YorkshireWater

Right First Time. Stat Mainlaying As-built drawing Guide. AMP6 v3(April 2016)

It's part of our Blueprint for Yorkshire

Developer Services

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All SLP's will be KPI measured on the <u>timeliness</u> and <u>quality</u> of as-builts submitted to the **YW CW Asset Data Mapping team.**





• Right 1st Time:

- 1. Timeliness & method of delivery
- 2. Data Requirements
- Quality checks YW Integration & Partner Support

As per SLA 6a in the Self-lay Code of practice, satisfactory asbuilt drawings should be submitted to Yorkshire Water prior to connection of the new main to the company's network. As built drawings should comply with the code of practice section 3.7.5

Drawings should be submitted electronically to :

SLO_Mailin@yorkshirewater.co.uk



2. Data Requirements

As-built Data Requirement.

The following data requirements should be provided when submitting As-Laid Drawings)

(A) Scheme Title Block

Ensure the following data is shown in the As built Title block.

- 1) Scheme Title/Address
- 2) Scheme Cost Code
- 3) Easting & Northing 12 figure grid -YW Eng Spec 27.5.1.1.1 Format and scale of drawings states 12 figure grid ref must be provided. Taken from an Arbitrary point centre of scheme.
- 4) Description of works Actual length, diameter and materials of main laid.

YorkshireWater New Supplies, Service Centre - Water, P.O. Box 52, Bradford, BD3 7YD Tel: 01274 608008			
SCHEME TITLE	E: CHERRY TREE DRIV FARSLEY LEEDS LS28 5SP	/E	
SCHEME DETAILS: 56MTRS OF 63MM MDPE 18.06.2015			
DEVELOPER: CHARTFORD HOMES			
DESIGNER:	LOUISE WHITAKER	X1DEV No:	17737305
DATE:	26/03/2015	ORDER No:	ML12 - 17933393
SCALE:	1:250	ORDER No:	ML10 - 18090254
GRID REF:	421889 / 435471	FIRE REF:	NO REQUIREMENTS
ICE REF:	P662242	DRAWING No:	B.5.046.1023

(B) Legend

1) If its on the plan it must be shown in legend.



3. Data Requirements

(C) Plan drawing

Plan clearly showing the extents (start & end) covered by the scheme, providing ALL the following data requirements:-

- 1) Approved site layout/plan. (black and white allows accurate location/placement of assets in relation to background map on Odyssey/GIS)
- 2) Draw in colour any New Mains, New Fittings, and any network/assets which have been abandoned/diverted as part of the scheme.
- 3) Positional Accuracy All apparatus surveyed on site must be measured and recorded wherever practical to a minimum accuracy of +/ 100mm to the centre of the apparatus.
- 4) **Density of Observations** The position of the apparatus must be recorded to ensure locational accuracy where changes in the characteristics of the assets have occurred.
 - a) Every significant change in direction. e.g. Road crossing
 - b) Every change in attribute ie changes in diameter, material type, lining type etc.
 - c) Every junction of mains or mains connections.
 - d) Those fittings located within chambers must be accurately shown eg all valve types, hydrants, meters, strainers (see 3. Measurements Relative to Fixed Geographical Features)
 - e) When a main is continuous, and there are no bends, fittings, change of attributes etc, then measurements along the main must be taken at 50 metres intervals.
 - f) Depth measurements, to the top of the pipe, must be recorded at 50 metre intervals or more frequently if depths do not fall within the 0.9 to 1.0m standard.
- **5) Measurements Relative to Fixed Geographical Features** Measurements, wherever possible, must be taken to geographical features that appear on Ordnance Survey background maps.

Surveys done using bi-lateration, ie 2 measurements taken from fixed O.S. features, must intersect at the centre of the asset.

In order of priority:-

- 1) Corners of buildings
- 2) Corners of boundary walls
- 3) Corners of fence-lines
- 4) Corners of fields

Surveys done using offsets, ie using a single measurement (usually along the length of the main) combined with another at a right angle to the first measurement at the point where a fitting or bend is located are useful on development sites with only kerb lines in place.

In order of priority:-

- 1) Building lines
- 2) Kerb lines
- 3) Boundary walls
- 4) Fence lines

Temporary and natural features must only be used when no other permanent features are available eg on new building sites or rural locations. When measurements are taken from temporary or natural features, a note of the feature type must be made on the submitted plan eg Manholes, gullies or lamp posts.

Measurements must NOT be taken from curved kerb lines or walls etc.

- 6) Scale of Survey Drawings Scaled survey drawings must be provided wherever possible. A minimum scale in urban areas must be 1:500 and in rural areas must be 1:1250 to ensure clarity of measurements, features etc. On large schemes, drawings showing the overall route of the scheme must accompany the survey drawings and be provided at a scale no smaller than 1:2500.
- 7) **Diameter** The nominal diameter of the water pipe must be indicated, measurements to be in millimetres or inches.
- 8) Material The type of material from which the pipe is made must be identified. e.g. Barrier Pipe
- **9)** Lining Information The type of lining in a pipe must be identified and the date the pipe was re-lined if applicable.
- **10) Fittings** All valves, hydrants, meters, PRV, ducts, swab access points, tapers, strainers must be clearly identified either alongside the relevant fitting on the plan or in an accompanying legend.
- **11) Enlargements** Where an area of dense asset information occurs, suitable enlargements must be incorporated and clearly referenced as a subset of information from the main plan.
- **12) Status** Clear differentiation must be made between live and abandoned mains and associated fittings. Abandoned mains may be shown on a separate drawing, if required.

2. Data Requirements - examples

Example of Statutory Scheme PDF drawing.



If using the design drawing from Yorkshire Water Developer Services as the basis to create an As Built most of the requirements are already covered, eg Scheme Title, NGR and Cost Code

The main things to look out for are:-

- If the sizes/materials or lengths change
- · Fire Hydrants are added or removed
- The proposed layers need switching off or hiding to avoid confusion
- · Deviations from the position designed to that laid
- Abandonments are captured.

3. Data Requirements - examples



2. Data Requirements - examples





All As built drawings received into

SLO_Mailin@yorkshirewater.co.uk, inbox will be subjected to a desktop survey by the developer services inspector, followed by a sample site check by the asset data mapping team, to ensure they meet the required standards. To be recorded as Right First Time they must have been received and have passed these checked within 28 days of the mains connection date.

Section 1 Check

Scheme Title; Cost code and Grid Ref must be provided in the email subject field. And the following details must be provided in the Title block of the CAD as built. CW Asset Data Mapping Team use these details to register the scheme and add a scanned icon to Odyssey. If the agreed template is used then the as-built should pass section 1 of

the process. REFER TO PAGE 5

