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

Under	the Fast-track Approvals Act 2024 (**Act**)
And	
In the Matter of	an application for approvals by Matakanui Gold Limited to establish, operate, rehabilitate and ultimately close an open pit and underground gold mining operation known as the Bendigo-Ophir Gold Project

Statement of Evidence of **Andrew Alan Metherell** on behalf of **Matakanui Gold Limited** in response to Section 53 Feedback

Traffic

Dated: 17 April 2026

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INTRODUCTION

1. My name is Andrew Alan Metherell.

2. I am a Chartered Professional Engineer, a Chartered Member of Engineering New Zealand, and am included on the International Professional Engineer Register. I hold a Bachelor of Engineering (Civil) with Honours degree from the University of Canterbury. I am also an Associate Member of the New Zealand Planning Institute.

3. I have twenty eight years' experience, practising as a traffic engineering and transportation planning specialist. I am employed by Stantec New Zealand as a transportation engineer, and currently hold the position of Traffic Engineering Team Lead. In that role I am responsible for providing traffic engineering advice, assessment and design for a wide range of activities.

4. Relevant to the Bendigo-Ophir Gold Project (**BOGP**), I have prepared transportation assessments for many large scale projects in rural environments where higher volumes of traffic would be generated onto lower volume and state highway road networks, and included a range of road mitigation and traffic management plan requirements. Examples of such project consent applications include:

   (a) The Waihi North Project gold mine expansion Fast Track Approvals Act 2024 (FTA) application at Waihi;

   (b) Development of high trip generating aggregate quarries in Canterbury including Fletcher Infrastructure and Concrete Burnham Quarry, Fulton Hogan Roydon Quarry, and Road Metals Wards Road quarry.

   (c) Construction of canal based hydroelectric power schemes impacting long stretches of road network during construction and requiring changes to the road network for operation, such as the Wairau Valley and Arnold Valley Hydroelectric Power Schemes;

   (d) Construction of wind farms generating high volumes of heavy vehicle and staff traffic throughout construction, including the original consenting of Mahinerangi Wind Farm and Kaiwera Downs Wind Farm, and quality assurance for the Stantec prepared transport assessment for the Contact Energy Southland Wind Farm;

   (e) Construction of the Klondyke 53M m^3 irrigation storage pond project in Mid-Canterbury, involving long duration and large-scale construction activities generating heavy vehicle and staff movements on the road network.

5. This statement is given as part of Matakanui Gold Limited's (**MGL**) response to comments on the Bendigo Ophir Gold Project (**BOGP**) made under Section 53 of the FTA. I have reviewed the transport-related evidence and comments submitted. This statement responds to specific comments raised by:

   (a) *NZ Transport Agency Waka Kotahi (NZTA) memorandum dated 9 April* 2026;

   (b) Central Otago District Council (**CODC**) as included in the Appendix D Transportation Review by Abley, dated 20 March 2026;

   (c) Otago Regional Council (**ORC**) Appendix 49 Transport team comment dated 20 March 2026;

   (d) Sustainable Tarras as included in the expert evidence of Mr Peter Martineau dated 6 April 2026 (the "Martineau evidence");

   (e) Chinamans Terrace Service Company Limited statement dated 9 April 2026;

   (f) Matakanui Station Limited comments dated 10 April 2026;

   (g) Gibbston Valley Wines Limited comments dated 10 April 2026; and

   (h) Professor Geoffrey Keasly and Dr Claire Fletcher-Flinn (undated).

6. My original findings are provided in full in:

   (a) B.30 Stantec - Integrated Transport Assessment (Stantec 2025).

7. I have prepared this statement in the limited time available for MGL to respond to comments under the Act. If the Panel requires elaboration on any of the matters raised in this statement, I am available to provide further information on request.

8. Although this is not an Environment Court proceeding my confirmation of compliance with the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2023 is included in Substantive Application Document A0.2B.

SPECIFIC RESPONSE TO COMMENTS

9. There is some commonality with the transport related comments by parties, and where that is the case, I have combined my response to parties under the issue raised. For clarity, I have structured my responses by first addressing strategic and wider network considerations, followed by location-specific effects on the local road

network, and concluding with a summary of recommended mitigation measures and related conditions of consent.

Wide Area Effects on Strategic Road Network

Concern Raised by Commenters: Whether BOGP-related staff traffic would exacerbate congestion or delay at existing pinch points on the state highway network, including the SH8A Red Bridge.

10. Mr Martineau for Sustainable Tarras (paragraph 10) considers the arrival and departure patterns of staff will put additional pressure on existing network "pinch points" which are "already under strain", with the single lane traffic signal controlled "Red Bridge" on SH8A crossing the Clutha River Mata Au specifically mentioned. I consider the Integrated Transport Assessment (**ITA**) suitably addresses wider area effects with a comparison of traffic volumes generated by the site and traffic volumes using the state highway network, which has a function of accommodating through traffic. However, to address the comments made, I have carried out further assessment of the Red Bridge.

11. The traffic signals were installed in 2024. The bridge shown in **Figure 1** is some 25km from the SH8 / Ardgour Road intersection on a different part of the state highway network, and was not specifically assessed in the ITA.

Figure 1: SH8A Red Bridge

12. The ITA sets out at Section 6.4 expected changes in traffic volumes on SH8 south of Ardgour Road being approximately 300 vehicles per day (**vpd**) during construction, and 180 vpd during operation. North of Ardgour Road, changes are

forecast to be approximately 100 vpd during construction, and 70 vpd during operation.

13. SH8A has an hourly traffic pattern as shown in **Figure 2**. It has similar traffic volumes to SH8. Site generated traffic crossing the single lane SH8A Red Bridge across the Clutha River Mata Au will be lower than the traffic generated onto SH8 immediately north of Ardgour Road as some traffic will disperse across the road network, including travel to Hawea which would not use the bridge.

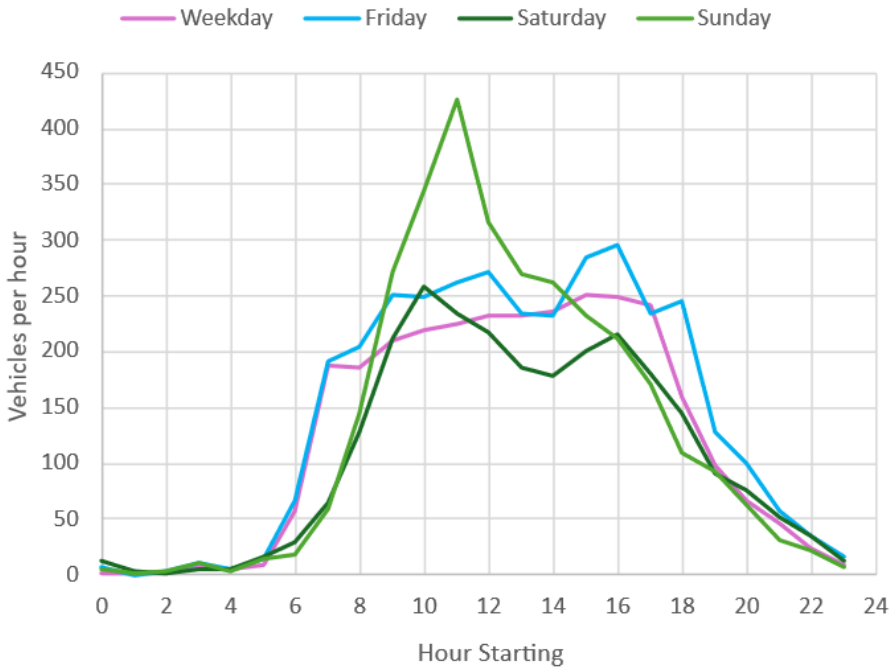

Figure 2: SH8A South of the Red Bridge - Hourly Traffic Flows for Week Beginning 4th March 2024

14. Section 5.2 of the ITA describes peak hourly traffic at BOGP staff changeover will occur outside of peak traffic hours of the highway, such that peak hourly traffic volumes will not coincide with typical peak hours on SH8 (or SH8A).

15. Mr Martineau considers the potential for a pulse of traffic being generated by the BOGP staff changeover. I have previously analysed surveys of worker arrival patterns for the Waihi gold mine. These surveys indicated arrival and departure traffic being spread over the period before and after shift changeover, rather than indicating a very short pulse of traffic within the peak period of arrivals and departures.

16. Whilst it is difficult to fully model a single lane bridge operation, I have carried out a SIDRA Intersection modelling analysis to assess the indicative capacity and performance, utilising an all red time in each direction of 25 seconds. To be conservative, I adopted the Friday 4-5 pm period to ensure peak traffic volumes are

captured which is the busiest weekday hour on SH8 and closest to the timing of a staff shift changeover (albeit still earlier than expected changeover time).

17. The analysis indicates average stop line vehicle delay of approximately 38 seconds per vehicle at existing traffic volumes, and operating at a degree of saturation (representing volume to capacity) of 0.49. This delay mostly relates to the long red time, rather than being associated with high traffic demand. I have then doubled traffic volumes, indicative of 20 years of growth of SH8A traffic at 5% per annum from 2024 volumes (an extra 300 vph). The bridge operation has average stop line delay of 45 seconds per vehicle and degree of saturation (representing volume to capacity) of 0.66 in the long term. Clearly the bridge has capacity to accommodate long term growth in its existing form, with proposal related contributions to that growth being comparably small.

18. In my opinion, the low generated traffic on the BOGP site will not materially affect operation of the SH8A Red Bridge, nor NZTA decision making or timing for further future upgrades.

SH8 Lindis River Bridge

Concern Raised by Commenters: Whether increased traffic associated with the BOGP would necessitate upgrading the SH8 Lindis River single-lane bridge to a two-lane facility.

19. Mr Martineau for Sustainable Tarras considers that the SH8 single lane bridge should be upgraded to a two lane bridge to accommodate additional development, referencing safety risk and traffic increases.

20. Through consultation with NZTA, there was no expectation that the Applicant would need to consider provision of a full bridge replacement or duplication to enable a standard two lane bridge. NZTA also advised they had no future plans for widening the bridge to accommodate two lanes of traffic.

21. The ITA at sections 2.3 and 6.4 describes current traffic volumes on SH8 average 2,400 vehicles per day (vpd) across the year and vary between approximately 1,500 vpd to a peak of approximately 4,500 vpd. Between 2018 and 2024 average daily traffic volumes increased by approximately 65 vpd per annum on average. North of Ardgour Road, changes due to the BOGP are forecast to be approximately 100 vpd during construction, and 70 vpd during operation.

22. This change is approximately equivalent to one year of average ambient traffic growth on SH8, and considerably smaller than the existing seasonal variation in the highway traffic of approximately 3,000 vpd. Peak hourly traffic at staff changeover

will occur outside of peak traffic hours of the highway, such that traffic volumes will be below normal peak traffic on the bridge.

23. In my opinion Mr Martineau has recommended a disproportionately high level of mitigation, and decisions and funding for changes to the single lane bridge on SH8 at Lindis River will be a matter for NZTA to consider in the longer term. As with other single lane bridges in the region, the first step will relate to managing safety and movement reliably with the installation of traffic signals. The ITA identified traffic signals afford safety improvements, but will not be justified by the project.

24. Mr Martineau also questions whether over-weight loads can be accommodated on the bridge. The bridge is included within the High Productivity Motor Vehicle network and is not identified as a constraint to accommodating heavy vehicles. Any over-weight loads that use the road network are required to be permitted by the road controlling authority to ensure loads and axle configurations are acceptable.

SH8 / Ardgour Road Intersection

Concern Raised by Commenters: Whether the SH8 / Ardgour Road intersection can safely and efficiently accommodate Project traffic, and whether additional mitigation is required.

25. The ability of the SH8 / Ardgour Road intersection to safety and efficiently accommodate BOGP traffic was assessed in the ITA at Section 4.4 and 6.5. Recognising the higher traffic volume environment and strategic connection that SH8 provides, a separate right turn bay on SH8 approaching from the south has been determined through the ITA to be the most appropriate design response.

26. NZTA confirmed support for the right-turn bay as an appropriate project-related mitigation to address the assessed change in effects, subject to detailed design review and approvals, and delivery prior to peak construction traffic. I understand that Abley in their transportation review for CODC similarly agree.

27. Mr Martineau for Sustainable Tarras raises some concerns around capacity of the bridge and intersection to accommodate additional traffic. From my existing observations, the intersection operates efficiently. The right turn lane proposed is intended to ensure project traffic does not disrupt highway traffic and supports safe movement associated with the BOGP. At the busiest periods the single lane bridge operation will create platoons of traffic across the bridge with large gaps between platoons, and clearing of any queuing on the south approach to the bridge. That will assist efficient turning to and from SH8 into Ardgour Road. In my opinion, the project traffic will be readily accommodated at the intersection with the mitigation proposed.

28. A range of recommendations are made by NZTA in relation to condition of consent amendments. Generally, the nature of the requested changes which specify relevant standards and guidance are logical from a transport engineering perspective. I describe a couple of exceptions as follow.

29. NZTA at paragraph 4.8 seek the improvement to be tied to *"prior to construction of the Bendigo-Ophir Gold Mine"*. During the upgrades the intersection will be under temporary traffic management operation to ensure the safety of workers and road users, and that will include any wider area traffic management implications such as effects on local roads from detours. I consider it to be reasonable that where the traffic management plan enables continued movement to and from Ardgour Road, the change in traffic generated by the project is of a scale that it can be efficiently and safely accommodated at the intersection. In that respect, the effect of project traffic being generated prior to completion of upgrades would be acceptable.

30. I recommend the timing related matter raised by NZTA to be modified to enable construction traffic to use the intersection where the traffic management plan for the intersection modifications supports safe movement to and from the mine, or a Construction Traffic Management Plan has been provided that supports short term use of the intersection in its existing form, to allow for potential different timings of mine construction and road construction seasons.

31. I also recommend the additional NZTA recommended text for condition 45 at paragraph 4.11 is further adjusted to state:

> *"Any changes to the intersection that are ~~recommended in~~ agreed actions from the post construction safety audit shall be undertaken ~~prior to the construction of the mine commencing~~ within two months of the completed safety audit, unless different timing is agreed with Central Otago District Council in consultation with the NZ Transport Agency / Waka Kotahi taking into account the level of risk associated with the safety concern and the practicable ability to implement the change within the two-month period".*

32. This will make it clearer that there are various steps that follow a safety auditor recommendation, with an action being the end outcome. As actions can be to address minor safety concerns, or changes may not be possible immediately but can be managed, some flexibility in timing is appropriate to ensure this condition is proportionate to the overall timing of mine construction.

Ardgour Road (SH8 to Thomson Gorge Road)

Concern Raised by Commenters: Whether Ardgour Road is suitable in its existing form to accommodate increased heavy vehicle and construction traffic associated with the Project.

33. Concerns relating to Ardgour Road focus on its existing narrow sealed width, increased heavy vehicle proportions, interaction with vulnerable users, and pavement condition. These matters are primarily raised by Abley in their transportation review for CODC, and Mr Martineau for Sustainable Tarras.

34. The ITA recognises Ardgour Road as a low-volume rural road with a constrained formation and quantifies both existing and forecast traffic volumes. From a road safety perspective, the contribution of project traffic to existing traffic volumes warrant safety management and maintenance-led responses rather than wholesale reconstruction.

Safety Assessment Methodology

Concern Raised by Commenters: Whether the safety assessment methodology used in the ITA is appropriate for a low-volume rural road with limited recorded crash history.

35. The ITA Section 6.3.1 included road safety assessment using standard crash prediction models used by NZTA for transport projects. These methods were adopted as the road has no reported crash history, and traffic volumes are low.

36. Whilst widening and other improvements would of course be desirable, major improvement works come at significant costs. From a transport assessment perspective, I consider the scale of improvement suggested by Abley needs to be justified on an effects basis. MGL may also choose to offer further improvements, and I am aware they have been in discussions with CODC to agree a Transportation Deed setting out improvements and responsibilities.

37. By way of comparison to existing public funding of road maintenance and renewal, CODC has apparently deferred investment in resurfacing and/or widening works, even though both may be justified based on existing traffic and asset condition. This deferral of investment is set out in the CODC 2025 Transportation Activity Management Plan (refer Section 6.9 of the Activity Management Plan relating to management of sealed roads) as a general approach to minimise costs associated with road maintenance and upgrade, and "*only intervening with a renewal when it is the most cost-effective intervention"*.

38. As noted in the ITA, it is apparent that there has been minimal investment in the road over the last 25 years by the CODC, with no resurfacing carried out in that period even though surfacing design life is defined in the Council Road Asset Management system as being 12 years.

Interpretation of Calculated DSI

Concern Raised by Commenters: Whether the forecast increase in calculated DSI represents a material change in road safety risk requiring substantive road upgrading.

39. Abley are correct that the calculated DSI doubles, as was stated in the ITA. However, it is too simplistic for Abley to then conclude this is a material safety effect given the very low numbers calculated. The ITA instead goes on to provide assessment against the Safe System Treatment Philosophy. At the low traffic volumes using Ardgour Road without and with the project, the calculation is largely proportional to changes in traffic volume. Overall forecast crash numbers remain low in the context of the Safe System Treatment Philosophy, being one DSI crash every 33-38 years with the project. Importantly, this translates to the collective risk and personal risk banding remaining unchanged both without and with the project.

40. The crash risk bands also remain materially unchanged if widening was incorporated, as set out in the ITA. The ITA also states that safety management measures as recommended are expected to result in a comparable reduction in DSI to the Abley recommended widening.

Influence of Heavy Vehicles on Crash Risk Calculation

Concern Raised by Commenters: Whether increased proportions of heavy vehicles associated with the Project materially alter calculated crash risk on Ardgour Road.

41. Abley have raised a concern that the crash risk analysis may not be representative for the road, referencing increases in the heavy vehicles on the road. The models are developed for rural roads which by their nature include heavy vehicles, as is the case on Ardgour Road. I have identified that the percentage of heavy vehicles within the traffic volume using Ardgour Road with the project will not be materially different to existing.

42. Existing traffic counts on Ardgour Road demonstrate the existing traffic profile comprises approximately 20% heavy vehicles. During construction and averaged over two years, the heavy vehicle composition is forecast to be 30% in year 1, and 24% in year 2. During project operation this is forecast to reduce to approximately

17% (as there is also an increase in light vehicles). Over the first five year period, being a standard period for assessing road safety, the average heavy vehicle composition is forecast to be approximately 21%. In my opinion, this is not materially different from the existing 20% heavy vehicle composition. The proportional increase in forecast crashes is representative of the changes in traffic volume and forecast composition of traffic using the road.

Curve Widening

Concern Raised by Commenters: Whether localised geometric improvements are required at curves on Ardgour Road to safely accommodate heavy vehicles.

43. Abley have recommended review of vehicle tracking widths of heavy vehicles at the curves on Ardgour Road. The ITA noted design sized articulated truck swept paths at the curves will be approximately 3m width (2.9m at the bend 0.4km from SH8, and 3.0m at the bend approximately 1.4km from SH8). Given the curves are the higher risk elements of this section of road, and notwithstanding the ITA commentary that opposing vehicle conflicts on individual 100m sections of road will be very infrequent, widening of those two curves to a sealed width of 6.5m would support a focused and enduring safety outcome at those locations consistent with the safety management approach. It will also provide greater support for effective delineation in particular, and reduce reliance on vegetation clearance for forward visibility. On that basis, I have recommended to MGL to include a condition of consent requiring curve widening at those two locations.

Speed Management

Concern Raised by Commenters: Whether speed management measures are necessary during construction to mitigate safety risks arising from increased traffic volumes.

44. Recognising the opportunity to further manage safety risk with speed management, I support the Abley further recommendation that a construction period temporary speed limit of 60km/h is incorporated in the traffic management plan. Noting that sits within the framework of the NZ Guide to Temporary Traffic Management administered under separate processes, if that was not approved, I recommend the Project Traffic Management Plan (**PTMP**) as included in Condition D.03 C13 can incorporate an equivalent response for construction traffic to adopt a 60km/h maximum operational speed, noting that over the 2.4km length of road that would not unduly inhibit other traffic traveling at normal operational speeds that may occasionally need to follow a vehicle traveling at the controlled speed (being an

approximate 40 second delay over 2.5km for vehicles travelling at the observed average speed following a vehicle travelling at 60km/h).

Pavement Maintenance and Renewal Strategies

Concern Raised by Commenters: Whether Project traffic would adversely affect pavement performance on Ardgour Road and how such effects should be managed.

45. Abley discuss road edge break and pavement asset management being of significance. Stantec ITA recommendations included a requirement for the pavement condition to be monitored, and a plan for remediation included. This was proposed to be incorporated in the PTMP, and in my experience, is a standard approach to managing the road asset.

46. CODC has made available some road asset management data (from their Asset & Work Manager (**AWM**) / Road Assessment and Maintenance Management (**RAMM**) system) for Ardgour Road. The level of reported maintenance interventions and performance measures can provide an understanding of existing pavement performance.

47. Three elements of the AWM/RAMM data have been broadly summarised to route position (**RP**) measured from SH8, from SH8 (RP 0) to Thomson Gorge Road (RP 2.56).

    (a) NAASRA road roughness recordings from high speed data are generally acceptable. Counts between 100 and 150 counts/km are recorded over the first 500m of the road, with the remainder less than 100 counts/km.

    (b) Rutting depths are recorded at 20m bands, and show only a couple of short sections with maximum reported value of greater than 15mm (and less than 20mm) including sections RP 0.22-0.24 (approximate) and RP 0.30-0.32 (approximate) from SH8.

    (c) The road has not been resealed since year 2000 (partial reseal of the first 200m in 2003), and is currently sitting at about 10-13 years past the nominal 12-13 year surfacing design life reported in AWM/RAMM. Prior reseals were carried out at more regular intervals.

48. In the absence of reseals for more than 25 years, the current AWM/RAMM data indicates the road pavement is functioning well. Site observations highlight surface sections of flushing in the seal, reducing skid resistance of the road. It is apparent the road will benefit from resurfacing to address existing pavement performance.

49. To aid ongoing discussion with CODC in relation to the proposed pavement maintenance plan, I arranged for Stantec civil engineering colleagues to prepare an assessment of a nominal 20 year design life traffic loading. For pavement performance, this is measured as a "design equivalent standard axle" (**DESA**), which allows for heavy vehicle loadings. Over the 20 year life, the combined loading without the project is estimated at 3.2 x 10^5 DESA, increasing to a total of 7.52 x 10^5 DESA with the project.

50. The desktop analysis inferred the pavement subgrade strength and pavement composition. Applying DESA over the life of the pavement to determine design parameters, it was assessed the interventions will be comparable without and with the BOGP, but brought forward by project related construction and operation. The major rehabilitation of a 100mm overlay and reseal without construction would occur at approximately year 10, whereas with project construction and operation it will be necessary at approximately year 3. Some road widening would also be appropriately considered at that time to better meet the changing traffic volumes.

51. It is noted that further monitoring and detailed investigation may determine different requirements. The existing pavement maintenance strategy of CODC has deferred the reseals and maintenance on the road, and pavement performance measures have not significantly deteriorated indicating some resilience.

		Indication of Annual and Periodic Maintenance					
		Option - Current Traffic			Option - Increase in HCV		
Year		Annual	Rehab	Resurface	Annual	Rehab	Resurface
2025/26	0						
2026/27	1						
2027/28	2						
2028/29	3			Reseal		100mm overlay	First Coat
2029/30	4						Second Coat
2030/31	5						
2031/32	6						
2032/33	7						
2033/34	8						
2034/35	9						
2035/36	10		100mm overla	1st Coat			Reseal
2036/37	11			2nd Coat			
2037/38	12						
2038/39	13						
2039/40	14						
2040/41	15						
2041/42	16						
2042/43	17						
2043/44	18						
2044/45	19			Reseal			
2045/46	20						Reseal

Figure 3: Indicative Comparison of Road Maintenance Treatments for 20 years

52. There is a difference in net present value of this change in strategy, and consequential impact on wider CODC road maintenance funding plans, which are funded by both rates and government contributions. CODC has not provided the expected timing of reseal / rehabilitation without the BOGP (as would be recorded

in dTIMS[1] referenced in the Activity Management Plan), so the true impact on funding timing cannot be determined.

53. Given the construction is forecast to utilise pavement life more quickly, and the existing pavement is still performing, the preferred approach from a pavement management perspective is considered to be rehabilitation at some stage following construction. Rehabilitation ahead of construction would simply utilise future pavement life more quickly, and bring forward future rehabilitation requirements, which is inefficient.

54. It is considered this will best be addressed through a developer agreement with CODC, setting out the respective financial contributions based on changes in forecast timing of major works, and allowance for external funding assistance. The proposed pavement maintenance plan included in the PTMP and set out in my recommendations later in my evidence will support that.

Road Width and Pavement Performance

Concern Raised by Commenters: Whether existing pavement width and edge condition on Ardgour Road are adequate to accommodate Project traffic without accelerated deterioration.

55. Abley have highlighted some sections of road have edge break, and are susceptible to further damage. From my observation these sections are confined in length, primarily in the section on the northern side of the road from RP 0.75 to RP 1.40. One particular susceptible location has approximately 20mm width of road edge break. There appears to have been minimal shoulder maintenance or recent edge protection maintenance carried out on the existing road, and no historical maintenance spend data was made available from CODC.

56. The recommendations of the ITA include a proposed pavement maintenance plan that can address these localised sections of edge break, and particularly where changes result due to project traffic. In my experience, this has been the adopted approach for projects in rural areas that have shorter term construction peaks in heavy traffic.

57. In assessing the susceptibility to further damage of the edge of seal, Abley highlight the wheel tracks observed in the grass as being evidence of trucks using the berm to pass other trucks. I have observed such wheel tracks also and would point to the likelihood of agricultural vehicles partially using the berm being the reason for such. As noted in the ITA, heavy vehicles were observed to stay on the pavement when

[1] Deighton Total Infrastructure Management System (dTIMS), being a strategic asset management and decision-support modelling system.

passing other light vehicles. The probability analysis in the ITA identified that over a 100m section of road (i.e. the indicative length that may be subject to edge stress when passing in each direction) the number of times a truck will pass another truck at peak construction will be in the order of a few occurrences. In my opinion, this points to a pavement maintenance response, rather than the need for full road widening as a result of effects of the development.

58. As I have also set out, road widening will most appropriately be timed to occur at the time of any road rehabilitation and resurfacing, which is indicatively likely after construction based on the inferred pavement analysis.

Treatment Recommendations

59. Consistent with Safe System Treatment Philosophy guidance, I consider the conditions of consent should include an additional requirement for Ardgour Road between SH8 (at the Lindis River end) and Thomson Gorge Road generally as follows:

(a) Prior to construction, the consent holder is to prepare a pavement management plan, including baseline condition, monitoring, and maintenance and rehabilitation requirements that are as a direct result of BOGP, including attention to measures to enable deployment of rapid edge break remediation where identified;

(b) Ardgour Road curve treatments at RP 0.4km and RP 1.4km to be carried out at the consent holder cost as follows:

(i) widen the curves to a sealed width of 6.5m;

(ii) provision of edge line and curve signage delineation in accordance with NZ Traffic Control Devices Manual; and

(iii) management of adjacent vegetation in the road reserve to maximise forward sight lines in accordance with Austroads Guide to Road Design guidance;

(c) The consent holder is to seek approval from CODC to implement a 60km/h temporary speed limit on Ardgour Road as part of a temporary traffic management plan prepared in accordance with NZ Guide to Temporary Traffic Management;

(d) The consent holder is to enter a Developer Agreement / Transportation Deed with CODC relating to financial contribution to changes in pavement rehabilitation and widening post construction, informed by pavement

monitoring during construction, currently planned funding timelines for pavement rehabilitation without the project, changes in pavement performance measures, and more detailed investigations of pavement composition where necessary; and

Thomson Gorge Road – From Ardgour Road to Site Access

Concern Raised by Commenters: Details of the proposed Thomson Gorge Road upgrade, including length of upgrade, and consistency with Ardgour Road.

60. There is broad alignment with Abley (in their transportation review for CODC) and others that the lower section of Thomson Gorge Road between Ardgour Road and the primary site access requires upgrading to safely accommodate Project-related traffic.

61. I understand the secondary access to Thomson Gorge Road is intended to be a locked gate, used only occasionally. I disagree with the need to seal the road further up to that access.

62. The ITA identifies the existing unsealed single-lane formation as unsuitable for the forecast two-way construction and operational traffic volumes and proposes upgrading approximately 1.6 km of road to a 6.5 m sealed carriageway consistent with CODC rural road standards.

63. The difference in standard compared with Ardgour Road relates to the proposed upgrade being materially different from the existing formation, essentially being developed as a “new road”. Widening of Ardgour Road will most appropriately be considered as part of its next pavement rehabilitation, likely required following construction based on the desktop pavement analysis carried out by Stantec. I consider standard signage can be included highlighting the change in road width.

64. Comments received regarding detailed design, construction methodology, and certification are implementation matters.

Ardgour Rise Replacement Route

Concern Raised by Commenters: Whether the Ardgour Rise replacement route provides an appropriate and safe replacement for the section of Thomson Gorge Road proposed to be closed.

65. Concerns regarding closure of part of Thomson Gorge Road and provision of the Ardgour Rise replacement route are raised in several parties’ comments, including

Mr Kennett for Sustainable Tarras, with emphasis on gradients, amenity, and recreational experience.

66. From a transport effects perspective, the ITA assessed the replacement route as a prerequisite to Thomson Gorge Road closure and considered its feasibility and function as a public access route. The primary purpose is to maintain access, continuity and resilience, although other users such as recreational users will use it as assessed by Mr Rob Greenaway in his statement of evidence.

67. Having driven Thomson Gorge Road to the top and much of the existing track on Ardgour Rise (some of which is not on the proposed alignment), as stated in the ITA I do consider geometric characteristics of that road can be used as a guide to the level of performance to be applied to the new road, noting elements of the existing road do not fully meet standards, and the road is not identified as being subject to a planned upgrade in the future. I understand MGL is working towards an acceptable solution with CODC in terms of road alignment, with maximum gradients proposed only in localised sections of the road.

68. The design guidance referenced in the Ableyreport at Section 4.4, including the mountainous terrain characteristics of the ARRB Unsealed Roads Manual will provide helpful supporting guidance as a relevant standard as referred to by s D.01 49.

69. In this case, and given the unique nature of the road, I consider detailed designs will need to be supported by design statements referencing guidance, any departures from guidance and assessment of such, comparative geometric analysis to Thomson Gorge Road, and how road safety measures are incorporated.

70. In that regard I recommend the following edits (or to the effect necessary) to the condition of consent D.01 49:

> *Prior to commencing the construction of Ardgour Rise required by Condition 48 above, the Consent Holder must submit final design drawings (including the route) to the Central Otago District Council for certification that the proposed design meets the relevant road design standards and guidance (with regard to road surfacing and width, design speed, gradient, road reserve, signage safety features and future maintenance requirements), noting that the design of Ardgour Rise is intended to be a like-for like replacement of Thomson Gorge Road. Design drawings are to be supported by engineering design statement referencing the standards and guidance adopted, and any design departures proposed supported by engineering assessment of those design departures.*

Alternative Access Routes to Site (Matilda Rise, Bendigo Loop Road, Thomson Gorge Road south)

Concern Raised by Commenters: Whether Project traffic could utilise alternative local roads and the need to restrict access routes to manage effects.

71. Abley, in their transportation review for CODC, and some commenting parties from Bendigo Loop Road (Chinamans Terrace Services Company Ltd) request reassurance that access to the site will be via Ardgour Road and Thomson Gorge Road only.

72. As outlined in the ITA, at Section 6.6, the intention is to use those roads only. Matilda Rise and Thomson Gorge Road would be used by exception only. I proposed that is included as a specifically mentioned route restriction in the PTMP.

73. Matakanui Station have raised concern about the use of Thomson Gorge Road between the mine site and the Manuherikia Valley side of the Dunstan mountains. I have not assessed use of that route on the understanding that primary access is to be via Ardgour Route and SH8. Like Matilda Rise, I consider it appropriate for this road to be specifically excluded from available routes to access he BOGP. This can be included in the PTMP (as generally referenced by the Section 7.3.2 in the ITA). The only exception would be in an emergency event requiring access via that route, or where a road controlling authority has directed traffic over that route (which is unlikely).

Project Traffic Management Plan (PTMP)

Concern Raised by Commenters: Whether the Project Traffic Management Plan is suitably defined in the conditions of consent.

Specifications of the PTMP Conditions of Consent

74. The ITA included a recommendation for an enduring Project Traffic Management Plan (**PTMP**), which is included at Condition D.03 C13. As Abley in their transportation review for CODC describe, this is not fully reflected in the proposed conditions of consent, in terms of content of the PTMP. The conditions at D.01 50-52 do include an *Access Road Construction Traffic Management Plan* covering the initial phase of the BOGP. I consider consent conditions should reflect the content described in Section 7 of the ITA, and advised by MGL to CODC on 13 February 2026. Those provisions, with further changes I consider suitable for the PTMP as described in my evidence, are set out below:

Purpose of the PTMP

The purpose of the PTMP is to manage traffic safety risks, mitigate adverse effects on the road network, protect road condition, and minimise effects on other road users and the surrounding community.

Content of the PTMP

The PTMP will include:

1. *Traffic safety risk assessment for construction and operation.*
2. *Approved site access points and travel routes from SH8 being via Ardgour Road and Thomson Gorge Road only, with Matilda Rise and Thomson Gorge Road south of the new Ardgour Rise road used by exception only.*
3. *Forecast traffic volumes by project stage and vehicle type.*
4. *Management of over-weight and over-dimension loads including routes, timing, piloting, and contingencies.*
5. *Driver code of conduct covering speed, school buses, unsealed roads, interactions with stock droving /crossing on access roads, and public road users.*
6. *Road improvements and temporary traffic management, including RCA approvals (noting this is addressed by the Access Road Construction Traffic Management Plan (refer to condition D.01 50-52). This shall include an application to the CODC to implement a temporary 60km/h speed limit on the access route from SH8 (being Ardgour Road and Thomson Gorge Road) to the site access during BOGP construction.*
7. *Pavement monitoring, repair, and post-construction rehabilitation.*
8. *Traffic and pavement monitoring with quarterly reporting during peak construction (>50 heavy vehicle movements per day) reducing to annual thereafter.*
9. *Staff travel plan describing measures to be adopted to minimise private vehicle travel movements to work, including responding to demand for staff bus and ride share arrangements.*
10. *Coordination with local landowners on the local road access route to determine stock moving or crossing needs and frequency on the roads, and advice for notification, and disseminating information to project staff*
11. *Road Controlling Authority Approval requirements for works in the road reserve and expected temporary traffic management plan guidance for implementation by contractors, as necessary*

12. Communication, complaints procedures, and community liaison.

Workforce Travel Plan

75. MGL have advised of their intention to provide bus transport to the site, and that is described at Section 5.1 and 5.2 of the ITA. Mr Matineau recommends specific consent conditions mandating the use of buses. As demand and locations of service will vary, I consider this should be incorporated in the PTMP to enable flexibility of response and provision, as stated at Section 7.3.8 of the ITA. I understand Abley agree.

Stock Movement

76. Matakanui Station refers to potential disruption to stock movement on Thomson Gorge Road as a result of changes in vehicle patterns and road users. Whilst I have not anticipated changes in traffic patterns on the southern side of the Dunstan Mountains and specific provisions had not been identified in the ITA, it is common practice for a PTMP to include a section on stock management, typically including location of potential stock movements (following engagement with those landowners that may need to drive stock), contact details, and process for notification. In addition, advice to staff and drivers as part of site induction can cover preferred processes for interacting with stock being shifted along or across a public road.

OVERALL TRANSPORT POSITION

77. Across the transportation related comments reviewed and relevant supporting technical evidence, there is general consistency in identifying key transport issues. I consider the ITA appropriately identifies and assesses these issues and proposes mitigation measures that are targeted, proportionate, and aligned with NZTA and CODC processes.

78. Some refinements to mitigation have been discussed in this evidence, and will require additional modification to conditions of consent, addressing:

(a) SH8 / Ardgour Road improvements: general alignment with NZTA recommended changes specifying design guidance, and refinement of NZTA recommended changes to timing of works and addressing concerns raised in post construction safety audit;

(b) Ardgour Road new conditions specifically addressing curve widening, pavement maintenance and monitoring plan, temporary speed limit during construction, and developer agreement / transportation deed for major rehabilitation;

(c) Ardgour Rise condition to reference a design statement to accompany design drawings; and

(d) Inclusion of a Project Traffic Management Plan purpose and content as set out in ITA, and expanded based on comments received.

79. It appears the primary difference of opinion with some commenters arise in relation to:

(a) Timing of works in relation to construction start: In my opinion some flexibility can be considered as construction on roads requires traffic management that can account for temporary movement of project traffic whilst mitigation works are being constructed.

(b) The approach to and timing of Ardgour Road mitigation: I consider a safety management and maintenance approach supported by some direct low cost interventions and the PTMP can deliver suitable outcomes for the road network that is aligned with CODC typical practice of providing improvements in a cost effective way, when they are warranted. I consider the advice of Abley in their transportation review for CODC extends beyond effects mitigation. Over time, the project is likely to have an impact on road pavement performance that brings forward the timing of rehabilitation works. I recommend that is addressed through a developer agreement.

80. I remain satisfied that transport effects can be appropriately managed subject to conditions of consent.

Andrew Alan Metherell

17 April 2026