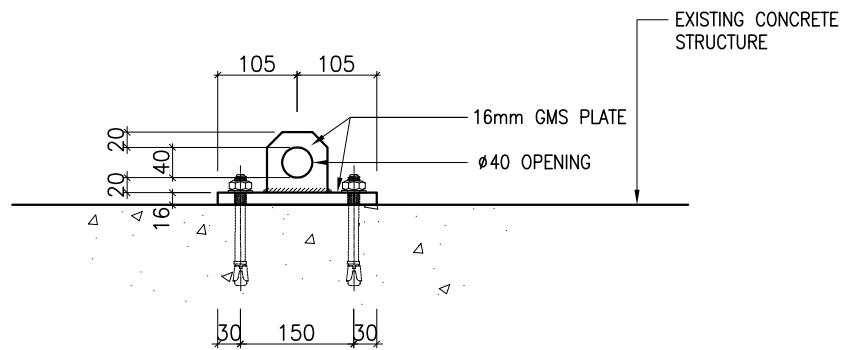
DRAWN: C. W. WONG	DATE: 20 MAR., 2020
CHECKED: EDMOND YU	APPROVED: Y. S. YEUNG
SCALE: 1 : 75	SHEET(S) IN SET: 1

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 4 5 - A



2 TONNES STEEL BRACKET



SECTION 1 - 1

NOTES FOR STRUCTURAL STEEL WORKS :-

1. ALL STRUCTURAL STEEL SHALL BE WELDABLE STRUCTURAL STEEL OF GRADE S275 CLASS 1 IN ACCORDANCE WITH BS EN 10025:2004.
2. ALL STRUCTURAL STEEL WORK INCLUDING STEEL SHALL BE HOT DIP GALVANIZED TO 85µm IN ACCORDANCE WITH BS EN ISO 1461:2009.
3. ALL WELDINGS SHALL BE 6mm FILLET WELD CONTINUOUSLY, UNLESS OTHERWISE STATED.



REVS.	A	B	C	D	E	F	G	H	J	K	L
INITIAL											

TITLE :

TYPICAL DETAILS OF HOOK FOR
INDEPENDENT LIFELINE

DRAWN: M S FONG DATE: 30 JUN 2017

CHECKED: M S FONG APPROVED: GARY KWOK

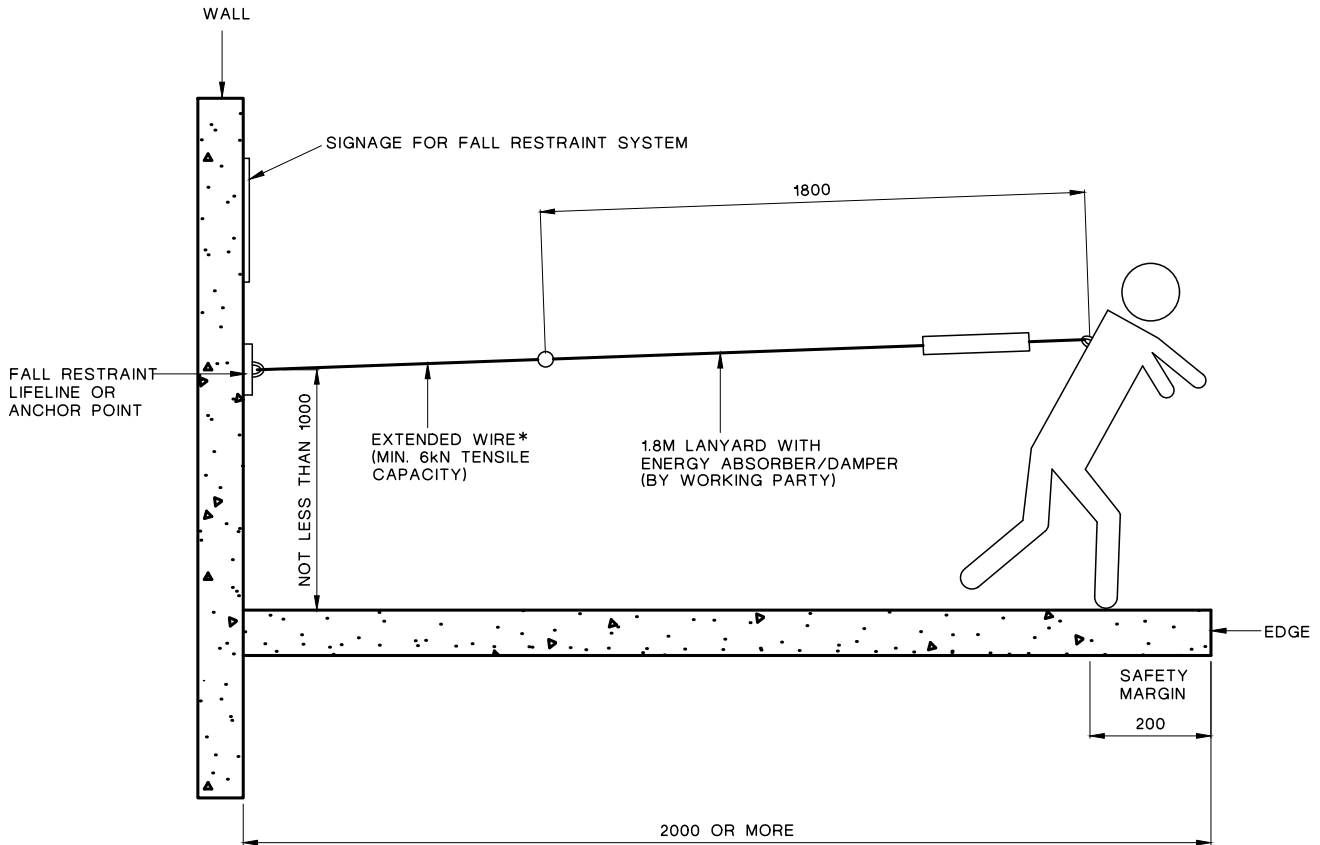
SCALE: N. T. S. SHEET(S) IN SET: 1

PROJECT NO.

CONTRACT NO.

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 3 7 - A



NOTES:

1. FOR FALL RESTRAINT LIFELINE, WALL MOUNTED TYPE DESIGN SHOULD BE ADOPTED WITH MAXIMUM SPAN LENGTH OF 10M. 3 NUMBER OF EXTENDED WIRE SHOULD BE PROVIDED.
2. THE FALL RESTRAINT LIFELINE SHALL BE CAPABLE OF SUPPORTING A MINIMUM SAFETY LOAD OF 18kN.
3. LENGTH OF EXTENDED WIRE IS SUBJECTED TO THE ACTUAL SITE CONDITION AND LAYOUT ORIENTATION.
4. IF ANCHOR POINT IS PROVIDED, IT SHALL BE CAPABLE OF SUPPORTING A MINIMUM SAFETY LOAD OF 6kN IN TENSION.
5. FALL PROTECTION SYSTEM SHALL COMPLY WITH EN795 STANDARD.
- * 6. IF THE DISTANCE BETWEEN FALL RESTRAINT LIFELINE OR ANCHOR POINT AND THE EDGE IS MORE THAN 2M, EXTENDED WIRE WILL BE REQUIRED.
7. ALL DIMENSIONS ARE IN mm.



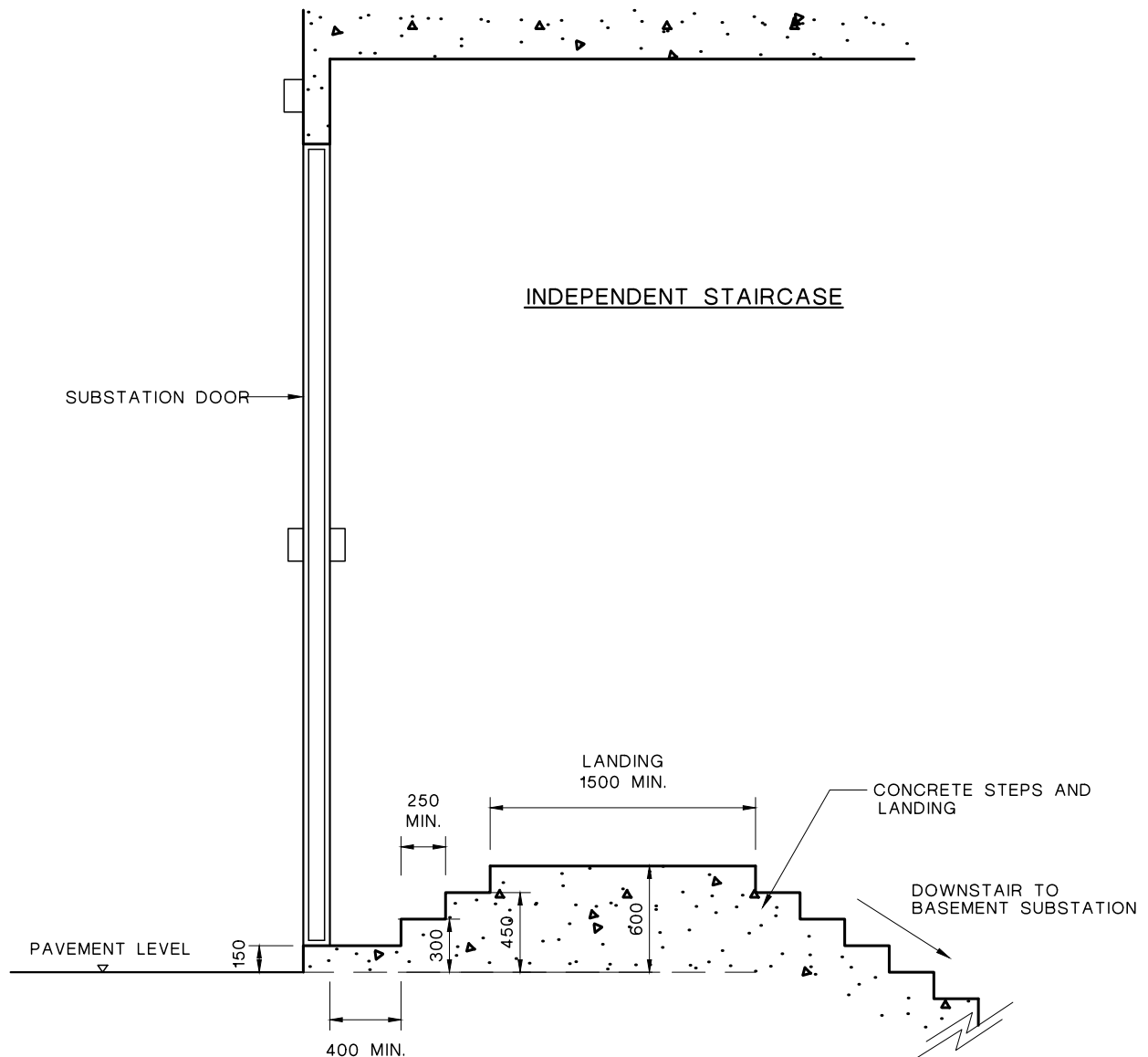
REVS.	A	B	C	D	E	F	G	H	J	K	L
INITIAL											

TITLE :

TYPICAL DESIGN OF FALL RESTRAINT SYSTEM

DRAWN: T. W. LAU	DATE: 17 -12-2018
CHECKED: H. T. YU	APPROVED: W. C. HO
SCALE: 1 : 5 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT	DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 3 8 - A
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**NOTES:**

1. THE MINIMUM VERTICAL HEADROOM ABOVE ANY STEP SHOULD BE 2M.
2. IF AIR INTAKE LOUVRE FOR NATURAL VENTILATION IS REQUIRED, THE LOWEST SIDE OF LOUVRE SHOULD BE INSTALLED AT MINIMUM 600mm ABOVE THE PAVEMENT LEVEL.
3. INSTALLATION OF FLOOD GATE AT LANDING AREA MAY BE REQUIRED SUBJECT TO THE DATUM LEVEL AT PAVEMENT
4. ALL DIMENSIONS ARE IN mm.



DRAWN: T.W.LAU	DATE: 24-1-2019
CHECKED: EDMOND YU	APPROVED: W.C. HO
SCALE: N.T.S.	SHEET(S) IN SET:

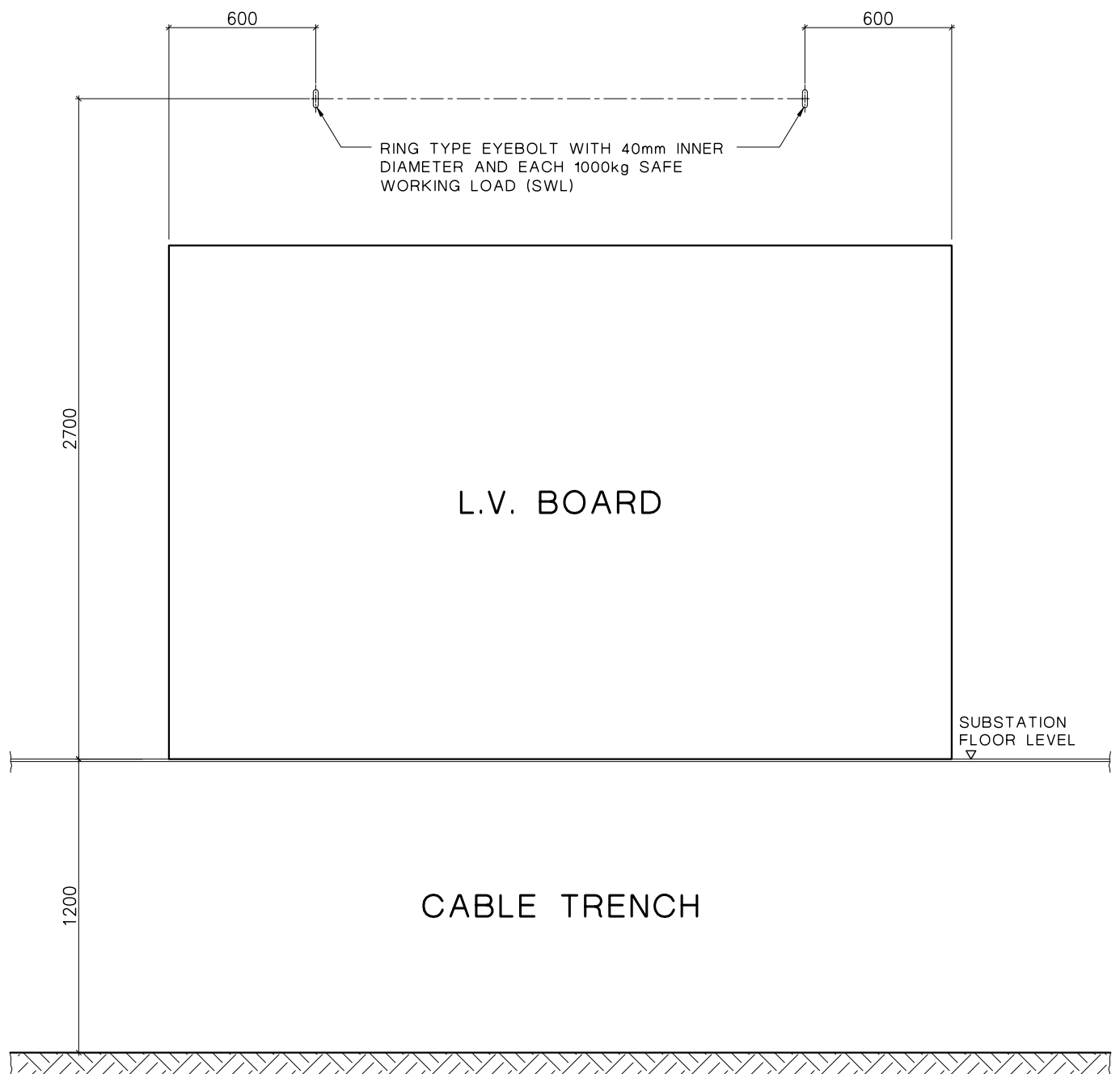
REVS.	A	B	C	D	E	F	G	H	J	K	L
INITIAL											

TITLE :

TYPICAL DESIGN OF GROUND FLOOR ENTRANCE
FOR BASEMENT SUBSTATION

ASSET MANAGEMENT

DRG. NO.	T	C	O	P	1	0	2	5	0	D	E	3	3	0	1	0	3	3	9	-	A
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NOTES FOR EYEBOLT :-

1. ALL STRUCTURAL STEEL SHALL BE WELDABLE STRUCTURAL STEEL OF GRADE S275 CLASS 1 IN ACCORDANCE WITH BS EN 10025:2004.
2. ALL STRUCTURAL STEEL WORK INCLUDING STEEL SHALL BE HOT DIP GALVANIZED TO 85 μ m IN ACCORDANCE WITH BS EN ISO 1461:2009.
3. ALL WELDINGS SHALL BE 6mm FILLET WELD CONTINUOUSLY, UNLESS OTHERWISE STATED.
4. ALL DIMENSIONS ARE IN mm.



REVS.	A	B	C	D	E	F	G	H	J	K	L
INITIAL											

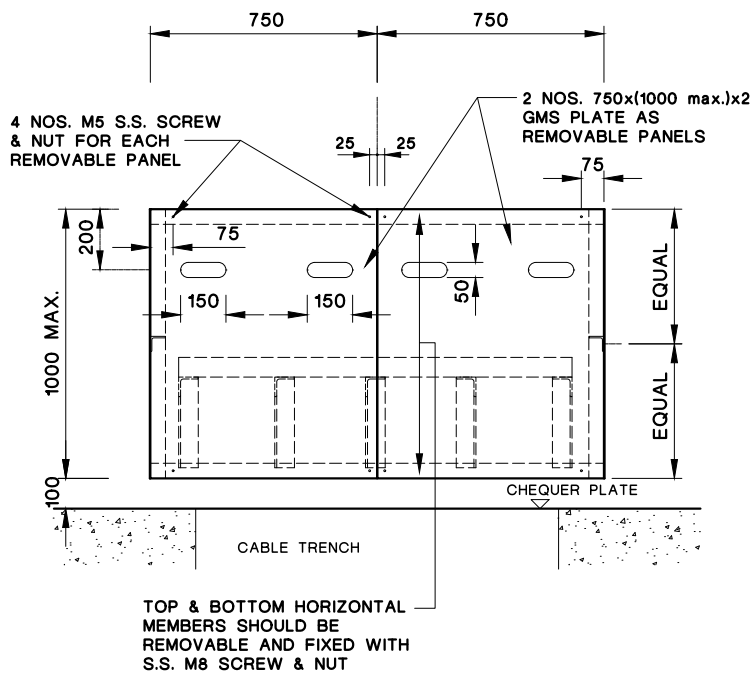
TITLE :

**TYPICAL DETAILS OF EYEBOLT INSTALLATION
FOR L.V. BOARD**

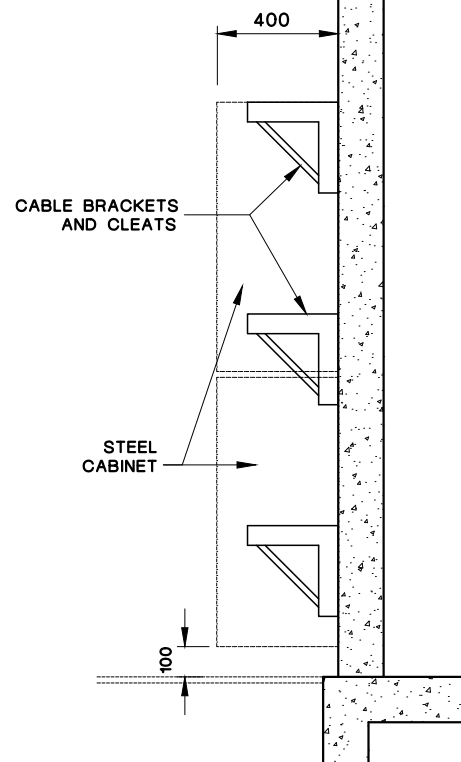
DRAWN: C. W. WONG	DATE: 20 AUG., 2019
CHECKED: EDMOND YU	APPROVED: W. C. HO
SCALE: N. T. S.	SHEET(S) IN SET: 1

ASSET MANAGEMENT

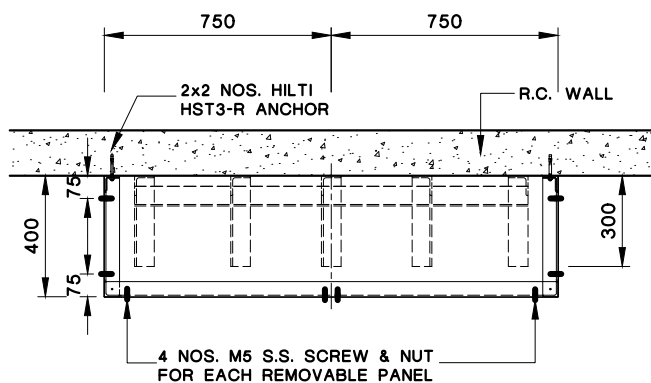
DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 4 0 - A



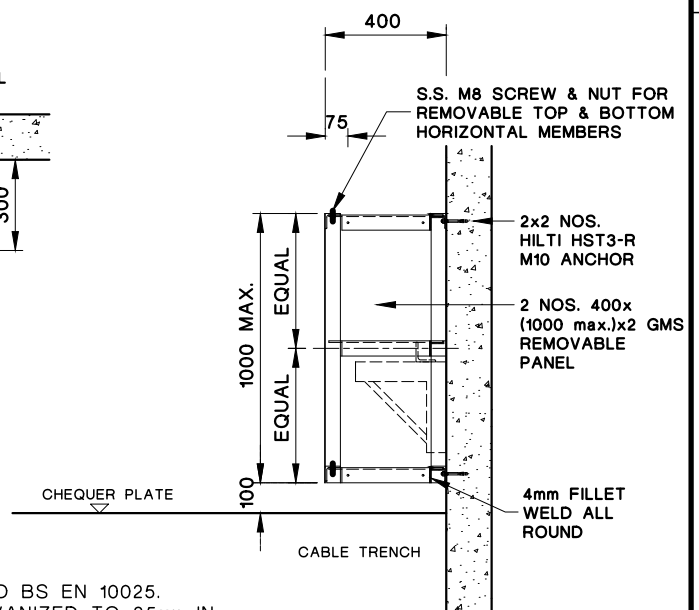
FRONT VIEW



TYPICAL ARRANGEMENT



PLAN VIEW



END VIEW

NOTES:

1. ALL STRUCTURAL STEEL WORKS SHALL BE GRADE 275 TO BS EN 10025.
2. ALL STRUCTURAL STEEL WORKS SHALL BE HOT DIP GALVANIZED TO 85µm IN ACCORDANCE WITH BS EN ISO 1461:2009.
3. ALL STAINLESS STEEL FASTENERS SHALL BE GRADE A2-70 TO BS 6105.
4. ALL DIMENSIONS ARE IN mm.
5. ALL STEEL FRAME MEMBERS TO BE 50x50x5 GMS ANGLE.
6. ALL METAL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE DISTRIBUTION BOARD WITH COPPER CONDUCTOR NOT LESS THAN 6mm².
7. REMOVABLE PANELS AND REMOVABLE HORIZONTAL MEMBERS ARE FIXED WITH S.S. SCREW & NUT. ALL STEEL NUTS SHALL BE SPOT WELDED TO THEIR SUPPORT STEEL MEMBERS.
8. PROVIDE 4mm FILLET WELD ALL ROUND FOR ALL STEEL FRAME MEMBERS, UNLESS OTHER SHOWN.



REVS.

INITIAL

TITLE :

STEEL CABINET FOR SINGLE CORE CABLE
BRACKETS AND CLEATS IN CUSTOMER
MAIN SWITCH ROOM

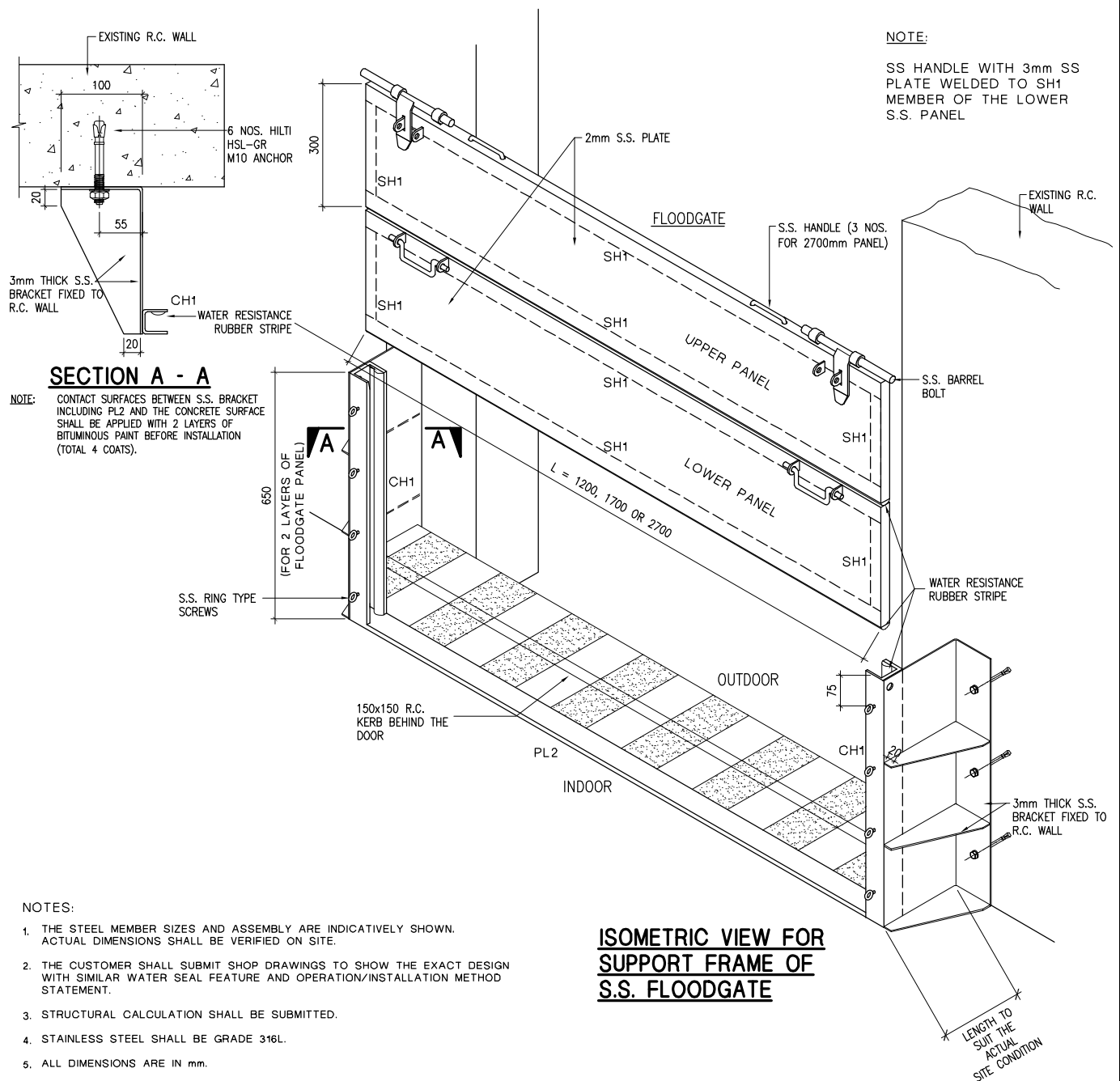
DRAWN: M.S. FONG DATE: 10-03-2020

CHECKED: M.S. FONG APPROVED: GARY KWOK

SCALE: N.T.S. SHEET(S) IN SET: 1

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 3 4 4 - A



REVS.

INITIAL

TITLE :

**DETAILS OF STAINLESS STEEL FLOODGATE
FOR SINGLE/DOUBLE LEAF DOOR**

DRAWN: M S FONG

DATE: 4 SEP, 2015

CHECKED: M S FONG

APPROVED: GARY KWOK

SCALE: N. T. S.

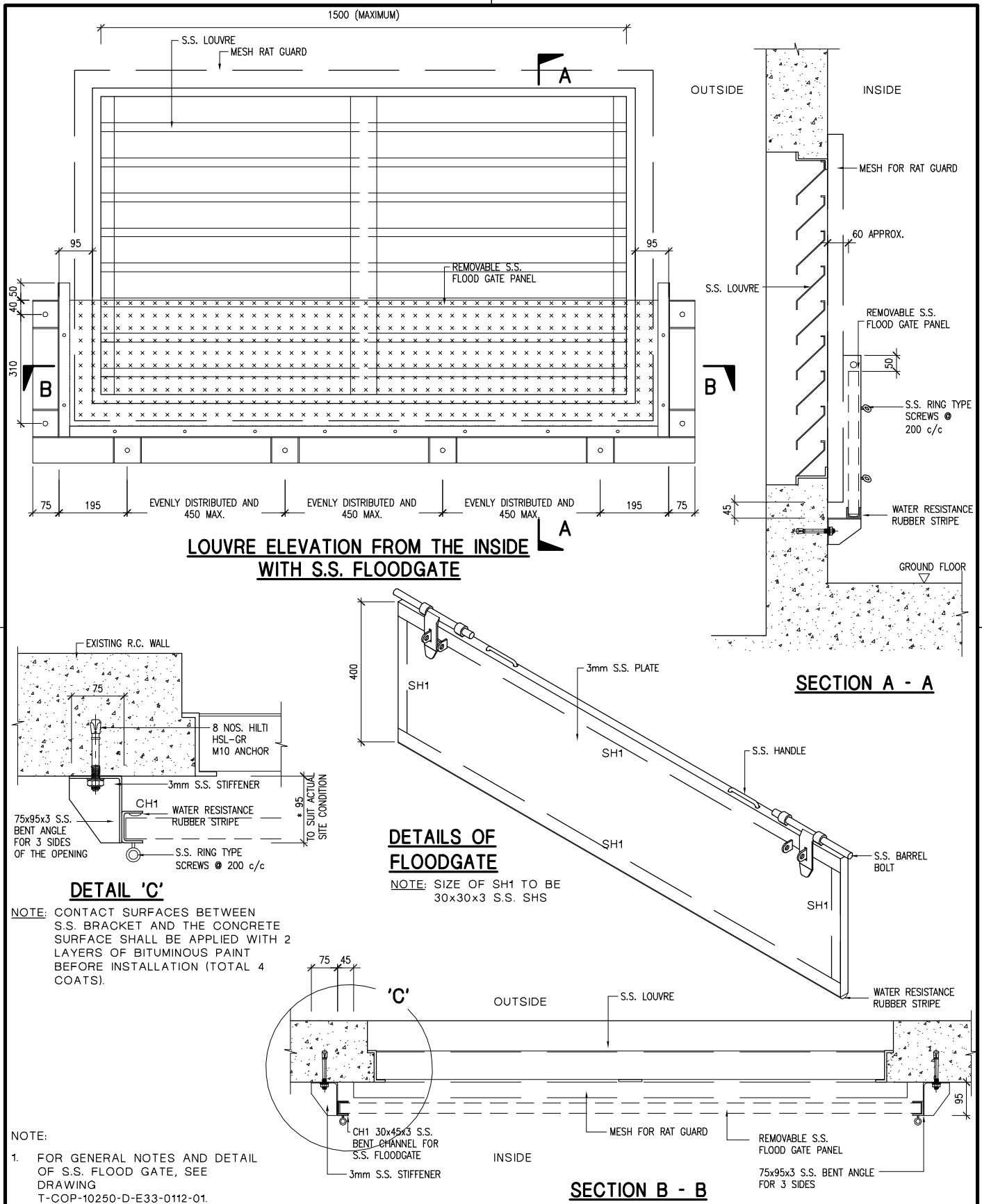
SHEET(S) IN SET: 3

PROJECT NO.

CONTRACT NO.

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 1 2 0 1 - A



CLP 中電

DRAWN: M S FONG DATE: 4 SEP., 2015

CHECKED: M S FONG APPROVED: GARY KWOK

SCALE: N.T.S. SHEET(S) IN SET: 3

REVS.	A	B	C	D	E	F	G	H	J	K	L
INITIAL											

TITLE : DETAILS OF STAINLESS STEEL FLOODGATE FOR GROUND FLOOR LOUVRE

PROJECT NO. CONTRACT NO.

ASSET MANAGEMENT DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 1 2 0 2 - A

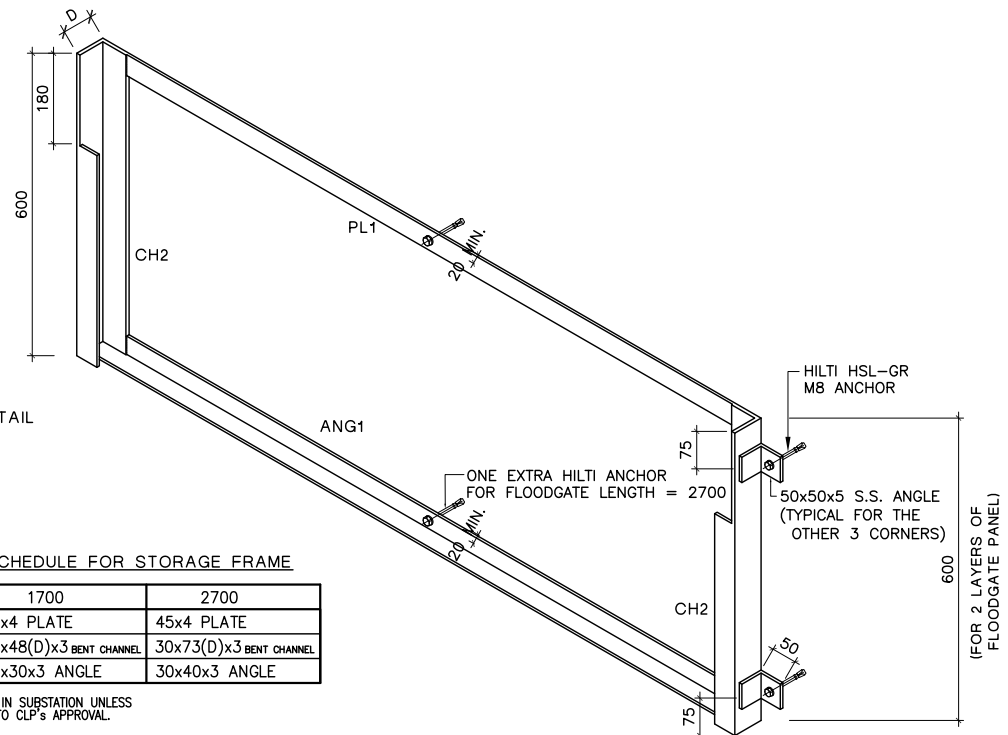
NOTE:

- FOR GENERAL NOTES AND DETAIL OF S.S. FLOOD GATE, SEE DRAWING T-COP-10250-D-E33-0112-01.
- D REFERS TO D OF CH2

STAINLESS STEEL MEMBER SIZE SCHEDULE FOR STORAGE FRAME

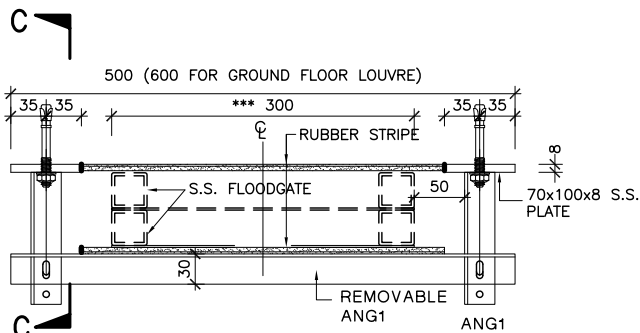
MEMBER MARK	LENGTH (L)	1200	1700	2700
PL1		25x4 PLATE	30x4 PLATE	45x4 PLATE
CH2		30x38(D)x3 BENT CHANNEL	30x48(D)x3 BENT CHANNEL	30x73(D)x3 BENT CHANNEL
ANG1		30x30x3 ANGLE	30x30x3 ANGLE	30x40x3 ANGLE

NOTE: * OPTION 1 IS PREFERRED TO BE INSTALLED IN SUBSTATION UNLESS THERE IS SPACE LIMITATION AND SUBJECT TO CLP'S APPROVAL.



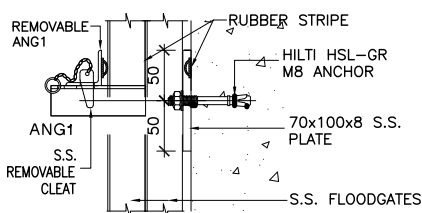
OPTION 1 *

**ISOMETRIC VIEW OF STORAGE FRAME FOR
S.S. FLOODGATE IN HORIZONTAL ARRANGEMENT**

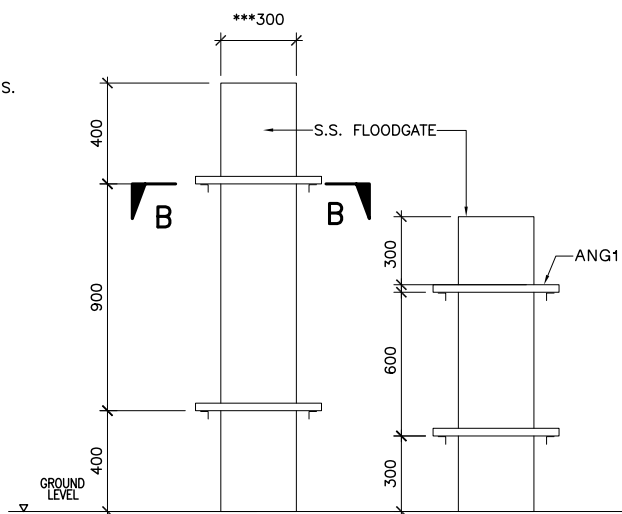


SECTION B - B (FOR OPTION 2)

NOTE: *** DENOTES 400 FOR S.S. FLOODGATE FOR GROUND FLOOR LOUVRE.



SECTION C - C (FOR OPTION 2)



**OPTION 2 ** FRONT VIEW FOR STORAGE FRAME FOR
S.S. FLOODGATE IN VERTICAL ARRANGEMENT
(FOR 1200 AND 1700 FLOODGATE ONLY)**

NOTE: *** DENOTES 400 FOR S.S. FLOODGATE FOR GROUND FLOOR LOUVRE.

A VERTICAL STORAGE FRAME ARRANGEMENT FOR 2700 LENGTH FLOODGATE IS DELETED.



REVS.	25.06.19													
INITIAL	A	B	C	D	E	F	G	H	J	K	L			

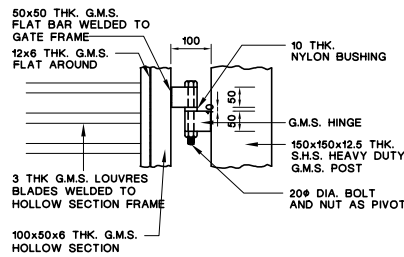
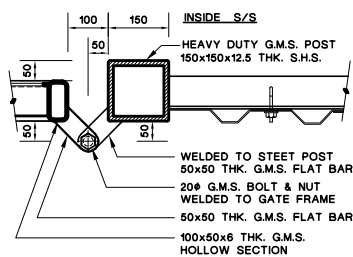
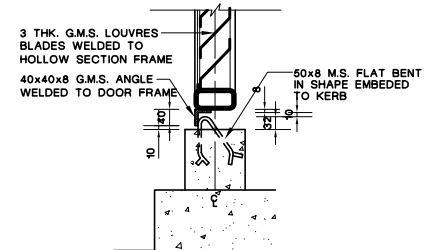
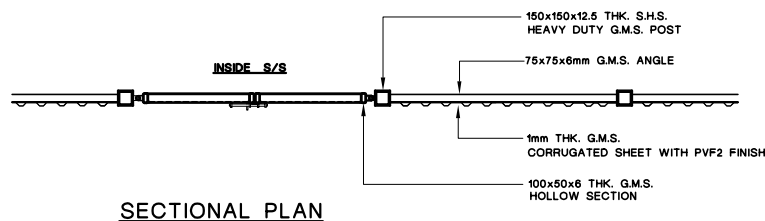
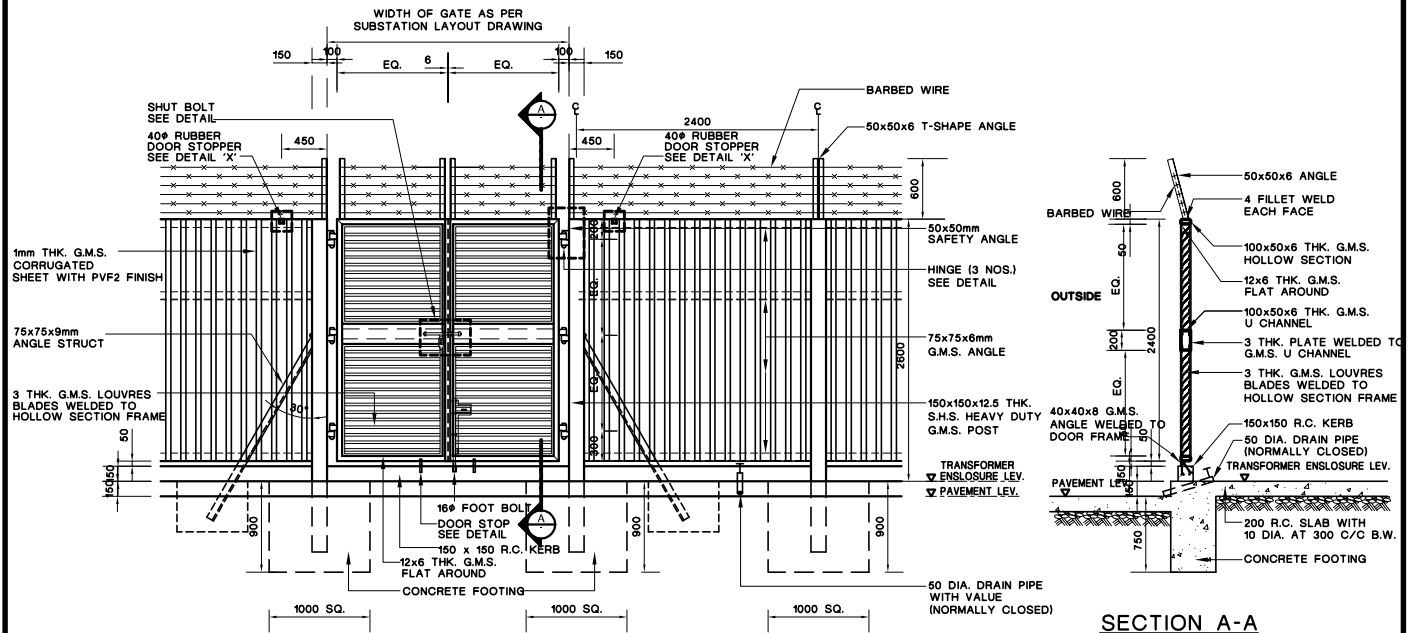
TITLE :

**STAINLESS STEEL FLOODGATE
STORAGE FRAME INSTALLATION DETAILS**

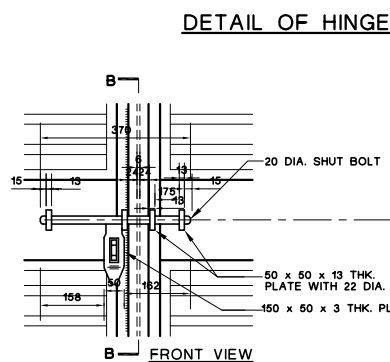
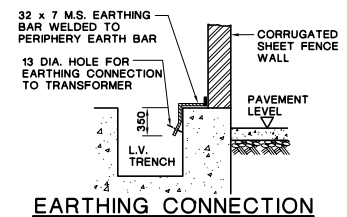
DRAWN: M S FONG	DATE: 4 SEP., 2015
CHECKED: M S FONG	APPROVED: GARY KWOK
SCALE: N. T. S.	SHEET(S) IN SET: 3

ASSET MANAGEMENT

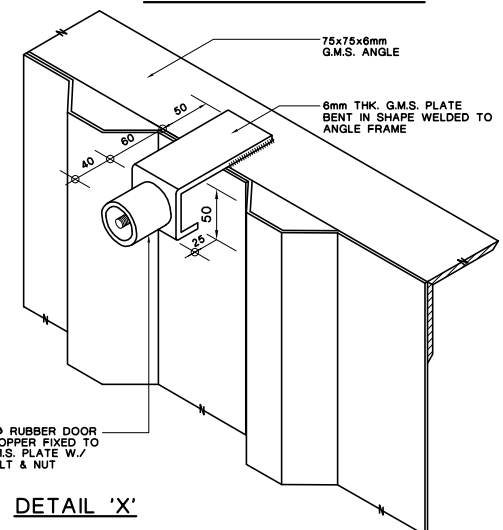
DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 1 2 0 3 A A



DETAIL OF DOOR STOP



DETAIL OF SHUT BOLT



DETAIL 'X'

NOTES:

- ALL STEELWORKS SHALL BE HOT DIP GALVANISED TO B.S. EN ISO 1461 AND FINISHED WITH ONE COAT OF CALCIUM PLUMBATE OR ZINC PHOSPHATE PRIMER AND TWO FINISHING COATS OF SYNTHETIC PAINT.
- ALL DIMENSIONS ARE IN mm.

C ZINC PRIMER ADDED

CLP 中電

REVS.	21.12.05	9.11.06	20.08.07											
INITIAL	A	B	C	D	E	F	G	H	J	K	L			
	K.C.C.	C.H.F.	K.C.C.											

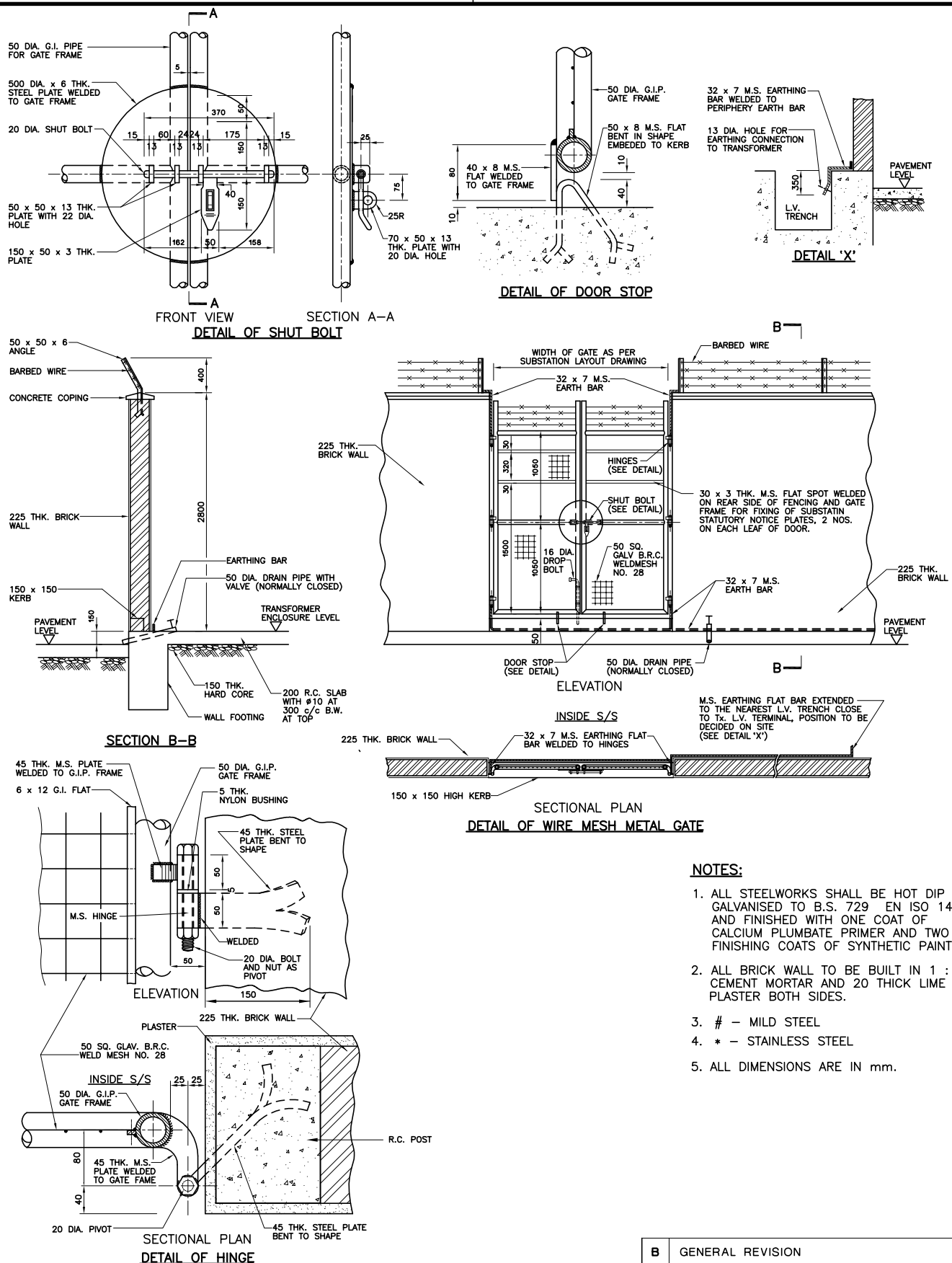
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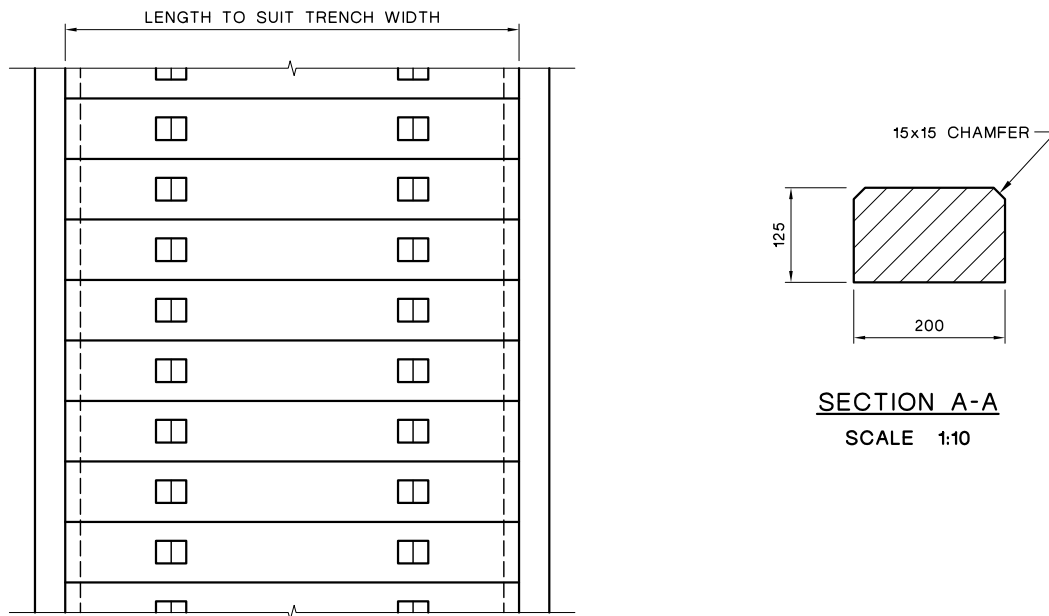
DETAILS OF METAL GATE AND FENCE WITH STEEL POST FOR OUTDOOR SUBSTATION

DRAWN:	O. S. YIP	DATE:	21 Dec., 2005
CHECKED:	C. H. FUNG	APPROVED:	W. C. HO
SCALE:	N. T. S.	SHEET(S) IN SET:	1

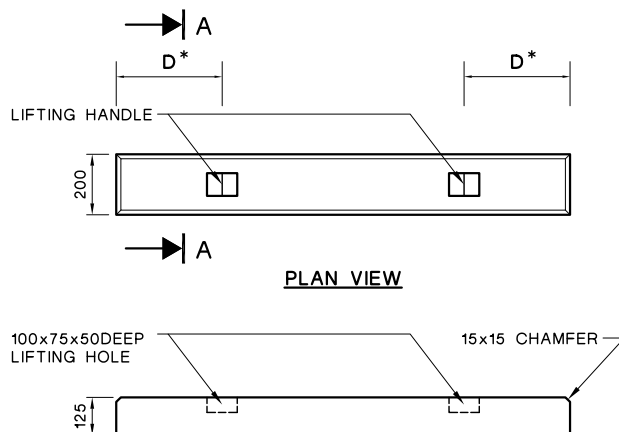
ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 4 0 1 C A





**TYPICAL ARRANGEMENT OF
REINFORCED CONCRETE COVER**




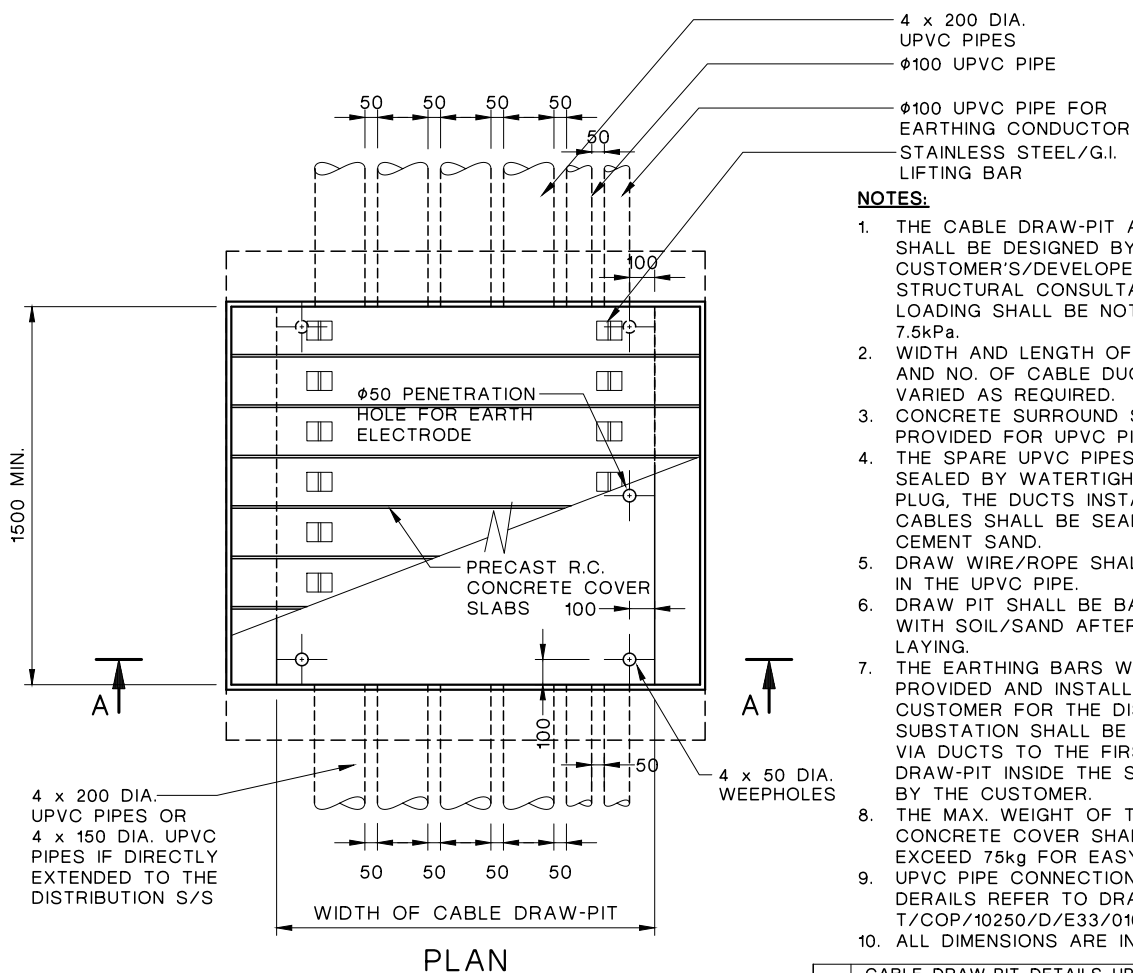
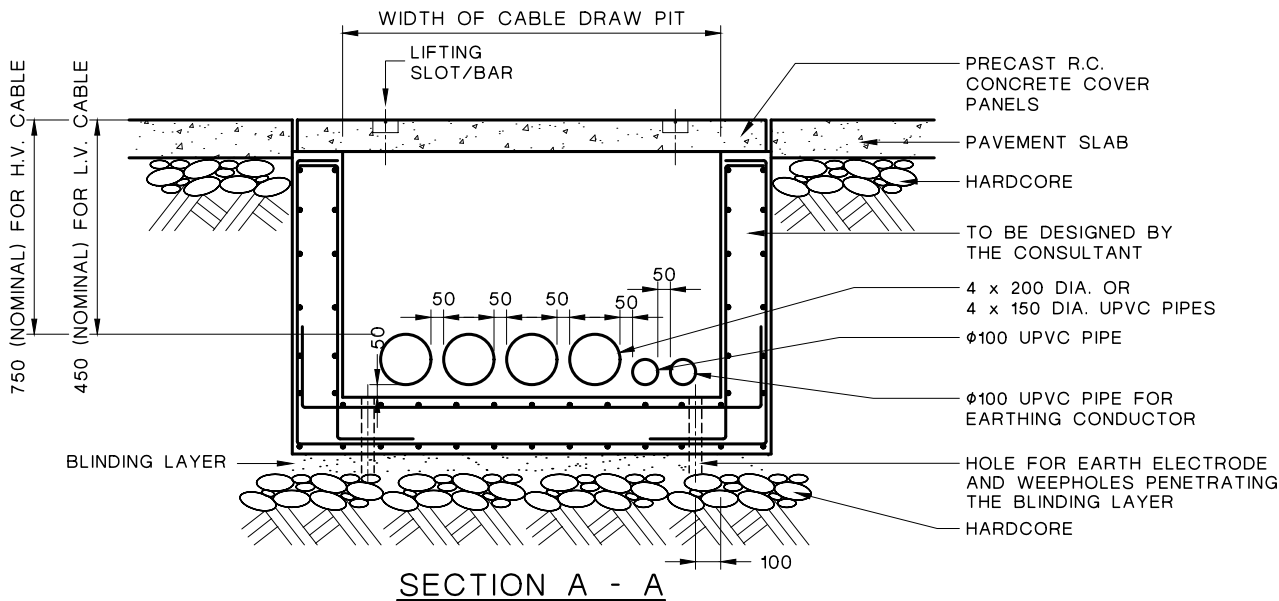
**TYPICAL DETAILS OF
REINFORCED CONCRETE COVER**

NOTES:

1. THE MAX. WEIGHT OF THE CONCRETE COVER SHALL NOT EXCEED 75kg FOR EASY HANDLING.
2. THE COVERS SHALL BE DESIGNED BY THE BUILDING OWNER TO WITHSTAND THE REQUIRED LOADING OF THE SITE. (MIN. LOADING SHALL BE NOT LESS THAN 7.5kPa).
3. ALL DIMENSIONS ARE IN mm.

* THE CLEARANCE OF DISTANCE 'D' SHOULD NOT BE MORE THAN 250.

C NOTE ADDED				B GENERAL AMENDMENT				A NOTES ADDED			
				REVS.	20.08.07	23.02.17	25.06.19				
				INITIAL	A K.C.C.	B H.T.YU	C H.T.YU	D	E	F	G
ASSET MANAGEMENT				TITLE :							
				TYPICAL DETAILS OF R. C. COVER							
DRAWN: T. Y. IP				DATE: 8-8-2002							
CHECKED: K. C. CHENG				APPROVED: K. W. WONG							
SCALE: 1 : 25 (mm)				SHEET(S) IN SET:							
DRG. NO. T				C O P 1 0 2 5 0 D E 3 3 0 1 0 4 0 4 C A							



NOTES:

1. THE CABLE DRAW-PIT AND COVERS SHALL BE DESIGNED BY THE CUSTOMER'S/DEVELOPER'S STRUCTURAL CONSULTANT. MINIMUM LOADING SHALL BE NOT LESS 7.5kPa.
2. WIDTH AND LENGTH OF DRAW-PIT AND NO. OF CABLE DUCTS TO BE VARIED AS REQUIRED.
3. CONCRETE SURROUND SHALL BE PROVIDED FOR UPVC PIPES.
4. THE SPARE UPVC PIPES SHALL BE SEALED BY WATERTIGHT DUCT PLUG, THE DUCTS INSTALLED WITH CABLES SHALL BE SEALED BY CEMENT SAND.
5. DRAW WIRE/ROPE SHALL BE LAID IN THE UPVC PIPE.
6. DRAW PIT SHALL BE BACKFILLED WITH SOIL/SAND AFTER CABLE LAYING.
7. THE EARTHING BARS WHICH ARE PROVIDED AND INSTALLED BY THE CUSTOMER FOR THE DISTRIBUTION SUBSTATION SHALL BE EXTENDED VIA DUCTS TO THE FIRST CABLE DRAW-PIT INSIDE THE SITE OWNED BY THE CUSTOMER.
8. THE MAX. WEIGHT OF THE CONCRETE COVER SHALL NOT EXCEED 75kg FOR EASY HANDLING.
9. UPVC PIPE CONNECTION SOCKET DERAILS REFER TO DRAWING NO. T/COP/10250/D/E33/0104/17.
10. ALL DIMENSIONS ARE IN mm.

F	CABLE DRAW-PIT DETAILS UPDATED AND NOTES ADDED
E	NOTES ADDED



REVS.	20.08.07	21.10.08	26.03.12	18.03.14	20.09.19	12.05.20					
	A	B	C	D	E	F	G	H	J	K	L
INITIAL	K.C.C.	K.C.C.	K.C.C.	H.T.YU	H.T.YU	H.T.YU					

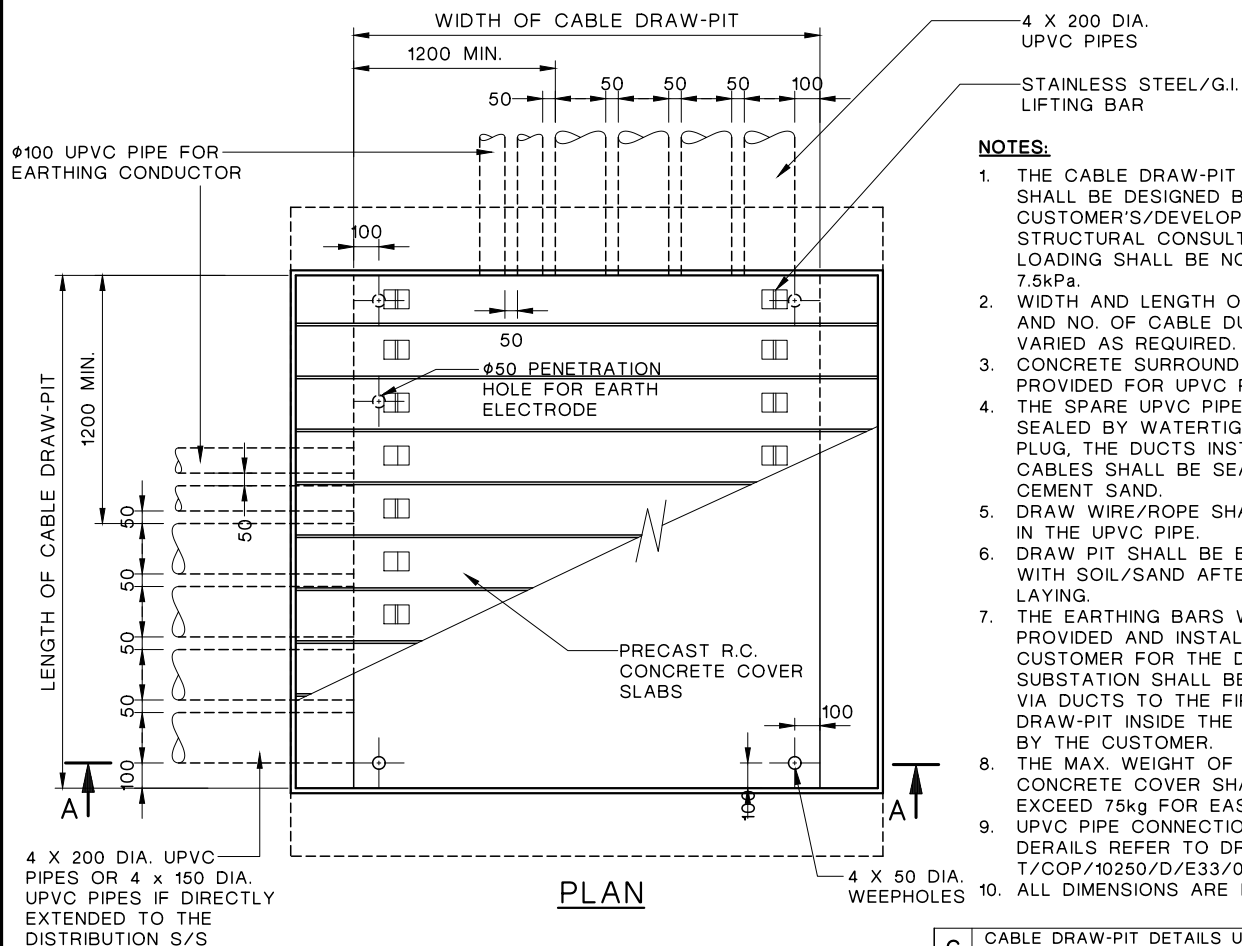
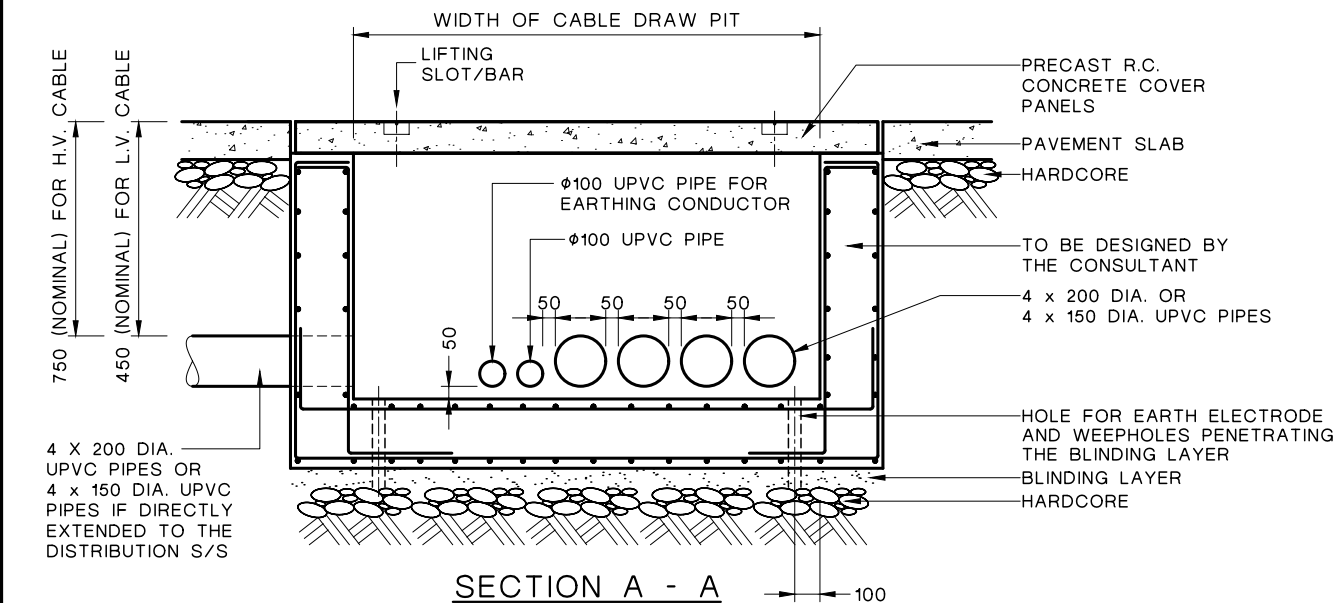
TITLE :

TYPICAL DETAILS OF CABLE DRAW-PIT
(STRAIGHT APPLICATION)

DRAWN: C. W. WONG	DATE: 17 Sep., 2002
CHECKED: K. C. CHENG	APPROVED: K. W. WONG
SCALE: N. T. S.	SHEET(S) IN SET: 1

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 4 0 5 F A

**NOTES:**

1. THE CABLE DRAW-PIT AND COVERS SHALL BE DESIGNED BY THE CUSTOMER'S/DEVELOPER'S STRUCTURAL CONSULTANT. MINIMUM LOADING SHALL BE NOT LESS 7.5kPa.
2. WIDTH AND LENGTH OF DRAW-PIT AND NO. OF CABLE DUCTS TO BE VARIED AS REQUIRED.
3. CONCRETE SURROUND SHALL BE PROVIDED FOR UPVC PIPES.
4. THE SPARE UPVC PIPES SHALL BE SEALED BY WATERTIGHT DUCT PLUG, THE DUCTS INSTALLED WITH CABLES SHALL BE SEALED BY CEMENT SAND.
5. DRAW WIRE/ROPE SHALL BE LAID IN THE UPVC PIPE.
6. DRAW PIT SHALL BE BACKFILLED WITH SOIL/SAND AFTER CABLE LAYING.
7. THE EARTHING BARS WHICH ARE PROVIDED AND INSTALLED BY THE CUSTOMER FOR THE DISTRIBUTION SUBSTATION SHALL BE EXTENDED VIA DUCTS TO THE FIRST CABLE DRAW-PIT INSIDE THE SITE OWNED BY THE CUSTOMER.
8. THE MAX. WEIGHT OF THE CONCRETE COVER SHALL NOT EXCEED 75kg FOR EASY HANDLING.
9. UPVC PIPE CONNECTION SOCKET DERAILS REFER TO DRAWING NO. T/COP/10250/D/E33/0104/17.
10. ALL DIMENSIONS ARE IN mm.

G	CABLE DRAW-PIT DETAILS UPDATED AND NOTES ADDED
F	NOTES ADDED

CLP 中電

REVS.	20.08.07	21.10.08	26.03.12	18.03.14	27.06.17	20.09.19	20.05.20					
INITIAL	A	B	C	D	E	F	G	H	J	K	L	
	K.C.C.	K.C.C.	K.C.C.	H.T.YU	H.T.YU	H.T.YU	H.T.YU					

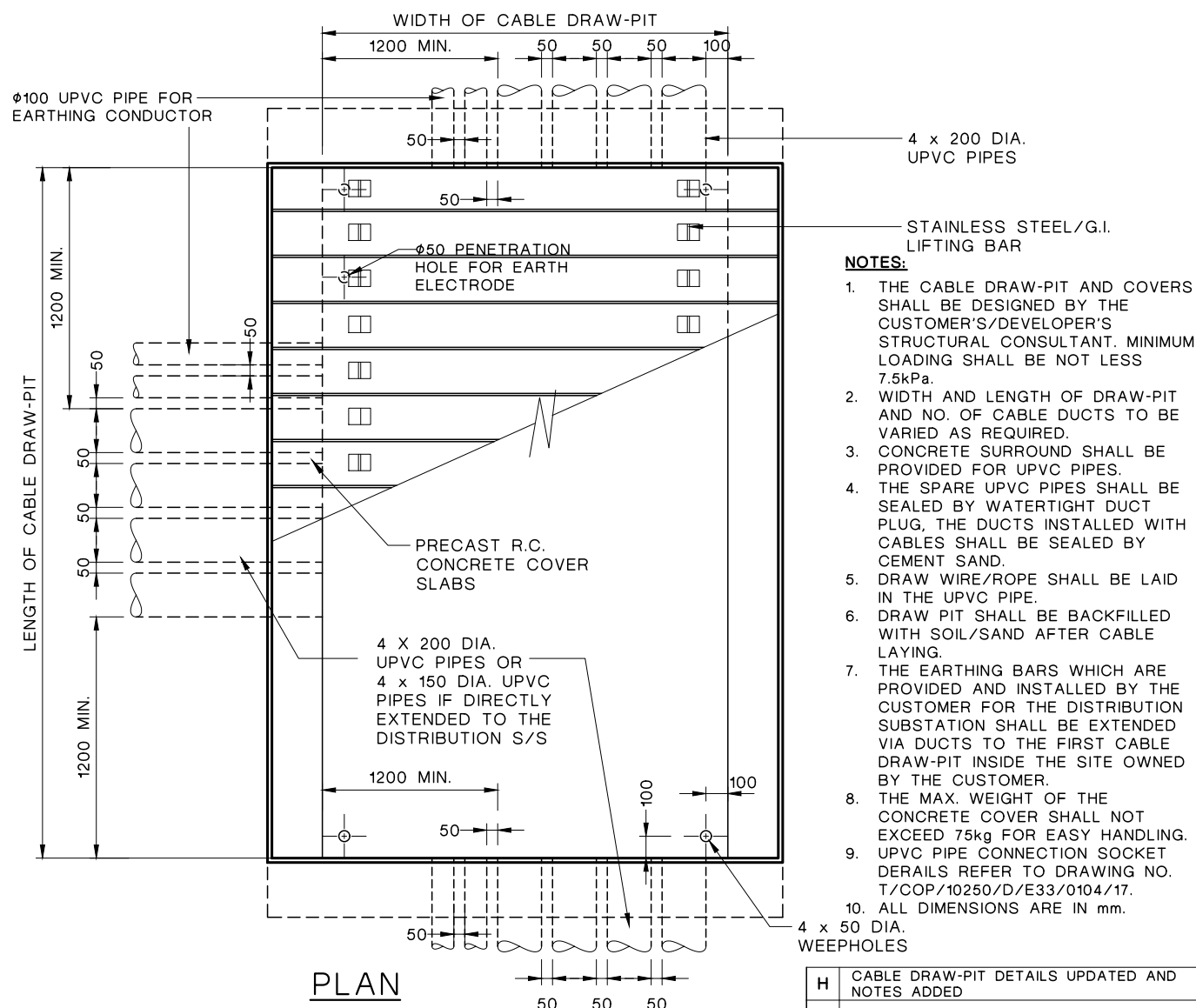
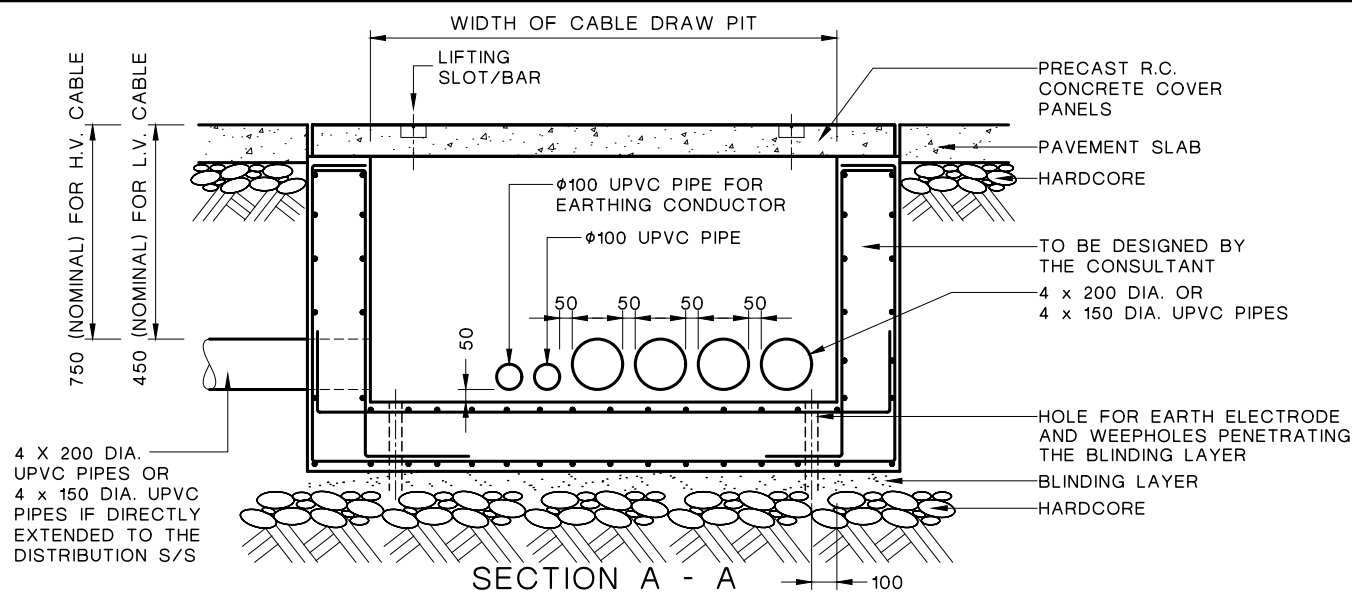
TITLE :

TYPICAL DETAILS OF CABLE DRAW-PIT (ANGLE APPLICATION)


DRAWN: C. W. WONG	DATE: 16 Sep., 2002
CHECKED: K. C. CHENG	APPROVED: K. W. WONG
SCALE: N. T. S.	SHEET(S) IN SET:

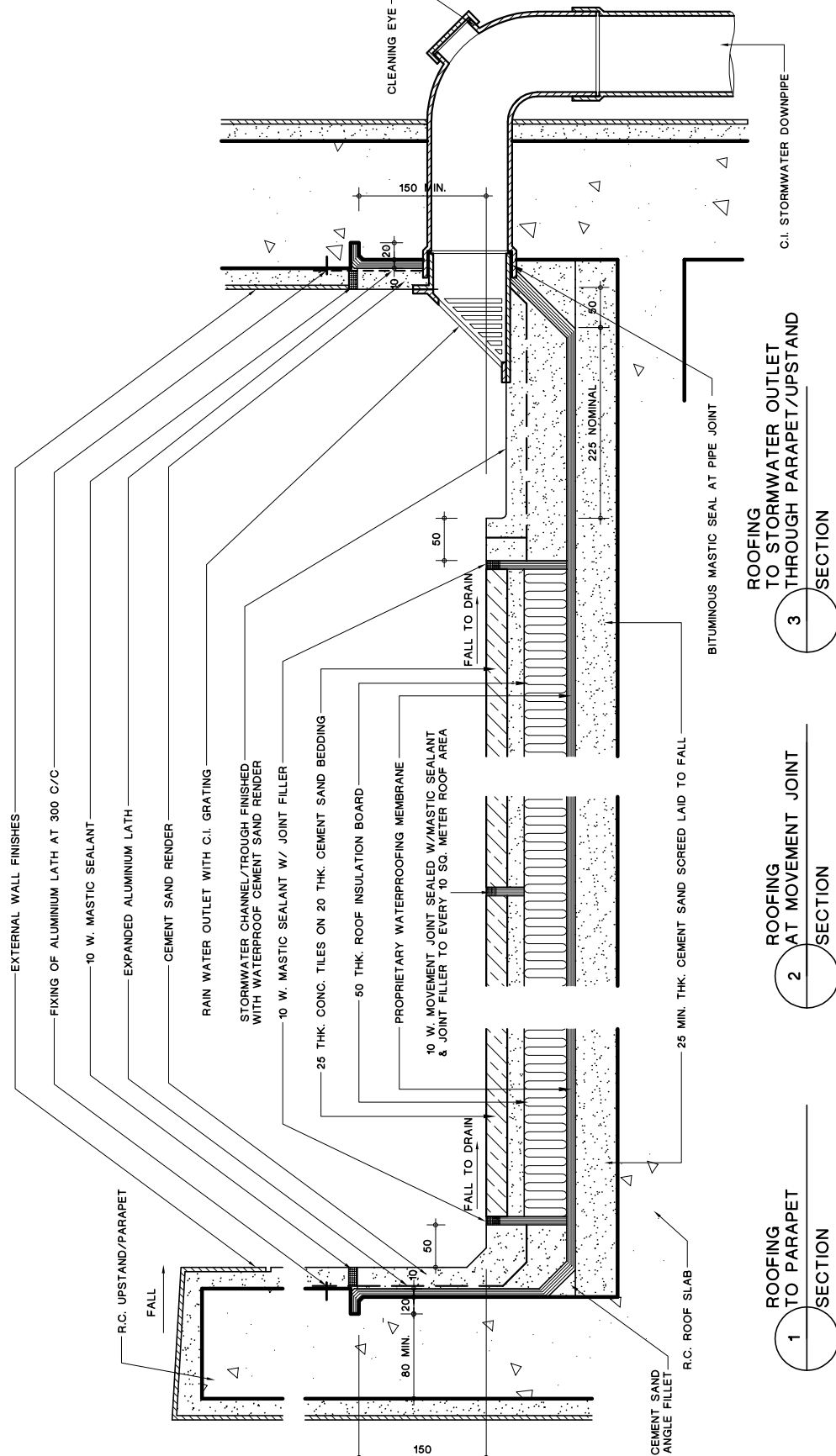
ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 4 0 6 G A



H	CABLE DRAW-PIT DETAILS UPDATED AND NOTES ADDED
G	NOTES ADDED

	REVS.	10.3.03	20.08.07	21.10.08	26.03.12	18.03.14	27.06.17	20.09.19	12.05.20			
		A	B	C	D	E	F	G	H	J	K	L
	INITIAL	K.C.C.	K.C.C.	K.C.C.	K.C.C.	H.T.YU	H.T.YU	H.T.YU	H.T.YU			
DRAWN: C. W. WONG		DATE: 17 Sep., 2002		TYPICAL DETAILS OF CABLE DRAW-PIT (TEE APPLICATION)								
CHECKED: K. C. CHENG		APPROVED: K. W. WONG										
SCALE: N. T. S.		SHEET(S) IN SET:										
ASSET MANAGEMENT				DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 4 0 7 H A								



ALL DIMENSIONS ARE IN mm



REVS.

INITIAL

TITLE :

ROOFING WITH INSULATION PARAPET & WALL DETAILS

DRAWN: C W WONG DATE: 22 Aug., 2007

CHECKED: K C CHENG APPROVED: W C HO

SCALE: N. T. S. SHEET(S) IN SET: 1

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 4 0 8 - A

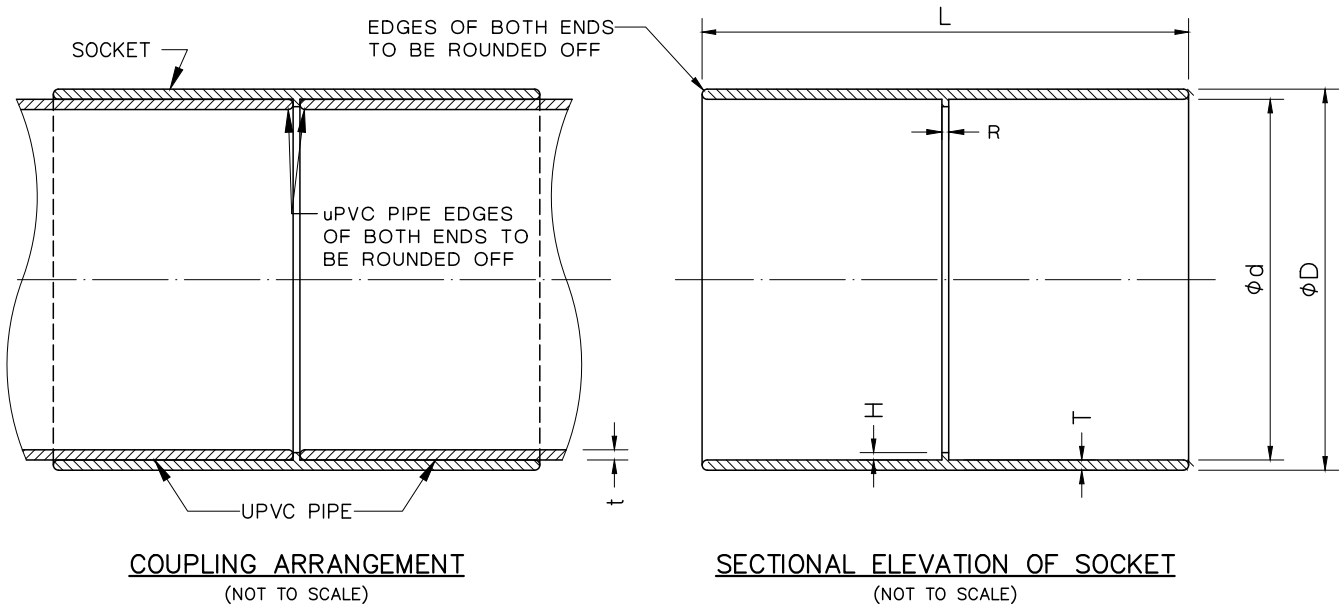
REMARK :

t = THICKNESS OF uPVC PIPE

R = THICKNESS OF THE STOPPER EDGE OF SOCKET

H = HEIGHT OF THE STOPPER EDGE OF SOCKET

T = THICKNESS OF uPVC PIPE CONNECTING SOCKET



ITEM	PIPE SIZE I.D. (mm)	DIMENSION (mm)					
		D	d	T	L	R	H
TYPE A	100	116	108	4.0	187	3	3
TYPE B	150	168	159	4.5	210	4	3
TYPE C	200	226	216	5.0	260	5	5

NOTES :

1. MATERIAL : UNPLASTICIZED PVC TO BS 3506 CLASS B
2. TOLERANCE : INNER & OUTER DIAMETER OF SOCKET $\pm 0.5\%$
ALL OTHER DIMENSION $\pm 2\%$
3. ALL DIMENSIONS ARE IN mm.



REVS.	A	B	C	D	E	F	G	H	J	K	L
INITIAL											

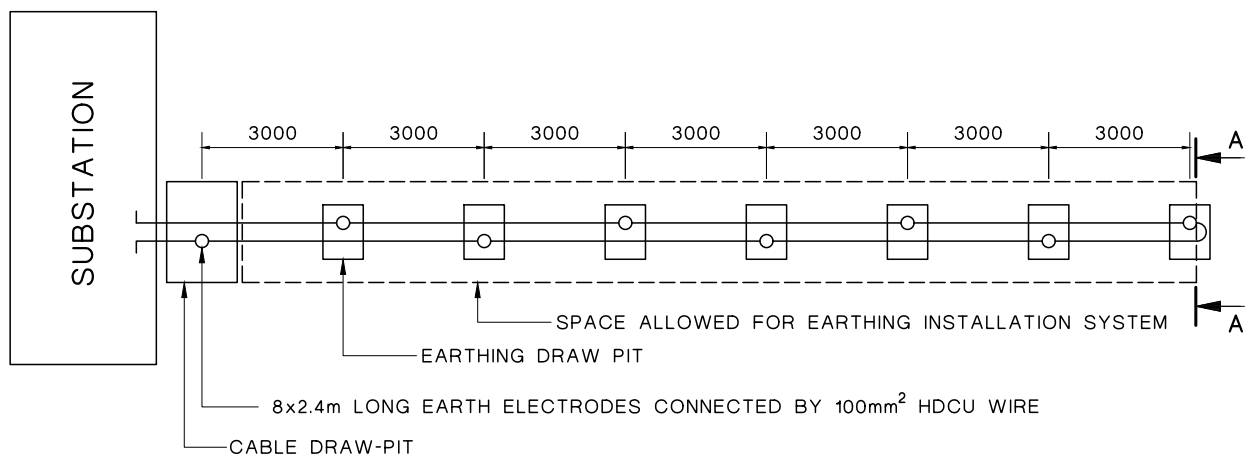
TITLE :

TYPICAL DETAILS OF uPVC PIPE
CONNECTING SOCKET

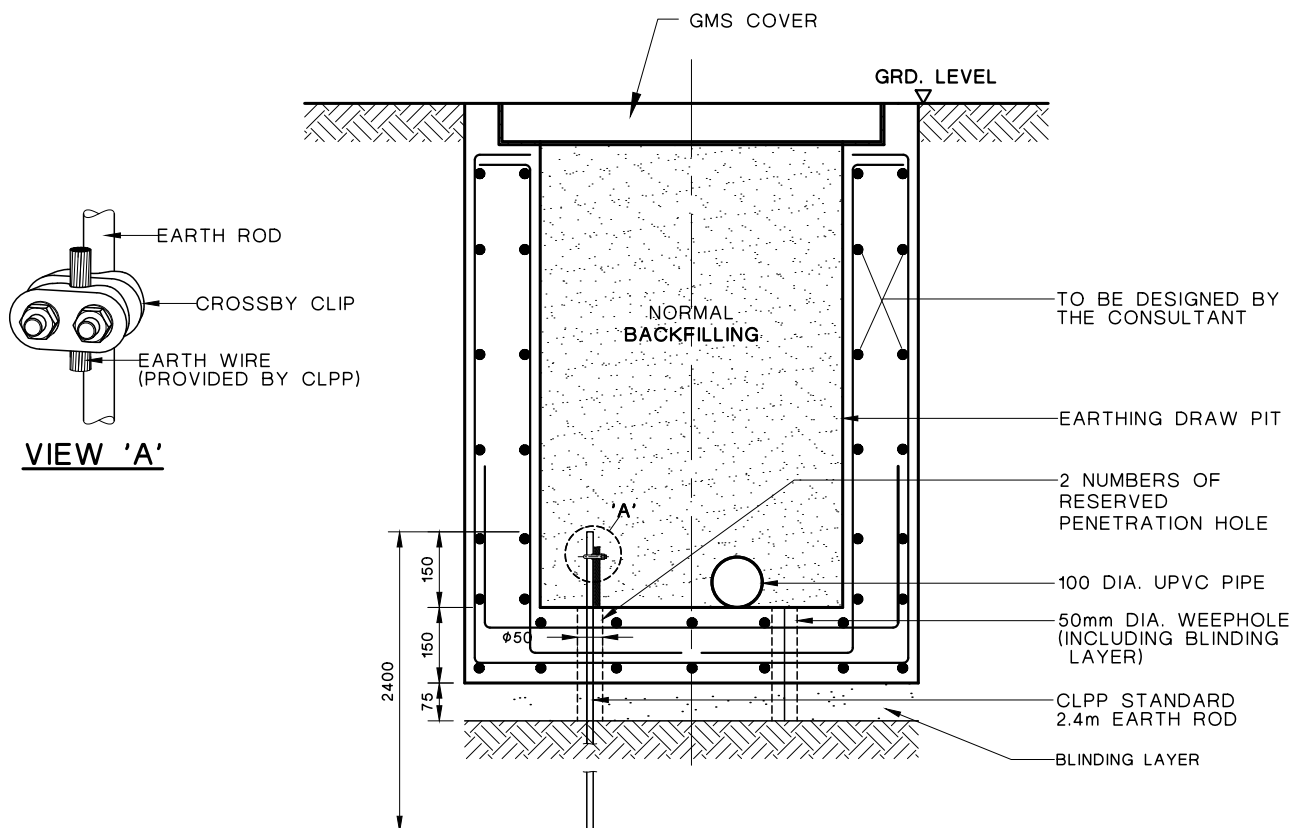
DRAWN: C. W. WONG	DATE: 9 APR., 2020
CHECKED: EDMOND YU	APPROVED: Y. S. YEUNG
SCALE: N. T. S.	SHEET(S) IN SET: 1

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 4 1 7 - A



TYPICAL EARTH ELECTRODES ARRANGEMENT



SECTION A-A EARTHING DRAW PIT INSTALLATION

NOTES:

1. SPACE IN FRONT OF SUBSTATION SHALL BE ALLOWED FOR INSTALLATION OF EARTHING SYSTEM, UNDERGROUND FACILITIES FROM OTHER UTILITIES SHOULD BE AVOIDED WITHIN THE SPACE. ALL HARD ROCK OR RELATED SUBSTANCES WITHIN 3M BELOW GROUND SHALL BE REMOVED.
2. EARTHING WIRES SHALL BE PROVIDED AND EXTENDED TO THE GROUND FLOOR BY THE BUILDING OWNER, IF IT IS NOT GROUND FLOOR SUBSTATION.
3. FINAL NUMBERS OF EARTHING PIT AND ARRANGEMENT SUBJECT TO CLPP's APPROVAL.
4. ALL DIMENSIONS ARE IN mm.



REVS.	A	B	C	D	E	F	G	H	J	K	L
INITIAL											

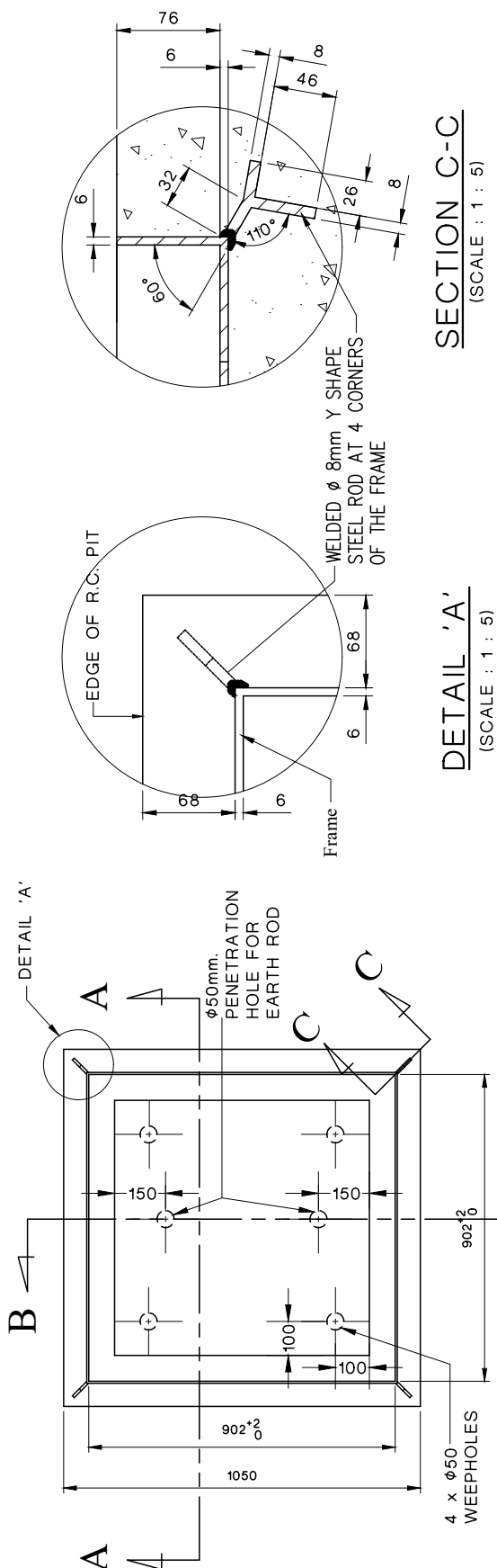
TITLE :

EARTHING DRAW PIT ARRANGEMENT FOR SUBSTATION

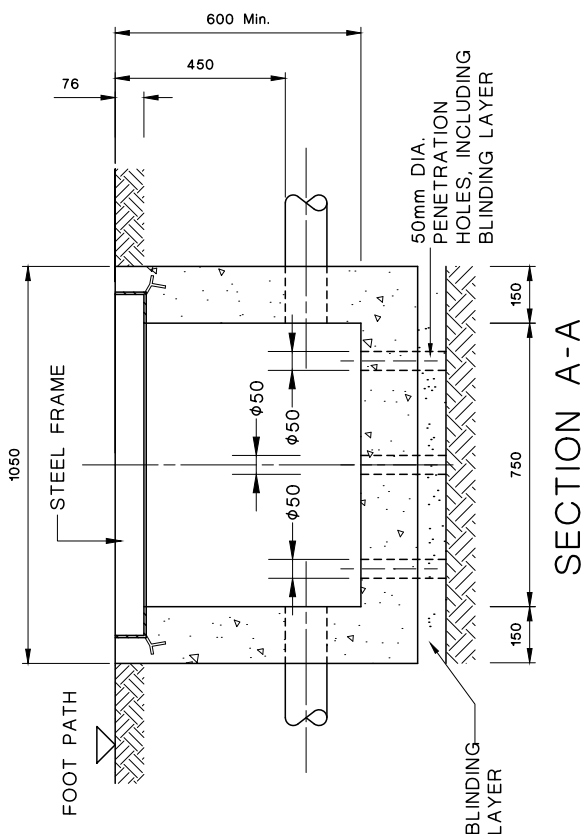
DRAWN: C. W. WONG	DATE: 9 APR., 2020
CHECKED: EDMOND YU	APPROVED: Y. S. YEUNG
SCALE: N. T. S.	SHEET(S) IN SET: 1

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 4 1 8 - A



TOP VIEW



NOTES:

1. ALL DIMENSIONS ARE IN mm.
2. COVERS AND FRAMES JIG WELDED TO ENSURE A CLOSE MATCHING FIT.
3. FRAME FABRICATED FROM STEEL TO BS EN 10025 S275.
4. AFTER MANUFACTURING, UNITS TO BE HOT DIP GALVANIZED TO BS EN ISO 1461.
5. EXACT NO. OF PIPE TO BE DETERMINED ON SITE.
6. MANHOLE COVER REFER TO DRAWING NO. T/COP/10250/D/E33/0104/20.
7. DRAW PIT FRAME REFER TO DRAWING NO. T/COP/10250/D/E33/0104/21.
8. THE DESIGN SUPERIMPOSED LIVE LOAD OF DRAW PIT IS FOR PEDESTRIAN ACCESS ONLY.
9. THE MANHOLE SHOULD BE BACKFILLED AS FAR AS PRACTICABLE.

CLP 中電

DRAWN: C. W. WONG DATE: 20 APR., 2020
 CHECKED: EDMOND YU APPROVED: Y. S. YEUNG
 SCALE: N. T. S. SHEET(S) IN SET: 1

REVS.

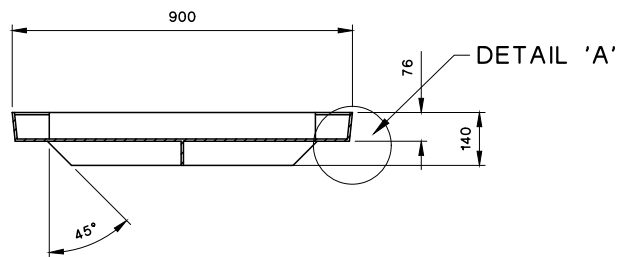
INITIAL

TITLE :

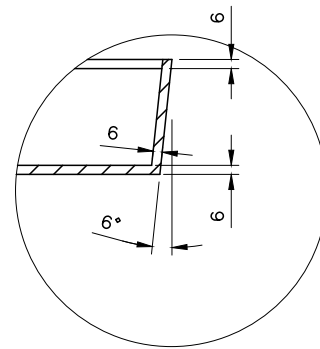
TYPICAL DETAILS OF EARTHING DRAW PIT

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 4 1 9 - A

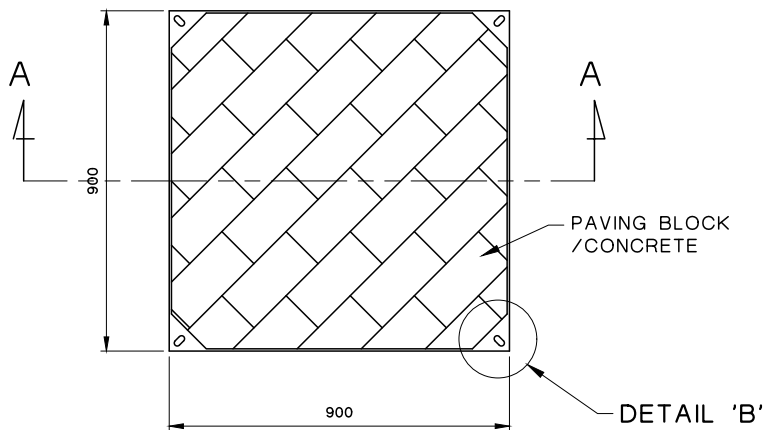


SECTION A-A

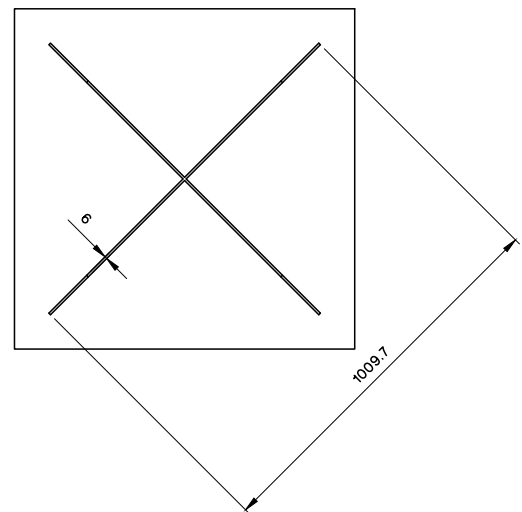


DETAIL 'A'

(SCALE: 1 : 5)



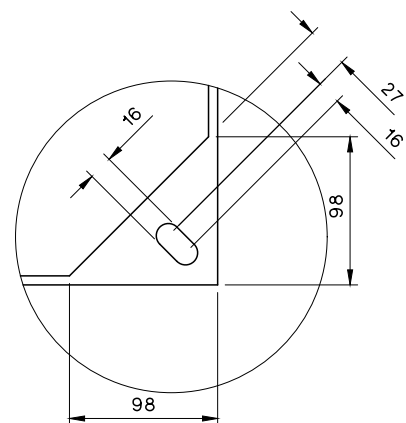
TOP VIEW



BOTTOM VIEW

NOTES:

1. ALL DIMENSIONS ARE IN mm
2. WEIGHT OF THE PIT COVER TO BE 150 kg APPROXIMATELY.
3. COVER FABRICATED FROM STEEL TO BS EN 10025 S275.
4. COVER BASE PLATES ARE STIFFENED WITH STEEL RIBS TO SUIT THE SPECIFIED LOADINGS.
5. AFTER MANUFACTURING, UNITS TO BE HOT DIP GALVANISED TO BS EN ISO 1461.
6. ALL WELDING TO BE 6mm FILLET WELD ALL ROUND, EXCEPT OTHERWISE STATED.
7. TO SUIT THE DRAW PIT SIZE OF 1050 x 1050 OR 1950 x 1050 (DOUBLE).
8. DRAW PIT FRAME REFER TO DRAWING NO. T/COP/10250/D/E33/0104/21.
9. THE DESIGN IMPOSED LIVE LOAD OF DRAW PIT COVER IS FOR PEDESTRIAN ACCESS ONLY.



DETAIL 'B'

(SCALE: 1 : 5)



REVS.	A	B	C	D	E	F	G	H	J	K	L
INITIAL											

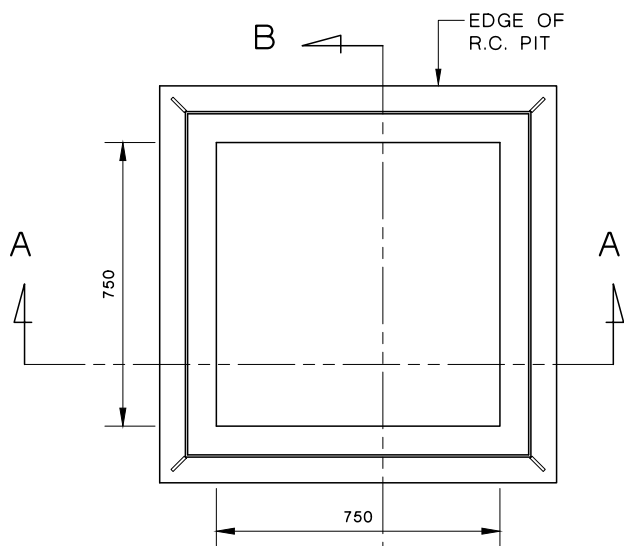
TITLE :

TYPICAL DETAIL OF COVER FOR EARTHING
DRAW PIT

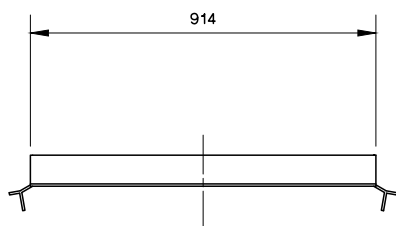
DRAWN: C. W. WONG	DATE: 20 APR., 2020
CHECKED: EDMOND YU	APPROVED: Y. S. YEUNG
SCALE: N. T. S.	SHEET(S) IN SET: 1

ASSET MANAGEMENT

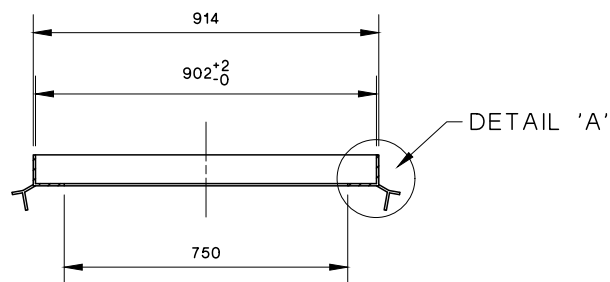
DRG. NO. T/COP/10250/D/E33/0104/20-A



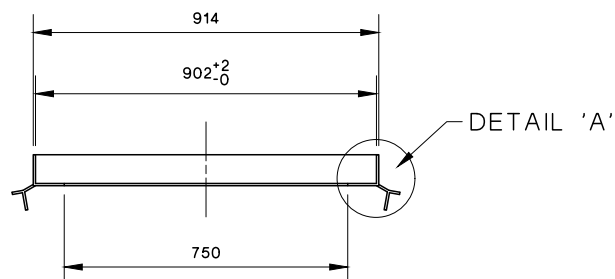
TOP VIEW



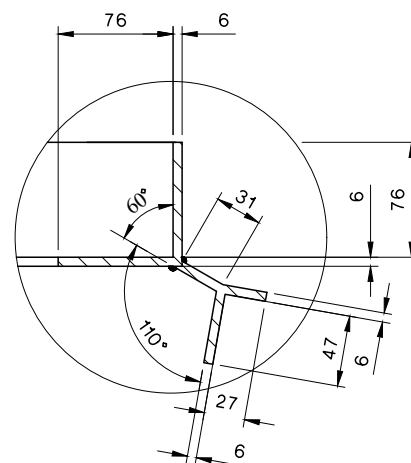
SIDE VIEW



SECTION A-A



SECTION B-B



DETAIL 'A'

(SCALE: 1 : 5)

NOTES:

1. ALL DIMENSIONS ARE IN mm.
2. COVERS AND FRAMES JIG WELDED TO ENSURE A CLOSE MATCHING FIT.
3. FRAME FABRICATED FROM STEEL TO BE GRADE S275 TO BS EN 10025. AFTER MANUFACTURING, UNITS TO BE HOT DIP GALVANISED TO BS EN ISO 1461.
4. ALL WELDING TO BE 6mm FILLET WELD ALL ROUND, EXCEPT OTHERWISE STATED.
5. EXACT NO. OF PIPE TO BE DETERMINED ON SITE.
6. TO SUIT THE DRAW PIT SIZE OF 1050 x 1050.
7. MANHOLE COVER REFER TO DRAWING NO. T/COP/10250/D/E33/0104/20.
8. THE DESIGN SUPERIMPOSED LIVE LOAD OF DRAW PIT IS FOR PEDESTRIAN ACCESS ONLY.



REVS.

INITIAL

TITLE :

TYPICAL DETAIL OF FRAME FOR EARTHING
DRAW PIT

DRAWN: C. W. WONG

DATE: 21 APR., 2020

CHECKED: EDMOND YU

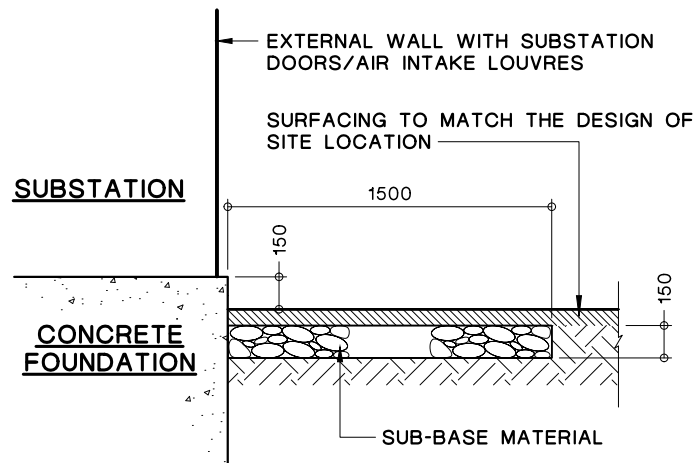
APPROVED: Y. S. YEUNG

SCALE: N. T. S.

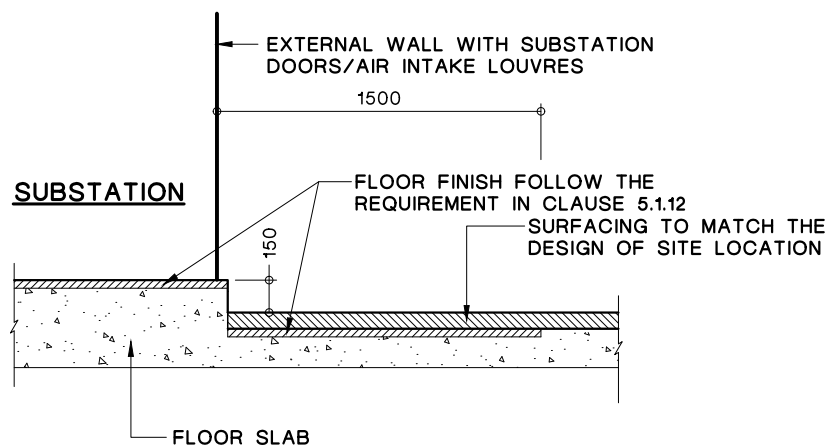
SHEET(S) IN SET: 1

ASSET MANAGEMENT

DRG. NO. T/COP/10250/D/E33/0104/21-A



TYPICAL DETAIL ON SOLID GROUND



TYPICAL DETAIL ON FLOOR SLAB

NOTES:

1. SUB-BASE MATERIAL SHALL BE CRUSHED ROCK AND SHALL HAVE THE PROPERTIES AS SPECIFIED IN GENERAL SPECIFICATION FOR CIVIL ENGINEERING WORKS 2006 CLAUSE 9.02.
2. SUB-BASE MATERIAL SHALL BE COMPACTED TO OBTAIN A RELATIVE COMPACTION OF AT LEAST 95% MAXIMUM DRY DENSITY THROUGHOUT.
3. ALL DIMENSIONS ARE IN mm.



REVS.

INITIAL

TITLE :

**TYPICAL ON GRADE SLAB DETAIL OUTSIDE
SUBSTATION**

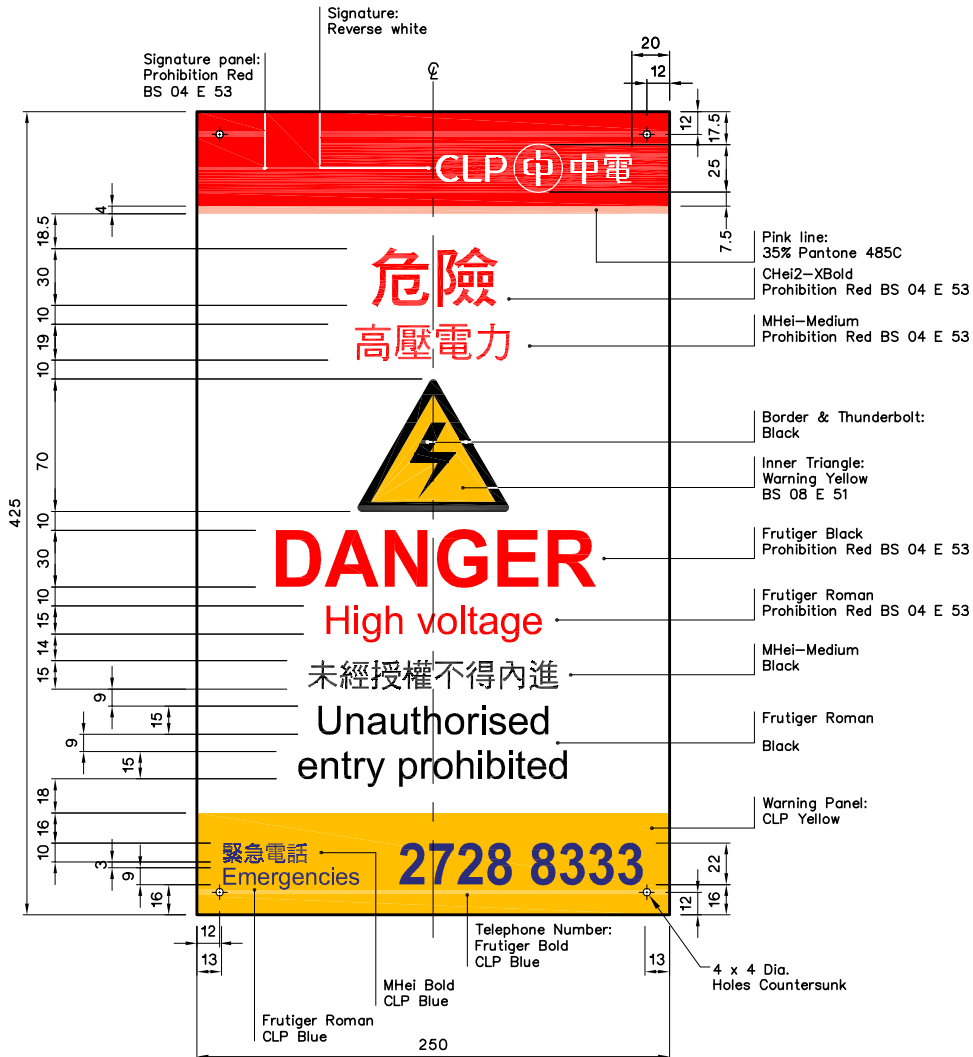
DRAWN: C. W. WONG DATE: 29 MAY, 2020

CHECKED: EDMOND YU APPROVED: Y. S. YEUNG

SCALE: N. T. S. SHEET(S) IN SET: 1

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 4 2 2 - A



C		TEXT SIZE UPDATED				B		GENERAL LAYOUT REVISION				A		GENERAL LAYOUT REVISION				
<div>CLP 中電</div>						REVS.		01-12-04	20-12-06	26-03-12								
								A	B	C	D	E	F	G	H	J	K	L
						INITIAL		K.C.C.	K.C.C.	K.C.C.								
						TITLE :												
DRAWN: S. C. TO						DATE:		13-8-2002										
CHECKED: K. C. CHENG						APPROVED:		W. C. HO										
SCALE: 1 : 4 (mm)						SHEET(S) IN SET:		DETAILS OF SUBSTATION STATUTORY NOTICE PLATE - DANGER WARNING										
ASSET MANAGEMENT																		
DRG. NO.		T C O P 1 0 2 5 0 D E 3 3 0 1 0 5 0 1 C A																



C TEXT SIZE UPDATED

B GENERAL LAYOUT REVISION

A GENERAL LAYOUT REVISION



REVS.	01.12.04	20.12.06	26.03.12										
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	K.C.C.	K.C.C.	K.C.C.										

TITLE :

DETAILS OF SUBSTATION STATUTORY NOTICE
PLATE - DANGER & SF₆ GAS-FILLED EQUIPMENT
WARNING

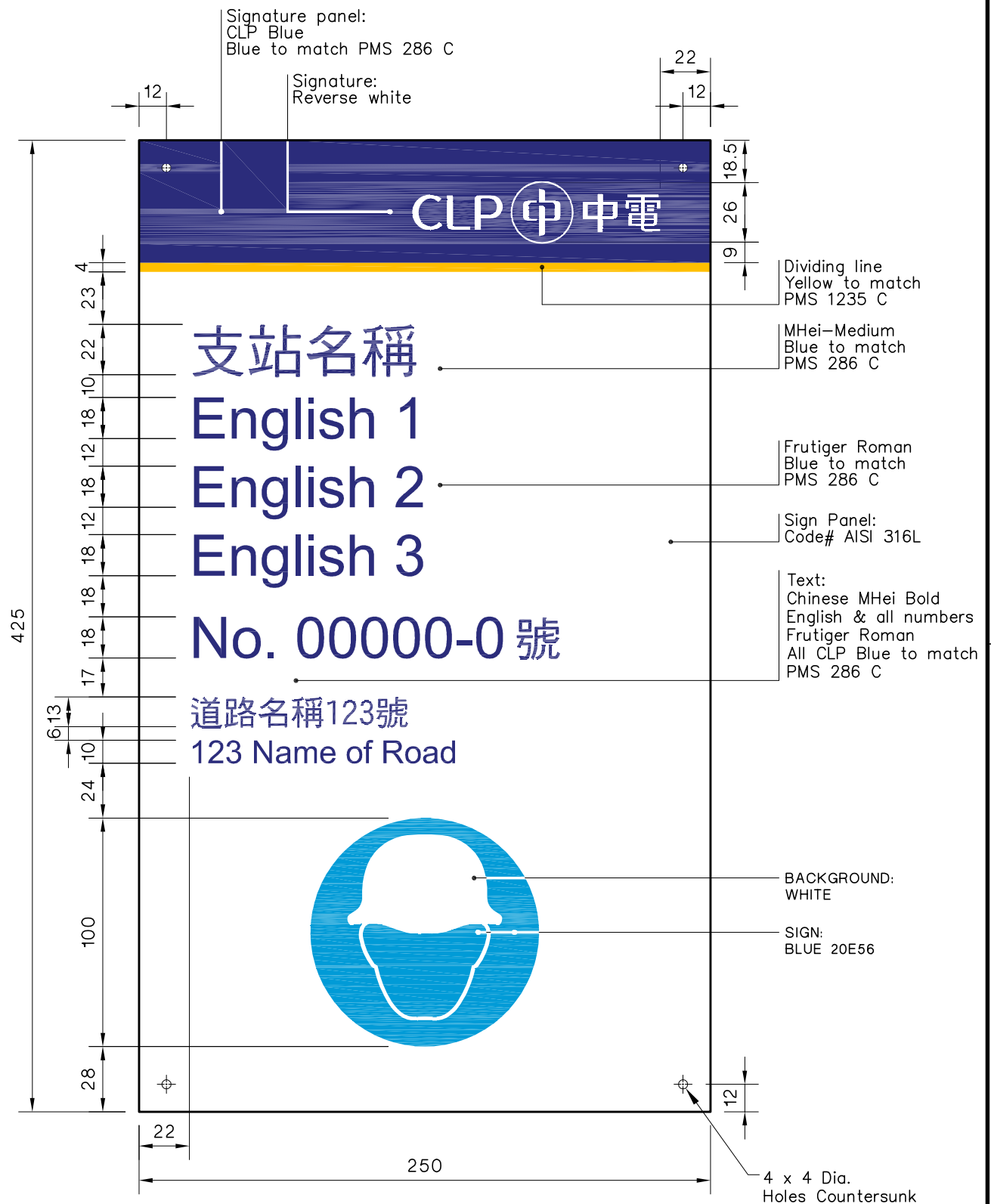
DRAWN: T. Y. IP DATE: 15-8-2002

CHECKED: K. C. CHENG APPROVED: W. C. HO

SCALE: 1 : 4 (mm) SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 5 0 2 C A



B GENERAL LAYOUT REVISION

A GENERAL LAYOUT REVISION



REVS.	01-12-04	27-12-06											
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	K.C.C.	K.C.C.											

TITLE :

DETAILS OF SUBSTATION STATUTORY NOTICE
PLATE - SUBSTATION NAME

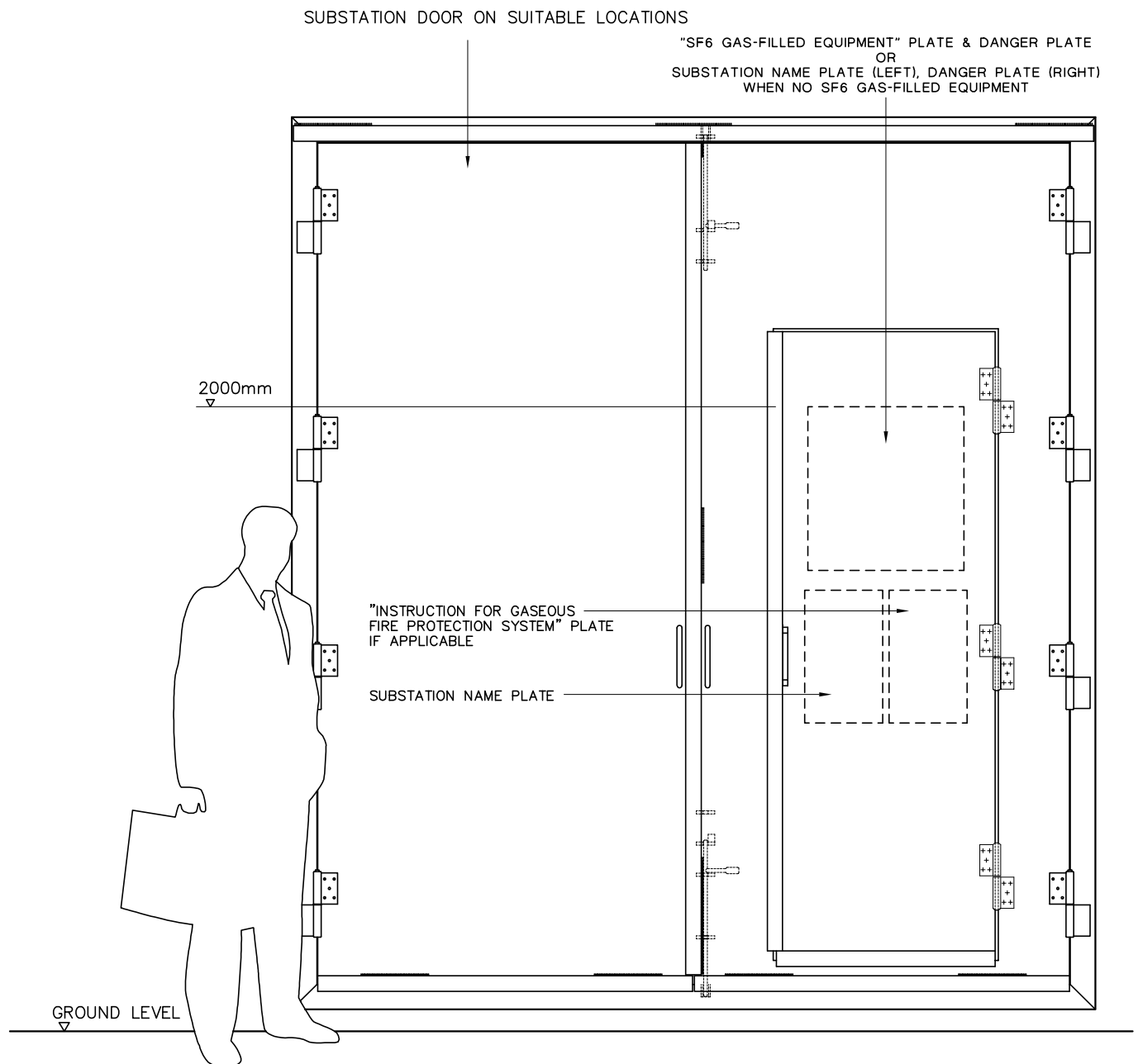
DRAWN: T. Y. IP DATE: 04-09-2002

CHECKED: K. C. CHENG APPROVED: W. C. HO

SCALE: 1 : 2.5 (mm) SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 5 0 3 B A



NOTES

1. NOTICE PLATES SHALL BE ON THE WICKET DOOR WHEN IT IS USED AS THE NORMAL ENTRANCE.
2. THE DANGER PLATE AND SUBSTATION NAME PLATE SHALL BE ARRANGED AND DISPLAYED CONSISTENTLY AT ALL SUBSTATIONS.

A NOTICE PLATE REVISION



REVS.	13.09.04												
INITIAL	A	B	C	D	E	F	G	H	J	K	L		

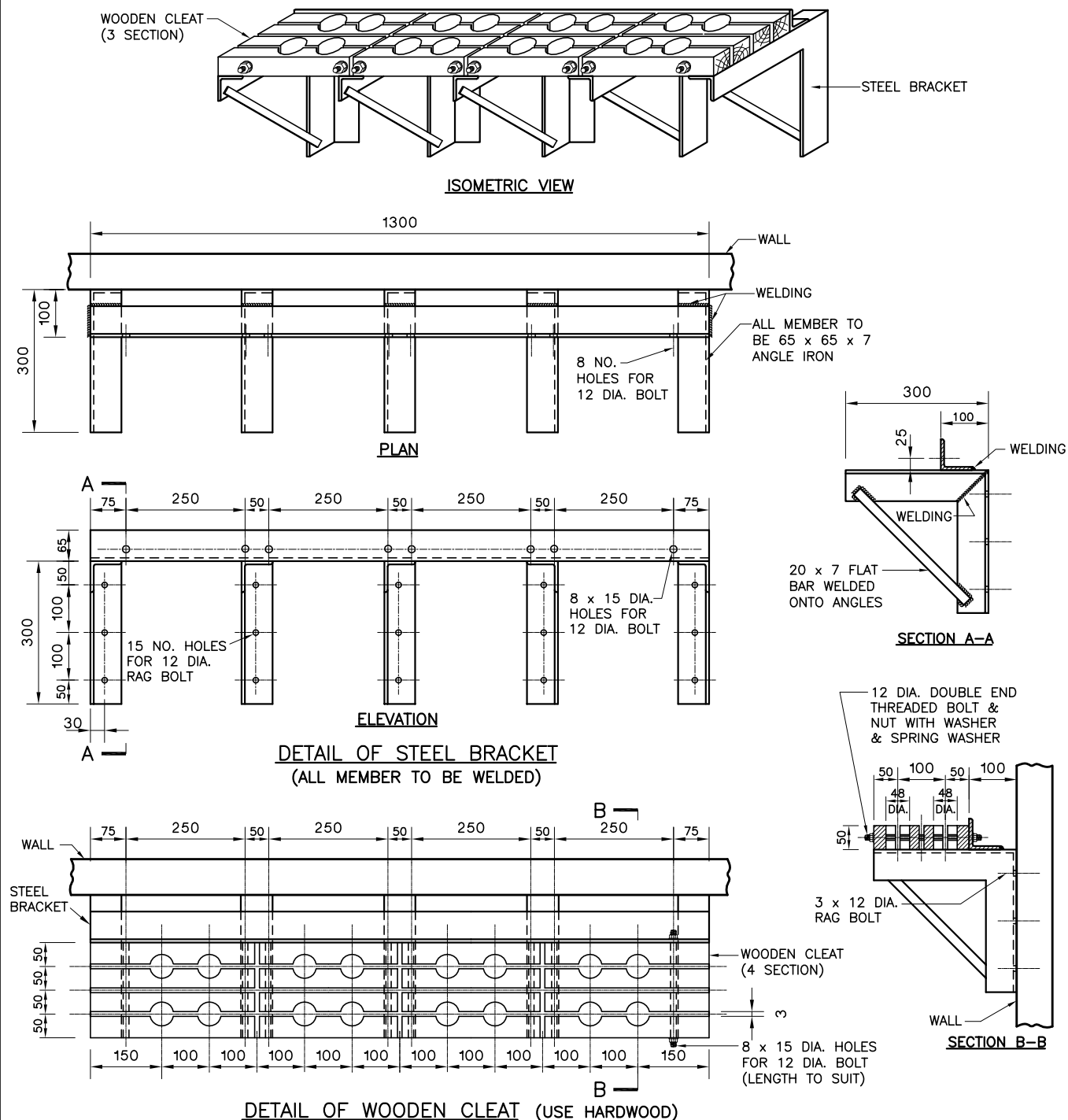
TITLE :

DISPOSITION OF THE DANGER PLATE AND
SUBSTATION NAME PLATE

DRAWN: S. C. TO	DATE: 13-8-2002
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: N.T.S.	SHEET(S) IN SET:

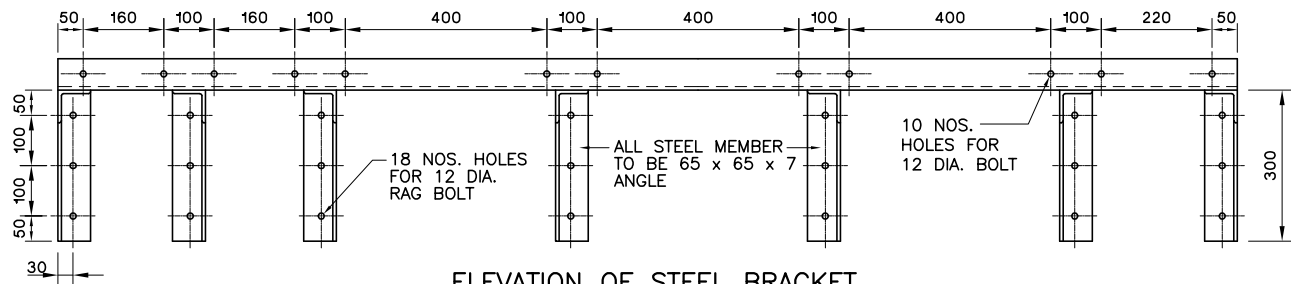
ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 5 0 4 A A

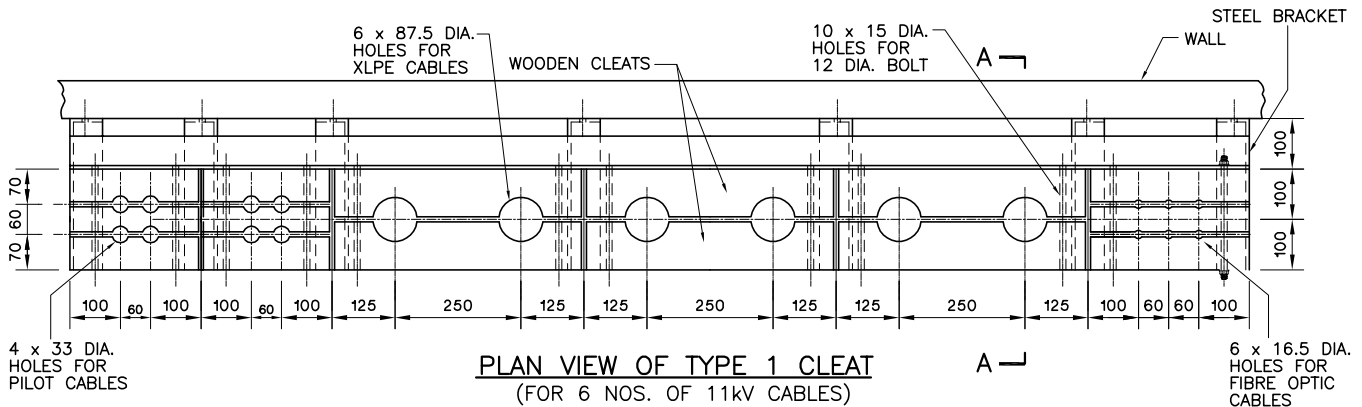
**NOTES:**

1. ALL STEELWORKS SHALL BE HOT DIP GALVANISED TO BS EN ISO 1461 AND FINISHED WITH ONE COAT OF CALCIUM PLUMBATE OR ZINC PHOSPHATE PRIMER AND TWO FINISHING COATS OF SYNTHETIC PAINT.
2. ALL MATERIALS TO BE PROVIDED AND INSTALLED BY DEVELOPER/CUSTOMER.
3. ALL METAL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE DISTRIBUTION BOARD WITH COPPER CONDUCTOR NOT LESS THAN 6mm².
4. THE NO. OF CABLE CLEATS SHALL BE ADEQUATE FOR THE ACTUAL NO. OF CABLES USED AND SPARES.

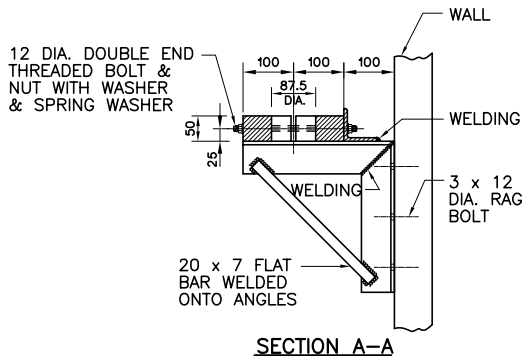
C	SIZE OF HOLES FOR CABLE UPDATED.				B	ZINC PRIMER ADDED				A	NOTE 4, 5 ADDED															
<div>CLP 中電</div>					REVS.	15.09.04	15.11.07	18.03.14																		
						A	B	C	D	E	F	G	H	J	K	L										
					INITIAL	K.C.C.	K.C.C.	H.T.YU																		
					TITLE :																					
					DETAILS OF STEEL WALL BRACKET AND WOODEN CLEAT FOR HOLDING SINGLE CORE CABLES																					
					DRAWN:	S. C. TO	DATE:	26-07-2002																		
					CHECKED:	K. C. CHENG	APPROVED:	W. C. HO																		
					SCALE:	1 : 12.5 (mm)		SHEET(S) IN SET:	1																	
A S S E T M A N A G E M E N T					DRG. NO.	T	C	O	P	1	0	2	5	0	D	E	3	3	0	1	0	5	0	5	C	A



ELEVATION OF STEEL BRACKET
(ALL MEMBER TO BE WELDED)



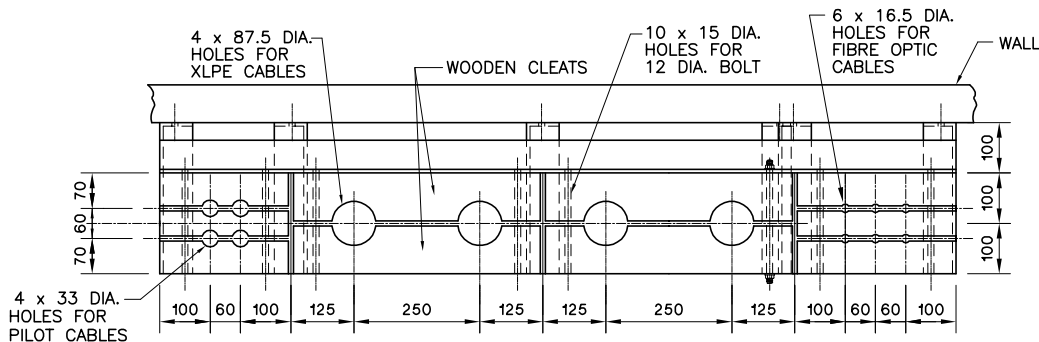
PLAN VIEW OF TYPE 1 CLEAT
(FOR 6 NOS. OF 11kV CABLES)



SECTION A-A

NOTES:

1. ALL STEELWORKS SHALL BE HOT DIP GALVANISED TO BS EN ISO 1461 AND FINISHED WITH ONE COAT OF CALCIUM PLUMBATE OR ZINC PHOSPHATE PRIMER AND TWO FINISHING COATS OF SYNTHETIC PAINT.
2. ALL MATERIALS TO BE PROVIDED AND INSTALLED BY DEVELOPER/CUSTOMER.
3. ALL METAL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE DISTRIBUTION BOARD WITH COPPER CONDUCTOR NOT LESS THAN 6mm².
4. THE NO. OF CABLE CLEATS SHALL BE ADEQUATE FOR THE ACTUAL NO. OF CABLES USED AND SPARES.



PLAN VIEW OF TYPE 2 CLEAT
(FOR 4 NOS. OF 11kV CABLES)

B ZINC PRIMER ADDED.

A NOTE 4, 5 ADDED



REVS.	15.09.04	15.11.07												
INITIAL	A	B	C	D	E	F	G	H	J	K	L			
	K.C.C.	K.C.C.												

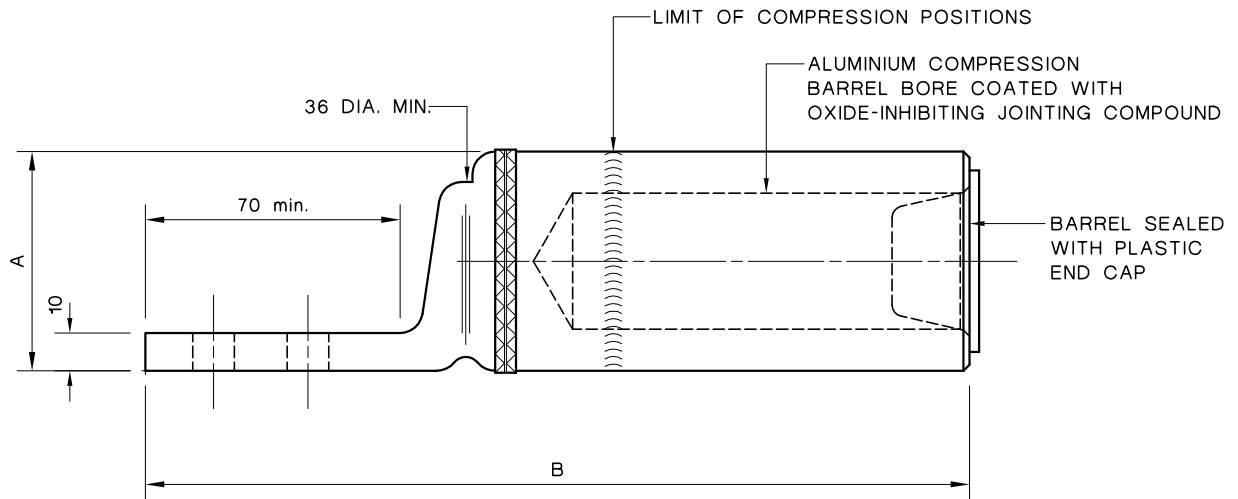
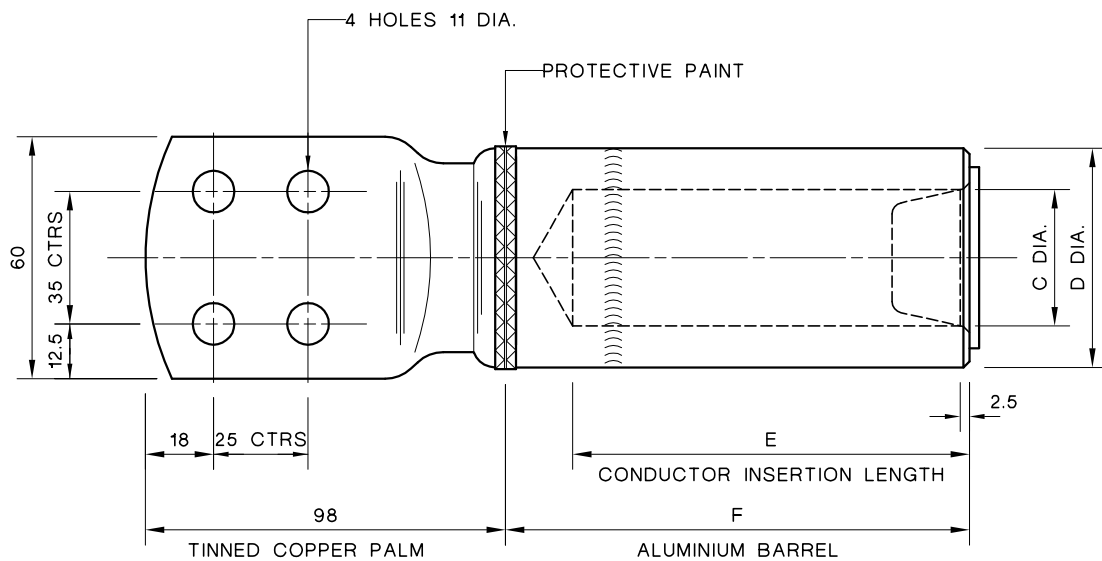
TITLE :

DETAILS OF STEEL WALL BRACKET AND WOODEN CLEAT FOR HOLDING 11kV CABLES
(240 mm² XLPE CABLE, PILOT CABLE AND FIBRE OPTIC CABLE)

DRAWN: S. C. TO DATE: 29-07-2002
CHECKED: K. C. CHENG APPROVED: W. C. HO
SCALE: 1 : 15 (mm) SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 5 0 6 B A

ELEVATION

PLAN

NOTES:

TOLERANCES: INSIDE AND OUTSIDE DIAMETERS OF BARREL $\pm 0.15\text{mm}$
ALL OTHER DIMENSION $\pm 2\%$

MATERIAL: ALUMINIUM AND TINNED COPPER

MARKING: '960mm² BICC DIE ED819' AT ALUMINIUM BARREL

NO. OF SINGLE CORE CABLE:

500kVA - 1 CABLE PER PHASE.

1000kVA - 2 CABLE PER PHASE.

1500kVA - 3 CABLE PER PHASE.

2000kVA - 4 CABLE PER PHASE.

DIMENSION TABLE		
ITEM	STRANDED CABLE	SOLID CABLE
A	58	58
B	218	218
C	39	36
D	54	54
E	105	105
F	120	120

B	GENERAL NOTES REVISED
A	GENERAL REVISED

[illegible]

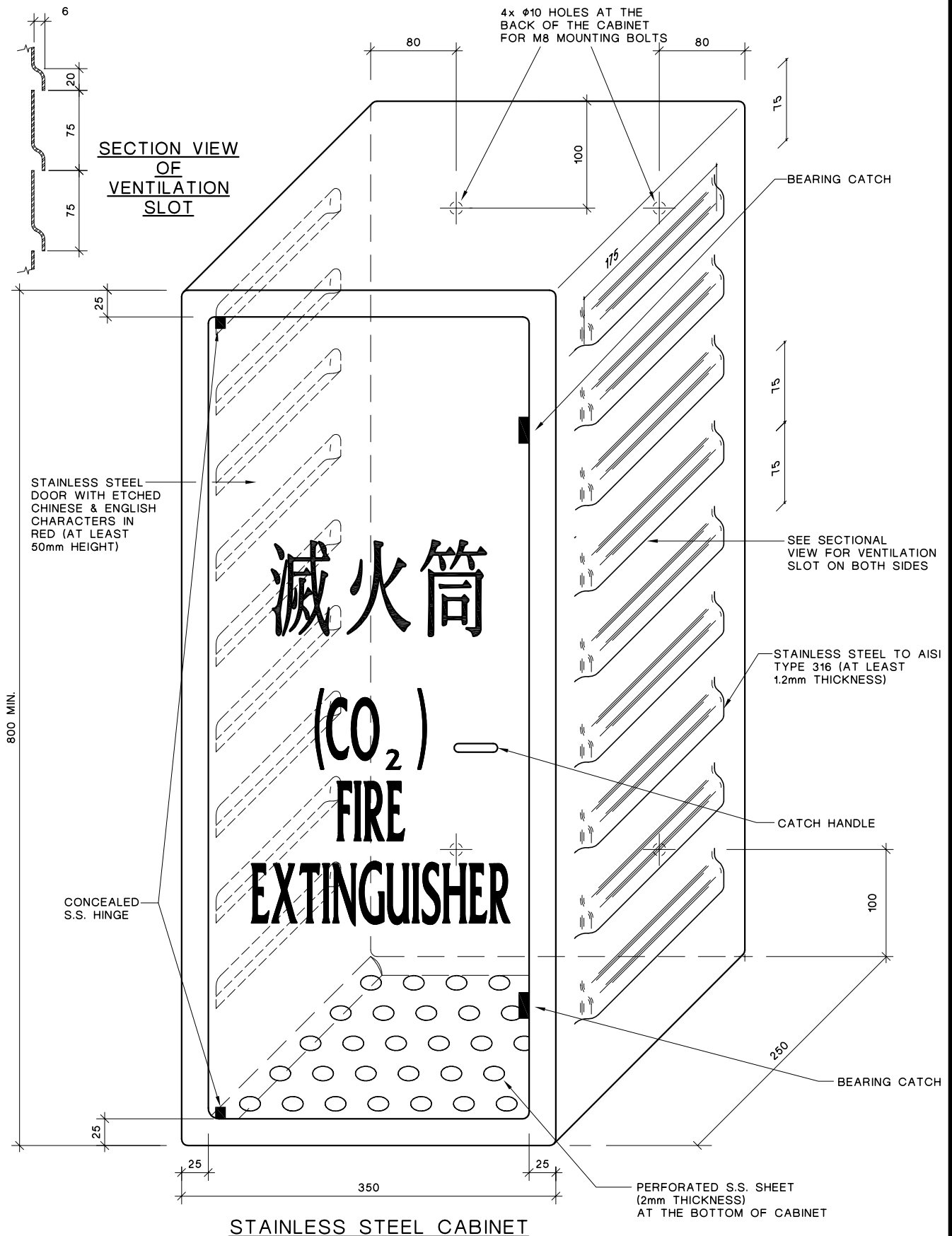
TITLE :

CABLE LUG FOR 960mm² SINGLE CORE
STRANDED ALUMINIUM CONDUCTOR L.V. CABLE

DRAWN: S. C. TO	DATE: 12-8-2002
CHECKED: K. C. CHENG	APPROVED: K. W. WONG
SCALE: 1 : 2 (mm)	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 5 0 8 B A



CLP 中電

REVS.

INITIAL

TITLE :

STAINLESS STEEL CABINET FOR OUTDOOR
4.5kg CO₂ FIRE EXTINGUISHER

DRAWN: C. W. WONG DATE: 29 Sep., 2004

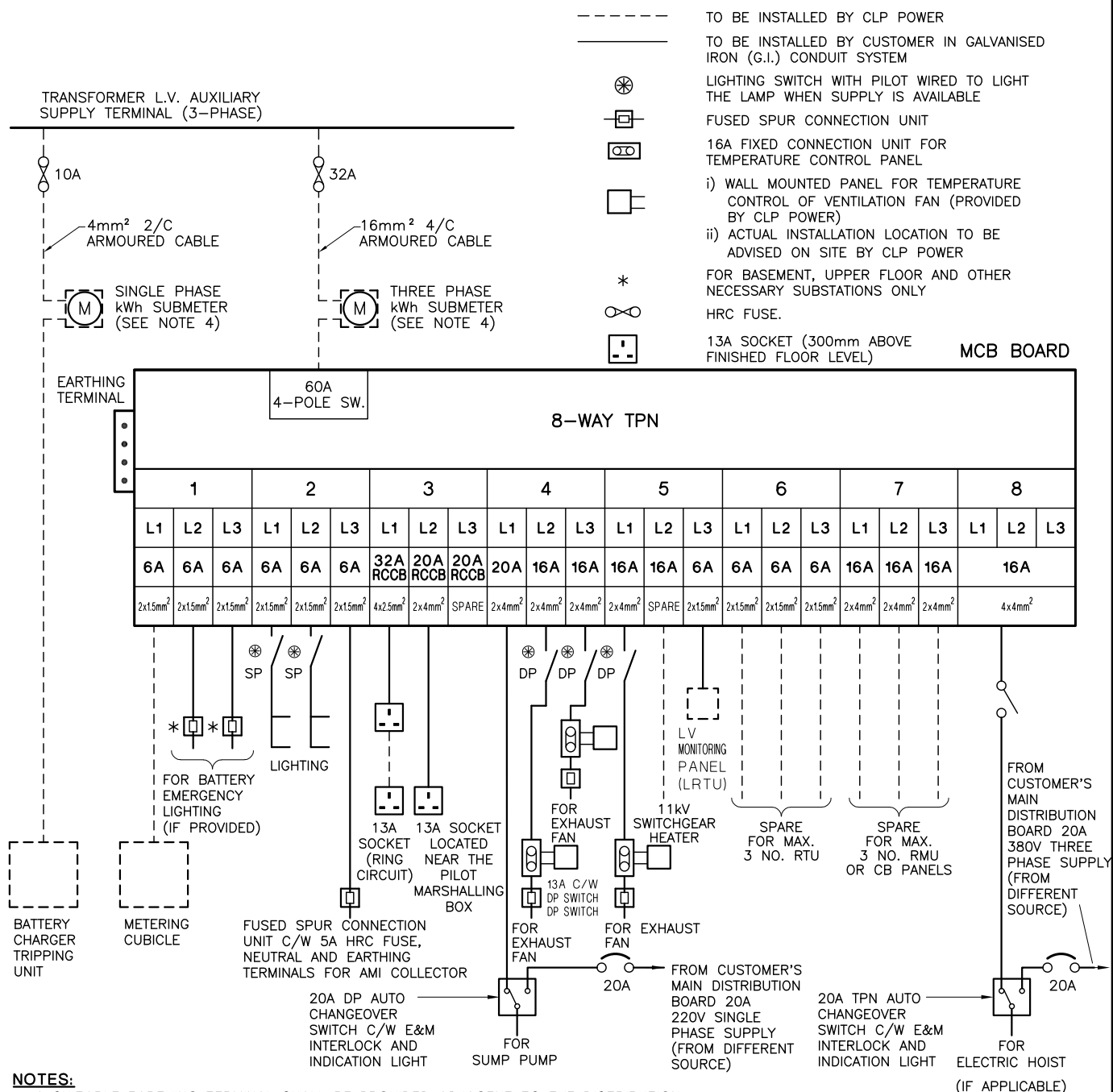
CHECKED: K. C. CHENG APPROVED: W. C. HO

SCALE: 1 : 5 (mm) SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 5 0 9 - A

LEGEND:



NOTES:

1. A SUITABLE EARTHING TERMINAL SHALL BE PROVIDED ADJACENT TO THE DISTRIBUTION BOARD FOR CONNECTING ALL EXPOSED CONDUCTIVE PARTS VIA APPROPRIATE PROTECTIVE CONDUCTORS.
2. ALL EXTRANEOUS CONDUCTIVE PARTS SUCH AS STEEL DOOR FRAME, EXHAUST DUCT, LOUVRE AND PIPEWORK OF FIRE SERVICES INSTALLATION ETC., SHALL ALSO BE CONNECTED TO THE EARTHING TERMINAL WITH A COPPER CONDUCTOR NOT LESS THAN 6mm².
3. FOR MULTI TRANSFORMER SUBSTATIONS, ADDITIONAL 13A FUSED SPUR FOR EXHAUST FAN(S) SHALL BE CONNECTED ON SEPARATE FINAL CIRCUIT.
4. kWh SUBMETERS WILL BE INSTALLED ADJACENT TO MCB BOARD IF THE SUBSTATION SUPPLY IS METERED AT 11kV.
5. LIGHTING SWITCH AND 13A SOCKET TO BE POSITIONED AT 1350mm AND 300mm FROM FLOOR LEVEL RESPECTIVELY.
6. MCB UNIT SHALL COMPLY TO BS EN60898 TYPE C AND BREAKING CAPACITY NOT LESS THAN 10kA.
7. MCB BOARD WITH DUSTPROOF DOOR AND COMPLIES TO IEC60439/BS5486
8. RCCB SENSITIVITY 30mA
9. PHASE IDENTIFICATION & COLOUR CODE OF WIRING CABLES SHALL COMPLY TO THE COLOUR CODE REQUIREMENTS OF EMSD WITH EFFECTIVE FROM 1 JULY 2007.
10. FUSED SPUR UNIT FOR AMI COLLECTOR TO BE POSITION AT 1350mm FROM FLOOR LEVEL AND NEXT TO THE MCB DISTRIBUTION BOARD.

F	POWER SUPPLY TO AMI COLLECTOR UPDATED
E	POWER SUPPLY TO ELECTRIC HOIST, EXHAUST FAN UPDATED.
D	MAIN SW. RATING & 13A SOCKET RING CIRCUIT REVISED
C	PHASE IDENTIFICATION UPDATED
B	LRTU ADDED
A	CIRCUIT REVISIONS



REVS.	13.09.04	21.12.05	09.08.07	12.10.09	18.03.14	18.10.18					
	A	B	C	D	E	F	G	H	J	K	L
INITIAL	K.C.C.	K.C.C.	K.C.C.	K.C.C.	HIYU	HIYU					

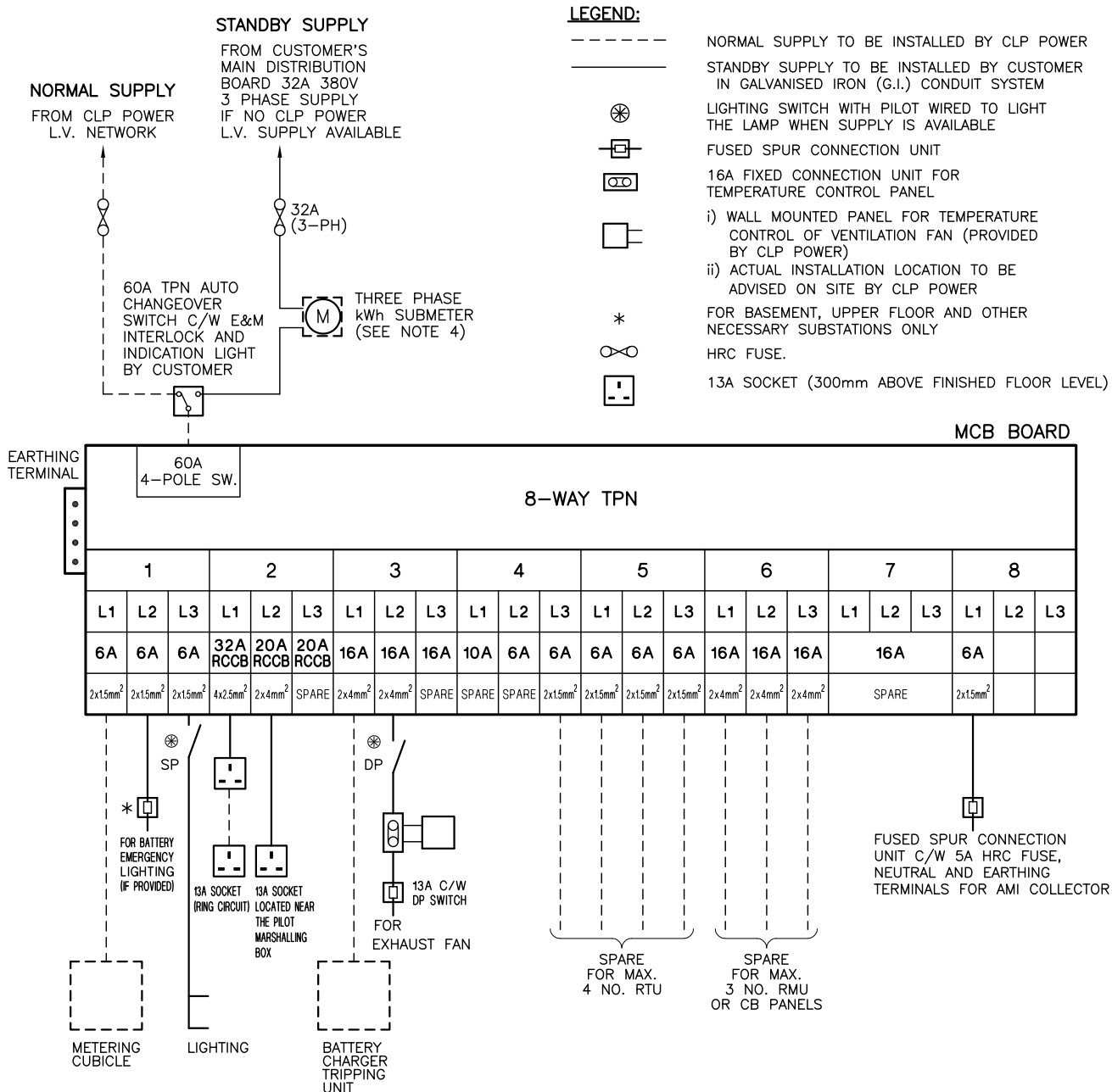
TITLE :

LV SCHEMATIC DIAGRAM FOR DISTRIBUTION SUBSTATION (WITH TRANSFORMER AND 11kV SWITCHGEAR)

DRAWN: S. C. TO	DATE: 23-07-2002
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: N. T. S.	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 6 0 1 F A

**NOTES:**

1. A SUITABLE EARTHING TERMINAL SHALL BE PROVIDED ADJACENT TO THE DISTRIBUTION BOARD FOR CONNECTING ALL EXPOSED CONDUCTIVE PARTS VIA APPROPRIATE PROTECTIVE CONDUCTORS.
2. ALL EXTRANEIOUS CONDUCTIVE PARTS SUCH AS STEEL DOOR FRAME, EXHAUST DUCT, LOUVRE AND PIPEWORK OF FIRE SERVICES INSTALLATION ETC., SHALL ALSO BE CONNECTED TO THE EARTHING TERMINAL WITH A COPPER CONDUCTOR NOT LESS THAN 6mm².
3. LIGHTING SWITCH AND 13A SOCKET TO BE POSITIONED AT 1350mm AND 300mm FROM FLOOR LEVEL RESPECTIVELY.
4. kWh SUBMETERS WILL BE INSTALLED ADJACENT TO MCB BOARD.
5. MCB UNIT SHALL COMPLY TO BS EN60898 TYPE C AND BREAKING CAPACITY NOT LESS THAN 10kA.
6. MCB BOARD WITH DUSTPROOF DOOR COMPLIES TO IEC60439/BS5486.
7. RCCB SENSITIVITY 30mA
8. PHASE IDENTIFICATION & COLOUR CODE OF WIRING CABLES SHALL COMPLY TO THE COLOUR CODE REQUIREMENTS OF EMSD WITH EFFECTIVE FROM 1 JULY 2007.
9. FUSED SPUR UNIT FOR AMI COLLECTOR TO BE POSITION AT 1350mm FROM FLOOR LEVEL AND NEXT TO THE MCB DISTRIBUTION BOARD.

F	POWER SUPPLY TO AMI COLLECTOR UPDATED
E	DETAIL OF CHANGEOVER FACILITY UPDATED.
D	CHANGEOVER FACILITY ADDED
C	MAIN SW. RATING & 13A SOCKET RING CIRCUIT REVISED
B	PHASE IDENTIFICATION UPDATED
A	LEGEND DESCRIPTION CHANGE



REVS.	13.09.04	09.08.07	12.10.09	26.03.12	18.03.14	18.10.18						
INITIAL	A K.C.C.	B K.C.C.	C K.C.C.	D K.C.C.	E H.T.YU	F H.T.YU	G	H	J	K	L	

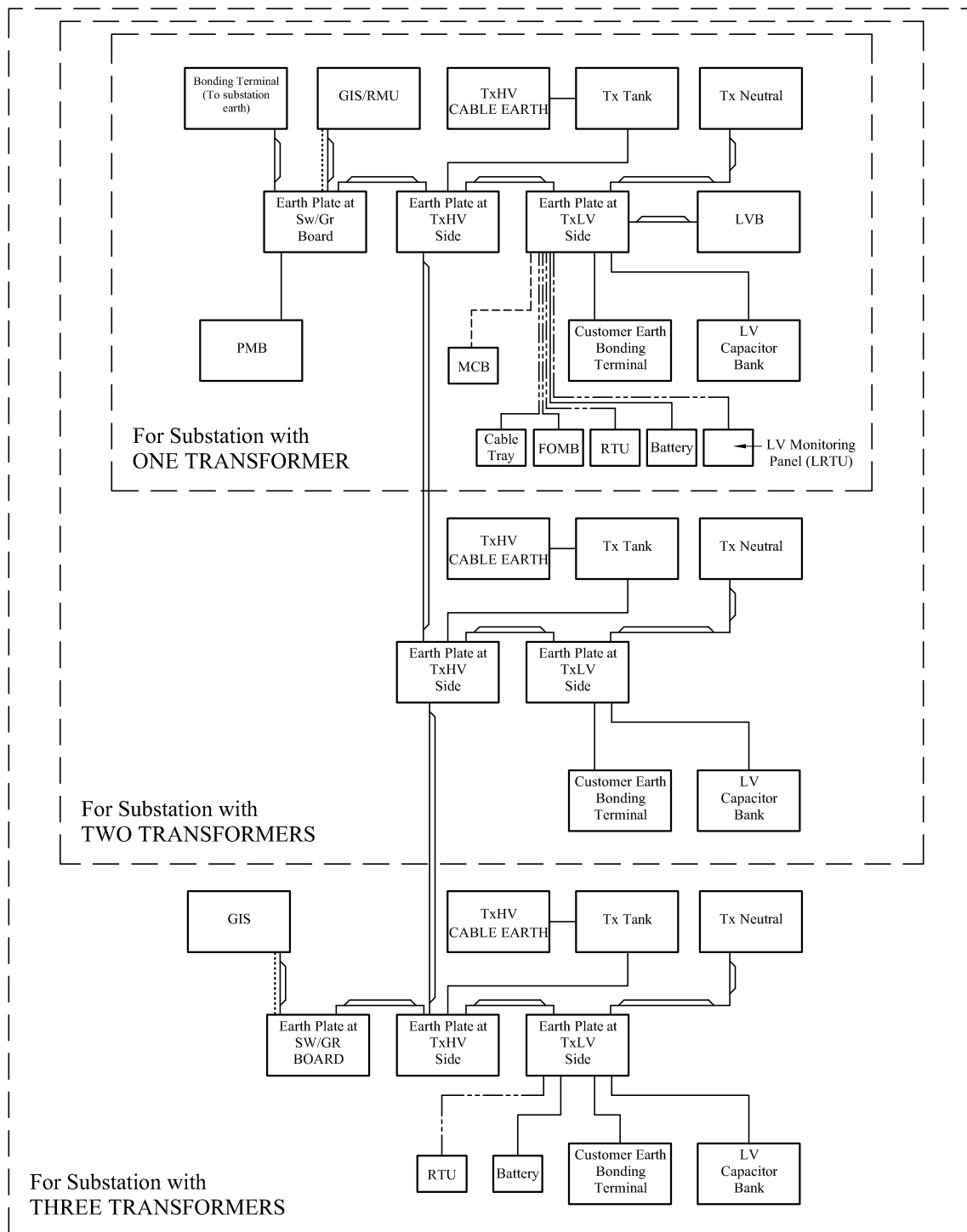
TITLE :

LV SCHEMATIC DIAGRAM FOR 11kV SWITCHROOM

DRAWN: S. C. TO	DATE: 23-07-2002
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: N. T. S.	SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 6 0 2 F A

**NOTES :****LEGEND :**

- Additional 2 x 100 mm² BARE COPPER is required for CB numbers at 5, 9, 13
- 100 mm² BARE COPPER
- 2 x 100 mm² BARE COPPER
- 6 mm² COPPER PVC COVERED
- 16 mm² COPPER PVC COVERED

C	LRTU ADDED
B	GIS BOARD ADDED FOR 3 Tx. S/S



REVS.	16.05.03	15.09.04	21.12.05										
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	D. HUNG	K. C. C.	K. C. C.										

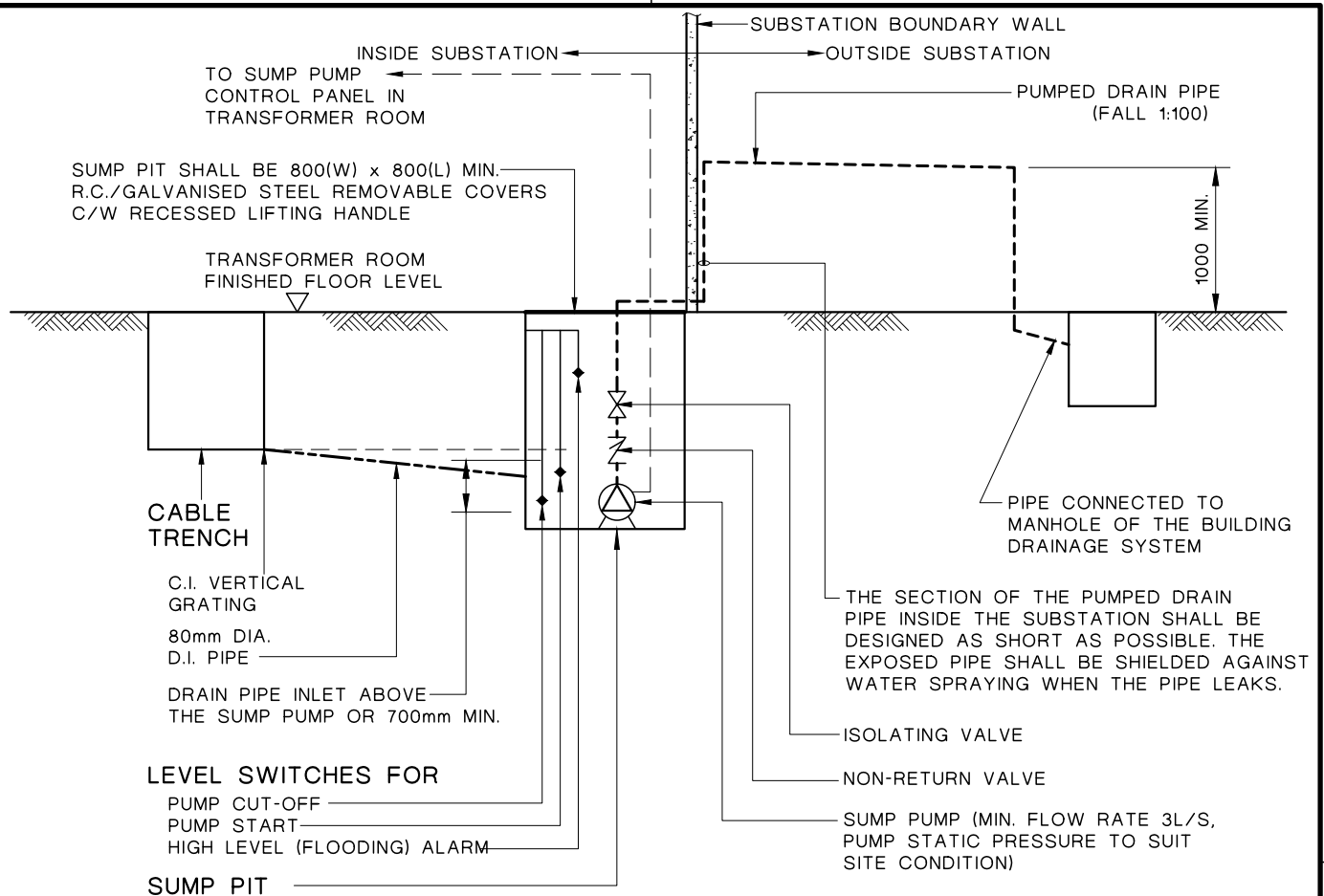
TITLE :

EARTHING SCHEMATIC DIAGRAM

DRAWN: T. Y. IP	DATE: 15-09-2002
CHECKED: K. C. CHENG	APPROVED: W. C. HO
SCALE: N.T.S.	SHEET(S) IN SET:

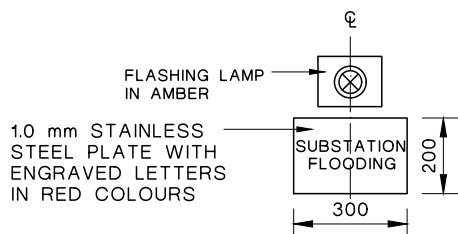
ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 6 0 3 C A

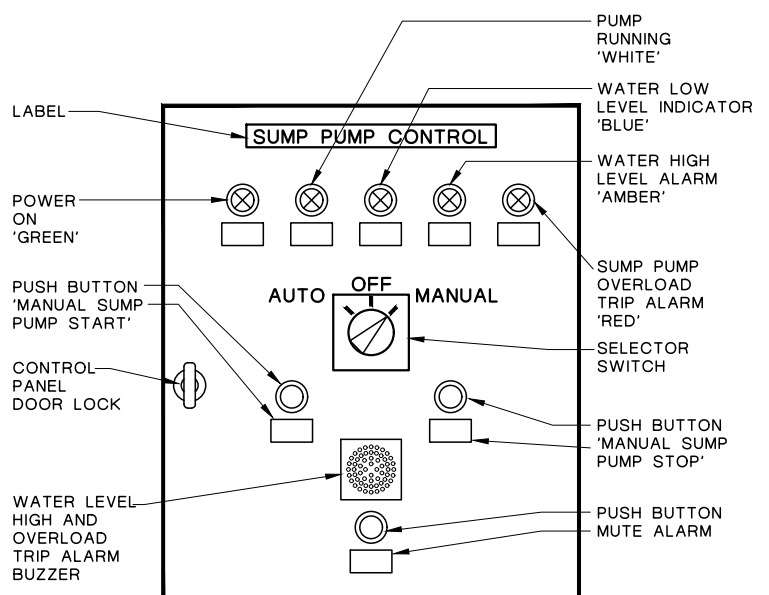


NOTES:

1. THE SUMP PUMP SHALL BE AUTOMATIC START AND STOP WHEN WATER LEVEL REACHES THE PUMP START LEVEL AND THE PUMP CUT-OFF LEVEL
2. START/STOP CONTROL OF THE SUMP PUMP SHALL BE PROVIDED ON THE CONTROL PANEL.
3. CHANGEOVER SWITCH FOR SWITCHING THE POWER SUPPLY TO THE SUMP PUMP SHALL BE PROVIDED. CHANGEOVER SCHEMATIC IS SHOWN IN CLP DRG. NO. T-COP-10250-D-E33-0106-01
4. SUMP PUMP CONTROL CIRCUIT DIAGRAM SHALL BE FRAMED AND DISPLAYED NEXT TO THE SUMP PUMP CONTROL PANEL.
5. SUMP PIT SIZE MIN. 600mm x 600mm.



FLOODING ALARM LIGHT AT EACH ENTRANCE



PROPOSED SUMP PUMP CONTROL PANEL

B	GENERAL AMENDMENT	C	DRAWING TITLE UPDATED
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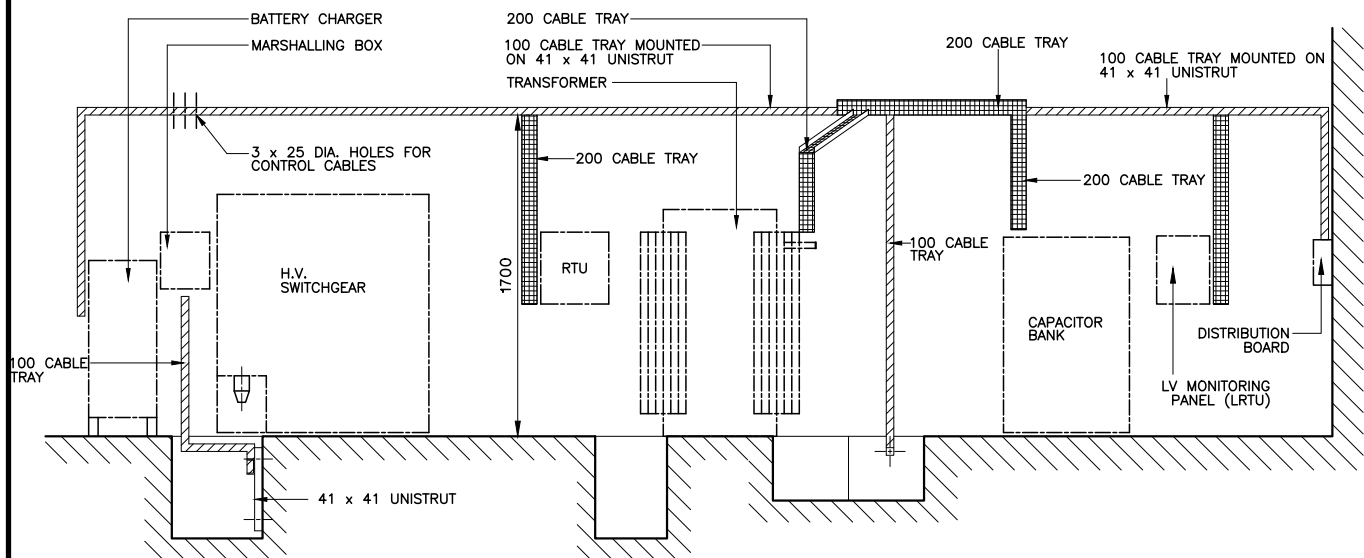
REVS.	20.08.07	23.02.17	15.06.20											
INITIAL	A	B	C	D	E	F	G	H	J	K	L			
	K.C.C.	H.T.YU	H.T.YU											

TITLE :

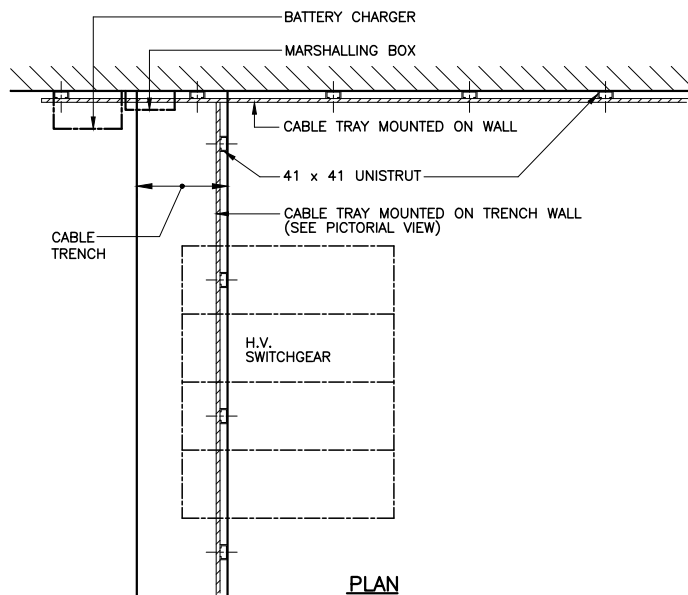
GENERAL SCHEMATIC DIAGRAM OF SUMP PUMP AND PIPE CONNECTIONS FOR BASEMENT SUBSTATION / SUBSTATION WITH RISK OF FLOODING

DRAWN: S. C. TO	DATE: 22-07-2002
CHECKED: K. C. CHENG	APPROVED: K. W. WONG
SCALE: N. T. S.	SHEET(S) IN SET:

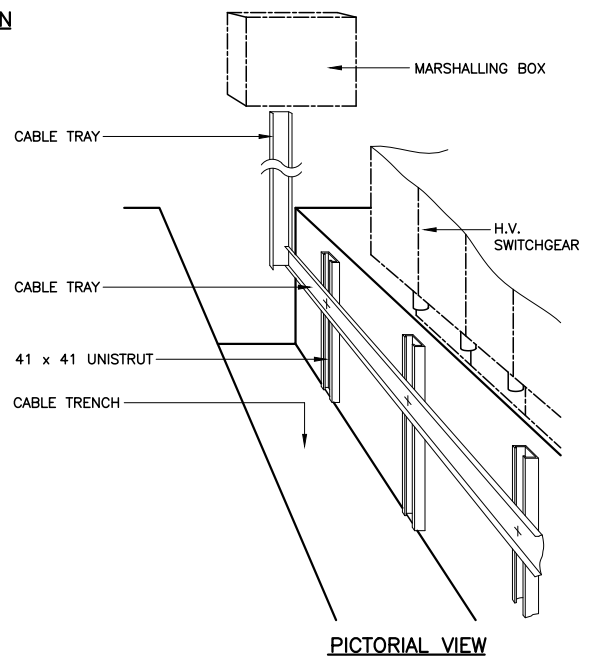
ASSET MANAGEMENT	DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 6 0 4 C A
------------------	----------------------------------------------------



ELEVATION



PLAN



PICTORIAL VIEW

NOTES:

1. ALL METAL WORKS MUST BE BONDED TO THE EARTHING TERMINAL AT THE EARTHING PLATE WITH COPPER CONNECTOR NOT LESS THAN 6mm².
2. ALL METAL WORKS TO BE HOT DIP GALVANISED.
3. ACTUAL INSTALLATION LOCATION TO BE ADVISED ON SITE BY CLP POWER.
4. ALL DIMENSIONS ARE IN MILLIMETRE.

D	SIZE OF UNISTRUT UPDATED
C	BATTERY CHARGER UPDATED
B	LV MONITORING PANEL ADDED
A	RTU ADDED



REVS.	13.09.04	21.12.05	17.03.17	23.03.20									
	A	B	C	D	E	F	G	H	J	K	L		
INITIAL	K.C.C.	K.C.C.	H.T.YU	H.T.YU									

TITLE :

TYPICAL ARRANGEMENT OF CABLE TRAY

DRAWN:	S. C. TO	DATE:	12-8-2002
CHECKED:	K. C. CHENG	APPROVED:	W. C. HO
SCALE:	N.T.S.	SHEET(S) IN SET:	

ASSET MANAGEMENT	DRG. NO.	T	C	O	P	1	0	2	5	0	D	E	3	3	0	1	0	6	0	5	D	A
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COLOUR CODE SYSTEM

COLOUR CODE

PIPE/CONDUIT



RED

FIRE FIGHTING PIPE
(WATER)

YELLOW/BLACK

FIRE FIGHTING PIPE
(CO₂ GAS)

ORANGE

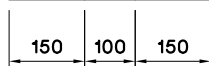
ELECTRICAL CONDUIT



ORANGE/RED

FIRE PROTECTION SYSTEM
CONTROL WIRING

ORANGE/GREEN

COMPUTER
DATA SIGNALING

REFERENCE: BS1710 SPECIFICATION FOR IDENTIFICATION OF PIPELINES AND SERVICES.
BS4800 SCHEDULE OF PAINT COLOURS FOR BUILDING PURPOSE.

A COLOUR CODE FOR COMPUTER DATA
SIGNALING ADDED



REVS.	16.5.12												
INITIAL	A	B	C	D	E	F	G	H	J	K	L		
	E. YU												

TITLE :

COLOUR CODES FOR PIPES AND CONDUITS
IN DISTRIBUTION SUBSTATION

DRAWN: C. W. WONG

DATE: 15 Sep., 2004

CHECKED: K. C. CHENG

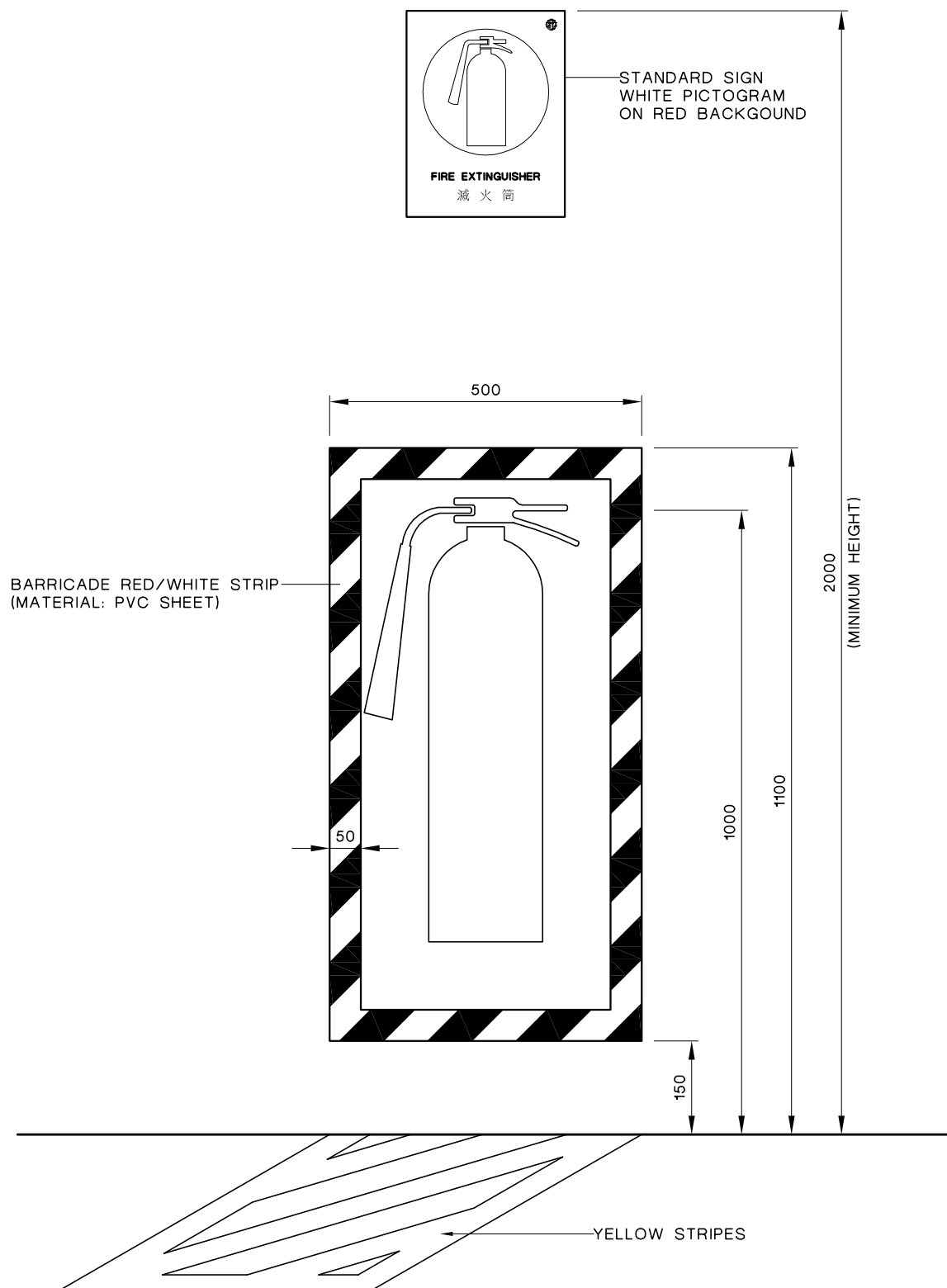
APPROVED: W. C. HO

SCALE: 1 : 15

SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 6 0 6 A A



ALL DIMENSIONS ARE IN mm



REVS.	A	B	C	D	E	F	G	H	J	K	L
INITIAL											

TITLE :

FIRE EXTINGUISHER DEMARCATION

DRAWN: C W WONG DATE: 9 Aug., 2007

CHECKED: K C CHENG APPROVED: W C HO

SCALE: N. T. S. SHEET(S) IN SET:

ASSET MANAGEMENT

DRG. NO. T C O P 1 0 2 5 0 D E 3 3 0 1 0 6 0 8 - A