

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of Proposed Private Plan Change 2 to
the Hamilton City Operative District
Plan: Te Awa Lakes Private Plan
Change

STATEMENT OF EVIDENCE OF ANDREW JULIAN MILLARD FOR THE APPLICANT

(QUANTITY SURVEYING)

29 OCTOBER 2019

1. EXECUTIVE SUMMARY

- 1.1 My statement of evidence summarises my technical report that was included in Appendix 2 of Essentia Consulting Group's industrial feasibility analysis report dated August 2019.
- 1.2 My technical report covers the estimated cost of:
 - a) developing the land in accordance with the advice from CMW and BBO for industrial development; and
 - b) in the alternative, remediating the Te Awa Lakes land to rural land in accordance with advice from CMW and BBO, and confirms that these costs have been deducted from the total civil construction costs included in the Essentia report for the hypothetical industrial development.
- 1.3 My evidence also identifies the information that I have relied on and the technical approach I have taken in preparation of the rough order of cost.
- 1.4 My evidence confirmed the outcomes of the expert caucusing, which is that based in part on the cost estimates I provided to Essentia, development of the subject site for industrial development will not be feasible within the next 10 – 15 years.
- 1.5 I stand by the estimates I produced for the Essentia report, and consider them to be an accurate and fair representation of the likely costs, based on the information provided to me.

2. QUALIFICATIONS AND EXPERIENCE

- 2.1 My full name is Andrew Julian Millard.
- 2.2 I am the sole director of Millard Construction Cost Consultants Limited (MCCCL), a professional quantity surveying firm.
- 2.3 I am a Registered Quantity Surveyor, registration number 281.
- 2.4 I hold an Associate Diploma in Building and Quantity Surveying from the Northern Territory University in 1986, and completed the Professional Exams of the Australian Institute of Quantity Surveyors in 1991. I have been an Associate member of the Australian Institute of Quantity Surveyors (AAIQS) for 31 years and an Associate member of the New Zealand Institute of Quantity Surveyors for the past 20 years (ANZIQS).
- 2.5 I have worked in New Zealand as a Director / Principal Quantity Surveyor since 1998. Prior to that, I worked as a Director / Senior Quantity Surveyor in Australia from 1986.
- 2.6 I formed MCCCL in 2014 having been an owner and director of Rawlinsons Quantity Surveyors in Australia and New Zealand since 1995.
- 2.7 I was also a Director of Rawlinsons Publications, a subsidiary of Rawlinsons Limited from 2008 to 2014. Rawlinsons Publications produced the Rawlinsons New Zealand Construction Handbook annually for 30 years and published a number of other industry publications including the Guide to the Construction Contracts Act and Managing Contractors' Cashflow.
- 2.8 In New Zealand, I have been commissioned as a consultant quantity surveyor on a significant number of projects covering all sectors of the construction industry over the past 20 years.
- 2.9 In addition, I have completed a number of relevant projects similar to the proposed Te Awa Lakes development, namely:
- a) Pacific Gardens Development Subdivision, Manukau (2014-2018) – land development and horizontal infrastructure for 1300 homes. My role included

providing professional quantity surveying advice from master planning the entire project through to completion of the infrastructure and civil construction works.

- b) Waingakau Village, Hastings (2018) – a community & residential subdivision to provide 80 co-housing dwellings and 44 conventional residential houses and associated community buildings. My role included provision of a detailed concept estimate and report.
- c) Hobson Quarter, Hobsonville (2017) – a medium density residential development providing 160 units in 7 apartment blocks. My role was to provide a detailed elemental estimate and report for the proposed development.
- d) Oakley Creek Rehabilitation Stage 1, Mount Albert (2016) – the rehabilitation of the Oakley Creek corridor between Richardson Road and Sandringham Road, including recontouring and bulk earthworks, extensive soft and hard landscaping including pedestrian bridges and tunnelling under existing public roads. My role was to provide a professional quantity surveyor's peer review of the detailed design estimate.

2.10 My specialist areas of expertise include early cost planning, contract procurement, financial control and dispute resolution.

2.11 I have been engaged by Perry Group Ltd (PGL) on the Te Awa Lakes project since August 2016, and have worked closely with PGL's inhouse staff and external consultants in providing detailed cost planning advice for the project.

2.12 During this time, I have prepared a significant number of cost estimates based on the various geotechnical & urban design options. The cost planning advice I have provided covers the land remediation and rehabilitation, civil subdivision and horizontal services including construction of the lakes, as well as the overall site masterplan including the proposed residential & commercial buildings based on the latest Land Use Plans.

2.13 I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014 and to the extent that I am giving expert evidence, have complied with it in preparing this evidence. I confirm that the issues addressed in this evidence are within my area of expertise and I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed in my evidence.

3. SCOPE OF EVIDENCE

3.1 I have been asked to provide evidence in relation to my cost estimates associated with the industrial development feasibility assessment undertaken by Martin Udale of Essentia Consulting Group Ltd dated August 2019.

3.2 My evidence will cover the following matters:

- a) Relevant facts and context;
- b) Summary of technical input;
- c) Expert caucusing – Joint Witness Statement; and
- d) Conclusions.

4. RELEVANT FACTS AND CONTEXT

4.1 In this statement of evidence I do not repeat the description of the plan change and refer to the summary of the application in the evidence of John Olliver for the Applicant.

5. SUMMARY OF TECHNICAL INPUT

5.1 I was instructed by PGL to prepare an estimate of the likely costs of converting the Te Awa Lakes land to a modern high quality industrial development, to form part of the industrial feasibility analysis being undertaken by Essentia Consulting Group (Essentia).

5.2 In preparing my estimate of costs for Essentia's industrial feasibility analysis, annexed as Rough Order of Cost Estimate in Appendix 2 to the Essentia report, I have applied standard cost planning principles generally in line with the New Zealand Institute of Quantity Surveyors (NZIQS) and the Australian Institute of Quantity Surveyors (AIQS) cost planning standards and utilised CostX measurement & estimating software developed by Exactal. These are standard industry tools. The output of that analysis is captured in the elemental estimates attached to my Rough Order of Cost Estimate at Section 4.0 of that document.

5.3 I have relied on information provided by Bloxam Burnett and Oliver Ltd (BBO), CMW Geosciences (CMW) and PGL.

5.4 I have also carried out a number of inspections of the site.

5.5 All costs I provided are excluding GST.

Preparation of Estimate

5.6 Generally, the bulk earthworks volumes (in cubic metres) have been provided by BBO and I have relied on these in preparing my estimate. I have measured all the other quantities (in m and sqm) using the 2D CostX software from relevant drawings provided by BBO and CMW.

5.7 The estimate reflects the earthworks methodology proposed by BBO & CMW in their reports and adopts the CMW Option 1 for ground improvement to prevent the risk of lateral spread for proposed swales in an ultimate limit state (ULS) earthquake event when liquefaction of uncontrolled fill materials occurs, as described at pg 7 of the memorandum provided by CMW and annexed to the Essentia report as Appendix 3.

5.8 The rates and allowances used in my estimate are based on my experience and have been benchmarked against previous projects and current market conditions.

5.9 These rates included an allowance for a subcontractor's profit margin of between 4-8% depending on the particular rate.

5.10 I have made a separate 16% allowance for Preliminaries, which includes the main contractors' preliminary (10%) and the main contractors' profit margin (6%). This is calculated as a percentage of the total construction value.

5.11 In addition, I have also included a 15% design and construction contingency as a percentage of the net total including the preliminaries and general costs.

5.12 I consider these allowances are inline with current industry norms.

5.13 I have also included an item to cover professional fees.

5.14 In summary, the likely costs are as set out in the Elemental Estimates annexed to the Essentia Report at Attachment 4 of Appendix 2, namely total construction costs of \$88,700,000. This is reproduced in Appendix 1 to the Essentia Report.

5.15 As part of that exercise, I estimated the costs of remediating the Te Awa Lakes land to rural land in accordance with the existing conditions of consent for the sand quarry. The information I relied upon is annexed as Appendix 4 to the Essentia report. The elemental estimate I provided for Rural Remediation Rough Order of Costs is annexed as Appendix 5 to the Essentia report. In summary, it concludes that work required to bring the land up to that standard would cost in the rough order of \$6,650,000.

5.16 I understand from a review of the Essentia report that those costs have been deducted from the total civil construction costs quoted in Mr Udale's static model to reflect the fact that under the status quo, those costs would have to have been incurred by PGL in any event.

6. EXPERT CAUCUSING

6.1 I was one of the experts who signed the joint witness statement ("**JWS**") for development feasibility, which was agreed and signed without the need for expert caucusing. The following agreed statement is reproduced from paragraph 5 of the JWS:

As a consequence of the adverse existing site ground conditions, development of the Te Awa Lakes site as a modern high quality industrial development is not commercially viable in the current market. Applying substantially more aggressive cost and revenue sensitivities to the development feasibility does not change that conclusion. It is also reasonable to assume that based on construction technology available today, development of the Te Awa Lakes site on a commercial basis as a modern, high quality industrial development is likely not commercially viable in the next 10-15 years.

6.2 I also understand that following the JWS, Michael Martin of Babbage Consultants for Fonterra requested a meeting with PGL's expert witnesses in relation to the inputs into the feasibility analysis from a geotechnical and civil engineering perspective. I did not take part in that meeting, but have discussed the matter with Kori Lentfer and Bernie Milne and have reviewed Mr Martin's queries. To the extent that any of them relate to matters within my area of expertise, I comment below:

- a) In relation to the 2m undercut to roads, I confirm that they were included in the construction costs in my Rough Order of Costs Estimate. Questions on the geotechnical and civil engineering rationale for this have been addressed by Messrs Lentfer and Milne.

- b) I also note that a separate query was made in relation to the proposed use of box culverts instead of bridges. While (at a conceptual level) box culverts may be a more cost-effective approach than bridges, whether or not they are appropriate and cost-effective as a matter of fact really depends on the clearspan required and the depth of any area beneath them. In any event, as the quoted cost for bridges was only \$2.5m out of a total construction cost of over \$88m, any reduction in cost that could have been achieved (if it was in fact achievable) would not have materially altered my total estimate of costs and I stand by that assessment.
- c) Finally, in relation to a comment by Mr Martin that the estimate for Preliminaries may be too high, I have clarified in 5.10 above that the allowance for Preliminaries also includes 6% for the main contractors' profit margin and therefore the 10% allowance for the main contractors' preliminaries and general (P&G) items is in line with Mr Martin's expectations.

6.3 Nothing in the queries raised by Mr Martin causes me to alter my opinion to any material extent.

7. CONCLUSION

7.1 I continue to support the rough order of costs estimates for the industrial and rural remediation developments that have been relied upon in the Essentia report.

Andrew Julian Millard

28 October 2019