

Re the Grantville Quarry Application

1. Name of expert: Ian Geoffrey Manning

- 1.1 **Address:** National Institute of Economic and Industry Research (NIEIR) 1A, 663 Victoria St, Abbotsford, Vic.
- 1.2 **Academic qualifications:** B.Com (hons) (Melb), PhD (urban studies) ANU. Books published include *The Journey to Work, Incomes and Policy, Beyond Walking Distance, The Open Street* and (with P J Brain) *Credit Code Red*. Also numerous articles, principally in *The National Economic Review*.
- 1.3 **Experience:** Deputy Director, now Senior Fellow, NIEIR. Has conducted research projects in all Australian states and the NT commissioned by Commonwealth, State, Territory and local government agencies, trade unions, non-government agencies and businesses.
- 1.4 **Relevant expertise:** familiarity with investment impacts on local economies, particularly indirect impacts and externalities.
- 1.5 **Other significant contributors to the exhibited report** (*Continued operation and extension of the Dandy Premix Sand Quarry at Grantville: Economic and social impact*) tab 26:
 - 1.5.1 Nick Marinopoulos, BSc (Hons) (Monash), MSc (Monash), Grad Dip Op Res (Melb), statistician and quantitative analyse
 - 1.5.2 Peter Hylands, former executive in the Pearson group of publishers, current partner in *Creative Cowboy* films, executive interviewer.
- 1.6 **Instructions**
 - 1.6.1 In 2012 NIEIR was commissioned by Dandy Premix to inspect their property on the eastern side of the Bass Highway at Grantville and prepare a report on the economic and social impact of the then-proposed quarry on Bass Coast Shire. The report, entitled *Costs and benefits of a proposed sand pit at Grantville, Vic.*, was completed in September 2012 and contributed to deliberations which issued in the grant of the permit under which the quarry currently operates. On 21 January 2020 NIEIR received verbal instruction from Dandy Premix to update the 2012 report to take into account the proposal to extend the quarry, concentrating once again on the economic and social impact on Bass Coast Shire. The resulting report, *Continued operation and extension of the Dandy Premix Sand Quarry at Grantville: Economic and Social Impact* was completed in June 2020.
 - 1.6.2 On 4 February 2021 lawyers acting for Dandy Premix instructed me to conduct a view of the Subject land and the surrounding land and prepare an expert witness statement addressing six matters and questions.
- 1.7 **Tests and experiments:** the report relies on data in the public domain and on data provided by the applicants. No tests or experiments were required.

2. **The report** has been provided to the Panel (tab 26) and is complete.
 - 2.1 It will be noted that the report was drafted with the impact on Bass Coast Shire in mind. The Panel's questions imply interest in a broader area of impact and the answers to the questions (below) take this into account.
 - 2.2 It will also be noted that the report includes environmental material which is outside the scope of NIEIR's expertise. This material was included in support of the judgement that the environmental effects of the proposed quarry extension are not readily quantified as economic or social externalities (positive or negative) impinging on the residents of Bass Coast Shire. I adopt this report as my evidence for the purposes of my witness statement.
3. **Question 1: the economic and social context of the existing Quarry (including the Proposed Further Development), including the regional economy and the role of extractive industries in the economy.**
 - 3.1 It will be noted that the social effects of the Quarry derive from its economic effects, principally as an employer. The Quarry is located on private land to which the public does not have legal access, hence there are no social effects arising from changes to public access to the land.
 - 3.2 The geographic context of the existing Quarry and its proposed developments can be defined in several ways, of which three are relevant to its economic and social context:
 - i. Bass Coast Shire, as the local government area in which the Quarry lies.
 - ii. The region from which Quarry employees are drawn. Most of Bass Coast Shire is within commuting distance of the Quarry, along with parts of South Gippsland and Cardinia Shires. Employees might also be recruited from the southern part of the City of Casey.
 - iii. The region supplied with sand from the Quarry, including regions of potential supply, that is, areas where the potential for sand supply from Grantville may affect sand price even though no actual sales occur. The actual supply region comprises the south-eastern part of the Melbourne metropolitan area, the potential region includes this area and much of West and South Gippsland.
 - 3.3 Chapter 2 of the Economic and Social Impact Assessment (tab 26) provides a comprehensive overview of the Bass Coast economy. Though written in May 2020, the coronavirus pandemic has played out much as anticipated and the discussion remains relevant.
 - 3.4 Paragraph (l) of the minutes of the Bass Coast Shire Council meeting of 17 February claims that 'the industry is inconsistent with the Shire's natural environment visitor economy and the economic assessment fails to address the impact on the Regions Visitor Economy'. It is true that the report does not make use of the phrase 'natural environment visitor economy', but it does discuss the role of tourism in the overall Bass Coast economy. Tourism is indeed a significant industry in Bass Coast. The report notes that the accommodation and food services industries as defined by the ABS in 2019 provided 11.1 per cent of employment in Bass Coast, compared to 5.7 per cent in Australia as a whole. Not

all of accommodation and food services employment in Bass Coast is generated by tourism demand, some of it is generated by resident expenditures in pubs, milk bars and the like, but even so the industry is a significant employer. However, it is noted that many tourism jobs are low-paid and casual and their number in the Shire was declining even before the impact of Covid-19. Though domestic tourism is now reviving, prospects for international tourism are affected by factors such as the uncertain state of Australia-China relations and the likelihood that air transport will become more expensive as international action is taken to limit greenhouse gas emissions.

- 3.5 Two other aspects of the Bass Coast economy are closely related to the perceived natural environment if not directly to tourism and visitors. These are retirement and ex-urban commuting, both of which support the residential construction industry. Prospects in these industries are relatively bright. Metropolitan house prices, and hence the budgets of potential retirees, are buoyant, while the Covid-19 experience has increased the acceptability of ex-urban living for office workers who can combine working at home with occasional commuting. Unfortunately burgeoning seaside housing estates do far more to compromise the perceived natural environment than the extractive industries located inland.
- 3.6 In Bass Coast the extractive industries have long co-existed with tourism and agriculture. This was possible because they were established in locations of low tourist and agricultural interest. The Wonthaggi coal mines were on an infertile plain inland from the coast. The sand quarries along the western side of the Heath Hill fault are likewise in country which historically has attracted little agricultural or tourist interest, and are shielded from the visitor gaze. For this reason the sand industry has very little impact on visitors.
- 3.7 In short, the extractive industries, including the Quarry, diversify the economic base of Bass Coast Shire, promoting stability and adding employment opportunities to those generated by tourism, retirement, commuting and agriculture.
- 3.8 The effect of the Quarry on the employment catchment will be considered in sections 4 and 5 below.
- 3.9 The effect of the Quarry on the region potentially supplied with sand is described in Chapter 3 of the Economic and Social Impact Assessment (tab 26). In short, concrete-grade sand is a major input to the construction industry. Due to its low value per tonne, transport costs provide a significant wedge between its price at the quarry gate and its cost at the construction site. With the exhaustion of supply from the South East Metropolitan sand pits, the sand deposit along the Heath Hill fault has become the nearest source of supply for the eastern part of the Melbourne Metropolitan area. Rejection of the present application (or approval subject to such onerous conditions which make exploitation uneconomic) will not prevent continued supply of sand from those parts of the Heath Hill deposits located in South Gippsland and Cardinia Shires, but will have two effects: it will hasten the day when the construction industry in Eastern Melbourne has to turn to even more distant deposits (expected to be in the La Trobe Valley) and in the meantime it will reduce competition in supply. Price

increases are to be expected, raising construction costs and generating economic rents.

4. Question 2. The contribution of the existing Quarry and the Proposed Further Development to local and broader economy

4.1 The contribution of the existing Quarry to the broader economy is described in the Economic and Social Assessment (tab 26) Ch 3 and its contribution to the local economy in Ch 4, where it is referred to as the 'base case'. The contribution of the Proposed Further Development is inseparable from the additional contributions referred to in Question 3 and will be considered there.

5. Question 3. Any anticipated impacts of the Proposed Further Development and additional contributions to the local and broader economy which might flow.

5.1 The Economic and Social Impact Assessment (tab 26) Ch 5, provides a detailed projection of the effects of the proposal on employment and incomes in Bass Coast Shire. It is estimated that the Quarry will generate 15 full-time jobs in direct production. Local purchase of inputs and the additional expenditures of locally-employed residents are expected to double this number. On average, these jobs are expected to generate value added per hour similar to the Bass Coast average – that is, somewhat above the jobs in retail and tourism and similar to the average in construction. However, the jobs generated will include some which require technical qualifications and attract above-average salaries. The presence of such jobs in a region has a positive effect on the incentive to upgrade qualifications, and also on the ability of other businesses in the region to recruit qualified personnel, hence the assessment that further jobs will be generated. The report estimates that the most likely additional employment from this source (at 50 per cent probability, with a long lead times) would be around 14.

5.2 It is argued, above, that the Quarry will have very little effect on visitor numbers and hence on the tourist industry. In so far as it generates additional jobs in local service industries, the resulting addition to the range and quality of locally-provided services will benefit the resident population including the retirees and ex-urban commuters. However, these benefits will be marginal and have not been included in the economic appraisal.

5.3 The report allows that some of the additional jobs due to the Quarry will be taken by residents of neighbouring local government areas. This will have the effect of spreading the benefits to the local region.

5.4 In the event of the Quarry not proceeding, the additional jobs will be lost to Bass Coast. However, it is likely that demand for sand will be diverted to other quarries located in South Gippsland and Cardinia. Jobs will follow this diversion and some Bass Coast residents may find themselves commuting to work near Nyora or Yannathan, hence incurring additional commuting costs. However, the diversion is unlikely to be complete, since sand prices are likely to rise, resulting in reduced production due to the substitution of other materials for concrete and to reduced construction activity. The combination of reduced production and higher prices will result in reduced employment and generate increased profits (or location rents) for businesses exploiting those parts of the Heath Hill

sand deposit which are not sequestered. This prospect will be further discussed under Question 6.

6. Question 4. Any issues raised in the objections to the Amendment Application that are within your expertise.

6.1 The objections on environmental and traffic noise grounds are best addressed by others. However, the economic case for the proposed traffic lights at 1381 Bass Highway is summarised in the Economic and Social Impact Assessment (tab 26) section 4.4. In brief, the lights will eliminate unnecessary truck travel costing approximately \$1.0 million a year, plus associated savings in environmental costs (greenhouse gas and other emissions and noise) particularly in Grantville town centre.

7. Question 5: The issues set out in Paragraphs 6 and 19 of the Directions.

7.1 The issues listed in paragraph 6 are best left to others, but the relationship to the Extractive Industries Interest Areas Plan warrants comment in addition to that provided in the Economic and Social Impact Assessment (tab 26) section 3.3.

7.2 Though the term 'extractive industries' can be defined broadly to cover any activity which extracts minerals from the earth, the extractive industries are here defined narrowly to cover the quarrying of stone as distinct from metal ores or energy resources. In this usage, stone includes sand. Stone in this sense is quarried to provide inputs for the construction industry, both civil works and buildings. It is of low value in relation to weight but is required in significant quantities, which means that transport costs are an important element in the cost of stone delivered to construction sites. Stone resources are superficial – their low value per tonne does not justify underground mining. Their removal therefore alters the local landscape, not necessarily for the worse. Particularly in peri-metropolitan areas, land use following quarrying often differs from the use prior to quarrying. Many sites in south-eastern Melbourne which began as dry paddocks were quarried for sand then rehabilitated as residential sites, urban parks or golf courses.

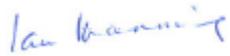
7.3 Stone resources are widespread but far from ubiquitous, particularly resources which are of good quality in relation to construction requirements. Resources situated close to areas of construction activity are particularly valuable, but are frequently in demand for land uses which prevent quarrying. The intent of the Extractive Industries Interest Areas Plan, as I understand it, is to restrain these competing uses to allow the quarrying of stone followed by rehabilitation of the land to suit it for the succeeding use. The cost of this for each work area is that the existing land use is foregone and the succeeding use postponed; the benefit is that the stone resource is available for quarrying and hence for the generation of economic value while at the same time enhancing the supply of stone for construction purposes.

- 7.4 I understand that the present site was identified as an area of extractive industry interest, reflecting both the quality of the sand deposit and its proximity to the metropolitan market. I am not in a position to judge whether a failure to provide a planning permit in the present case would constitute a breach of the intent or the application of the Extractive Industries Areas Plan, but am in a position to provide a rough estimate of the cost.
- 7.5 Given that the economic returns from the previous dry-pasture land use were low, the capital value of the loss to the residents of Bass Coast Shire from sequestering the deposit may be estimated by discounting the flow of benefits in Table 3 of the Economic and Social Impact Assessment (tab 26) at the Victorian Treasury recommended rate of 7 per cent a year. This produces a capital value of nearly \$50 million. Immediate conversion of the site to conservation purposes will forgo this capital value, which raises the question as to whether alternative conservation proposals may be available within Bass Coast at less cost.
- 7.6 The capital value of the loss to the Victorian economy may be roughly estimated by discounting the level of production (taken at 750,000 tonnes p a) by the quarry gate price (taken as \$22 per tonne, from the Access Economics 2006 *Economic Contribution of the Extractive Industries in Victoria*, report for Cement, Concrete and Aggregates Australia, p 19, updated for movements in producer cost indices). Discounted at 7 per cent a year the present value of production expected from the Quarry is \$221 million in 2020 prices.
- 7.7 The economic loss from failure to provide a permit is expected to express itself through a reduction in competition in the supply of sand to the potential supply area as defined in para 3.2 above. The primary effect will be the diversion of production to other quarries accessing the Heath Hill fault deposits. These quarries are limited in number and, thanks to reduced competition, will be in a position to raise their quarry-gate prices. In classic fashion, the construction industry will respond to the increased prices by seeking to substitute other materials for concrete, and, if this is not possible, will raise its own prices to cover the increase in costs, resulting in a reduction in construction activity in the supply area. The increased rate of exploitation of the remaining deposits will also hasten the day when the construction industry has to resort to more distant, and hence significantly more expensive, sources of supply. In principle the resulting loss of economic activity can be estimated by projecting construction activity in the supply zone with and without the Grantville Quarry, but in practice such projections are not easily specified since they require numerous assumptions particularly on how price-responses interact with the other factors influencing investment rates. However, the depressive effect is clear and the discounted economic loss could very easily be greater than the loss as estimated by the methodology in Paragraph 7.6 above.

8. Question 6. Any other economic and social context matters you consider relevant to the assessment of the Proposed Further Development

8.1 I consider that the economic and social context of the project is adequately covered in the Economic and Social Impact Assessment (tab 26) and the above replies to questions arising.

I have made the inquiries that I believe are desirable and appropriate and no matters of significance which I regard as relevant have to my knowledge been withheld from the Panel.



Ian Manning