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Job No: 65507

SUNFIELD FAST TRACK APPLICATION – ECOLOGICAL RESPONSE TO STREAM VALUES REVIEW

This memorandum provides additional information and responses to matters raised in Annexure A of the memorandum of counsel from Auckland Council, dated 3 December 2025.

Item 1 – the main channel refers to the diversion channel adjacent to the proposed Mill Road and Stage 2 alignment.

Item 2 – the channel has a post-development upstream contributing catchment of 382.2 ha¹. This is more than sufficient to retain permanent flows through the main channel considering the average threshold for permanent stream catchment size on Waitemata sandstone is 2.8 ha². In addition, the Stream Park through the centre of the site, with a post-development catchment size of 54.9 will provide a high amount of permanent aquatic habitat. The streams on site are permanent streams, and will remain permanent following the diversion, therefore no transferability to the intermittent SEV calculator is considered to be necessary

Item 3 – the culverted amount is excluded from the enhancements, where 1,929 m of stream will be diverted to 2,332 m of stream length, noting this will be wider than what is currently present. These 2,332 linear metres of stream *does not* include the culverted length, nor the Central Stormwater Park which will include an additional 1,678 linear metres of stream and wetland habitat to the site.

Item 5 – deciduous vegetation scored as 1 in the potential value as riparian planting would introduce evergreen vegetation. The existing riparian yard is entirely restricted to rank grasses and herbaceous vegetation.

Item 8 – geomorphic risk assessment and mobilisation/stability of sediments will be provided by CKL. Options to minimise risk of gravels flushing out may include the use of larger gravels for this lining to increase stabilisation. Monitoring of the substrate retention may then be incorporated following flood events to determine how stable it will be.

Item 10 – revised SEV scores, including 20 m of riparian planting has increased the potential SEV score for the SEV1-p to 0.51, and 0.54 for SEV2-p. This marginally increases the ECR to 1.06 and 1.13 respectively. Noting Figure 1 in the stream value assessment indicates the location of SEV1 and SEV2

In summary, 1,929 linear metres of stream, equating to 2,066 m² of stream bed area will be diverted to 2,332 linear metres of stream bed (*excluding* culverted length and the Stream Park) with a bed area of 19,552 m². The ECR, including these stream lengths, show the freshwater values are sufficiently provided for on the main channel, even when accounting for the increase in ECR scores. In addition, this assessment does not account for the Central Stormwater Park through the centre of the site which will also provide an increase in the extent and quality of aquatic habitat compared to what is currently present.

¹ Maven (2025) Stormwater Management Plan for Sunfield – Fast Track Approvals Application

² Storey, R.; Wadhwa, S. (2009). An Assessment of the Lengths of Permanent, Intermittent and Ephemeral Streams in the Auckland Region. Prepared by NIWA for Auckland Regional Council. Auckland Regional Council Technical Report 2009/028.



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Stream ID	Impact type	Impact					Compensation/Offset							ECR		Compensated	Residual
		SEVi-P	SEVi-I	Length (m)	Average width (m)	Streambed area (m2)	Stream ID	Compensation method *	SEVm-P	SEVm-C	Average width (m)	Length available (m)	Streambed area available (m2)	ECR	Streambed area compensation required (m2)	Proportion of impact reach compensated	Compensation stream bed area still available (m2)
Main drain rep	Reclamation	0.51	0	1144	1.01	1155	Main channel	Enhancement	0.72	0	10	1861	18610	1.06	1227.66	15.16	17382.3
Side drain rep	Reclamation	0.54	0	751	1.16	871	Main channel	Enhancement	0.72	0	10		17382.3	1.13	980.06	17.74	16402.3
Side drain rep	Reclamation	0.54	0	751	1.16	871	Swale 13	Enhancement	0.71	0	2	471	942	1.14	993.86	0.95	0.0

Figure 1. ECR calculations with revised SEVi-P 20 m planting showing an overall no net loss due to the diversion



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