UXO RISK MANAGEMENT
INTRUSIVE UXO SURVEY

PLANIT
RESTORING BALANCE

UXO RISK MANAGEMENT
INTRUSIVE UXO SURVEY

PLANIT employs intrusive UXO survey to detect for items of UXO using a magnetometer delivered into the ground by one of two methods:

- Down a borehole, lined with a non-ferrous sheath or
- Within a cone penetrometer pushed into the ground from a rig.

UXO is detected out to a radius of up to three metres from the axis of the magnetometer. This approach reaches below gross, surface ferrous clutter that may limit non-intrusive survey (i.e. some reinforced concrete surfaces) and also achieve detection depths to cover the deepest penetration of UXO.

It is most effectively used to ensure that proposed pile positions are safe from the presence of UXO or for proposed site investigation positions, where non-intrusive cannot be used; intrusive UXO survey is designed for surveying columns within the ground.

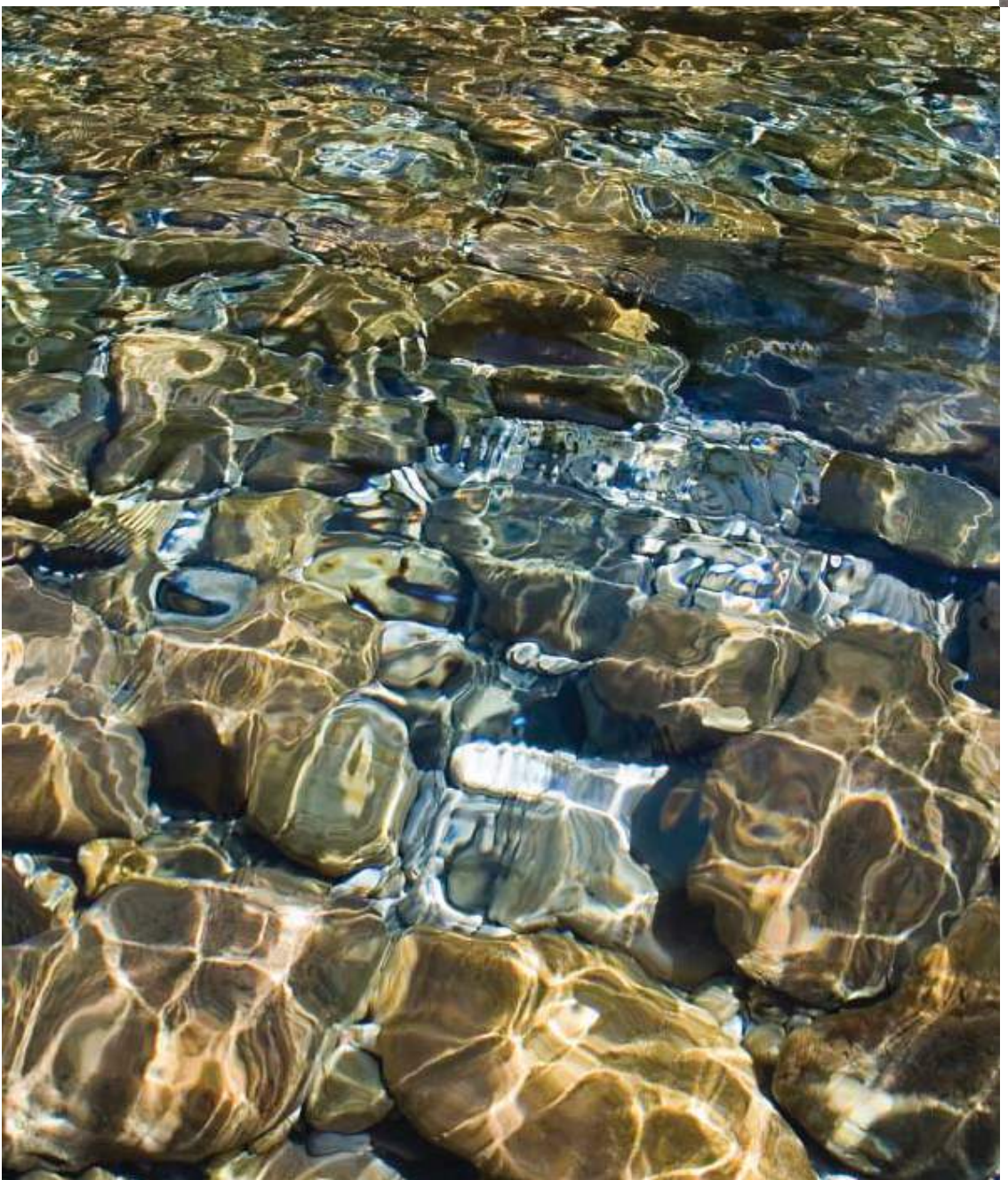
PLANIT provides the most appropriate equipment for a Client's site by assessing the nature of the proposed development, the identified UXO risk and the ground conditions, passing on to the Client the cost benefits of approaching the widest market for the supply of the equipment.

PLANIT UXB LIMITED
PO BOX 285, NUNBURNHOLME, YORK,
EAST RIDING OF YORKSHIRE, YO42 9AU
Tel: +44 (0) 8000 588 747
Email: help@planitsurveys.com
www.planitintsurvey.com

PLANIT
RESTORING BALANCE

UXO RISK MANAGEMENT
NON-INTRUSIVE UXO SURVEY

PLANIT
RESTORING BALANCE



UXO RISK MANAGEMENT
NON-INTRUSIVE UXO SURVEY

PLANIT's non-intrusive UXO survey utilises the latest generation of proven magnetometers to identify anomalies beneath the ground likely to be UXO. These anomalies are then targeted for subsequent controlled excavation to remove them from a Client's site. Non-intrusive survey by its very nature provides the quickest option for surveying a given area for UXO, saving time and money.

Non-intrusive detection depths for items of UXO vary depending upon the size of the ordnance and the nature of the ground; high levels of environmental ferrous contamination (scrap metal, reinforced concrete or industrial clinker for example) can reduce the maximum detection depths for non-intrusive survey. (As a benchmark, we can achieve a detection depth of 10.8m for a 1000Kg (2000lb) air-dropped bomb.)

It is important to assess both the detection depth required on your site (i.e. the deepest depth that UXO is expected to be encountered) and whether ferrous contamination will adversely limit any non-intrusive UXO survey. An on-site assessment using the actual survey equipment will quickly identify the suitability of the equipment and will be conducted free as part of our solution development.

PLANIT UXB LIMITED
PO BOX 285, NUNBURNHOLME, YORK,
EAST RIDING OF YORKSHIRE, YO42 9AU
Tel: +44 (0) 8000 588 747
Email: help@planitsurveys.com
www.planitsurveys.com

PLANIT
RESTORING BALANCE

UXO RISK MANAGEMENT
ON-SITE ENGINEER SUPPORT

PLANIT
RESTORING BALANCE

UXO RISK MANAGEMENT
ON-SITE ENGINEER SUPPORT

PLANIT UXO Engineers are all former military personnel, appropriately qualified and experienced to provide support to those working within UXO risk areas.

UXO Engineers provide:

- advice to the Client on UXO related issues;
- UXO Health & Safety Awareness Briefings to site personnel;
- appropriate UXO related Health & Safety documentation for the Client;
- excavations monitoring, ensuring that false alarms and unnecessary delays are minimised;
- safe management of the removal of UXO as it arises during excavations on a site.

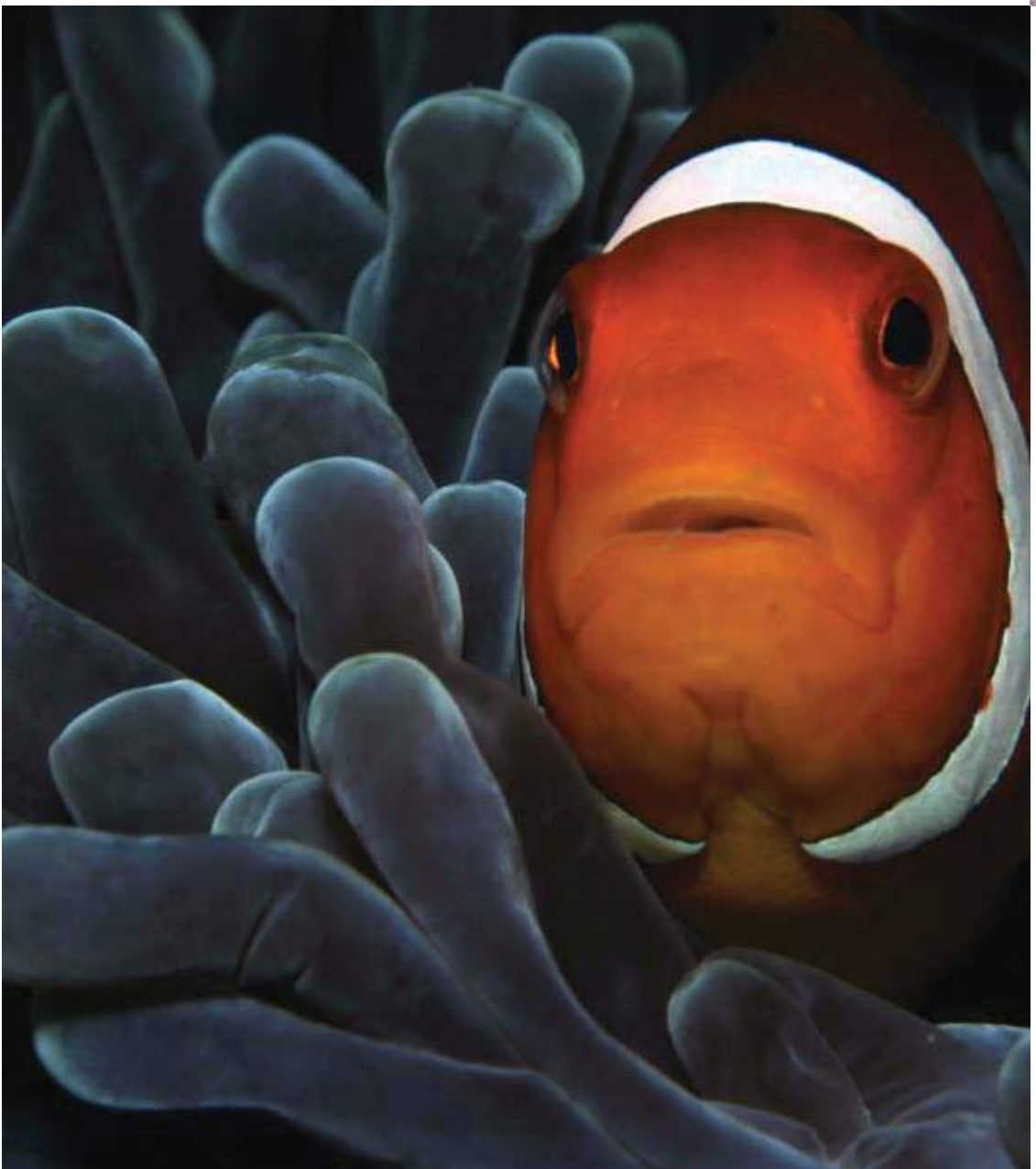
PLANIT personnel are provided with full supporting documentation detailing their qualifications and experience and are backed up by an expert technical team constantly on call.

PLANIT UXB LIMITED
PO BOX 285, NUNBURNHOLME, YORK
EAST RIDING OF YORKSHIRE, YO42 9AU
Tel: +44 (0) 8000 588 747
Email: help@planitsurveys.com
www.planitsurveys.com

PLANIT
RESTORING BALANCE

UXO RISK MANAGEMENT
RISK ASSESSMENT & MITIGATION DESIGN

PLANIT
RESTORING BALANCE



UXO RISK MANAGEMENT
RISK ASSESSMENT & MITIGATION DESIGN

PLANIT has developed a rigorous risk assessment process for identifying the true risks presented by unexploded ordnance (UXO) contamination, in response to the construction industry's demands for more transparency when considering the issue of ordnance contamination. A risk assessment is key in identifying whether or not further UXO work is required on a site and for the design of UXO Risk Mitigation solutions.

Building on practical experience in dealing with UXO, PLANIT uses the traditional source-pathway-receptor model for assessing land contamination and presents the identified risk openly, allowing our Clients to view the justification for a particular UXO risk level being assigned.

So, if we identify a particular UXO risk on your site you will know how we arrived at the result, what the implications are for your development and what, if anything, needs to be done to mitigate against it.

PLANIT has built a reputation for being able to respond with flexible, cost effective mitigation solutions to deliver a safe environment within which Client's can operate with confidence. Our ability to approach the market for the provision of "heavy" intrusive UXO survey support allows us to pass the cost benefits onto our Clients and ensure that the most appropriate technology is used on a particular site.

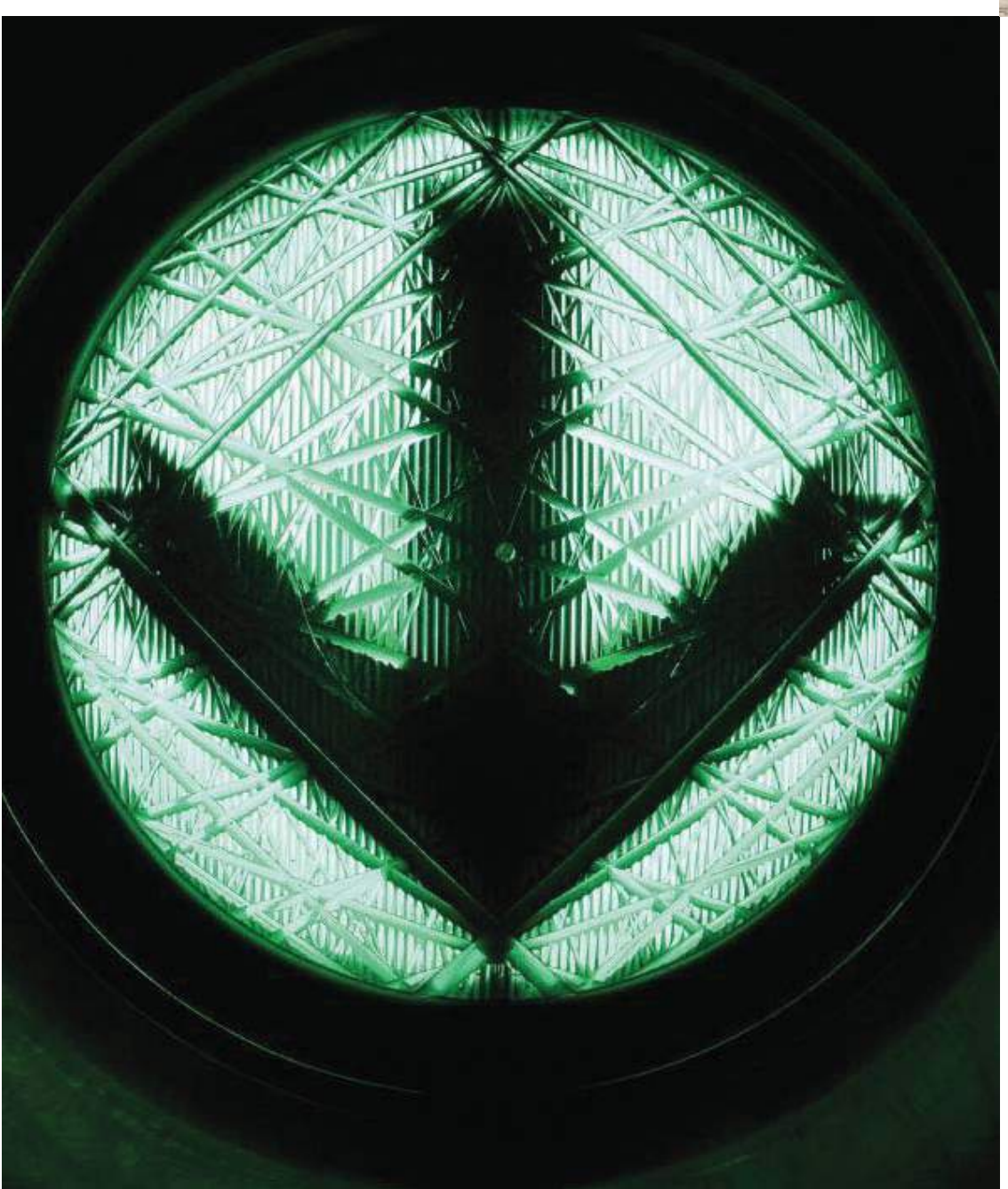
We will not use a sledgehammer to crack a nut.

PLANIT UXB LIMITED
PO BOX 285, NUNBURNHOLME, YORK,
EAST RIDING OF YORKSHIRE, YO42 2QN
Tel: +44 (0) 8000 588 747
Email: Help@planitsurveys.com
www.planitsurveys.com

PLANIT
RESTORING BALANCE

UXO RISK MANAGEMENT
SUPPORT TO SITE INVESTIGATION

PLANIT
RESTORING BALANCE



UXO RISK MANAGEMENT
SUPPORT TO SITE INVESTIGATION

Site investigation in areas where there is an identified UXO risk requires UXO support to ensure that trial pits, boreholes and window samples can be placed safely.

PLANIT's approach focuses the UXO support to provide safe, individual locations for the site investigation, rather than unnecessarily surveying and clearing the whole area.

Dependant upon the surface ground conditions, PLANIT can utilise either non-intrusive or intrusive UXO survey techniques. The rationale differs slightly between the two approaches:

- **Non-intrusive Site Investigation Survey.** PLANIT conducts a non-intrusive UXO survey of up to a 10 x 10 metre box, centred on each of the proposed site investigation (SI) positions.

  This will identify ferrous magnetic anomalies beneath each SI location, allowing them to be subsequently positioned safely. Below this depth, the likelihood that a borehole would encounter an item of UXO across its diameter is reduced to negligible.

- **Intrusive Site Investigation Survey.** PLANIT conducts an intrusive UXO survey either along or parallel to the axis of the proposed borehole or window sample, using either down borehole UXO survey or cone penetrometry. This will identify whether there are any potential items of UXO along the proposed axis, that would require it to be realigned.

As with ordinary UXO survey, non-intrusive support takes less time than intrusive and so is more cost effective when it can be used. It is important to assess both the detection depth required on your site (i.e. the deepest depth that UXO will be encountered) and whether ferrous contamination will adversely limit any non-intrusive UXO survey.

An on-site assessment using the actual survey equipment will quickly identify the suitability of the equipment which will be completed free as part of our solution development.

PLANIT UXB LIMITED
PO BOX 285, NUNBURNHOLME, YORK,
EAST RIDING OF YORKSHIRE, YO42 9AU
Tel: +44 (0) 8000 588 747
Email: help@planitsurveys.com
www.planitsurveys.com

PLANIT
RESTORING BALANCE