

Memorandum

To: Louisa Armstrong – Christchurch City Council

From: Richard Turner

Date: 17 November 2020

Re: Further Information Response – Ryman Park Terrace

INTRODUCTION

The purpose of this memorandum is to provide Ryman Healthcare Limited's ("Ryman") response to the further information requested by Christchurch City Council via email on 2 November 2020, pursuant to section 92 of the Resource Management Act 1991 ("RMA"), in relation to the resource consent applications for a comprehensive care retirement village ("Proposed Village") at 78 Park Terrace and 100 Park Terrace, Christchurch.

1. SHADING ASSESSMENT

The further information request seeks the following with respect to daylight and sunlight matters:

Given the accepted overreliance in the application on the District Plan's built form standards, please provide an updated sunlight and daylight study for both sites. Please include reference to 4a Dorset Street which has been omitted from previous submitted sunlight and daylight studies. It would also be helpful if you could please show a comparison with the previous buildings on the sites.

R.A Skidmore Urban Design Limited has prepared an updated shading analysis of the properties surrounding the Proposed Village, which is attached as **Appendix A**. The updating shading analysis includes 4A Dorset Street.

Appendix B provides shading diagrams comparing the shading from the Proposed Village with the shading generated by the previous (but still consented) buildings that were located on the Peterborough Site. This shading comparison is relevant background context, but is not relied upon in the updated shading analysis.

It is also not possible to prepare shading diagrams for the previous buildings on the Bishopspark Site due to the quality of the drawing set available for these buildings.

The updated shading analysis identifies the magnitude of shading resulting from the Proposed Village, as well as the magnitude of shading from the Proposed Village that is additional to the shading that would result from a building built within the built form standards for the Residential – Central City Zone. Both considerations have been used to inform the overall assessment of the

amenity effect of the shading, in terms of time, extent and relationship to site layout and use and amenity expectations guided by the objectives, policies and assessment matters under the Christchurch District Plan.

2. PROPOSED PEDESTRIAN CROSSING

The further information request seeks the following with respect to the proposed pedestrian crossing on Salisbury Street:

Please provide an update on the proposed pedestrian crossing on Salisbury Street, including updated plans, Community Board Approval, resolution of safety issues raised and an anticipated timeline for the implementation

A response from Commute Transportation Consultants regarding the proposed pedestrian crossing on Salisbury Street is attached at **Appendix C**. The consent conditions proposed by Ryman, attached as **Appendix D**, provide further detail on how Ryman intends to formalise the proposed pedestrian crossing on Salisbury Street.

3. RESIDENTIAL UNITS PER HECTARE

The further information request seeks the following with respect to the number of residential units per hectare:

Confirmation of residential units per hectare that is achieved on each site and total number of future residents on each of the sites.

The Bishopspark Site will have 85 one, two and three-bedroom independent living apartments, as well as 70 care rooms and 54 assisted living suites. The site is approximately 12,267 m² – such that the site will have a density of 172 residential units per hectare.

The Peterborough Site will have 80 one, two and three-bedroom independent living apartments situated across two buildings. The site is approximately 5,082 m² – such that the site will have a density of 157 residential units per hectare.

The proposed density on both sites comfortably exceeds the policy expectation for an average net density of at least 50 households per hectare for intensification development in the Central City (as per Policy 14.2.1.1(a)(ii) of the Christchurch District Plan).

The approximate number of future residents on each of the sites is as follows (taking into account the possibility of single or twin occupancy of the one, two and three-bedroom independent living apartments):

Bishopspark Site:	235 residents
Peterborough Site:	104 residents
Total:	339 residents

4. SITE PLAN AND ELEVATIONS OF PREVIOUS AND PROPOSED BUILDINGS

The further information request seeks the following:

A site plan and elevations for each site which shows the previous and proposed buildings.

Comparative drawings for the Peterborough Site are attached as **Appendix E**. An analysis of the previous buildings on the Bishopspark Site is not possible due to the quality of the drawing set available for these buildings.

5. WESTWOOD TERRACE LEGAL ACCESS

The further information request seeks the following:

Confirmation of how many properties have legal access to use Westward Terrace.

The titles record that there are 13 property owners (14 Records of Title), including Ryman, that have a right of way to use Westwood Terrace. These are listed in the table below.

Property	Identifier	Registered Owner
24 Dorset Street, 100 - 104 Park Terrace	CB28F/1159	Park Terrace No. 2 Limited
1/15 Salisbury Street	CB21B/749	Gordon Craig Bennett and Christina Anne Bennett
1/17 Salisbury Street	897762	Vance Edward Tainui Stewart, Cathleen Patrice Stewart, and John Francis Butchard
2/17 Salisbury Street	897763	Cookeson Properties Limited
3/17 Salisbury Street	897764	Gregor Vasill Yotoff Tzvetkoff and Fang Gao
4/17 Salisbury Street	897765	Terry James Best and Sharyn Patricia Best
5/17 Salisbury Street	897766	Southwest Terraces Limited
6/17 Salisbury Street	897767	R.J. Begg Properties Limited
23A Salisbury Street	746787	Richard John Lucas, Margaret Mary Lucas, and Canterbury Trustees (2006) Limited
23B Salisbury Street	746788	Brenda Lea Watson
23C Salisbury Street	746789	Deborah Marie Lawry, Deborah Beatrice Chapman, and Simon John Abbot

23D Salisbury Street	746790	Jane Marie Dewe and Gregory John Dewe
123 Victoria Street	591797	Victoria 123 Limited
	592028	

6. PEDESTRIAN SAFETY ALONG WESTWOOD TERRACE

The further information request seeks the following with respect to pedestrian safety along Westwood Terrace:

Pedestrian safety along Westward Terrace has been raised throughout the submissions. Will there be any demarcation of the areas for vehicles and pedestrians? A number of submitters are opposed to Westwood Terrace being promoted as a pedestrian access due to safety issues with the lack of width, reversing vehicles and lack of pedestrian facilities. Can you please provide an assessment on these issues.

A response from Commute Transportation Consultations regarding pedestrian safety on Westwood Terrace is attached at **Appendix C**. In summary, it is noted that Westwood Terrace was previously used as both a vehicle, service, and pedestrian access as part of the Bishopspark Retirement Village. The Proposed Village will only use Westward Terrace for minimal light traffic use and, therefore, is considered an improvement compared to the previous occupation.

With regard to pedestrian demand on Westwood Terrace, based on the site layout, Commute Transportation Consultants anticipate the following in terms of pedestrian demand between the sites:

- Occasional staff movements – While staff will predominantly be based at a single site, there may be a need for movements between the sites on occasion;
- Travel between recreational activities – it is expected that some of the more able bodied residents (generally based in independent apartments) will walk to, and from, recreational facilities on each site such as the bowling green (Bishops Park) and movie theatre (Peterborough). These trips would likely be outside of peak times; and
- With regard to food and common areas, there is no need for residents to travel between the sites as both operate in a self-sufficient manner.

Overall, it is estimated that between 150 - 200 pedestrian movements will occur on Westwood Terrace per day (or around 15 - 20 in the peak hour). It is also noted that shared pedestrian and vehicle lanes are a common arrangement in car parks and private accessways around the city and assuming vehicle speeds are low, there is no evidence of a safety issue with this arrangement.

7. TRAFFIC SAFETY ON DORSET STREET

The further information request seeks the following with respect to traffic safety on Dorset Street:

Truck reversing onto Dorset Street is dangerous and a potential safety issue. Is there an alternative that is available or how do you plan to deal with this safety issue?

A response from Commute Transportation Consultants regarding traffic safety on Dorset Street is attached as **Appendix C**. It is unclear who has formed the view that truck reversing is ‘dangerous’ and the basis for this view, but as noted by Commute Transportation Consultants the proposed access arrangement is considered safe due to:

- Adequate visibility being provided;
- Loading movement are infrequent; and
- A reversing manoeuvre onto Dorset Street will be made at low speed.

8. CAR PARK LAYOUT MATTERS

The further information request seeks the following with respect to the car park layout:

There are a number of issues raised in the submissions regarding the layout of the car parking (Centro Roydvale Ltd). Can you please confirm that the proposed layout is designed to comply with Appendix 7.5.1?

A response from Commute Transportation Consultants regarding the proposed car park layout is attached at **Appendix C**.

9. SETBACK OF LIVING ROOM WINDOWS

The further information request seeks the following with respect to the setback of living room windows:

Confirmation of the setback of the living room windows from the northern boundary for Building B01. The District Plan’s bulk and location standards require that living area windows need to be setback a minimum of 4m from internal boundaries where they are above first floor level.

The living room windows on the northern boundary of Building B01 on the Bishopspark Site are set back 3.244 m from the site boundary. However, these windows are also screened with vertical louvres to provide screening of neighbouring properties.

The assessment matters under Rule 14.15.30, in terms of the effects of the proximity of the building on the amenity of neighbouring properties, is considered to have already been addressed in the Assessment of Environmental Effects and the Urban Design, Landscape and Visual Assessment by R.A. Skidmore Urban Design Limited.

10. ARBORICULTURAL MATTERS

The further information request seeks the following:

Following the meeting of October 15 with the applicant, landscape architect and arborist it was agreed that the following would be provided: Provision of examples of trees over

basements that have successfully established, confirmation of height of replacement trees, radar of root system of protected tree at 76 Park Terrace and confirmation of any changes to the landscaping proposal including changes to soil volumes. Specifically, with regard to the protected tree at 76 Park Terrace, it was agreed that the drip line had been drawn incorrectly. Please provide accurate plans that reflect the correct drip line.

A response from Design Squared to these matters is attached as **Appendix F**.

11. SPRING ON THE BOUNDARY OF THE DORSET STREET FLATS

The further information request seeks the following:

Confirmation or not of the presence of a spring on the boundary with the Dorset Street Flat.

Tonkin & Taylor visited the site on 4 November 2020 and did not see any evidence of a spring on the boundary of the site with the Dorset Street Flats. It is also noted that there are no springs listed on the Environment Canterbury Well Database at this location.

12. ENVIRONMENTAL EFFICIENCIES AND SUSTAINABILITY FEATURES

The further information request seeks the following with respect to the environmental efficiencies and sustainability features:

Provision of how the build will address environmental efficiencies and sustainability features.

Ryman have integrated environmental efficiency and sustainability initiatives into the design of the Proposed Village. These initiatives include:

- Buildings that are oriented to maximise natural lighting and solar shading features;
- Solar shading features that include deep eaves, balconies and louvres for solar control to north, east and west facades;
- The use of concrete and brick materials for thermal mass benefits;
- The use of thermally broken windows with low emissivity glass;
- Passive ventilation, where possible, to remove the need for mechanical ventilation; and
- The integration of electric vehicle charging stations within the Proposed Village.

Additionally, the following outcomes will form part of the operation of the Proposed Village:

- A van will be utilised for group outings;
- Mobility scooter, e-bike parking and charging facilities will be available throughout the Proposed Village;
- Energy efficient appliances and lighting will be used throughout the Proposed Village; and
- Recycling and waste streams will be separate.

13. NATIVE BIODIVERSITY

The further information request seeks the following with respect to native biodiversity:

A number of submissions have raised concerns regarding the proposed landscaping and that no new native trees are proposed to enhance biodiversity throughout the site. Has this been reconsidered, and if so, please provide amended landscape plans.

Further to the further information response provided on 18 May 2020, the Proposed Village requires resource consent as a restricted discretionary activity in the Residential Central City Zone under Rule 14.6.1.3, with the matters of discretion limited to those matters set out in Rule 14.15.9 and the built form standards that are exceeded. None of the matters of discretion reference the site landscaping needing to enhance biodiversity values through the site.

The principal focus of the landscaping treatment for both sites (which are private sites) has been to provide specimen trees that reflect the surrounding environment around Park Terrace and Hagley Park, and which provide a garden-type environment that is pleasant for residents. Some native species will be used as part of the under-planting.

In light of the above, updated landscape plans are not provided as part of this further information response.

14. SERVICE VEHICLE DELIVERIES

The further information request seeks the following:

Provision of estimated times for service vehicle deliveries.

Service vehicle deliveries to both sites will typically be off peak and during daylight hours.

15. HERITAGE NEW ZEALAND POUHERE TAONGA

The further information request seeks the following with respect to Heritage New Zealand Pouhere Taonga:

Heritage New Zealand Pouhere Taonga have included in their submission a number of conditions that they seek to be impose if consent is granted. Could you please confirm if these are acceptable and thus would form part of your proposal.

Ryman met with representatives of Heritage New Zealand Pouhere Taonga regarding their submission on 4 November 2020.

The relevant consent conditions attached as **Appendix D** have been sent to Heritage New Zealand Pouhere Taonga for their review and comment. We will provide further comment on this matter once we have received feedback from Heritage New Zealand Pouhere Taonga.

16. SUBSURFACE DRAINAGE MATTERS

The further information request seeks the following with respect to subsurface drainage or subsoil drains:

An assessment of the extent to which any potential changes to the patterns of surface drainage or subsoil drains can be avoided or mitigated if those changes would put the site or adjoining land at higher risk of drainage problems, inundation run-off, flooding, or raise the site's or adjoining land's water table; whether any change in ground level would be likely to impact on trees on adjacent sites in terms of access to water and drainage; and the extent of any potential adverse effects on the quality of groundwater and whether any such can be avoided or mitigated.

Woods have undertaken an assessment of the overland flow paths within the site and adjoining properties. Based on their assessment, it is noted that most neighbouring sites are bounded by masonry block walls and / or retaining walls - with no major identified overland flow paths entering or exiting the site. No subsoil drainage was noted on the subject site or adjoining Sites.

Investigation of the proposed finished ground levels indicates that there will be no new overland flow paths created between the site and adjoining properties. As such, following construction, there will be no changes to the patterns of surface drainage, including no changes to the risk of inundation runoff and flooding. As there are no proposed changes to overland flow paths, Woods do not consider there to be any likely impact to trees on adjacent sites.

As noted in the Civil Design Report, stormwater treatment will be provided to runoff from all trafficable areas, with runoff to be attenuated prior to discharge to the public stormwater reticulation. Therefore, Woods do not consider there to be any adverse effects on the quality of groundwater.

Tonkin & Taylor further advise that they do not expect that the construction of the basements will have consequential effects on the level of the groundwater table at the site. The potential for drawdown of groundwater leading to settlement is mitigated by the proposed perimeter retention system. As the steel clutches are exposed by excavation, they will be welded to ensure they are watertight. The welding will typically extend to the low permeability silty peat that underlies the site, which will prevent consequential local drawdown.

17. PUBLIC SITE AMENITIES

The further information request seeks the following with respect to public access to site amenities:

Confirmation if any of the onsite amenities will be available for use by the public.

Ryman have confirmed that the public will not have any access to the amenities within the Proposed Village. Consistent with all of other Ryman villages, site amenities are for the use of residents and their guests only.

18. CHANGES DUE TO CONCERNS RAISED IN SUBMISSIONS

The further information request seeks the following:

An updated plan set following any changes as a result of concerns raised in the submissions.

No changes to the design of the Proposed Village are proposed by Ryman. As such, an updated plan set is not being submitted as part of this further information response.

19. EFFECTS ON HERITAGE LISTED DORSET STREET FLATS

The further information request seeks the following:

An assessment of the effects of the development on the adjacent heritage listed Dorset Street flats.

DPA Architects note that the Dorset Street Flats are listed as a Category 1 Historic Place by Heritage New Zealand Pouhere Taonga and scheduled as a Highly Significant Historic Heritage Place in the Christchurch District Plan. The complex was designed in what would become known as the Brutalist style by Miles (later Sir Miles) Warren and is recognised as one of the most significant Modern Movement buildings in New Zealand. The significant heritage values of the flats are well recognised.

DPA Architects acknowledge that the Proposed Village is larger in scale than the retirement village that was previously on the Bishopspark Site. The Proposed Village is also larger than nearby single storey villas and the two storeyed flats. However, much of the recent development in the area is larger than the villas and flats, and the scale of the Proposed Village reflects its zoning as Residential - Central City.

With respect to its design, the Proposed Village has been designed by Warren and Mahoney as a contemporary development and one that clearly does not try to emulate its older neighbours. In the opinion of DPA Architects, that is an appropriate response to the surrounding context - including the flats.

An image created by Young Architects was attached to the submission of the Dorset Street Flat Owners Group. The image shows the north elevation of the flats with Building B01 superimposed behind them. Both buildings are shown as a true elevation – a view that, in reality, will never be seen - with the new building appearing as one large structure.

Building B01 is in fact “U” shaped in plan, with two wings enclosing a landscaped courtyard. Although the building is taller than the flats at four levels, the upper level is stepped back to reduce its scale. For this reason, when viewed from the street, DPA Architects do not believe that the flats will be overshadowed or dominated by the Proposed Village.

Some of the submitters described the end walls of the two wings as being largely blank. In fact, there are small windows at each level in the end walls with angled screens to provide some texture and interest to the facades. The angled screens will also ensure privacy to the flats.

It is noted that the former stables building behind the flats, that was demolished after the earthquakes, is to be reconstructed. DPA Architects consider this building will provide additional separation between the flats and the Proposed Village.

In conclusion, the flats face north which means they will be facing away from the Proposed Village. Efforts have also been made to reduce the scale of the two wings of Building B01 by stepping back their upper level. These measures will ensure that the flats will not be dominated or overshadowed by the Proposed Village.

20. LIQUEFACTION MATTERS

The further information request seeks the following with respect to the TC3 and liquefaction possibilities:

An assessment of the TC3 and liquefaction possibilities of the land in conjunction with the proposed buildings.

Tonkin & Taylor advise that the seismic performance of both sites are comparable and can be assessed collectively.

Tonkin & Taylor have assessed the seismic performance of the site in terms of the shaking hazard in accordance with guidance from the Ministry of Business, Innovation and Employment (2014). Tonkin & Taylor advise that the potential for liquefaction was assessed using the Boulanger and Idriss (2014) method, which includes in its database case studies from the Canterbury Earthquake Series. Post-liquefaction settlements were then calculated using the approach set out in Zhang (2002). Further details, including the specific parameters and results, are set out in Section 5.2 of the Geotechnical Assessment provided with resource consent application in March 2020.

Under seismic shaking, some of the subsurface materials at the site are at risk of liquefaction related strength loss and settlement. Some materials in the upper 10 m or so (Springston Formation) are at high risk of liquefying, with occasional lenses or pockets possibly affected in the Christchurch Formation (the next 10 m or so below that). The Riccarton Gravels are too dense and permeable to liquefy.

The calculation method set out above shows liquefaction occurring under frequent (25-year return period) levels of seismic loading, with the intensity and extent increasing up to infrequent (200 - 300-year return period) loading. Without mitigation, the effects of liquefaction are likely to include strength loss of materials, post-liquefaction settlements up to 300 mm, and lateral spreading towards the Avon River. As such, the performance of this site is consistent with the technical classification, TC3, as developed by the Ministry of Business, Innovation and Employment.

These liquefaction effects can be appropriately mitigated by an appropriately designed foundation system. The proposed foundation and retention system will mitigate the effects of seismic shaking on the Proposed Village and the consequential effects are expected to be negligible on site.

It is currently proposed that the basement perimeter will be retained by driven circular steel tubes, 'clutched' to each other like sheet piles, and filled with concrete for stiffness. These are stiff elements (to control deformations) and restrict groundwater flow through the clutches. Once these piles are installed, the single level basement can be excavated in stages and the steel clutches welded as they are exposed to provide an impermeable permanent perimeter wall. Temporary water flows through the basement floor are anticipated and will be controlled by pumping. During the excavation, the perimeter walls will be supported to maintain wall deformations at acceptable levels.

For the foundations, the current proposal utilises rigid concrete elements (similar to piles) that will be drilled through the floor extending to the dense sands between 10 and 20 m below ground level. In combination with the slab, the rigid elements stiffen the soil and carry the load of the building into non-liquefying layers and mitigate settlement. An approximately 1 m thick, rigid concrete slab will then be cast onto the basement floor, providing a permanent prop to the steel perimeter walls. The basement foundation system will then be waterproofed, and a base isolated structure constructed in dry, controlled conditions above the foundation slab.

Once completed, the system will provide a stable foundation for the proposed buildings and mitigate any potential offsite effects of the Proposed Village. Liquefaction strength loss and settlement will be isolated from the buildings by the installation of the concrete rigid elements into dense layers, combined with the basement slab and the base isolated structure above.

Finally, the potential for liquefaction to occur offsite and the consequences of this happening is not assessed to change in any meaningful way by the Proposed Village.

21. CONSTRUCTION MATTERS

The further information request seeks the following with respect to construction effects including the use of Westwood Terrace:

Many of the submissions in opposition raised issues regarding construction including the use of Westward Terrace for construction traffic, dust, noise, vibration, hours of operation, length of construction, cumulative effects of construction in the area etc. So that a full assessment of these effects can be undertaken could you please provide a Draft Construction Management Plan and a supporting Construction Traffic Management Plan for the two sites.

A Draft Construction Management Plan, including matters relating to the management of construction noise and vibration, is attached as **Appendix G**. It is noted that some minor exceedances of the construction noise standards are predicted for very short periods of the

construction programme. The draft CMP identifies mitigation approaches to address those minor exceedances in line with the proposed condition.

Likewise, the Draft Construction Traffic Management Plan prepared by Commute Transportation Consultants is attached as **Appendix B**.

22. PROPOSED CONDITIONS

The further information request seeks the following with respect to the proposed conditions:

Please provide a full list of any proposed conditions.

The consent conditions to be proffered by Ryman are attached as **Appendix C**.