# Designers Risk Assessment

Project: Great Baddow Cemetery Extension

Document Ref: CDS-GRT-BDW-05

Date: 18<sup>th</sup> December 2018











Cemetery Development Services Limited
Capability House
Building 31
Wrest Park
Silsoe
Bedfordshire
MK45 4HR
T: 01525 864387
E: info@cem-dev.co.uk
www.cemeterydevelopmentservices.co.uk

#### **Project Summary**

The project is for the development of a new section of cemetery adjacent to the existing cemetery at Great Baddow. The works include drainage installation comprising excavation and landscaping of a detention basin, installation of a system of lateral, collector and carrier drains, reinstatement, installation of an outfall in a ditch and seeding. Construction of a Macadam roadway, kerbing and drainage gullies. Connection of roadway drains to land drain system. Cultivation, levelling and seeding of the designated extension area.

Specifically, the proposed works consist of installing new drainage infrastructure including piped drains, chambers, sumps, headwalls and access chambers. In addition, part of the site will be stripped of topsoil, the subsoil re-graded and the topsoil replaced and graded to finished levels. Parts of the works will involve working in moderate proximity to existing graves with some hand dug drains being necessary.

Anticipated mobilisation date – as conditions allow in later spring / early summer 2019.

Designer: A Vickers Project: Great Baddow Cemetery Extension

Job No: CDS-GRT-BDW-05 Date 18.12.2018



Ref	Activity /	Potential	Population	Risk F	Risk Rating		Action at Design Stage	Action Tak	en	Possible Control Options
No	Element	Hazard	At Risk	L	S	R		Ву	Date	(Contractors)

#### 1.0 Site wide

1.1	Deliveries to site	Site access/egress and potential damage to vehicles and harm to pedestrians	Public Contractor	Н	M	Н	Clear, safe, separate routes for vehicles and pedestrians to be established and clearly marked.  Access to downslope allotment to be maintained via diversion as	CDS	All deliveries and large vehicles to arrive via agreed access points during an agreed time period.
							needed. Secure contractors compound to be established in allotment car park area but to be separate and secured from allotment users and public.		
1.2	Trespass by members of the public	Unauthorised access onto site.	Public	M	Н	Н	Contractor zones clearly identified on Drawings	CDS	Site is an active, working cemetery. Works areas shall be temporarily secured using appropriate fencing and all excavations covered as required to allow access to graves.
	Movement of sub soil and spoil	Contact with moving vehicle/ plant	Public Contractor	М	М	M	Adequate space must be allowed to enable the manoeuvring of vehicles safely on site.	CDS	Movement of vehicles off site to be controlled with banksmen. Site compound to have designated pedestrian routes. Mobile telephones to be used only within designated compound on site.
1.3	Demolitions and general excavations	Below ground services	General public Contractor	L	Н	Н	Existing services are to be identified by contractor's survey.	Contractor	Contractor to carry out search.

Designer: A Vickers Project: Great Baddow Cemetery Extension





Ref	Activity /	Potential	Population	Risk	Rating	•	Action at Design Stage	Action	Taken	Possible Control Options	
No	Element	Hazard	At Risk	L	S	R		Ву	Date	(Contractors)	
1.5	Simultaneous	Conflicts of	Contractor	L	М	М	A strategy management document to	CDS		Programme works to avoid potential	
	activities	multidisciplinary					be produced by site CA and			clashes.	
		activities					Contractor				
1.6	General	Fire or other	Public	М	Н	Н	Fire escape strategy to be developed	CDS		Contractor to identify escape routes	
	operations on	emergency					with successful tenderer			to safe areas and establish muster	
	site		Contractor							points for each section of the works.	
										H&S notices to be provided on site to	
										advertise fire strategy and	
										congregation points.	

Designer: A Vickers Project: Great Baddow Cemetery Extension

Job No: CDS-GRT-BDW-05 Date 18.12.2018



Ref	Activity /	Potential	Population	Risk Rating			Action at Design Stage	Action Tal	(en	Possible Control Options
No	Element	Hazard	At Risk	L	S	R		Ву	Date	(Contractors)

#### 2.0 Working space / working platforms

2.1	Working in confined	Entrapment	Contractor	М	М	Н	All manholes are less than 2.0	CDS	Certificates for qualifications of
	Spaces						meters depth. Pit sides will need		working in confined spaces to be
							securing.		supplied with contractor method
									statements.

Designer: A Vickers Project: Great Baddow Cemetery Extension

Job No: CDS-GRT-BDW-05 Date 18.12.2018



Ref	Activity /	Potential	Population	Risk F	Risk Rating		Action at Design Stage	Action Tal	(en	Possible Control Options
No	Element	Hazard	At Risk	L	S	R		Ву	Date	(Contractors)

#### 3.0 Materials / substances / components

3.1	Manual handling of materials	Manual handling/ musculoskeletal injuries	Contractor	Н	L	M	Materials as far as possible have been specified that are within acceptable safe limits for manual handling.	CDS	Contractor to allow for requirements for specialist lifting / handling equipment. 2 no. operatives required for manual handling of materials in excess of 20kg.
3.2	Wet mortar/concrete	Skin diseases	Contractor	М	M	М	Concrete used for haunching, foundation slabs and effecting water-tight seals.	CDS	Ensure enforcement of PPE

Designer: A Vickers Project: Great Baddow Cemetery Extension

Job No: CDS-GRT-BDW-05 Date 18.12.2018



Ref	Activity /	Potential	Population	Risk F	Risk Rating		Action at Design Stage	Action Tak	en	Possible Control Options
No	Element	Hazard	At Risk	L	S	R		Ву	Date	(Contractors)

#### 4.0 Earthworks

4.1	Initial soil stripping and grading works	Ground contamination	Contractor	L	L	L		CDS	Due to the history of the site as open space and investigation work completed to date, it is understood that there should be no contamination of the ground.
4.2	Excavations for trenches	Instability of earth and flooding	General public Contractor	L	M	М	Generally simultaneous back-filling excepting hand dug trenches. Depth limited to 0.7m. No trenches left unfilled overnight.	CDS	Minimal risk due to shallow depth of excavation for hand dug trenches. Begin at outfall where possible, pumps available for sump construction. No trenches left unfilled overnight.
4.3	Excavations for Detention basin	Instability of earth and flooding	General public Contractor	L	М	M	Keep sides of basin no steeper than 1:5.		Ensure outfall to ditch is in place ahead of basin construction.
4.4	Excavations for sumps	Instability	Contractor	L	M	М	Designed for mechanical operation will ensure labour will be manual, and labour will be kept clear of pit walls. Shoring of walls may be needed.	CDS	Method statements
4.5	Installation of concrete chambers	Wet concrete mortar, alkaline burns Lifting	Contractors	М	М	М		CDS	Enforcement of PPE Contractor to allow for requirements for specialist lifting / handling equipment.
4.6	Exportation of soil arisings	Vehicle movement hazards	Contractors Public	Н	Н	Н	Clear walk ways and pedestrian route ways to be designated before works start on plans. Timing of works to avoid peak visiting times.	CDS	Designated walkways to be marked out on site under supervision from PM and movement timings agreed.

Designer: A Vickers Project: Great Baddow Cemetery Extension

Job No: CDS-GRT-BDW-05 Date 18.12.2018



Ref	Activity /	Potential	Population	Risk F	Risk Rating		Action at Design Stage	Action Tak	en	Possible Control Options
No	Element	Hazard	At Risk	L	S	R		Ву	Date	(Contractors)

#### 4.0 Earthworks cont..

4.7	Grading of soil mounds	Vehicle movement hazards	Public Contractor	Н	Н	Н	Clear walk ways and pedestrian route ways to be designated before works start on plans	CDS	Designated walkways to be marked out on site under supervision from PM
4.8	Installation of pipes and ducting	Manual handling/ musculoskeletal injuries	Contractor	Н	L	М	Materials as far as possible have been specified that are within acceptable safe limits for manual handling.	CDS	Contractor to allow for requirements for specialist lifting / handling equipment. 2 no. operatives required for manual handling of materials in excess of 20kg.