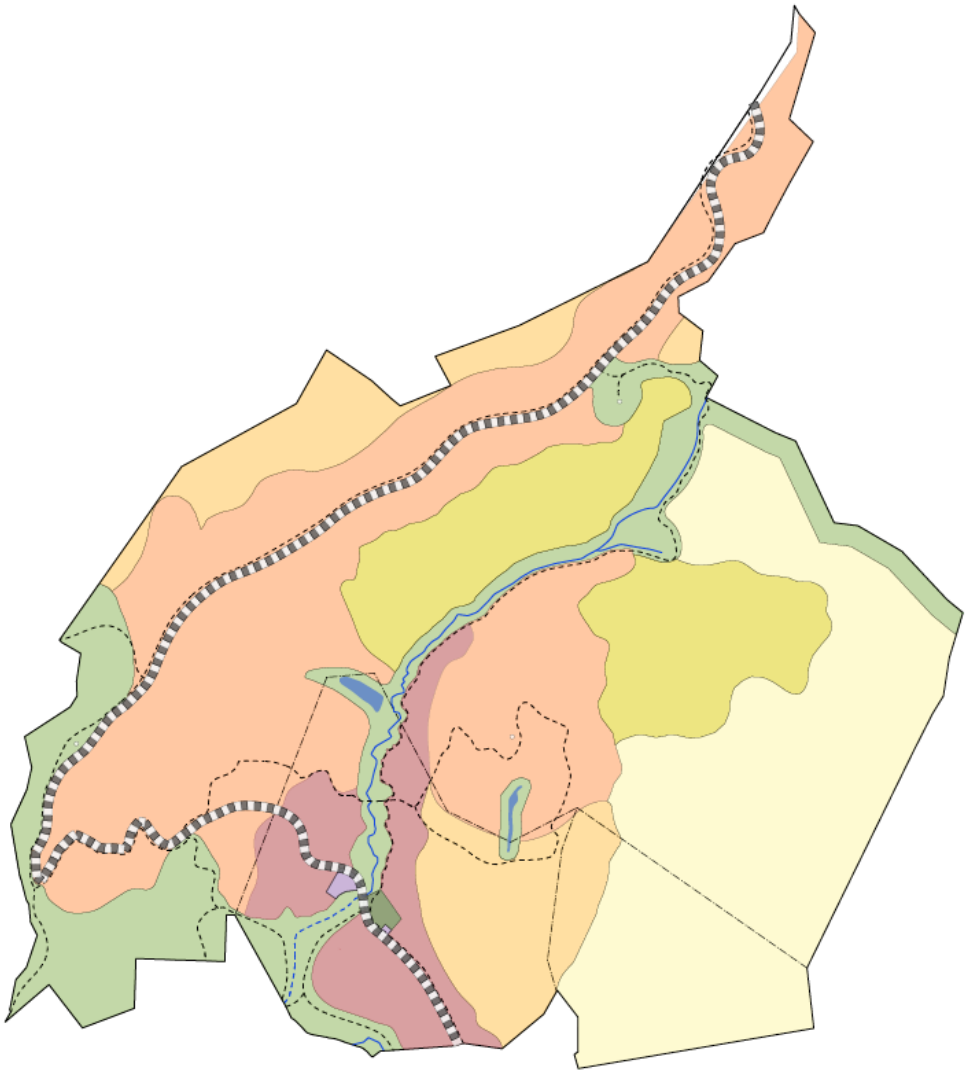
Private Plan Change 28 Maitahi/Bayview

Urban Design Report



for Nelson City Council

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19 May 2022

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OVERARCHING OBSERVATIONS

INTRODUCTION

Role in PCC28

1. This urban design assessment of PCC28 is on behalf of Nelson City Council. I began assisting Council on this project in April 2021. Since then I have reviewed the application in detail; supplied urban design advice to inform the S92 request; taken part in the official site visit with Council officers and the Applicant team on 4 May 2021; reviewed the plan change submissions; and participated in the expert urban design conferencing on 5 May 2022 which culminated in the Joint Witness Statement of that date.

Scope

2. This report is informed by overview of the full set application documents with a particular focus on reviewing the Structure Plan; the Landscape, Visual Amenity and Urban Design Assessment; the proposed district plan provisions in the Private Plan Change Request; and the LVA and UD Further Information Response prepared by the Applicant. I have also reviewed the summaries of all submissions on PPC28 paying particular attention to those identified to have an urban design focus.

3. Following a brief overview of PPC28 from an urban design perspective this report is structured in relation to issues that have emerged. Under each I note any outcomes from expert conferencing on that issue, submissions on the issue and my urban design response to those submissions if not already covered in the Joint Witness Statement.
   a. I have referred to what I consider to be the most representative submissions relating to each issue.
   b. Where I have commented on any submission I have sourced and reviewed the original.
   c. My conclusion on the issues raised in submissions is integrated into my response to each.
   d. Matters which overlap with other disciplines (eg transport, landscape, open space amenity and planning) are covered only from an urban design perspective.
   e. This report concludes with overarching urban design observations.

Qualifications and experience

4. I am founding director of specialist Wellington-based urban design consultancy McIndoe Urban Ltd and a registered architect and qualified urban designer with 40 years professional experience.
   a) I am a Fellow of the NZIA and qualifications are BBSc, BArch(Hons 1), Diploma in Urban Design (Dist.) and MA(Urban Design) from Oxford Polytechnic.
   b) My familiarity with the Nelson context is informed by having been chairman of the Nelson Tasman urban design panel since 2011. That work has included review of the Bayview project that is currently under construction to the north of the PPC28 area. Other current design review experience includes membership of Eke Panuku Development Auckland's Technical Advisory Group since 2007, and membership of the Auckland's Urban Design Panel. I have chaired WCC's waterfront Technical Advisory Group since 2005.
   c) I am familiar with urban design research having been a senior lecturer in the VUW Faculty of Architecture and Design teaching urban design history, theory and methods in a 0.5 academic position from 1992-2009. I was also principal co-author of various MfE Urban Design Protocol documents including *The Value of Urban Design: the economic, environmental and social benefits of urban design* (2005).

d) I both contribute urban design content to district plans and review district plan content. I was Auckland Council's urban design advisor on the Residential sections of the Unitary Plan and am currently working on new residential standards and other district plan provisions for the Porirua and Palmerston North City Councils.
e) Finally, I am regularly involved in the design of large-scale urban growth areas and subdivisions for both Councils and private sector developers. This includes the 3500+ lot Tara-Ika extension of Levin and Waitarere masterplanning both for HDC; Palmerston North's 7000+ lot Kakatangiata growth area for PNCC; and a 750 lot extension to a town north of Auckland.

URBAN DESIGN REVIEW OF THE PROPOSAL

Overview

Suitability of PPC28 urban design controls

5. Informed by detailed review, I consider that the proposed planning framework enables and requires good urban design outcomes.[1]

6. The Nelson Tasman Land Development Manual 2020 and Appendix 22 of the NRMP for Comprehensive Housing Development are important components of the plan provisions that will apply. These cover respectively overall layout and subdivision, and any comprehensive housing development within the subdivision. They are in my opinion both suitably robust and comprehensive.

Suitability of the Structure Plan

7. Subject to satisfactory inclusion of road connection to Walters Bluff, link road connection from Ralphine Way to the ridgeline[2], relocation of the commercial zone, inclusion of secondary road up the Kaka Valley adjacent to the stream esplanade and verification of these changes and zone boundaries with an indicative lot layout, I consider that the urban structure proposed is sound.

Need for an indicative lot and road layout

8. Any refinement of the Structure Plan and zoning boundaries will be informed by the recommended indicative potential street network and lot layout.[3] In my experience with designing projects of this type, preparing an indicative layout is particularly important for steeply sloping areas such as up the Kaka Hill and along and below the Bayview ridgelines. It will demonstrate the viability of access and land use zoning and also allow landscape and visual effects to be assessed with greater certainty.

9. Such an indicative layout would allow for refinement of zoning boundaries if and as required to reflect the development that will be possible on the steeply sloping areas. It would also show the indicative secondary road up the Kaka Valley on the Structure Plan and would allow verification of the acceptability of the location and shape of the Commercial zone and related reserve and esplanade.

[1] Urban Design JWS, para. 3.10
[2] The applicant has produced further information and traffic expert conferencing has subsequently agreed that a road link to the ridgeline from Ralphine Way is feasible for road, walking and cycling purposes. (JWS Transport (1) 4 May 2022 para 3.2.)
[3] Urban Design JWS, para. 3.4

Review of applicant's urban design assessment

General observation

10. The Urban Design Assessment (Section 6, pp68-79) describes aspirations and intentions largely in words but generally lacks detailed description of the attributes that are intended. That notwithstanding, the Structure Plan, if suitably refined and in combination with other design controls that apply, will contribute to achieving the aspirational qualities described.

Landscape and site context

11. Location relative to centres and destinations
    - Locating higher intensity in the relatively accessible flats of the Kaka Valley close to existing recreational and leisure facilities is a sound approach. This will minimise the distance travelled to and from the city centre and related services and facilities for the greatest number of residents.
    - A corollary is that the intention of locating the lowest density of development on the Malvern Hills is sound as these upper areas will be to an extent vehicle dependant.

12. Relation to landform

    The application states:

    > *The urban fabric of the development will follow and respond to the topographical nature of the site where possible. On a conceptual level, the PPCR has adopted a contextual site response that is reflective of the underlying character and landscape.* (R&M, p68)

    In such a complex topography, there is insufficient information to confirm that this will be the case should the plan change be approved and when roads and lots are planned and contoured. For this reason, preparation of an indicative road and lot layout has been recommended.

13. Character and Identity

    The application states:

    > *The development will reflect the unique identity of Nelson, the local environment, heritage and urban context, and the investigation and understanding of these elements will inform the future consenting and design process.*

    and

    > *Future development shall draw inspiration from the surrounding environment, building materials representing the vernacular of the surrounding environment and produced in a best practise environmentally friendly manner.* (R&M p68)

    While the revised Structure Plan is expected to demonstrate a sensitive response to site and context, precisely how the unique identity of Nelson will be reflected and just what the building materials representing the vernacular of the surrounding environment are has yet to be identified. Furthermore, that is not necessary. The appropriateness of referencing the materiality of farm sheds and buildings or of adjacent existing residential development in new higher density residential development is questionable.

Connectivity and accessibility

14. The local street network which is proposed to be designed later is underplayed as a means of providing for connectivity and accessibility. It is the primary movement network, but neither mentioned nor (indicatively) drawn. Therefore, how the development provides for day-to-day movement as a pedestrian within and between areas via the street system is not clear. Neither is the impact of contours on walkability and cycling identified or assessed.

15. Public transport

> *The central area of the development is designed with higher density housing surrounding the commercial area creating a village centre. This will provide the fundamental attributes that enable it to be considered to operate as a public transport oriented development should the public transit network and infrastructure be geared towards supporting it.* (page 75)

This and the concentration of density at the base of the Kaka Valley will contribute to this development being 'public transport ready'.

Open space

16. Open spaces have been located on the Structure Plan but not planned so their potential qualities are not yet clear. However, investigation of indicative roads including along the Kaka Stream esplanade, and the location of the Local Commercial Zone and its relation to the neighbourhood reserve is underway. Assuming the shape, location and relationship of these elements to each other is well resolved, then I am confident that design in accordance with the Nelson Tasman Land Development Manual 2020 will achieve a positive outcome.

17. It is stated "an emphasis will be placed on quality universal design". This is laudable but how this will be achieved in the more complex and steeper parts of the site and integrated into the plan change is unclear.

Character

18. There are many aspirational statements in this section but apart from reference to general locations of density relating to location (which are sound) there is no description which allows assessment of planned character.

19. Considered placement of buildings within the commercial area is noted (page 75) however this has not been described at even an indicative level. This should be tested with indicative planning to verify the location, shape and size of the Suburban Commercial Zone, and that is underway.[4]

Diversity

20. The proposed range of residential zones and mix of uses will contribute a positive degree of choice.

Sustainability

21. This section is a series of general statements about sustainability rather than identification of what initiatives are intended and an assessment as to precisely how the plan change delivers on these initiatives.

Collaboration

22. This section describes a routine multi-disciplinary process which relates to the NZ Urban Design Protocol direction to use "*a collaborative approach to design that acknowledges the contributions of many different disciplines and perspectives*". The proposal does not appear to address up until this point of plan change submissions, a second Urban Design Protocol direction which is to "*involve communities in meaningful decision-making processes.*" Generally, it is desirable to involve communities prior to a plan intent being confirmed which is not described in this case. However, the chosen approach of engaging through the formal legal plan change process can in my opinion be justified in this case given the politically fraught nature of this project, and the consequent practical

[4] Urban Design JWC, para.3.2

challenge of being able to achieve genuinely useful collaborative public process in such a case.

Walters Bluff street connection

23. Expert conferencing confirms that the Structure Plan should include an indicative street connection to Walters Bluff.[5] In my opinion this would be optimally located at more or less the mid-point of development along the Malvern Hills, assisting with reducing vehicle traffic on other routes, enhancing community connection and the convenience of that connection. Specifically, it would provide the option of much more direct, convenient and efficient connection between the upper part of the plan change area and the city centre and areas to the west.[6]



Figure 1: My sketch concept diagram prepared on 4 May 2022 to inform urban design conferencing.

24. I prepared the sketch concept above from Google maps to assist analysis of connectivity and the potential benefits of a Walters Bluff connection. Reference points are identified:
    - Point A is indicatively where a Walters Bluff connection might occur;
    - Point B is approximately at the midpoint of the plan change area north of point A; and
    - Point C is the existing intersection of Walters Bluff and Atawhai Drive.

25. All road alignments are indicative and measured distances along them are approximate. Nevertheless, this simple, to-scale sketch identifies the order of the distance between the identified points. That distance is noted on the drawing but repeated below for the purpose of legibility:

    Point A to B via Bayview = order of 5.1km
    Point A to B vs Walters Bluff = order of 1.0km
    Via Bayview +4.1km extra each way

[5] Urban design JWS, para 3.1; Transport JWS (4 May 2022) para. 3.9
[6] S51 (David Jackson) cites that Walters Bluff was consented with the expectation that it would be extended to accommodate development further up the hill.

Point C to B via Bayview = order of 4.45km
Point C to B vs Walters Bluff = order of 1.65km
Via Bayview +2.8km extra each way

26. In my opinion the fundamental need for a Walters Bluff connection is further increased if the connection from the southern end of the ridgeline down to Ralphine Road may be delayed[7]. In the event, a Walters Bluff connection avoids the ridgeline road being a long cul-de-sac, and any dwellings up here being disconnected and unduly distant from the nearby city centre.

Location of Suburban Commercial Zone(s)

27. Successful local centres will typically be located slightly closer to the entrance route than the centre of the development to take advantage of passing traffic and at the same time be central. Analysis (described in my figure 2 below) shows that main commercial zone in the proposed Structure Plan is located well left of centre and away from the 'centre of gravity' of the Kaka Valley development. Significantly, it is beyond where it will benefit from passing traffic to and from the Higher Density Residential located up the Kaka Valley to the north (to area HD2 in figure 2).

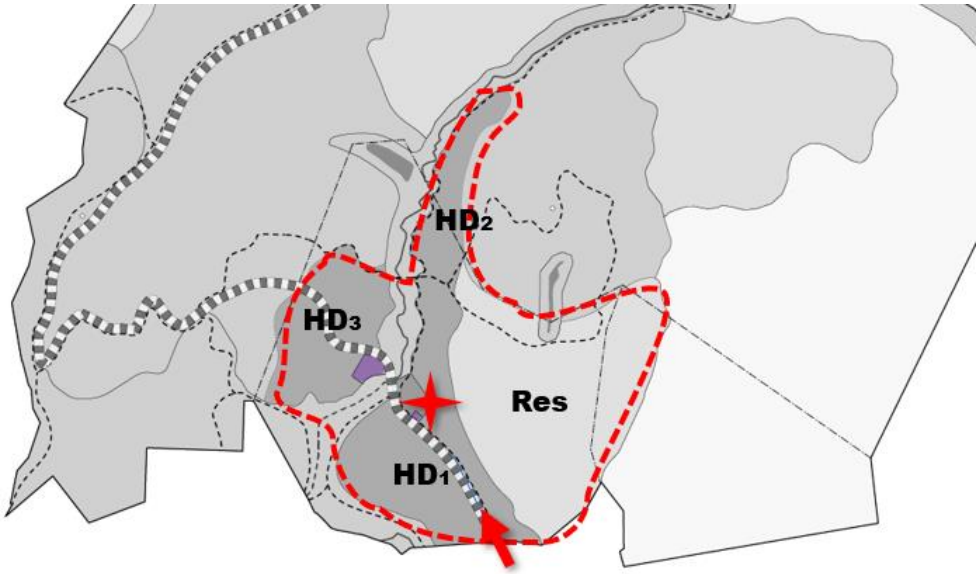


Figure 2: My diagram of the general extent of higher density and general residential overlaid on the Structure Plan. A dashed red line encloses the Higher Density (HD) and Residential (Res) zones, and a star indicates an estimated 'centre of gravity' of the neighbourhood. The Suburban Commercial zones proposed in the notified Structure Plan are shown in purple.

28. There was agreement in the urban design expert conferencing that that the proposed Suburban Commercial Zone would be better located at the intersection of the primary road and a secondary road leading up the Kaka Valley. It was also confirmed that this is being investigated as part of revision of the Structure Plan that is currently underway.[8] In addition to optimal location for access and commercial feasibility, successful integration with the Kaka Stream esplanade and neighbourhood reserve will be factors in determining the suitability of any revised layout.

[7] That this link road may not be completed in the first stage of development is noted in the Transport JWS (4 May 2022), para. 3.7
[8] Urban design JWS, para. 3.2

URBAN DESIGN REVIEW OF SUBMISSIONS

Microclimate of the Kaka Valley and its suitability for housing

29. The suitability of micro-climate of the Kaka Valley for housing was agreed in urban design expert conferencing.[9] Description of submissions on this point and the analysis I undertook prior to conferencing to address those submissions is included below.

30. Several submitters [S306.001 (Serge Crottaz) S8.001 (Jean Edwards) S218.001 (David Wheeler) S233.001 (Dianne Anyan)] question the suitability of Kaka Valley for affordable housing, considering it to be shady, cold and damp. Scott Stocker (S276) and Peter Olorenshaw (S311) submit that every section should have access to winter sun for at least three hours per day noting that while it is possible to design a house to be warm without any sun and with minimal heating, it is psychologically damaging to live in a house that doesn't get any winter sun at all at some times of the year. S358 (Mike Tasman-Jones) cites a 2019 report by Barker & Associates which "*noted that portions of the site would have reasonably significant shading in winter, causing minimal sunlight access and impacting residential amenity values….*"

Response

31. At mid-winter the highest density housing areas in the Kaka Valley receive approximately five hours of sun per day out of nine hours of daylight. The sun exposure here is to an extent restricted but that restriction is not excessive, being only slightly more than some other areas in the vicinity. Furthermore, the New Zealand Building Code requires that housing is constructed to be warm and dry. For these reasons I consider that this area is suitable for the proposed housing.

32. In reaching this conclusion I have analysed the midwinter 'worst-case' scenario, with reference to the Applicant's shading studies[10]. In figure 3 below I have overlaid the indicative boundaries of the Residential Zone (Higher Density Areas) being the areas on the flat and along the stream in the Kaka Valley on the shading diagrams for early-mid morning and mid-late afternoon. In mid-winter (22 June) in Nelson the sun rises at 7.57am and sets at 5.09pm. The diagrams show that the elevated plateau in the western part of the Higher Density area receives sun at 9.00am. The entire area is in full sun at 10.00am and that continues until 3.00pm. Midwinter shadows move across the flat so that by 4.00pm only the south-eastern tip is in sun.

33. This is suitable for residential amenity in mid-winter, being more than the 3-4 hours of sunlight per day that has often been used as a benchmark for sun to a living area within multi-unit housing, and more than the three hour minimum identified by submitters.

34. For local context:
    a. The shading diagrams show that this is about one hour less of mid-winter sunlight than housing areas at the base of the Maitai Valley.
    b. On 22 June, the eastern part of the Wood is also in shade at 9.00am and at 10.00am an area at the eastern end of Hardy Street, and Pitt Street down to Nile remain in shade.

[9] Urban design JWS, para. 3.8
[10] Rough and Milne pp70-73

35. At mid-summer when sunrise is 5.50am and sunset is 8.59pm, the Applicant's diagrams show that the High Density Residential area is in sun from around 7.00am to 8.00pm, or for approximately 13 of the maximum 15 hours.



9.00am in midwinter



10.00am in midwinter



3.00pm in mid-winter



4.00pm in midwinter

Figure 3: Mid-winter (22 June) shading studies extracted from the application drawings with the extent of proposed zoning for higher density residential indicated in yellow.

Integrated and sustainable development

36. S292 (Monika Clark-Grill) questions the suitability of the site given its location relative to the urban boundary, linkage to existing residential areas, need for contour modification around the flood plain, and traffic flow impacts.

Response

37. Considering the context, this offers potential for many new homes on the Kaka Valley flats, relatively close to the city centre and with more or less flat access to and from it. At the same time the extent of development on the less accessible elevated hills ridges and steep slopes is appropriately restricted. Considering the

net addition to traffic flows in the city as a whole, there would be a greater increase of vehicle distance travelled should other sites further away from the centre be developed. Considering the wider whole of city and region context, this placement of a large amount of new housing relatively close to the city centre is optimal.

Residential density

38. Several submitters recommend reducing density. S156.003 (Jo Gould) submits that *"reducing the amount of high density and standard density residential zone would help maintain a green, open space feel in the valley. Increasing the minimum lot sizes of these zones would also help with this."* S298 (Susan Corry) supports in principle rezoning to make more land available for housing, but not the residential high density (300m2) or standard (400m2) in the Kaka Valley. She considers this would lead to a character that is too urban and with related traffic noise and congestion and potentially negative water quality effects.

39. Other submitters call for establishing a maximum lot size to encourage higher density. S320 (Waka Kotahi) supports increased residential density close to the Nelson city centre. However, Waka Kotahi note that with no maximum site areas, the development of the newly rezoned area to the indicated density will be left to the will of the developer.

    The plan change area will need to include density of residential development that can support public transport and active mode transport within and through the area. The Structure Plan currently states minimum densities of 300m2 for higher density residential, 400m2 for standard residential and 800m2 for lower density residential. However, it would be more helpful to have a maximum lot size to ensure the desired density of housing comes to fruition.

    A related submission, (S51 David Jackson) considers 1,500m2 or 8,00m2 minimum lot sizes on the Malvern hills is excessive and very wasteful of land. Nelson Marlborough District Health Board FS10.029 agrees that higher density development should prioritised as these provide viable options for reducing emissions and promote active modes of travel. S276.002 (Scott Stocker) notes:

    This development should at least medium-density, with town-houses and/or apartments. Nelson does not need more suburban sprawl. This land is relatively close to town, we must use it well, to house as many people as possible.

Response

40. For reasons of providing for housing diversity, maximising potential for PT service, and locating the highest density of housing in the most accessible locations closest to centres and public amenities I support the range of densities proposed in PPC28 including high density on the lower Kaka Valley. I therefore consider that it is most appropriate – as planned - to concentrate the majority of houses in the lower and more accessible sites, rather than on the high ridges which will almost certainly be vehicle dependant.

41. I do not consider that setting maximum lot sizes for the lower density residential is appropriate in this context. The plan change area is on very steep and complex contours. In many cases large areas of steeply sloping land will be inaccessible and for practical purposes unbuildable without major and highly complex and earthworks. In this instance, while the majority of lots will be to the minimum size, which will assist in providing density, there will also need to be 'balance lots' that may include large areas of privately owned bush clad hillside that is from a practical perspective both inaccessible and unbuildable.

Support for providing a local centre

42. S206.006 (Michael Ward) supports inclusion of local hospitality, food and beverage facilities such as a corner café as providing an opportunity for shared experience. S320 (Waka Kotahi) also support a community hub/suburban centre with high density residential development surrounding it at Maitahi. However, they also submit that:

    "more thought needs to be given to the spaces allocated for certain purposes (e.g., suburban centre, high density residential, sufficient width for active mode transport routes etc.) to align with national urban design policies and direction."

Response:

43. I agree with these submissions on the value of the local neighbourhood centre (represented by 'Suburban Commercial' zoning) and agree with Waka Kotahi that "more thought" is required in relation to allocation of space for this. I have already discussed this matter in detail above and noted that the Applicant's refinement of the Structure Plan is intended to address this.

River setbacks and ecologies

44. S310.004 (Department of Conservation) and FS10.023 (Nelson Marlborough District Health Board) submit that higher density residential and commercial zoning adjacent to areas to be zoned open space such as the river corridor may have an effect on the values of the river corridor as an ecological linkage. Submissions recommend considering setting the high density residential and commercial zones back from the proposed open space zones where possible to ensure that residential and commercial areas do not have an adverse effect on the flora and fauna of the river corridors.

Response

45. Assuming the Kaka Valley Stream is the same as identified in the NRMP Appendix 6, Table 2 as '*Maitai confluence to headwaters and lower Kaka Hill tributary*' then the esplanade requirement is 20 metres both sides. The Nelson Tasman Land Development Manual 2020 also applies to this aspect of the development with the following key content on riparian ecologies.
    a. 'Open Channel Design' – or the design of open streams is required to address habitat for flora and fauna to promote biodiversity.
    b. Chapter 10 Parks and Reserves contains mandatory requirements for riparian planting to stabilise banks, slow run-off, shade river water, provide habitat and encourage bird life, enhance recreation and amenity value and restore native biodiversity to stream environments.

46. Considering the human environment, locating housing sufficiently close to overlook public open space and the public walkway planned for the river corridor is desirable from both public safety and residential amenity perspectives. To that end, it has been agreed by the urban design experts in conferencing that a public road is aligned adjacent to and along the majority of the eastern boundary of the esplanade reserve, and that this is shown on the Structure Plan.[11]

47. An acceptable solution must reconcile and optimise all relevant drivers. So public safety, residential amenity, and riparian ecology are all important, and a 20 metre minimum esplanade setback is already required. From an urban design perspective and provisionally, I do not consider that increased setbacks beyond

[11] Refer Urban Design JWS para. 3.3 and 3.5

20m are likely to be required. However, the 1:10,000 scale Structure Plan is, by itself, so conceptual that it gives insufficient detail or certainty on potential to resolve this matter. In the absence of sufficient information in the Application that remains to be verified. Therefore, I recommend that the relation to the esplanade reserve is investigated in the indicative street and lot planning that is recommended in para. 3.4 of the Urban Design JWS. It would also be advantageous if the Applicant were to prepare cross-sections at a representative range of typical locations along the river corridor (and including in the vicinity of commercial zone) to demonstrate suitable planning in relation to the Kaka Stream. These would indicate contours, the intended planned relationship between the river and adjacent development including setbacks and the general approach to riparian ecologies, landscape and public realm.

Amenity, health and wellbeing

48. This matter is addressed in the Urban Design JWS (para. 3.9) where it was agreed that the impacts of the PPC 28 development are positive. In relation to this, the analysis below is my detailed response to submissions on these matters.

Potential loss and degradation of public amenity

49. S292 (Monika Clark-Grill) cites the recognised recreation and leisure value of the large public recreation reserves within the Maitai Valley *and expresses concern about "cumulative adverse effects of the development in the will negatively impact on the peaceful and easily accessible amenity values present in immediately adjoining spaces."* S292 also contends the proposed development will *"conflict with the current recreational values that large numbers of locals and visitors alike enjoy e.g., walking, running, mountain biking, picnicking, river swimming, sports, community activities and social & family events."* A related submission (S367 by Save the Maitai Incorporated) is that the development's cumulative adverse effects will negatively impact on the area's peaceful and easily accessible open space, landscape, recreational and amenity values and request that if the plan change is approved all adverse effects on existing rural character and amenity values in the Maitai Valley are avoided. S198.001 (Friends of the Maitai) addresses similar issues.

Response

50. Physically, the recreation and leisure facilities in Maitai Valley remain physically unchanged apart from additional vehicle, cycle and pedestrian traffic on the road through and potential for, from some locations, views of new residential development on the upper slopes of the Kaka Valley. Subject to the indicative road and indicative walkway and cycleway links being provided and appropriate design at its interface with the Maitai River, in my opinion the proposal adds to recreational opportunities. This is opening public access along the Kaka Stream and introducing new paths and enhanced potential to climb onto and walk and cycle along the ridgeline of the Botanical and Malvern Hills.

51. The proposal places homes close to these prime public recreation and leisure facilities and placing more users closer to them will increase public use. Placing residents close to major public amenities is also a fundamental and entirely sound neighbourhood design approach.

52. The change from rural to urban in the Kaka Valley will inherently change the character of that part of the wider valley. However, integration can be achieved with sensitive landscape design at the interface with the Maitai Valley and of the movement network. Design should be sufficiently sophisticated to enhance amenity for all users. That means in addition to meeting functional requirements,

a high level of design input integrates amenity features and visual qualities that go beyond not detracting from the existing environment. I consider that the plan change and the controls and processes it puts in place have sufficient weight to ensure that occurs. However, that needs to be demonstrated with some more indicative detail of key elements, and view simulations that at a minimum show the extent of the proposed residential development in context. Existing site photos alone are not sufficient to allow assessment.

Sense of open space and greenness

53. S156.003 (Jo Gould)

    The proposed residential development would result in loss of open space in the city's greenbelt. Undeveloped green spaces like the Maitai Valley are essential for people's health and wellbeing, particularly when they are close to town and accessible. Even though the land is currently private, the views across it from tracks on the back of the Centre of NZ hill are extensive and contribute to the experience and sense of space and green.

    If the plan change is allowed to proceed, the impacts on amenity value should be mitigated by increasing the size of the Open Space zone so that a predominantly 'green or natural' feel is retained in the valley and recreational opportunities such as walkways/cycleways can be enhanced.

Response

54. While it is correct that urban development in the Kaka Valley will be visible from tracks on the back of Botanic Hill (and also from the top at 'The Centre of New Zealand') due to the trees around the cricket ground, it will not be visible in most views at ground level from the Matai River Reserve. Also the Maitai Valley Reserve will retain its sense of greenness as the green spaces and elements are not intended to be changed.

Role of green areas in the city

55. S109.001 (Gretchen Rasch) questions the wisdom of building development in this greenfield situation:

    Big cities like London and New York are able to keep significant green areas within some of the most densely-populated areas in the world, why would Nelson be so short sighted as to throw away its most precious natural area?

Response

56. The extent and green character of the public reserves in the Maitai Valley remain unchanged under the plan change and the Kaka Valley is currently private farm land to which the public do not have physical access. The plan change, by incorporating new public access along the length of the Kaka Valley extends the extent of publicly available green area.

57. The submission cites publicly accessible green space in large cities surrounded by urban development including Hagley Park in Christchurch and New York's Central Park. Those spaces provide amenity for the residents around, and the development of the Kaka Valley follows the same principle of proximity, with the existing large green area supporting intensive residential development around.

Woodlands and impact on mental health and wellbeing

58. Several (for instance Helen Black S224.001) refer to the loss of woodlands and the impacts on mental health and wellbeing. S358 (Mike Tasman-Jones) also cites the health and wellbeing benefits of green space.

    "Specifically, in regards to health and wellbeing of those who use the Maitai recreational area see report 'Valuing the mental health benefits of woodlands' by Forest Research - Vadim Saraev, Liz O'Brien, Gregory Valatin and Matthew Bursnell 2021 … The pressure this development would put on existing recreational area would be counter active to the public need for green spaces as mental health management."

    This research considers evidence of the reduced incidence of depression and anxiety as a result of regular visits to nature and also the presence of street trees. It also considers associations between greater residential greenspace and lower mental ill health, and between higher street tree density and reduced antidepressant prescriptions.[12]

Response

59. Considered from an urban design perspective, this research assumes that to gain the benefits of exposure to nature that people are actually visiting greenspace and woodland, not that nature /woodland/ green open spaces simply exist. In the case of the proposed plan change, the Maitai River and Valley walks and associated reserves are maintained. So, there is no loss of the capacity of the existing environment to provide for visits to nature, woodland and greenspace. The research cited also notes that physical activity is correlated with visits to nature.[13] The plan change extends walking trails, including opening up the Kaka Stream with a publicly accessible walkway so in this respect may be seen to enhance opportunities for exposure to nature.

60. Any loss of woodland on the inaccessible upper eastern slopes of the Kaka Valley will therefore have no impact on the health and wellbeing of those who use the Maitai recreational area.

61. I do not consider that the presence of additional potential reserve users would be of such a magnitude that it would compromise the greenness, open space, amenity and recreational value of the existing recreational area.

Benefit of being within bio-diverse natural spaces

62. S292 (Monika Clark-Grill) addresses a similar issue:

    We would be well advised to orientate ourselves on our intuitive knowledge that being in bio-diverse natural spaces is good for our well-being, and take note of the science that gives quantifiable prove of this knowledge."

    Studies cited included the following findings:

    - *"Rurality and increased minimum greenness were strongly and independently associated with a reduced risk of ADHD."* [14]
    - Research suggests *"that exposure to greenness and vegetation diversity may be protective of asthma"* with natural land-cover types being protective and

[12] Vadim Saraev, Liz O'Brien, Gregory Valatin and Matthew Bursnall. *Research Report: Valuing the mental health benefits of woodlands*. Forest Research: Edinburgh. 2021 Page iv

[13] Saraev et al, page 3

[14] Geoffrey H Donovan, Yvonne L Michael, Demetrios Gatziolis, Andrea 't Mannetje, Jeroen Douwes. *Association between exposure to the natural environment, rurality, and attention-deficit hyperactivity disorder in children in New Zealand: a linkage study* Lancet Planet Health 2019; 3: e226–34

non-native, low biodiversity land-cover types leading to increased risk of asthma.[15]

- *Exposure to plant diversity, and associated microbial communities, may be a viable public-health intervention to reduce the risk of ALL* [acute lymphoblastic leukemia] *and possibly other immune diseases.*[16]
- *"Consistent with the literature on enhanced-recovery programme, people who lived in greener neighbourhoods took fewer opioids, and lived longer, following hip arthroplasty. Improving access to the natural environment may therefore be an effective component of postsurgical recovery programme."*[17]

63. The research cited appears, from an urban design perspective, to be robust and relevant. In relation to the matters raised:
    a. *Rurality and greenness*
    Kaka Valley's rurality is reduced should it change from rural to residential zoning although the visually prominent elevated slopes of the Kaka Hill remain zoned rural. The question that remains is the extent to which the plan change provides a sense of greenness and public access to green environments. The greenness the Maitai Valley reserves remains unchanged for existing residents although residents on elevated sites to the south will be able to see houses on the Kaka Valley to the north beyond the reserves. The proposed development in the Kaka Valley does expose prospective residents to the existing green environment. Given this, with reference to this research, the proposed plan change area might be considered to be optimally located as it places more people in proximity to nature, green space and walking trails through nature. It also extends the network of walking trails through a green natural environment, being the restored Kaka Stream.
    b. *Vegetation type and diversity*
    Vegetation diversity is required by the plan change controls. One of the matters of discretion for residential development is "*The design and layout of roads, access, cycleways, walkways, reserves and biodiversity corridors*." Chapter 10 Parks and Reserves of the Nelson Tasman Land Development Manual 2020 which applies has detailed requirements that amenity planting will help restore native biodiversity (10.6.2.2.h.) and riparian planting will restore native biodiversity to stream environments (10.6.3.5. f.).
    c. *Access to a green environment*
    Family housing close to the green Maitai Reserves would increase the number of people benefitting from access to a green environment. The existing low intensity rurality of the Kaka Valley is lost, however residents within the proposed urbanised Kaka Valley will be adjacent to the Kaka Stream and stream reserve, will look out onto heavily vegetated steep hillsides, and have close and direct access via walkways and cycleways to the reserves of the Maitai Valley.

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[15] *Donovan, G.H., Gatziolis, D., Longley, I. et al. Vegetation diversity protects against childhood asthma: results from a large New Zealand birth cohort. Nature Plants* **4,** 358–364 (2018). https://doi.org/10.1038/s41477-018-0151-8

[16] Geoffrey H. Donovan, Demetrios Gatziolis, Andrea 't Mannetje, Robert Weinkove, Caroline Fyfe, Jeroen Douwes. *An empirical test of the biodiversity hypothesis: Exposure to plant diversity is associated with a reduced risk of childhood acute lymphoblastic leukemia*. Science of the total Environment 768 (2021) 144627

[17] Geoffrey H Donovan, Demetrios Gatziolis, Jeroen Douwes *Relationship between exposure to the natural environment and recovery from hip or knee arthroplasty: a New Zealand retrospective cohort study.* BMJ Open. First published 20 September 2019

Energy and resource efficient housing requirements

64. Friends of the Matai (S198 point 10), NMDHB (S300 point 2), NMDHB (S300 point 6), Te Ātiawa (S328 point 6), Save the Maitai (S367 26) question whether the plan change and the NRMP sufficiently require energy and resource efficient housing. Peter Olorenshaw (S311) would like to see all dwellings being eco-houses, some with adjoining walls, passive solar design, minimal space heating and zero cooling and with other measures including water conservation. S300.006 (NMDHB Public Health Service) requests amendment, that opportunity is given to developers to build at high energy efficient standards, which include options to integrate solar power, rainwater harvesting and roof top gardens into the design.

    NMH would like to see the promotion of low-carbon buildings. Consideration could be given to using a Life Cycle Assessment to provide useful information to support eco-efficient and to reduce the climate impact of buildings.

    This raises the question of the need for bespoke additional provisions in the plan change.

Response

65. I consider no change is required.[18] The NRMP Appendix 24 for Comprehensive Housing Development (AP22.4 on-site amenity outcomes) already includes content relating to these matters:

    Site Planning

    c) siting and orientation of buildings, occupied spaces and openings to ensure passive solar gain is optimised.

    Energy and Resource Efficiency

    r) energy and thermal-efficient design which incorporates active and passive energy efficient features and appliances.

    s) the use of water conservation design features and fittings.

    t) on-site provision of specific areas for recycling, rubbish facilities and secure bicycle storage.

66. Beyond that the New Zealand Building Code applies to all dwellings and this has been revised to apply more rigorous energy efficiency outcomes. MBIE released energy efficiency updates on 29 November 2021 with new insulation standards to reduce energy needed for heating by approximately 40% over previous minimum requirements.

67. Bearing in mind this recent NZ Building Code change it is unclear why standard detached houses on this site should face more rigorous requirements than others in Nelson City and the region. In the absence of specific rationale for application of more rigorous controls to the dwellings in the residential zones in the plan change area I consider no extension of the controls that currently apply is necessary. Furthermore, any developer, designer or prospective home-owner can choose to exceed these newly upgraded building code standards and integrate whatever more sophisticated active and passive design measures and systems that they wish.

Facilitating cluster and terraced development in the higher density zone

68. In response to Mr Olorenshaw, I consider that potential for 'clusters with adjoining walls' including terrace houses is facilitated in the higher density residential zone with application of NRMP Appendix 22 which provides for Comprehensive Housing Development.

[18] I note that the NMDHB have now agreed not to pursue their submissions on this issue (refer Planning (1) JWS 22 April, paragraph 3.1).

Universal Design

69. S300.002 (NMDHB Public Health Service) requests
    a. *"That there is a requirement for universal design for all residential dwellings and commercial buildings in the development."*
    b. "*that there is a requirement for at least 30% of the development to be 1-2 bedroom houses built to universally designed standards.*" This request is with reference to a population that is aging and becoming more diverse.

70. The submission cites decade old BRANZ research on the cost of as being one eighth of retrofitting for accessibility once the building is completed and the multiple benefits of doing so. It also cites an example from a local council in Melbourne requiring incorporation of Universal Design features as follows:
    a. In 20% of dwellings for developments with 10 or more.
    b. In a minimum of one dwelling for development of 3-9 units

Response

71. I consider that this submission could be accepted in part to give effect to the following parts of the NRMP:

    Objective - DO13A.4 providing for diversity
    Subdivision and development that provides for a range of choices in housing types, neighbourhood types, compatible employment opportunities and leisure and cultural activities.
    Policy - DO13A.4.1 flexibility, choices and adaptability
    Subdivision and development should facilitate, where appropriate:
    b) flexibility to adapt buildings and spaces to accommodate a range of uses both now and in the future.
    c) a range of building types to provide accommodation and offer opportunities for all groups within the community.

72. This would be to apply Universal Access standards to a proportion of any multi-unit and comprehensive housing development as per the Melbourne example cited.
    a. Complying units might be single storey units at ground including ground floor apartments. Where a development comprises two or more storey development, the ground floor of a multi-level dwelling (in at least the proportions recommended) should be capable of conversion for full 'Accessibility'.
    b. Considering a cost/value balance the primary value in my opinion is to at a minimum ensure access routes from the street into the unit, entrances, doors and corridors are properly sized and configured, and key fitting and fixtures and wall reinforcement appropriately placed to allow ready conversion for full 'accessibility' if and as required later. The actual requirements should be with reference to established Universal Design guidelines for housing.

73. I consider this to be a positive outcome which as has been identified can be readily achieved for a proportion of the buildings at relatively low-cost relative to later retrofit. I consider it also reasonable that, should this opportunity be pursued, only a proportion are required to provide for Universal Access, even though it is desirable that the proportion might be higher. However, further to the above, the NMBHB have agreed in the Planning (1) JWS 22 April that they will not pursue this request.

Dwelling colours

74. S156.008 (Jo Gould) is that *low reflectivity paint/surfaces for all houses in all zones should be incorporated into plan rules …. to mitigate adverse effects on amenity values.* This is to *'create an overall recessive feel so that the urbanisation of a rural landscape is not so much 'in your face'.*

Response

75. This matter is already in part incorporated into the plan change:

> **X.8 Skyline Area**
> Building within the Skyline Area (as identified on Attachment B1.2 of Schedule X) is a controlled activity if:
> a) The final colour of any building's external roof and gutters uses a natural range of greys, browns or greens with a light reflectivity value (LRV) of less than 20%.
>
> b) The final colour of any building's external walls, joinery and spouting uses a natural range of greys, browns or greens with a light reflectivity value (LRV) of less than 32%, and either
>
> c) The final height of any dwelling shall sit below the primary ridgeline, as illustrated on the Maitahi Bayview Structure Plan (Sheet B1.2); or
>
> d) Any building proposed to extend above the ridgeline shall be supported by a landscape assessment by a suitably qualified and experienced landscape architect along with a detailed landscape plan, setting out how the visual impacts of a building exceeding the height of the primary ridgeline are to be mitigated.

76. Viewing attachment B1.2 I consider that at least the defined Skyline Area justifies such control, and the other areas do not. Consideration should be given to applying this control in the backdrop area (described by R&M, page 90) with this subject to review and advice from Mr Girvan. I do not support extending application of the colour control to other less visually prominent locations as that would be unnecessary and arbitrarily restrictive. The plan change also goes further than colour in the Skyline Area to ensure visual integration.

Street design and speed environment

77. S276.003 Speed within Development - *Any vehicle access or side roads off the main Ralphine Way should be 30kph shared zones where drivers feel that they are driving through a pedestrian place and children are to be expected playing on the road. These need to feel like pedestrian areas with no kerb, but perhaps a central drainage channel and street trees.*
S276.004 (Scott Stocker) is that "*the Maitai Valley Road needs some changes so it does not feel like a 100kph road. One suggestion is to plant trees down the middle of it or perhaps better still, trees in the paving either side of the road, to narrow the roadway and make it feel like a country lane rather than a racetrack."*
In relation to character and the street environment and in opposing the development as a whole, S358 (Mike Tasman Jones) raises concern that development within this rural area would compromise the rural character, quality and amenity value, especially the existing absence of urban infrastructure, for example, footpaths and street lighting.

Response

78. While the submissions identify appropriate aspirations, whether they are a potential solution depends on the appropriateness of the speed environment as identified by traffic and transportation planners, and a whole of environment consideration of street landscaping.
    a. Landscaping for streets within the development is covered by documents such as the Nelson Tasman Land Development Manual 2020 which also

triggers Council involvement. Treatment of the Maitai Valley Road also requires a whole of corridor approach. That would begin with assessment of the appropriateness of the existing condition additional demands that will be put on it, and then an appropriate integrated traffic engineering, open space and urban landscape resolution.

b. In the case of the Maitai Valley Road it may or may not be appropriate to include more trees, as to do so would spatially bisect part of Branford Park. In order to address the perceived speed environment, if that is necessary, treatments that suggest an urban street should be explored. That might include footpaths that signal a low-speed urban environment, particularly through and next to the park areas. It is essential that any design changes respect and respond accordingly to the valued character of Maitai Valley Road and the landscape and open space through which it passes.

OVERARCHING OBSERVATIONS

79. PPC28 is, from an urban design perspective and in its yet to be refined form, well-conceived, well-planned and sound in its execution.

80. This urban growth area is well-located due to its proximity to the city centre and in particular Kaka Valley being co-located with the existing recreational spaces and facilities in the Maitai Valley.

81. The planning strategy of locating the most intensive development on flat areas at low elevation closest to the city centre and limiting the density of development on and around the higher slopes and ridgelines is appropriate.

82. The Structure Plan is sound, subject to modification including describing:
    a. a full road connection to Walters Bluff;
    b. the planned viable alignment for the Kaka Valley to ridgeline road;
    c. an optimally located Suburban Commercial Zone including the indicative planning of this and its relation to open spaces and the Kaka Stream;
    d. a secondary street adjacent to the esplanade reserve along the central and northern part of the Kaka Stream; and
    e. potential refinements to zone boundaries to reflect the extent and location of viable and accessible lot layouts on the upper and steep slopes. This is to be based on a realistic but indicative street and block layout that takes into account known contours and ground conditions insofar as they are known at this time.

83. The planning and design controls that apply are, subject to the above refinement of the Structure Plan, suitably robust and comprehensive and will contribute to achieving appropriately high residential amenity and good quality urban design outcomes in the PPC28 area.