Appendix E As-built Requirements for Stormwater Systems

E01: SW Single Sump (Point)

E03: SW Corner Sump (Point)

E17:SW Main Pipes (Line)

E09 to E13: SW Manholes (Point)

E06: SW Inspection Chamber (Point)

E17: SW Main Pipes (Line)

E02: SW Double Sump (Point)

SW.SS-11132-08 (New)

DN225

SW.IC-11132-04 (New)

SW.SS-11132-07 (New)

DN225

SWMH11132-03 (New)

DN225

SW.DS-11132-14 (New) Solid Lid

DN225

E23: SW Lateral Junction (Point)

E32: SW Headwall Inlet/Outlet (Point)

E01: SW Single Sump (Point)

E19: SW Lateral (Line)

E17: SW Main Pipes (Line)

E32: SW Headwall Inlet/Outlet (Point)

E31: SW Pipe Culvert (Line)

River

E33: SW Stormwater Restriction `Weir' (Point)

E29: SW Outfall/Outlet (Point)

E32: SW Headwall Inlet/Outlet (Point)

Stormwater – Overview

As-Built requirements (SW)			

Name	**SW Single Sump (Point)**	●
Point Type	**E01** "Point Asset Inputs"	

E01: SW Single Sump

CAT Column	SAG Description	Valid Values
A	Type of Point Feature	E01
B	Type of Sump	Select from pick list: domSwInletType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Centre of Structure in Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Centre of Structure in Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	RL on lowest corner of lid - (m)	data - Decimal Number (6 Chars, 3 Decimals)
I	RL at base of pit (lowest point) - (m)	data - Decimal Number (6 Chars, 3 Decimals)
J	Width and length of pit (e.g. 600x800) or diameter of pit - (mm)	data - Number
K	Date of commission	data - Date (dd/mm/yyyy)
L	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
N	Date of 'survey start'	data - Date (dd/mm/yyyy)
O	Style of sump lid	Select from pick list: domAccessLidStyle
P	Leave Blank	Leave Blank
Q	Manufacturer of asset	Select from pick list: domManufacturer
R	Construction material of sump	Select from pick list: domAccessConstruction
S	Type of security on sump access	Select from pick list: domAccessSecurity
T	Pit angle - orientation of inner structure to nearest 5 degrees (rectangular pits only) - (degrees)	data - Number

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT

See Appendix C.1.2 for a CAT example.

Centre of Structure X Y   **Sump RL Z**

SINGLE SUMP
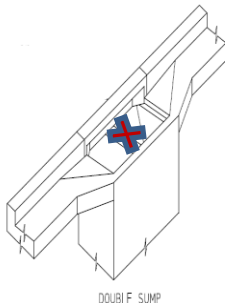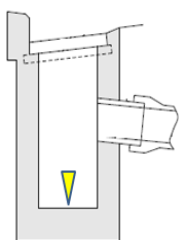
Lowest Corner Lid Z

As-Built requirements (SW)		

Name — SW Double Sump (Point) ●

Point Type — **E02** "Point Asset Inputs"

CAT Column	SAG Description	Valid Values
A	Type of Point Feature	E02
B	Type of Sump	Select from pick list: domSwInletType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Centre of Structure in Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Centre of Structure in Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	RL on lowest corner of lid - (m)	data - Decimal Number (6 Chars, 3 Decimals)
I	RL at base of pit (lowest point) - (m)	data - Decimal Number (6 Chars, 3 Decimals)
J	Width and length of pit (e.g. 600x800) or diameter of pit - (mm)	data - Number
K	Date of commission	data - Date (dd/mm/yyyy)
L	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
N	Date of 'survey start'	data - Date (dd/mm/yyyy)
O	Style of sump lid	Select from pick list: domAccessLidStyle
P	Leave Blank	Leave Blank
Q	Manufacturer of asset	Select from pick list: domManufacturer
R	Construction material of sump	Select from pick list: domAccessConstruction
S	Type of security on sump access	Select from pick list: domAccessSecurity
T	Pit angle - orientation of inner structure to nearest 5 degrees (rectangular pits only) - (degrees)	data - Number

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT

See Appendix C.1.2 for a CAT example.
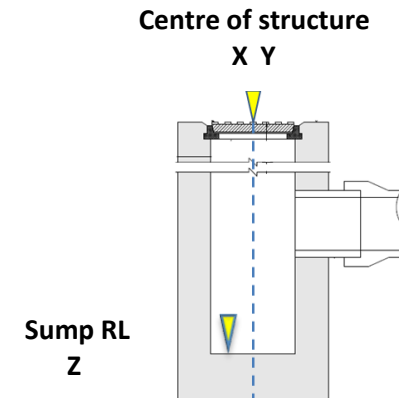
Centre of structure
X Y

Sump RL
Z

DOUBLE SUMP

Lowest Corner Lid Z

E02: SW Double Sump

As-Built requirements (SW)		

Name	**SW Corner Sump (Point)**	●
Point Type	**E03** "Point Asset Inputs"	

E03: SW Corner Sump

CAT Column	SAG Description	Valid Values
A	Type of Point Feature	E03
B	Type of Sump	Select from pick list: domSwInletType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Centre of Structure in Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Centre of Structure in Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	RL on lowest corner of lid - (m)	data - Decimal Number (6 Chars, 3 Decimals)
I	RL at base of pit (lowest point) - (m)	data - Decimal Number (6 Chars, 3 Decimals)
J	Width and length of pit (e.g. 600x800) or diameter of pit - (mm)	data - Number
K	Date of commission	data - Date (dd/mm/yyyy)
L	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
N	Date of 'survey start'	data - Date (dd/mm/yyyy)
O	Style of sump lid	Select from pick list: domAccessLidStyle
P	Leave Blank	Leave Blank
Q	Manufacturer of asset	Select from pick list: domManufacturer
R	Construction material of sump	Select from pick list: domAccessConstruction
S	Type of security on sump access	Select from pick list: domAccessSecurity
T	Pit angle - orientation of inner structure to nearest 5 degrees (rectangular pits only) - (degrees)	data - Number

Centre of structure X Y

Sump RL Z

Lowest Corner Lid Z

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT
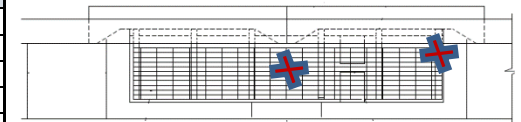See Appendix C.1.2 for a CAT example.

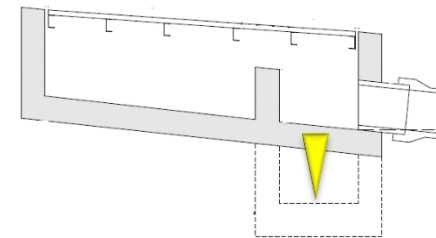| As-Built requirements (SW)		

Name — SW Triple Sump (Point) ⬤

Point Type — E04 "Point Asset Inputs"

E04: SW Triple Sump

CAT Column	SAG Description	Valid Values
A	Type of Point Feature	E04
B	Type of Sump	Select from pick list: domSwInletType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Centre of Structure in Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Centre of Structure in Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	RL on lowest corner of lid - (m)	data - Decimal Number (6 Chars, 3 Decimals)
I	RL at base of pit (lowest point) - (m)	data - Decimal Number (6 Chars, 3 Decimals)
J	Width and length of pit (e.g. 600x800) or diameter of pit - (mm)	data - Number
K	Date of commission	data - Date (dd/mm/yyyy)
L	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
N	Date of 'survey start'	data - Date (dd/mm/yyyy)
O	Style of sump lid	Select from pick list: domAccessLidStyle
P	Leave Blank	Leave Blank
Q	Manufacturer of asset	Select from pick list: domManufacturer
R	Construction material of sump	Select from pick list: domAccessConstruction
S	Type of security on sump access	Select from pick list: domAccessSecurity
T	Pit angle - orientation of inner structure to nearest 5 degrees (rectangular pits only) - (degrees)	data - Number

Centre of structure
X Y

Lowest Corner Lid Z

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT

See Appendix C.1.2 for a CAT example.

As-Built requirements (SW)		

E05: SW Hillside Sump

Name	SW Hillside Sump (Point)	
Point Type	E05 "Point Asset Inputs"	●

CAT Column	SAG Description	Valid Values
A	Type of Point Feature	E05
B	Type of Sump	Select from pick list: domSwInletType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Centre of Structure in Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Centre of Structure in Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	RL on lowest corner of lid - (m)	data - Decimal Number (6 Chars, 3 Decimals)
I	RL at base of pit (lowest point) - (m)	data - Decimal Number (6 Chars, 3 Decimals)
J	Width and length of pit (e.g. 600x800) or diameter of pit - (mm)	data - Number
K	Date of commission	data - Date (dd/mm/yyyy)
L	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
N	Date of 'survey start'	data - Date (dd/mm/yyyy)
O	Style of sump lid	Select from pick list: domAccessLidStyle
P	Leave Blank	Leave Blank
Q	Manufacturer of asset	Select from pick list: domManufacturer
R	Construction material of sump	Select from pick list: domAccessConstruction
S	Type of security on sump access	Select from pick list: domAccessSecurity
T	Pit angle - orientation of inner structure to nearest 5 degrees (rectangular pits only) - (degrees)	data - Number

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT
See Appendix C.1.2 for a CAT example.

**Centre of structure
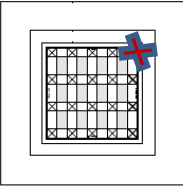X Y**   **Lowest Corner
Lid Z**

PLAN

**Sump RL
Z**

	As-Built requirements (SW)		
Name	**SW Inspection Chamber (Point)**		●
Point Type	**E06** "Point Asset Inputs"		

Centre of structure
X Y

CAT Column	SAG Description	Valid Values
A	Type of Point Feature	E06
B	Type of Manhole or Access	Inspection Chamber
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Centre of Structure in Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Centre of Structure in Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	RL on lowest corner of lid	data - Decimal Number (6 Chars, 3 Decimals)
I	RL at base of pit (lowest point) - (m)	data - Decimal Number (6 Chars, 3 Decimals)
J	Width and length of pit (e.g. 600x800) or diameter of pit - (mm)	data - Number
K	Date of commission	data - Date (dd/mm/yyyy)
L	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
N	Date of 'survey start'	data - Date (dd/mm/yyyy)
O	Style of access lid	Select from pick list: domAccessLidStyle
P	Shape of access lid	Select from pick list: domAccessLidShape
Q	Manufacturer of asset	Select from pick list: domManufacturer
R	Construction material	Select from pick list: domAccessConstruction
S	Type of security on access	Select from pick list: domAccessSecurity
T	Pit angle - orientation of inner structure to nearest 5 degrees (rectangular pits only) - (degrees)	data - Number
U	Treatment material for refurbished manholes	Select from pick list: domAccessTreatmentType

E06: SW Inspection Chamber

Flow ← ← **Flow**

Lowest Corner Lid Z

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT
Col T: leave blank/unchanged for circular chambers
Col U: leave blank/unchanged if N/A
See Appendix C.1.1 for a CAT example.
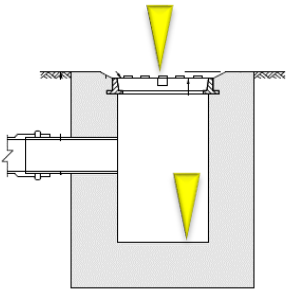
As-Built requirements (SW)				

Name — SW Small Trafficable Sump (Point)

Point Type — E07 "Point Asset Inputs"

CAT Column	SAG Description	Valid Values
A	Type of Point Feature	E07
B	Type of Sump	Select from pick list: domSwInletType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Centre of Structure in Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Centre of Structure in Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	RL on lowest corner of lid - (m)	data - Decimal Number (6 Chars, 3 Decimals)
I	RL at base of pit (lowest point) - (m)	data - Decimal Number (6 Chars, 3 Decimals)
J	Width and length of pit (e.g. 600x800) or diameter of pit - (mm)	data - Number
K	Date of commission	data - Date (dd/mm/yyyy)
L	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
N	Date of 'survey start'	data - Date (dd/mm/yyyy)
O	Style of sump lid	Select from pick list: domAccessLidStyle
P	Leave Blank	Leave Blank
Q	Manufacturer of asset	Select from pick list: domManufacturer
R	Construction material of sump	Select from pick list: domAccessConstruction
S	Type of security on sump access	Select from pick list: domAccessSecurity
T	Pit angle - orientation of inner structure to nearest 5 degrees (rectangular pits only) - (degrees)	data - Number

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT

See Appendix C.1.2 for a CAT example.

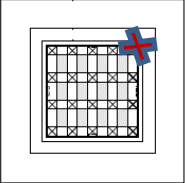**Lowest Corner Lid Z**

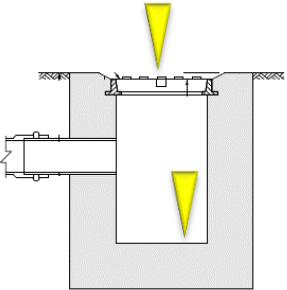**Centre of structure X Y**

PLAN   CROSS SECTION

Sump RL Z

E07: SW Small Trafficable Sump

	As-Built requirements (SW)		

Name — SW House Drain Sump (Point)

Point Type — E08 "Point Asset Inputs"

E08: SW House Drain Sump

CAT Column	SAG Description	Valid Values
A	Type of Point Feature	E08
B	Type of Sump	Select from pick list: domSwInletType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Centre of Structure in Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Centre of Structure in Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	RL on lowest corner of lid - (m)	data - Decimal Number (6 Chars, 3 Decimals)
I	RL at base of pit (lowest point) - (m)	data - Decimal Number (6 Chars, 3 Decimals)
J	Width and length of pit (e.g. 600x800) or diameter of pit - (mm)	data - Number
K	Date of commission	data - Date (dd/mm/yyyy)
L	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
N	Date of 'survey start'	data - Date (dd/mm/yyyy)
O	Style of sump lid	Select from pick list: domAccessLidStyle
P	Leave Blank	Leave Blank
Q	Manufacturer of asset	Select from pick list: domManufacturer
R	Construction material of sump	Select from pick list: domAccessConstruction
S	Type of security on sump access	Select from pick list: domAccessSecurity
T	Pit angle - orientation of inner structure to nearest 5 degrees (rectangular pits only) - (degrees)	data - Number

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT
See Appendix C.1.2 for a CAT example.

Lowest Corner Lid Z

Centre of structure X Y

PLAN

CROSS SECTION

Sump RL Z

As-Built requirements (SW)		

	Name	**SW Square Manhole Vented (Point)**	●
	Point Type	**E09** "Point Asset Inputs"	

E09: SW Square Manhole Vented

CAT Column	SAG Description	Valid Values
A	Type of Point Feature	E09
B	Type of Manhole or Access	Select from pick list: domSwAccessType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Centre of Structure in Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Centre of Structure in Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	RL on lowest corner of lid	data - Decimal Number (6 Chars, 3 Decimals)
I	RL at base of pit (lowest point) - (m)	data - Decimal Number (6 Chars, 3 Decimals)
J	Width and length of pit (e.g. 600x800) or diameter of pit - (mm)	data - Number
K	Date of commission	data - Date (dd/mm/yyyy)
L	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
N	Date of 'survey start'	data - Date (dd/mm/yyyy)
O	Style of access lid	Select from pick list: domAccessLidStyle
P	Shape of access lid	Select from pick list: domAccessLidShape
Q	Manufacturer of asset	Select from pick list: domManufacturer
R	Construction material	Select from pick list: domAccessConstruction
S	Type of security on access	Select from pick list: domAccessSecurity
T	Pit angle - orientation of inner structure to nearest 5 degrees (rectangular pits only) - (degrees)	data - Number
U	Treatment material for refurbished manholes	Select from pick list: domAccessTreatmentType

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT
Col U: leave blank/unchanged if N/A
See Appendix C.1.1 for a CAT example.

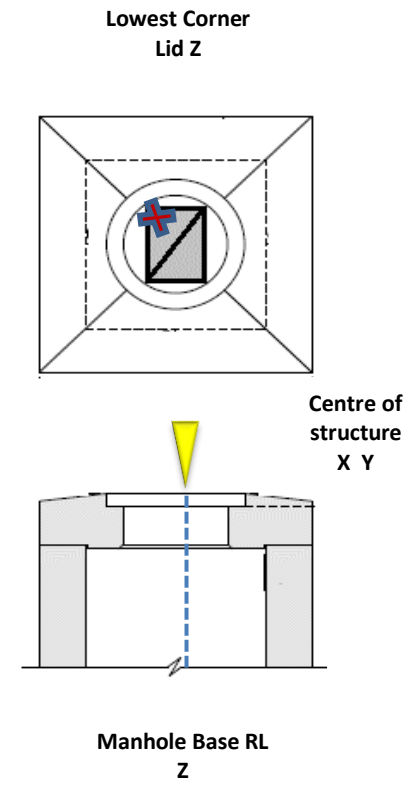**Lowest Corner Lid Z**

Centre of structure X Y

Manhole Base RL Z

As-Built requirements (SW)		

Name	**SW Square Manhole Non Vented (Point)**	●
Point Type	**E10** "Point Asset Inputs"	

CAT Column	SAG Description	Valid Values
A	Type of Point Feature	E10
B	Type of Manhole or Access	Select from pick list: domSwAccessType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Centre of Structure in Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Centre of Structure in Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	RL on lowest corner of lid	data - Decimal Number (6 Chars, 3 Decimals)
I	RL at base of pit (lowest point) - (m)	data - Decimal Number (6 Chars, 3 Decimals)
J	Width and length of pit (e.g. 600x800) or diameter of pit - (mm)	data - Number
K	Date of commission	data - Date (dd/mm/yyyy)
L	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
N	Date of 'survey start'	data - Date (dd/mm/yyyy)
O	Style of access lid	Select from pick list: domAccessLidStyle
P	Shape of access lid	Select from pick list: domAccessLidShape
Q	Manufacturer of asset	Select from pick list: domManufacturer
R	Construction material	Select from pick list: domAccessConstruction
S	Type of security on access	Select from pick list: domAccessSecurity
T	Pit angle - orientation of inner structure to nearest 5 degrees (rectangular pits only) - (degrees)	data - Number
U	Treatment material for refurbished manholes	Select from pick list: domAccessTreatmentType

E10: SW Square Manhole Non Vented

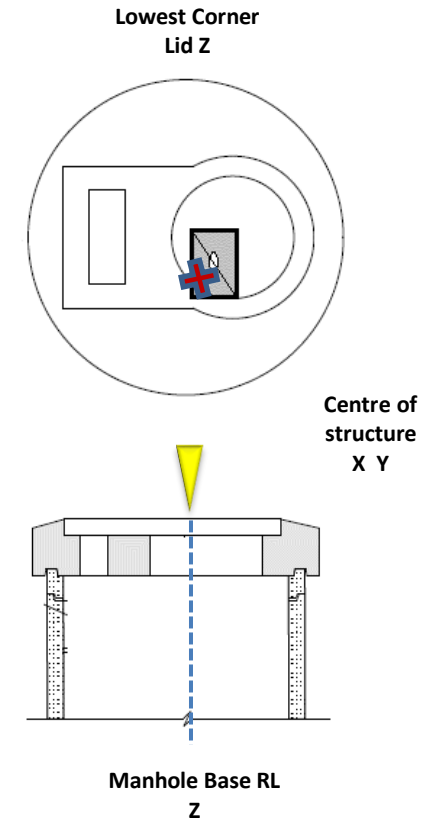| Additional Information |
|---|
| *All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT
Col U: leave blank/unchanged if N/A
See Appendix C.1.1 for a CAT example. |

Lowest Corner Lid Z

Centre of structure X Y

Manhole Base RL Z

As-Built requirements (SW)		

	Name	**SW Circular Manhole Vented (Point)** ⬤
	Point Type	**E11** "Point Asset Inputs"

	CAT Column	SAG Description	Valid Values
E11: SW Circular Manhole Vented	A	Type of Point Feature	E11
	B	Type of Manhole or Access	Select from pick list: domSwAccessType
	C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
	D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
	E	Asset Unique Identifier	data - Text (100 Characters)
	F	Centre of Structure in Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
	G	Centre of Structure in Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
	H	RL on lowest corner of lid	data - Decimal Number (6 Chars, 3 Decimals)
	I	RL at base of pit (lowest point) - (m)	data - Decimal Number (6 Chars, 3 Decimals)
	J	Width and length of pit (e.g. 600x800) or diameter of pit - (mm)	data - Number
	K	Date of commission	data - Date (dd/mm/yyyy)
	L	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
	M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
	N	Date of 'survey start'	data - Date (dd/mm/yyyy)
	O	Style of access lid	Select from pick list: domAccessLidStyle
	P	Shape of access lid	Select from pick list: domAccessLidShape
	Q	Manufacturer of asset	Select from pick list: domManufacturer
	R	Construction material	Select from pick list: domAccessConstruction
	S	Type of security on access	Select from pick list: domAccessSecurity
	T	Pit angle - orientation of inner structure to nearest 5 degrees (rectangular pits only) - (degrees)	data - Number
	U	Treatment material for refurbished manholes	Select from pick list: domAccessTreatmentType

Additional Information
*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT Col T: leave blank/unchanged for circular manholes Col U: leave blank/unchanged if N/A See Appendix C.1.1 for a CAT example.

Lowest Corner Lid Z

Centre of structure X Y

Manhole Base RL Z

As-Built requirements (SW)		

Name — SW Circular Manhole Non Vented (Point)

Point Type — E12 "Point Asset Inputs"

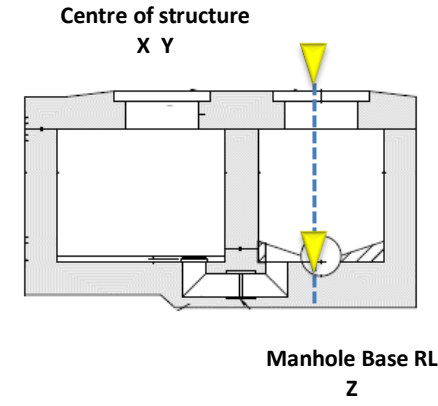| CAT Column	SAG Description	Valid Values
A	Type of Point Feature	E12
B	Type of Manhole or Access	Select from pick list: domSwAccessType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Centre of Structure in Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Centre of Structure in Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	RL on lowest corner of lid	data - Decimal Number (6 Chars, 3 Decimals)
I	RL at base of pit (lowest point) - (m)	data - Decimal Number (6 Chars, 3 Decimals)
J	Width and length of pit (e.g. 600x800) or diameter of pit - (mm)	data - Number
K	Date of commission	data - Date (dd/mm/yyyy)
L	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
N	Date of 'survey start'	data - Date (dd/mm/yyyy)
O	Style of access lid	Select from pick list: domAccessLidStyle
P	Shape of access lid	Select from pick list: domAccessLidShape
Q	Manufacturer of asset	Select from pick list: domManufacturer
R	Construction material	Select from pick list: domAccessConstruction
S	Type of security on access	Select from pick list: domAccessSecurity
T	Pit angle - orientation of inner structure to nearest 5 degrees (rectangular pits only) - (degrees)	data - Number
U	Treatment material for refurbished manholes	Select from pick list: domAccessTreatmentType

E12: SW Circular Manhole Non Vented

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT
Col T: leave blank/unchanged for circular manholes
Col U: leave blank/unchanged if N/A
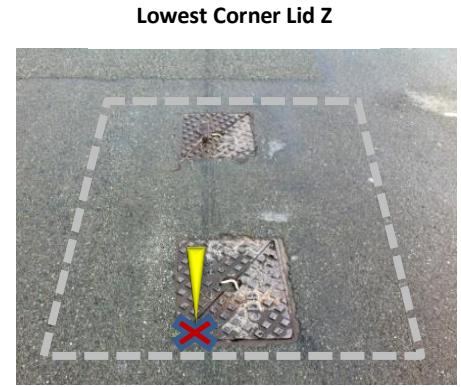See Appendix C.1.1 for a CAT example.

Lowest Corner Lid Z

Centre of structure X Y

Manhole Base RL Z

As-Built requirements (SW)			

Name	SW Flush Manhole (Point)		
Point Type	**E13** "Point Asset Inputs"		

Lowest Corner Lid Z

CAT Column	SAG Description	Valid Values
A	Type of Point Feature	E13
B	Type of Manhole or Access	Select from pick list: domSwAccessType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Centre of Structure in Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Centre of Structure in Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	RL on lowest corner of lid	data - Decimal Number (6 Chars, 3 Decimals)
I	RL at base of pit (lowest point) - (m)	data - Decimal Number (6 Chars, 3 Decimals)
J	Width and length of pit (e.g. 600x800) or diameter of pit - (mm)	data - Number
K	Date of commission	data - Date (dd/mm/yyyy)
L	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
N	Date of 'survey start'	data - Date (dd/mm/yyyy)
O	Style of access lid	Select from pick list: domAccessLidStyle
P	Shape of access lid	Select from pick list: domAccessLidShape
Q	Manufacturer of asset	Select from pick list: domManufacturer
R	Construction material	Select from pick list: domAccessConstruction
S	Type of security on access	Select from pick list: domAccessSecurity
T	Pit angle - orientation of inner structure to nearest 5 degrees (rectangular pits only) - (degrees)	data - Number
U	Treatment material for refurbished manholes	Select from pick list: domAccessTreatmentType

E13: SW Flush Manhole

Centre of structure X Y

Manhole Base RL Z

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT
Col T: leave blank/unchanged for circular manholes
Col U: leave blank/unchanged if N/A
See Appendix C.1.1 for a CAT example.

As-Built requirements (SW)		

Name — SW Main Pipes (Line)

Line Type — **E17** "Line Asset Inputs"

Centre of structure
X Y and Z

E17: SW Main Pipes

CAT Column	SAG Description	Valid Values
A	Type of Line Feature	E17
B	Type of Pipe	Select from pick list: domSwPipeType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Line Vertex Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Line Vertex Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	Invert Level at Vertex - (m)	data - Decimal Number (6 Chars, 3 Decimals)
I	Number of Vertex (point along line)	data - Number
J	Material of pipe	Select from pick list: domPipeConstruction
K	Nominal diameter in mm - (mm)	Select from pick list: domPipeNominalDiameter
L	At Node - Asset Unique Identifier	data - Text (50 Characters)
M	To Node - Asset Unique Identifier	data - Text (50 Characters)
N	Manufacturer of asset	Select from pick list: domManufacturer
O	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
P	Pressure class (PN)	Select from pick list: domPipePressureClass
Q	Stiffness rating (SN)	Select from pick list: domPipeStiffnessClass
R	Concrete Load Class	Select from pick list: domPipeLoadClass
S	Date of commission	data - Date (dd/mm/yyyy)
T	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
U	Date of 'survey start'	data - Date (dd/mm/yyyy)
V	Shape of pipe	Select from pick list: domSwPipeShape
W	Leave Blank	Leave Blank
X	Method by which the pipe was installed	Select from pick list: domPipeInstallationMethod

At Pit
X – Y and Z

To Pit
X – Y and Z

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT

All bends, start/end points to be surveyed. Create one CAT row per surveyed point. This feature requires at least two row entries.

Col I: enter number of vertex along line starting with the downstream end

See Appendix C.2.1 for a CAT example.

As-Built requirements (SW)

Name — SW Lateral (Line)
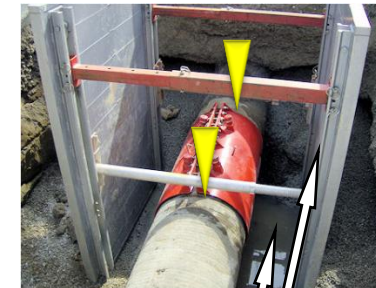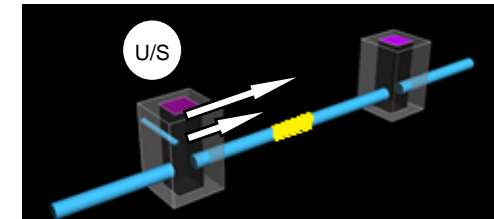
Line Type — E19 "Line Asset Inputs"

E19: SW Lateral

CAT Column	SAG Description	Valid Values
A	Type of Line Feature	E19
B	Type of Lateral	Select from pick list: domSwLateralType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Line Vertex Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Line Vertex Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	Leave Blank	Leave Blank
I	Number of Vertex (point along line)	data - Number
J	Material of pipe	Select from pick list: domPipeConstruction
K	Nominal diameter in mm - (mm)	Select from pick list: domPipeNominalDiameter
L	Leave Blank	Leave Blank
M	Leave Blank	Leave Blank
N	Manufacturer of asset	Select from pick list: domManufacturer
O	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
P	Pressure class (PN)	Select from pick list: domPipePressureClass
Q	Stiffness rating (SN)	Select from pick list: domPipeStiffnessClass
R	Concrete Load Class	Select from pick list: domPipeLoadClass
S	Date of commission	data - Date (dd/mm/yyyy)
T	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
U	Date of 'survey start'	data - Date (dd/mm/yyyy)
V	Shape of pipe	Select from pick list: domPipeShape
W	Leave Blank	Leave Blank
X	Method by which the pipe was installed	Select from pick list: domPipeInstallationMethod
Y	Leave Blank	Leave Blank
Z	Do several units share this lateral? (yes/no)	Select from pick list: domLateralSharedConnection
AA	Type of Lateral Junction	Select from pick list: domSwEyeType
AB	Distance of IP from Lateral Start (from connection to existing private lateral) - (mm)	data - Decimal Number (9 Chars, 3 Decimals)

Centre of structure

X Y

At Start X and Y

At End X and Y

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT

All bends, start/end points to be surveyed. Create one CAT row per surveyed point. This feature requires at least two row entries.

Col I: enter number of vertex along line starting with the downstream end

See Appendix C.2.2 for a CAT example.

As-Built requirements (SW)		
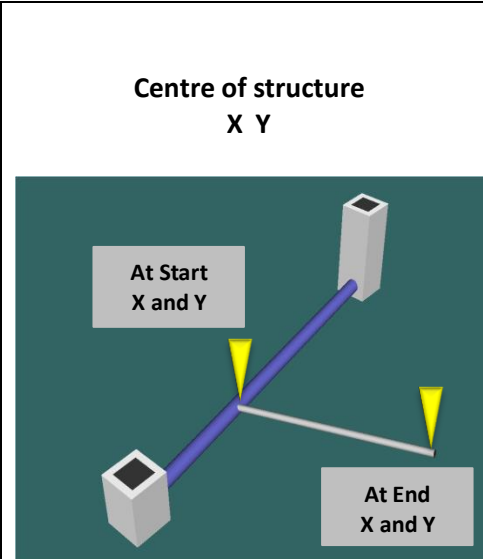
E20: SW Repair/Relay Dig

Name	SW Repair/Relay Dig (Line)	
Line Type	E20 "Line Asset Inputs"	

Distance to start and end of repair from upstream MH

CAT Column	SAG Description	Valid Values
A	Type of Line Feature	E20
B	Type of Repair	Select from pick list: domRepairType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Line Vertex Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Line Vertex Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	Leave Blank	Leave Blank
I	Number of Vertex (point along line)	data - Number
J	Material used for repair	Select from pick list: domRepairConstruction
K	Nominal diameter in mm - (mm)	Select from pick list: domPipeNominalDiameter
L	At Node - Asset Unique Identifier	data - Text (50 Characters)
M	To Node - Asset Unique Identifier	data - Text (50 Characters)
N	Manufacturer of asset	Select from pick list: domManufacturer
O	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
P	Leave Blank	Leave Blank
Q	Leave Blank	Leave Blank
R	Leave Blank	Leave Blank
S	Date of commission	data - Date (dd/mm/yyyy)
T	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
U	Date of 'survey start'	data - Date (dd/mm/yyyy)
V	Distance from US MH to lining start (m) - (m)	data - Decimal Number (9 Chars, 3 Decimals)
W	Distance from US MH to lining end (m) - (m)	data - Decimal Number (9 Chars, 3 Decimals)

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT
Use this feature for dig repairs only (new pipe sections or pipe clamps) – pipe lining is to be entered into D21.
If entered without coordinates, this feature requires only one row per repair.
Col V&W: Make sure to measure distances from the inner wall of the upstream manhole structure.
See Appendix C.2.8 for a CAT example.

As-Built requirements (SW)			

Name — SW Pipe Lining (Line)

Line Type — E21 "Line Asset Inputs"

Distance to start and end of lining from upstream MH

CAT Column	SAG Description	Valid Values
A	Type of Line Feature	E21
B	Type of Repair	Select from pick list: domRepairType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Line Vertex Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Line Vertex Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	Leave Blank	Leave Blank
I	Number of Vertex (point along line)	data - Number
J	Material used for repair	Select from pick list: domRepairConstruction
K	Nominal diameter in mm - (mm)	Select from pick list: domPipeNominalDiameter
L	At Node - Asset Unique Identifier	data - Text (50 Characters)
M	To Node - Asset Unique Identifier	data - Text (50 Characters)
N	Manufacturer of asset	Select from pick list: domManufacturer
O	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
P	Leave Blank	Leave Blank
Q	Leave Blank	Leave Blank
R	Leave Blank	Leave Blank
S	Date of commission	data - Date (dd/mm/yyyy)
T	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
U	Date of 'survey start'	data - Date (dd/mm/yyyy)
V	Distance from US MH to lining start (m) - (m)	data - Decimal Number (9 Chars, 3 Decimals)
W	Distance from US MH to lining end (m) - (m)	data - Decimal Number (9 Chars, 3 Decimals)

E21: SW Pipe Lining

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT

Use this feature for pipe lining only (lining patches or fully lined pipes) – pipe repairs are to be entered into D20.

If entered without coordinates, this feature requires only one row per patch.

Col V&W: Make sure to measure distances from the inner wall of the upstream manhole structure.

See Appendix C.2.5 up to C.2.7 for CAT examples.
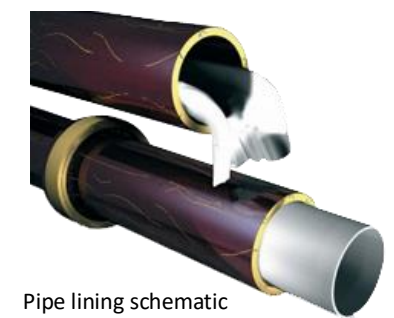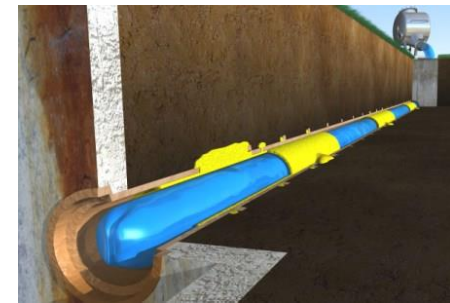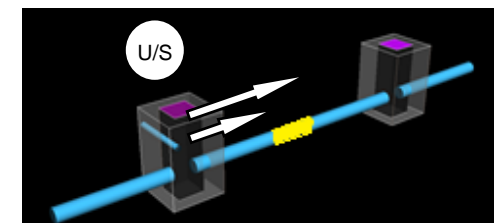
Pipe lining schematic

As-Built requirements (SW)			
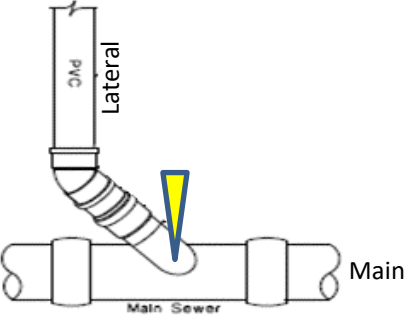
Name — **SW Junction (Point)**

Point Type — **E22** "Point Asset Inputs"

CAT Column	SAG Description	Valid Values
A	Type of Point Feature	E22
B	Type of Junction	Select from pick list: domSwFittingType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Centre of Structure in Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Centre of Structure in Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	Leave Blank	Leave Blank
I	Leave Blank	Leave Blank
J	Leave Blank	Leave Blank
K	Date of commission	data - Date (dd/mm/yyyy)
L	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
N	Date of 'survey start'	data - Date (dd/mm/yyyy)

E22: SW Junction

Centre of Junction
X Y

Main

Standard 'Y' junction

Main

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT

As-Built requirements (SW)		

Name — SW Lateral Junction (Point) ●

Point Type — E23 "Point Asset Inputs"

CAT Column	SAG Description	Valid Values
A	Type of Point Feature	E23
B	Type of Lateral Junction	Select from pick list: domSwEyeType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Centre of Structure in Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Centre of Structure in Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	Leave Blank	Leave Blank
I	Leave Blank	Leave Blank
J	Leave Blank	Leave Blank
K	Date of commission	data - Date (dd/mm/yyyy)
L	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
N	Date of 'survey start'	data - Date (dd/mm/yyyy)

E23: SW Lateral Junction

Centre of Lateral Junction
X Y

PVC Lateral

Main

Main Sewer

This asset is located at the junction between a lateral and a main

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT

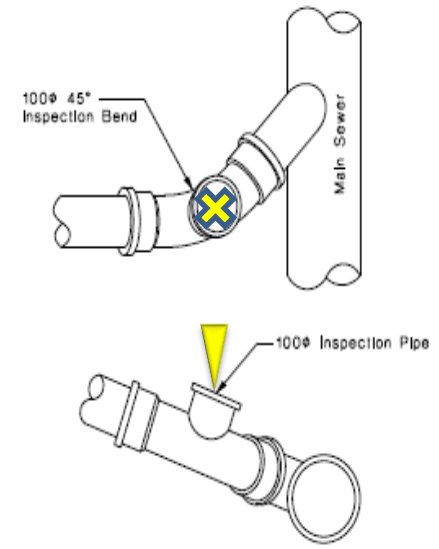See Appendix C.1.3 for a CAT example.

As-Built requirements (SW)

Name	SW Inspection Point (Point)	●
Point Type	E24 "Point Asset Inputs"	

CAT Column	SAG Description	Valid Values
A	Type of Point Feature	E24
B	Type of Manhole or Access	Inspection Point
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Centre of Structure in Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Centre of Structure in Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	Leave Blank	Leave Blank
I	Leave Blank	Leave Blank
J	Leave Blank	Leave Blank
K	Date of commission	data - Date (dd/mm/yyyy)
L	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
N	Date of 'survey start'	data - Date (dd/mm/yyyy)
O	Leave Blank	Leave Blank
P	Leave Blank	Leave Blank
Q	Leave Blank	Leave Blank
R	Construction material	Select from pick list: domAccessConstruction

E24: SW Inspection Point

Centre of Inspection Point
X Y

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT
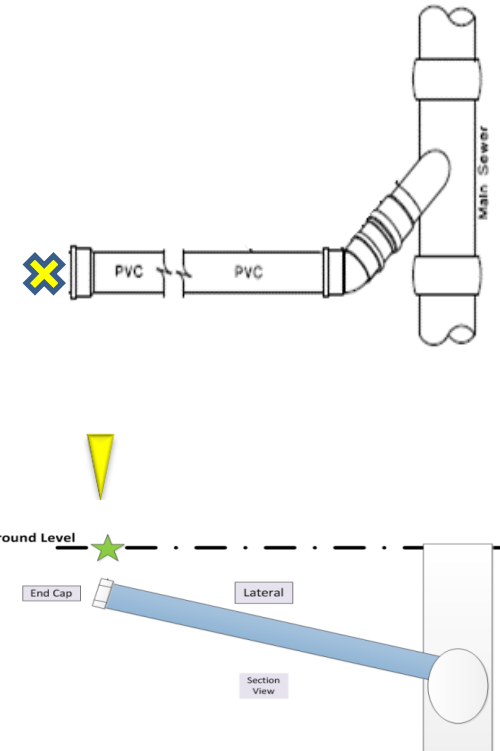
See Appendix C.1.4 for a CAT example.

As-Built requirements (SW)

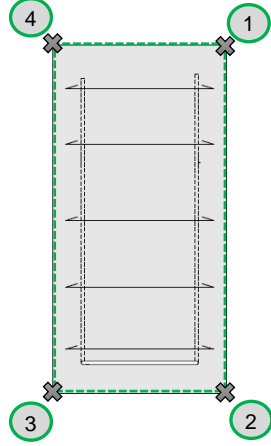| Name	SW End Cap (Point)	●
Point Type	E25 "Point Asset Inputs"	
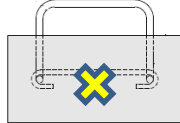
E25: SW End Cap

CAT Column	SAG Description	Valid Values
A	Type of Point Feature	E25
B	Type of End Cap	Select from pick list: domSwFittingType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Centre of Structure in Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Centre of Structure in Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	Leave Blank	Leave Blank
I	Leave Blank	Leave Blank
J	Leave Blank	Leave Blank
K	Date of commission	data - Date (dd/mm/yyyy)
L	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
N	Date of 'survey start'	data - Date (dd/mm/yyyy)
O	Leave Blank	Leave Blank
P	Leave Blank	Leave Blank
Q	Leave Blank	Leave Blank
R	Construction material	Select from pick list: domAccessConstruction

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT

	As-Built requirements (SW)		

	Name	**SW Thrust Block – Non – Standard (Outline)**		
	Polygon Type	**E26** "Polygon Asset Inputs"		

Thrust Block Outline of Structure

X Y

CAT Column	SAG Description	Valid Values
A	Type of Polygon Feature	E26
B	Type of Thrust Block	Select from pick list: domSwPipeRestraintType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Polygon Vertex Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Polygon Vertex Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	Leave Blank	Leave Blank
I	Number of Vertex (point along outline)	data - Number
J	Predominant material of structure	Select from pick list: domAccessConstruction
K	Leave Blank	Leave Blank
L	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
M	Date of commission	data - Date (dd/mm/yyyy)
N	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
O	Date of 'survey start'	data - Date (dd/mm/yyyy)

E26: SW Thrust Block – Non – Standard

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT

For non-standard thrust blocks, all corner points along outline are to be surveyed. Create one CAT row per surveyed point. This feature requires at least three row entries.

Col I: enter number of vertex along outline

See Appendix C.3.1 for a CAT example.

As-Built requirements (SW)		

Name — SW Thrust Block – Standard (Point) ●

Point Type — **E27** "Point Asset Inputs"

CAT Column	SAG Description	Valid Values
A	Type of Point Feature	E27
B	Type of Thrust Block	Select from pick list: domSwPipeRestraintType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Centre of Structure in Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Centre of Structure in Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	Leave Blank	Leave Blank
I	Leave Blank	Leave Blank
J	Leave Blank	Leave Blank
K	Date of commission	data - Date (dd/mm/yyyy)
L	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
N	Date of 'survey start'	data - Date (dd/mm/yyyy)

Thrust Block Centre of Structure

X Y

Sidebar (vertical text): **E27: SW Thrust Block – Standard**

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT
For standard shaped thrust blocks, just the centre of structure is to be surveyed
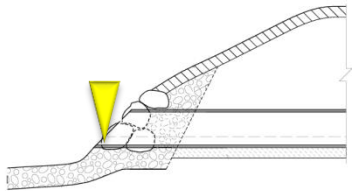See Appendix C.3.1 for a CAT example.

As-Built requirements (SW)			

Name — **SW Pump (Point)**

Point Type — **E28** "Point Asset Inputs"

CAT Column	SAG Description	Valid Values
A	Type of Point Feature	E28
B	Type of Pump	Select from pick list: domSwPumpType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Centre of Structure in Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Centre of Structure in Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	Height above datum - (m)	data - Decimal Number (6 Chars, 3 Decimals)
I	Leave Blank	Leave Blank
J	Leave Blank	Leave Blank
K	Date of commission	data - Date (dd/mm/yyyy)
L	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
N	Date of 'survey start'	data - Date (dd/mm/yyyy)
O	Name and/or number of pump station	data - Text (50 Characters)
P	Leave Blank	Leave Blank
Q	Manufacturer of asset	Select from pick list: domManufacturer
R	Serial number of asset	data - Text (50 Characters)
S	Backup energy source	Select from pick list: domBackupEnergySource
T	Situation of Pump	Select from pick list: domPumpSituation
U	Maximum capacity of pump in litres per hour	data - Number
V	Manufacturer warranty reference	data - Text (50 Characters)
W	Manufacturer warranty term in years	data - Number

E28: SW Pump

Centre of Pump
X Y and Z (on pump)

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT
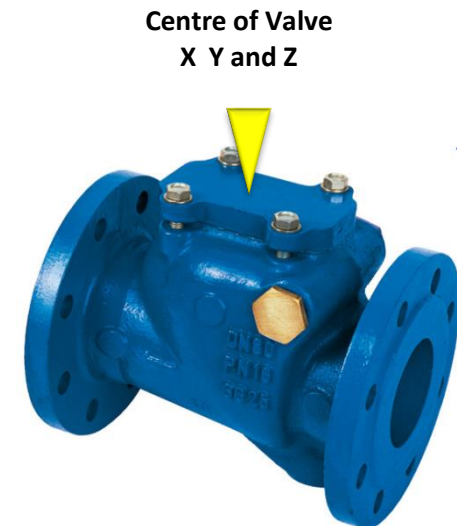
Col O: leave blank/unchanged if N/A

As-Built requirements (SW)		

Name	SW Outlet/Outfall (Point)	●
Point Type	**E29** "Point Asset Inputs"	

CAT Column	SAG Description	Valid Values
A	Type of Point Feature	E29
B	Type of Outfall/Outlet	Select from pick list: domSwOutletType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Centre of Structure in Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Centre of Structure in Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	Leave Blank	Leave Blank
I	Height above datum - (m)	data - Decimal Number (6 Chars, 3 Decimals)
J	Leave Blank	Leave Blank
K	Date of commission	data - Date (dd/mm/yyyy)
L	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
N	Date of 'survey start'	data - Date (dd/mm/yyyy)
O	Leave Blank	Leave Blank
P	Leave Blank	Leave Blank
Q	Manufacturer of asset	Select from pick list: domManufacturer
R	Leave Blank	Leave Blank
S	Type of security on outlet access	Select from pick list: domAccessSecurity

E29: SW Outfall/Outlet

Outlet/Outfall
X Y and Z

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT

As-Built requirements (SW)		

Name	SW Valve (Point)	●
Point Type	**E30** "Point Asset Inputs"	

E30: SW Valve

CAT Column	SAG Description	Valid Values
A	Type of Point Feature	E30
B	Type of Valve	Select from pick list: domSwValveType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Centre of Structure in Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Centre of Structure in Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	Height above datum - (m)	data - Decimal Number (6 Chars, 3 Decimals)
I	Leave Blank	Leave Blank
J	Nominal diameter in mm - (mm)	Select from pick list: domValveNominalDiameter
K	Date of commission	data - Date (dd/mm/yyyy)
L	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
N	Date of 'survey start'	data - Date (dd/mm/yyyy)
O	Valve normal operating position - open or closed	Select from pick list: domValveNormalPosition
P	Manual or motorised valve	Select from pick list: domValveActuation
Q	Manufacturer of asset	Select from pick list: domManufacturer
R	Valve closure rotation direction	Select from pick list: domValveClosureRotation
S	Situation of Valve	Select from pick list: domValveSituation
T	Main function of valve	Select from pick list: domSwValveFunction
U	Valve control point	Select from pick list: domValveControlPoint
V	Manufacturer warranty reference	data - Text (50 Characters)
W	Manufacturer warranty term in years	data - Number

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT
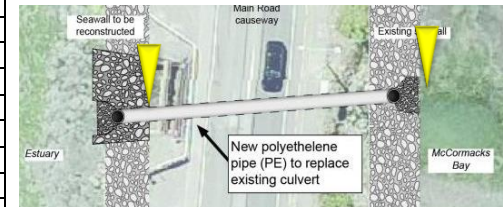
Centre of Valve
X Y and Z

	As-Built requirements (SW)	
Name	**SW Culvert (Line)**	**Centre of structure**
Line Type	**E31** "Line Asset Inputs"	**X Y and Z**

Line features require at least two row entries in the CAT.

CAT Column	SAG Description	Valid Values
A	Type of Line Feature	E31
B	Type of Pipe	Select from pick list: domSwPipeType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Line Vertex Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Line Vertex Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	Invert Level at Vertex - (m)	data - Decimal Number (6 Chars, 3 Decimals)
I	Number of Vertex (point along line)	data - Number
J	Material of pipe	Select from pick list: domPipeConstruction
K	Nominal diameter in mm - (mm)	Select from pick list: domPipeNominalDiameter
L	At Node - Asset Unique Identifier	data - Text (50 Characters)
M	To Node - Asset Unique Identifier	data - Text (50 Characters)
N	Manufacturer of asset	Select from pick list: domManufacturer
O	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
P	Pressure class (PN)	Select from pick list: domPipePressureClass
Q	Stiffness rating (SN)	Select from pick list: domPipeStiffnessClass
R	Concrete Load Class	Select from pick list: domPipeLoadClass
S	Date of commission	data - Date (dd/mm/yyyy)
T	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
U	Date of 'survey start'	data - Date (dd/mm/yyyy)
V	Shape of pipe	Select from pick list: domSwPipeShape
W	Leave Blank	Leave Blank
X	Method by which the pipe was installed	Select from pick list: domPipeInstallationMethod

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT
Create one CAT row for each vertex, starting at downstream pit
Col I: enter number of vertex along line starting with the downstream end

All bends, start/end points to be surveyed. Create one CAT row per surveyed point.

E31: SW Culvert

As-Built requirements (SW)		

Name — SW Headwall Inlet/Outlet (Point) ●

Point Type — **E32** "Point Asset Inputs"

E32: SW Headwall Inlet/Outlet

CAT Column	SAG Description	Valid Values
A	Type of Point Feature	E32
B	Type of Outfall/Outlet	Select from pick list: domSwHeadwallType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Centre of Structure in Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Centre of Structure in Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	Height above datum - (m)	data - Decimal Number (6 Chars, 3 Decimals)
I	Leave Blank	Leave Blank
J	Leave Blank	Leave Blank
K	Date of commission	data - Date (dd/mm/yyyy)
L	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
N	Date of 'survey start'	data - Date (dd/mm/yyyy)
O	Construction material	Select from pick list: domSwHeadwallConstruction
P	Primary Apron construction material	Select from pick list: domSwHeadwallApronConstruction
Q	Wing Wall Type	Select from pick list: domSwHeadwallWingwallType
R	Width of pipe face wall, measured in metres (m).	data - Decimal Number (6 Chars, 3 Decimals)
S	Width across front face of wing wall only, measured in metres(m)	data - Decimal Number (6 Chars, 3 Decimals)
T	Depth from pipe face wall to end of apron, measured in metres	data - Decimal Number (6 Chars, 3 Decimals)
U	Height from apron or bed to top of pipe face wall, measured in metres (m). - (m)	data - Decimal Number (6 Chars, 3 Decimals)
V	Thickness, wall thickness of pipe face wall, measured in metres (m).	data - Decimal Number (6 Chars, 3 Decimals)
W	Number of openings in headwall.	data - Number
X	Accessibility, ease of access?	Select from pick list: domSwHeadwallAccessibility

Outlet/Outfall
X Y and Z

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT

As-Built requirements (SW)		

E33: SW Flow Restriction

Name	SW Flow Restriction 'Weir' (Point)	●
Point Type	**E33** "Point Asset Inputs"	

CAT Column	SAG Description	Valid Values
A	Type of Point Feature	E33
B	Type of Stormwater Flow Restriction	Select from pick list: domSwFlowRestrictionType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Centre of Structure in Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Centre of Structure in Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	RL at which water overflows - (m)	data - Decimal Number (6 Chars, 3 Decimals)
I	Leave Blank	Leave Blank
J	Leave Blank	Leave Blank
K	Date of commission	data - Date (dd/mm/yyyy)
L	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
N	Date of 'survey start'	data - Date (dd/mm/yyyy)
O	Leave Blank	Leave Blank
P	Leave Blank	Leave Blank
Q	Manufacturer of asset	Select from pick list: domManufacturer

Flow Restriction X Y and Z

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT
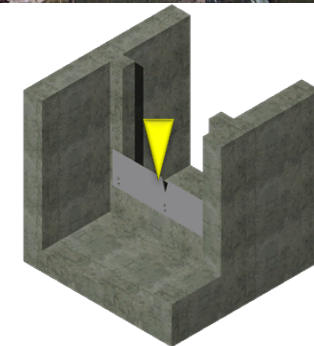
As-Built requirements (SW)		

Name: SW Structural Pipe Protection (Line)

Point Type: **E34** "Point Asset Inputs"

E34: SW Structural Pipe Protection

CAT Column	SAG Description	Valid Values
A	Type of Line Feature	E34
B	Type of Structural Pipe Protection	Select from pick list: domSwPipeProtectionType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Line Vertex Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Line Vertex Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	Leave Blank	Leave Blank
I	Number of Vertex (point along line)	data - Number
J	Leave Blank	Leave Blank
K	Leave Blank	Leave Blank
L	Leave Blank	Leave Blank
M	Leave Blank	Leave Blank
N	Leave Blank	Leave Blank
O	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
P	Leave Blank	Leave Blank
Q	Leave Blank	Leave Blank
R	Leave Blank	Leave Blank
S	Date of commission	data - Date (dd/mm/yyyy)
T	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
U	Date of 'survey start'	data - Date (dd/mm/yyyy)

Pipe Protection
X Y

Create one CAT row per surveyed point.

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT

This feature requires at least two row entries.

Col I: enter number of vertex along line starting with the downstream end
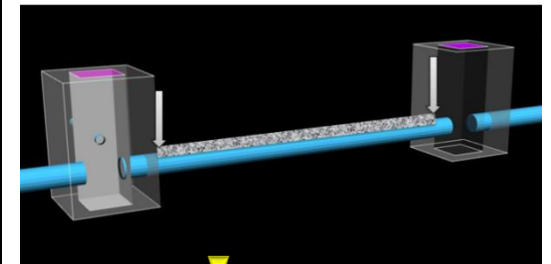
As-Built requirements (SW)		

Name — **SW Structure (Outline)**

Polygon Type — **E36** "Polygon Asset Inputs"

Structure Outline
X Y

CAT Column	SAG Description	Valid Values
A	Type of Polygon Feature	E36
B	Type of Structure	Select from pick list: domSwStructureType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Polygon Vertex Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Polygon Vertex Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	Leave Blank	Leave Blank
I	Number of Vertex (point along outline)	data - Number
J	Predominant material of structure	Select from pick list: domAccessConstruction
K	Leave Blank	Leave Blank
L	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
M	Date of commission	data - Date (dd/mm/yyyy)
N	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
O	Date of 'survey start'	data - Date (dd/mm/yyyy)

Left margin label: **E36: SW Structure**

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT

Use this feature for all structures or other larger manholes which do not fit into any of the other structure categories, populate col B accordingly.

All corner points along outline to be surveyed. Create one CAT row per surveyed point. This feature requires at least three row entries

Col I: enter number of vertex along outline

See Appendix C.1.5 and C.3.1 for a CAT example and beginning of Appendix D for more information.

As-Built requirements (SW)

	Name	SW Grill (Point)	●
	Point Type	E39 "Point Asset Inputs"	

Grille
X Y and Z

CAT Column	SAG Description	Valid Values
A	Type of Point Feature	E39
B	Type of Grill	Select from pick list: domSwGrillType
C	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign
E	Asset Unique Identifier	data - Text (100 Characters)
F	Centre of Structure in Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
G	Centre of Structure in Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)
H	Height above datum - (m)	data - Decimal Number (6 Chars, 3 Decimals)
I	Leave Blank	Leave Blank
J	Leave Blank	Leave Blank
K	Date of commission	data - Date (dd/mm/yyyy)
L	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
N	Date of 'survey start'	data - Date (dd/mm/yyyy)
O	Construction material	Select from pick list: domSwGrillConstruction
P	Length of Grill measured in metres - (m)	data - Decimal Number (6 Chars, 3 Decimals)
Q	Width of Grill measured in metres	data - Decimal Number (6 Chars, 3 Decimals)
R	Typical height above bed, measured in metres	data - Decimal Number (6 Chars, 3 Decimals)
S	Typical spacing between bars, measured in metres	data - Decimal Number (6 Chars, 3 Decimals)
T	Type of security on grill	Select from pick list: domAccessSecurity
U	Leave Blank	Leave Blank
V	Leave Blank	Leave Blank
W	Accessibility, ease of access?	Select from pick list: domSwGrillAccessibility

E39: SW Grill

Additional Information
*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT