

Utility Strike Avoidance

Background

Utility strikes continue to be one of the biggest health and safety hazards in our industry. Across key suppliers to Highways England, there can be as many as one utility strike per day on average. The most significant incidents have tragically resulted in fatalities and life changing injuries.

Routinely, the root cause of these incidents includes poor quality or inaccurate information about buried utility locations, little or no consideration of diversion during design development, lack of consistency of safe working practices across the industry and inadequate or inconsistent control measures on site.

Vision

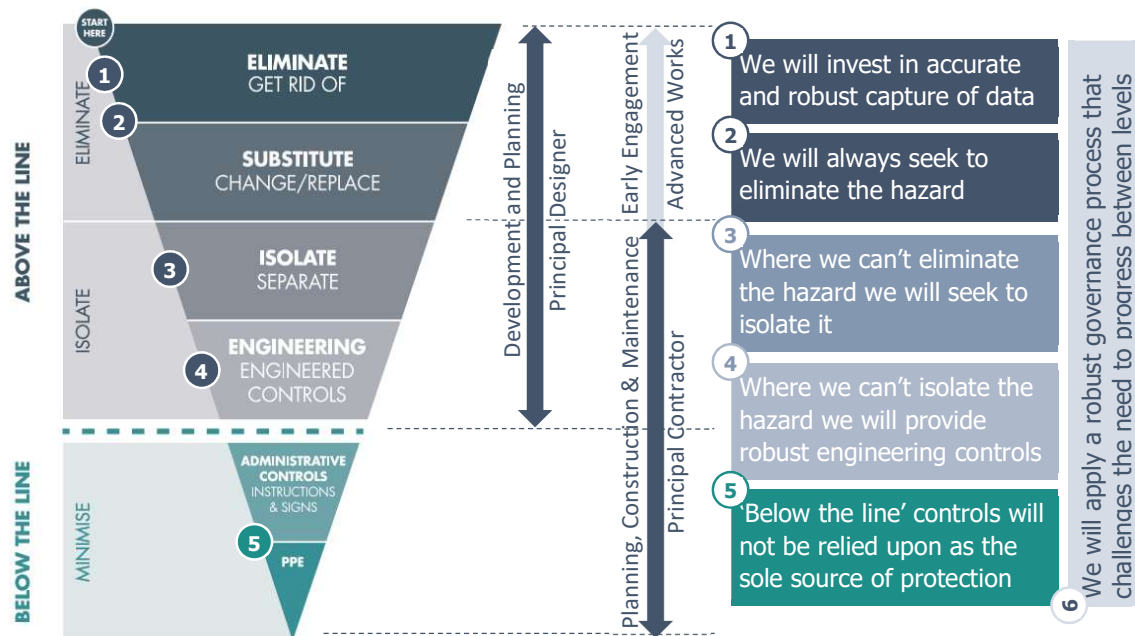
To eliminate the incidences of utility strikes on Highways England projects and maintenance activities.

To improve the engagement, awareness and competence of those involved in commissioning, designing, planning, managing and carrying out work on or near underground utilities.

Principles of Approach to be Adopted (incl Application of Hierarchy of Control)

Overview

As a supplier community we have agreed to adopt the following approach as a **common standard**, following the principles of prevention and adopting a hierarchy of controls as described below, commencing from the earliest consideration of the proposed maintenance or improvement activity. *This will require a review and update of all current processes and procedures.*



The principles of this approach are:

- We will invest in accurate and robust capture of data relating to existing utilities** to ensure we are basing decisions on the best available information, including surveys on site in advance and immediately prior to work commencing.
- We will always seek to eliminate the hazard** and will seek to design solutions that avoid the need to work over/under/adjacent to live utilities or to divert the utilities in advance of any works. As a general principle any utility that does NOT need to be within the works should be removed from the work either by re-planning the works, or by altering the utility outside the works where practicable. Costs for diversion of utilities must be considered in the context of the scale/complexity of the project/activities and unless prohibitively expensive/disproportionate for the context, then this option will be thoroughly exhausted before a lesser control measure is accepted.

3. **Where we can't eliminate the hazard we will seek to isolate it** during construction and maintenance by having the supply temporarily stopped. We will design and plan works to be completed within such an isolation, adopting the same mindset/approach as would be considered for a rail possession – ie we will design and plan all works to be implemented in the vicinity of the utility during as few isolations as possible/practicable, rather than adopting a linear approach to all of the elements independently that would require multiple isolations.
4. **Where we can't isolate the hazard we will provide robust engineering controls** that physically prevent any people, plant or equipment coming into contact with the utility, supported by robust procedures. This will include (but are not be limited to) the following measures:
 - › location of utilities accurately determined/confirmed on site prior to commencement of any work, at every location and the presence visibly identified using appropriate means on site;
 - › height restrictors used on any plant that could come into contact with overhead utilities if unrestricted;
 - › gates/barriers/exclusion zones/other measures (eg audible warnings and physical limiters in cabs for drivers as hazards are approached) to physically prevent uncontrolled access to areas where overhead cables are present;
 - › vacuum excavators (where appropriate) used to avoid direct contact with underground utilities during excavation.

Additional measures that may be appropriate in certain circumstances include:

- › protection slabs to prevent damage to underground utilities from direct/indirect work activities;
- › directional drilling for underground works.

These measures will also consider the situation *where works are taking place outside the controlled working area* (eg overnight closures of live lanes allowing work outside an enclosed site, or maintenance activities) and where barriers/exclusion zones and height restriction measures may not be possible to implement in the same way as a controlled site.

NB Use of hand tools/digging and air lances is not considered to be an Engineering Control and should be included in the approvals noted under item 5 below.

5. **Signs, instructions and PPE will not be relied upon as the sole source of protection** - in the event that a greater level of control cannot be achieved, the measures to be put in place to provide protection (eg goal posts, markings, coloured cones, permits to dig, methods of work, etc) will be signed off by a Senior (off-site) Representative for the Principal Contractor [*to be defined in organisational processes/procedures*] each and every time this is required (not for a project or section of works as a whole), to confirm their understanding of the risks and that all other mitigation measures have been considered and exhausted.
6. **We will apply a robust governance process that challenges the need to progress between levels in the hierarchy of control and document decisions taken** - applying robust leadership off-site and on-site to provide positive support and hold people to account where a higher level of control isn't applied. This information will also be used to learn lessons for future projects.

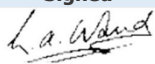

Additional Documentation/Detailed Guidance

Further documents have been developed to support Suppliers and Highways England Project Managers in their approach and decision-making. These are in the process of being incorporated into/combined with the following Raising the Bar Documents, based on this Common Intent:

- › RtB 7 – Overhead Structure and Service Protection
- › RtB 9 – Service Avoidance (*will be updated to Utility Avoidance*)

All current Raising the Bar documents are available at the following location: [Highways Safety Hub](#).

Document Approval Record

	Name	Signed	Dated
Working Group Chair	Lesley Waud		28 April 2020
SCSLG Chair	Phil Clifton		28 April 2020