ASSET DATA DICTIONARY DEFINITION DOCUMENT (AD4)
L71167 – GEOTHERMAL LOOP

Document Number: **CRL1-XRL-Z3-ADDSD-CR001- 50552**

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1.0	24/11/14	[redacted]	[redacted]	[redacted]	First Issue
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1 Introduction

Not Applicable

1.1 Asset Details

Class Code:	L71167
Class Name:	Geothermal Loop
Class Lineage:	Construction Products>Services>Supply/Storage/Distribution of Liquids and Gases>Water and General Supply/Storage/Distribution>Pipes and Pipework for Water Supply/Distribution>Geothermal Loops

1.2 Description

Geothermal heating systems are those that utilise the natural warming that occurs underground. Geothermal energy originates from the heat retained within the Earth since the original formation of the planet, from radioactive decay of minerals, and from solar energy absorbed at the surface. The Geothermal Loop is a closed pipe system that carries liquid which is heated by the geothermal source and used for heating in other areas via a heat pump.

Geothermal loops have been installed at some Crossrail sites as part of the ground works but the heating/cooling benefit is for the use of local commercial buildings and not Stations, Shafts or Portals associated with Crossrail.

1.3 Related Functions

All information on the configuration of asset classes (L-Class) to functions is contained within the latest revision of the Asset Data Dictionary Master Configuration document (eB ref: CRL1-XRL-Z3-ADDSD-CR001-50186)

2 Asset Tag Identification Rules

Assets will be identified as required by the Asset Identification Standard (CRL1-XRL-O6-STD-CR001-00031), in the following format:

<LCS Code>-<Function Code>-<Incremental number to ensure uniqueness>

e.g. C125-TSP-12345

Information and guidance on the standard naming convention for all asset classes is contained within the latest revision of the Asset Naming Convention Document (eB ref: CRL1-XR1-Z3-ADDSD-CR001-50413).

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2.1 Example Images

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3 Attributes

3.1 Generic Attributes

All Classes of assets will have a set of Generic Attributes for which data is collected without exception. Full details relating to these assets can be found at:

AD4 – Generic Attributes CRL1-XRL-Z3-ADDSD-CR001-50069

3.2 Class Specific Attributes

Below is a table of the further specific attributes which are associated with this asset class.

Attribute Name	Base Unit or Formula	Value Type (See Below)	Decimal Places (nu Only)	Defined Values List (pd only)	Description
Length (Metres)	Metres	NU	2		Total length of Loop
Depth (Metres)	Metres	NU	2		Total Depth of Loop from surface

pd = Predefined List (Listed Values Only)
nu = Numeric (dp and number format can be stipulated)
ch = Free text (Max 255 Characters)
da = Date (dd-mm-yyyy)
me = Memo (Free text 1GB Limit)

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4 Performance Data

This section is to be used to specify the performance data to be gathered from this Class of asset when in operation. To be populated once the performance measures have been agreed with the Infrastructure Managers.

5 Labelling

Information and guidance on the standard labelling convention for all asset classes is contained within the latest revision of the Asset Naming and Labelling Convention Document (eB ref: CRL1-XR1-Z3-ADDSD-CR001-50413).

6 Other Information

Not Applicable

7 Reference Material

- Asset Data Dictionary Master Configuration document - CRL1-XRL-Z3-ADDSD-CR001-50186
- Asset Identification Standard - CRL1-XRL-O6-STD-CR001-00031
- AD4 – Generic Attributes - CRL1-XRL-Z3-ADDSD-CR001-50069
- <ADD OTHER REFERENCE DOCUMENTS HERE>

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8 Crossrail Technical Approvals

Name	Role	Date
[redacted]	Lead Mechanical & Electrical Plant (MEP) Engineer	03/12/2014

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