



Issues

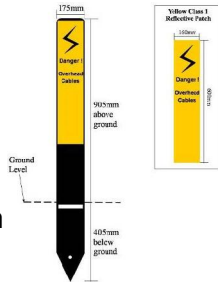
- *Overhead lines can not be seen at night when most maintenance / incident management operations are undertaken*
- *Safe working heights required for construction activities*
- *GS6 requires power switch off*



Mitigation

Design

- Remove overhead lines within designs
- Does the work need to be done near lines?
- Consult utility services and request switch off
- Obtain safe working heights
- Include hazard marker posts



Construction / Maintenance

- GS6 Goalposts
- AMOSS fitted tower lights
- Overhead detection jackets
- SiteNav hazard warning system

LINKS

- [Raising the Bar 7 – Overhead structure and service protection](#)
- [HSE Guidance Note GS6 'Avoidance of danger from overhead electric power lines'](#) provides advice on complying with legal obligations under the:-
 - Health and Safety at Work Act 1974
 - Management of Health and Safety at Work Regulations 1999
 - Construction (Design and Management) Regulations 2015
 - Electricity at Work Regulations 1989
- [DMRB GD 304 – Designing Health and Safety Into Maintenance](#) - Appendix E/A Table E/A.1 Type A1 Relocation of features

Actual Incidents

- 2003 – Two maintenance operatives pull fully erected tower light into live overhead cable at night, electrocuting themselves, Area 14 A66
- 2019 – [Alert HEI068](#) - Unsecured lorry loader boom came into contact with 11KV
- 2018 – Alert - Grab wagon boom struck cable, road closed for several hours
- 2017 – [Alert HEI13](#) – Tower light contacted 33Kv during night-time strimming operations - two operatives taken to hospital



Examples of Significant Risks

Activity Affected	Traffic Management	Driving on Network	Resurfacing - Planing
Hazard	Electrical contact	Electrical contact	Electrical contact
Persons Affected	Road worker – Tower light maintainer	Road user - Driver	Road worker – Planer operator
Likelihood / Severity of Risk	L: High S: High	L: Low S: High	L: Medium S: High



Please submit any feedback, examples of similar issues, or best practice to:
Chair of the Whole Life Design Task Group Andrew.Finch@jacobs.com

LEAN	Material Reduction	Alternative Materials	Reduced Plant	Alternative Plant	Reduced Labour	Reduced Land	Reduced Transportation	Improved end user benefits	Reduced Activity Duration	Reduced Defects	Reduced Reportable Accidents
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