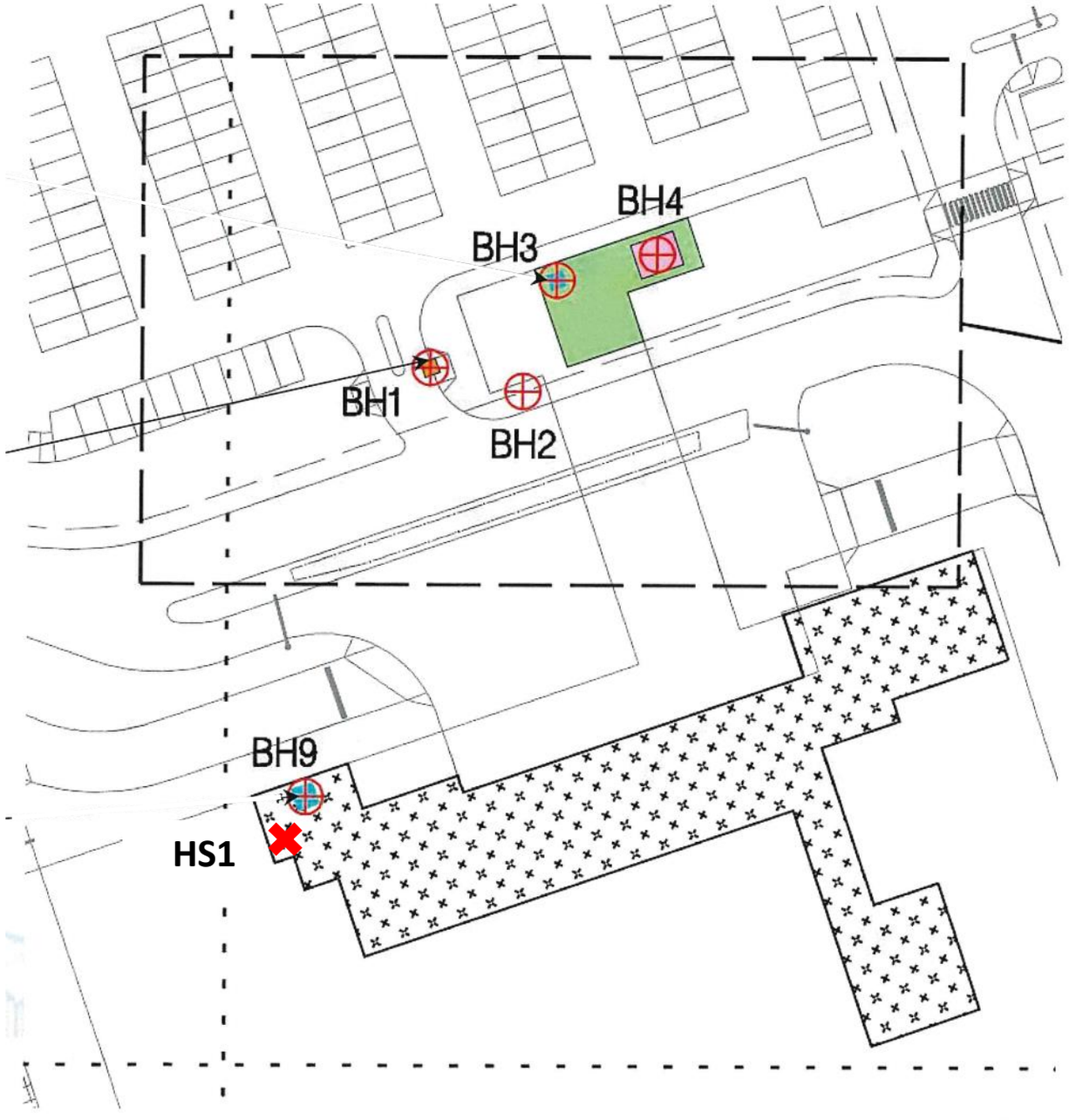
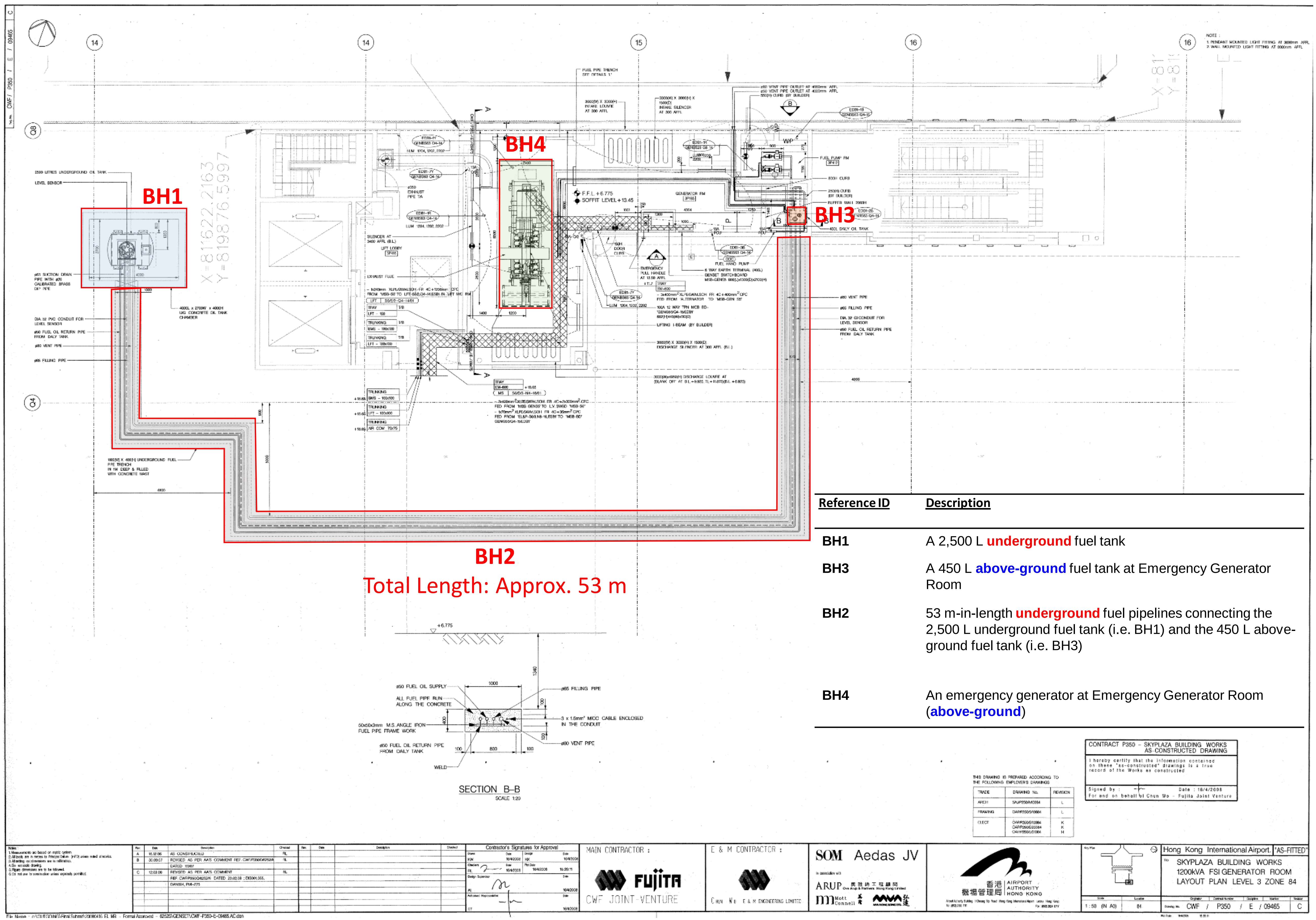
Appendix E.1 Emergency Power Supply System No. 1 (**BH 1**, **BH2**, **BH3** and **BH4**)

Northern Section of T2 Building



Reference ID	Description
BH1	A 2,500 L **underground** fuel tank
BH3	A 450 L **above-ground** fuel tank at Emergency Generator Room
BH2	53 m-in-length **underground** fuel pipelines connecting the 2,500 L underground fuel tank (i.e. BH1) and the 450 L above-ground fuel tank (i.e. BH3)
BH4	An emergency generator at Emergency Generator Room (**above-ground**)

Appendix E.1 Emergency Power Supply System No. 1 (BH 1, BH2, BH3 and BH4)



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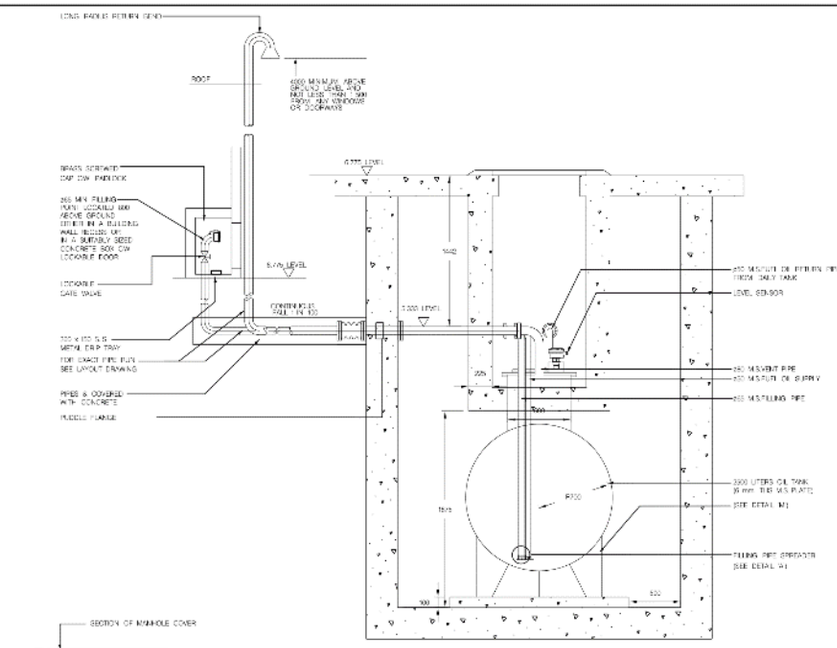
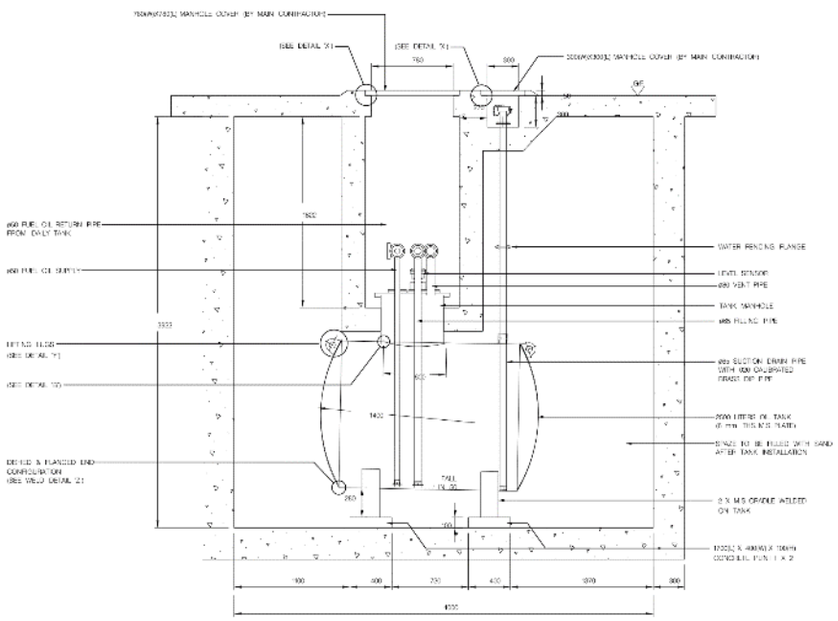
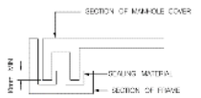
Appendix E.1 Emergency Power Supply System No. 1 (BH 1, BH2, BH3 and BH4)



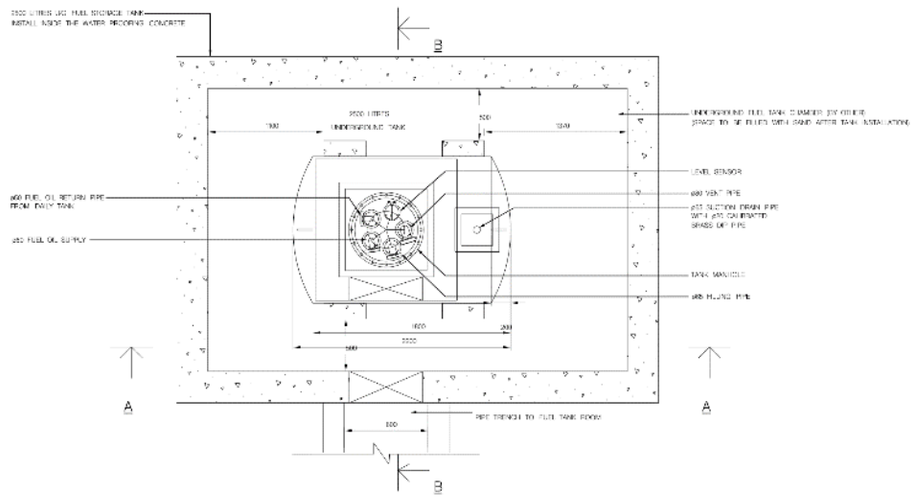
SECTIONAL ELEVATION 'B–B'



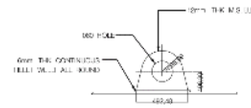
LONGITUDINAL SECTION 'A–A'



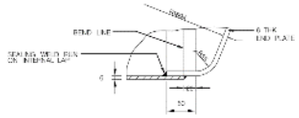
PART SECTION OF SEALED MANHOLE COVER DETAIL X



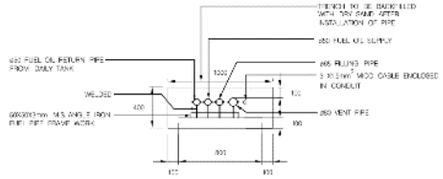
2500 LITRES STORAGE TANK LAYOUT



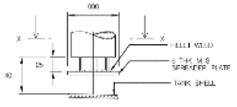
DETAIL Y
N.T.S



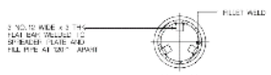
WELD DETAIL Z (DISH END)
N.T.S



TRENCH DETAILS

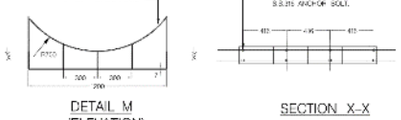


DETAIL A
N.T.S



X – X
N.T.S

BRASS SCREWED CAP
SCALE 1 : 2
(SIMILAR FOR FILLING PIPE)



DETAIL B

DETAIL M
(ELEVATION)

SECTION X–X

CONTRACT P350 – SKYPLAZA BUILDING WORKS AS CONSTRUCTED DRAWING
I hereby certify that the information contained on these "as-constructed" drawings is a true record of the Works as constructed
Signed by : Date : 8/OCT/08
For and on behalf of Chun Wo – Fujita Joint Venture

Rev.	Date	Description	Checked
A	18.12.08	AS CONSTRUCTED	RL
B	30.09.08	REVISED AS PER AAS COMMENT REF CWF/P350/E/08329R	RL
C	17.09.08	REVISED AS PER AAS COMMENT PER CORR350/08029N DATED 09.09.08	RL

Contractor's Signatures for Approval

MAIN CONTRACTOR : FUJITA CWF JOINT-VENTURE

E & M CONTRACTOR : Chun Wo E & M ENGINEERING LIMITED

SOM Aedas JV in association with ARUP 奧雅納工程顧問 Mott Connell 香港 MVA HONG KONG LTD 亞

香港機場管理局 AIRPORT AUTHORITY HONG KONG

Hong Kong International Airport. "AS FITTED"

SKYPLAZA BUILDING WORKS
2500 LITRES UNDERGROUND FUEL STORAGE TANK LAYOUT AND ELEVATION AND DETAILS (ZONE 84

Scale 1 : 50 (IN A0) | Location 84

Drawing No. CWF / P350 / E / 09487 | C

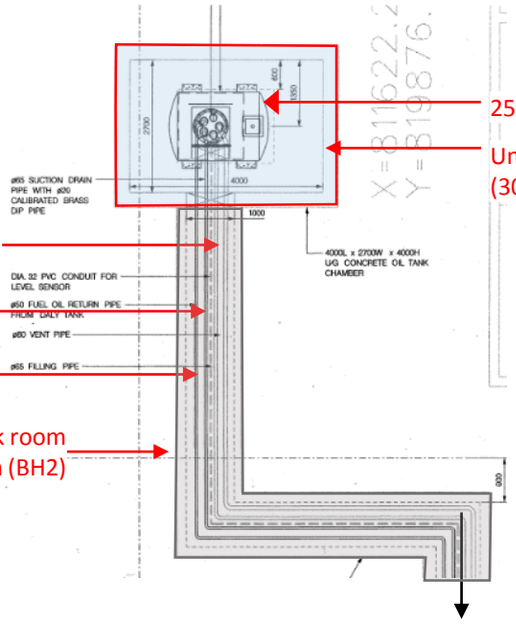
Appendix E.1 Emergency Power Supply System No. 1

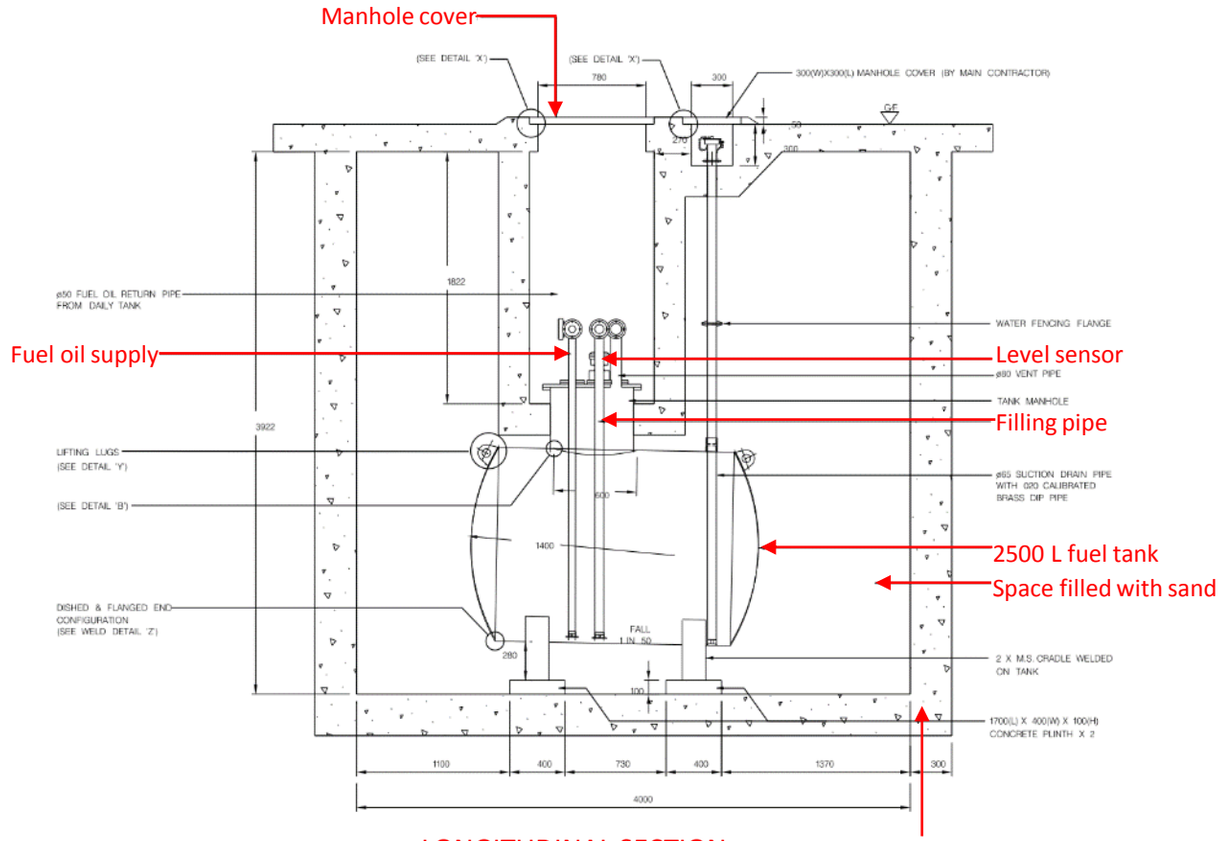
Details of **BH1** (2,500 L **Underground** Fuel Tank) & **BH2** (**Underground** Fuel Pipeline)

Notes

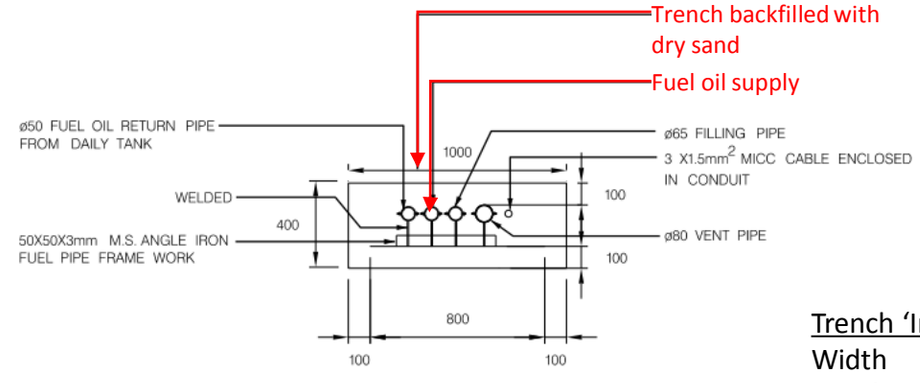
- Underground fuel tank fully encased in 300mm thick concrete chamber
- Space between the tank and the chamber is filled with sand
- Test run of emergency generator conducted monthly (for 30-60 mins)
- Manhole chamber of U/G tank is checked monthly and re-filled approx. every 6 months
- The quantity of fuel inside the tank is automatically monitored by level sensor. No sign of leakage is detected.

PLAN VIEW





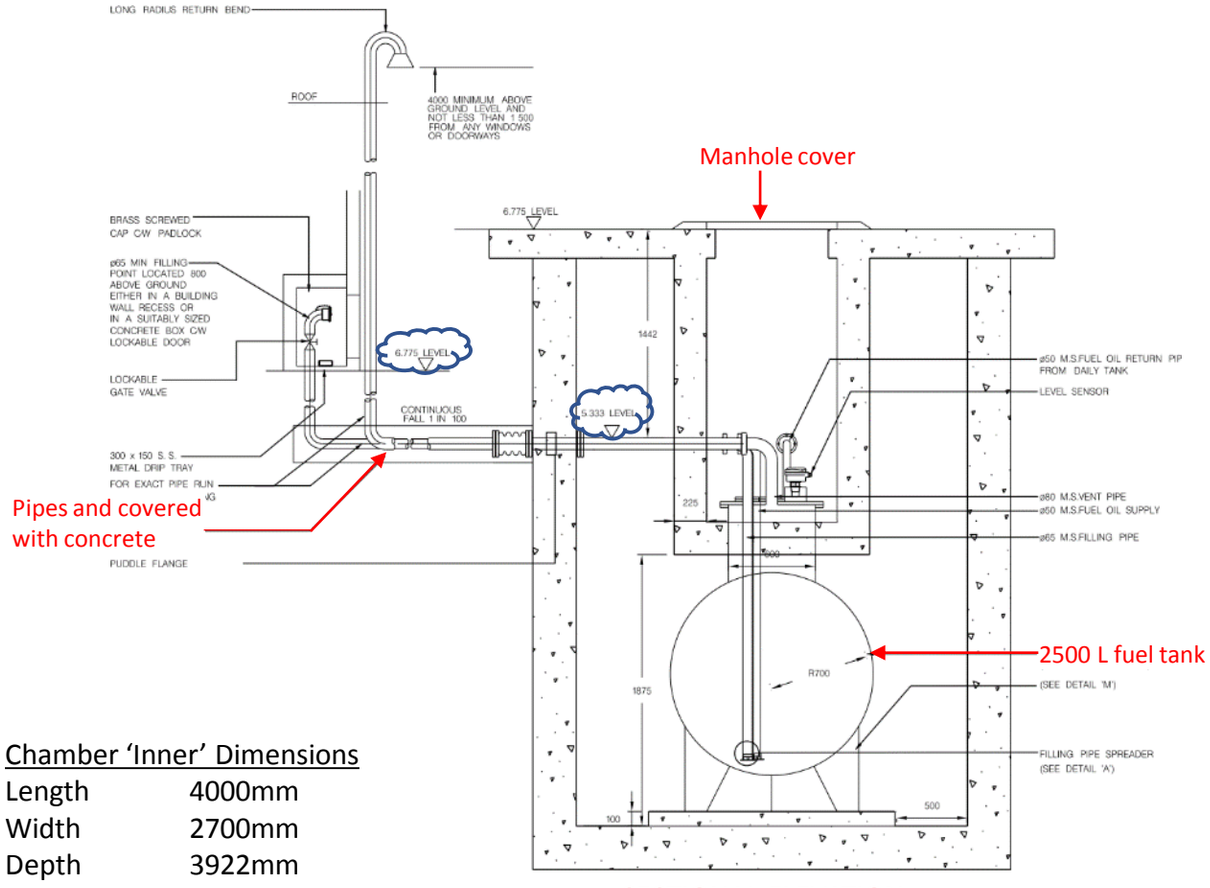
LONGITUDINAL SECTION



TRENCH DETAILS

(Underground Pipeline (BH2) – Approx. 1.5m below ground level)

Trench 'Inner' Dimensions	
Width	800mm
Depth	300mm
Thickness	100mm



SECTIONAL ELEVATION

Chamber 'Inner' Dimensions	
Length	4000mm
Width	2700mm
Depth	3922mm
Thickness	300mm

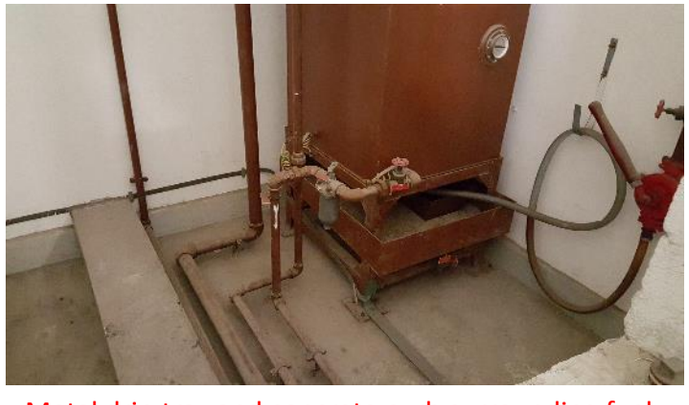
Appendix E.1 Emergency Power Supply System No. 1

Details of **BH3** (450 L **Above-ground** Fuel Tank) & **BH4** (**Above-ground** Emergency Generator)

Fuel pump room

450 L fuel tank (BH3)

Fuel pipes within the fuel tank chamber (leading to generator BH4)



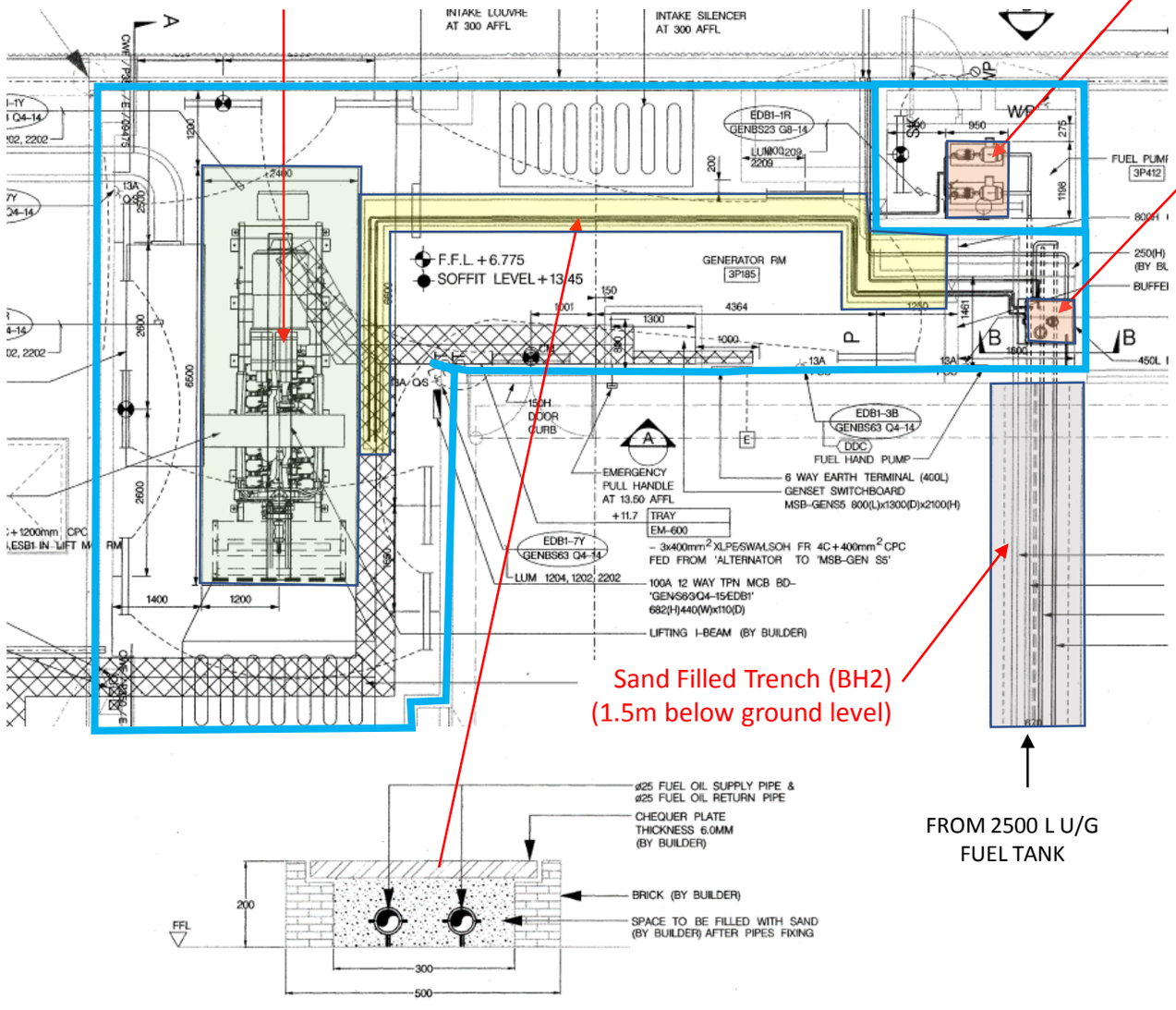
Metal drip tray and concrete curb surrounding fuel tank

PLAN VIEW

Emergency Generator (BH4)
(Mounted on **200mm-thick concrete plinth**)

Fuel pump room

450 L Fuel Tank (BH3)



Sand Filled Trench (BH2)
(1.5m below ground level)

FROM 2500 L U/G FUEL TANK

Supply and return pipe from fuel oil tank
(Sand Filled Trench at floor level)

Fuel pipes to/from 450L fuel tank and the generator

Sand filled trench containing fuel pipes (outside the fuel tank chamber)

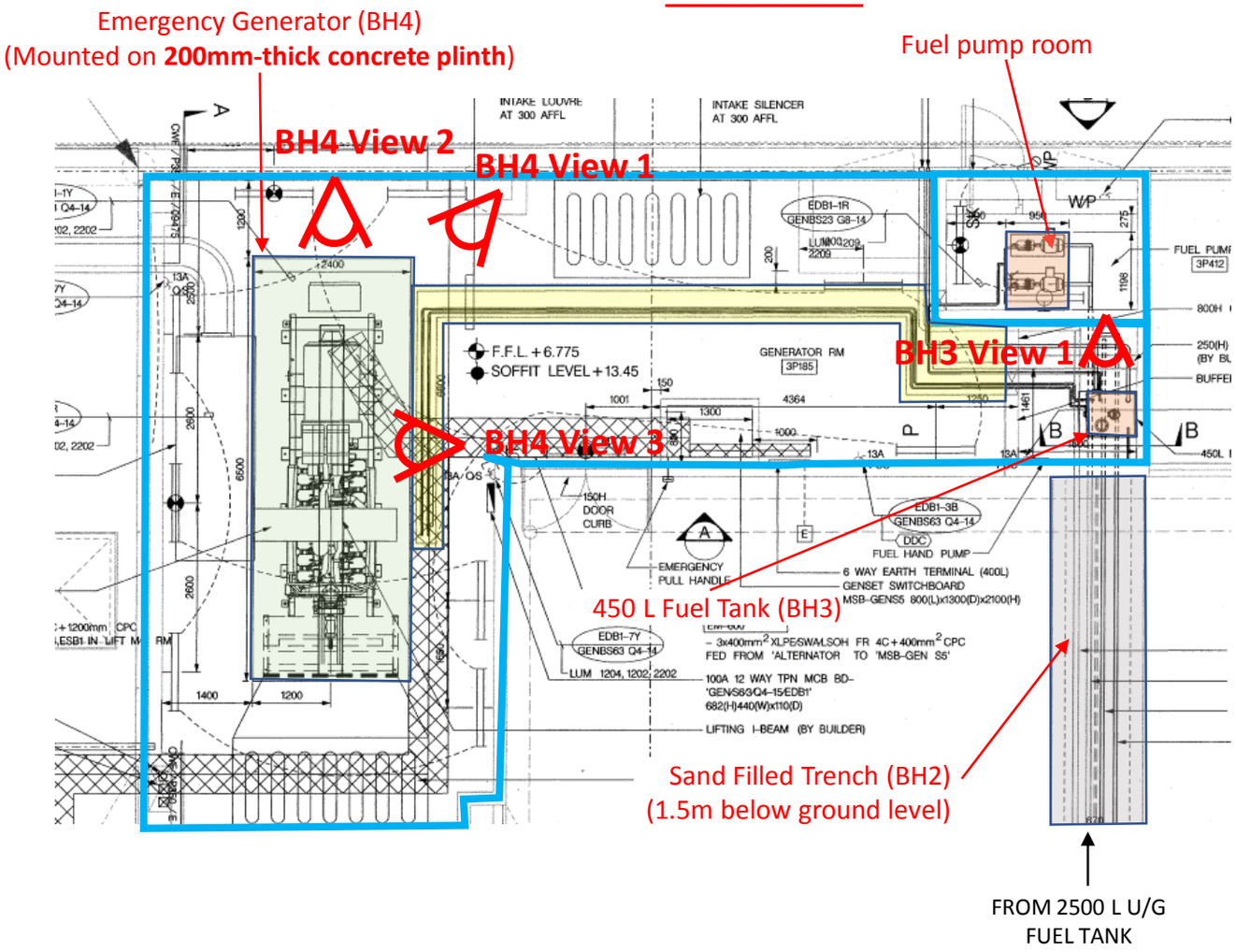
Notes

- Both the fuel tank and generator mounted on intact concrete floor with no any oil stain.
- Fuel tank with metal drip tray and surrounded by concrete curb
- Fuel pipes inside sand filled concrete trench
- Test run of emergency generator conducted monthly (for 30-60 mins)
- Fuel tank is checked monthly and re-filled approx. every 6 months. No fuel leakage was recorded.

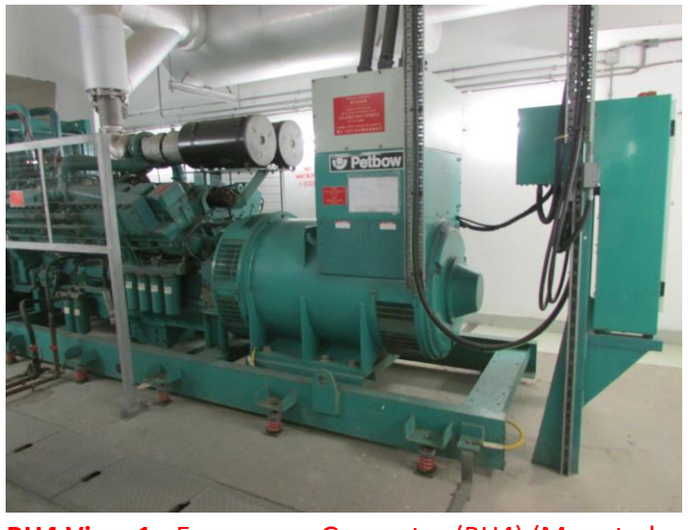
Appendix E.1 Emergency Power Supply System No. 1

Details of **BH3** (450 L **Above-ground** Fuel Tank) & **BH4** (**Above-ground** Emergency Generator)

PLAN VIEW



BH3 View 1 – concrete floor condition underneath 450 L fuel tank



BH4 View 1 - Emergency Generator (BH4) (Mounted on **200mm-thick concrete plinth**)

BH4 View 2 - concrete floor condition underneath Emergency Generator

BH4 View 3 - concrete floor condition underneath Emergency Generator