ASSET DATA DICTIONARY DEFINITION DOCUMENT (AD4)
L328 – MASONRY STRUCTURE

Learning Legacy Document

Document Number: **CRL1-XRL-Z3-ADDSD-CR001-50638**

Document Revision: **9.0**

Document History:

Revision:	Date:	Prepared by:	Checked by:	Authorised by:	Reason for Issue:
1.0	22/01/15	[redacted]	[redacted]	[redacted]	First Issue
2.0	27-Aug-2015	[redacted]	[redacted]	[redacted]	Labelling Section Updated
3.0	28-Jan-2016	[redacted]	[redacted]	[redacted]	Attribute Value Added
4.0	27-Apr-2016	[redacted]	[redacted]	[redacted]	Asset Tag Identification Rules updated
5.0	11-May-2016	[redacted]	[redacted]	[redacted]	Attributes added
6.0	30-Aug-2016	[redacted]	[redacted]	[redacted]	Attribute Added
7.0	02-Feb-2017	[redacted]	[redacted]	[redacted]	Attribute Added
8.0	20-Apr-2017	[redacted]	[redacted]	[redacted]	Attribute Replaced
9.0	25-Apr-2017	[redacted]	[redacted]	[redacted]	LRS Codes Updated

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1 Introduction

Not Applicable

1.1 Asset Details

Class Code:	L328
Class Name:	Masonry Structure
Class Lineage:	Construction Products>Structural and Space Division Products>Masonry>Masonry Structure

1.2 Description

A Masonry Structure is constructed from individual units laid and bound together by mortar. The common materials uses in a masonry structure are brick, concrete block, stone, marble, granite, etc. This class specifically relates to clay brick and concrete block structures.

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).

Due to buildings typically having varied and complex internal structures identification of individual assets needs to be undertaken in a methodical way to ensure repeatability and correct application of these requirements.

For each level of a structure all the columns and walls within a level are viewed as part of that level. The floor slab and any reinforcing beams associated with this floor slab will be considered as part of the level above (even though inspection activities for these assets may be undertaken from the level below).

The following process should be followed to define Building Structure assets:

- For each level of a Building Structure a 2 metre x 2 metre virtual grid will be defined that will be used for the identification of structural elements such as walls, columns and beams

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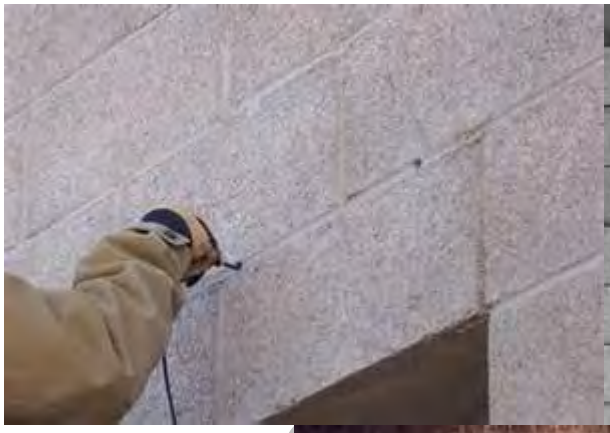
- Facing the normal direction of travel from west to east for Crossrail, the ‘origin’ will be the front left hand corner of the structure
- The ‘x’ direction vertices will be parallel to the direction of travel and will be identified starting from the left working to the right ‘AA’, ‘AB’, ‘AC’ etc.
- The ‘y’ direction vertices will be perpendicular to the direction of travel and will be identified starting from the ‘front’ working back as ‘01’, ‘02’, ‘03’, ‘04’ etc.
- Other Components will be defined based upon their location within this grid, for example: o BOS-L6-WESTERN TICKET HALL – FRAME AC05-AE05

Non building/structure assets

For Masonry Structures the 'non building/structure assets' mentioned in the AD4 include Walls, Arches, Free Standing Walls, Shafts and Tunnels. If these Masonry Structure types are constructed within the station environment then they should be recorded as individual assets.

Assets should be named based upon the location, function and duty of the asset.

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
Structure Material		PD		Concrete Block Clay Brick Other	Type of material used in the construction of the structure
Height (Metres)	Metres	NU	2		The vertical height of the asset
Length (Metres)	Metres	NU	2		The horizontal length of the asset
Thickness (Millimetres)	Millimetres	NU	0		The thickness of the asset, if relevant
Structure Type		PD		Wall Tunnel Shaft Arch Free Standing Wall	Type of structure using masonry as a construction form e.g. Wall, Tunnel, Shaft, etc.
Supported by Windposts		PD		Yes No	Are Windposts fitted to the wall for extra support
Load Bearing		PD		Yes No	Is the wall a load bearing wall?
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
Structurally Critical		PD		Yes No	The component is integral to the overall asset's structural integrity

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

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8 Crossrail Technical Approvals

Name	Role	Date
[redacted]	Civil & Structural Engineer	

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