



Risk Register

Project Name: Mangawhai Balance Tank

Project Number:1-1492.07

Client: Kaipara DC

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Version 2

Updated: 17 September 2020

	Risk	Description	Party with Risk	Avoid/ Mitigate/ Manage	Action	Risk Potential \$	Owner
1	Commercial	Project cost exceeds annual budget	KDC	Manage	WSP have undertaken a review of the option, concept level design and cost estimate. Cost estimate of \$1.9 m plus 15% contingency is identified. – In Budget.	\$272k (contingency)	KDC
2	Commercial	Project cost increases	KDC	Manage	Periodic review of project. Identify and agree changes. Request additional funding if needed.		KDC
3	Technical	Geotechnical requirement changes compare to 2007 survey	KDC	Mitigate	Undertaken targeted Geotech investigation. Confirm locations of construction.		WSP to do survey
4	Technical	Bank Stability- The stability of the bank is assumed as outside of previous survey. Risk of increased measures to maintain stable bank.	KDC	Mitigate	Include bank in geotech surveys. Identify risks.		WSP to include in survey
5	Constructability	Screen relocation. It is assumed that the existing screen can be relocated in a 4-6 hour window of no flow to works. If this is not possible, an additional screen	KDC	Mitigate	Plan screen move with contractor. Prepare contingency to enable come back later	\$60k	KDC - Assess in design

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		may be required. Also condition of screen permits relocation.			approach. Or purchase new screen.		
6	Technical	Odour- it is assumed that change from old to new odour systems will occur at a time of low odour generation. Else it may be required to run twin system for a period.	KDC	Mitigate	Consider timing of activity and make risk based decision.	\$20k	KDC - consider in design
7	Technical	Tank cleaning. It is assumed that the tank can be cleaned from a single access platform, washing all debris to the sump for removal by installed pump. It is assumed that washwater is adequate flow and pressure to clean floor to prevent odour. Task is manual.	KDC	Mitigate	Get info on flow and pressure from existing washwater system. If too low, consider auto in tank cleaning, or washwater booster.	\$40k	KDC - consider in design
8	Environment/Compliance	Spills from PS-K. The project is to pass 30 l/s more to the WWTP in storm events. This will improve the Outfall PS situation, but may not address PS-K issue	KDC	Manage	Monitor and record high levels in PS. Confirm response plan in place to tanker excess water.	\$50k	KDC
9	Environment	Wildlife outside of current site fence. Unknown whether any significant ecology to be considered	KDC	Mitigate	Desktop ecology review to lower risk of ecology impact	\$10k	KDC - to instruct WSP
10.	Archaeology	Construction outside of site boundary may impact on archaeology.	KDC	Mitigate	Review scope of previous archaeological studies. If area is out of scope, undertake a desktop review to assess strategy	\$15k	KDC