Before the Hearings Panel At Wellington City Council

Under Schedule 1 of the Resource Management Act 1991

In the matter of Hearing submissions and further submissions on the

Proposed Wellington City District Plan

Stream 2 Reporting Officer Right of Reply of Josh Patterson on behalf of Wellington City Council

Date: 29 May 2023

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RIGHT O	F REPLY AUTHORS
Josh Patt	terson
1	My name is Josh Patterson. I am employed as Principal Advisor in the
	District Planning Team at Wellington City Council (the Council).
2	I have prepared this Reply in respect of the matters in Hearing Stream 2
	raised during the hearing.
3	I have listened to submitters in Hearing Stream 2, read their evidence
	and tabled statements, and referenced the written submissions and
	further submissions relevant to the Hearing Stream 2 topics.
4	Part 1 of my Stream 2 Section 42A Report, section 1.2, sets out my

qualifications and experience as an expert in planning.

I confirm that I am continuing to abide by the Code of Conduct for Expert Witnesses set out in the Environment Court's Practice Note 2023, as applicable to this Independent Panel hearing.

INTRODUCTION

This Reply follows Hearing Stream 2 held from 28 March 2023 to 11 April 2023. Minute 17: Stream 2 Follow Up requested that the Section 42A report authors submit a written Right of Reply as a formal response to matters raised during the hearing. The Minute requires this response by 26 May 2023.

RESPONSE TO KĀINGA ORA PROPOSED HEIGHT INCREASES

- Kāinga Ora Homes and Communities have submitted revised height maps across the entire Wellington City. These maps propose significant height increases and zone expansions beyond the notified PDP. I have reviewed these height increases, and I do not agree with the proposals. I do agree to a limited extent with the proposed HRZ expansion in Kilbirnie. I will first address the proposed increases in general terms and then consider the specific maps below.
- In recommending their proposed height increases, Kāinga Ora have relied heavily on Policy 3 of the NPS-UD which, among other matters, states that at least six storeys should be enabled within at least a walkable catchment of rapid transit stops, the edge of city centre zones, and the edge of the metropolitan centre zones. I consider that Kāinga Ora Homes and Communities have not given enough consideration to other parts of the NPS-UD and the purpose of the RMA. In addition, I cannot see any evidence that Kāinga Ora have considered Policy 3(d) of the NPS-UD. This states that within neighbourhood centre zones, local centre zones, and town centre zones (or equivalent), building heights and densities should be commensurate with the level of commercial activity and community services that are offered. In many cases, as

described in what follows, Kāinga Ora have proposed large height increases and expansions to the high-density zones in and around centres which cannot accommodate the level of intensification proposed. An example of this is height increases around Khandallah and Ngaio where the centres are limited in scale. As a result, I do not consider that Kāinga Ora have proposed heights and densities well in excess of what policy 3(d) suggests is appropriate for these centres.

Policy 3 of the NPS-UD does not sit in isolation and does not elevate recognising the national significance of urban development above broader RMA outcomes. In other words, giving effect to the NPS-UD does not mean that other resource management matters should be ignored. To achieve the purpose of the RMA, the Plan must recognise the national significance of urban development in a way that assists in achieving the overall purpose of the Act. Objective 1 to the NPS-UD reflects this wider scope by requiring well-functioning urban environments, with Policy 1 listing a broad range of matters that make up a well-functioning urban environment. These matters are:

- (a) have or enable a **variety of homes** that: (i) meet the needs, in terms of type, price, and location, of different households; and
- (c) have **good accessibility** for all people **between housing, jobs, community services**, natural spaces, and **open spaces**, including by way of public or active transport; and
- (e) support reductions in greenhouse gas emissions; and
- (f) **are resilient** to the likely current and future effects of climate change

For this reason, in considering Kāinga Ora's height and density recommendations I have measured the proposed outcomes based on Policy 3 against Objective 1 of the NPS-UD and Part 2 of the RMA, in particular section 5. Section 5 of the RMA outlines the purpose of the Act which is to 'promote the sustainable management of natural and physical resources'. In this context, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities

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to provide for their social, economic, and cultural well-being and for their health and safety.

- In my view, the proposed height increases by Kāinga Ora do not achieve either a well-functioning urban environment or sustainably manage the urban environment because:
 - 11.1 The notified PDP takes a stepped approach to urban development, whereby the centres provide for greater heights. These heights step down to the HRZ and then to MRZ. I have aligned my recommendations for the residential zone with those recommendations from the authors of the centres Section 42A Reports. In general, the centres Section 42A Report Authors are not proposing to increase heights in the centres, except for in the CCZ where height limits are proposed to be removed. Therefore, it is important that the HRZ and MRZ height limits are relative to those in the Centres to continue the stepped approach. Should height limits be increased in the residential zones to the levels proposed by Kāinga Ora, well beyond those in the centres zones, this would not be creating a well-functioning urban environment. It would particularly discourage further growth of centres because land away from the centres will be cheaper, and this undermines policies 3(a) and (b). It will therefore limit the services and amenities that the centres provide. The result will not, in my view, be consistent with sustainable management of the urban environment.
 - 11.2 Kāinga Ora have not provided adequate analysis detailing how the proposed heights and supporting controls achieve a sustainable balance of growth and amenity. Conversely, the notified proposals are informed by a vast array of work including an analysis of the effect of the notified standards

on residential amenity in the 'Planning for Residential Amenity' Report and the impact of these standards on development capacity, factoring in all of the qualifying matters.

- In my view, the proposed heights are not grounded in good planning principles and have not factored in other resource management matters or integrated with other parts of the plan. For example, Kāinga Ora are proposing a 43m height limit along Tinakori Road. The area that has been identified for height increases by Kāinga Ora is almost completely covered by the Wellington Fault Overlay. Kāinga Ora appear to have not considered the appropriateness of intensifying development on a significant fault (assessed as a high hazard) or the impacts that a large earthquake could have on 43m buildings within this overlay.
- In addition, Kāinga Ora have proposed increasing height limits in large parts of Karori to 18m. The Council has incorporated the MDRS in Karori as well as a 14m height limit around the centre. That is the maximum considered justifiable given the significant infrastructure constraints in Karori posed by a three waters network which is already at capacity and regularly overflows. Kāinga Ora has not sought to explain how this issue can be managed. Inevitably in my view, a rule framework would have to be introduced to manage this issue which would mean the MDRS could no longer be permitted. That would require justification as a qualifying matter.
- These examples speak to the exercise undertaken by Kāinga Ora being a top-down urban design led approach and failing to incorporate broader planning considerations and constraints that exist within the

Wellington City context. Accordingly, it cannot be considered to fully address the many responsibilities of plan makers under the RMA.

- The notified PDP has been developed to be consistent with the Wellington City Spatial Plan, which is well understood by the community. The Spatial Plan is the 'blueprint' for the city that sets out a plan for how and where the city should develop over the next 30 years. The Spatial Plan identified areas where low, medium and high growth should occur. In summary, high growth is proposed in and around the central area, medium growth is proposed around most centres and low growth is proposed within existing residential areas around the city. Under Kāinga Ora's scenario I consider that they have proposed high growth in and around all centres across the City, which also expand significantly into the areas identified in the spatial plan for low growth. This is inconsistent with the Spatial Plan and therefore the 30-year vision for the city that was approved by Councillors and is well-known by the community.
- 14 The PDP provides for more than sufficient development capacity to meet bottom lines, even considering all qualifying matters, including the proposed character precincts. As covered in Stream 1 these numbers show that Wellington City has a demand of 35,928 dwellings to 2051 and the PDP provides for a realisable capacity of 62,979 dwellings, meaning an excess of 27,051 dwellings are provided for within the PDP. Therefore, in my view there is no reason or need to increase heights beyond those proposed in the PDP. I also note that section 31(1)(aa) of the RMA requires that objectives, policies, and methods are established, implemented and reviewed to ensure that there is sufficient development capacity in respect of both housing and business land to meet the expected demands of the district. Therefore, should a situation arise in the future where it is determined that the Plan does not provide sufficient development capacity, the plan will need to be reviewed, and this is anticipated under the RMA. I argue

that there is no need to pre-empt this, particularly as the PDP provides for greater capacity than is currently required.

In addition to the above, I also note that in her City Centre Zone Section 42A Report, Ms Stevens, has recommended that height limits in the CCZ are removed, allowing for greater heights within the central business district. If adopted, the effect of this will be to increase both residential and business development capacity and encourage both residential and business growth in the area where it is most suitable due to access to jobs, services, and facilities. This further removes the need to increase height limits in the residential zones beyond those proposed in the PDP.

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It is also important to note that to the extent that Mr Rae's updated maps propose increased heights and densities beyond those in the Kāinga Ora submission (and over a wider land area), there may be natural justice issues. I understand that there is power for the commissioners to make out of scope recommendations, but in considering this issue, I think it important to weigh those proposals against the substantial amount of public consultation that the Council undertook through the Spatial Plan and draft PDP processes before notifying the PDP. Public involvement in the development of the PDP can be traced back to 2017, a process which has been described in detail in Paragraphs 15 to 49 of the Section 42A Overview Report, presented in Stream 1.

Throughout the process described, the Council has not proposed heights in excess of 22m within the residential zones. There will be large parts of the community who have not engaged in this hearings process who will have no knowledge of the increased height limits that Kāinga Ora are proposing based on Mr Rae's updated position.

RESPONSE TO KĀINGA ORA PROPOSED MAPPING CHANGES – HEIGHTS AND REZONING

- The notified PDP zones and height limits relied on the analysis of walking catchments and the extent of the notified zoning and heights fully complies with the requirements of Policy 3 of the NPS-UD. While Mr Rae's updated maps depict the outcomes he considers appropriate, it is hard to understand his reasoning for specific sites because nowhere is there a narrative explanation as to why he considers a specific height limit on a specific site appropriate.
- To the extent that Dr Zamani agrees with Mr Rae's mapped heights and densities, I note that neither urban designer was addressing the general planning approach, focused on sustainable management, that I have discussed above. However, where Dr Zamani disagreed with Mr Rae's position, that provides another basis for my view that Mr Rae's position should not be adopted.
- In addition to my general response, I have detailed my specific responses to each of the maps, showing Kāinga Ora's proposed rezonings and height changes, below.
- 21 Map 1 (Linden) I disagree with the proposed re-zonings. The notified HRZ reflects the access to the Kenepuru Train Station and the Linden Train Station. The HRZ does not extend further within the notified PDP due to the location of Linden in relation to the centra area. This area is located the greatest distance away from the central area and I consider it inappropriate to encourage any greater density than is proposed under the PDP.
- 22 Map 2 & 3 (Tawa North and South) I disagree with the proposed rezonings. I consider that the PDP provided for sufficient height within the walking catchment of the Tawa centre and that any further additional height is not required. I consider that the areas currently zoned MRZ in

the PDP, proposed to be re-zoned HRZ in Kāinga Ora's scenario, are most appropriate as MRZ, given their location within existing residential areas and the varied topography around the centre.

- Map 4 (Churton Park) I disagree with the proposed height changes within Churton Park. I concur with Dr Zamani that this area does not contain adequate amenities and is separated from other centres and the central area to the point that it will be necessary for people to leave Churton Park to access services. Given the location of Churton Park and the reduced public transport options, this is likely to predominantly occur in the form of private vehicle use. Therefore, I consider that the 11m height limit proposed under the MRZ is appropriate.
- Map 5 (Newlands) I do not agree to the proposed height increases in Newlands. I do not consider that the centre provides an adequate level of service to accommodate the increase in height. Given its location, people will likely drive to Johnsonville or the central area to access services. I am comfortable with the 14m height limit which surrounds the centre and I believe this is commensurate with the level of service that Newlands centre offers.
- 25 Map 6 & 7 (Johnsonville) I disagree with both the height increases and the proposed re-zonings in Johnsonville.
 - 25.1 In my view, the proposed re-zonings extend too far beyond the centre, into residential areas which are disconnected from the Johnsonville centre by topography and State Highway 1. I consider that the notified PDP already reflects the MCZ status of the Johnsonville Centre and provides enough capacity for residential development such that any increases to the HRZ are not necessary.
 - 25.2 I do not consider that a 36m height limit in the residential areas surrounding the Johnsonville centre is either required,

for all the reasons as stated in Paragraphs 7-17, or appropriate. That is because the Johnsonville Centre height, as a metropolitan centre, should be differentiated from the City Centre height. In turn, the surrounding residential area should step down further from the 36m height in the Johnsonville centre. I consider that the proposed 22m height limit within the notified HRZ in this area is sufficient to achieve the level of development anticipated under Policy 3 of the NPS-UD and that no further height increases are necessary or warranted.

- Map 8 (Khandallah) & Map 9 (Ngaio) I disagree with rezoning any areas in Khandallah and Ngaio as HRZ. I do not believe that the areas have enough services or planned investment to warrant the HRZ. In addition, I do not consider that a height of 22m is appropriate in these areas given the size of both centres is limited to a few shops, with one small supermarket. I note that the PDP proposes a height limit of 14m directly around the Khandallah centre and I consider that this is commensurate with the level of services that this centre offers. Any additional height increase would be inappropriate in this area.
- 27 Map 10 (Crofton Downs) I concur with Dr Zamani that any re-zoning to HRZ is not necessary in this area, particularly as the centre is very limited in scale and size. I also concur that the likely outcome in this area is 'pepper potted'; apartments in amongst existing single level dwellings which I do not consider to be a desirable outcome.
- 28 Map 11 (Karori) I disagree with any increases in height in Karori. I concur with Dr Zamani that the suburb is located a great distance from the central area and note that access to Karori is very limited given there is only one viable way in and out of the suburb. In addition, the three waters infrastructure in Karori is very limited and is currently at capacity, meaning there is no capacity in the network for further

development. Given this situation it would be inappropriate to encourage any greater levels of development than what is proposed under the PDP.

- Map 12 (Kelburn) I disagree with the proposed zone changes in Kelburn. The Kelburn Centre is limited in terms of services, and I do not consider that it can accommodate the increase in height that the HRZ would introduce. In addition, given the notified PDP provides for more than sufficient development capacity I do not consider that it is necessary to re-zone to HRZ in this area, which is primarily a low-density residential area. I note that a 14m height limit is proposed in areas which are located closer to the central area.
- Map 13 (City Centre North) I disagree with both the proposed HRZ zoning and the height increases. This area has been zoned MRZ with an 11m height limit in the PDP due to the multiple hazards which overlay the area. The Wellington Fault Hazard Overlay runs through the entire area proposed to be re-zoned and increased in height. Within the Natural Hazards Chapter, the Wellington Fault Hazard Overlay has a high respective hazard ranking. In addition, there are large parts of this area which are subject to the flood inundation area. For these reasons I do not recommend that the height changes or zone changes are approved in this area, and I recommend that the PDP is retained as notified.
- 31 Map 14 (City Centre Central), Map 15 (City Centre South) & Map 16 (Aro Valley) I do not support the proposed height increases or rezonings in these areas for the following reasons:
 - 31.1 I do not consider that the proposed height increases are necessary within these areas. In her Section 42A, Ms Stevens proposes that the height limits in the CCZ are removed. This will assist in encouraging further growth within the CCZ and

removes the need for further height increases outside of the CCZ. I consider that the proposed 22m height limit within the areas zoned HRZ in the notified PDP, in this area, are sufficient for achieving the increased density expected in this location, directly adjoining the central area. I also concur with Dr Zamani that there are additional issues which need to be considered as a result of increasing heights to the extent proposed (36-43m), not least wind effects.

- The proposed re-zonings are over the areas that are proposed to be Character Precincts. On that basis I disagree with the proposed re-zonings. The MRZ has been used to reduce the density in these areas to ensure the character values are protected. The validity of character precincts has been addressed within Mr Lewandowski's Right of Reply.
- 31.3 In addition, I consider that the proposed re-zonings are not necessary given the extent of land that is proposed to be rezoned HRZ around the CCZ. I again come back to this not being needed from a development capacity perspective given the PDP provides for more than sufficient capacity.
- Map 17 (Brooklyn) I disagree with the height increases proposed. I note that the area around the Brooklyn Centre is proposed to be 14m in the notified PDP. I believe this reflects the scale of the centre and that the centre does not contain sufficient services and amenities to justify an increase to 18m in height. In addition, the public transport to the city is limited in this area and walking/cycling is challenging due to the topography. It is likely that many people will utilise private vehicles to access the central area from this location given the constraints. I also concur with Dr Zamani that Brooklyn is within a high wind zone and any additional height increases would increase the effects of this.

Map 18 & 19 (Newtown) – I disagree with the proposed height increases ranging from 36m – 43m in Newtown. I consider that the 22m height limit proposed within the HRZ in this area is sufficient to enable high density housing of at least six storeys, as required under the NPS-UD. I do not consider that it is necessary to increase heights in this area given the PDP provides more than sufficient capacity. I also note that in my view the proposed height limits appear like an extension to the CCZ, which is not the intended outcome in this area. The notified HRZ reflects the location of Newtown to the CCZ but provides a clear distinction between the two areas. I also note that in her Section 42A Report for Centres, Ms Hayes has recommended to provide for 27m within the Newtown Centre. This is further reason that additional height within the residential areas of Newtown is not required.

Particularly as this recommendation will increase the PDP's capacity.

Map 20 (Island Bay) — I disagree with the proposed increased height limits. I acknowledge that Island Bay is one of the most connected suburbs in Wellington from a public transport perspective. However, I do not consider that the proposed 18m height increase is justifiable. I consider that the proposed 14m and 11m height limit are more appropriate in this area given there is no need to increase height limits beyond those proposed as additional capacity in this area is not required. In addition, it is noted that there are flood constraints, in the form of the inundation area, right through the area proposed to increase to 18m. Given this constraint I do not believe 18m is appropriate.

Map 21 (Hataitai) – I concur with Dr Zamani that this area is inappropriate for the increased height limits. The area is separated from the central area by the geographical barrier of Mt Victoria and the town belt and public transport through the suburb is limited. The most accessible public transport routes are located along main roads which you need to walk to. Given the topography of the area, this becomes

difficult. I also concur with Dr Zamani that the suburb receives very little sunlight and agree this makes it less suitable for intensification. In addition, I do not consider the centre provides sufficient services and amenities to support this height increase.

Map 22 (Kilbirnie) – I note that Mr Wharton has proposed to rezone the ten-minute walking catchment around the Kilbirnie Metropolitan Centre Zone to HRZ. I support this recommendation and therefore support the areas proposed to be rezoned to HRZ by Kāinga Ora that fall within this catchment. This area is shown in the Stream 1 Section 42A Report, Figure 44 under paragraph 372. However, I disagree with the height proposed by Kāinga Ora of 36m. Given the multiple hazard overlays within the Kilbirnie area including coastal inundation, the flood hazard overlay, the liquefaction hazard overlay and the tsunami hazard overlay, I consider that 22m is an appropriate height which gives effect to the NPS-UD and balances this with the natural hazard overlays. I note that Mr Wharton recommended a 21m height limit. However, to be consistent with the recommendation to increase the height limit in HRZ-S2 to 22m, I recommend that this is also applied in Kilbirnie.

Map 23 & 24 (Miramar) – I disagree with both the proposed height increases and HRZ re-zonings in Miramar. I consider that Miramar is located too great a distance from the central area to accommodate the height increases proposed and that the public transport to this suburb is not sufficient to accommodate the increased density, given the amount of traffic that the main roads into the central area experience during all times of the day. I concur with Dr Zamani that the Miramar centre does not offer the level of service or amenity that would support the height increases or the HRZ. I also note that there is no additional height recommended for the Miramar Centre beyond the 15m notified in the PDP. Therefore, there is no justification to increase height in and around the Miramar centre in the residential areas, particularly as this

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will result in greater heights in the residential area compared to the centre.

RESPONSE TO MINUTE 17

There are several matters which the hearings panel has requested I respond to; these are listed below.

A list of out-of-scope matters

There are no out-of-scope matters. It is noted that the residential chapters fall under the IPI Plan Change which is not limited in terms of scope. However, there are some provisions which fall under the Part 1 Schedule 1 process which are clearly identified within the Section 42a Report and within the PDP. I have reviewed my recommendations and have concluded that none are out of scope.

Legal response to Mr Hinchey's argument for the Retirement Villages
Association and Ryman Healthcare that mandatory design guidelines
would be contrary to MDRS Policy 5.

40 See Mr Whittington's evidence in Appendix 2.

Legal response to the validity of an analogy between identifying ONLs and character areas, insofar as both might involve areas/properties that make little contribution (and may even make a negative contribution) to the broader area defined.

See Mr Whittington's evidence in Appendix 2.

Comment on whether the Three Waters provisions of the PDP operate as a Qualifying Matter, with reasoning, and if so, where the Council's evaluation of the restriction on standards that would otherwise be required by the NPSUD is located.

- The Three Waters provisions do not operate as a Qualifying Matter. The MDRS can be undertaken as a permitted activity. The provisions do not modify the height or density able to be achieved. What the provisions do is require developers to meet the servicing standards of the Three Waters Chapter. In this way the standards are no different to requirements to meet Noise or Light emission requirements for any permitted activity.
- I consider that it is important to remember that the intent of the MDRS is <u>not</u> to entirely curtail the ability of district plans to introduce other controls in a district plan which may have any impact on the ability of an individual to undertake the MDRS. It was always foreseen that district plans could introduce complementary or related controls to manage effects not otherwise regulated by the MDRS. For example, just because the MDRS does not include standards for driveway gradient and width, does not mean that the district plan cannot include standards that apply to MDRS developments. The Departmental Report on the Resource Management (Enabling Housing Supply and Other Matters) Amendment Bill itself states that it was intended that district wide matters are retained, this is within Chapter 3 of the report, page 33.
- The framework of the chapter requires that the Regional Standards for Three waters are met. The Regional Standard for Water Services provides minimum standards that must be applied to the design and construction of proposed stormwater, wastewater and water supply infrastructure. It is applicable to the Wellington Region. If there is limited capacity in the three waters network in a particular area the Three Waters chapter allows for alternative on-site solution (eg tanks) to act with or in lieu of the infrastructure capacity of the area.
- In areas where the servicing standard cannot be met and there is no possible onsite mitigation, there is the potential that that development

capacity may be limited for periods of time in particular areas, depending on the state of the network.

Provide a breakdown (i.e. percent) of the ODP in the Inner Residential and Outer Residential Zones proposed to be zoned MRZ and HRZ respectively.

The below table breaks down the percentage of the Inner and Outer Residential Zones which are proposed to be zoned MRZ and HRZ.

Percentage of the ODP (Inner and Outer Residential Zones) proposed to be Rezoned MRZ and HRZ					
ODP Zone	Area of ODP Zone (ha)	Percentage Zoned MRZ	Percentage Zoned HRZ	Percentage Zoned Other Zones	
Inner Residential	303.7	55.40%	41.60%	2.90%	
Outer Residential	3466.3	94.40%	3.80%	1.70%	

Comment on the implications of substituting 'ability' with 'impairment'.

A7 I have considered the changes I recommended in my Section 42A
Report with respect to MRZ-P3 and HRZ-P3, to change 'abilities' to
'impairments'. I have considered the comments by Commissioner Lutz
that abilities can refer to a wider range of access impediments than
'impairments' on its own. However, I do not agree with removing the
word 'impairments' and substituting with 'abilities'. I consider that the
advice, received from the Disabled Persons Assembly New Zealand
Incorporated, that abilities can be considered a euphemistic term is
legitimate and that including the word 'impairments' assists in
mitigating this. However, if the panel were of a mind to include the
word 'abilities' in MRZ-P3 and HRZ-P3, I would recommend including it
as well as leaving 'impairments'. However, I note that my preferred
outcome is to remove 'abilities' and leave 'impairments' in the policies.

As above, if the panel were of a mind to include 'abilities' in MRZ-P3 and HRZ-P3 then I recommend that the policies are amended as follows:

MRZ-P3 Housing Needs.

Enable housing to be designed to meet the day-to-day needs of residents, <u>including by and encouraging</u> a variety of housing types, sizes and tenures to cater for people of all ages, lifestyles, <u>abilities and impairments.</u>

HRZ-P3 Housing Needs.

Enable housing to be designed to meet the day-to-day needs of residents, <u>including by and encouraging</u> a variety of housing types, sizes and tenures to cater for people of all ages, lifestyles, <u>abilities and impairments.</u>

I note that the recommendations provided above within the text box are consistent with the approach taken by the reporting officers for Hearing Stream 4.

In the context of Three Waters, what does it mean to be 'adequately serviced'; and is greater clarity required in the PDP provisions in that regard?

The standards for three waters service are set out in the rules of the Three Waters chapter via the Wellington Water Regional Standard for Water Services. Not meeting the rules and not having satisfactory onsite mitigation means not being adequately serviced.

What does it mean saying that a development is 'able to be' serviced? In particular, how definite does that ability need to be? I have reviewed my recommended change to MRZ-P6, MRZ-P7, MRZ-P15, HRZ-P6, HRZ-P7, and HRZ-P14, where I recommended adding 'is able to be' serviced to the policies. I understand that it may be helpful to be more definite but I do not consider that elaborating on the meaning of "able to be serviced" will achieve more certainty. In fact, this is an area where I think that, in a resource consent process, discretion, alongside the infrastructure chapters, ought to be available to determine if a development is able to be serviced.

What potential qualifying matters were considered as part of the Section 32 evaluation, or otherwise, by Council? Please provide references to the relevant analysis.

The qualifying matters that were considered are those that are in the PDP. There were no further qualifying matters that were considered. I point the Panel to the analysis of qualifying matters which was completed as part of the Right of Reply response for Stream 1 Hearings. This can be found in the Council Officers Right of Reply, in Appendix 5. This table lays out the qualifying mattes that were considered and how they modify the building height or densities of Policy 3 or the MDRS.

What modelling has the Council done of the loss of sunlight/shading under the proposed height and height in relation to boundary controls in the PDP? What difference do the changes to height and height in relation to boundary standards proposed by Kāinga Ora make to loss of sunlight/shading?

In relation to modelling of the boundary controls in the PDP, Council engaged Boffa Miskell to carry out modelling of standards and report back. This report is called 'Planning for Residential Amenity' and can be found here. The report focused on three key attributes being the effect of development on sun and natural light, privacy between habitable spaces, and scale and dominance. This report included undertaking

shading modelling on real sites to show the effects of the PDP controls on both current and future states.

In relation to the effects of the proposed provisions the report found that the district plan measures relating to height, development envelopes (recession planes), privacy set-backs, building length and open space are proposed to work in concert to provide reasonable level of residential amenity across the city. It was acknowledged that some sites will be impacted to a greater extent than other due to topography. Overall, the report found that the proposed development controls provide a good balance between protecting sunlight and privacy whilst providing for a reasonable level of urban development.

In relation to the impact that Kāinga Ora's proposed height changes would have on sunlight across the city, this would invariably have an impact beyond what is proposed under the PDP. The Planning for Residential Amenity Report notes that there will be an impact on shading under the PDP as opposed to the ODP, this impact would be increased significantly under the Kāinga Ora scenario.

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The Planning for Residential Amenity Report recommended a suite of development standards which accounted for the incremental level of change that will be experienced under the PDP. Development will not occur all at once, it will be an incremental change meaning under the Kāinga Ora scenario it is a realistic outcome that a 1-2 storey development would be directly adjoining a development which is able to be constructed under 19m recession plane requirements. I do not consider this to be an appropriate outcome and consider that the PDP does not need to go from 2.5m recession planes in the ODP straight to 19m recession planes. Over time, as the built form changes it would be more appropriate to increase heights and recession plane requirements as necessary. I also note that Kāinga Ora have not demonstrated the

impact that their proposed height increases with a 19m recession plane would have on an existing single level dwelling.

What is the extent of rooftop solar panel use in the Wellington City Urban Area?

I have made enquiries with the relevant teams within the Council.

Currently there is no data or information on how many houses use solar panels across the city. The main reason for this is that the installation of solar panels does not require a building or resource consent meaning solar panels can be installed at any time by anyone across the city, with no council oversight.

What consideration has been given in the Section 32 evaluation of lost solar power generation under the proposed rules and standards?

There is no direct consideration within the Section 32 analysis of lost solar power generation under the PDP. However, the 'Planning for Residential Amenity' Report prepared for Wellington City Council that under the PDP standards and rules, most sites across Wellington will be able to accommodate 4 hours of sunlight between the equinoxes. This is based on modelling of the standards, undertaken by Boffa Miskell. Therefore, it is reasonable that the proposed standards are suitable for ensuring that solar power generation will be a viable option for most sites.

I understand that solar panels do not need direct sunlight to be able to generate power. Although direct sunlight will generate greater amounts of power, modern solar panels are able to harness energy even in shaded conditions. This may mitigate some of the concerns in relation to power generation by solar panels.

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However, I acknowledge that on some sites, due to topography and other factors, combined with increased building heights and recession

plane requirements, solar power generation may be impacted. In relation to this, I would like to note the following:

- The PDP encourages increased density around existing urban areas which will lead to greater development within areas that are close to services. This will reduce the need for people to travel long distances in private vehicles, which will in turn have a positive impact on the efforts to reduce carbon emissions. It is my view that this is a preferable outcome to amending the standards to allow for increased sunlight to solar panels.
- I acknowledge that the NPS-REG requires District Plans to provide for the development, operation, maintenance, and upgrading of renewable electricity generation. I consider that the PDP does this through the Renewable Electricity Generation Chapter, notably through solar panels being a permitted activity in REG-R3. I consider that the PDP strikes an appropriate balance between giving effect to both the NPS-REG and the NPS-UD.

Did the Section 32 evaluation explore the option of a Coastal Hazard Zone, rather than an overlay? If so, please provide references.

- The Section 32 evaluation did not explore the option of a Coastal Hazard Zone. I consider that an overlay is the appropriate means of control within this area. This is because the coastal hazards are addressed within the Coastal Environment Chapter and the overlay directs users to this Chapter. Any development within these overlays will need to consider the applicable provisions within this Chapter.
- I also consider that the activities within the MRZ are generally appropriate within the coastal hazard overlays, with some refinement as directed by the overlays. In addition, the overlays within the PDP are

used to manage values, features, and risks, as directed by the national planning standards. The coastal hazard overlays are consistent with this. Therefore, I do not consider that a Coastal Hazard Zone is needed.

As regards the recommended reference in Objective HRZ-O1 to a built character "of at least six storey buildings", what is the outcome anticipated? — in particular how much higher than six storeys is anticipated?

63 I have considered the Panel's feedback, and that of submitters heard during the Hearing, and I recommend that HRZ-O1 is not amended. I note that the change was intended to signal to plan users that heights which can accommodate 6 storeys, or more, are encouraged. In addition, this objective is in keeping with Policy 3 of the NPS-UD which directs that at least six storeys are provided for in areas that are in at least a walkable catchment of rapid transit stops, the edge of city centre zones, and the edge of metropolitan centre zones. The HRZ are always within one of these three areas. In my view, using 'at least 6 storeys' provides for greater flexibility in terms of height in a resource consent process. I consider it unnecessary to specify 'how much higher than six storeys is anticipated' as I consider that this can be determined in a resource consent process. In addition, a resource consent in relation to height breaches will always be a restricted discretionary activity which means applicants can still develop higher under an enabling framework.

Please confirm Council Officers' view as to whether HRZ-P2 should refer to 'other' residential buildings?

I consider that HRZ-P2 does not need to refer to 'other' residential buildings. I note that HRZ-P8 already refers to other residential buildings and structures. I consider this is sufficient and that it does not need to be repeated in HRZ-P2.

As regards HRZ-P6 please confirm Council Officers' view as to whether the RPS requires greater consideration be given to reverse sensitivity issues vis a vis regionally significant infrastructure such as state highways in this context?

In relation to reverse sensitivity effects, I stand by my assessment in my Section 42A Report which concluded that there is no need to explicitly reference reverse sensitivity effects throughout the HRZ or MRZ Chapters. My reasons for this remain the same, that there are other parts of the plan, including in the infrastructure related chapters, which address the management of matters such as noise and light.

65

In relation to the RPS, I acknowledge that it requires consideration of reverse sensitivity effects in relation to regionally significant infrastructure and I am of the view that the suite of chapters addresses and meets these requirements.

As regards HRZ-P8, please advise as what the suggested requirement to respond to the site context means in practice.

The addition to HRZ-P8 was recommended in response to submitters concerns that the greater heights on HRZ sites where they adjoin character or heritage sites will have a detrimental impact on the character or heritage values. In practice, this will be used as a Matter of Discretion for a resource consent where buildings adjoin a heritage or character site. It is also noted that HRZ-S3.3 provides for more restrictive height in relation to boundary requirements on sites adjoining character areas or heritage, this addition provides a clearer policy foundation for this requirement.

For the reasons above, I stand by my recommendation to amend HRZ-P8 in accordance with the Section 42A Report. My views on this were further reinforced after hearing the concerns from several submitters during the hearing that greater heights on boundaries adjoining character areas will have a detrimental impact on the character area.

In relation to HRZ-P14, can Council Officers please confirm what policy direction is proposed for non-residential activities that do not meet one or more of the listed instructions?

I note that during the hearings process, HRZ-P14 was re-numbered to HRZ-P13 with the removal of HRZ-P9 Permeable surfaces and for consistency with the s42a recommendations, will be referring to the policy as HRZ-P13.

I have reviewed HRZ-P13 in light of the Panel's feedback regarding the wording of 'only allow'. I concur with the Panel that the phrasing of HRZ-P13 suggests that only when all of the criteria listed in HRZ-P13 are met that a resource consent can be granted. This was not the intended outcome. The outcome was that all of the matters within HRZ-P13 are considered and a weighting exercise is undertaken to determine of a resource consent can be granted.

Therefore, I recommend that HRZ-P13 is amended to remove' only allow' and replace with 'provide for'. I consider that this phrasing is consistent with other policies in the chapter and clarifies that not all of the matters within the policy need to be met. I note that a resource consent planner would still need to weigh up the relative achievement of each clause. However, I consider that this recommendation allows a weighting exercise to occur, as compared to not allowing this under the wording 'only allow'.

72 I recommend that HRZ-P13 is amended as follows:

HRZ-P13 Non-residential activities and buildings

Only allow Provide for non-residential activities and buildings that:

- 1. Support the needs of local communities;
- 2. Are of an intensity, scale and design that is consistent with the amenity values anticipated for the Zone;
- 3. Contribute positively to the urban environment and achieve attractive and safe streets;
- 4. Reduce reliance on travel by private motor vehicle;
- 5. Maintain the safety and efficiency of the transport network; and
- 6. Are adequately serviced by three waters infrastructure or can address any constraints on the site.
- 73 I note that the MRZ chapter has a similar policy in MRZ-P14. I recommend that this policy is also amended as follows:

MRZ-P14 Non-residential activities and buildings

Only allow Provide for non-residential activities and buildings that:

- 1. Support the needs of local communities;
- 2. Are of an intensity, scale and design that is consistent with the amenity values anticipated for the Zone;
- 3. Contribute positively to the urban environment and achieve attractive and safe streets;
- 4. Reduce reliance on travel by private motor vehicle;
- 5. Maintain the safety and efficiency of the transport network; and
- 6. Are adequately serviced by three waters infrastructure or can address any constraints on the site.
- 74 Panel request: In relation to HRZ-R3, please advise the evidential basis for the suggested standards of four employees/ten people total?
- The evidential basis for the recommended standard of four employees comes from the Prostitution Reform Act 2003 which states that a small owner operator brothel (one that does not have a person in charge and no more than 4 people work together out of the brothel) does not

require a special licence. The District Plan cannot specify limits that would constrain this.

This was adopted into HRZ-R3 as an appropriate threshold for all home businesses. The requirement for ten people in total was arrived at on the basis that this number would limit the scale of home businesses and therefore manage adverse effects on neighbouring properties.

I acknowledge that the standard specifying a maximum of ten people in total could be argued to be arbitrary. However, I consider that a maximum number is needed, due to the effects that could be generated from a home business activity which allows for an unspecified amount of people. These could include effects on the residential amenity, privacy, and on traffic. In that respect a resource consent trigger is needed and a maximum of ten people on site was arrived at on the basis that this will allow for a home business activity to occur whilst limiting the effects that are generated.

In addition to the above, a resource consent can be applied for when a home business activity breaches the maximum number of people allowed on site. This will always be a restricted discretionary activity which is still an enabling process for this activity.

79 In relation to HRZ-R9, can Council Officers please advise the rationale for all commercial activities, irrespective of nature and scale, to be full discretionary activities.

The rationale for all commercial activities to be full discretionary activities is that the nature and varied scale of commercial activities means that they can have a wide range of effects on a residential environment. A full discretionary activity status allows a processing planner to consider the wider effects of a proposed activity or development.

- The policy framework for this activity status is MRZ-P14 and HRZ-P13 (non-residential activities and buildings). I note that I have recommended, in paragraph 71, that the wording of these policies is changed to remove 'only allow' and replace with 'provide for'. This will enable a wider range of commercial activities and buildings than what the notified plan would allow for.
- I do acknowledge that there may be some commercial activities and buildings that will have lesser effects than others. I note that in my Section 42A report I provided the Panel with a suggested new rule for dairies, cafes and restaurants. This is discussed further in Paragraphs 103-105.
- 83 In HRZ-R17 should the trigger for restricted discretionary activity status be whether the standards specified 'cannot' be achieved, or alternatively 'are not' achieved?
- I consider that HRZ-R17 should remain as 'cannot be achieved'. I note that this is the language that is used consistently throughout the PDP and I do not consider there to be a material difference between 'cannot be' and 'are not'. I have noticed some inconsistencies within the HRZ chapter in relation to this and I recommend that these are tidied up.

 The changes I recommend are as follows:
 - 84.1 HRZ-R4.2.a. Compliance with HRZ-R4.1.a. is not cannot be achieved.
 - 84.2 HRZ-R5.2.a. Compliance with HRZ-R5.1.a. is not cannot be achieved.
 - 84.3 HRZ-R6.2.a. Compliance with HRZ-R6.1.a. is not cannot be achieved.

84.4 HRZ-R15.1.a. - Compliance with the requirements of HRZ-R15.1.a. is not cannot be achieved.

85 I note that both LLRZ and MRZ always state 'cannot be'.

In relation to HRZ-S1, can Council Officers please comment on the substance of Mr Heale's revised version of this standard. If they do not agree with it, please also supply the basis for that disagreement given Dr Zamani's agreement with it in the urban designers Joint Witness Statement?

I do not support the changes proposed by Mr Heale in relation to HRZ-S1. I have also reconsidered my position in the Joint Witness Statement between Mr Heale and I, in light of my opposition to amending HRZ-S1. This is because I consider that the notified rule framework works best under the current scenario of having two separate height standards, being HRZ-S1 and HRZ-S2.

87 I note that there is urban design support for Mr Heale's revised standard by Mr Rae and Dr Zamani, as set out in the Joint Witness Statement. This support is due to the height increases proposed by Mr Heale in the revised standard, particularly in relation to heights within walkable catchments of specific areas.

88

At present, the provisions in the High-Density Residential Zone Chapter are structured so that there is one set of rules and standards for construction of 1-3 units and one set for construction of four or more units. The reason for this structure is to provide a permitted activity status for developments resulting in 1-3 units, as is required under Schedule 3A of the RMA. The structure also allows for multi-unit developments (4 or more units) to be considered under a Restricted Discretionary Activity Status, under a clear separate set of rules and standards.

Mr Heale proposed a single set of rules and standards for all development types where the result is residential units, removing MRZ-S2 and making the lowest height within the HRZ 22m. Mr Heale proposes this height limit increases to 43m maximum within 400m of the CCZ.

I do not agree with Mr Heale's proposal. I consider that the structure of the HRZ is consistent with the approach in both the MRZ and HRZ Chapters of allowing an 'MDRS development' to occur as a permitted activity. This is because HRZ-S1 applies to developments resulting in 1-3 units and HRZ-S2 applies to multi-unit developments. This is a clear structure which is easy to understand for all plan users.

91

Under Mr Heale's scenario, to comply with Schedule 3A of the RMA the PDP would have to enable developments of 1-3 units to a height of 22m as a permitted activity. I do not agree with this outcome. I consider that 14m is an appropriate permitted height within the HRZ and that further assessment under a restricted discretionary activity status is required for anything greater than 14m. This ensures that the specific proposal can be assessed within the context of the site. This also ensures that an assessment against the Residential Design Guide can be completed for any building where the height exceeds 14m, I consider this will lead to better urban design outcomes than only assessing against the Residential Design Guide at 22m and beyond, notwithstanding that Kāinga Ora seek that the Residential Design Guide is removed from the Plan. There is no further escalation beyond a restricted discretionary activity status for a development which breaches height in the PDP. Therefore, I consider that the heights being proposed by Mr Heale in his revised standard can be applied for in a resource consent and that this process is still an enabling one.

92 I recommend that HRZ-S1 and HRZ-S2 are retained as recommended in my Section 42A Report and Mr Heale's revised standard is rejected.

In relation to HRZ-S2, Council Officers are invited to comment on whether shifting the height limit from 21 metres to 22 metres might facilitate height creep, utilising the latter as the permitted baseline.

I recommend that the height limit for HRZ-S2 is increased to 22m from 21m. I note that in the Joint Witness Statement of Dr Zamani and Mr Rae, they both agreed that 22m is appropriate and that this would provide for greater flexibility. I concur with this position.

I also note that the increase in height would provide for greater flexibility in design and would allow for six storeys to be met. As it stands, advice received from Dr Zamani and Mr Rae suggests that 21m would not allow six storeys as the space needed for the roof would mean the top storey is too small to accommodate six storeys. I agree with the Panel's suggestion that this could facilitate height creep, by way of a higher baseline. However, I do not consider this to be an issue and note that an increase in 1m will have negligible effects on shading. In addition, any effects of shading will be outweighed by the efficiencies of setting a height limit that enables six storeys rather than requiring a resource consent for a breach of height to enable six storeys. I also note that HRZ-S2 applies to areas where Council seeks to encourage denser development based on location to services and facilities.

95 I therefore recommend that HRZ-S2 is amended as follows:

HRZ-S2 Building height control 2 for multi-unit housing or a retirement village.

 Buildings and structures must not exceed 21 22 metres in height above ground level...

•••

93

94

- Panel request: In relation to HRZ-S2, have Council Officers changed their view having heard Willis Bond's evidence in relation to provision for rooftop plant rooms? If not, is a more limited provision e.g. for lift wells, appropriate?
- I have not changed my mind about plant rooms. I support my position in my Section 42A which states that a resource consent can be applied for if a plant room needs to be constructed which exceeds the height limits in the PDP. However, I do consider that an exemption can be made for lift wells, as these do not need to be as high as plant rooms do. I understand that there are requirements for lifts in buildings of a certain height. Therefore, I recommend that an exclusion for lift overruns is included in HRZ-S2. I recommend the following amendment to HRZ-S2:

HRZ-S2 Building height control 2 for multi-unit housing or a retirement village.

2. Buildings and structures must not exceed 21 22 metres in height above ground level.

This standard does not apply to:

- a. Fences or standalone walls;
- Solar panel and heating components attached to a building provided these do not exceed the height by more than 500mm; and
- Satellite dishes, antennas, aerials, chimneys, flues, architectural or decorative features (e.g. finials, spires) provided that none of these exceed 1m in diameter and do not exceed the height by more than 1m.; and
- d. <u>Circumstances where up to 50% of a building's roof in</u>
 <u>elevation exceeds the maximum height where the entire roof</u>
 <u>slopes 15° or more; and</u>
- e. <u>Lift overruns provided these do not exceed the height by more than 1m.</u>

In relation to MRZ-PRECO3, is this precinct correctly analysed as a Qualifying Matter? If so, please refer the Panel to the appropriate

Section 77J/77L evaluations, ideally in the same tabular format as that supplied in relation to other precincts.

98 For the reasons set out in Appendix 2, this is not considered to be a qualifying matter.

99

The Oriental Bay Height Area Precinct is generally supported by the community and contains height limits which are often higher than the limits in the wider Medium Density Residential Zone. This is reflective of the fact that the Oriental Bay Height Precinct has unique qualities and development opportunities that are distinct from the other residential areas of the city, and which require a more specific approach to address the outcomes sought for this area. It also aligns with the 1998 Environment Court Decision W73/98 which confirmed that "Oriental Bay is a unique area of Wellington with a special character and high land and amenity value. The public significance of the area, as well as the special character of its residential environment needs very special consideration".

Panel request: In relation to MRZ-P7, can Council Officers please comment on the potential to provide in this policy for utilisation of the flexibility provided by large sites, e.g. to provide for greater heights well set back from site boundaries?

While I do not consider that height flexibility should be provided for within MRZ-P7, I do acknowledge that larger sites can provide opportunity to develop to greater heights. Therefore, instead of providing flexibility within the policy, I recommend adding a new assessment criterion that allows for the context of larger sites to be assessed when height limits are breached. I still consider that a resource consent is the more appropriate way of managing increased height on larger sites, this will allow for a site and context specific assessment to be carried out. However, including specific assessment

criteria for larger sites when height is breached will provide greater direction and ability to consider the location of a building on a site.

Therefore, I recommend that the assessment criteria under MRZ-S1 and MRZ-S2 are amended as follows:

MRZ-S1 Building Height Control 1

Assessment criteria where the standard is infringed:

- 1. Streetscape and visual amenity effects;
- 2. Dominance, privacy and shading effects on adjoining sites; and
- 3. Effects on the function and associated amenity values of any adjacent open space and recreation zone; and
- 4. The siting of a development on a site, particularly in relation to larger than typical sites.

MRZ-S2 Building Height Control 2

Assessment criteria where the standard is infringed:

- 1. Streetscape and visual amenity effects;
- 2. Dominance, privacy and shading effects on adjoining sites; and
- 3. Effects on the function and associated amenity values of any adjacent open space and recreation zone; and
- 4. The siting of a development on a site, particularly in relation to larger than typical sites.
- In addition, I also recommend that the assessment criteria under HRZ-S1 and HRZ-S2 are amended as follows:

HRZ-S1 Building Height Control 1

Assessment criteria where the standard is infringed:

- 1. Streetscape and visual amenity effects;
- 2. Dominance, privacy and shading effects on adjoining sites; and
- 3. Effects on the function and associated amenity values of any adjacent open space and recreation zone; and
- 4. The siting of a development on a site, particularly in relation to larger than typical sites.

HRZ-S2 Building Height Control 2

Assessment criteria where the standard is infringed:

- 1. Streetscape and visual amenity effects;
- 2. Dominance, privacy and shading effects on adjoining sites; and
- 3. Effects on the function and associated amenity values of any adjacent open space and recreation zone;
- 4. Wind effects; and
- 5. The siting of a development on a site, particularly in relation to larger than typical sites.

As regards the suggested MRZ-Rxx, can Council Officers please advise the evidential basis for the suggested GFA standard and the rationale for including restaurants, and for not providing hours of operation as a standard?

In relation to MRZ-Rxx, I recommended this rule as a suggestion, should the Panel be minded to include a rule for small-scale commercial activities. I stand by my assessment in the Section 42A Report, being that I am comfortable with a Discretionary activity status for commercial activities as this will allow for a wider consideration of effects and encourages commercial activity to locate in centres.

However, I see merit in a rule which allows for small scale commercial

activities only. On that basis I decided on dairies, cafés and restaurants. I consider that these activities will generate minimal effects on the residential environment, particularly if limited a 100m² GFA.

If the Panel is minded, I recommended that a GFA of 100m² be incorporated as this will ensure that the activity will be limited in scale and therefore effects. In addition, this area is consistent with the approach of other Council's. This includes New Plymouth District Council who specify a maximum floor area of 100m² for dairies within the MRZ of their PDP-Decisions Version.

On reflection of the suggested MRZ-Rxx, I consider that controls on the hours of operation within a residential environment will be beneficial to help mitigate the effects of noise and light. I consider that an appropriate time for hours of operation is 7am – 10pm. This is consistent with the noise control of 50dB in the Inner Residential Areas and Medium Density Residential Areas in the ODP. I also consider that this period allows a reasonable time of operation.

In relation to MRZ-P12, please advise the evidential basis for differentiating Spenmoor Street in this regard? In particular, does the fact that Plan Change 67 specified traffic controls when it was made operative adequately justify the maintenance of such controls in the PDP given the road improvements that have been made in the interim, and the absence of like controls governing development on similarly traffic-challenged streets?

106 I have reviewed the supplementary evidence provided by Mr Leary regarding Spenmoor Street and I have reviewed the evidence that Council holds in the form of recent consent applications relating to the Spenmoor Street area. My position is unchanged in relation to this matter. I still consider that MRZ-P12 and the reference to this policy as

a matter of discretion in MRZ-R2 is necessary. My reasons are set out below.

In his evidence, Mr Leary has specified several other roads that have the potential to develop further traffic and generate similar traffic effects to those in Spenmoor Street. The Panel has also pointed this out and made note that on a site visit they did not see any material difference between Spenmoor Street and other streets in Wellington. I acknowledge these points but consider that the reason Spenmoor Street has been differentiated from other streets is that the area was re-zoned under Plan Change 67 from a large rural area into outer residential. The Plan Change acknowledged the traffic effects that would result from this rezoning and set a limit of 230 houses that could be developed, without causing excessive traffic effects. I am not aware of any other street or area in Wellington that has undergone a similar plan change with the same nuances as Spenmoor Street which would mean significant traffic effects would be generated.

In his supplementary evidence, in Paragraph 16, Mr Leary states that the access road has been built to a wider standard than that which is required for a rural area and, as I read his evidence, points to this being one of the reasons that the specific MRZ-P12 is not needed. I note that the reason the road was built to a wider standard than a rural road is because the area was always planned to be developed to a residential environment and that this does not negate the need for MRZ-P12.

108

109 It is acknowledged within Mr Leary's evidence that the main issue with regards to Spenmoor Street is not Spenmoor Street itself but is the Wakely Road/Newlands Road intersection, which is where traffic from Spenmoor Street accumulates to exit. This intersection is routinely backed up during peak hours and the Spenmoor Street Traffic Assessment Report by Traffic Concepts (provided in support of a resource consent application and dated 2021), attached at Appendix 4,

demonstrates this, and acknowledges that if a roundabout were to be constructed at the Wakely Road/Newlands Road intersection then the area could accommodate more housing. I accept this finding but do not consider it reason to remove the provisions in the MRZ in relation to Spenmoor Street.

- 110 Mr Leary states in his evidence that this roundabout will be constructed and has provided plans which show the concept. However, to date there are no firm plans that the Council is aware of and no date as to when this construction was to occur. Although I acknowledge Mr Leary's assertion that this will occur, I cannot rely on this alone, particularly given that at the time of writing neither myself nor the Traffic Engineers at Council have seen a timeline for this occurring. Even if a resource consent application had been granted, it would not be a guarantee that the roundabout would be constructed, and so in my view, the plan would still have to provide for the situation currently on the ground. Given the issue of the Wakely Road/Newlands Road intersection has not yet been resolved, I do not feel confident recommending that the specific provisions relating to the Spenmoor Street traffic issues are removed from the District Plan. Whilst there are likely other areas in Wellington that experience similar issues, Spenmoor Street is one area that we know definitively of and for that reason I do not consider that removal of the provisions is appropriate given the potential for the traffic situation to worsen with no resolutions.
- I consider that if the roundabout were to be constructed in the future and this is found to resolve the traffic issues then the provisions in the PDP can be revisited at that stage and potentially removed through a Plan Change, Council initiated or otherwise.
- In relation to the proposed MRZ-P12 and the Matter of Discretion in MRZ-R2, I do not consider that these will necessarily mean that

development cannot go ahead. Rather, I consider that any application for resource consent in the area will need to demonstrate how traffic effects will be mitigated. In addition, under the MRZ, it is possible to construct a compliant development which results in 1-3 units on any site, without the need for traffic assessments.

What is Council Officers' response to Mr Halliday's presentation as regards the Council at 35 Bickerton Street, and whether it should more appropriately be OSZ?

I agree with Mr Halliday that the land identified as Lot 5 DP 524106 should be rezoned to Natural Open Space Zone. The land was vested as scenic Reserve in 2021 and I consider that the appropriate zoning is Natural Open Space to reflect this, as shown below.

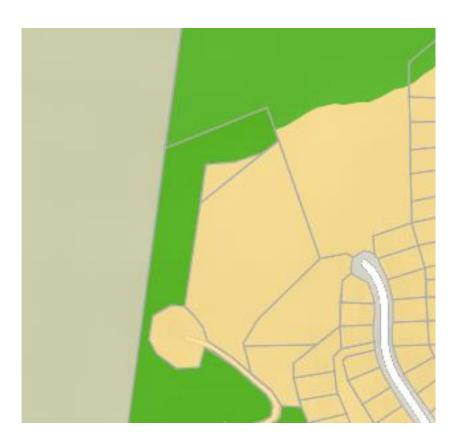


Figure 1 - Before Rezoning

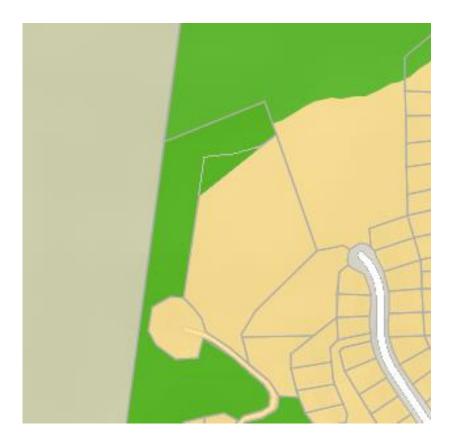


Figure 2 - After Rezoning

Panel request: Have Council Officers reconsidered their view in relation to Mr Halliday's proposed extension of the MRZ zoning in Atherton Terrace to match property boundaries?

I have reconsidered my view in relation to the properties in Atherton

Terrace. I agree with Mr Halliday that the zoning should be amended to follow the property boundaries, as shown below.

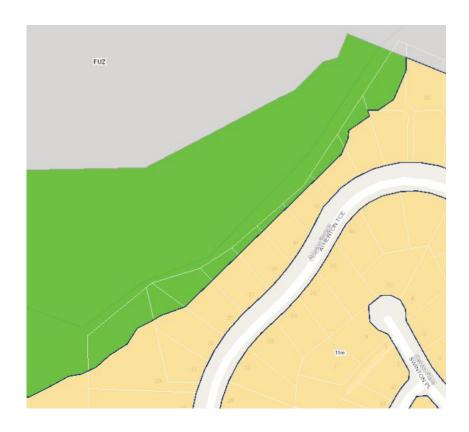


Figure 3 - Before Rezoning

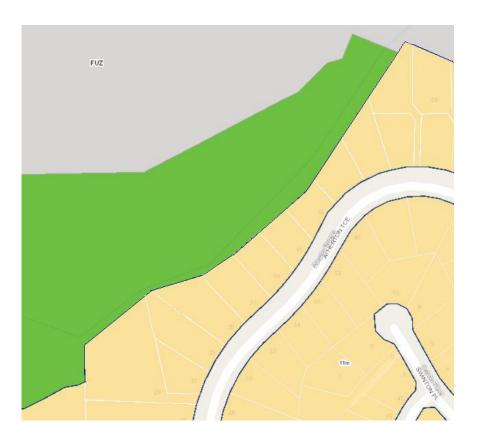


Figure 4 - After Rezoning

115 Whilst amending the zoning to follow the property boundaries along
Atherton Terrace, I noticed that there are several properties, also on
Atherton Terrace and on Melksham Drive, which have a similar issue in
relation to the Future Urban Zone protruding into the back boundaries.
I recommend that these properties are also rezoned as shown below:



Figure 5 - Before Rezoning.



Figure 6 - After Rezoning

In relation to MRZ-O1, do Council Officers consider that the current wording accurately reflects the intended outcome?- in particular whether it goes further than 'encouragement'.

I have reviewed MRZ-O1 and do not consider that any amendments are necessary. I consider that the intended outcome is met by the proposed wording, being that medium density development is provided for within the MRZ and that a variety of housing types are anticipated.

In relation to MRZ-P13, should the location of 'the Tapu-Te-Ranga land' be clarified? Further, is the cross reference to the Papakāinga Design Guide in this policy consistent with Officers' advice that that design guide is not intended to be part of the PDP?

- I note that during the hearings process, MRZ-P13 was re-numbered to MRZ-P12 with the removal of MRZ-P9 Permeable surfaces and for consistency with the s42a recommendations, will be referring to the policy as MRZ-P12.
- It would assist plan users if the Tapu te Ranga Land is identified in the PDP in the form of maps and property address. I recommend that MRZ-P12 is amended as below.
- In relation to the Papakāinga Design Guide reference in the PDP, I agree with the Panel that as the Papakāinga Design Guide is not a statutory document that it should not be referred to within the Policy.
- 120 In relation to the above, I recommend that MRZ-P13 is amended as follows:

MRZ-P12 Tapu Te Ranga <u>– 16-50 Rhine Street, Island Bay</u>

Facilitate the integrated development of the Tapu Te Ranga land (16-50 Rhine Street, Island Bay) in a manner that:

- 1. Identifies and appropriately addresses any geo-technical and contamination issues;
- 2. Incorporates planting and landscaping to provide visual screening and integrate development into the surrounding environment; and
- 3. Fulfils the intent of the Residential Design Guide and PapaKāinga Design Guide where relevant and applicable.
- I do, however, consider that reference to the Papakāinga Design Guide is necessary in the MRZ Chapter to alert plan users of its existence.
 Therefore, I recommend the following amendment to the introduction of the MRZ Chapter:

MRZ Introduction

...

The Medium Density Residential Zone accommodates a range of compatible non-residential uses that support the needs of local communities. Incompatible non-residential activities are not anticipated in this zone.

The Papakāinga Design Guide may be relevant within the Medium

Density Residential Zone. This is a non-statutory document which sits

with other Design Guides in Part 4 of the District Plan.

In relation to MRZ-R3, can Council Officers please comment on whether Condition (a) should require, as at present, that the site is the principal place of residence of all persons living on the site?

I consider it to be appropriate that MRZ-R3 requires that the site is the principal place of residence. I note that this requirement is not that all persons who work on the site must live on the site but rather that it is

the principal place of residence for at least one person who works on the site. I consider that this requirement assists in ensuring the residential environment will remain intact and that effects on the neighbouring properties will be managed. Noting that resource consent can be applied for if a larger scale home business were proposed.

However, I acknowledge that the current wording within MRZ-R3 is unclear and that it can be interpreted that the requirement is that all people who work on the site must also live on the site. On that basis I recommend that MRZ-R3 is amended so that the rule states only one person who works on the site must live on the site.

124 I recommend that MRZ-R3 is amended as follows:

MRZ R3 Home Business

 Activity status: Permitted Where:

- a. The site is occupied by a residential building and used for residential activities by <u>at least one person</u>, <u>who is an employee or equivalent engaged in the</u> <u>home business</u>, and lives <u>the person or persons living</u> on the site as their principal place of residence;
- b. ...

c. ...

In relation to MRZ-R14, can Council Officers please confirm their position regarding notification preclusion in relation to non-compliance with MRZ-S7 (outlook spaces)?

The notification preclusion for MRZ-S7 is recommended on the basis that any non-compliance with outlook spaces will have effects that are internal to the site only. Non-compliance with MRZ-S7 will not affect neighbouring properties or the surrounding environment and therefore the limited notification preclusion is appropriate in this context.

In relation to LLRZ-P8, is it appropriate and in scope to include reference to non-public infrastructure such as telecommunications and electricity?

- The intent of the wording of LLRZ-P8 was not to exclude non-public infrastructure, but rather to highlight that on-site infrastructure is considered an acceptable way of servicing a development within the context of the Large Lot Residential Zone. In addition, the focus of the policy was on three waters infrastructure, not telecommunications and electricity.
- On that basis, I do not consider it to be in scope or appropriate to reference non-public infrastructure where it is not related to three waters in LLRZ-P8, as this was not the intent of the Policy.
- I have reconsidered my position in the Section 42A Report where I recommended removing 'council reticulated' and replacing with 'public' infrastructure. Because the focus of the LLRZ-P8 is on three waters, I no longer consider that 'public infrastructure' is necessary as 'council reticulated' is sufficient in the context of three waters.
- In addition, I consider that it is appropriate to include clarification to LLRZ-P8 to emphasise that the focus is on three waters infrastructure.

 Therefore, I recommend that LLRZ-P8 is amended as follows:

LLRZ-P8 Infrastructure

Ensure that new buildings can be appropriately serviced by three waters infrastructure, either on-site or council reticulated public infrastructure that is able to accommodate the demand generated by the proposed activity within the building.

Dr Zamani referred in his evidence (paragraph 40) to international standards for unit sizes. Can he please provide further detail as to what those standards are?

- Dr Zamani has provided me with further detail as to international standards for unit sizes. These are outlined below:
 - 130.1 The Ireland Department of Housing, Planning and Local
 Government, in their <u>Sustainable Urban Housing: Design</u>
 <u>Standards for New Apartments Guidelines</u> specify minimum apartment floor areas as below:

Studio Apartment (1 person)	37 sq.m
1-bedroom apartment (2 persons)	45 sq.m
2 bedroom apartment (4 persons)	73 sq.m
3-bedroom apartment (5 persons)	90 sq.m

130.1 The United Kingdom Department for Levelling Up, Housing and Communities and the Ministry of Housing, Communities and Local Government, in their Technical Housing Standards
— Nationally Described Space Standard specify minimum floor areas as below:

Table 1 - Minimum gross internal floor areas and storage (m2)

Number of bedrooms(b)	Number of bed spaces (persons)	1 storey dwellings	2 storey dwellings	3 storey dwellings	Built-in storage
	1p	39 (37) *			1.0
1b	2p	50	58		1.5
	3p	61	70		
2b	4p	70	79		2.0
	4p	74	84	90	
3b	5p	86	93	99	2.5
	6р	95	102	108	
	5p	90	97	103	
	6p	99	106	112	
4b	7p	108	115	121	3.0
	8p	117	124	130	
	6p	103	110	116	
5b	7p	112	119	125	3.5
	8p	121	128	134	
	7p	116	123	129	
6b	8p	125	132	138	4.0

Appolloni & Alessandro (2021)¹ carried out research on housing spaces in nine European countries. Their analysis determined the following minimum unit sizes for studio apartments:

Country	Size
Italy	28 sq.m
Spain	20 sq.m
Portugal	35 sq.m

Can Dr Zamani please document his verbal comments on the maps Mr Rae tabled for Kāinga Ora showing suggested zoning changes. If there are non-urban design planning (or other) issues relevant to those rezoning proposals, please itemise same.

- Dr Zamani has provided me with his Urban Design comments on the maps, which I attach at Appendix 3.
- I have provided my commentary on the maps provided by Kāinga Ora in Paragraphs 18-37 above.

Can Council Officers please comment on the Pukepuke Pari argument that development controls are required to constrain the properties immediately behind those with frontage to Oriental Parade, in order to achieve the objectives of the Oriental Bay Height Precinct?

The Oriental Bay Height Precinct recognises the unique setting, characteristics, and development potential of the Oriental Bay area.

The Precinct has a separate set of heights and other development

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¹ Appolloni, L., & D'Alessandro, D. (2021). Housing Spaces in Nine European Countries: A Comparison of Dimensional Requirements. *International Journal of Environmental Research and Public Health*, 18(4278), 1-19.

controls which allow for medium to high rise development whilst protecting the amenity of properties to the rear of Oriental Parade and the public amenity of Oriental parade itself. The heights also offer protection to the townscape views of St Gerard's Monastery, a listed heritage building, and the escarpment below. The sole objective (MRZ-PREC03-O1) is that the Precinct accommodates medium to high density residential development and a range of compatible non-residential activities at ground floor that maintain or enhance the unique qualities of the Precinct.

- In the context of the above, I assess that the proposed provisions achieve the objectives of the Oriental Bay Height Precinct, for the reasons that I set out below:
 - The height limits within the Precinct vary from 12.6m to 27.6m. These heights have been brought into the PDP from the ODP and were originally decided on in the 1998

 Environment Court Decision W73/98. The height limits are based on providing for enough height that medium and high density development can occur whilst protecting the views behind the precinct, the heights vary depending on the specific features and topography of the land behind. In addition, the height limits stop at 27.6m to ensure that the public amenity of Oriental Parade is kept intact. As is well known, thousands of people across Wellington City, Wellington Region, and the country use and enjoy Oriental Parade for a variety of recreation activities.
 - 134.2 There are no setback controls and no height in relation to boundary controls within the Precinct, except where a boundary adjoins a residential property that is located outside of the precinct. This means that it is highly likely any

development can reach the maximum height specified in the District Plan.

I note that Pukepuke Pari argue that it necessary to constrain the development controls of those properties immediately behind those with frontage to Oriental Bay. I consider that the provisions and extent of the Oriental Bay Height precinct already achieve this protection and that further development controls are not necessary, noting that these controls have been in the District Plan since 1998. Since this time, development along Oriental Parade has been consistent with the objectives of the Precinct, which is to protect the amenity of Oriental Parade.

136 It is my view that including development controls outside of the Precinct would be contrary with Policy 3 of the NPS-UD and Schedule 3A of the RMA. Particularly as I consider that the Precinct already achieves a sufficient level of protection.

In relation to HRZ-S3(4), which Officers have recommended be deleted, what analysis has been undertaken of the proposed height in relation to boundary controls demonstrating that they achieve the same or a similar level of sunlight in the Natural Open Space Zone, Open Space Zone and Sports and Active Recreation Zones?

There has not been an analysis undertaken in relation to this. However, I note that HRZ-S3(4) was a late councillor addition to the PDP which many submitters commented was confusing to understand. This provision was also not tested as to its effectiveness. The recommended approach in my Section 42A Report removes the ambiguity associated with this standard and applies height in relation to boundary controls more consistently. I also note that the proposed height in relation to boundary controls have been tested through modelling in the 'Planning for Residential Amenity' Report.

Can Council Officers please comment on Mr Rae's proposal that when analysing walkable catchments, a gradient of 12.5-20% requires specific consideration and a gradient in excess of 20% is not walkable?

The issue of walking catchments and gradients has been addressed at length in Hearing Stream 1. The Hearing Stream 1 Council Officers Right of Reply is highly relevant, particularly Appendix 2 and Appendix 3 of this report.

Referencing Mr Heale's suggestion that clear policies are required to ensure that any additional height provisions over 22 metres are not regarded as 'anticipated', do Council Officers agree with that proposition, and if so, how should such policies be framed?

I disagree with Mr Heale on this point. I do not consider that this is necessary. I note that Policy 3 of the NPS-UD directs building heights of at least six storeys. I recommend that any policies which discourage height over 22 meters should not be considered.

Further, any height breaches in either the MRZ or HRZ will always be considered under a Restricted Discretionary consent. This is still an enabling pathway and including policies which discourage this would be contrary to this.

Council Officers please advise their response to the presentation of the Tenths Trust as regards development controls applying to 357-359 Adelaide Road?

I note that the properties which the Wellington Tenths Trust were referring to are 557-559 Adelaide Road, not 357-359. I understand that the Tenths Trust have development aspirations for the site and would like to see either the height increased to 36-40m or for the site to be re-zoned MUZ. I do not support these changes in this location.

The surrounding area is proposed MRZ with a height limit of 14m.

Granting this relief in the form of a site-specific height increase or a rezoning to MUZ would effectively result in a spot zone which is not a desired outcome in any plan. I sympathise with the Tenths Trust as to their aspirations for development on the site and note that a resource consent for this could be applied for as a Restricted Discretionary Activity, there would be no escalation beyond this. This is still an enabling pathway but will allow for the site context to be considered in relation to the surrounding environment and the specific proposal.

Therefore, I recommend that the proposed height increase and the proposed rezoning are rejected.

Does the definition of a 'site' exclude land designated for road or rail widening, and if not, should it be so defined?

- I do not consider that the definition of site excludes land designated for road or rail widening. I have reviewed the definition and there are no such exclusions. I note that the definition for 'site' in the PDP is consistent with the prescribed definition under the National Planning Standards.
- I do not consider that the definition needs to be amended or that a new definition is needed to exclude land designated for road and rail widening. The chapters within the designation part of the PDP clearly identify land that has been designated by requiring authorities. I do not consider this needs any further elevation beyond this. I also note that if requiring authorities wish to designate further land, they can do this through serving a Notice of Requirement on the Council.

Has the effect of excluding eaves from the boundary setback requirements in HRZ-S4 and MRZ-S4 on sunlight reaching adjacent properties been assessed, and if so, what is the resulting relative loss of amenity? Similarly, what is the loss of development capacity if they are not included?

The impact on development capacity has not been assessed and it would be impossible to do this based on how the modelling works. The capacity model does not model features such as eaves, rather it models the mass of a building. However, I consider that if the eave exclusion were to be removed, the resulting loss on capacity would be minor for several reasons, including the limited impact a 600mm exclusion will have on development capacity and that there are other building designs to get around needing eaves.

The purpose of the exclusion is to introduce some flexibility in the provisions for reasons of practicality. The purpose was not to increase development capacity, which the PDP provides a more than sufficient amount of.

I note that the eave exclusion is a common exclusion in other District plan's, including in the Porirua Proposed District Plan, where eaves up to 600mm are excluded from the boundary setback and in the New Plymouth Proposed District Plan (Decisions Version), where eaves up to 600mm are also excluded.

In relation to the effects on shading, I do not consider that the proposed exclusion will have a significant impact. The height in relation to boundary standards will still apply regardless of this exclusion. I note that in some instances, it may not then be possible to utilise the exclusion.

In reviewing this exclusion, I have noticed that there is an inconsistency between the HRZ and MRZ Chapters. The HRZ provides a 600mm exclusion for eaves whereas the MRZ provides a 1m exclusion. I have reconsidered my position on this and consider that a 1m exclusion is not appropriate given the side yard setback is 1m, meaning an eave

could be constructed right up to the boundary, potentially resulting in the eaves of one building touching the eaves of another. On that basis I recommend that MRZ-S4 is amended as follows:

MRZ-S4 Boundary Setbacks

Buildings and structures must be set back from the relevant boundary by the minimum depth listed in the yards table below:

Yard	Minimum Depth
Front	1.5 metres
Side	1 metre
Rear	1 metre (excluded on corner
	sites)
Rail corridor boundary	1.5 metre

This standard does not apply to:

- Site boundaries where there is an existing common wall between 2 buildings on adjacent sites or where a common wall is proposed; and
- b. Fences or standalone wall;
- c. <u>Uncovered decks and uncovered structures no more than 1m</u> in height above ground level; and
- d. Eaves up to 1m 600mm in width.

Can Council Officers please provide examples as to how height or density standards manage effects on properties adjacent to character precincts or within character precincts within both the HRZ and MRZ?

- The MRZ does not contain any specific height or density standards where a site adjoins a character precinct. I consider that the MRZ provisions are sufficient for addressing effects on neighbouring properties, regardless of if that site is a character precinct or not.
- 151 In relation to the HRZ, there are specific provisions that manage the effect on adjoining character precincts, this acknowledges the higher density development anticipated on HRZ sites. These provisions are:

- 151.1 HRZ-P8 a matter within the Policy (HRZ-P8.5.) which directs that development respond to site context, particularly where located adjacent to a character precinct.
- 151.2 HRZ-S3 a more restrictive HIRB standard applies to sites adjoining character precincts. This standard means that the same HIRB standards that apply in the MRZ (Height Area 2) also apply in the HRZ, that is 5m+60 degrees.
- 151.3 HRZ-S3 Assessment criteria which directs assessment of the effects of HRZ development on any adjoining character precinct.
- In relation to the second part of the question, which asks about controls within the character precincts, I note that there are no properties within character precincts which are zoned HRZ, they are all zoned MRZ. Within the character precincts, the controls on development are those that are specified within the MDRS under Schedule 3A of the RMA.

Can Council Officers please advise what provisions in the HRZ, MRZ and LLRZ govern development adjacent to SASMs and protect the values of those sites and areas?

- There are currently no provisions in the residential chapters which govern development adjacent to Sites and Areas of Significance to Māori. Currently the SASMs chapter provides for the protection of the values of these sites.
- I note that this issue has been addressed in Hearing Stream 3. I agree with Mr McCutcheon in his Section 42A Report, where he potentially sees value in exempting Medium Density Residential Standards on properties adjacent to sites and areas of significance to Māori.

 However, Mr McCutcheon was unable to support the addition of

controls at the time of his writing as submitters had not provided any evidence as to how development controls could be modified.

155 I suggest that this matter is considered at the same time as the Panel considers the evidence in relation to SASMs in Hearing Stream 3.

In relation to the submission of Taranaki Whanui seeking reference in the introduction to the LLRZ Chapter to SASMs, should the text note that the relatively undeveloped nature of the zone increases the likelihood that new SASMs will be discovered?

Identified sites and areas of significance to Māori are located within the SASMs Schedule. The introduction to the LLRZ chapter already signals that there are other Part 2 matters that a plan user needs to consider, including the SASMs chapter.

157 I do not consider that any amendments in relation to the accidental discovery of SASMs are needed within the LLRZ chapter. The Earthworks Chapter of the PDP and the recommendations to the SASMs chapter sufficiently address this issue by directly plan users to Appendix 1 of the PDP which sets out the accidental discovery protocols.

RESPONSE TO SUBMISSIONS ON THE RESIDENTIAL DESIGN GUIDE

In submissions and throughout the hearing I heard from various submitters that the Residential Design Guide is not fit for purpose and that the reference to them in the policies is vague and inappropriate.

I acknowledge these submissions and note that the Residential Design Guide is now going through a separate review process which sits outside of Hearing Stream 2.

I note that the wording of the reference to the Residential Design Guide within the Policies is subject to change as a result of the wider review of the Residential Design Guide and I recommend that the wording is not formally adopted until the outcomes of the design guide review are clearer.

ADDITIONAL SUBMISSION POINT

- It has come to my attention that a submission point was incorrectly referenced as relating to the subdivision chapter when it relates to the residential chapters.
- Hilary Watson made an original submission [321] and further submission [FS74] in relation to the MRZ and spoke to her submission at the hearing. It has since been identified that her further submission incorrectly identified Kāinga Ora's original submission points as relevant to subdivision, when they were intended to oppose Kāinga Ora's points on the MRZ and MRZ-PRECO1. I have read and considered Hilary Watsons further submissions [FS74.5 through FS74.24] and note her support of Council using Character as a Qualifying Matter to modify the permitted building heights and other matters under NPS-UD 2020 or the MDRS

APPENDICES LIST

- Appendix 1 contains a list of recommended changes to the Residential Chapters.
- Appendix 2 contains Mr Whittington's Legal Reply to Hearing Stream 2.
- Appendix 3 contains Dr Zamani's Urban Design comments of the maps that Mr Rae supplied on behalf of Kāinga Ora, showing zone changes and increased height limits.

Appendix 4 contains a report by Traffic Concepts Ltd which was prepared for a resource consent and outlines the traffic concerns in relation to Spenmoor Street.

Date: 29 May 2023

Hatte Box

APPENDIX 1 – AMENDMENTS TO THE HEARING STREAM 2 SECTION 42A REPORT

Amendments to recommendations in the Hearing Stream 1 Section 42A Report, from when the Report was published to when the Stream 1 Hearing finished, are shown in blue text (with <u>underline</u> and <u>strike out</u> as appropriate).

High Density Residential Zone - HRZ

 HS2-P2-Rec32: Enable housing to be designed to meet the day-to-day needs of residents, <u>including by and encouraging</u> a variety of housing types, sizes and tenures to cater for people of all ages, lifestyles, <u>abilities and impairments</u>.

2. HRZ-P13 Non-residential activities and buildings

Only allow Provide for non-residential activities and buildings that:

- 1. Support the needs of local communities;
- 2. Are of an intensity, scale and design that is consistent with the amenity values anticipated for the Zone;
- 3. Contribute positively to the urban environment and achieve attractive and safe streets;
- 4. Reduce reliance on travel by private motor vehicle;
- 5. Maintain the safety and efficiency of the transport network; and
- 6. Are <u>able to be</u> adequately serviced by three waters infrastructure or can address any constraints on the site.; and
- 7. Are integrated into residential developments where appropriate.

3. HRZ-R4.2.a.

•••

Compliance with HRZ-R4.1.a. is not cannot be achieved.

4. HRZ-R5.2.a.

...

Compliance with HRZ-R5.1.a. is not cannot be achieved.

5. HRZ-R6.2.a.

...

Compliance with HRZ-R6.1.a. is not cannot be achieved.

6. **HRZ-R15.1.a.**

...

Compliance with the requirements of HRZ-R15.1.a. is not cannot be achieved.

7. HRZ-S2 Building height control 2 for multi-unit housing or a retirement village.

 Buildings and structures must not exceed <u>21_22</u> metres in height above ground level.

This standard does not apply to:

- a. Fences or standalone walls;
- Solar panel and heating components attached to a building provided these do not exceed the height by more than 500mm; and
- Satellite dishes, antennas, aerials, chimneys, flues, architectural or decorative features (e.g. finials, spires) provided that none of these exceed 1m in diameter and do not exceed the height by more than 1m.;
- d. <u>Circumstances where up to 50% of a building's roof in elevation exceeds</u>

 the maximum height where the entire roof slopes 15° or more; and
- e. Lift overruns provided these do not exceed the height by more than 1m.

8. HRZ-S1 Building Height Control 1

Assessment criteria where the standard is infringed:

- 1. Streetscape and visual amenity effects;
- 2. Dominance, privacy and shading effects on adjoining sites; and
- 3. Effects on the function and associated amenity values of any adjacent open space and recreation zone; and
- 4. The siting of a development on a site, particularly in relation to larger than typical sites.

9. HRZ-S2 Building Height Control 2

Assessment criteria where the standard is infringed:

- 1. Streetscape and visual amenity effects;
- 2. Dominance, privacy and shading effects on adjoining sites; and
- 3. Effects on the function and associated amenity values of any adjacent open space and recreation zone;
- 4. Wind effects; and
- 5. The siting of a development on a site, particularly in relation to larger than typical sites.

Medium Density Residential Zone - MRZ

10. HS2-P3-Rec29: Enable housing to be designed to meet the day-to-day needs of residents, <u>including by and encouraging</u> a variety of housing types, sizes and tenures to cater for people of all ages, lifestyles, <u>abilities and impairments</u>.

11. Medium Density Residential Zone – Introduction

...

The Medium Density Residential Zone accommodates a range of compatible non-residential uses that support the needs of local communities. Incompatible non-residential activities are not anticipated in this zone.

The Papakāinga Design Guide may be relevant within the Medium Density

Residential Zone. This is a non-statutory document which sits with other Design

Guides in Part 4 of the District Plan.

Precincts within the Medium Density Residential Zone include Character Precincts, the Mt Victoria North Townscape Precinct, and the Oriental Bay Height Precinct.

12. MRZ-P12 Tapu Te Ranga - 16-50 Rhine Street, Island Bay

Facilitate the integrated development of the Tapu Te Ranga land (16-50 Rhine Street, Island Bay) in a manner that:

- 1. Identifies and appropriately addresses any geo-technical and contamination issues:
- 2. Incorporates planting and landscaping to provide visual screening and integrate development into the surrounding environment; and
- 3. Fulfils the intent of the Residential Design Guide and Papakainga Design Guide where relevant and applicable.

13. MRZ R3 Home Business

- 1. Activity status: Permitted Where:
 - a. The site is occupied by a residential building and used for residential
 activities by <u>at least one person</u>, <u>who is an employee or equivalent</u>
 <u>engaged in the home business</u>, <u>and lives the person or persons living</u>
 on the site as their principal place of residence;
 - b. ...
 - c. ...

14. MRZ-P14 Non-residential activities and buildings

Only allow Provide for non-residential activities and buildings that:

- 1. Support the needs of local communities;
- 2. Are of an intensity, scale and design that is consistent with the amenity values anticipated for the Zone;
- 3. Contribute positively to the urban environment and achieve attractive and safe streets:
- 4. Reduce reliance on travel by private motor vehicle;
- 5. Maintain the safety and efficiency of the transport network; and
- 6. Are able to be adequately serviced by three waters infrastructure or can address any constraints on the site.; and
- 7. Are integrated into residential developments where possible.

15. MRZ-S1 Building Height Control 1

•••

Assessment criteria where the standard is infringed:

- 1. Streetscape and visual amenity effects;
- 2. Dominance, privacy and shading effects on adjoining sites; and
- 3. Effects on the function and associated amenity values of any adjacent open space and recreation zone; and
- 4. The siting of a development on a site, particularly in relation to larger than typical sites.

16. MRZ-S2 Building Height Control 2

Assessment criteria where the standard is infringed:

- 1. Streetscape and visual amenity effects;
- 2. Dominance, privacy and shading effects on adjoining sites; and
- 3. Effects on the function and associated amenity values of any adjacent open space and recreation zone; and
- 4. The siting of a development on a site, particularly in relation to larger than typical sites.

17. MRZ-S4 Boundary Setbacks

Buildings and structures must be set back from the relevant boundary by the minimum depth listed in the yards table below:

Yard	Minimum Depth
Front	1.5 metres
Side	1 metre
Rear	1 metre (excluded on
	corner sites)
Rail corridor boundary	1.5 metre

This standard does not apply to:

- a. Site boundaries where there is an existing common wall between 2 buildings on adjacent sites or where a common wall is proposed; and
- b. Fences or standalone wall;
- c. <u>Uncovered decks and uncovered structures no more than 1m in height</u> above ground level; and
- d. Eaves up to 1m 600mm in width.

Large Lot Residential Zone - LLRZ

18. LLRZ-P8 Infrastructure

Ensure that new buildings can be appropriately serviced by three-waters
infrastructure, either on-site or council reticulated public infrastructure that is able to accommodate the demand generated by the proposed activity within the building.

APPENDIX 2 – MR WHITTINGTON'S LEGAL REPLY TO HEARING STREAM 2

Before Independent Hearing Commissioners Wellington City Council

In the matter of

The Wellington City Proposed District Plan

Reply (Legal Points) Hearing Stream 2

29 May 2023



Reply (Legal Points) Hearing Stream 2

1 Matters addressed

- 1.1 These reply submissions address:
 - (a) The Council's approach to qualifying matters;
 - (b) What is a "site-specific analysis" for the purposes of s 77L;
 - (c) The retirement village parties' argument about policy 5 of the MDRS:
 - (d) The Panel's analogy between assessment of ONLs and the Council's approach to character precincts; and
 - (e) Whether MRZ-PREC-03 requires reliance on a qualifying matter.

2 Qualifying Matters

- 2.1 The Council's approach to qualifying matters has previously been explained but generally in addressing associated questions such as the ISPP v Sch 1 issue (which relies on s 80E), as opposed to the process for establishing a qualifying matter (ss 77G(6) and 77I-77L).
- 2.2 In general, the Council's approach has been that where a rule or standard modifies (so as to be less enabling) the MDRS, or the height or density of urban form from that which would be required by policy 3, that engages ss 77G(6) and 77I and policy 4 of the NPS-UD, and requires a qualifying matter assessment.
- 2.3 Matters which may generally be seen as imposing a restraint on development, but which do not result in the modification of building heights and densities are not qualifying matters. For example, the wind provisions require an assessment when building over a certain height and, depending on the effects found, may limit the height a developer can build to without undertaking wind mitigation. But the plan still provides for the applicable MDRS or policy 3 height regardless. That does not engage policy 4 and is not therefore a qualifying matter. The same applies to three waters infrastructure issues.

- 2.4 Appendix 5 of the Hearing Stream 1 Officers' Reply contains a table listing qualifying matters proposed by the Council and their justifications. These include:
 - (a) Areas subject to coastal and natural hazards (the MDRS may not be undertaken in such areas as a permitted activity).
 - (b) Heritage buildings, items and areas (on such sites the MDRS is not a permitted activity and in the City Centre Zone the otherwise required policy 3 heights and density is not enabled).
 - (c) Sites and Areas of Significance to Māori (the MDRS may not be undertaken as a permitted activity within the extent of the SASM, though it may be able to be to the extent it is achievable elsewhere on the particular site).
 - (d) Areas subject to flood inundation, overland paths and stream corridors, or the fault hazard overlay (where the MDRS cannot be undertaken as a permitted activity).
 - (e) The Airport Noise Overlay (the MDRS may not be undertaken as a permitted activity).
 - (f) Character Precincts (some of which limit heights and densities to those provided for by the MDRS where policy 3 would require higher and greater density, and in all cases to require resource consent for the construction of new buildings).
 - (g) Mount Victoria North Townscape Precinct (which limits new permitted activity development by requiring resource consent for new development to consider townscape effects, and which limits height and bulk and location standards to those provided for by the MDRS).

2.5 As well:

- (a) The Waterfront Zone (which limits the construction of residential dwellings, including the site coverage and height).
- (b) Viewshafts (which limits construction where the building will intrude on any of protected views).

2.6 I note that, for the purpose of modelling the impact of qualifying matters on development capacity, the Council has taken a more inclusive approach, to ensure that it captured the impact of provisions that do not directly modify building heights or density relative to the MDRS or policy 3, but which nonetheless may have a less enabling effect.

3 "Site-specific analysis" – s 77L

- 3.1 Section 77L(c) requires a site-specific analysis of a specific characteristic to enable determination of the geographic extent of a proposed qualifying matter. In the table addressing the evidence base for character areas as a qualifying matter, Ms Woodbridge for Kāinga Ora notes that "the test is to understand if intensification on a site-by-site basis would be incompatible with the specific characteristics of the **site** not the streetscape or wider area" (the emphasis is Ms Woodbridge's).
- "Site" is not defined in the RMA. In the context in which it appears here, s 77L, it cannot have a rigid meaning, for example, of "lot" or "allotment" ("allotment" being defined in s 218), but instead will vary relative to the nature of the qualifying matter and the specific characteristic it seeks to accommodate. A "lot-by-lot" analysis cannot be required to support every qualifying matter. Rather, what constitutes the "site" to which the requisite analysis must be specific, depends on the nature of the qualifying matter proposed. For example, a wastewater pipe that serves a number of properties but which cannot for whatever reason be increased in capacity will practically constrain the ability to intensify on all the lots it serves being more fine-grained than that does not otherwise assist.
- 3.3 Where, as in relation to the character precincts, the characteristic is identified by reference to the cumulative contributions of multiple lots to a particular aesthetic, it is not sensible to address that characteristic on a lot-by-lot basis. None of the properties could by themselves justify a qualifying matter it is their cumulative effect that justifies the approach. By the same token, a site-specific analysis would not be achieved by addressing each proposed character precinct as its own site. That is because the applicable framework allows room for legitimate debate about whether a particular street or collection of properties possesses such character as to justify accommodation by way of modified urban form provisions.

3.4 How this plays out in practice is demonstrated by Mr Lewandowski's assessment of sub-areas, and proposed additional street additions to character precincts in his reply evidence. More generally, this same approach has been taken in all aspects of the Council's evidence base – the Boffa Miskell and other reports, the s 32 report, and s 42A and supplementary reports.

4 MDRS Policy 5

- 4.1 Mr Hinchey, on behalf of RVA and Ryman (**retirement village parties**), submitted that the Council's proposed Design Guide was inconsistent with policy 5 of the MDRS. This was because the Design Guide imposed such strict requirements that it did not "provide for" non-permitted developments and, being mandatory, stretched beyond the concept of "encouragement" of high-quality design.
- 4.2 As a preliminary point, the Design Guides are currently subject to a process of expert witness caucusing directed by the Panel. This argument will therefore have to be determined in light of the Design Guide that emerges from that process. Accordingly, I will not address the elements of the submission based on the "rating system" and number of guidance items, 1 but will focus on its mandatory nature.
- 4.3 I do not consider that the dictionary definition identified for "provide" ("make available for use") is relevant. In policy 5 of the MDRS, mirroring how it is used in s 6 of the RMA, the phrase is "provide for", which means something different that simply "provide". It simply describes the mechanism that the plan must contain "provisions" addressing non-permitted developments.
- 4.4 I agree that the "provisions" relating to non-permitted development must generally be enabling, as anticipated by the new legislation, but all that this means is that non-permitted developments must be controlled or restricted discretionary. That conclusion derives from the meaning of "plan-enabled" in the NPS-UD (which, as the retirement village parties suggest, is linked by context to the MDRS).² By providing for non-

4

Submitter legal submission - Ryman and RVA [346, FS128 & 3501, FS126] (wellington.govt.nz) at [43]-[44].

Submitter legal submission - Ryman and RVA [346, FS128 & 3501, FS126] (wellington.govt.nz) at [48].

- permitted development as restricted discretionary, the plan provides for non-permitted development.
- 4.5 It also encourages high-quality design. Not addressed in the retirement village parties' argument is that the "encouragement" in the second clause of policy 5 is offset from the "provision for" non-permitted development in the first clause by "while". This is important. It acknowledges that the encouragement of high-quality design will necessarily detract in some way from the provision for non-permitted development. Otherwise it would simply have said "provide for developments not meeting permitted activity status and encourage high-quality developments." The rules giving effect to this policy must pull in slightly different directions at the same time.
- 4.6 The retirement village parties' argument is that a mandatory design guide goes beyond encouraging and amounts to requiring high-quality. But what the Design Guide requires is simply a process intended to encourage a design outcome that is high-quality. It does not take away the design process from the developer. The outcomes it seeks have many methods of achievement. As noted in the Introduction to the Residential Design Guide "The guidance that follows here is not meant to replicate or replace [plan] rules but rather to ensure best practice design approaches and encourage built outcomes that both support the District Plan objectives and meet the Design Guides' overarching principles and outcomes."
- 4.7 It is undeniable that demonstrating, as part of a consent application, that a good design process has been followed, and that the intent of the Design Guide is fulfilled, will add some cost to development. But cost comes with any rule framework providing for a restricted discretionary activity, since consent is required and information will need to be gathered and submitted to achieve consent. It is also consistent with "encouragement" as anticipated by policy 5's inclusion of "while". It follows that the retirement village parties' argument is not so much a legal one about consistency with policy 5, but instead a merits argument that in terms of s 32 the costs imposed by the Design Guide outweigh the benefits.

5 Analogy between ONLs and Special Character Areas

5.1 The Panel has sought comment on the validity of an analogy between identifying ONLs and special character areas, insofar as both might

- involve areas/properties that make little contribution (and may even make a negative contribution) to the broader area defined.
- 5.2 Subject to qualifications set out below, I consider that there is a helpful conceptual similarity between the approach that the Courts have developed to identify ONLs for the purpose of ensuring that they are protected from inappropriate subdivision, use, and development under s 6(b) of the RMA, and the approach that the Panel should take to identifying the appropriate ambit and location of character precincts.
- 5.3 In Wakatipu Environmental Society Inc v Queenstown Lakes District
 Council the Environment Court proposed a series of factors (the WESI
 factors) relevant to assessing the quality of a landscape.³ Subsequent
 cases have categorised the factors as bio-geographical or biophysical
 elements, perceptual elements, and associative or relationship
 contributions.⁴ The first of those factors is about the inherent physical
 attributes or morphology of the landscape, the second about aesthetic
 perception, and the third about the value that the landscape has to people
 and the meanings people associate with the landscape.
- 5.4 Similarly, the approach that the Council has taken to the identification of character precincts is reflected in the definition of "character". The definition contains elements highlighting the inherent physical attributes of the area, how the resulting aesthetic is perceived, and the experiential value that has.⁵
- 5.5 When the definition is applied, naturally each area will have properties that substantially contribute to the character, and those that do not (or detract), in the same way as an ONL may have some compromised elements, but nonetheless be outstanding as a whole.
- 5.6 The analogy can only be taken so far, however. I express the same qualifications that I did in reply submissions on HS1,⁶ including that focusing on the analogy poses a risk of distracting from implementation of the NPS-UD and (given this is a qualifying matter) ss 77J and 77L on their terms.

4 Man O'War Station v Auckland Council [2014] NZEnvC 169 at [59].

³ [2000] NZRMA 59 at [80].

See also the methodology of the Boffa Miskell Review: <u>Pre-1930 Character Area Review</u> (wellington.govt.nz).

⁶ Attachment 2 - Right of reply responses Mr Nick Whittington (wellington.govt.nz).

5.7 In particular, unlike the approach to ONLs, where planning consequences follow from identification,⁷ in identifying the appropriate ambit of character areas ss 77J and 77L require that the consequences are brought into the equation.

6 MRZ-PREC-03

- 6.1 MRZ-PREC-03 provides for the Oriental Bay Height Precinct. The Precinct seeks to manage development in a manner that recognises the unique characteristics and development potential of the Precinct.
- 6.2 Plan protection was first imposed following an Environment Court decision in 1998, and the Council has sought to maintain that position. This has been discussed in Mr Patterson's s 42A report and in his reply evidence.
- 6.3 The Precinct sits within a walkable catchment of the City Centre Zone and is thus required to allow for at least six storeys. Considered at a precinct level, it broadly achieves this by offsetting lower heights on some sites with a rule framework providing for eight or potentially nine storeys on other sites (25.6m and 27.6m). In relation to other controls, such as the number of permitted residential units, the rule framework is more lenient than the MDRS (as permitted by s 77H).
- On this basis, the Council has not approached the Precinct as a whole as engaging policy 4 of the NPS-UD. If that approach is not considered appropriate, then the upshot is that for the particular sites where less enabling heights are provided for on the Precinct Map there is no evidence base that meets the strictures of ss 77J and 77L.

Date: 29 May 2023

Nick Whittington

Counsel for the Wellington City Council

⁷ Attachment 2 - Right of reply responses Mr Nick Whittington (wellington.govt.nz) at [2.3].

APPENDIX 3 – DR ZAMANI'S RESPONSE TO KAINGA ORA HEIGHT AND RE-ZONING PROPOSALS

Before the Hearings Panel At Wellington City Council

Under Schedule 1 of the Resource Management Act 1991

In the matter of the Proposed Wellington City District Plan

Between Various

Submitters

And Wellington City Council

Statement of evidence of Dr Farzad Zamani on behalf of Wellington City Council (Urban Design)

Date: 29 May 2023

INTRODUCTION

- 1 My full name is Farzad Zamani. I am employed as the Te Ngakau Programme Manager at Wellington City Council but I was formerly the Urban Regeneration and Design Manager at Wellington City Council. Prior to this I held the position of Manager of the Council's Urban Design Team (RMA). This is a position that comes under the umbrella of my current role.
- I have prepared this statement of evidence on behalf of the Wellington City Council (the **Council**) in respect of technical related matters arising from the submissions and further submissions on the Proposed Wellington City District Plan (the **PDP**).
- 3 Specifically, this statement of evidence relates to my urban design comments on the proposed re-zoning and height change maps presented by Mr Rae on behalf of Kainga Ora Homes and Communities.
- 4 I am authorised to provide this evidence on behalf of the Council.

QUALIFICATIONS AND EXPERIENCE

- I hold the qualifications of Bachelor of Architecture, Master of Architecture (Design) and PhD in Urban Design.
- I have worked for Wellington City Council for 2 years and 11 months.

 Previously, I have worked both in private practice and academia for more

 5 years.

7 I am a member of Urban Design Forum National Committee, NZIA, Urban Development Institute of New Zealand and I am a certified RMA hearings commissioner.

CODE OF CONDUCT

I have read the Code of Conduct for Expert Witnesses contained in the Practice Note issued by the Environment Court, which came into effect on 1 January 2023. I have complied with the Code of Conduct in preparing my evidence and will continue to comply with it while giving oral evidence before the Environment Court. My qualifications as an expert are set out above. Except where I state I rely on the evidence of another person, I confirm that the issues addressed in this statement of 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 my expressed opinions.

INVOLVEMENT WITH THE PROPOSED DISTRICT PLAN

- As the former manager of the Council's Urban Design Team (RMA), I have been involved in the development of the PDP since I joined the Council in October 2020. I have been led the review of the Design Guides and provided urban design advice to the District Planning Team throughout the period of the District Plan Review.
- In addition to preparing the suite of Design Guides, the team has assisted with the development of specific objectives, policies, rules and standards throughout the zone-based chapters of the District Plan.
- Specifically, I have provided advice in relation to the following:
 - a. City Outcomes Contribution
 - b. Zone boundary extents
 - c. Significant height changes and minimum building height

- d. Minimum ground floor height requirements
- e. Separation and building depth (as more effective and achieving better outcome than site coverage)
- f. HIRB changes
- g. Outdoor living space 64m2 minimum and reinforce why 8x8 is necessary
- h. Minimum sunlight to public space
- i. Purpose and benefit of the following standards:
- j. Minimum ground floor height
- k. Minimum sunlight access to public space
- I. Verandah control
- m. Active Frontage Control and non-residential activity frontage control
- n. Minimum residential unit size
- o. Residential outdoor living space
- p. Minimum building separation distance
- q. Maximum building depth
- r. Outlook Space
- 12 I am now the Te Ngakau Programme Manager. Due to my conflict of interest, I cannot comment on Te Ngakau civic square precinct provisions.

SCOPE OF EVIDENCE

- 13 My statement of evidence addresses the proposed re-zoning and height change maps presented by Mr Rae on behalf of Kainga Ora during the Stream 2 Hearings.
- 14 I address each of the maps in turn below.
- Map 1 (Linden) I partially agree with the proposed rezonings to HRZ.

 Considering the proximity of Linden to Porirua and the Linden Train

 Station, its accessibility to the state highway, and the lack of other specific urban features, the increase in density can be supported.

However, from an urban quality perspective, I believe that this increase in the HRZ area needs to be balanced as this area is still the furthest point from the central city and the many amenities it provides. Hence, it may be more appropriate to have a transition zone (height area of 14-18m) instead of 21m.

Map 2 & 3 (Tawa) — I agree with the extension to the HRZ and the centre. The centre increase will create a more continuous active frontage and will justify the expansion of the HRZ in this area. In addition, these zone changes will provide a higher level of commercial activity and more amenities for future residents.

17 Map 4 (Churton Park) – I disagree with the height increase proposal.

This level of intensification in this location is not appropriate, as I consider there are not adequate quality urban amenities locally. Hence, the amenities required will need to be accessed in other centres or the central city, which will lead to increased traffic and other issues.

Map 5 (Newlands) — I agree to the extension of the height control areas, but not the height increase. There is little existing investment in Newlands and this area is difficult to access from Johnsonville, the State Highway, and any train stations.

19

Map 6 & 7 (Johnsonville) — I agree with all of the proposals by Kainga Ora in Johnsonville. However, I note that there are certain topography issues and issues with narrow streets which will need to be considered and worked through before accepting any rezoning or height change proposals.

20 Map 8 (Khandallah) & 9 (Ngaio) – I partially agree with the proposed rezonings. I believe that there is some scope for extension of high density. However, considering the small scale of the centre and the lack of local amenities, including the lack of investment planning in this area, I believe this extension should be limited to the blocks which adjoin the centres and the train stations.

- 21 Map 10 (Crofton Downs) I do not believe that the proposed rezonings are necessary. While I believe that further intensification of this area will have some benefits, I consider the benefits are outweighed by the potential for unintended consequences. This is due to the urban grain, lot sizes, and topography. All of these factors may result in sparse apartment development in an area predominantly occupied by single level detached houses.
- Map 11 (Karori) I disagree with the extension of the height control areas and the proposed height increases. Although Karori is an established suburb, it is still located a great distance from the centre of the city. The suburb does not have the adequate urban amenities required for this level of growth, including public transport services.
- Map 12 (Kelburn), Map 13, 14, 15 (City Centre), and Map 16 (Aro Valley) I agree with the height increases in principle. However, considering the complexity of this entire area, I believe that the extent of increase will need to be assessed block by block and I do not consider that Kainga Ora have done this. There are numerous issues with increasing the height in these areas which need to be considered, including wind, views, urban grain and the street/public realm.
- Map 17 (Brooklyn) I partially agree with the increase in height control areas and height. This is due to the close proximity of Brooklyn to the city. It may be acceptable to increase the height around the Brooklyn centre. However, this needs to be considered in relation to issues of wind given Brooklyn is within a high wind zone. Access to public transport also needs to be considered as the area is not well serviced by existing public transport services.
- 25 Map 18 & 19 (Newtown) I partially agree with the expansion of the HRZ and the proposed height increases. Considering the proximity of Newtown to the central area, the hospital, and many other amenities such as the university and schools, I agree that some increase in height

may be reasonable. However, the impact of this height on the Town Belt (east and west), the narrow streets, and the impact of the increases on character precincts needs to be considered and I cannot see evidence that Kainga Ora have done this.

Map 20 (Island Bay) — I agree with the proposed height increases and the extension of the height areas to the north. However, I do not agree with the proposals to the west and the south. This is due to the proximity of the northern areas to the central area compared to that of the southern and western parts. Island Bay is on a key transport route, with close proximity to Newtown and other amenities. Hence, I believe that some increase in height may be reasonable purely from an urban design perspective.

27 Map 21 (Hataitai) – I disagree with the proposed height increases and re-zonings. Even though Hataitai is located within close proximity of the central area on a map, there is a major geographical barrier between the city and this suburb, being Mount Victoria and the Town Belt. This significantly limits the accessibility of the suburb. In addition, the suburb receives a small amount of sunlight, which makes it less appropriate for this level of intensification.

Map 22 (Kilbirnie) – I agree with the proposed height increases and rezonings. I consider this area is similar to Johnsonville from a public transport, services, and amenities perspective. I believe the area can accommodate the proposed increase in intensification.

28

29 Map 23 (Miramar) – I disagree with the proposed height increase and the extent of the HRZ re-zonings. Miramar has a lack of access to the central area and major centres and amenities. There is also limited access to green space within the suburb. For these reasons, I believe that the level of intensification proposed is not appropriate.

Date: 29 May 2023

Dr. Farzad Zamani

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APPENDIX 4 – TRAFFIC CONCEPTS REPORT



PO Box 3737
Richmond 7050
Tasman District
M +64 (0) 21 243 1233
E+gary.clark@traffic-concepts.co.nz

27 August 2021 Ref: 0697

Cedric Carter
Project Manager
Prime Property Limited
WELLINGTON

Dear Cedric

Spenmoor Street Development, Newlands, Wellington City Road Capacity and Intersection Analysis Assessment

Traffic Concepts has been commissioned to provide an assessment of the potential road capacity for the older section of Spenmoor Street and the performance of the Intersection of the Wakely Road/Newlands Road intersection. I have now completed my analysis which has included the following:

- site visits
- collecting traffic data
- turning movement surveys
- review of previous reports by other consultants
- SIDRA modelling of the proposed roundabout at Wakely Road/Newlands Road intersection
- Assessment of the capacity of Spenmoor Street

These matters are discussed in detail in the assessment below. The assessment below also draws on past information completed as part of the past consent applications which includes technical analysis completed by other consultants.

1. Introduction

The demand for houses in Wellington City is leading to greater pressure to use good available land to meet the future needs of the residents for the city. In recognition of this need it is proposed to increase the number of lots within the Spenmoor Street development.

The Spenmoor Street development has a consent limit on the number of lots due to downstream constraints which include the lower section of Spenmoor Street and the intersection of Wakely Road and Newlands Road. The limit on the number of lots came from work undertaken on the performance of the Wakely Road/Newlands Road intersection which showed that the Level of Service (Los) reached E at certain times of the day. A limit of 230 homes was put on the Spenmoor Street development to address this adverse effect.

With the increase in housing needs some options were investigated around how the capacity of the intersection of Wakely Road and Newlands Road could be increased. A concept design for a mini roundabout was developed and presented to Wellington City Council as a possible mitigation measure to address the existing performance issues at the intersection. Initial SIDRA work also showed that this significantly improved the LoS at the intersection for the increased traffic from the 230 homes. It also suggested that more homes could be built within the Spenmoor Street Development with the LoS/delays being no worse than the already approved 230 lots.

Provisionally Wellington City Council is allowing for 300 homes within the Spenmoor Street Development in its forward planning. This report looks at the ability of lower sections of Spenmoor Street and the intersection of Wakely Road and Newlands Road to accommodate the 300 homes.

The analysis below is broken into two components - the road capacity assessment of the lower section of Spenmoor Street and the performance of the Wakely Road/Newlands Road intersection based on 300 homes.

2. Spenmoor Street

This section provides an assessment of the road capacity for the lower section of Spenmoor Street. The analysis includes traffic count data, trip generation calculations and an analysis of the road capacity.

2.1. Traffic Counts

A traffic count was completed on the lower section of Spenmoor Street to better understand the existing traffic volumes on this road and also assist in calculating a more accurate and robust trip generation rate for the upper development. The trip

generation rate for new homes (which will be based on the existing homes) is the key factor in determining the capacity of Spenmoor Street and the performance of the nearby intersection.

The traffic count was carried out from 04 June 2021 to 13 June 2021. It should be noted that 07 June 2021 was a public holiday (Queens Birthday). The recorded traffic flow on the Monday were around 65% of the normal daily flows.

The traffic counter was located outside 7 Spenmoor Street and collected vehicle movements in both directions.

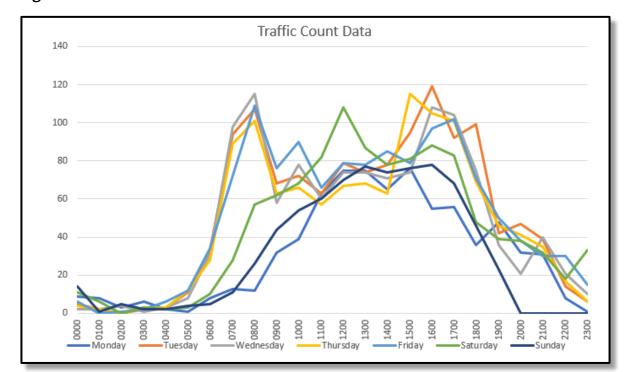


Figure 1 shows the traffic count data for the virtual count week.

Figure 1: Spenmoor Street Weekly Count

As shown the traffic flows on the Monday are much lower than the rest of the week which was due to the public holiday. The adjusted weekday flows (over four days) were around 1,230 vehicles per day. The Saturday flows where relatively high compared to the weekday and Sunday flows. The flows on Monday (public holiday) and Sunday were very similar (around 745 vehicles per day).

The peak hourly flows for the weekday were 108 vehicles in the AM Peak (08:00-09:00) and 107 in the PM Peak (16:00-17:00).

The traffic counter also picked up the vehicles associated with the construction of homes within the Spenmoor Street Development. A count of construction vehicles within the development area showed around 80 vehicles. This was a snapshot of construction traffic and did not account for some day-to-day movements of other construction traffic. Accordingly, there are around 240 vehicle movements (one in and

one out for each vehicle) associated with the construction of homes. It is likely that these trade vehicles noted within the development would also make other trips during the day for breaks and/or picking up materials.

2.2. Trip Generation

As noted above, the collection of traffic count data will assist in determining the trip generation of the existing homes within the Spenmoor Street Development. The trip generation rate calculation included some of the homes on the lower section of Spenmoor Street. The construction traffic was removed from the calculation of the dwelling trip generation rate.

For the purpose of calculating the trip generation rate, it was assumed that there were around 240 construction trips per day for the period of the traffic count. This allowed for the vehicle count noted in the survey and other movements that would occur during the day.

A trip generation rate of eight trips per dwelling per day was calculated which excludes construction traffic. More details around the trip generation and traffic are provided below.

It should be noted that the trip generation rate used for the initial assessment of the performance of the Wakely Road/Newlands Road intersection was 9.7 trips per dwelling per day. This trip rate included construction traffic as it had a limited amount of development in the Spenmoor Street Development area.

2.3. Road Capacity

The operating capacity of the lower section of Spenmoor Street is constrained by the existing carriageway width and parked vehicles on the road. While the management of on-street parking will assist in improving the capacity of Spenmoor Street, the carriageway width will be the determining factor of its overall capacity.

It is also important to note that the calculation of road capacity relates to the Level of Service (LoS) which incorporates delays and safety. Consideration and use of some of the technical information provided in past reports has also been used in this analysis which is mainly Tim Kelly's report dated June 2014. This analysis did not consider the different LoS for Spenmoor Street.

The LOS is a qualitative measure of the operational conditions within a traffic stream. There are six different LoS ranging from A through to F, a LoS A being free flow and LoS F being a congested road network. It is not practical to provide LoS for all road networks as it is too costly. Typically, the most efficient LoS for urban roads is around LoS C or D. Spenmoor Street is easily operating at LoS A and has capacity to accommodate higher traffic flows.

The technical capacity of a road depends on a number of different factors including speed, road geometry, number of intersections/accesses, headway gaps, vehicle composition and driver population. In perfect conditions the capacity of a traffic lane is 2,400 vehicles per hour and is a LoS A. However, in most ideal situations the capacity is around 1,800 vehicles per hour per lane which is still a LoS A.

The capacity of Spenmoor Street will be much lower than the ideal situation above due to the geometry of the road and the presence of on-street parking. The road geometry restricts the capacity due to its width, with opposing traffic needing to slow down to pass each other safely where residents are parked on both sides of the road. The operating speeds are also lower than the optimal travelling speed which further reduces the road capacity.

Another determining factor is the makeup of the driving population. The different needs of different drivers change the capacity. A broad example of these differences is a person going to work will drive differently to a person going on holiday. Also, the driving abilities of different drivers, as well as age affect the driver population.

The carriageway width of Spenmoor Street is between 6.6 metres to 8.8 metres wide. The narrowest section of 6.6 metres is marked with broken yellow lines to improve its moving lane width. Generally, the available road width is around 7.2 metres along most of its length.

Inset parking bays were installed in 2019 to increase the available road width. Notably this was completed after the analysis of Tim Kelly in 2014. These improvements along with broken yellow lines has been effective in managing the available road width for the movements of vehicles and increasing the capacity of the road.

Spenmoor Street, following these changes allows for two-way traffic flow along most of its length within a comfortable carriageway width of more than 6.6 metres. In calculating Spenmoor Street's operating capacity, the ability to provide for two-way traffic along its length and within an effective unimpeded carriageway will significantly increase the through movement. It should be noted that some areas such as the start of Spenmoor Street and at the old turning head parking on both sides may reduce the roadway to one lane. This may need to be managed if two-way traffic is to be maintained.

There are a number of documents widely used in New Zealand to assess the capacity of roads. The commonly used NZS:4404 standards for Land Development and Subdivision provide guidance around road classification and expected traffic flows. It should be noted that this is not a calculation of capacity but merely guidance. It is also important to note that modern thinking around liveable streets deliberately seeks to narrow roads,

to provide better outcomes for all road users of the streets and those that live next to them.

Table 3.2 within NZS 4404:2010 provides a series of road cross sections along with the function of the road and the typical traffic volumes. Based in the information the traffic volumes are likely to be aimed at LoS A.

For road widths around 5.5 metres the traffic volumes are less than 2,000 vehicles per day. The road classifications then jump up to a traffic lane width of 8.4 metres (two lanes at 4.2 metres) which are expected to carry volumes of up to 8,000 vehicles per day. These traffic volumes are conservative as real-life examples such as Mt Victoria Tunnel in Wellington carries more than 30,000 vehicles per day within a carriageway less than seven metres. Other narrow roads with narrow vehicle lanes that carry high traffic flows include Adelaide Road and Constable Street.

Spenmoor Street has an effective road width of seven metres which falls between the two cross sectional examples in NZS 4404:2010. Accordingly, it is reasonable to assume that Spenmoor Street can carry flows between 2,000 and 8,000 vehicles per day and closer to 8,000 vehicle per day. Conservatively Spenmoor Street could carry around 5,000 vehicles per day as it is able to provide two-way flow.

The calculation of the road capacity of Spenmoor Street below is based on Austroads Guide to Traffic Management "Roadway Capacity - Part 2" and "Traffic Studies and Analysis – Part 3".

Table 5.1 of Guide to Traffic Management Part 3 sets out typical hourly mid-block capacities for urban roads. Within this table the typical rates for one direction of traffic range from 600 to 900 vehicles per hour which is equivalent to around 6,000 plus vehicles per day.

Section 3 of Guide to Traffic Engineering Practice Part 2 – Road Capacity provides formulas to calculate the capacity of a road. It should be noted that this is for a rural road but does provide some level of guidance.

As noted above there are six different LoS ranging from A through to F. LoS A is a condition of free-flowing stable traffic stream with LoS F being unstable with long delays and queues. Typically, arterial roads have a target LoS service being no worse than LoS D. The existing LoS for Spenmoor Street is estimated to be around LoS A with traffic moving relatively freely along the road with the need to stop being relatively low. The target operating LoS for this type of road is expected to be around LoS C. This would suggest more traffic can use the road.

The practical operating capacity of any road is around 2,400 vehicles per hour per lane. However, this is under ideal situations (motorway for example) for short sections of

road. The realistic operating capacity of a road has been measured as high as 2,200 vehicles per lane per hour with 1,800 vehicles per lane per hour as the accepted operating design capacity. The formula for calculating operating capacity uses the 1,800 vehicles per lane per hour and applies adjustment factors for the key elements noted above, such as road layout. Road capacity is reduced when there are reduced or no shoulders, reduced lane widths, vehicle composition, type and terrain.

However, the peak operational capacity of a two lane, two-way road (one lane in each direction) is more practically around 2,800 vehicles per hour (total for both directions). This operational flow is for a road with traffic lanes being 3.7 metres in width and shoulders of 2.0 metres (parking lane).

By using Austroads we can calculate the road capacity for Spenmoor Street. This is done with the formula (Austroads Guide to Traffic Engineering – Part 2 Page 8) is provided below:

$$SF_i = 2,800(v/c)_i f_d f_w f_{hv}$$

The various parts of the equation are adjustment factors that are provided in the Austroads guide noted above. The key component of the calculation relates to the use i which is the LoS.

Using an expected LoS of C the total Service Flow Rate (SFi) for a road in rolling terrain, with a directional distribution of 80/20 and width of 3000mm with no shoulders, the calculated road capacity is around 566 vehicles per hour. This calculation assumes a road width of 6000mm. Accordingly, the road capacity would be more than 566 vehicles per hour calculated as the road width is wider than 6000mm.

However, the calculation is useful in helping understand what the capacity could be.

Therefore, based on the above different approaches to assessing the capacity of Spenmoor Street, it is reasonable to assume that the operational capacity of Spenmoor Street is at least 600 vehicles per hour at peak times and around 6,000 vehicles per day.

It should be noted that while this is the operational capacity of the road, it is not suggested that it is appropriate for traffic volumes this high to occur along Spenmoor Street.

The existing flows on Spenmoor Street are around 1,230 vehicles per day with peak flows of around 110 vehicles per hour. There are around 124 homes that were within the traffic count area. This along with the construction excluded equates to a trip generation rate of 7.9 (say eight) trips per dwelling per household.

Assuming a lot yield of 300 homes within the Spenmoor Street Development and an assumed trip rate of eight per dwelling per day, the increase in the total daily flow would be around 2,400 vehicles per day or around 240 trips in the peak hour. It should be noted

that there are already around 90 homes within the Spenmoor Street Development that have been counted in the traffic count in June 2021. Accordingly based on 7.9 trips per dwelling there are 720 vehicles per day already on the network.

Therefore, based on a trip generation rate of eight trips per day per dwelling and the total movements that would be generated by the existing and future residents the expected total traffic flows coming from Spenmoor Street are estimated to be around 2,910 (1,230 + 1,680) vehicles per day or around 300 movements in the peak hour.

As a sensitivity check against the trip rate, the following calculation takes a higher generation of 10 trips per dwelling per day. Based on this higher rate the existing and future residents would lead to traffic flows of around 3,300 (1,230 + 2,100) per day or around 330.

The expected flows of 2,910 vehicles per day are well below the assessed road capacity of around 6,000 vehicles per day or 6,000 vehicles in the peak hour. Even increasing the trip generation rate to 10 trips per dwelling per day is still below the 6,000 vehicles per day calculated capacity. Accordingly, there are no capacity constraints for the suggested 300 homes for the Spenmoor Street Development.

2.4. Road Safety

A detailed search of the Waka Kotahi crash database was undertaken for Spenmoor Street for the five-years from 2016 to 2020. The part crash year of 2021 was also included in the search.

There have been two reported crashes within the search area since 2016.

Table 1 provides details of the reported crashes.

Road	Location	Date	Collision Ref	Accident Description	Severity
Spenmoor Street	Outside Number 27	30/10/2019	201973081	A motorist was carrying out a u turn and accelerated too hard and went over a retaining wall.	Minor injury
		03/03/2018	201812053	The driver had a few beers before the crash. The rider of a moped lost control turning at Grumman Lane and slid over. The rider had been drinking at a party.	Minor Injury

Table 1: Crash History (Source: Waka Kotahi)

As noted above, there have been two reported crashes within the search area. Both crashes were not related to the road environment or geometry. There are no inherent safety deficiencies on Spenmoor Street based on the crash data.

Generally, the road environment provides for two-way traffic with traffic calming being implemented to reduce vehicle speeds. Spenmoor Street provides a safe environment for road users.

3. Wakely Road and Newlands Road Intersection

This section builds on the analysis above around anticipated traffic flows assuming 300 lots are completed in the Spenmoor Street Development area. It should be noted that around 40 homes have already been completed so the analysis considers the impacts of traffic generated from 260 homes on the intersection of Wakely Road and Newlands Road.

The existing intersection operates reasonably well for the Newlands Road traffic. However, with increased flows now coming from Wakely Road long delays are starting to develop, especially for the right turn out of Wakely Road.

In reviewing the performance of the existing intersection, an alternative layout (mini roundabout) was tested to see if further development could be accommodated on the Wakely Road approach and the intersection overall. This simplified testing assessment showed some noticeable improvements in the operation of the intersection. Council considered the outputs from SIDRA and in principle agreed that a roundabout would provide a good solution at the intersection on capacity and safety grounds.

Accordingly, the analysis below includes assumptions around trip distribution, traffic generation and uses SIDRA to assess the performance of the intersection. It should be noted that SIDRA has been used in previous assessments of the intersection which shows that the construction of more than 230 homes in the Spenmoor Street Development area would start to adversely affect the operation of the junction. In response to the need for more homes in Wellington City, it is proposed to construct a mini roundabout at the intersection to improve safely and capacity at this junction. The analysis below tests the performance of the new intersection layout.

3.1. Traffic Count Data

As noted above the traffic flows anticipated from Spenmoor Street will include the existing homes and future homes. The total number of movements from the existing homes along with the remaining future dwellings has been estimated to be around 3,000 vehicles per day, which equates to around 300 vehicles in the peak hour.

Traffic distribution and turning movements have been calculated based on previous survey data and assuming the completed development has 300 homes. The intersection

turning counts were carried out in 2016 and 2019. The two sets of turning counts showed very good alignment especially when considering they were three years apart. The flows on Newlands Road were slightly higher for 2019, but the trip distribution of the flows through the intersection for the two surveys were similar.

An adjustment was also made to the PM peak to account for the longer lower peak at this time due to the different trips' commuters have when they come home from work. Such trips include going to the supermarket, restaurants and bars and recreational activities.

Table 2 shows the anticipated turning movements upon the completion of the development with 300 homes.

Approach	Newlands Ro	ad ards Newlands)	Wakely R	oad	Newlands Road (heading towards the city)		
Direction	Thru	Right	Left	Right	Left	Thru	
07:00-08:00	239	53	188	53	6	1038	
17:00-18:00	1075	115	40	38	33	298	

Table 2: Future turning movements - 300 homes

As shown the flows in and out of Wakely Road increase. As expected, the left turn from Wakely Road in the morning and the right turn into Wakely Road in the evening are noticeably higher as a result of the development when compared to the existing flows (due to the possible 300 lots).

It is also interesting to note that the turning counts showed almost equal exiting flows from Wakely Road in the PM peak.

3.2. SIDRA Analysis

The trip distribution and turning count analysis provided above has been used to develop a SIDRA model of the intersection to enable an assessment of the intersection performance to be completed.

The SIDRA model that was used was peer reviewed and accepted by Council as part of the previous assessment for the Spenmoor Street Development area and has been used for the analysis. The SIDRA model was calibrated against the queue lengths at the intersection and provided a fair representation of the performance of the junction.

The SIDRA model was set up with a tee intersection to reflect the existing layout. The analysis will assess the performance of the intersection with a mini roundabout.

The preliminary design of the mini roundabout has been accepted by Council and also has had a safety audit completed. Changes were made to the design as part of the

recommendations of the safety audit. It is understood that Council will consult with the community about the proposed change to the intersection.

Figure 2 shows the proposed intersection layout with a roundabout.

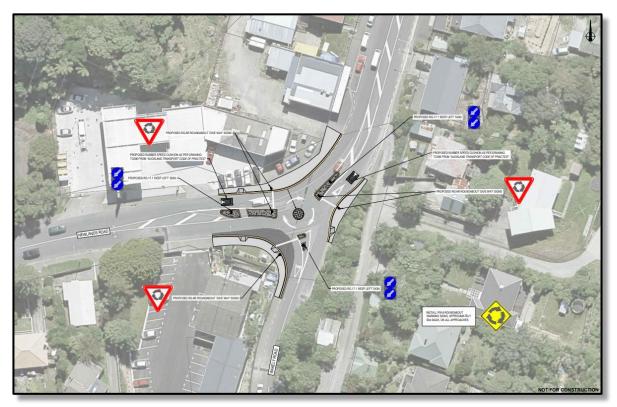


Figure 2: Proposed Mini Roundabout (Source: Stantec)

As shown, each approach has one lane with a short right turn lane provided for the movement from Newlands Road into Wakely Road. Apart from the installation of the roundabout, the most significant change is the introduction of median islands which will provide pedestrian refuges to assist in crossing the roads.

This layout was coded into the SIDRA model to test the performance of the intersection with the traffic flows upon completion of the Spenmoor Street Development area.

3.3. SIDRA Outputs

As noted, the new intersection layout with the turning flows (Table 2) were coded in the SIDRA software which allows for the performance of the intersection to be tested.

The same input parameters used for the existing intersection will be included in the new SIDRA model for the mini roundabout. Changes to the intersection layout and input traffic volumes were the main changes made to the SIDRA model. The outputs include geometric delay.

For completeness the outputs from the previous SIDRA modelling for the intersection have been included below. This table shows the testing of the tee intersection with different scenarios relating to how many homes are constructed. This was done to set

a threshold on the limit of the Spenmoor Street Development area. This formed part of the approval for 230 homes.

Table 3 shows the outputs from the previous SIDRA testing for the existing tee intersection at the AM peak. The SIDRA outputs showed that the AM peak was the critical time period.

		177 Homes 220		220 h	omes	230 homes		250 homes	
		LoS	Delay	LoS	Delay	LoS	Delay	LoS	Delay
	L	LOS C	16.6	LOS C	18.9	LOS C	19.4	LOS C	20.5
Wakely Rd	R	LOS D	28.9	LOS D	33.0	LOS D	33.6	LOS D	35.0
		LOS C	19.3	LOS C	21.9	LOS C	22.5	LOS C	23.7
	R	LOS A	4.3	LOS A	4.6	LOS A	4.7	LOS A	4.7
Newlands Rd	L	LOS A	4.1	LOS A	4.4	LOS A	4.4	LOS A	4.5
		NA	4.1	NA	4.4	NA	4.4	NA	4.5
Newlands Rd	L	LOS A	4.2	LOS A	4.2	LOS A	4.2	LOS A	4.2
	R	LOS A	4.6	LOS A	4.6	LOS A	4.6	LOS A	4.6
		NA	4.2	NA	4.3	NA	4.3	NA	4.3
Intersection		NA	5.5	NA	6.4	NA	6.6	NA	6.9

Table 3: Tee Intersection Scenario Testing (Source: Traffic Concepts Peer Review Report dated 1 July 2019)

As shown, and as one would expect, as the number of homes increases the LoS becomes worse, and delays increase. Wakely Road is the only significantly affected approach which is largely due to the priority control at the intersection.

Table 4 provides the outputs from the SIDRA model with the mini roundabout for the two peak periods for 300 homes. The table also includes the SIDRA outputs for the existing intersection with 230 homes as approved.

			A	АМ					Ì
		Exis	ting	Fut	ure	Exis	ting	Fut	ure
		LoS	Delay	LoS	Delay	LoS	Delay	LoS	Delay
	L	LoS C	19.4	LoS B	15.1	LoS A	5.7	LoS A	2.6
Wakely Rd	R	LoS D	33.6	LøS B	15.7	LoS A	9.7	LoS A	3.2
Newlands Rd	Т	LoS A	4.7	LoS A	5.3	LoS A	0.0	LoS A	5.3

(to the city)	L	LoS A	4.4	LoS A	3.3	LoS A	4.6	LoS A	3.3
Newlands Rd	Т	LoS A	4.2	LoS A	3.0	LoS A	0.1	LoS A	4.6
(to Newlands)	R	LoS A	4.6	LoS A	4.0	LoS A	6.1	Los A	4.4
Intersection		N/A	5.5	LoS A	6.4	N/A	1.7	LoS A	4.6

Table 4: Mini Roundabout Intersection Performance

As shown the future intersection overall operates with a LoS of A with average delays of 6.4 seconds and 4.6 seconds for the AM and PM peak respectively. As expected, there is a little more queuing for the through traffic as a result of needing to slow down and possibly give way. However, these approaches still operate at a LoS A which is very good for a busy urban arterial road.

As noted above the AM peak is the one most affected by any change in flows from Wakely Road.

3.4. Sensitivity Testing

It was considered appropriate to carry out sensitivity testing on the proposed roundabout to better understand what effects may occur with different scenarios. The scenarios that were tested included a higher trip generation from the homes in the Spenmoor Street Development area.

Table 5 shows the SIDRA outputs based on 10 trips per dwelling per day for 300 homes within the development area.

		АМ				РМ				
		Eight Trips		Ten Trips		Eight Trips		Ten Trips		
		LoS	Delay	LoS	Delay	LoS	Delay	LoS	Delay	
Malaka Dal	L	LoS B	15.1	LoS B	17.9	LoS A	2.6	LoS A	2.6	
Wakely Rd	R	LoS B	15.7	LoS B	18.5	LoS a	3.2	LoS A	3.3	
Newlands Rd	Т	LoS A	5.3	LoS A	5.4	LoS A	5/3	LoS A	5.4	
(to the city)	L	LoS A	3.3	LoS A	3.5	LoS A	3.3	LoS A	3.4	
Newlands Rd	Т	LoS A	3.0	LoS A	3.1	LoS A	4.6	LoS A	4.8	
(to Newlands)	R	LoS A	4.0	LoS A	4.0	Los A	4.4	Los A	4.6	
Intersection		LoS A	6.4	LoS A	7.2	LoS A	4.6	LoS A	5.7	

Table 5: Mini Roundabout Intersection Performance – 10 trips per dwelling test

As shown the LoS for all approaches is still operating very well at LoS A. The average delay increases slightly for all approaches and the overall intersection delay also increases slightly. However, overall, the intersection still operates efficiently.

The remaining test is to understand when the performance starts to become a problem for the intersection. This is related to the increase in the number of lots over 300 or overall increases in traffic flows at the intersection. For the purpose of this test scale factors wear applied to all approaches to represent traffic growth.

When the traffic flows were scaled up by 40% the Wakely Road approach moved from LoS A to LoS C. This would suggest that the roundabout continues to operate efficiently with noticeably more traffic travelling through the intersection.

4. Conclusions

The assessment above provides an analysis of two matters relating to the Spenmoor Street Development Area. The need for more housing in Wellington City has generated the need to explore opportunities where more growth can be provided.

The Spenmoor Street Development area is located relatively close to the city, has good connections to public transport facilities and is near the arterial road network. The development has approval to provide 230 homes of which around 90 have been completed.

Council and the developer see the value in maximising the lot yield in this area but there are concerns around the lower section of Spenmoor Street to accommodate the increased flows and the ability of the Wakely Road/Newlands Road intersection to meet increased flows.

It was clear from the past analysis that the intersection of Wakely Road/Newlands Road could not accommodate any additional traffic over 230 lots without some noticeable effects starting to occur. Preliminary investigations testing a mini roundabout showed that this treatment could significantly improve the intersection performance and also provide additional benefits such as a safe intersection and better provision for pedestrians.

Some work was completed around how many lots could be formed within the Spenmoor Street development which showed that up to 300 sections could be developed. The figure of 300 lots has been used in this assessment to calculate and understand the impacts.

Accordingly, this report has firstly provided an analysis of the road capacity for Spenmoor Street. The analysis and assessment show that even with adopting a high

trip generation rate than what has been measured, there is easily enough capacity to accommodate 300 homes on the Spenmoor Street development.

The second part of the report looks at the performance of the Wakely Road/Newlands Road intersection if it was changed to a mini roundabout. The traffic flows associated with 300 lots on the Spenmoor Street Development area were assigned to various movements based on turning counts. The outputs from SIDRA show that the intersection will perform significantly better and operate at LoS A. The current tee intersection is expected to have some approaches that could fall to a LoS E as the development progresses.

Overall, the road network and Wakely Road/Newlands Road intersection can easily accommodate the expected flows from 300 lots within the Spenmoor Street Development area. The construction of a mini roundabout at Wakely Road/Newlands Road has an overall positive effect on the operation and safety of the intersection.

We are happy to provide any further clarification if required.

Regards

Gary Clark.

Director

NZCE (Civil), REA, MIPENZ, CPEng