



SCDF
The Life Saving Force
... for a safer Singapore

SINGAPORE CIVIL DEFENCE FORCE



Date: 16 December 2020

Our Ref: SCDF/HAZ/SRB/PP/1

To All Petroleum & Flammable Material Pipeline Licensees

Dear Sir/Mdm

IMPLEMENTATION OF STANDARD AND SPECIFICATIONS FOR UTILITY SURVEY IN SINGAPORE FOR NEW PETROLEUM & FLAMMABLE MATERIAL PIPELINE SUBMISSIONS

This circular is to inform the industry on the additional requirements of As-built plan submissions for all new Petroleum and Flammable Material (P&FM) pipeline submissions to SCDF.

Background

2. The Standard and Specifications for Utility Survey in Singapore, released by the Singapore Land Authority (SLA) sets the standard for the procedure and practice of utility surveying. This aims to improve the reliability of data and the establishment of a homogeneous utility database that will operate across government agencies, ultimately facilitating the planning and implementation of underground developments.

Requirements for New Submissions

3. To enable the build-up of better records of underground structures, new P&FM pipeline submissions will need to adhere to the Standard and Specifications for Utility Survey in Singapore (SSUS). Plan submissions for P&FM pipeline shall comply with the SSUS from 1 June 2021 onwards. The As-built plans, which shall be certified by a Registered Surveyor with a valid practicing certificate shall be submitted at the Fire Safety Certificate application stage or during the application for P&FM pipeline licence.



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4. The As-built plans shall be provided in either EsriShapefile(.shp), AutoCAD(.dwg) or MicroStation(.dgn) formats.
5. The As-built plans shall provide all the required attributes of the pipeline listed in Table 1 as follows:

S/No	Attribute Name	Attribute domain (Exhaustive)	Requirements
a.	X, Y, Z Coordinates		<p><u>X and Y</u></p> <p>-Easting, Northing.</p> <p>To be captured at:</p> <p>For straight lines: Not exceeding 20 m intervals</p> <p>For curved lines: As determined by the Registered Surveyor Salient points</p> <p><u>Z</u></p> <p>-Invert level with respect to Singapore Height Datum (SHD)</p> <p>-Unit: m</p> <p>To be captured at:</p> <p>For straight lines: Not exceeding 20 m intervals</p> <p>For curved lines: As determined by the Registered Surveyor Salient points</p> <p>Data type: Double (to 3 decimal places)</p>
b.	External Diameter of Pipes		<p>Unit: mm</p> <p>Data Type: Integer</p>



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c.	External Diameter of Concrete Sleeves		
d.	Quality	1,2,3,4,5	(1) ±100 mm (2) ±300 mm (3) ±500 mm (4) Unknown accuracy (5) Trenchless method All new lines/ points must be surveyed to ±100 mm accuracy, unless otherwise permitted by SCDF for special circumstances. Data Type: Integer
e.	Date of Last Survey		Data Type: Date (in DD/MM/YYYY)
f.	Surveyed by		Registered Surveyor Company Name Data Type: String
g.	Status	Abandoned, Existing	Data Type: String
h.	Date of Installation		Data of Installation of pipes Data Type: Date (in DD/MM/YYYY)
i.	Type of Contents		Data Type: String

Table 1

6. Please convey the contents of this circular to members of your Institution/Association/Board. The circular is also available in SCDF website: <http://www.scdf.gov.sg>.

7.. Should you have any enquiries, please feel free to contact:

Miss Claire Yeo @ 68483560 or email at claire_yeo@scdf.gov.sg.

Mr Kelvin Wong Weng Kuin @ 68481484 or email at wong_weng_kuin@scdf.gov.sg.



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Yours faithfully
(transmitted via email)
LTC Lee Kok Chuen
Hazmat Department
for Commissioner
Singapore Civil Defence Force



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