

Thank you for choosing to use our underground detection services.

The following document should serve as a guide to the services and also an agreement outlining the details of the service we are providing for you.

Briton Detection & Inspection provides a range of underground detection and locating services using a range of specialised equipment and techniques.

Capability:

We combine a range of traditional and specialised methods to locate underground services as well as providing ground investigations and infrastructure fault locating.

Some underground detection services we locate but are not limited to include:

- Power cables
- Communication cables
- CCTV cables
- Ducts Water pipes,
- Drainage/Sewer pipes
- Gas lines,
- Septic tanks
- Manholes
- Soak Holes
- Cable pits

Underground Investigations we undertake but are not limited to include:

- Cavity Locating
- Sink Holes
- Pavement Structure Investigation
- Leak Detection

Equipment:

Briton Infrared has a 'no compromise to quality' approach with our range of specialised equipment. All of our equipment systems under go regular inspection and maintenance to make sure we can provide the best results possible.

Some of our equipment includes:

- Ground Penetrating Radar (GPR)
- Electromagnetic Locators (EM)
- High Power Electromagnetic Induction (EMI)
- Tracer Wires
- Tracing Rods
- Fresh Water CCTV Push Cameras w/Locator
- Drainage CCTV Push Cameras w/Locator
- High Resolution Infrared.
- Metallic and Non-Metallic Probes
- Acoustic Drop Testing.

With every job we approach, the process to locate and trace underground services are never the same. Methods vary with each job as many variables are to be considered if reliable results are to be obtained. Some of the variables include but are not limited to be are ground conditions, surrounding interference's & weather conditions etc..

It is critical to understand that equipment is not generally designed to detect unknown services but rather to assist in confirming the location of known services and general underground infrastructure. Different services require different equipment and methods to locate; sometimes an array of methods may be used on a singular service. There are a multitude of factors that can affect the capability to locate and accuracy of the location.

These can include:

- Above ground conditions – over ground cover such as gardens, kerbs, buildings, hazards, electrical interference, anything large and metallic (vehicles).
- Below Ground Conditions – Saturation of fill, material & metal content (mill slag, iron sand)
- Target size
- Target material
- Depth
- Underground service congestion
- Underground electrical interference/current leakage

General Scope of Works:

Generally our preferred approach to underground service investigations for pre works planning or any form of groundworks is to create a target list prior to commencing our investigation (unless you have just requested a specific services that you want us to potentially locate), this is done in conjunction with any plans that we can obtain or have at time of planning. These plans may include - service provider plans, council plans, as-built plans if available or plans provided by www.beforeudig.co.nz. This enables us to make a target list (**refer to Pg 4**) that is to be reviewed by you or your representative either before or after our works have been undertaken.

When we undertake detection works on your site we will do so to the best of our abilities, however we cannot guarantee to ever locate all services due to the limitations of equipment and environmental conditions at that specific moment in time.

Located services will be spray marked out on the ground and if requested UAV mapped, all services marked should be given a 1 meter variance in all directions and careful hand or hydro-excavation should be used to confirm the location of the services indicated before any machine works are to commence. Should you be concerned with the location of any services that are not marked out or found and reported by us during the site investigation it is at this point that you must advise what service or services that you are still concerned about and we can endeavour to help further or advise to the best of our ability.

Depth: The use of Sonde, EMI or GPR equipment to calculate depths can provide highly useful information when planning and undertaking underground works. However substantial variance depending on ground conditions, target size, composition interference and signal strengths which can occur. Sometimes depth estimation cannot be obtained for any number of reasons and Briton will provide depth readings where possible.

This service is provided to map the position of known services where possible to reduce the risk of a strike during your works, it is not to eliminate it. Briton Detection & Inspection take no responsibility for you or any person/s working on your site striking any services.

No equipment can simply locate all services and we advise you excavate carefully at all times regardless of what is marked out.

Should you agree to us commencing works on you site, you are accepting the provided information/responsibilities and following Terms & Conditions. (Please refer to Pg 3)

Underground Detection Services - Terms and Conditions

1. This agreement governs the provision of cable, pipe, structure, leak, cavity and any other underground locating services of any nature ("the services") by Briton Infrared Limited to the person or organisation named on the front of this form ("you") or should you except the services upon reviewing this document.
2. You warrant that the services are acquired by you for business purposes only.
3. You acknowledge that the services provided by Briton Infrared Limited are intended to assist in locating targets that are known to us only and/or on plans provided by Service Company's. The equipment used in underground locating and detection is not designed for locating unknown underground services.
4. Any plans provided by the service companies give no more than a general guide as to the location of cables or other underground services and may have not been updated.
5. The accuracy of any equipment and procedures used by Briton Infrared can vary. You may not assume that any indicated underground services lies in the position indicated and any depth is to be considered a guideline only therefore you must confirm the position and depth of all cables and other underground services by carefully digging with hand tools or using hydro excavation.
6. Briton Infrared Limited is in no circumstances liable for any damage to or disturbance of cables or services, or for any injury, loss or other consequences of such damage or disturbance, including (without limitation) for loss of use, data, production, profit, revenue, business, contract or anticipated saving, damage to goodwill, reputation or share price, loss of customer or customer losses, loss by reason of full or partial shutdown or non-operation, or for any delay, financing costs or increase in operating costs or any economic loss or for any special, indirect or consequential loss or damage which may be suffered by you, or by any other person or organisation including (without limitation) any operator, owner, customer, service company, or subscriber, You will at all times indemnify Briton Infrared Limited against any liability for any such injury, loss or damage, and for all consequences thereof.
7. Without prejudice to the above provision, if Briton Infrared Limited should in any circumstances have any liability to you in tort, contract or otherwise in connection with the services, its liability shall be confined to damages in a maximum sum not exceeding the moneys actually paid to Briton Infrared Limited by you for the services.
8. The above protections and indemnities also apply for the benefit of all employees, officers, agents and contractors of Briton Infrared Limited.
9. You acknowledge that this document contains the entire agreement between you and Briton Infrared Limited, and that no representation, warranty or other stipulation inconsistent with this document is expressed or implied on the part of Briton Infrared Limited.

CLIENT NAME: _____ DATE: _____

SIGNATURE: _____

UNDERGROUND DETECTION SERVICES - CHECK LIST

Checklist to be completed before commencing work to identify targets advised by the client or known by us from “Before U Dig” or as researched by Briton. Located & un-located services are to be marked of checklist with relevant notes as required. A copy is to be provided to the customer either onsite, or if client is not present a copy will be forwarded to them to a later time. NOTE TO CLIENT: Until you have received this checklist the services detection works are not to be considered complete, should you be concerned with services not located/checked of it is your responsibility to request further works by us if possible, or locate the services using other methods.

| | | | |
|------------------|--|--------------|--|
| CUSTOMER: | | DATE: | |
| SITE: | | TECH: | |

| UNDERGROUND SERVICE | KNOWN TO BE IN WORKS AREA? | LOCATED? | NOTES: |
|--|----------------------------|------------|--------|
| GAS NETWORK (roadside) | Y / N / UN | Y / N / NA | |
| GAS PRIVATE (on private property) | Y / N / UN | Y / N / NA | |
| ELECTRICAL NETWORK HV or LV (road side) | Y / N / UN | Y / N / NA | |
| ELECTRICAL PRIVATE (on property) | Y / N / UN | Y / N / NA | |
| WATER COUNCIL (roadside) | Y / N / UN | Y / N / NA | |
| WATER PRIVATE (on property) | Y / N / UN | Y / N / NA | |
| COM - STD NETWORK (roadside) | Y / N / UN | Y / N / NA | |
| COM - PRIVATE (on property) | Y / N / UN | Y / N / NA | |
| COM - FIBRE NETWORK (road) | Y / N / UN | Y / N / NA | |
| COM - FIBRE PRIVATE | Y / N / UN | Y / N / NA | |
| SEWER SYSTEM PUBLIC (roadside or private land) | Y / N / UN | Y / N / NA | |
| SEWER SYSTEM PRIVATE (on property) | Y / N / UN | Y / N / NA | |
| STORMWATER SYSTEM (private) | Y / N / UN | Y / N / NA | |
| STORMWATER SYSTEM PUBLIC(public or private land) | Y / N / UN | Y / N / NA | |
| UNKNOWN/OTHER | Y / N / UN | Y / N / UN | |

Client Representative Name: _____ **Signature:** _____