T446: Design Risk Management Schedule Project No M5 J19-20 Portbury to Clevedon 70067536 Project Name



Guidance Notes (see guidance notes page for more details)

Design risk management should be an integral part of the overall design development and designers should think of it in terms of considering constructability, maintainability, etc. Designers only need to document their consideration of risks in this simple risk management schedule format. There is no requirement for quantitative design risk assessments to be carried out/documented and these should be avoided * Risks should be considered in a logical sequence relating to the location/operational environment, constructability/installability, operability (incroutine cleaning, replacement, etc.), and alteration/decommissioning/dismantling/demolition, and should be categorised against those headings,

CIRIA guidance documents C755, C756, C686, C607, etc. provide a useful checklist and detailed guidance on the identification of risks to be considered during design and how those risks might be addressed - see detailed guidance notes for more details

§ Significant residual risks are those which are unusual, not obvious, difficult to manage, or where critical design assumptions apply. The documentation by designers of residual risks that cover well-known and understood hazards should be avoided.

| Ref | Risk Category* & Phase where appropriate, e.g. location/environment, construction, operation, maintenance, alteration/demolition | Asset Key (Structure Key) commas between keys | Work Element/Location (where appropriate) | Hazard or Risk Issue Identified | Risk Management Owner | Design ERIc Action Required (e.g. hazard elimination/risk mitigation action, information to be provided to others) | Significant Temporary Works Requirements/Management Arrangements and/or any Special Erection/Installation Sequences or Requirements | Design Action Status/Final Resolution Notes (e.g. traceability of ERIc action, communication of significant residual risk, critical design criteria, etc.) | Significant Residual Risk [§] | Date Logged/ Reviewed | Raised By |
|-----|---|--|--|--|--------------------------|---|---|--|---|--------------------------|----------------|
| 1 | General | 15553,1770, 11071 | Structure and access to the structure | Working adjacent to the highway | Highways England | Designers aimed to minimise the need for future replacement, maintenance or inspection works to take place during design life of the highway, as well as facilitating safe access where this is not possible. Risks may be mitigated through segregation of users/maintenance staff from highway. Information to be provided to others - Traffic Management arrangements to avoid work next to live traffic where possible | | | | 06/11/2020 | Liam Hennessey |
| 2 | General | 15553,1770, 11071 | Access to the structure | Working at height - resulting in death or injury from falling | Highways England | SFARP design out the need for regular cleaning, maintenance and inspection that would necessitate work at height and design in safer ways of meeting a need without needing to work at height. (For example by providing access platforms.) | | | | 06/11/2020 | Liam Hennessey |
| 3 | General | 15553,1770, 11071 | Structure | Leptospirosis | Highways England | Contractor to ensure the following: Ensure appropriate facilities for first aid, hand washing on site. Full site induction for all persons working on site identifying the various health and safety issues, i.e. cover all open wounds and wear hand protection to cover and protect open wounds, do not eat on site, ensure familiarity with the symptoms and mechanisms for catching the disease, keep out of standing water. | | | | 06/11/2020 | Liam Hennessey |
| 4 | General | 15553,1770, 11071 | Access to the structure | Interface with the public | Highways England | Eliminate/Reduce: Where possible design out the need for regular maintenance and inspection that would require traffic management on the road or an interface with the public. This may be conducted by considering more expensive but longer lasting repairs. Information to provide: Areas where repairs are required have been provided to the contractor during ECI meetings so contractor can consider access and the interface with the public during the construction phase. | | | | 06/11/2020 | Liam Hennessey |
| 5 | General | 1770,11071 | Structure | Working over water | Highways England | | // , | | | 06/11/2020 | Liam Hennessey |
| 6 | General | 15553,1770, 11071 | Structure | Excavation and construction around existing cabling and services/ Unknown services | Highways England | Utility returns to be reviewed and information is to be included in the design. contractors working methods are likely to mitigate risk with unknown services e.g. CAT scanning. Contractor to be supplied with C3 utility information and drawings showing approximate layout of utilities on plan. Identify all known statutory undertakers services on site prior to carrying out any excavation works. Take all necessary measures to avoid the services. | | Residual Risk noted in Works Information. | Yes | 06/11/2020 | Liam Hennessey |

T446- Design Risk Management Schedule Page 1 of 1