

Before the Hearing Commissioners
Appointed by Canterbury Regional Council and Selwyn District Council

Under	The Resource Management Act 1991
In the matter of	an application by Southern Screenworks Limited for land use consents and discharge permits associated with the extension of, and changes to, existing quarry operations at 50 Bealey Road, Kirwee

Statement of evidence of Michael Campbell Copeland

31 March 2025

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**anderson
lloyd.**

Introduction

- 1 My full name is Michael Campbell Copeland. I am a consulting economist at Brown, Copeland and Company Limited, a firm of consulting economists which has undertaken a wide range of studies for public and private sector clients in New Zealand and overseas.
- 2 I hold a Bachelor of Science degree in mathematics and a Master of Commerce degree in economics. I have over 50 years' experience in the application of economics to various areas of business, infrastructure and resource management matters. A summary of my curriculum vitae is attached as **Appendix A**.
- 3 During the period 1990 to 1994, I was a member of the Commerce Commission and during the period 2002 to 2008 I was a lay member of the High Court under the Commerce Act. Prior to establishing Brown, Copeland and Company Limited in 1982, I spent six years at the New Zealand Institute of Economic Research and three years at the Confederation of British Industry.

Code of conduct for Expert Witnesses

- 4 Whilst this is a Council hearing, I acknowledge that I have read and am familiar with the Environment Court's Code of Conduct for Expert Witnesses, contained in the Environment Court Practice Note 2023, and agree to comply with it.
- 5 My qualifications as an expert are set out above. Other than where I state that I am relying on the advice of another person, I confirm that the issues addressed in this statement are 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

- 6 Southern Screenworks Limited (**Southern Screenworks**) owns and operates its Aylesbury Quarry located at 50 Bealey Road, Kirwee in the Selwyn District. Southern Screenworks is seeking resource consents to enable the continuation of its Aylesbury Quarry operations through extension of quarrying into adjoining land parcels. Processing and stockpiling of material will occur at the existing Aylesbury Quarry and within parts of the extension areas. Southern Screenworks expects that extraction within the existing quarry site will be completed this year, and quarrying operations will then move into extension areas should the necessary consents be obtained.
- 7 I understand volumes of aggregate extracted have averaged around 30,000 to 40,000 tonnes per annum over the previous decade although individual years have had higher and lower volumes than this. I further understand the volumes of

product extracted from the extension areas are expected to remain similar to this level.

- 8 An unlimited consent duration is sought for the extension area from SDC and consent durations of 35 years from CRC. While changes are proposed to some of the consents for the existing quarry, these will continue to have an expiry date of 2046.
- 9 It is anticipated that the extension area will provide a long-term extension for the Aylesbury Quarry, in excess of 30 years, hence reflecting the consent durations sought.
- 10 While it is proposed to rehabilitate the extension (which may require bringing in some cleanfill), no imported 'cleanfilling' is proposed within this area. Cleanfilling may however continue within the existing quarry within the life of those consents.
- 11 As extraction and rehabilitation will occur in stages progressively across the extension, areas will be able to be returned to pastoral grazing or another appropriate use once rehabilitation is completed within a stage.
- 12 The purpose of my evidence is to assess the economic effects of the proposed Aylesbury quarry extension.
- 13 After a summary, the remainder of my evidence addresses the following:
 - (a) The relevance of economic effects under the RMA;
 - (b) The economic importance of low cost aggregate supplies;
 - (c) The economic benefits of maintaining Greater Christchurch's and the wider Selwyn District's aggregate supply cost advantage;
 - (d) The economic benefits of the proposed quarry extension and changes to conditions of the existing quarry consents;
 - (e) Potential economic costs of the proposed quarry extension;
 - (f) Issues raised in submissions;
 - (g) Issues raised in the section 42A reports; and
 - (h) My conclusions.

Executive summary

- 14 The economic wellbeing of communities and the efficient use and development of resources are concepts relevant to this proposal under the RMA.

- 15 Developing new quarries is expensive, time consuming and uncertain due to consenting constraints.
- 16 Aggregate is an important component in the construction and maintenance of housing, commercial and industrial buildings and community infrastructure. Local authorities and central government are significant users of aggregate.
- 17 There is an ongoing need for new aggregate sources of supply as existing quarries are depleted and the demand for aggregate continues to enable the new construction, replacement and repair of infrastructure, houses and other buildings. Over time the demand for aggregate will increase with population (and household) growth and general economic growth.
- 18 Aggregate is a low value, high volume product and its delivered cost is particularly sensitive to its transport costs. Greater Christchurch, within which the Aylesbury Quarry is located, and the wider Selwyn District, is effectively self-sufficient in aggregates and there is no need to import aggregates into the area. This self-sufficiency is of significant economic advantage to Greater Christchurch and the wider Selwyn District, because the cost of transporting aggregates is such a significant proportion of their delivered cost.
- 19 Southern Screenworks proposed extension of its Aylesbury Quarry has the following economic benefits:
 - (a) It will enable the continued use of existing assets used for the production and processing of aggregate;
 - (b) It will defer the economic and other costs associated with developing new quarries;
 - (c) It will defer the need to source aggregate from more distant sources of supply, generating transport and emission cost savings. This will help to prevent the delivered cost of aggregate from increasing, benefitting local residents and businesses both directly and indirectly as ratepayers and taxpayers. The granting of consents will also enable the Aylesbury Quarry to continue as an important supplier to nearby communities such as Darfield and Kirwee, especially in relation to supplying aggregate in response to emergency requirements such as flooding;
 - (d) The land required for the quarry extension will be rehabilitated enabling it to be reused for pastoral farming; and
 - (e) It will retain jobs for Southern Screenworks staff.
- 20 The proposal will not give rise to economic externality costs.

- 21 I have reviewed the submissions of Dion Coleman and Louis and Karen Nunn, which include concerns about negative effects on nearby property values. Any property value effects are a reflection of, not in addition to, any adverse effects from quarrying operations for nearby residents. I also note that Southern Screenworks, following consultation with potentially affected parties, has proposed a number of changes sought by Mr Coleman and the Nunns to the proposal that was first lodged to address their concerns.
- 22 The proposed quarry extension is consistent with enabling people and communities to provide for their economic wellbeing. It is also consistent with the efficient use and development of natural and physical resources.
- 23 The Selwyn District Council and Canterbury Regional Council s42A officer's reports identify a number of positive economic effects from the proposed quarry extension.
- 24 Mr Alan King's evidence also identifies a number of the positive economic benefits for local residents and businesses from the Aylesbury Quarry's continued operation.

Economics and the RMA

Community Economic Wellbeing

- 25 Economic considerations are intertwined with the concept of the sustainable management of natural and physical resources, which is embodied in the RMA. In particular, Part II section 5(2) refers to enabling "*people and communities to provide for their ... economic ... well being*" as a part of the meaning of "*sustainable management*", the promotion of which is the purpose of the RMA.
- 26 As well as indicating the relevance of economic effects in considerations under the RMA, this section also refers to "people and communities", which highlights that, in assessing the impacts of a proposal, it is the impacts on the community and not just the applicant or particular individuals or organisations, that must be taken into account. This is underpinned by the definition of "*environment*" which also extends to include people and communities.
- 27 Southern Screenworks' proposed Aylesbury quarry extension will help lessen the extent to which the future costs of aggregate supply increase and therefore benefit local businesses and residents. This is discussed later in my evidence and the evidence of Mr Alan King.

Economic Efficiency

- 28 Part II section 7(b) of the RMA notes that in achieving the purpose of the Act, all persons "*shall have particular regard to ... the efficient use and development of*

natural and physical resources” which include the economic concept of efficiency.¹ Economic efficiency can be defined as:

“the effectiveness of resource allocation in the economy as a whole such that outputs of goods and services fully reflect consumer preferences for these goods and services as well as individual goods and services being produced at minimum cost through appropriate mixes of factor inputs”.²

- 29 More generally economic efficiency can be considered in terms of:
- (a) Maximising the value of outputs divided by the cost of inputs;
 - (b) Maximising the value of outputs for a given cost of inputs;
 - (c) Minimising the cost of inputs for a given value of outputs;
 - (d) Improving the utilisation of existing assets; and
 - (e) Minimising waste.
- 30 Southern Screenworks' proposed Aylesbury Quarry extension will result in the more efficient utilisation of existing quarry infrastructure, plant and machinery and limit increases in aggregate transport costs. These efficiency benefits are discussed later in my evidence.

Value of investment to the existing consent holder

- 31 Section 104(2A) of the RMA requires the consent authority, when considering a renewal of an existing consent, to “*have regard to the value of the investment of the existing consent holder.*” Although in this instance Southern Screenworks are seeking new consents rather than renewal of an existing consent, this section of the RMA highlights that consideration of the value and remaining useful life of Southern Screenworks existing aggregate quarrying and processing assets is relevant to having regard to the efficient use of resources.
- 32 The value to Southern Screenworks of its investment in the Aylesbury Quarry assets can be considered in terms of either the reinstatement value of the facilities (including internal roading, access-way from Bealey Road, other onsite

¹See, for example, in *Marlborough Ridge Ltd v Marlborough District Council* [1998] NZRMA 73, the Court noted that all aspects of efficiency are “economic” by definition because economics is about the use of resources generally.

²Pass, Christopher and Lowes, Bryan, 1993, Collins Dictionary of Economics (2nd edition), Harper Collins, page 148.

infrastructure installations, overburden removal, parking areas, a workshop, office facilities, a concrete pad/washing bay and on-site bunding and planting) of in excess of \$20 million³ or the foregone future earnings of the facilities on the site if they were forced to downsize or have their future extension restricted. By both of these measures, the value of investment to Southern Screenworks as the existing consent holder is significant.

Viewpoint

- 33 An essential first step in carrying out an evaluation of the positive and negative economic effects of a development proposal is to define the appropriate viewpoint that is to be adopted. This helps to define which economic effects are relevant to the analysis. Typically, a city (district) or wider regional viewpoint is adopted and sometimes even a nationwide viewpoint might be considered appropriate.
- 34 For the proposed Aylesbury quarry extension the primary beneficiaries will be the businesses, residents and ratepayers of the Greater Christchurch sub-region – i.e. Christchurch City and Selwyn and Waimakariri Districts and the wider Selwyn District, noting that the Aylesbury Quarry is at the edge of Greater Christchurch and therefore is able to service customers beyond the precise boundaries of the Selwyn District (and Greater Christchurch) – e.g. to north and west of the Selwyn District boundary. (See the evidence of Mr Alan King). Therefore, a Greater Christchurch and wider Selwyn viewpoint is appropriate.
- 35 There are also private or financial costs and benefits associated with the proposed quarry extension. If consents are granted allowing it to occur, and Southern Screenworks gives effect to these consents, then it can be assumed that the private or financial costs and benefits have been responsibly and properly analysed and that from the viewpoint of Southern Screenworks which has money at risk, the expected financial benefits exceed the expected costs. Accountability for the accuracy of the financial analysis clearly rests with Southern Screenworks and ultimately the net financial benefits it might receive from the proposal are not directly relevant to the assessment of effects under the RMA.
- 36 Therefore, the focus of my evidence is generally on the wider economic effects on parties other than Southern Screenworks. Economists refer to such effects as “externalities”.⁴ However, as is explained later in my evidence, increases in the costs for Southern Screenworks in supplying aggregate to customers in Greater Christchurch and wider Selwyn will flow through into higher prices for aggregate,

³Source: Southern Screenworks.

⁴Defined as the side effects of the production or use of a good or service, which affects third parties, other than just the buyer and seller.

increasing infrastructure and other building capital and maintenance costs. This will detrimentally impact on not just Southern Screenworks but also local residents, directly as aggregate customers and indirectly as ratepayers and taxpayers. Increases in the costs of supplying aggregate are also relevant with respect to the “*efficient use and development of natural and physical resources*”.

Non-economic effects

- 37 My evidence addresses the economic effects⁵ of allowing the proposed quarry extension. Non-economic effects (i.e. the environmental, social and cultural effects) are covered in the evidence of other technical experts.
- 38 In economics, ‘intangible’ costs and benefits are defined as those which cannot be quantified in monetary terms. Sometimes attempts can be made to estimate monetary values for ‘intangible’ non-economic costs and benefits using techniques such as willingness to pay surveys or inferring values on the basis of differences in property values. Once quantified in monetary terms, these effects can supposedly be considered as part of the assessment of economic effects.
- 39 However, such techniques are frequently subject to uncertainty and criticism. In my opinion it is generally better to not attempt to estimate monetary values for these effects but to leave them to be assessed by appropriately qualified experts and for their assessments to form part of the application of the relevant legal test. This also avoids the danger of ‘double-counting’ – i.e. including them within a quantified measure of economic wellbeing or efficiency and treating them as a separate consideration.

The economic importance of low-cost aggregate supplies

- 40 Each year, New Zealand consumes the equivalent of eight tonnes of aggregate per person.⁶ Due to the significance of aggregate in housing, commercial and industrial buildings and community infrastructure (especially roading), enabling the provision of low-cost aggregate is important to both people and the community's economic wellbeing and the efficient use and development of resources. Aggregate is used in the manufacture of concrete and concrete products (e.g. blocks, pipes and paving stones), the construction and maintenance of roads and railway lines and for drainage and filtration. The construction of an average New Zealand house requires between 180 and 240 tonnes of aggregate for foundations, tiling, plastering, brick or block cladding, gib board wall linings, driveways and other landscaping, drains and soak pits and sewerage and water schemes. A kilometre of water pipe services requires 8,100

⁵Sometimes economic effects can have a social dimension – e.g. employment and income effects.

⁶Aggregate Modelling; GNS Science – <http://www.gns.cri.nz/research-projects/aggregate-modelling/>

tonnes of aggregate and a kilometre of single highway lane requires 39,000 tonnes of aggregate.⁷

- 41 Nationally, over half of the aggregate produced is used on roads and a further 21% is used in the construction of commercial and residential buildings. Local authorities account for 75% of the quantity of aggregate used each year in New Zealand.⁸
- 42 There is an ongoing need for new aggregate sources of supply as existing quarries are depleted and the demand for aggregate continues to enable the new construction, replacement and repair of infrastructure, houses and other buildings. Over time the demand for aggregate will increase with population (and household) growth and general economic growth. Future responses to climate change may also lead to greater future growth in the demand for aggregate – for example, responses to more damaging weather events may include more frequent repair and more intensive strengthening of flood protection infrastructure.⁹
- 43 In a competitive market, increases in the costs of quarrying, producing and transporting aggregate will result in increased prices for aggregate used for the construction and maintenance of infrastructure and other building. Southern Screenworks' proposed Aylesbury Quarry extension will enable more efficient use of existing quarrying infrastructure, plant and equipment, the costs of which are largely sunk – i.e. cannot be resold or relocated to an alternative site(s). It will delay the need to source aggregate from newly established quarries, likely to be located further away from points of aggregate demand.
- 44 Putting downward pressure on aggregate supply costs benefits businesses and residents, both directly and indirectly as ratepayers and taxpayers, since aggregate is a significant cost component of roading and other infrastructure provision and maintenance. Higher prices for inputs reduce the overall competitiveness of a local economy reducing employment, incomes and economic growth.
- 45 Low cost aggregate supply and use is also relevant to the issue of affordable housing, since it impacts on subdivision development and home building costs.

⁷Aggregate and Quarrying Association of New Zealand Incorporated; Submission on Land Use Consent to place overburden from existing Otaika Quarry onto adjoining land zoned countryside environment and partially within mineral extraction area, as defined in Operative Whangarei District Plan; 4 August, 2017.

⁸Source: Providing Solid Foundations for New Zealand; The Aggregate and Quarry Association of New Zealand; Undated.

⁹See The Economic Significance of the Proposed New Quarry at Burnham in Canterbury. NZIER Report to Winstone Aggregates Ltd, 24 July, 2023 (page 5).

The economic benefits of maintaining Greater Christchurch and the wider Selwyn District's aggregate supply cost advantage

- 46 Aggregate is a low value, high volume product and its delivered cost is particularly sensitive to transport costs – i.e. the distance between its point of supply and its end use. As an approximate rule of thumb, the cost of a truckload of aggregate doubles if it needs to be transported 30 kilometres from its source of supply. Beyond 30 kilometres the delivered cost continues to rise by around 20-30% for the next 30 kilometres and beyond that at a diminishing rate. This is for average priced aggregates. For higher priced aggregates (e.g. sealing chip), the higher price of the aggregate means that transport costs are a lower percentage of the delivered cost. For example, carting sealing chip 30 kilometres would typically increase the ex-quarry price by 35-40%. ¹⁰
- 47 Greater Christchurch and the wider Selwyn District are effectively self-sufficient in aggregates, as there is no need to import aggregates into the area. This self-sufficiency is of significant economic advantage to Greater Christchurch and the wider Selwyn District, because the cost of transporting aggregates is such a significant proportion of their delivered cost.
- 48 By way of example, the delivered cost of aggregate in Auckland and Wellington is estimated to be in broad terms double that for Christchurch because of the greater transport distances involved between sources of supply and points of demand, and the more expensive quarrying costs from hard rock quarries.¹¹
- 49 Without the aggregate supply cost comparative advantage Greater Christchurch and the wider Selwyn District have compared to other main centres in New Zealand, there would be significant additional costs for local residents, businesses and in particular the Christchurch City Council, the Selwyn and Waimakariri District Councils and their ratepayers. To the extent that central and local government agency budgets are fixed, these additional costs may delay or prevent the provision of new infrastructure. These agencies are required to provide public sector infrastructure and facilities to secure additional private sector investment and initiatives, which will underpin Greater Christchurch's future economic growth, economic and social wellbeing, resilience and overall prosperity.

¹⁰Source: The Aggregate and Quarry Association of New Zealand newsletter December 2016 – January 2017. (www.aqa.org.nz)

¹¹Source: Based on data supplied by Fulton Hogan, Isaac Construction Limited and Mr. Richard English.

The economic benefits of Southern Screenworks proposed Aylesbury quarry extension

Continued use of existing assets

- 50 Southern Screenworks has provided an estimate of in excess of \$20 million for the replacement cost value of the assets associated with the existing Aylesbury Quarry aggregate production and processing operations. Continuing to produce aggregates from these assets, which in the main are “sunk” in that they cannot be sold or transferred for use elsewhere, is consistent with the efficient use of resources.

Deferring the cost of new quarries

- 51 Investment costs in developing a new quarry are relatively high and much of the infrastructure is “sunk”, that is, it is not readily transferable to another site. Development costs for a new quarry include road construction, the installation of infrastructure services, the relocation and installation of mobile plant and equipment and the installation of fixed plant and equipment. There is also significant cost, time and uncertainty in obtaining approvals to open new quarries and Southern Screenworks has high certainty that the gravel in this location is of good quality for demands in the wider Selwyn District and Greater Christchurch generally.
- 52 The proposed Aylesbury quarry extension is estimated to extend the life of the quarry in excess of 30 years. Alternatively, without the quarry extension being approved, aggregate will be sourced from further afield to customers’ points of demand and/or aggregate material may need to be transported to the existing Aylesbury Quarry site for sale and/or processing. Both of these alternatives involve significantly increased transport costs, whilst bringing aggregate to the Aylesbury Quarry will also involve double handling. As is discussed later in my evidence increasing aggregate supply costs will result in reduced economic wellbeing and resource use efficiency.

Reduced aggregate transport costs

- 53 Without consents being granted for the proposed quarry extension, there will be additional costs if a new quarry with its own aggregate processing facilities is established and/or if aggregate material needs to be transported to the existing Aylesbury Quarry site for sale and/or processing. As discussed earlier in my evidence since aggregate is a low value, high volume product the delivered cost of aggregate is very sensitive to transport costs.
- 54 The transport costs associated with the movement of aggregate incorporate both the running costs of operating vehicles (such as fuel, oil, tyres, and distance-

related vehicle depreciation) as well as the standing (or time) costs associated with owning and operating a vehicle (time-related vehicle depreciation, insurance, driver's wages and required return on capital). Since having a more distant source of supply for aggregates will increase the number of vehicles required as well as vehicle kilometres there will be both increased time-related and distance related costs.¹²Included in vehicle running costs are road user charges, which are a proxy for the cost of maintaining the road, as well as including a contribution towards new capital works for enhanced road capacity and safety. Road user costs are distance related, and since they are a function of the number of heavy vehicles using a section of road, so are road maintenance costs.

- 55 There are also three important external effects (or “externalities”) associated with road transport, and which need to be taken into account. Firstly, there are the environmental benefits associated with reduced road transport including reduced emissions of CO² and other pollutants. Secondly, there are reduced road accident costs, which are not internalised in freight rates. These include reduced costs to other traffic and public health and policing agencies. Thirdly, there are reduced congestion effects of road transport for other road users. Congestion cost reductions in this context relate to lower vehicle running and standing costs and travel time costs for users of the road other than the trucks carting aggregate.

Reduced aggregate prices¹³

- 56 Southern Screenworks current site for its quarry (and proposed extension) is described in Mr King's evidence as being optimally placed to serve its current customers. Should Southern Screenworks be forced to close its Aylsebury Quarry it would need to get consented and then develop a new quarry at a site which may be less optimally located relative to its customer base and with the added costs of consenting and duplication of sunk assets.
- 57 Savings in the costs of producing and transporting aggregate (as described above) imply increases in resource use efficiency. However, in terms of “community economic wellbeing” positive impacts will occur only if these cost savings are translated into price reductions for customers – or at least aggregate prices are maintained at existing levels for longer before cost increases are reflected in higher prices. If the Aylesbury Quarry extension consents are not granted, initially at least, Southern Screenworks although faced with higher aggregate supply costs may at first need to accept a reduction in the margin achieved from the sale of aggregate. The market price for aggregate supplied to points of demand in Greater Christchurch may still be largely driven by the

¹² Increased distance related costs will worsen with higher fuel costs.

¹³Or restraint on future price increases.

existing supply points and there would be limited scope for the delivered price of aggregate to immediately increase significantly.

- 58 However, with time we would expect the market to adjust to a new supply regime and with a significant supply volume¹⁴ from further afield, prices will trend upwards. The rate of increase would be largely determined by the pricing behaviour of the quarries closest to the market demand points. Increased costs for aggregate supply would be reflected in the market prices for aggregate because even though other competitors would not face these increased costs, with a tight supply situation generally, the aggregate would be “priced to market” – in other words, prices from all sources tend towards the highest cost source of supply that is required to meet demand.
- 59 The Aylesbury Quarry extension would help delay the time when higher cost sources of aggregate must be utilised and therefore help prevent increases in the delivered price of aggregate. Higher prices for aggregate raise the costs for infrastructure projects and other building construction and maintenance. Also, to the extent that central and local government budgets for the provision and operation of infrastructure are fixed, higher costs imply delays in the provision of improved infrastructure services, impacting on community economic and social wellbeing. The economic importance of maintaining the lowest possible prices for aggregate within the Selwyn District and Greater Christchurch generally has been covered earlier in my evidence.

Retention of current land uses

- 60 I am informed by Southern Screenworks that after rehabilitation of the quarry extension, the land required for the quarry extension will be able to be reused for its existing land use i.e. pastoral farming. Also, during quarrying of the extension site, continued pastoral use will be possible for parts of the site before quarrying commences. In this regard Southern Screenworks maintains an agreement with the adjoining farmer to graze the site before quarrying commences and after site rehabilitation.

Retention of existing employment opportunities

- 61 The Aylesbury Quarry is currently staffed by approximately 30 people, and if quarrying activity ceases there will be a loss of some of those jobs at the site. These jobs may be transferred to other quarry sites but would not be in the same general location and existing employees may be unwilling to incur the costs of

¹⁴Either finished aggregate products or aggregate raw material trucked to the Aylesbury Quarry for processing.

travel associated with more distant quarry locations. There may therefore be a loss of jobs for local residents.

Potential economic costs of Southern Screenworks proposed Aylesbury Quarry extension

Alternative land uses

- 62 Any lost agricultural or other production is not an external cost of using the site for quarrying activities. The productive value of the land in alternative uses (such as agricultural use) has been internalised into the cost structure of the development – in other words in purchasing the land, Southern Screenworks has paid a price reflective of future net returns from alternative uses for the land. Such costs are not costs to be borne by the wider community.
- 63 In any case, the Application states at Section 2.6 (page 4) that the quarry extension site is classified as LUC4 and therefore does not meet the definition of “Highly Productive Land”.

Infrastructure

- 64 There will be no requirement for additional publically provided infrastructure associated with the proposed quarry extension. Southern Screenworks will meet the costs of any additional mitigation required and the monitoring and compliance costs associated with the quarry extension. Also, the payment by Southern Screenworks (and its customers) of rates, user charges, petrol taxes and road user charges will meet the ongoing operation and maintenance costs of infrastructure. Therefore, other Selwyn District ratepayers, residents and businesses will not be required to cross-subsidise the proposed quarry extension.

Nearby property value effects

- 65 Property value effects are a reflection of, not in addition to, any adverse effects from the quarrying operations for nearby residents. Any change in property value effect does not materialise unless and until an owner sells the property. At this point there is a wealth loss to the seller, but no ongoing adverse effects to be borne by the seller. The purchaser of the property gains by having to pay a lesser price for the property but experiences any costs of any ongoing adverse effects. I understand the Environment Court has accepted that to include both adverse

effects for local residents and property value effects would involve double counting.¹⁵

Issues raised in submissions

- 66 Dion Coleman and Louis and Karen Nunn have stated in their submissions that the proposed Aylesbury quarry extension will have a negative effect on their property values.¹⁶ Potential adverse effects for nearby residents are assessed in the evidence of other witnesses for Southern Screenworks. As I have explained, any property value effects are a reflection of, not in addition to, adverse environmental effects. Also, I note that Southern Screenworks, following consultation with potentially affected parties, has proposed a number of changes sought by Mr Coleman and the Nunnns to the proposal that was first lodged to address their concerns (see the evidence of Ms Sarah Bonnington).

S42A reports' comments

- 67 The Canterbury Regional Council's s42A report (paragraphs 134 and 135) accepts that the quarry extension will have the following positive effects that were identified in Southern Screenworks' Application:

- (a) *Enabling a supply of aggregate in line with the demand of the district;*
- (b) *Utilisation of existing quarrying infrastructure;*
- (c) *Extraction from the site does not preclude ongoing use of the site for rural production during or following quarrying;*
- (d) *Direct employment for staff on-site and indirect employment for numerous other works within the roading and construction industries.*

- 68 The Selwyn District Council's s42A report (paragraphs 137-139) also lists the positive benefits from the quarry extension that were identified in the Southern Screenworks' Application.

Conclusions

- 69 The proposed Aylesbury quarry extension will provide a number of economic benefits including:

¹⁵See for example, paragraphs 249 - 256 of: Environment Court in *Foot v Wellington City Council* ENE Wellington W73/98, 2 September 1998 which dealt with the impact of height restrictions on properties in Oriental Parade.

¹⁶Louis and Karen Nunn in their submission refer to "financial concerns of existing homeowners" which I take to be related to negative property value effects.

- (a) It will enable the continued use of existing assets used for the production and processing of aggregate;
 - (b) It will defer the economic and other costs associated with developing new quarries;
 - (c) It will defer the need to source aggregate from newly established quarries, likely to be more distant sources of supply, generating transport and emission cost savings and help to prevent the delivered cost of aggregate from increasing benefitting local residents and businesses both directly and indirectly as ratepayers and taxpayers;
 - (d) The land required for the quarry extension will be rehabilitated enabling it to be reused for pastoral farming; and
 - (e) It will retain jobs for Southern Screenworks staff.
- 70 The use of the quarry extension site for aggregate extraction will not give rise to economic externality costs.
- 71 The proposed Aylesbury quarry extension is consistent with enabling people and communities to provide for their economic wellbeing. It is also consistent with the efficient use and development of natural and physical resources.

Michael Campbell Copeland

31 March 2025

Appendix A

Curriculum Vitae of Michael Campbell Copeland

DATE OF BIRTH	3 October 1950
NATIONALITY	New Zealand
EDUCATIONAL	Bachelor of Science (Mathematics) 1971
QUALIFICATIONS	Master of Commerce (Economics) 1972

PRESENT POSITIONS

(Since 1982)	Economic Consultant, Brown, Copeland & Co Ltd
(Since 2017)	Trustee, Trade Aid, Kapiti

PREVIOUS EXPERIENCE

1978-82	NZ Institute of Economic Research Contracts Manager/Senior Economist
1975-78	Confederation of British Industry Industrial Economist
1972-75	NZ Institute of Economic Research Research Economist
1990-94	Member, Commerce Commission
2001-06	West Coast Regional Council Trustee, West Coast Development Trust
2002-08	Lay Member of the High Court under the Commerce Act 1986
2003-11	Director, Wellington Rugby Union
2010-13	Director, Southern Pastures

GEOGRAPHICAL EXPERIENCE

- New Zealand
- Australia
- Asia (Cambodia, India, Indonesia, Kazakhstan, Malaysia, Nepal, Pakistan, People's Republic of China, Philippines, Tajikistan, Sri Lanka, Uzbekistan, Viet Nam)
- South Pacific (Cook Islands, Fiji, Kiribati, Tokelau, Tonga, Tuvalu, Vanuatu, Western Samoa)
- United Kingdom

AREAS OF PRIMARY EXPERTISE

- Agriculture and Resource Use Economics (including Resource Management Act)
- Commercial Law and Economics (including Commerce Act)
- Development Programme Management
- Energy Economics
- Industry Economics
- Transport Economics