S278 Risk Assessment
Job Number: 4813
Project Title: Stansty Chain Road, Wrexham
Date: 23/05/2025

Potential Hazard	Original Risk			Action Taken By Designer (To be read in conjunction with Control of Residual Risk)	Residual Risk			Control of Residual Risk By Contractor (Before and During Works)
	Freq	Sev	R A R		Freq	Sev	R A R	
Site Access /Egress (Road traffic accident)	4	5	20	Contractor to apply safe working methods adjacent to live carriageway. Comply with Chapter 8. Adequate and safe advanced provision to be made for pedestrians.	2	5	10	Contractor to plan construction works accordingly. Comply with Chapter 8, Traffic Management Act 2004 and HSE guidance on construction traffic management. Contractor to meet with the client/local authority prior to commencing the works to agree their programme, areas of works, sequence of works, hours of works and traffic management. Contractor to agree any restricted working hours with the local authority/client and delivery timescales to minimise any impact on the surrounding areas. Contractor will need to agree any required access/egress permits for all deliveries and their personnel prior to commencing works.
Working in the highway Contact with people/ moving vehicle / plant	3	5	15	Contractor to include enough working room within site boundary. Banksman to be provided.	2	6	12	Contractor to plan site layout accordingly. Comply with Chapter 8, Traffic Management Act 2004 and HSE guidance on construction traffic management. Contractor to meet with the client/local authority prior to commencing the works to agree their programme, areas of works, sequence of works, hours of works and traffic management. Contractor to agree any restricted working hours with the local authority/client and delivery timescales to minimise any impact on the surrounding areas. Contractor will need to agree any required access/egress permits for all

								deliveries and their personnel prior to commencing works.
Site Compound/Deliveries	4	5	20	Contractor to minimise potential risk of conflict with site workers and deliveries.	1	4	4	Contractor to provide traffic management and temporary signage in accordance with the requirements of Chapter 8 to allow deliveries to be made at a location agreed with the client. A banksman is to be provided to assist with all plant movement and deliveries within the site compound.
Statutory Undertakers Plant Local Authority cables (Explosion / Electrocution)	3	6	18	Contractor to obtain service plans prior to commencement of works. Safe working practice HS(G)47 shall be followed. PPE utilised at all times. Use electronic detection device, trial holes, locate-highlight all services prior to works. Contractor to ensure that all staff are trained to work in confined spaces alongside stats plant and are aware of all risks and how to control/minimise them	1	6	6	Contractor to comply with CDM regs, HSE Guidance, HSG47 and Statutory Undertakers requirements. Contractor to trace and mark out all existing services and undertake hand dug trial holes and GPR survey to accurately confirm the depth and location of all stats in the vicinity of their works. Where necessary service providers to be informed of any works affecting their plant and permits including permit to dig to be obtained by the Contractor
Working Below Ground Level (excavation Collapse)	3	5	15	Contractor to avoid lone working for deep trenching>1.2m. Minimise depth of any excavations required.	1	4	4	Support sides of excavation, comply with HSE guidance including 'Preventing accidents in Excavations'. Areas of excavations and spoil heaps to be fenced off and backfilled as soon as possible and covered when unattended
Working Below Ground Level (Underground Services)	3	6	18	Contractor to obtain service plans prior to commencement of works. Safe working practice HS(G)47 shall be followed. PPE utilised at all times. Use electronic detection device, trial holes, locate-highlight all services prior to works. Contractor to ensure that all staff are trained to work in confined spaces, alongside stats plant and are aware of all risks and how to control/minimise them	1	6	6	Contractor to ensure operatives comply. Use of service Location device and reference made to Stats plans. Contractor to comply with CDM regs, HSE Guidance, HSG47 and Statutory Undertakers requirements. Contractor to trace and mark out all existing services and undertake hand dug trial holes and GPR survey to accurately confirm the depth and location of all stats in the vicinity of their works. Where necessary service providers to be informed of any works

								affecting their plant and permits including permit to dig to be obtained by the Contractor
Working Below Ground Level (Confined Spaces)	2	6	12	Contractor to obtain service plans prior to commencement of works. Safe working practice HS(G)47 shall be followed. PPE utilised at all times. Use electronic detection device, trial holes, locate-highlight all services prior to works. Contractor to ensure that all staff are trained to work in confined spaces, alongside stats plant and are aware of all risks and how to control/minimise them. Avoid lone working. Minimise use of private cable networks where practicable.	1	4	4	Highlight to Contractor. Contractor to provide two means of access to excavation, and gas monitor if required. At least 3 personnel present. Confined spaces training.
Working below ground level (contaminated Land and mud on road)	1	5	5	Contractor to obtain service plans prior to commencement of works. Safe working practice HS(G)47 shall be followed. PPE utilised at all times. Use electronic detection device, trial holes, locate-highlight all services prior to works. Contractor to ensure that all staff are trained to work in confined spaces, recognise hazardous materials, alongside stats plant and are aware of all risks and how to control/minimise them.	1	3	3	Contractor to be aware of any possible risks of contamination and flammable fumes/liquids Contractor to ensure all operatives comply with PPE requirements. Contractor to implement working methods to minimise the risk of any construction materials, debris, mud etc being placed on the carriageway and provide a road sweep at regular intervals to clean any mud on roads.
Erection of Street Furniture-inc bus shelters	1	5	5	Avoid overhead lines present throughout the works and elsewhere (HSE GS6). Consult statutory undertakers plans. PPE utilised at all times. Create safe working area. Use appropriate plant / equipment for installation.	1	3	3	Contractor to ensure operatives comply with all relevant HSE guidance and workplace Health and Safety procedures.
Removal of Existing Street Furniture.	2	5	10	Avoid overhead lines present throughout the works elsewhere (HSE GS6), Service plans, PPE to be utilised, create safe working area, remove all equipment attached to furniture, use appropriate plant for removals, ensure electrical supplies have been disconnected.	1	4	4	Contractor to ensure operatives comply with all relevant HSE guidance. Dismantle columns in sections. Bracket arms and lanterns to be removed.

Falls from Height	1	5	5	Platform vehicles, safety harnesses and safety nets to be utilised.	1	5	5	Contractor to ensure operatives comply with all relevant HSE guidance and workplace Health and Safety procedures.
Fall of tools / equipment	2	3	6	Tools to be stored in enclosure. Equipment to be secured (clamps / tethered). Create safe working area.	1	3	3	Contractor to ensure operatives comply with all relevant HSE guidance and workplace Health and Safety procedures.
Vibration	3	2	6	Use PPE at all times. Minimise use of vibrating hand-held equipment.	1	2	2	Contractor to ensure operatives comply with all relevant HSE guidance and workplace Health and Safety procedures.
Electric Shock	2	6	12	Test all electrical supplies. Prove all supplies. Isolate/ disconnect using locks/ blanks. Warning notices. Use PPE. Competent operatives. Adhere to Electricity at Works Act.	1	5	5	Comply with all relevant HSE guidelines including Electricity at Work and IEE Regulations
Electrical Works (After isolation)	1	3	3	Competent Operatives to be trained and certified in the operation of powered equipment. Specialist tools. PPE to be Utilised. Conform to I.E.E current regulations.	1	3	3	Contractor to ensure operatives comply with all relevant HSE guidelines including IEE current regulations.
Lifting and Handling	3	4	12	Contractor to minimise use of heavy equipment. Detail size and weight. Lifting aids to be used.	3	3	9	Contractor to ensure operatives comply with all relevant HSE guidance and workplace Health and Safety procedures. Ensure manual handling aids are available.
Asbestos encountered during works	1	6	6	Action Plan to be undertaken in accordance with the guidance contained in IAN 63/05 'Asbestos Management Applicable to the road network'	1	2	2	Contractor to ensure that all operatives are trained in identifying asbestos and are familiar with areas having the potential to contain asbestos

Risk Assessment/Evaluation

1. Identify all hazards associated with a particular project. List hazards on Risk Evaluation Sheet.

2. Assess frequency and severity of hazards according to the following:-

Frequency	Severity
1 - improbable occurrence	1 - trivial injury/ies
2 - possible occurrence	2 - minor injury/ies
3 - occasional occurrence	3 - major injury to one person
4 - frequent occurrence	4 - major injury/ies to several people
5 - regular occurrence	5 - death of one person
6 - common occurrence	6 - multiple deaths

3. Calculate Risk Assessment Rating (R.A.R)

   RAR = Frequency x Severity

4. Investigate methods of reducing the Risk Assessment Rating. Record all proposals on the Risk Evaluation Sheet.

5. Calculate the residual Risk Assessment Rating.

6. Comment on how the residual risk will be controlled.

7. Risk Rating - Low Risk 1 - 6
   Medium Risk 7 - 12
   High Risk 13 - 36

8. All hazards, which cannot be reduced to a low risk category, are to be reported to the planning supervisor.

9. All hazards, which cannot be eliminated, must be recorded on the Pre-Tender Risk Assessment to be addressed by the Contractor in the Health & Safety Plan.

10. A re assessment of risk must be undertaken on all changes to design, methods of working, etc. whether these originate in the Design Office or from site activities.

11. **This risk assessment identifies non-standard risks which may be encountered on the site but is not exhaustive. The Contractor/Surveyor will be required to prepare detailed method statements and risk assessments as necessary for the works.**

CDM Regulations 2015

In line with the above regulations we are obliged to inform the client of the risks that may be encountered in the construction of these works. all design work has been carried out with health and safety aspects given full consideration. wherever possible risks have been eliminated from the design, however due to the very nature of this type of work it is not possible to remove all the risks from the design. we would also respectfully remind the client of his obligations to take all reasonable steps in ensuring that only competent contractors who have a valid safety policy are employed. they should also provide satisfactory responses at tender stage as to the manner in which they will deal with the elements of risk involved in this type of work and in particular those highlighted by Croft below:-

1. Trench excavations in excess of 1.2m deep.

2. Guarding to edges of excavations to prevent people, materials and vehicles falling into excavation.

3. Guarding of excavations outside working hours to prevent unauthorised access.

4. Undermining to adjacent roads or structures.

5. Confined space operations.

6. Dealing with existing services.

7. Traffic management on existing highways.

8. Procedure to be followed in event of accident or emergency.

9. Method of working where contaminated ground is present on site.

10. Confirmation will be required that all operatives are adequately trained, copies of relevant training certificates to be supplied.

11. Any construction personnel, including operatives intending to construct the designs shown on this drawing should ensure that they have been regularly and thoroughly briefed by the principal contractor on all health and safety matters and have had sight of:

i) the full designers and contractors risk assessments and risk registers.
ii) the developed construction health and safety plan
iii) the contractors construction method statements.

the above list is by no means exhaustive but it does highlight operations that present a risk to contractors and the general public.