

Before the Independent Hearing Commissioner
Appointed by the Christchurch City Council

Under the Resource Management Act 1991

In the matter of Plan Change 18 (Hendersons Residential Rezoning) to the
Christchurch District Plan

Cashmere Fields

Applicant

Evidence of Andrew Francis Leckie

14 August 2026

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**anderson
lloyd.**

Introduction

- 1 My name is Andrew Francis Leckie.
- 2 I have a Bachelor of Engineering (Hons) in Civil Engineering, and a Master of Engineering in Transportation, both from the University of Canterbury. I am a Chartered Professional Engineer, and I am a Chartered Member of Engineering New Zealand.
- 3 I have specialised as a transportation engineering consultant for the last 12 years. In my current role as a Principal Transportation Engineer with Stantec New Zealand, I am involved in transportation engineering assessment and design for a broad range of land use activities.
- 4 My relevant experience includes carrying out Integrated Transport Assessments for numerous residential rezoning and subdivision projects throughout Canterbury. These have included Plan Changes 75 and 82 in Rolleston, which involved detailed traffic modelling assessments of large residential growth areas. I authored the Integrated Transport Assessment and appeared as an expert transportation witness in support of the 93 Tosswill Road residential rezoning proposal in Prebbleton and subsequently prepared the Integrated Transport Assessment supporting the subdivision consent application for that development.
- 5 I have led traffic engineering design of arterial road intersection upgrades to traffic signals, including on Shands Road and Main North Road in Christchurch. I have prepared traffic engineering design plans for new residential subdivision roads in Belfast. I regularly am involved in new residential subdivision designs as a road safety auditor, both at design and post-construction stages.
- 6 I have prepared an Integrated Transport Assessment (ITA), Appendix E to a private plan change request (PC18) by Cashmere Fields, seeking to rezone the below sites (the **Site**) from Residential New Neighbourhood (**RNN**) and Rural Urban Fringe (**RUUF**) zones to RNN, excluding the stormwater management areas which will remain RUUF (**the Proposal**):
 - (a) 126 Sparks Road (Lot 1 DP 412488)
 - (b) 17 Northaw Street (Lot 2 DP 412488)
 - (c) 36 Leistrella Road (Lot 3 DP 412488)
 - (d) 240 Cashmere Road (Lot 23 DP 3217)
 - (e) 236 Cashmere Road (RS 41613)

- (f) 200 Cashmere Road (Lot 1 DP 547021)
 - (g) 60 Leistrella Road, Part of Lot 406 DP 561520 (Balance Lot 349 as per RMA20213829)
- 7 I undertook site visits during the morning peak period and school drop-off period in 2023, during the afternoon school pick-up period and evening peak period on 21 July 2026, and later in the evening of 22 July 2026 to observe kerbside parking conditions on Leistrella Road and surrounding streets.
- 8 In preparing this evidence I have considered the following documents:
- (a) Plan Change Request Private Plan Change Prepared for Cashmere Fields Ltd
 - (b) Submissions
 - (c) Section 42A report
 - (d) Evidence of Liqi Chen
 - (e) Evidence of Jade McFarlane
 - (f) Evidence of Bryan McGillan
 - (g) Relevant provisions of the Christchurch District Plan
 - (h) National Policy Statement on Urban Development; and
 - (i) Canterbury Regional Policy Statement

Code of Conduct for Expert Witnesses

- 9 While this is not a hearing before the Environment Court, I confirm that I have read the Code of Conduct for expert witnesses contained in the Environment Court of New Zealand Practice Note 2023 and that I have complied with it when preparing my evidence. Other than when I state I am relying on the advice of another person, this evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

Scope of evidence

- 10 I have prepared evidence in relation to the transportation aspects of the proposed Plan Change and provide a summary of the ITA. In particular, my evidence:
- (a) describes the existing and future transport environment;

- (b) assesses the transportation implications of the proposed amendments to the Hendersons East ODP, including the connectivity provided by the proposed transport network;
 - (c) assesses the accessibility of the Site and transport choices available to future residents;
 - (d) assesses the traffic effects of development enabled by the proposed Plan Change;
 - (e) provides my opinion on the suitability of the surrounding transport network to accommodate development enabled by the proposed Plan Change;
 - (f) considers the consistency of the proposed Plan Change with relevant transport-related planning provisions;
 - (g) responds to Council's Request for Further Information;¹
 - (h) responds to transport matters raised in submissions; and
 - (i) responds to transport matters raised in the section 42A report.
- 11 The Proposal is described at paragraphs [21]-[42] of the evidence of Jade McFarlane. I rely on that description and only provide further detail where this is necessary for the purposes of my evidence.

Executive summary

- 12 I have assessed the transport effects of PC18, which seeks to extend the Residential New Neighbourhood zoning within the Hendersons East ODP area and facilitate approximately 200 additional residential lots. The proposal builds upon an existing residential growth framework already anticipated by the Christchurch District Plan and the Hendersons East ODP.
- 13 In my opinion, residential development enabled by PC18 will be well integrated with the surrounding urban area and transport network and provide future residents with access to a range of travel modes. Existing and proposed connections support travel by walking, cycling, public transport and private vehicle, while the proposed active mode connection to Sparks Road will improve access to nearby schools, the Quarryman's Trail Major Cycleway and the wider active transport network.
- 14 The transport assessment was undertaken using the Christchurch Assignment and Simulation Traffic (CAST) Model, supplemented by SIDRA intersection modelling.

¹ Appendix C, RFI Response, dated 5 August 2025

Importantly, the modelling assessed a conservative development scenario comprising approximately 550 residential lots across the wider Hendersons East ODP area, including approximately 230 lots within the PC18 area. This exceeds the development yield currently anticipated from PC18 and provides confidence that the assessment outcomes are robust.

- 15 The modelling demonstrates that development enabled by PC18 can be accommodated within the surrounding transport network. While PC18 will contribute to increased traffic volumes on parts of the local road network, particularly Leistrella Road, the future connection of Leistrella Road and the development of the wider Hendersons East ODP area are already anticipated under the existing planning framework. In my opinion, the additional traffic generated by PC18 will not alter the role and function of Leistrella Road or justify a higher-order road standard. Safe and efficient access to the arterial road network can be maintained and the additional traffic generated by PC18 is forecast to have a negligible effect on the operation of key arterial intersections.
- 16 I generally agree with the transport conclusions reached in the section 42A report, including that the transport effects of PC18 are acceptable. However, I do not support the recommendation requiring development to proceed from the Cashmere Road frontage inward, as I do not consider there is a traffic engineering basis for such a staging requirement. I also consider that a number of detailed transport matters identified by Mr Chen are more appropriately addressed through future subdivision consent processes and detailed design, rather than through additional ODP requirements.
- 17 Overall, I conclude that development enabled by PC18 can be safely and efficiently accommodated within the surrounding transport network. The proposal is consistent with the transport-related objectives and policies of the Christchurch District Plan, National Policy Statement on Urban Development and Canterbury Regional Policy Statement, and I support the proposed rezoning from a transportation perspective.

Existing and future transport environment

Existing transport environment

- 18 The Site is located on the western edge of the existing urban area of Hoon Hay. Established residential neighbourhoods adjoin the Site to the north and east, while land to the west remains largely open and Cashmere Road forms the southern boundary

- 19 The surrounding transport network is predominantly comprised of local residential streets which provide connections to Hoon Hay Road, Cashmere Road and Sparks Road. These roads are identified as minor arterial roads within the Christchurch District Plan road hierarchy and provide connections to the wider transport network, linking the area with surrounding residential neighbourhoods, commercial centres and community destinations throughout south-west Christchurch.
- 20 The local road network includes connections via Leistrella Road, Rydal Street and Northaw Street to the north of the Site, together with connections to Cashmere Road via Leistrella Road at the southern end of the Site. These connections form part of the existing transport environment and provide access between the Site and surrounding residential neighbourhoods.
- 21 Pedestrian infrastructure is provided throughout the surrounding area. Footpaths are generally provided on the surrounding road network and support walking access between nearby residential areas, schools, recreational destinations and public transport services. Kaiwara Reserve also provides a pedestrian connection between the southern part of the Site and the surrounding neighbourhood. Existing neighbourhood connections provide a relatively permeable environment for pedestrian movement.
- 22 From a cycling perspective, the Site is located in proximity to two of Christchurch's Major Cycleways. In particular, the Quarryman's Trail Cycleway on Sparks Road provides a high-quality cycling connection between Halswell, Hoon Hay, Somerfield and the central city. The Nor'West Arc Cycleway also passes through Centennial Park to the east of the Site, providing connections to the wider Christchurch cycle network.
- 23 Public transport services are available in the vicinity of the Site. The surrounding area is served by the Orbiter service together with the 44 Westmorland–Shirley and 60 Hillmorton–Southshore routes. These services operate on nearby roads including Hoon Hay Road, Rose Street, Cashmere Road and Sparks Road and provide connections to destinations throughout Christchurch.
- 24 The surrounding arterial road network carries traffic volumes consistent with its function within the wider Christchurch transport network. Peak period congestion and queuing occur at some locations on the surrounding arterial road network, particularly during commuter peak periods. These conditions are typical of established urban arterial roads that accommodate both local and wider city travel demand.
- 25 A range of community, recreational and educational destinations are located within the wider area surrounding the Site. These include primary schools on Sparks Road, Cashmere High School, Centennial Park, Pioneer Recreation and Sport

Centre, neighbourhood reserves and local commercial facilities. The presence of these destinations contributes to the accessibility of the area and supports opportunities for travel by a range of modes.

- 26 Overall, the Site forms part of the western edge of the existing urban area and is connected to the surrounding transport network by a range of travel modes. The existing transport environment includes established road, pedestrian, cycle and public transport networks, together with a range of nearby community and recreation destinations.

Future transport environment

- 27 The future transport environment is an important consideration in assessing the effects of the proposed Plan Change.
- 28 The transport assessment did not assume that future residents would rely solely on the transport network as it exists today. Rather, the assessment was undertaken having regard to the future transport environment anticipated by the Christchurch District Plan and the existing Hendersons East Outline Development Plan (**ODP**).
- 29 The Hendersons East ODP already provides for residential development north of Cashmere Road, together with associated road connections and active transport links. In particular, the ODP anticipates the future connection of the two sections of Leistrella Road, connections to Cashmere Road and a connected internal street network serving the wider residential area. These elements form part of the future environment against which the proposed Plan Change has been assessed.
- 30 From a transport perspective, the future environment is therefore characterised by an established urban area that is expected to continue developing in accordance with the existing planning framework, including the future road network anticipated by the Hendersons East ODP and ongoing access to existing public transport services. This provides an appropriate context within which to assess the transport effects of development enabled by the proposed Plan Change.

Proposed Plan Change

- 31 The proposed Plan Change seeks to enable additional residential development within the Site through amendments to the Hendersons East ODP.
- 32 The proposed rezoning could facilitate approximately 200 additional residential lots within the Hendersons East ODP area, primarily within the northern part of the Site together with smaller areas centrally located and fronting Cashmere Road. This is slightly lower than the approximately 210 additional residential lots referred to in the ITA, reflecting refinement of the residential land area since that assessment

was prepared. I discuss the development yield assumptions adopted for transport assessment purposes in Paragraphs 48 to 52.

- 33 From a transport perspective, the proposed ODP builds upon the existing and planned transport framework within the Hendersons East area. The ODP includes connections to Northaw Street, Leistrella Road, Emily Knowles Drive and Cashmere Road, together with an active mode connection to Sparks Road. These connections are intended to integrate the additional residential areas with the wider Hendersons East ODP area and surrounding transport network.
- 34 I note that development enabled by the proposed Plan Change will be subject to future subdivision approval. I understand that subdivision of the Residential New Neighbourhood zoned land will be assessed as a discretionary activity and will require the preparation of a transport assessment. This process will provide an opportunity for detailed consideration of transport matters including road and intersection design, transport safety, accessibility, pedestrian and cycle connectivity, and the operation of the surrounding transport network. Accordingly, where I refer throughout my evidence to matters being considered at the subdivision stage, this reflects my opinion that such matters are more appropriately addressed through the future subdivision and detailed design process rather than through the ODP itself. I understand Mr McGillan describes the subdivision framework and associated assessment process in more detail in his evidence.

Accessibility and transport choice

- 35 A key consideration in assessing the suitability of the Site for residential development is the extent to which future residents can access employment, education, recreation, community facilities and local services by a range of travel modes.
- 36 In my opinion, the Site is well positioned in this regard. While located on the western edge of the existing urban area, it nevertheless benefits from integration with the surrounding transport network and provides opportunities for travel by walking, cycling, public transport and private vehicle. This is assisted by the fact that the additional residential development enabled by the proposed Plan Change will largely comprise extensions to existing and already planned residential areas within the Hendersons East ODP area.

Active modes

- 37 Existing pedestrian infrastructure and local street connections support access to the schools and recreation facilities located in proximity to the Site.
- 38 A significant feature of the proposed ODP is the inclusion of an active mode connection to Sparks Road that is not provided for within the existing ODP. This

connection will provide direct access to the Quarryman's Trail Major Cycleway, the Sparks Road footpath network and nearby schools. In my opinion, this represents a benefit not only for development enabled by the proposed Plan Change, but also for existing and already planned residential development within the wider Hendersons East ODP area. The Site also benefits from proximity to the Nor'West Arc Cycleway through Centennial Park, providing further access to Christchurch's wider cycle network.

- 39 The ITA identified opportunities to further improve active mode accessibility between the Site and Hoon Hay Road, including consideration of reduced pedestrian crossing distances at the Hoon Hay Road / Leistrella Road and Leistrella Road / Rydal Street intersections, together with minor improvements to the pedestrian route via Kaiwara Reserve and Blakiston Street. During my site visits, I observed pedestrian activity throughout this part of the local street network, including movements associated with nearby schools. These observations reinforced my view that active mode accessibility is an important consideration in this area and that the opportunities for improvement identified in the ITA are appropriate. In my opinion, these matters can be appropriately addressed through future subdivision design and do not affect the overall suitability of the Site for residential development.
- 40 I also observed pedestrian activity crossing Hoon Hay Road between Leistrella Road and Rose Street. While an existing pedestrian refuge island is provided south of Rose Street, my observation was that this facility is somewhat removed from the pedestrian desire line associated with movements between the Leistrella Road area and destinations east of Hoon Hay Road. This observation further reinforces the importance of providing good pedestrian connectivity between the Site and the wider area. In my opinion, opportunities to improve pedestrian accessibility in this area can be appropriately considered through future subdivision design and pedestrian network planning.

Public transport

- 41 Public transport accessibility is an important consideration in assessing the suitability of the Site for residential development. Existing public transport services in the vicinity of the Site include the high-frequency Orbiter service, the 44 Westmorland–Shirley service and the 60 Hillmorton–Southshore service. These routes provide connections to a range of destinations throughout Christchurch, including Barrington Mall, Christchurch Hospital, Sydenham and the city centre. Together, these services provide future residents with a range of public transport options rather than reliance on a single route.
- 42 Public transport accessibility varies across the Site. The southern development area is located in close proximity to Cashmere Road and the existing 44 service.

The central and northern development areas are generally within approximately 600 to 800 metres of existing bus stops on Hoon Hay Road and Rose Street, including stops served by the high-frequency Orbiter route. While these walking distances are at the upper end of what is typically considered convenient for public transport access, they are comparable to public transport access distances experienced in many established residential areas within Christchurch. Most of the Site is located within an approximately 800 metre walk of an Orbiter bus stop pair and residents will also have opportunities to access public transport services by walking and cycling via the existing and proposed active mode network.

- 43 I acknowledge that future service frequency and route provision are matters for Environment Canterbury. However, the Site forms part of an area where residential development is already established and planned through the Hendersons East ODP, and which is currently served by multiple bus routes. The Site is also well positioned to benefit from future public transport investment as residential development continues within south-west Christchurch.
- 44 Overall, I consider the Site to be relatively well served by public transport when compared with many residential areas within Christchurch. The combination of access to the high-frequency Orbiter route, additional local bus services and good active mode connectivity provides future residents with a genuine range of transport choices.

Traffic effects assessment

Assessment approach

- 45 The transport effects of the proposed Plan Change have been assessed through the ITA and the subsequent response to the Request for Further Information. The assessment considered expected traffic generation, forecast traffic volumes, the operation of key intersections and the ability of the existing and planned road network to accommodate additional development enabled by the proposed Plan Change.
- 46 The assessment was undertaken having regard to both the existing and future transport environment. The future environment includes residential development already anticipated by the Hendersons East ODP, together with the associated transport infrastructure required to support that development. Accordingly, the effects of the proposed Plan Change have been assessed against a future environment that includes development already enabled by the existing planning framework.
- 47 Traffic modelling was undertaken using the Christchurch Assignment and Simulation Traffic (CAST) Model. Additional intersection modelling was subsequently undertaken using SIDRA software in response to Council's Request

for Further Information. Together, these assessments provide a suitable basis for evaluating the transport effects of the proposed Plan Change.

Development assumptions

- 48 The proposed Plan Change is expected to facilitate approximately 200 additional residential lots within the Hendersons East ODP area. This estimate is based on a development yield of approximately 18 lots per hectare across the additional residential land proposed to be incorporated into the ODP. This is at the upper end of the anticipated development density range of approximately 15–18 lots per hectare.
- 49 As I noted earlier, this lot yield differs slightly from the approximately 210 additional residential lots referred to in the ITA. The ITA calculations were based on an additional residential land area of approximately 11.5 ha, whereas the current proposal contains approximately 11 ha of additional residential land.
- 50 An important aspect of the assessment is that the additional development enabled by the proposed Plan Change was not considered in isolation. The assessment also recognised that the existing Hendersons East ODP already provides for residential development within the wider area.
- 51 For the purposes of transport modelling, the wider ODP area was assessed on a conservative basis using a development yield of approximately 20 lots per hectare. This resulted in an assumed development yield of approximately 320 residential lots within the existing ODP area together with approximately 230 residential lots within the additional land proposed through the Plan Change (based on 11.5 ha). Accordingly, the CAST modelling assessed a future development scenario comprising approximately 550 residential lots across the wider ODP area.
- 52 In my opinion, this approach provides confidence that the assessment outcomes are robust. The transport modelling therefore assessed a conservative development scenario for the wider ODP area, including a higher development yield than is now anticipated within the additional residential land proposed through the Plan Change, and demonstrated that the surrounding transport network is capable of accommodating the resulting traffic demand.

Transport modelling assessment

- 53 The CAST modelling assessed a future 2038 scenario both without and with the additional residential development enabled by the proposed Plan Change. As outlined above, the modelling assessed conservative development scenarios for the wider Hendersons East ODP area and incorporated development provided for by the existing Hendersons East ODP together with the planned future local road network.

- 54 The modelling indicates that development enabled by the proposed Plan Change would increase traffic volumes on surrounding local roads, particularly Leistrella Road. This outcome is expected given the role of Leistrella Road in connecting the Hendersons East area with Hoon Hay Road.
- 55 Importantly, the modelling demonstrated that development enabled by the proposed Plan Change would result in minimal changes to delays on the wider arterial road network. The CAST outputs forecast minimal changes in delay at the key signalised intersections in the surrounding area, including Hoon Hay Road / Cashmere Road, Hoon Hay Road / Sparks Road and Sparks Road / Hendersons Road.
- 56 This conclusion was subsequently supported by additional SIDRA modelling undertaken as part of the response to the Request for Further Information, which confirmed that development enabled by the proposed Plan Change would not have a noticeable effect on the operation of the Hoon Hay Road / Cashmere Road and Hoon Hay Road / Sparks Road intersections.
- 57 In my opinion, the additional SIDRA modelling reinforces the conclusions of the original ITA that the proposed Plan Change will have a negligible effect on the operation of the wider arterial road network and that any future upgrades at these intersections would be driven by broader network growth and cumulative development occurring across the wider catchment, rather than any individual development area.
- 58 I acknowledge that peak period delays and congestion currently occur at some intersections within the wider arterial network. However, these conditions reflect travel demands across the wider south-west Christchurch area and are influenced by broader network activity rather than any individual development area.
- 59 Given the minimal effects forecast on the wider arterial road network, the focus of my assessment is the suitability of the local road network and the operation of the key intersections that will provide access between the Site and the arterial road network.

Local road network

Leistrella Road

- 60 Development enabled through the proposed Plan Change will largely comprise extensions to existing and already planned residential development within the Hendersons East ODP area. Accordingly, it will utilise extensions of the existing and planned local road network rather than requiring the establishment of a new higher-order road network.

- 61 The CAST modelling indicates that Leistrella Road would accommodate the largest increase in traffic volumes within the local road network. Peak hour traffic volumes on the eastern section of Leistrella Road could increase from approximately 230 to 290 vehicles per hour under the existing ODP development scenario to approximately 310 to 420 vehicles per hour with the additional development enabled by the proposed Plan Change. These forecast traffic volumes reflect the conservative development assumptions adopted for the transport assessment.
- 62 In assessing the implications of these forecast traffic volumes, I have considered the role and function of Leistrella Road within the wider Hendersons East ODP area. The ITA reviewed both the Christchurch District Plan road standards and NZS4404 guidance. I have also had regard to the future connection of the two sections of Leistrella Road and the resulting role of the road within the future transport network. Even with this development, I consider it appropriate that Leistrella Road continues to function as a local residential road.
- 63 During recent evening-peak and late-evening site visits, I observed existing kerbside parking demand on Leistrella Road. While kerbside parking was present, it was not continuous or widespread along the route. Where vehicles were parked on both sides of the road, drivers generally yielded to opposing traffic rather than attempting to pass simultaneously through the narrowed section of carriageway. In my observation, this occurred in an orderly manner, with sufficient space available for vehicles to wait and allow opposing traffic to pass. This is a typical operating characteristic of a local residential street and did not indicate any underlying capacity or safety concern.
- 64 The ability to accommodate kerbside parking is also an important attribute of the street. While parked vehicles can reduce the amount of unobstructed carriageway available for traffic movements, they contribute to the residential character of the road and assist in moderating vehicle speeds. In my opinion, retaining Leistrella Road as a local road with on-street parking is preferable to widening the carriageway or treating the road as a higher-order route.
- 65 Having regard to the forecast traffic volumes, the existing 9 m carriageway width, the future role of the road and my site observations, I consider the existing road environment remains appropriate. While traffic volumes are forecast to increase, they do not alter the role and function of Leistrella Road within the road hierarchy. In my opinion, the existing carriageway width remains appropriate for the forecast level of use and I do not consider that the forecast traffic volumes, or the nature of the development enabled by the proposed Plan Change, justify upgrading Leistrella Road to a higher-order road standard.
- 66 As discussed in the ITA, the combination of a relatively wide carriageway and a long straight section of road can result in vehicle speeds that are higher than

desirable for a residential environment where pedestrians and cyclists are present. Accordingly, I support the incorporation of traffic calming measures as development occurs. Such measures would assist in maintaining vehicle speeds appropriate to the residential setting and would also be consistent with the existing Hendersons East ODP expectation that the future road connection be designed to discourage through-traffic use between Cashmere Road and Hoon Hay Road. In my opinion, traffic calming can assist in achieving both objectives while continuing to accommodate forecast traffic volumes. This matter can be appropriately addressed through future subdivision design.

Rydal Street and Northaw Street

- 67 The CAST modelling indicates that increases in traffic volumes on Rydal Street and Northaw Street will be relatively modest and I do not identify any concerns regarding their ability to accommodate forecast traffic demands.
- 68 I visited the area during the afternoon school pick-up period. At that time, I observed kerbside parking on both Rydal Street and Northaw Street together with pedestrian activity associated with school travel. In my observation, vehicles travelled at slow speeds and drivers behaved appropriately having regard to the presence of pedestrians, parked vehicles and other road users.
- 69 Prior to the end of the school day, many parents had already arrived and parked within the surrounding streets. Following school pick-up, the area dispersed relatively quickly, with much of the associated vehicle and pedestrian activity reducing over a period of approximately 10 to 15 minutes. In my opinion, this reflected a typical primary school pick-up environment rather than sustained traffic congestion or network capacity constraints.
- 70 The traffic volume increases forecast on Rydal Street and Northaw Street are relatively small and my observations did not cause me to alter the conclusions of the ITA. While I consider there is merit in reviewing the operation of the Rydal Street / Northaw Street intersection, including consideration of clearer priority control arrangements, these matters can be appropriately considered through future subdivision design and do not affect my overall conclusions regarding the suitability of the local road network.

Arterial road network access

Hoon Hay Road / Leistrella Road

- 71 The Hoon Hay Road / Leistrella Road intersection will provide the primary access between the northern part of the Site and the wider arterial road network. I have considered the operation of this intersection through both the transport modelling assessments and site observations.

- 72 The ITA and subsequent SIDRA modelling indicate that the intersection will continue to operate acceptably following development enabled by the proposed Plan Change. Drivers exiting Leistrella Road are forecast to experience delays that are typical of a local road intersection on an arterial road and I do not consider these delays to be excessive. The modelling also indicates that only relatively small changes in intersection performance occur as a result of the additional development enabled by the proposed Plan Change.
- 73 I observed the intersection during the weekday evening peak period between 4.30pm and 5.00pm. During that time, I observed only seven right-turn movements exiting Leistrella Road, with an average delay of approximately 12 seconds before vehicles were able to depart. Left-turn movements from Leistrella Road experienced minimal delay. In my observation, traffic volumes on Hoon Hay Road remained at a level that supported efficient access to and from the local road network.
- 74 Right-turn movements into Leistrella Road similarly occurred with minimal delay. On occasion, trailing vehicles briefly waited behind a right-turning vehicle before continuing through the intersection. Where kerbside parking was absent, some vehicles were able to pass to the left of the waiting vehicle. In my opinion, this is a typical operating characteristic of an arterial road intersection serving adjacent residential neighbourhoods and did not result in any notable operational issues.
- 75 A further observation was that the operation of the Hoon Hay Road / Leistrella Road intersection was independent of traffic conditions at the nearby Rose Street intersection. I did not observe conditions at Rose Street affecting opportunities for vehicles to enter or exit Leistrella Road.
- 76 Overall, my site observations were consistent with the conclusions of both the ITA and the subsequent SIDRA modelling. In my opinion, the Hoon Hay Road / Leistrella Road intersection will continue to operate safely and efficiently and will be capable of accommodating the additional traffic generated by development enabled through the proposed Plan Change.

Cashmere Road / Leistrella Road

- 77 The existing Cashmere Road / Leistrella Road intersection has been constructed with a right-turn bay on Cashmere Road and was designed to accommodate future development within the Hendersons East area. The forecast increase in traffic using the intersection is modest and the existing layout provides a good standard of access to and from Cashmere Road. In my opinion, the intersection can accommodate development enabled by the proposed Plan Change and I do not identify any safety or operational concerns that would warrant intersection upgrades as a consequence of that development.

New Cashmere Road intersection

- 78 The proposed ODP includes a new local road intersection on Cashmere Road. In the ITA, I concluded that the proposed separation between this intersection and Leistrella Road is appropriate and will provide for safe and efficient operation within the urban road environment.
- 79 Additional information provided through the response to the Request for Further Information confirmed that relatively low traffic volumes are expected to use the intersection. The assessment also recognised that the intersection is intended to serve a relatively small catchment area and would function as a local road connection rather than a significant point of access to the wider transport network.
- 80 In my opinion, the proposed intersection will operate safely and efficiently and will not adversely affect the performance of Cashmere Road or the surrounding transport network.
- 81 The ODP also identifies an indicative future connection through to Emily Knowles Drive. In my opinion, this is a positive feature of the proposal as it supports local connectivity and integration with the wider residential area.

Safety performance

- 82 I updated the crash history review undertaken for the ITA. The updated review identified one additional crash within the study area since completion of the original assessment. This minor-injury crash occurred at the Hoon Hay Road / Rose Street intersection and involved a pedestrian crossing Rose Street and a vehicle turning right into Rose Street.
- 83 Consistent with the findings of the ITA, the updated review did not identify any reported crashes at the Hoon Hay Road / Leistrella Road, Cashmere Road / Leistrella Road or Sparks Road / Rydal Street intersections. In my opinion, the updated crash history does not identify any safety issues associated with the arterial intersections providing access to the Site and does not alter the conclusions of the ITA regarding the suitability of the surrounding transport network.

Summary of traffic effects

- 84 The transport assessment demonstrates that development enabled by the proposed Plan Change can be safely and efficiently accommodated within the surrounding transport network. In reaching this conclusion, I note in particular that:
- (a) the transport assessment adopted conservative development assumptions when assessing the effects of future development within the wider Hendersons East ODP area;

- (b) development enabled by the proposed Plan Change largely comprises extensions to existing and already planned residential areas within the Hendersons East ODP area;
- (c) the surrounding local road network is capable of accommodating forecast increases in traffic volumes;
- (d) safe and efficient access to the arterial road network can be maintained;
- (e) additional SIDRA modelling confirmed that development enabled by the proposed Plan Change would not have a noticeable effect on the performance of key arterial intersections; and
- (f) any localised transport improvements can be appropriately considered through future subdivision design and do not alter my conclusions regarding the suitability of the surrounding transport network.

85 For these reasons, I conclude that the traffic effects of development enabled by the proposed Plan Change are acceptable.

Consistency with transport objectives and policies

Christchurch District Plan

- 86 I have reviewed the transport-related objectives and policies of the Christchurch District Plan, including Objective 7.2.1 which seeks an integrated transport system that enables safe and efficient movement of people and goods while supporting access by a range of travel modes.
- 87 In my opinion, development enabled by the proposed Plan Change is consistent with these provisions from a transport perspective. As discussed throughout my evidence, the proposed ODP integrates with the existing and planned transport network within the Hendersons East area and provides connections for travel by walking, cycling, public transport and private vehicle.
- 88 I have assessed that development enabled by the proposed Plan Change will be well connected to surrounding residential areas and community facilities. In particular, the active mode connection to Sparks Road and the Quarryman's Trail Major Cycleway will improve walking and cycling connectivity within the wider Hendersons East area.
- 89 I have also concluded that the surrounding transport network can accommodate development enabled by the proposed Plan Change. The local road network can accommodate forecast traffic volume increases, safe and efficient access to the arterial road network can be maintained, and the additional traffic generated will not have a noticeable effect on the operation of key arterial intersections.

- 90 For these reasons, I consider the proposed Plan Change to be consistent with the transport-related objectives and policies of the Christchurch District Plan.

National Policy Statement on Urban Development

- 91 I have reviewed Objectives 1, 3 and 8 and Policy 1 of the NPS-UD. From a transport perspective, these provisions seek well-functioning urban environments with good accessibility between housing, employment, community facilities and open space, including by active and public transport modes. In my opinion, the transport outcomes associated with the proposed Plan Change are consistent with these provisions.
- 92 As outlined in my evidence, development enabled by the proposed Plan Change will be integrated with the surrounding urban area and transport network and will have good accessibility to employment, education, recreation, community facilities and public transport services. Future residents will have opportunities to travel by walking, cycling, public transport and private vehicle, thereby supporting transport choice and reducing reliance on any single mode of travel.
- 93 In my opinion, the Site exhibits the characteristics of a well-functioning urban environment from a transport perspective and is consistent with the transport-related objectives and policies of the NPS-UD.

Canterbury Regional Policy Statement

- 94 The relevant RPS provisions² seek integration of land use and transport, efficient use of infrastructure, maintenance of the strategic and arterial road network, and provision of connectivity for walking and cycling.
- 95 In my opinion, development enabled by the proposed Plan Change is consistent with these provisions. The Site adjoins existing and planned residential development within the Hendersons East ODP area, will make efficient use of existing transport infrastructure, and provides a high level of connectivity for walking and cycling.
- 96 I have also assessed that the proposed Plan Change will result in negligible effects on the operation of the surrounding arterial road network. Accordingly, I consider that development enabled by the proposed Plan Change appropriately integrates land use and transport infrastructure and is consistent with the relevant transport provisions of the RPS.

² Relevant provisions include Policies 5.3.1 (Regional Growth), 5.3.2 (Development Conditions), 5.3.7 (Strategic Land Transport Network and Arterial Roads), and 5.3.8 (Land Use and Transport Integration).

Response to matters raised in submissions

97 A number of submissions raised concerns regarding the transport effects of development enabled by the proposed Plan Change. The principal transport-related matters raised can be grouped into the following themes:

- (a) increased traffic volumes on Leistrella Road and surrounding local roads;
- (b) the operation and safety of the Hoon Hay Road / Leistrella Road intersection;
- (c) pedestrian and cyclist safety, particularly in relation to school travel;
- (d) requests for vehicle access to Sparks Road; and
- (e) wider concerns regarding congestion within the south-west Christchurch transport network.

Local road network

98 Several submitters expressed concern regarding increased traffic volumes on Leistrella Road, Rydal Street, Northaw Street and surrounding local roads. Concerns were also raised regarding the width of Leistrella Road, on-street parking, and the ability of the local road network to accommodate future traffic demands.

99 I have considered these matters as part of my assessment and remain satisfied that the forecast traffic increases can be accommodated within the function of the surrounding local road network. As discussed earlier in my evidence, the transport modelling adopted conservative development assumptions when assessing future development within the wider Hendersons East ODP area. I do not identify any concerns regarding the ability of Leistrella Road, Rydal Street or Northaw Street to accommodate the forecast traffic volumes.

Hoon Hay Road / Leistrella Road intersection

100 A number of submitters raised concerns regarding congestion, safety and delays at the Hoon Hay Road / Leistrella Road intersection, and suggested that upgrades may be required.

101 These matters were assessed through both the ITA and the subsequent SIDRA modelling undertaken in response to Council's Request for Further Information. I also observed the intersection during the weekday evening peak period. The modelling and my site observations were consistent in indicating that the intersection will continue to operate acceptably following development enabled by the proposed Plan Change. Accordingly, I do not consider that intersection upgrades are required as a result of the Plan Change.

Pedestrian and cyclist safety

- 102 Submitters also raised concerns regarding pedestrian and cyclist safety, particularly in relation to school travel movements, pedestrian crossing opportunities and local active mode connections.
- 103 I acknowledge these concerns. As discussed earlier in my evidence, the Site has good access to the surrounding active mode network, including the Quarryman's Trail and Nor'West Arc Major Cycleways. The proposed active mode connection to Sparks Road will further improve walking and cycling connectivity, providing more direct access to nearby schools, local destinations and the wider cycle network. The ITA also identified opportunities to improve pedestrian accessibility between the Site and Hoon Hay Road, including opportunities to improve crossing conditions and pedestrian connections within the surrounding local road network.
- 104 My site observations reinforced the importance of these connections, particularly in relation to school travel movements. I also note that the forecast traffic volumes on Leistrella Road, Rydal Street and Northaw Street remain within a range that I consider compatible with continued use by cyclists. I support the incorporation of traffic calming measures as development occurs, which would assist in maintaining vehicle speeds appropriate to the residential environment and support safe use of the local road network by pedestrians and cyclists. In my opinion, these matters can be appropriately considered through future subdivision design and do not alter my overall conclusions regarding the suitability of the Site for residential development.

Vehicle access to Sparks Road

- 105 Several submitters sought a vehicle access connection to Sparks Road, either through reopening the Rydal Street connection or providing a new access point to Sparks Road.
- 106 In my opinion, the proposed access arrangements remain appropriate. Development enabled by the proposed Plan Change largely comprises extensions to existing and already planned residential development within the Hendersons East ODP area rather than a standalone residential neighbourhood. The proposed road network therefore builds upon the access arrangements already anticipated through the ODP. The ITA considered the proposed road network structure and assessed the effects of development using these planned access arrangements. I remain satisfied that the surrounding road network can safely and efficiently accommodate development enabled by the proposed Plan Change without requiring a vehicle access connection to Sparks Road.

- 107 The proposed active mode connection to Sparks Road will nevertheless provide an important walking and cycling connection to surrounding destinations, including nearby schools and the Quarryman's Trail Major Cycleway.

Wider arterial road network

- 108 A number of submitters raised broader concerns regarding congestion on Cashmere Road, Sparks Road and within the wider south-west Christchurch transport network. Some submitters questioned whether other planned and recent developments had been adequately considered, while others raised concerns regarding the operation of nearby intersections on Cashmere Road, including the Penruddock Rise intersection.
- 109 I acknowledge that congestion occurs at times within parts of the wider arterial road network. However, these conditions reflect travel demands across the wider south-west Christchurch area and are influenced by broader network activity rather than any individual development area. The transport assessment was undertaken having regard to the future transport environment, including residential development already anticipated under the Hendersons East ODP.
- 110 The assessment utilised the Christchurch Assignment and Simulation Traffic (CAST) Model, which is the accepted strategic transport modelling tool used to assess the operation of the Christchurch transport network under future growth scenarios. Accordingly, wider growth and development anticipated within the area was incorporated within the assessment. The transport modelling demonstrated that development enabled by the proposed Plan Change would result in negligible effects on the wider arterial road network, while subsequent SIDRA modelling confirmed that the additional development would not have a noticeable effect on the operation of key arterial intersections.
- 111 In relation to the Penruddock Rise intersection, the transport assessment and subsequent response to the Request for Further Information concluded that only a relatively small proportion of development traffic would be expected to travel to and from the west along Cashmere Road and through this intersection. Accordingly, I do not consider that development enabled by the proposed Plan Change would materially alter the operation of either the Penruddock Rise intersection or the wider Cashmere Road corridor. These submissions do not alter the conclusions of my assessment.

Response to matters raised in the s42A report

- 112 Overall, I generally agree with the transport conclusions reached by Ms Parnwell and Mr Chen, including that the transport network is capable of accommodating the development enabled by PPC18 and that the resulting transport effects are acceptable. My comments below therefore focus on those matters where I consider

further clarification is required or where I do not agree with the recommended amendments.

Development staging

- 113 I do not support the recommended amendment requiring development to proceed from the Cashmere Road frontage inward. While I acknowledge that development may ultimately progress in this manner for commercial, ownership or delivery reasons, I do not consider there is a transport planning basis to require such an outcome through the ODP. Mr Chen concludes that the surrounding transport network, including access via Leistrella Road to Hoon Hay Road, is capable of accommodating the traffic generated by PPC18 and that the resulting transport effects are acceptable. In my opinion, the recommended staging requirement does not address any identified capacity, safety or operational issue, nor is it linked to the provision of any specific transport infrastructure. As such, I consider there is no transport-related need to delay development that is accessed via Leistrella Road and Hoon Hay Road.

Minor ODP amendments

- 114 Aside from the recommended staging provision discussed above, I have no objection to the remaining transport-related amendments recommended in the section 42A report.
- 115 In relation to the Cashmere Road / Penruddock Rise roundabout, I note that the intersection lies outside the area subject to PPC18 and is already under construction. Accordingly, I have no objection to the ODP being updated to reflect the roading layout now being implemented and to remove the previously shown indicative connection location. In my opinion, this amendment improves consistency between the ODP and the future transport network but does not alter the conclusions of my transport assessment.
- 116 I also have no objection to the removal of the provision referring to a potential future road connection through Kaiwara Reserve. A road connection through the reserve is not required to support the development enabled by PPC18 and has not formed part of my transport assessment. Accordingly, I consider it reasonable for the reference to be removed from the ODP.

Additional comments on matters raised in Mr Chen's evidence

- 117 At paragraphs 39 to 43, Mr Chen refers to the north-south connection through the site as a "spine road" and notes that it should be designed to accommodate potential future public transport services. In my opinion, this terminology overstates the intended function of the road. As discussed earlier in my evidence, development enabled by PPC18 comprises extensions to existing and planned

residential areas within the Hendersons East ODP area and I consider it appropriate that Leistrella Road continues to function as a local residential road. The transport assessment did not assume the road would perform a higher-order transport function or accommodate future public transport services. Rather, the assessment assumed a traffic-calmed local road environment intended to discourage through traffic and support a low-speed residential setting.

- 118 In his conclusion, Mr Chen identifies a number of additional transport-related recommendations. While these recommendations have not been incorporated into the transport-related amendments recommended in the section 42A report, I have considered them and provide the following comments.
- 119 Mr Chen recommends detailed subdivision-stage safety assessments. I agree that future subdivision design should be supported by an appropriate transport assessment and detailed consideration of transport safety and accessibility matters. As noted elsewhere in my evidence, subdivision of the site will require resource consent and provide an opportunity to assess matters such as pedestrian and cycle connectivity, intersection design, vehicle speeds and road safety. In addition, I expect the future road network will be subject to the Council's normal engineering approval processes, including road safety audits where required.
- 120 Mr Chen's recommendations include an upgrade to the Hoon Hay Road / Leistrella Road intersection. I note that the discussion in his evidence primarily relates to pedestrian accessibility and safety considerations, including crossing distances, kerb radii and visibility. These matters can be appropriately considered through future subdivision design and detailed assessment. I do not consider it necessary for the ODP to prescribe a specific upgrade outcome for the intersection at this stage.
- 121 Mr Chen also recommends a pedestrian crossing at the Blakiston Street / Hoon Hay Road intersection. As discussed in the ITA, the additional pedestrian demand generated by PPC18 for this particular crossing movement is expected to be relatively low. While there may be opportunities to improve pedestrian connectivity and accessibility in this area over time, I do not consider it necessary to identify or require a specific crossing facility through PPC18. In my opinion, any minor improvements are more appropriately considered through future subdivision design and assessment of pedestrian safety and accessibility on the adjoining road network.
- 122 Mr Chen recommends a footpath connection along Cashmere Road to the existing bus stop. In my opinion, this outcome is already anticipated as part of future subdivision and road upgrading works associated with development fronting Cashmere Road. As noted in the ITA, the existing Leistrella Road development has already resulted in urbanisation of the Cashmere Road frontage, including footpath

provision, and it is expected that this treatment will continue as adjacent land develops. Accordingly, I fully anticipate that the pedestrian connection towards the east will be provided over time, and do not consider it necessary to prescribe a specific footpath requirement through the ODP.

Conclusion

123 For the reasons set out in my evidence, I conclude that the transport effects of development enabled by PC18 are acceptable. Additional development enabled will be well integrated with the surrounding transport network, can be safely and efficiently accommodated within the existing and planned road network, and will provide future residents with access to a range of transport choices. The transport assessment demonstrates that the additional traffic generated by PC18 will have negligible effects on the wider arterial network and can be appropriately accommodated within the local road network. Accordingly, I support PC18 from a transportation perspective.

Dated 14 August 2026

Andrew Leckie