

Detect Hidden Underground Infrastructure with MUD® (Mapped Underworld Dimension)

Cold War bunkers, reinforced underground shelters, were constructed to house key government and military leaders so that governments could continue to safely operate in the event of nuclear attacks.

There were seven nuclear blast and fallout shelters plus many other hardened structures built across Canada.

The Challenge

To demonstrate MUD®s capacity to search and subsurface locate infrastructure, used the Nanaimo Cold War Bunker as a test site. Located about 2 miles southwest of downtown Nanaimo, British Columbia, the bunker an underground 61,000 square foot, two storey, concrete structure built between 1960 and 1963.







An air photo from 1980 shows that the bunker's identity was "hidden" under grass and soil, with a practice field built over top of the bunker.

MUD® successfully detected the location of the subsurface bunker. Using its machine classification system, MUD® discretely and anonymously developed signal combinations that identified thick, reinforced concrete walls and defined a void. The technology differentiated one floor was filled with sand or soil-like material as part of the demolition process.

The findings spatially correlate with the historic air photos that disclosed the location of the constructed bunker.

