

Before the Expert Panel appointed under the
Fast-track Approvals Act 2024

FTAA-2604-1207

Under the Fast-track Approvals Act 2024 (FTAA)

In the matter of the Southern Link Inland Port

By Southern Link Property Limited

**STATEMENT OF EVIDENCE BY MARK SCAIFE ON BEHALF OF SOUTHERN LINK
PROPERTY LIMITED**

GROUNDWATER

19 August 2026



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1. INTRODUCTION

- 1.1 My full name is Mark Scaife. I hold the qualifications of Bachelor of Science in environmental sciences with geology and geography (2016) and a Professional Master of Engineering Geology (2018) from the University of Canterbury. I have over 9 years' experience in hydrogeology, I am currently employed as a senior hydrogeologist at Stantec New Zealand (Stantec). I am a member of the New Zealand Hydrological society.
- 1.2 My role in relation to the implementation of the Southern Link Inland Port (**SLIP**, or the **Project**) has been to provide expert advice in relation to groundwater quantity and quality as part of the Project. I was a secondary author to the Stantec Groundwater Assessment report (Part B.11 of the substantive application for the SLIP), with Evelyn Charlesworth being the primary author and Vanessa Dally being the reviewer. When I refer to "our" in this evidence, it is to myself, Evelyn Charlesworth, and Vanessa Dally.
- 1.3 I have been asked by Southern Link Property Limited (**SLPL**) to provide a response to specific matters within my areas of expertise contained in written comments on the SLPL application from persons invited by the Panel to comment under s 53 of the FTAA. I respond to:
- (a) Mike Thorley on behalf of Otago Regional Council (**ORC**) in relation to hydrogeology / groundwater; and
 - (b) Craig Inch and Joanne Inch in relation to groundwater quality
- 1.4 I have prepared this statement within the limited time available to me. Consequently, it is necessarily at a high level. I am able to provide a more fulsome response to the issues covered in this statement if the Panel requires further assistance from me.

Code of Conduct

- 1.5 I confirm that I have read the Code of Conduct for Expert Witnesses contained in section 9 of the Environment Court Practice Note 2023 and have complied with it in preparing this evidence. I confirm that the issues addressed in this evidence are within my area of expertise, and I have not omitted material facts known to me that might alter or detract from my evidence.

2. MIKE THORLEY FOR ORC

- 2.1 Mr Thorley (Beca Ltd – Hydrogeology Review – RM25.034: Southern Link Inland Port FTAA to Otago Regional Council) appears to be in general agreement that our assessment provides a reasonable conceptual basis for understanding the hydrogeology of the site and the general groundwater pathways relevant to the proposal.
- 2.2 Mr Thorley requests a condition to “Demonstrate how groundwater monitoring results have informed detailed design of stormwater, wastewater, infiltration areas, and other site infrastructure.”
- 2.3 Such content would typically be considered and presented in a detailed design report to determine if the water balance of stormwater / infiltration areas is sufficient to manage what is generated from the site, to the extent that any part of the design performance may rely on infiltration features.
- 2.4 I do not consider this should be a ‘requirement’ insofar as a condition of the resource consents are concerned unless there is an identified potential adverse effect on groundwater that requires management, which I do not believe to be the case. Notwithstanding this, conditions 28-31 stipulate the need to continue to monitor and report groundwater levels below the site. Condition 32 stipulates that should groundwater monitoring indicate dewatering will be required for construction purposes (which in my opinion is highly unlikely), the necessary consents and / or approvals will be

obtained. As such, groundwater levels must be considered by the applicant during design.

- 2.5 Mr Thorley requests a condition to “Verify the performance of any infiltration devices adopted through detailed design before operation.”
- 2.6 In my opinion, such verification might be specified by the designer if the overall stormwater quantity management is reliant on a certain infiltration performance, but the need for verification is not a valid groundwater consent condition in my opinion. This requirement does not appear to be linked to managing an identified potential adverse effect on groundwater and therefore should not be a condition of the consent. I have not seen any evidence from Mr Thorley or otherwise to suggest that there is a need to target a certain recharge to mitigate an identified effect.
- 2.7 Mr Thorley requests a condition to “Avoid locating infiltration devices in areas where contamination remains or residual contamination is identified, unless supported by contaminated land and hydrogeology assessment.”
- 2.8 I consider that the identification and remediation of contaminated land will be adequately dealt with via the Contaminated Site Management Plan and Remedial Action Plans which are required to be lodged with ORC at least 20 working days prior to the commencement of each development stage of earthworks. The requirements for the Contaminated Site Management Plan and Remedial Action Plans are outlined in ‘Resource Consent A’. As stipulated in Condition A.3(1), the plan must be submitted to the Otago Regional Council for certification. As noted in Condition A.3(2), “The Contaminated Site Management Plan must identify best practice options for the safe and efficient management of contaminated soils and materials to ensure the health of humans and the environment is protected.” Discharging stormwater onto contaminated land is not considered best practice (unless supported by an assessment), as such, it is my opinion that an additional condition stipulating so is not necessary.

- 2.9 Mr Thorley requests a condition to require annual inspection, maintenance, and record keeping for any operational infiltration devices.
- 2.10 For the same reasons that I have set out under paragraph 2.6 above, such reporting may be specified by the designer and/or supplier as part of the design reporting process (including O&M manual). I do not consider a condition is necessary to manage any identified potential adverse effect on groundwater.
- 2.11 Mr Thorley requests a condition to “Retain a targeted groundwater monitoring and review framework focused on groundwater levels, groundwater quality, and a hydrogeologist-led review following an initial operational period.”
- 2.12 In my opinion, the additional monitoring requested by Mr Thorley, in addition to what is already proposed within Consent Conditions 28-31, is not commensurate with the magnitude of the potential effects the development may have on groundwater. This is due to all infrastructure being above groundwater, any potential recharge reduction to the aquifer being very small and discharges to groundwater comprising clean roof runoff or post-treatment stormwater. Additional comments on the makeup of discharges to land and its potential effect on groundwater quality are set out below.
- 2.13 There are three potential pathways for surface contaminants to enter ground, namely ‘clean’ roof runoff if infiltrated (subject to detailed design), washbay overflow in an extreme weather event and the stormwater attenuation pond.
- 2.14 The conditional trade waste component is isolated from groundwater pathways through the construction of a dedicated washbay runoff capture system that provides storage and pre treatment prior to discharge to trade wastewater system in normal operating conditions. Only in rare events greater than 10% AEP (or rarer depending on storm duration) will a small

portion of relatively clean water, after at least 20 minutes of intense rainfall resulting in very low residual contaminants, potentially overflow the washbay perimeter and be carried to the stormwater attenuation pond where it will be substantially further diluted (for those analytes) by stormwater from the entire SLIP site. As such, any discharges to ground will be of similar quality to treated stormwater. The water quality characterisation of the washbay overflow is further discussed by my colleague Dr Claire Conwell in her evidence.

2.15 Stormwater discharge to land will predominantly be via the attenuation pond, however, this is unlikely to be designed to intentionally recharge groundwater. Based on groundwater level monitoring there will generally be an unsaturated zone below the stormwater basin. Therefore, there will be a reduction of common stormwater contaminants before reaching groundwater in the vadose zone. If there is no unsaturated zone below the basin the infiltration rate to ground will be greatly reduced (due to the slackened hydraulic gradient out of the basin) and stormwater related contaminants entering the groundwater system will be very limited and diluted rapidly (due to the high groundwater flows during elevated levels). As such, any discharges to land will be self-regulated and assessed to have a negligible impact on groundwater quality.

2.16 As such, it is my opinion that all groundwater related effects are assessed to be negligible and the risk of producing more than minor effects, very low. Hence, I do not agree that groundwater monitoring in excess of what has been proposed in Consent conditions 28-31 is required.

3. CRAIG AND JOANNE INCH

3.1 Craig and Joanne Inch highlight that “our household water is supplied by bore and we are concerned about contamination of the aquafill”.

3.2 The bore in question is located on 54 Rutherford Road, Council well number: I44/0977. The well is separated from the development by the

Silver Stream which it is approximately 80 m southeast from at its closest. Contaminated land shall be removed as part of the site development reducing contaminate load. Stormwater discharges will be treated prior to any infiltration that may occur. Any stormwater discharges will receive further treatment through the vadose zone or infiltrate slowly and be rapidly diluted, as such, any discharges to land will have a negligible effect on groundwater quality.

3.3 Furthermore, Silver Stream will be causing a groundwater mound below as it loses to the underling aquifer. As groundwater will not flow uphill there will be a groundwater divide below the Silver Stream. Therefore, the bore located on Craig and Joanne Inch's property will not be in the flow path of treated stormwater discharged to land.

3.4 As such, it is my opinion that the development will not reduce the groundwater quality in bore I44/0977.

4. CONCLUSION

4.1 I confirm that this evidence does not change the views I expressed within my original report. I do not recommend changing consent conditions as the current conditions commensurately monitor the potential of the proposed infrastructure on groundwater.

Dated: 19 August 2026



Mark Scaife