

PAS128 – Type D Survey

Requesting and chasing down utility 'stats' from various providers can be a frustrating and time-consuming process. The Safedigging Ltd Utility Record Search service can take this task off your hands and provide you with the information you need, hassle free.

With a single click or call to our "Safe Dig" number **0800 689 5315**, Safedigging Ltd will canvas all known asset owners within your excavation area, including some which you may not even have given consideration to.

You're in Safe hands...we've given thought to every asset owner!

PAS128 Type D Specifies:

Survey type D shall use desktop search techniques to identify existing utility data within the survey area. The quality level achieved shall be documented as QL-D in accordance with Table below.

Survey type (Establish with client prior to survey)		Quality level (Practitioner to determine post survey)	Post-processing	Location accuracy		Supporting data
				Horizontal ¹⁾	Vertical ²⁾	
D	Desktop utility records search	QL-D	—	Undefined	Undefined	—
C	Site reconnaissance	QL-C	—	Undefined	Undefined	A segment of utility whose location is demonstrated by visual reference to street furniture, topographical features or evidence of previous street works (reinstatement scar).
B	Detection ³⁾	QL-B4	No	Undefined	Undefined	A utility segment which is suspected to exist but has not been detected and is therefore shown as an assumed route.
		QL-B3	No	±500 mm	Undefined (No reliable depth measurement possible)	Horizontal location only of the utility detected by one of the geophysical techniques used.
		QL-B3P	Yes			
		QL-B2	No	±250 mm or ±40% of detected depth whichever is greater	±40% of detected depth	Horizontal and vertical location of the utility detected by one of the geophysical techniques used. ⁴⁾
		QL-B2P	Yes			
		QL-B1	No	±150 mm or ±15% of detected depth whichever is greater	±15% of detected depth	Horizontal and vertical location of the utility detected by multiple ⁵⁾ geophysical techniques used.
		QL-B1P	Yes			
A	Verification	QL-A	—	±50 mm	±25 mm	Horizontal and vertical location of the top and/or bottom of the utility. Additional attribution is recorded as specified in 9.2.5.

¹⁾ Horizontal location is to the centreline of the utility.

²⁾ Vertical location is to the top of the utility.

³⁾ For detection, it is a requirement that a minimum of GPR and EML techniques are used (see 8.2.1.1.2).

⁴⁾ Electronic depth readings using EML equipment are not normally sufficient to achieve a QL-B2 or higher.

⁵⁾ Some utilities can only be detected by one of the existing detection techniques. As a consequence, such utilities cannot be classified as a QL-B1.

Methodology

A desktop utility records search shall be produced by the following process:

- a) Identify known utility owners within the specified survey area;
- b) Request asset information from identified utility owners;
- c) Collate all data on utility owners and their assets.

Note: The identification of utility owners and the request for asset information should be extended to land adjacent to the survey area, as this might offer an informative understanding of where utility feeds derive.



When a project takes place on a private site, such as a hospital, industrial or military establishment, a utility owner might not have statutory records covering the survey area. Historical utility data should be obtained from the relevant estate's department, where available.

A practitioner should allow adequate time within their schedule of work to receive the responses from utility owners. A 20-day period is recommended.

Sources of information can include, for example, internet-based inquiry sites. The practitioner should consider asking the utility owner whether RFIDs have been used within the survey area.

A desktop utility records search deliverable can be provided as a compilation and consolidation of all record data into a digital representation within a CAD/GIS/BIM model file structured to the client's requirements.

The information gathered shall include as a minimum:

- a) Company details of the practitioner carrying out survey type D.
- b) Client details.
- c) A plan showing the boundary for the requested survey area.
- d) A list of utility owners to whom a request was sent.
- e) A list showing utility owner responses and actions taken to obtain response from non-responders.
- f) Any information received from the utility owner by way of plans, maps, diagrams or text and covering letter along with any asset guidance notes.
- g) The date of issue of any maps supplied by the utility owners.
- h) An advisory/cautionary note in BOLD explaining how this information was constructed, its limitations regarding accuracy and that no on-site survey/ geophysical detecting techniques have been used.

Note: A desktop utility records search deliverable older than 90 days should be classed as historical and used with caution. Attention is drawn to the New Roads and Street Works Act 1991 (NRSWA) [2].

Note: Where data have been supplied in imperial measurements this should be noted.