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Memo

То:	Warwick and Marion Steffert
Date:	2 February 2024
From:	Kevin Counsell, Director, NERA

Subject: Addendum to economic analysis of Plan Change 58

Introduction

- In respect of Plan Change 58 (PC58), I have previously prepared two economic reports (dated 6 October 2022 and 23 November 2023) filed with the Matamata-Piako District Council (MPDC). My 23 November 2023 report analysed industrial land supply and demand in Morrinsville in light of a Business Demand and Capacity Assessment (BDCA) prepared for MPDC by Market Economics in 2023.¹ In my 23 November 2023 report, I undertook my own analysis of supply and demand to:
 - a. Utilise more recent population projections than those in the BDCA, as an input to my demand-side estimates; and
 - b. Utilise more recent analysis by Monocle of the extent of vacant industrial land in Morrinsville,² as an input to my supply-side estimates.
- 2. Following discussions with Mr Fraser Colegrave, the economist for MPDC and peer reviewer of my 23 November 2023 report, I have been asked to set out my calculations of demand and supply with only the second adjustment referred to above. That is, I have used the Monocle analysis for the supply-side of the analysis, while using the projections contained in the BDCA for the demand-side. The results of this analysis are set out in the next section of this memo.

Results for Morrinsville using BDCA demand estimates

3. In Table 1 below I have set out the demand estimates from the BDCA. These estimates are calculated for three different conversion ratios of employee density, of 500m², 700m², and 800m² per employee. The 500m² and 800m² scenarios are those presented in the BDCA, while the 700m² scenario is included in light of Mr Colegrave's peer review of the BDCA.³ I have derived the 700m² calculations using the data from the BDCA. The use of different employee ratios arises because different industrial land uses have different employee densities. For

¹ Market Economics (2023), "Business Development Capacity and Demand Assessment 2023: Update – Matamata-Piako District", Final report, prepared for MPDC, 16 October.

² Monocle memo to MPDC, 23 November 2023.

³ Fraser Colegrave (2023), "Preliminary Draft Findings of 2023 BCA Review", Technical Memo to MPDC via Todd Whittaker, 30 August.

example, in the BDCA, Market Economics notes that yard-based activities across New Zealand range from 350-1,000m² per employee, and warehouses and factories range from 500-600m² per employee.⁴

4. The demand estimates in Table 1 are also shown with and without the competitiveness margins set out in the National Policy Statement on Urban Development (NPS-UD).⁵ While the NPS-UD does not require these margins to be applied for a Tier 3 authority such as MPDC, Market Economics was requested by MPDC to apply these as a sensitivity test "to reflect a range of potential future outcomes".⁶

	500m ² per employee			700m ² per employee			800m ² per employee		
Metric	Short- term: 2023- 2026	Medium- term: 2023- 2033	Long- term: 2023- 2054	Short- term: 2023- 2026	Medium- term: 2023- 2033	Long- term: 2023- 2054	Short- term: 2023- 2026	Medium- term: 2023- 2033	Long- term: 2023- 2054
Industrial land demand (without NPS-UD margins)	4.0ha	11.8ha	27.2ha	5.7ha	16.7ha	38.2ha	6.4ha	19.0ha	43.6ha
Industrial land demand (with NPS-UD margins)	4.8ha	14.2ha	31.9ha	6.9ha	20.0ha	44.0ha	7.7ha	22.7ha	51.0ha

Table 1: BDCA results for Morrinsville Industrial-Zoned Land Demand

Source: Market Economics BDCA 2023, Tables 4-4 for the $500m^2$ and $800m^2$ scenarios. The $700m^2$ scenario is calculated by backing-out employee numbers from the industrial land data in Table 4-3 of the BDCA, and then re-converting this to industrial land data using the $700m^2$ ratio.

- 5. On the supply-side, I set out in my 23 November 2023 report (at [36]-[40]) the results of Monocle's analysis of vacant Industrial-zoned land, which sought to rigorously verify vacant supply based on, for example, recent aerial photography and other analysis. This analysis identified 11.9ha of vacant Industrial-zoned land supply in Morrinsville.
- 6. The Industrial-zoned land demand figures referred to in Table 1 cover both the Morrinsville township and the Morrinsville-Walton Rd Industrial Area (referred to as "Morrinsville South" in the BDCA). I refer to these areas collectively as "Morrinsville" in this memo. The supply figures referred to in the previous paragraph also cover both of these areas, albeit that they show no

⁴ Market Economics (2023), "Business Development Capacity and Demand Assessment 2023: Update – Matamata-Piako District", Final report, prepared for MPDC, at p.33.

⁵ Clause 3.22 of the NPS-UD.

⁶ Market Economics (2023), "Business Development Capacity and Demand Assessment 2023: Update – Matamata-Piako District", Final report, prepared for MPDC, at p.70.

remaining undeveloped Industrial-zoned land in the Morrinsville-Walton Rd Industrial Area. However, the BDCA does allow for some demand in this area to be captured by growth in existing industrial businesses.⁷

- 7. The BDCA also assesses supply and demand in aggregate for the "Northern townships" of the Matamata-Piako District, which covers the Morrinsville and Te Aroha together. I return to this assessment in the next section of this memo.
- 8. In Table 2 below I have calculated the overall sufficiency (supply minus demand) of Industrialzoned land in Morrinsville.⁸ That is, I take the 11.9ha of supply and subtract the demand figures for each of the scenarios shown in Table 1. I highlight in particular the results in Table 2 for the medium-term (the next ten years), on the basis that this is the period of focus referenced in the National Policy Statement for Highly Productive Land (**NPS-HPL**) for whether there is "sufficient development capacity".⁹
- 9. Excluding the competitiveness margins, Table 2 shows that there will be sufficient Industrialzoned land supply in Morrinsville to meet demand if the 500m² per employee ratio is used (a small surplus of 0.1ha). However, if the 800m² per employee ratio is used, there will be a shortfall of Industrial-zoned land in Morrinsville in the next ten years of -7.1ha. The 700m² per employee ratio also gives a shortfall, of -4.8ha. I discuss later in this memo the reasons why I consider the 800m² per employee ratio result to be a more appropriate ratio to use for determining sufficiency.

	500m ² per employee			700m ² per employee			800m ² per employee		
Metric	Short- term: 2023- 2026	Medium -term: 2023- 2033	Long- term: 2023- 2054	Short- term: 2023- 2026	Medium- term: 2023- 2033	Long- term: 2023- 2054	Short- term: 2023- 2026	Medium- term: 2023- 2033	Long- term: 2023- 2054
Sufficiency (supply minus demand) without NPS-UD margins	7.9ha	0.1ha	-15.3ha	6.2ha	-4.8ha	-26.3ha	5.5ha	-7.1ha	-31.7ha
Sufficiency (supply minus demand) with NPS- UD margins	7.1ha	-2.3ha	-20.0ha	5.0ha	-8.1ha	-32.1ha	4.2ha	-10.8ha	-39.1ha

Table 2: Sufficiency of Industrial-zoned land in Morrinsville

⁷ See footnote 11 of the BDCA.

⁸ I have presented these results only for the base case scenario set out in my 23 November 2023 report.

⁹ See paragraph [3] of my 23 November 2023 report.

Results for Morrinsville and Te Aroha

- 10. As noted earlier, the BDCA also assesses supply and demand in aggregate for the Northern townships of Morrinsville and Te Aroha together. In my 23 November 2023 report I noted (at paragraph [10]) that I did not undertake this calculation, because there was no vacant Industrial-zoned land supply in Te Aroha (but there would be demand), so it was conservative to just focus on Morrinsville.
- 11. However, for completeness, I also present sufficiency results with Morrinsville and Te Aroha combined. These results, shown in Table 3, use the BDCA figures for the demand-side, and the aforementioned supply figures for Morrinsville drawn from Monocle's analysis (with no vacant supply in Te Aroha¹⁰). As expected, if Te Aroha is included the supply shortfall is even greater than for Morrinsville only. In the medium-term, even under the 500m² employee ratio scenario there is a supply shortfall (of -1.7ha), while the shortfall is greater at -7.3ha and -10.0ha in the 700m² and 800m² employee ratio scenarios respectively.

	500m ² per employee			700m ² per employee			800m ² per employee		
Metric	Short- term: 2023- 2026	Medium -term: 2023- 2033	Long- term: 2023- 2054	Short- term: 2023- 2026	Medium- term: 2023- 2033	Long- term: 2023- 2054	Short- term: 2023- 2026	Medium- term: 2023- 2033	Long- term: 2023- 2054
Sufficiency (supply minus demand) without NPS-UD margins	7.3ha	-1.7ha	-23.5ha	5.3ha	-7.3ha	-37.8ha	4.5ha	-10.0ha	-44.8ha
Sufficiency (supply minus demand) with NPS- UD margins	6.4ha	-4.5ha	-29.5ha	4.0ha	-11.1ha	-45.3ha	3.0ha	-14.2ha	-54.3ha

Table 3: Sufficiency of Industrial-zoned land in Morrinsville and Te Aroha

Relevant context in considering the sufficiency assessment

- 12. In considering the sufficiency assessment set out above, it is helpful to note the following context:
 - a. First, as set out in my 23 November 2023 report, the projections underlying the demand analysis in the BDCA (based on data from the Waikato Integrated Scenario Explorer, **WISE**, released in March 2021) are low relative to more recent projections undertaken by Statistics

¹⁰ See Table 5-1 of the BDCA.

New Zealand (**Stats NZ**, released in December 2022). For example, the WISE data projects the Morrinsville population (under the high scenario) to be 9,403 by 2035, compared to a slightly earlier but higher (high scenario) projection from Stats NZ in 2033 of 9,730;¹¹

- b. Second, even the high scenario, Stats NZ projections are tracking below the actual population in Morrinsville. For example, the population in Morrinsville as at June 2023 is 8,960, compared to the projected population for 2023 in the Stats NZ high scenario of 8,840;¹²
- c. Third, the projected population growth rate in all of the Stats NZ and WISE scenarios is low relative to the recent historical growth in population in Morrinsville. For example, the Morrinsville population grew at a rate of 2.0% per annum in the previous ten years, compared to forecast growth rates over the next ten years of 1.0% per annum and 0.8% per annum in the Stats NZ and WISE high scenarios respectively;¹³ and
- d. Fourth, there is also some relevant 'on-the-ground' information that provides context for the sufficiency assessment. Mr Colegrave has indicated to me that it would be useful to provide some more of this on-the-ground information as context. Specifically:
 - There is strong demand for Industrial-zoned land in Morrinsville, as indicated by all 11 lots in the Avenue Business Park (Stage 1) development being pre-sold off the plans by word-of-mouth, without any external marketing or engagement of real estate agents.¹⁴ I understand also that three of eight lots in Stage 2 have been made available for sale and have also already been sold off the plans;
 - ii. There is an identified need from an existing industrial operation to expand its site if PC58 is approved. Bowers Brothers Concrete Limited's submission on PC58 states that it could expand its operations if PC58 is approved, but such an expansion would not be possible without PC58 or if new Industrial-zoned land were located elsewhere in Morrinsville.¹⁵ Mr Chris Steffert has advised me that Bowers Brothers Concrete has expressed interest in purchasing 2.3ha, which is approximately 23% of the 10.1ha of developable land that would be made available by PC58; and
 - iii. Demand for Industrial-zoned land can be to some extent 'lumpy', in that there is the potential for a single buyer to purchase a large land holding. Where this occurs, a large portion of vacant supply can quickly become unavailable to meet future demand (in contrast to more incremental demand take-up of smaller land holdings). Bowers Brothers Concrete is a good example of an industrial activity that requires a large land holding. With the additional 2.3ha that they have expressed an interest in purchasing, their total site would be 9.9ha.¹⁶ With existing supply, a new industrial activity of a similar scale to this would not be capable of being accommodated on Industrial-zoned

¹¹ See Figure 4 of my 23 November 2023 report.

¹² See Figure 5 of my 23 November 2023 report.

¹³ See Table 2 of my 23 November 2023 report.

¹⁴ See paragraph [45] of my 23 November 2023 report.

¹⁵ See paragraph [69] of my 23 November 2023 report and Bowers Brothers Concrete Limited (2023), "Submission on Private Plan Change 58", July.

¹⁶ The submission of Bowers Brothers Concrete states that their current site covers 7.6ha: Bowers Brothers Concrete Limited (2023), "Submission on Private Plan Change 58", July.

land in Morrinsville. Mr Steffert has advised me that he has received enquiries from potential purchasers for up to 6ha sites which he is currently unable to accommodate.

- 13. When all the factors identified in this section are taken into account, there is a strong case that the results of the BDCA are an underestimate of the demand for Industrial-zoned land in Morrinsville.¹⁷ For this reason, it is my opinion that it is preferable to focus on the sufficiency results in Table 2 using the 800m² per employee ratio.
- 14. I note also Market Economics' assessment of employee ratios described in the BDCA. Market Economics' analysis of the Matamata-Piako district found that a high share of industrial land use in the district occurred in yard-based activities, with such activities requiring a higher ratio of land use per employee. Market Economics notes that if there was a continued demand for yard-based activities, this would be better reflected in the higher ratio of 800m² per employee.¹⁸
- 15. There are inherent uncertainties in any sort of analysis of supply and demand that attempts to forecast the future, and a risk of a false sense of precision being applied to the supply-demand estimates. Thus, it can be appropriate to err on the side of caution in drawing conclusions from the sufficiency assessment. Taking a cautious approach would be consistent with MPDC's request of Market Economics in the BDCA to use the high scenario in the WISE data, to reflect a prudent approach to addressing issues such as the high price of industrial land.¹⁹
- 16. I note also that the -7.1ha shortfall in the 800m² per employee ratio scenario in Table 2 excludes the NPS-UD competitiveness margins, and thus there is not already these in-built margins to reflect a cautious approach. The competitiveness margins are "required in order to support choice and competitiveness in housing and business land markets".²⁰ Therefore, even if these margins are not required to be applied by MPDC, it is still appropriate to consider other ways in which "choice and competitiveness" can be provided for. The aforementioned approach of erring on the side of caution does this.
- 17. Furthermore, Market Economics notes in the BDCA that it can still be important to include the competitiveness margins. It states that the competitiveness margins are arguably important for Tier 3 local authorities like MPDC for "a conservative sufficiency assessment".²¹ Market Economics also points out that smaller economies like Matamata-Piako can be more sensitive to a large business consuming a significant portion of the zoned land consistent with the point I noted above. When competitiveness margins are included, Table 1 shows shortfalls in Industrial-zoned land in Morrinsville across all the employee ratio scenarios. I agree with

¹⁷ As are the results set out in my 23 November 2023 report, to which the majority of the points identified above also apply.

¹⁸ Market Economics (2023), "Business Development Capacity and Demand Assessment 2023: Update – Matamata-Piako District", Final report, prepared for MPDC, at p.33.

¹⁹ Market Economics (2023), "Business Development Capacity and Demand Assessment 2023: Update – Matamata-Piako District", Final report, prepared for MPDC, at p.27.

²⁰ Clause 3.22 of the NPS-UD.

²¹ Market Economics (2023), "Business Development Capacity and Demand Assessment 2023: Update – Matamata-Piako District", Final report, prepared for MPDC, at p.79.

Market Economics' concluding comment in respect of the competitiveness margins, where it states:²²

It is important that Matamata Piako treat the requirements in the NPS-UD as minimums – not targets and potentially provide for <u>at least</u> these amounts, if not more in order to accommodate a reasonably foreseeable future.

Conclusion

18. In my 23 November 2023 report on PC58, I set out the results of my supply-demand analysis showing there was a strong economic case for PC58 to meet a shortfall in Industrial-zoned land in the medium-term (the next ten years). In the alternative, if the demand-side analysis of the BDCA was used (while retaining the supply-side analysis set out in my 23 November 2023 report), I have shown in this memo that there will be a -7.1ha shortfall in Industrial-zoned land within Morrinsville in the next ten years and a -10.0ha shortfall within Morrinsville and Te Aroha combined, under a 800m² employee ratio scenario (excluding competitiveness margins from the NPS-UD). I consider it is appropriate to use the 800m² employee ratio scenario to err on the side of caution, in light of the evidence that demand in the BDCA is underestimated and other on-the-ground information suggests strong demand for Industrial-zoned land in Morrinsville. Even if the 700m² employee ratio scenario was used, the shortfall of -4.8ha would still be a material shortfall, including in light of the potential for a single buyer to purchase a large land holding or even if a modest number of smaller operations wanted to establish in Morrinsville within the 10-year medium-term period.

In Could

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²² Market Economics (2023), "Business Development Capacity and Demand Assessment 2023: Update – Matamata-Piako District", Final report, prepared for MPDC, at p.79, emphasis in original.