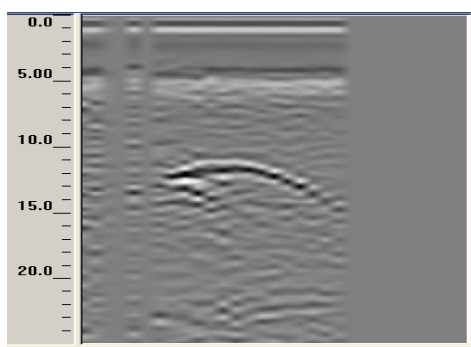


Application Note

Underground cavity location



This image is an 80cm pipe at 10m depth

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Void location is an application that is particularly successful with geophysics. SSI use both Ground Radar and Resistivity Imaging to map possible voids.

SSI have a concept known as a Radar Void Signature (RVS)tm is one typical of a void. Ground truthing may change how this RVStm is used but this concept is a useful one as it enables predictive testing of the signature. This signature is partly theoretical and partly based on practical work imaging voids.

SSI have worked with void location in Australia, New Zealand and SE Asia and are routinely consulted by major Corporations and Consulting organizations on technologies to map voids.

Typically we find that voids have a signature but it needs careful consideration for successful survey design. Questions we ask are:

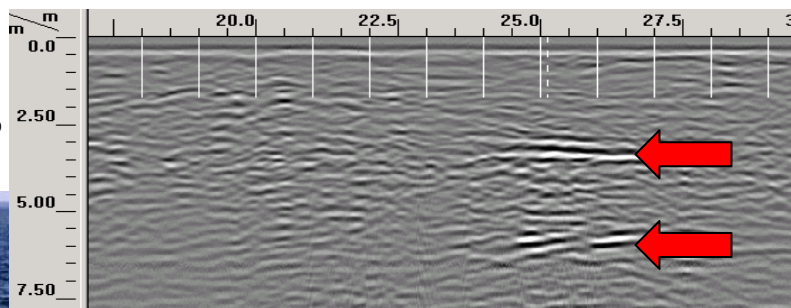
Is the void an open cavity?

How big is it?

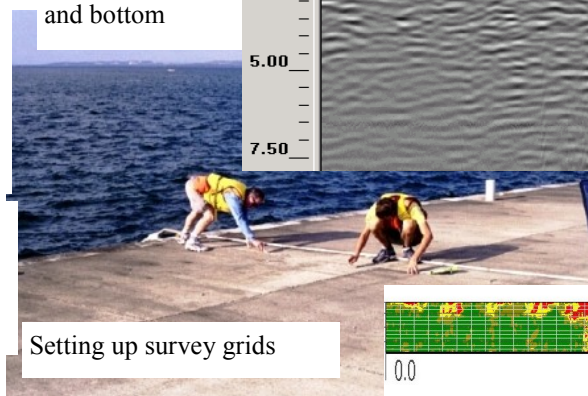
Is it filled with weak material or fluid?

What is above the void ie rock sediment or debris?

This is an example of a void in-filled with sediment showing top and bottom



The red and yellow areas are voids under a slab



Setting up survey grids

