T446: Design Risk Management Schedule

Project No Project Name Hamworthy Park Paddling Pool



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 quantative design risk assessments to be carried out/documented and these should be avoided

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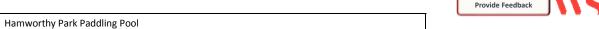
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Ref Risk Category*	Work Element/Location	Hazard or Risk Issue Identified	Risk Management	Design ERIc Action Required	Significant Temporary Works	Design Action Status/Final Resolution Notes	Significant	Date Logged/	Raised By
& Phase where appropriate, e.g. location/environment, construction, operation, maintenance, alteration/demolition	(where appropriate)	natalo di lisa issociationale	Owner	(e.g. hazard elimination/risk mitigation action, information to be provided to others)		_	Residual Risk [§]	Reviewed	nuised by
1 Location/environment	Large vehicle/plant access to site	There is space for large vehicle/plant to turn around adjacent to site; but direct access will require removal of site fencing. Risk of large vehicle reversing into the existing site facillties and boundaries of the turning area.	Civil Engineer	Information to be provided to others - Risk included in Specification Appendix 1/23 for contractor to manage. WSP drawings 70044842-WSP-SGN-DR-CB-0001, 0010 & 0011 show plan of existing site and proposed works. Proposed turning area to north of paddling pool and nearby features at risk of collision to be highlighted. CLOCS standard for HGV to be included as requirement bu client in Tender process.	Contractor to manage risk through site rules based on information provided. CLOCS standard required for HGV.	Closed - risk highlighted and requirement for CLOCS standard included within Specification Appendix 1/23.	Yes	Oct-18	Bryn Noble
2 Location/environment	Large vehicle/plant in public space	The space for large vehicle/plant to turn around nearby has public access. Time of year would indicate not likely to be busy, but precaution to protect passing pedestrians and fence off site works.	Civil Engineer	Information to be provided to others - Risk included in Specification Appendix 1/23 for contractor to manage. WSP drawings 70044842-WSP-SGN-DR-CB- 0001, 0010 & 0011 show plan of existing site and proposed works. Proposed turning area to north of paddling pool and public access routes to be highlighted. CLOCS standard for HGV to be included as requirement bu client in Tender process.	Contractor to manage risk through site rules based on information provided. CLOCS standard required for HGV.	Closed - risk highlighted to contractor on Specification Appendix 1/23.	Yes	Oct-18	Bryn Noble
3 Demolition	Demolition of existing pool slab	Demolition plant falling into pool during demolition of existing slab by way of existing pool wall collapsing	Civil Engineer	Information to be provided to others - Existing wall detail provided on WSP drawing 70044842- WSP-SGN-DR-CB-0010. Residual risk highlighted on drawing and in Specification Appendix 1/23 for contractor to manage.	Contractor to manage risk based on information provided. Plant should not be permitted around the pool within a suitable distance from the face of the wall	Closed - risk highlighted to contractor on drawing 70044842-WSP-SGN-DR-CB-0010 and Specification Appendix 1/23.	Yes	Oct-18	Bryn Noble
4 Demolition	Demolition of existing pool slab	Excavator boom length reaching centre of pool 17.65m in radius. Ramp down into pool for plant or manual excavation likely to be necessary. Inherits risk of pool wall failure from heavy plant crossing or whole body vibration effects (HAVS) associated with manual plant.	Civil Engineer	Information to be provided to others - Residual risk highlighted with warning triangle and note on WSP drawing 70044842-WSP-SGN-DR-CB-0010 and Specification Appendix 1/23 for contractor to manage.	Contractor to manage risk based on information provided. Plant should be selected so that boom length is sufficient or plan for works accordingly.	Open - to be risk highlighted to contractor on drawing 70044842-WSP-SGN-DR-CB-0010 and Specification Appendix 1/23.	Yes	Oct-18	Bryn Noble
5 Demolition	Unknown existing drainage features	Visual inspection of site drainage suggests system does not completely correspond with the proposed works of previous scheme. Unknown pipes may be found / damaged during excavation.	Civil Engineer	Existing drainage features reviwed further and results indicated on drawings	None	Open - Contractor to verify details of drainage elements of interest at site works commencement	Yes	Oct-18	Bryn Noble
6 Demolition	Excavation at deeper areas of pool	Undermining existing pool side wall foundations (preformed concrete channel).	Civil Engineer	Information to be provided to others - Highlight hazard on WSP drawing 70044842-WSP-SGN-DR-CB-0010 for contractor to manage and plan works accordingly.	Contractor to manage risk based on information provided.	Open - risk to be highlighted to contractor on drawing 70044842-WSP-SGN-DR-CB-0010.	Yes	Nov-18	Andrew Mitchell
7 Demolition and Construction	Demolition of existing pool slab	Potential risk of high water table during demolition and construction due to tidal range.	Civil Engineer	Information to be provided to others - Note on WSP drawing 70044842-WSP-SGN-DR-CB-0010 for contractor to manage and plan works accordingly with tidal range.	Contractor to manage risk based on information provided.	Open - risk to be highlighted to contractor on drawing 70044842-WSP-SGN-DR-CB-0010. MHWS = 2.2mCD or 0.8m AoD	Yes	Oct-18	Bryn Noble
8 Construction	Construction sequence	Installing piles adjacent to undermined side wall	Civil Engineer	Edge piles could be installed prior to demolition of existing slab - eliminates hazard. Risk highlighted on WSP drawing 70044842-WSP-SGN-DR-CB-0010 and Specification Appendix 1/23, for contractor to manage.	Contractor to manage risk based on information provided.	Closed - risk to be highlighted to contractor in drawing 70044480-SBR-DR-CB-0010 and Specification Appendix 1/23	Yes	Apr-18	Bryn Noble

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Project No 70044842 Project Name



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Ref	Risk Category* & Phase where appropriate, e.g. location/environment,	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	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
	construction, operation, maintenance, alteration/demolition					Requirements	, , , , , , , , , , , , , , , , , , , ,			
9	Construction	Piling	Installation induced ground movement (settlement and heave) and their impacts on nearby structures, noise, dust and vibration, impacts on pile trimming	Civil Engineer	While piles are a contractor design element Bored piles couls be preferred over driven - this is much better suited than driven piles for the hazards listed. Reduced impact on existing paddling pool, reduced noise, dust and vibration.	Contractor to manage risk based on information provided.	Closed - risk to be highlighted to contractor in drawing 70044480-SBR-DR-CB-0010 and Specification Appendix 1/23	Yes	Nov-18	Andrew Mitchell
10	Construction	Pool Drainage	Connection of new pool drain to existing pump mahole will require some work within the manhole. The manhole is deep and may be considered a confined space	Civil Engineer	New drain pipe laid at moderate 1:100 fall to limit depth of connection. Most work (including creation of opening can be soen from outside) but some marking out/ finishing/making good will be required inside.	Contractor to manage risk based on information provided. An Emergency Evacuation Plan will likley be requried.	Open - risk to be highlighted to contractor in drawing 70044480-SBR-DR-CB-0010 and Specification Appendix 1/23	Yes	Nov-18	Brendon Pell
10	Operation	Depth of paddling pool	Risk of small child drowning	Client	Client requirement to design new paddling pool level the same as existing and depths similar to exisitng. Additionally fully ramped beach area provided to allow for easier access / egress by all	None	Closed - Client to manage risk during operation.	Yes	Nov-18	Andrew Mitchell
11	Operation	Significant vertical step between edge pavement and paddling pool	pool	Client	Client requirement to design new paddling pool level to same as existing. Existing curved ramp ("beach") down to be reconstructed on one side of pool to partially eliminate this risk. Carefully considered concrete finish.	None	Final concrete finish to be determined by trial panels; details in Specification Appendix 17/3. Client to manage risk during operation.	Yes	Nov-18	Andrew Mitchell
12	Maintenance	New pool slab	Settlement causing cracking of the slab	Civil Engineer	Geotechnical analysis based on factual report provided used to predict number of piles and allowable settlement for control of cracking.	None	Closed - risk has been controlled through design. See WSP drawing 70044842-WSP-SGN-DR-CB-0012	No	Aug-18	Bryn Noble
13	Maintenance	New pool slab	Depending on the joint sealant material chosen by client, these will need to be maintained.	Client	Information to be provided to ensure that client is aware of maintenance required for product chosen . This will be given in the revised design intent report and noted on WSP drawing.	None	Open - choice of joint sealant details in Specification Appendix 23/2. Product to be agreed by client.	Yes	Oct-18	Bryn Noble
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Provide Feedback

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