ASSET DATA DICTIONARY DEFINITION DOCUMENT (AD4) L21721 – PIPES FOR SEWERS AND DRAINS

Learning Legacy Document

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1 Introduction

1.1 Asset Details

Class Code:	L21721
Class Name:	Pipes for sewers and drains
Class Lineage:	Construction Products>Complete construction entities and components>Civil engineering works products>Public health and environmental engineering products>Sewerage and drainage system products, large scale-municipal-mains> Pipes for surface and foul water drains

1.2 Description

A pipe system designed to transport: effluence, waste, and surface or sub-surface water.

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)

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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. CR076-BAF-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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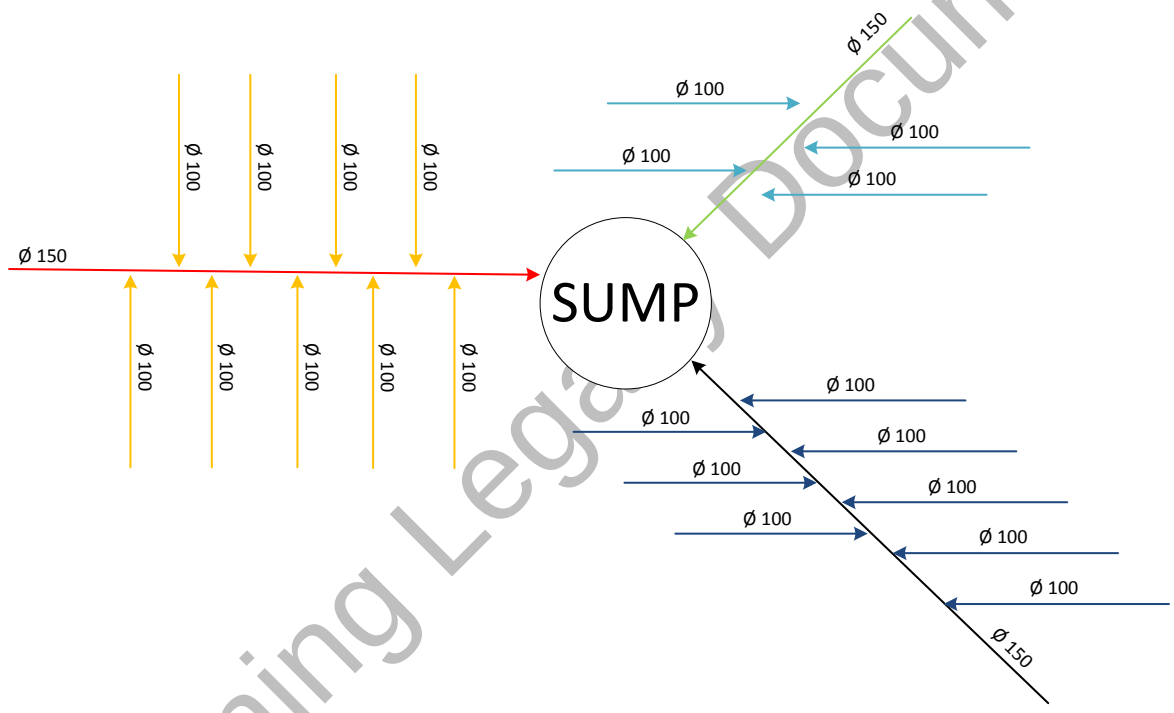
The rules for identifying drainage assets are more complex and require close attention when assigning asset tags. As a general rule, new tag for a drainage service pipe is required under the following circumstance:

- Change in diameter
- Change in material
- Pipes of same material / diameter feeding into a discharge pipe at different locations, each require their own tag

Using the above guidance the following diagram has been developed for the drainage on level -6 of Tottenham Court Road's ETH, using the Goslett Yard Box / Eastern Ticket Hall drawing (C422-LAO-P-DDA-N105_7-32190) provided by the contractor.



From the above 24 drainage pipe assets have been identified.

The contractor is also advised that labelling needs to be carefully considered and that the number of labels needed is likely to be significant higher than the number of asset tags.

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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**
External Diameter (Millimetres)	Millimetres	NU	0		External Diameter of the pipe
Internal Diameter (Millimetres)	Millimetres	NU	0		Internal Diameter of pipe
Length (Metres)	Metres	NU	2		Total length of pipe
Pipe Finish		CH			Surface finish of pipe
Pipe Material Type		PD		Metallic Polymeric Concrete Ceramic	Description of pipe material
Insulated		PD		Yes No	Is the asset insulated?
From Meterage (Metres)	Metres	NU	2		The Meterage (Chainage) of the start point of the asset. To be populated only when the start of the asset is located on track.

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Attribute Name	Base Unit or Formula	Value Type (See Below)	Decimal Places (nu Only)	Defined Values List (pd only)	Description
To Meterage (Metres)	Metres	NU	2		The Meterage (Chainage) of the end point of the asset. To be populated only when the end of the asset is located on track.
LRS Code		PD		C.EB C.EB.CRW5 C.EB.CR1 C.EB.CR7 C.EB.TBC C.WB C.WB.CRW9 C.WB.CRW6 C.WB.CR2 C.WB.CR5 C.WB.TBA C.WB.TBB CNE.EB CNE.WB CSE.EB CSE.EB.CR11 CSE.WB CSE.EB.CR13 CSE.WB.CR15 Non Track	The Crossrail Linear Referencing Standard code (CRL1-XRL-O6-STD-CR001-00026) where the asset is located. When the asset is not located on track then non track should be selected. The LRS codes are as follows: C.EB - Central Section Eastbound C.EB.CRW5 - Crossover between W5 and W4 Points C.EB.CR1 - Crossover between C1 and C4 Points C.EB.CR7 - Crossover between C7 and C8 Points C.EB.TBC - Turnback C C.WB - Central Section Westbound C.WB.CRW9 - Crossover between W9 and W8 Points C.WB.CRW6 - Crossover between W6 and W3 Points C.WB.CR2 - Crossover between C2 and C3 Points C.WB.CR5 - Crossover between C5 and C6 Points C.WB.TBA - Turnback A C.WB.TBB - Turnback B CNE.EB - Central Section North East Spur Eastbound CNE.WB - Central Section North East Spur Westbound CSE.EB - Central Section South East Spur Eastbound CSE.EB.CR11 - Crossover between C11 and C12 Points CSE.WB - Central Section South East Spur Westbound CSE.EB.CR13 - Crossover between C13 and C14 Points CSE.WB.CR15 - Crossover between C15 and C16 Points Non Track - Non Track Assets
Effluent Type		PD		Foul/sewage Non-Foul	Foul/sewage – Includes water from toilets, sinks and baths but does not include surface water unless it has been in contact with foul water Non-Foul – Surface water and other drainage not contaminated by sewage or chemically contaminated water

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Attribute Name	**Base Unit or Formula**	**Value Type** (See Below)	**Decimal Places** (nu Only)	**Defined Values List** (pd only)	**Description**
Discharge Location		CH			The location description of where the effluent/waste discharges to e.g. Road name, River name, Brook name, etc.
Discharges To		PD		Atmosphere Manhole Sewer Sump Tank Watercourse	The equipment the effluent/waste discharges into
Emergency Hose (PD)		PD		Yes No	Is an emergency hose connection fitted to the pipework? This usually only applies to discharge pipework.

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

- Each pipe will be labelled in accordance with British Standard 1710.
- Asset Data Dictionary Master Configuration - CRL1-XRL-Z3-ADDSD-CR001-50186
- Asset Identification Standard - CRL1-XRL-O6-STD-CR001-00031
- AD4 – Generic Attributes - CRL1-XRL-Z3-ADDSD-CR001-50069
- Asset Naming Convention Document - CRL1-XR1-Z3-ADDSD-CR001-50413

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8 Crossrail Technical Approvals

Name	Role	Date
[redacted]	Lead Mechanical & Electrical Plant (MEP) Engineer	19-Sep-2014

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