

AS5488: Classification of Subsurface Utilities Information

AS5488: Classification of Subsurface Utility Information (SUI) is the Australian Standard used to classify the reliability of underground utility information. The standard does not guarantee the accuracy of utility locations. Instead, it provides a framework for communicating the level of confidence in the data.

The standard defines four Quality Levels, ranked from lowest confidence (QL-D) to highest confidence (QL-A). These levels help engineers, designers, and contractors understand how much they can rely on available information when planning or undertaking works.

QLA

QL-A represents the highest level of confidence and is achieved by physically exposing the utility. This is typically performed using vacuum excavation, potholing, or careful hand excavation to visually confirm the utility's position. QL-A verification allows accurate identification of the utility's exact location, depth, size, and orientation.



QLB

QL-B information is obtained using surface based geophysical methods such as electromagnetic locating (EMF). These techniques allow technicians to detect and mark the probable horizontal position of utilities without excavation. While confidence is significantly improved, depth estimates remain approximate and some utilities may remain undetectable.



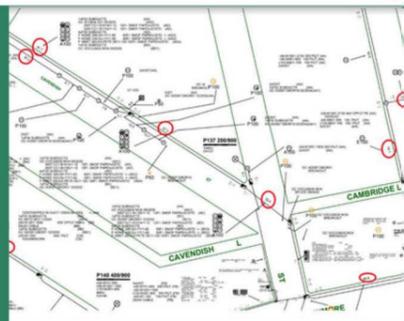
QLC

QL-C correlates existing utility records with visible surface features such as pits, valves, marker posts, and service boxes. This process helps infer the likely alignment of utilities between known surface points. However, the precise underground location and depth of services remain uncertain.



QLD

QL-D is the lowest confidence level and is based entirely on existing records such as utility plans, as-built drawings, and Dial Before You Dig information. These records can be incomplete, outdated, or inaccurate and should only be used for preliminary planning purposes. QL-D information alone is not suitable for making excavation decisions.



AS5488 does not define how utilities must be located. Instead, it classifies the confidence level of the information provided so designers and contractors can understand the risk associated with underground services.

