BEFORE THE COMMISSIONERS ON BEHALF OF DUNEDIN CITY COUNCIL

IN THE MATTER of Application for Resource Consent under Section 88 of the Resource Management Act 1991

BY **NZ HORIZON HOSPITALITY GROUP LIMITED**

LUC 2017-48 and SUB 2017-26

BRIEF OF EVIDENCE KURT ALISTAIR BOWEN

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INTRODUCTION

1. My full name is Kurt Alistair Bowen. I am a surveyor and director of Paterson Pitts Management Limited.

2. I have been engaged by NZ Horizon Hospitality Group Limited to provide information relevant to the proposed Dunedin Moray Place Hotel. To aid in focused discussion, this information will be presented to the Hearings Committee within several bundles of expert evidence. This particular evidence bundle addresses the shading assessment material that has been provided as part of the application documents.

3. I have read the Code of Conduct for Expert Witnesses within the Environment Court Consolidated Practice Note 2014 and I agree to comply with that Code. This evidence is within my area of expertise, except where I state I am relying on what I have been told by another person. To the best of my knowledge I have not omitted to consider any material facts known to me that might alter or detract from the opinions I express.

SHADING ASSESSMENT

Preliminary

4. This evidence refers to the shading assessment diagrams and associated report notes that form part of the application information. The relevant application information is:

    (a) Plans (**Appendix A**):

        (i) Sheets dated 31/01/17 and numbered 1-3.

        (ii) Sheets dated 30/06/17 and numbered 1-13.

    (b) Reports: dated 31/01/17 and 30/06/17 (**Appendix B**).

    (c) Resource: Sun elevation/bearing diagram (**Appendix C**).

    Copies of the above plans and reports are attached to this evidence bundle.

Methodology

5. The critical heights of the proposed building have been determined from the concept architectural plan (not contained in the application documents), with a correction of +112.500 applied to convert these levels to Otago Datum. This correction has been determined through comparison of dimensions shown on the concept architectural plan with measurements made to existing ground level. I note that the architectural plans submitted with the application have also been converted to Otago Datum, however that there is a 0.200m difference in the levels between those used for shading purposes and those used by the applicant's architect. This difference appears to arise from rounding processes employed from the independent design processes. While this difference exists, it is not of a size that I consider would either i) materially affect the various assessments that have been undertaken, or ii) materially affect the accurate interpretation of the proposed activity.

6. The critical levels are-

   (a) Top of main building: 172.100 (shown on the architectural plans as having a level of 171.900).

   (b) Top of ring feature: 176.850 (determined by scaling from the concept architectural plan; a distance of 4.750m above the top of the main building).

7. The shading assessment has taken into account four principal forms of the proposed Hotel structure, these being-

   (a) The service shaft and ring feature at the top of the building.

   (b) The extent of the structure at its upper level floor, at RL 172.100 (shown on the architectural plans as having a level of 171.900). Note that this shape ignores the small bite that is shown on Section AA of the architectural plans removed from the left-hand-side of the structure.

   (c) The extent of the structure at its widest 'bulge' point (Level 8).

   (d) The extent of the structure at its various ground level elevations (Levels 1 to 4) as it retracts from the bulge point at Level 8.

8. The combination of these four principal forms, at their respective elevations, provides the 3-dimensional block that has been used as the basis of the shading assessment.

9. Ground levels of the surrounding landscape have been adopted from Dunedin City Council LiDAR information (sourced as contour lines at 0.500m intervals). This LiDAR information has been corrected by +100.000m to convert from Mean Sea Level to Otago Datum.

10. The elevation and orientation of the sun has been interpreted in the conventional manner using the diagram titled ‘Elevation and Bearing to Sun in Dunedin (45°53’S 170°30’E) – FIG. A’, a copy of which is attached.

11. Using the above information, the assessments that have been carried out occur at various times of the day for each of the three significant annual occurrences:

    (a) Summer Solstice; 21 December.

    (b) Winter Solstice; 21 June

    (c) Equinox; 20 March and 23 September

12. The sun elevation and orientation values for the Summer Solstice date apply Daylight Savings Time.

13. In each assessment, the extent of the shadow has been determined as being the intersection of the line from the sun’s positon (centre of the sun) in the sky across the top of the subject to where this intersects with the existing ground surface or an existing structure.

14. Where existing structures are considered in the various assessments, the horizontal positon of these structures has been determined from DCC aerial photography and the vertical height of these structures has been determined from DCC LiDAR information.

Sheets dated 31/01/17 and numbered 1-3.

15. These assessment diagrams depict the extent of the shading that will occur from the proposed Hotel on each of the three significant annual occurrences.

16. The earliest time of the day applied to the shading assessments shown on these sheets has been determined as being the earliest hour at which the sun has risen above the eastern horizon, e.g. 7am on the Summer Solstice. In respect of the Winter Solstice, the latest time of the day applied to the shading assessments is 4pm (the sun has set before 5pm). In respect of the Equinox, the latest time of the day assessed is 6pm (the sun has set before 7pm). In respect of the Summer Solstice, the latest time of day assessed is 7pm (at this date the sun will set at approximately 9pm). Various hours have then been selected for the assessment between the rise and set times to provide a suitable range of shading scenarios. Local topography has been accounted for in these assessments.

17. The extent of the shading, at the times selected, has been determined in accordance with the methodology described above.

18. These sheets also identify a number of nearby existing structures that will interrupt the extent of the anticipated shading from the proposed Hotel structure. In these instances the shadow will terminate on the vertical wall or roof plane of the interrupting structure. The instances where this occurs have been marked on the assessment diagrams as a yellow line on the periphery of the shading areas. I note that not all existing structures have been included in this part of the assessment. There are numerous small existing structures (and other features such as established trees), which have not been included in this shading assessment, that are likely to also interrupt the anticipated Hotel shading. It is considered that the influences of these elements on the shading assessment will be relatively minor. The structures that have been taken into account are those that I expect will have a moderate to substantial effect on the shading assessment, these generally being large structures located near to the Hotel site and medium-large structures located near to the limits of the projected shading effect.

19. Shading that currently occurs from existing buildings has not been illustrated on these diagrams.

Sheets dated 30/06/17 and numbered 1-3.

20. These assessment diagrams repeat the assessment illustrated on the sheets dated 31/01/17, except where modified as follows-

    (a) These sheets include the extent of shading that would be expected to occur at several selected levels of the proposed Hotel (shown and labelled in orange). The selected levels are-

        (i) Level 16: 168.500 (shown on the architectural plans as having a level of 168.300).

        (ii) Level 14: 161.300 (shown on the architectural plans as having a level of 161.100).

        (iii) Level 10: 146.900 (shown on the architectural plans as having a level of 146.700).

    (b) The sheets dated 30/06/17 and numbered 2 and 3 include a minor adjustment to the shading lines that were shown on the sheets dated 31/01/17. This adjustment serves to improve the accuracy of the shadow paths by a small margin. The later sheets have plotted the proposed Hotel at a horizontal location several meters more accurately than the original sheets, and the shadow paths have been improved accordingly. This has resulted in the shading impacts being plotted approximately 1mm differently on the later sheets than they appeared on the original sheets (when printed in A3 size format). Sheet 1 has not required any adjustment in this regard.

Sheets dated 30/06/17 and numbered 4-7.

21. These assessment diagrams illustrate the impact of shading from the proposed Hotel on the Octagon at various times in the afternoon of the Winter Solstice. The times used are: 2pm, 2:25pm, 3pm and 4pm. The time at 2:25pm corresponds to the angle of the sun matching the orientation of Harrop Street.

22. There will be no shading in the Octagon on the Winter Solstice from the proposed Hotel before approximately 1:15pm (at which time the Hotel shadow corridor will only just be starting to encroach onto the Octagon space. Similarly, there will be no shading in the Octagon after approximately 4:10pm (at which time the sun will have just set behind the hillside to the west).

23. I have undertaken the necessary sun elevation/orientation calculations to confirm the period of days (over the course of the year) in which the Octagon will be subject to some level of shading from the proposed Hotel. My calculations indicate that this period is 11 weeks, occurring from approximately 14 May to approximately 29 July.

24. The shading extents of the Octagon assessments have been determined using the same manner as described in the Methodology above.

25. These sheets also show the extent of shading from existing buildings within the Octagon. This existing shading is shown in a dotted pattern to distinguish it from the Hotel shading, which is shown in a more solid grey pattern. Where the two sources of shading overlap, the existing shading has been given priority. The purpose of these diagrams is to illustrate the degree of additional shading that the proposed Hotel will generate beyond the existing shading that occurs through this period of the Winter Solstice.

26. The sheet dated 30/06/17 and numbered 6 (3pm) includes several notes that appear in the south-east quadrant of the Octagon. These notes relate to the existing shading that occurs from the trees which line George Street and Princes Street. This extent of this shading has not been illustrated on the assessment diagrams due to its ‘soft’ nature, however the notes recognise that there is a degree of existing shading in this regard and that the shadows cast from these trees extend as far as face of the buildings that ring the Octagon.

27. Where the extents of the assessed shading has been shortened to assist with diagram clarity (for instance, where the shadows passes beyond the Octagon), the edge of the applicable shading has been illustrated using a dashed black line.

Sheets dated 30/06/17 and numbered 8-10

28. These assessment diagrams illustrate the shading effect that would be generated from a ‘permitted structure’ (under the operative District Plan) erected within the ‘Lot 1’ portion of the subject site. I note that this structure shown on this plan has been described as the ‘controlled activity building outline’ in the section 42a report. The references in this evidence to the ‘permitted structure’ remain consistent with the notes I have prepared for the application and not intended to imply that the structure enjoys a permitted activity status under the respective District Plans, only that the occupied space of the described structure is consistent with the bulk and location rules of those District Plans.

29. The assessments depicted on these plans show the shading that will occur on all three significant annual occurrences, at various times of those days.

30. To evaluate a ‘non-fanciful’ structure, I have adopted a building that is stepped across the site, with four different roof levels that are each 3.5m apart. Each of the roof levels used by these sheets have then been set at a height that is 11m above a position on the ground that is located at the lowest point on a line running across the site perpendicular to the building steps and located near the Moray Place corridor (this line is the same line shown as ‘A-A’ on the ‘Occupied Space’ plan sheet dated 30/06/17 contained in the anticipated views assessment information). For the portions of the building that are located south of the ‘A-A’ profile line, I have recognised that these portions will also step lower as the building moves towards Moray Place due to the ground level reducing in this direction. Accordingly, the non-fanciful structure has roof levels that have been set 11m above appropriate ground levels in these regions and this is reflected in the resulting shading assessment diagrams. Overall, it is my consideration that a new building constructed to the levels described would comply with the 11m heights as anticipated by the operative District Plan and that such a building would be non-fanciful in nature.

31. Having determined the shape of a non-fanciful structure, the shading impacts have been determined in the same way as the standard methodology above, for various times of day at each of the three principle times of year.

32. These sheets also identify a number of nearby existing structures that will interrupt the extent of the anticipated shading from the proposed Hotel structure. These interruptions have been assessed and illustrated I the same manner as described in paragraph 18 above.

33. Shading that currently occurs from existing buildings has not been illustrated on these diagrams.

34. Where the extents of the assessed shading has been shortened to assist with diagram clarity (for instance, where the shadows passes beyond the Octagon), the edge of the applicable shading has been illustrated using a dashed black line.

Sheet dated 30/06/17 and numbered 11

35. This assessment diagram mimics the assessment illustrated on the sheet dated 30/06/17 and numbered 10 (Winter Solstice), except where modified as follows-

    (a) This assessment diagram illustrates the shading effect that would be generated from a 'permitted structure' (under the proposed District Plan) erected within the 'Lot 1' portion of the subject site.

    (b) Each of the roof levels used by this sheet have been set at a height that is 16m above the ground level of the relevant position.

Sheets dated 30/06/17 and numbered 12 and 13

36. These assessment diagrams have been prepared to illustrate the shading effect that would be generated from a permitted structure (under the operative District Plan) that could be erected along the northern boundary of the Kingsgate property.

37. The assessment depicted on these plans show the shading that would occur from a permitted structure on the Winter Solstice, at 9am and 10am.

38. The extent of the shading from the proposed Hotel structure is also shown on these assessment sheets. Where the shading extents overlap, the permitted structure shading has been given priority.

39. To evaluate a ‘non-fanciful’ structure, I have adopted a building that is stepped along the northern side of the subject boundary line, with different roof levels that are 3.0m apart.

40. Each of the roof levels used by this assessment have then been set at the permitted height above the lowest point on the ground within the relevant building section. The lowest point of each section has been determined at a distance of at approximately 8m to the north of the boundary line (rather than on the boundary itself), in recognition that a non-fanciful structure must have a useable width associated with it. The small region of bank at the Moray Place end of the boundary has also been taken in to account, with the shading that would be generated from a permitted building at this location being restricted to reflect a structure that extends no more than the permitted height above an appropriate ground level in this region.

41. The building heights have been determined to comply with the operative District Plan provisions, which allow an 11m high building along the eastern half of the subject boundary and a 9m high building along the western half (due to differences in the applicable zone provisions).

42. Having determined the shape of a non-fanciful structure, the shading impacts on the adjacent Kingsgate property have been determined in the same way as the standard methodology described above.

43. The sheet dated 30/06/17 and numbered 13 illustrates the vertical extent that shading would occur across the northern face of the Kingsgate building, at both the 9am and 10am instances. The height of this shading has been determined in respect of the non-fanciful structure described by calculations using the elevation of the sun at each of the assessed times and the position and height of the Kingsgate building (as adopted from DCC aerial photography and LiDAR information). This resultant height has then been placed onto the photographic image by maintaining the proportion of the calculated shading height relative to the apparent building height.

44. Shading that currently occurs from existing buildings has not been illustrated on these diagrams.

Other Relevant Matters

45. No transitional shading has been illustrated on any of the assessment diagrams. Transitional shading occurs along the inside and outside edges of the shading areas, where the sun is partially obscured by the edge to the structure. This creates a 'fade' between full sunlight to full shadow, with a transition range between. The average apparent diameter of the sun is 0°32'02", which creates a transitional shading wedge that widens at a rate of 0.932m for every 100m that the full shadow extends away from the subject structure. The 'hard' lines shown on the assessment plan at the edges of the shading areas illustrate the centre of the transitional fade wedges (due to these lines having a bearing to the centre of the sun). Thus the transitional wedges, if depicted on the assessment diagrams, would project on both the inside and the outside of the illustrated lines at a rate of 0.466m per 100m. As an example, if we consider the longest of the assessed shadows, occurring at 4pm on the Winter Solstice diagram and having a shadow that extends a distance of close to 710m, we can determine that the total width of the transitional shading width at its maximum is 6.617m. This wedge would extend to a maximum distance of 3.309m on either side of the shadow edge illustrated, this width equating to a diagram distance of 1.3mm when plotted at the 1:2500 scale of the Winter Solstice assessment diagram.

46. No assessment has been made to-date of the shading that is presently generated across the application land by existing structures or the surrounding environment.

S42A Report

47. Paragraph 216 of the s42a report contains a statement that Kingsgate Hotel property will be shaded by the proposed Hotel for "*approximately ¾ of the year*". This is clearly a statement of indicative nature, and so to assist the Committee I have undertaken the necessary sun elevation/orientation calculations to confirm the period of time during which the Kingsgate hotel property will be subject to shading from the proposed Hotel. My calculations indicate that this period is more accurately 33 weeks (slightly less than ⅔ of the year), between approximately 26 February to approximately 14 October.

ANTICIPATED VIEWS ASSESSMENT

Preliminary

48. This evidence refers to the anticipated views assessment diagrams and associated report notes that form part of the application information. The relevant application information is:

    (a) Plans (**Appendix D**):

        (i) Sheets dated 31/01/17 and numbered 1a, 1b and 2-10.

        (ii) Sheets dated 28/03/17 and numbered Ind. A, Ind. B and 11-21 (but not 17a).

        (iii) Sheets dated 04/04/17 and numbered 17a and 22-23.

        (iv) Sheets dated 27/06/17 and numbered 22 and 23.

        (v) Sheet dated 30/06/17 and numbered 1.

    (b) Reports: dated 28/03/17 and 30/06/17 (**Appendix E**).

    Copies of the above plans and reports are attached to this evidence bundle.

Montage Methodology

49. A total of 24 assessment positions have been identified to provide a range of view representations. Of these, 23 visual montages have been developed. One position, shown with ‘Note 1’ reference on the Ind B sheet (28/03/17), was not montaged after it became apparent that the hotel would not be visible at all from this position.

50. The montages have been constructed in such as manner as to provide visual representations that are consistent with the NZILA ‘Visual Simulations Best Practice Guide 10.2’ document.

51. Photographs have been taken from each of the 23 assessment positions indicated by the plans provided. Accurate positions and levels have been measured at each of the photograph locations (these have also been obtained for the Hotel site).

52. The width of the Hotel has been determined in each view through comparison of the horizontal extents of the Hotel against photographic lines-of-sight to relatable structures located near to the Hotel site. This was achieved by plotting lines on an aerial photograph from the sides of the hotel to the subject photo position, and noting which obvious existing features these lines passed over. The horizontal width of the Hotel frame has then been able to be inserted onto the photo using these features for reference.

53. The height of the Hotel has been determined in a similar manner as described above, i.e. by determining its relative relationship to existing structures that appear within the image. Known heights of existing features, sourced from either DCC LiDAR information or by physical measurement by theodolite, have been used to determine the relative vertical position of an appropriate point on the Hotel frame, and this enabled the Hotel frame to be inserted onto the photo image at that position. The vertical scale of the Hotel frame has been established by maintaining the design height relative to the design width of the structure, as determined by the horizontal extents method described above. Where the vertical extent of the Hotel is at a steep angle (where the high-angle of view is at greatest risk of inheriting inaccuracy due to extrapolation of the oblique perspective) the positioning of the top of the Hotel has been verified by physical measurement. This occurred by using a theodolite to observe where the known vertical angle between the applicable photo position and the top of the Hotel would meet with existing structures in the photo.

54. From the measurements described above, the framework outline for the proposed Hotel structure was able to be plotted onto the photographic images. The architectural design of the Hotel has then been added to the images using the framework outline as means of calibration to ensure that the correct perspective is achieved (this process was undertaken by Thom Craig Architects). Each resulting montage image has been checked by Paterson Pitts Group against its parent framework outline to confirm accuracy.

55. The accuracy of the montage methodology described above, considering all elements of the imaging process, is considered to be-

(a) For far-perspective montage plans (i.e. from assessment position 9 and further distant): an image accuracy of 1mm (on an A3 print format).

(b) For mid- and close-perspective montage plans: have an image accuracy of 2-3mm (on an A3 print format), depending on the quality of the reference features and whether theodolite verification has been employed.

56. The quality of the photographs was considered. Several initial photographs were re-taken due to poor conditions. Note that the montage from the Andersons Bay Sea Scouts car park (No. 1) has two view assessment diagrams supplied. The first of these is slightly dark while the second is overly light. Both images have been supplied in lieu of a single image taken during ideal photographic conditions.

57. The photographs have been taken in several stages. The montage view positions numbered 1-10 and 23 were taken using several digital cameras, as noted below:

(a) Samsung S5 with a 31mm focal length (not zoomed).

(b) Fuji Finepix C25 with a 35.5mm focal length (not zoomed).

(c) Fuji Finepix A800 with 36mm focal length (not zoomed).

58. For photographs 1-10 and 23 the Hotel form has been added to the image and the image has then been cropped in size to achieve an equivalent 50mm lens field of view (to achieve consistency with the 'Visual Simulations BPG 10.2' manual). The view sizes of these images have been checked against subsequent photographs taken from the same assessment positions using a Ricoh KR-10m camera with a Cosina 50mm lens and 200 ASA Fuji film to confirm field of view accuracy.

59. The montage view positions numbered 11-22 were taken using the Ricoh KR-10m camera with a Cosina 50mm lens and 200 ASA Fuji film. In these instances, the Hotel form has simply been added and no image cropping has been needed.

60. As recommended by ‘Visual Simulations BPG 10.2’ manual, the 50mm field of view images have been supplied A3 size. Accordingly, by printing these montage plans on A3 paper, and holding the prints at a distance of 500mm from the eye, the images are expected to replicate what will become the ‘real’ scene if the Hotel is built.

Permitted Structure Methodology

61. The ‘permitted structure’ perspective plan, dated 30/06/17 and numbered 1, shows the upper height of a permitted non-fanciful structure on the application land (built to 11m and 16m above existing ground level, representing the operative District Plan and proposed District Plan provisions respectively). I note that this structure shown on this plan has been described as the ‘controlled activity building outline’ in the section 42a report. The references in this evidence to the ‘permitted structure’ remain consistent with the notes I have prepared for the application and do are intend to imply that the structure enjoys a permitted activity status under the respective District Plans, only that the occupied space of the described structure is consistent with the bulk and location rules of those District Plans.

62. To evaluate a ‘non-fanciful’ structure, I have adopted a building that is stepped across the site, with four different roof levels that are each 3.5m apart. Each of the roof levels used by this assessment have then been set at heights of 11m and 16m above a position on the ground that is located at the lowest point on the ‘A-A’ cross-section shown on the inserted diagram. It is my consideration that a new building constructed to these levels, along the ‘A-A’ alignment, would comply with the 11m and 16m heights as described by the District Plans and would be non-fanciful in respect of the practical ability to construct such a building.

63. For interpretation purposes, lines have been plotted on this visualisation sheet that show the profile of the 11m and 16m above ground alignments along the ‘A-A’ cross-section (these are shown in orange).

64. The horizontal positions of the steps in the permitted structure roof alignment have been plotted onto the oblique photograph image using the same method as used for the montage visualisations described above.

65. The vertical levels of the permitted structure shown on the assessment sheet have been established by using a theodolite to observe where the known vertical angle between the applicable photo position and the top of the permitted structure, at each of the roof steps, would correspond with existing structures in the photo.

66. It is important to note that the 'permitted structure' perspective plan, dated 30/06/17 and numbered 1, does not meet the 50mm field of view perspective (as recommended by the 'Visual Simulations BPG 10.2' manual) due to the intention of this image to illustrate the broader picture.

Specific Sheets

67. The purpose of sheet 17a (dated 04/04/17) is to replace sheet 17 (dated 28/03/17). The replacement sheet includes part of an existing structure that is located in front of the proposed Hotel (which does not appear on the original sheet).

68. The purpose of sheets 22 and 23 (dated 27/06/17) is to illustrate additional information beyond what is shown on sheets 22 and 23 (dated 04/04/17). The later sheets include the Hotel montage image, whereas the earlier sheets show only the Hotel framework shape.

INFRASTRUCTURE DEMAND ASSESSMENT

Preliminary

69. This evidence refers to the infrastructure demand assessment that forms part of the application information. The relevant application information is:

    (a) Report: dated 27/01/17 (**Appendix F).**

    Copies of the above report is attached to this evidence bundle.

Foul Sewerage Infrastructure

70. The manner of foul sewerage disposal has been described in the application report. Relevant calculations are included in the description.

71. I consider that the method used to assess foul sewerage demand is consistent with local best practice.

72. The application report concludes that the proposed Hotel will generate an additional foul sewage discharge flow of 6.5 litres per second into the local City network. It is understood, from discussions with DCC Water and Waste staff, that this level of flow can be accommodated within the existing reticulated network. Furthermore, gravity drainage can be achieved to the existing public infrastructure in Moray Place.

Water Infrastructure (Domestic Supply)

73. The manner of water supply has been described in the application report. Relevant calculations are included in the description.

74. I consider that the method used to assess water supply requirements is consistent with local best practice.

75. The application report concludes that the proposed Hotel will generate an additional minimum water demand for domestic purposes of 8.1 litres per second from the local City network. It is understood, from review of the water pressure records and discussions with DCC Water and Waste staff, that this level of supply can be accommodated from the existing reticulated water supply network infrastructure which is available in Moray Place.

76. A backflow preventer valve and meter will need to be installed on the Hotel supply connection to ensure that the City's public reticulation network is not put at risk from reverse contamination issues.

Stormwater Infrastructure

77. The manner of stormwater discharge has been described in the application report. Relevant calculations are included in the description.

78. I consider that the method used to assess stormwater discharge is consistent with local best practice.

79. The application report concludes that the proposed Hotel will generate an additional stormwater discharge flow of 6.8 litres per second. This is a

fairly modest increase, principally due to the fact that the site is predominantly surfaced in asphalt and paving areas at present.

80. There are known capacity issues with the nearby public stormwater system and the proposed Hotel will need to provide suitable on-site retention to ensure that downstream effects are not exacerbated.

81. The retention facility will need to ensure that it is able to be effective under both short, high-intensity events and long duration events. This can be achieved in a number of ways,. The exact nature of the retention facility should be reviewed by Council at the building consent stage of the development, which will allow the detailed calculations to be updated following completion of the final construction plans.

Other Matters

82. The other matters described in the infrastructure demand assessment that has been provided as part of the application documents, which are not specifically commented on in this evidence report, should be deemed to be included in this evidence as those matters appear in the application report. Such matters include trade waste, artesian water, water feature and green technology.

SUBDIVISION

Preliminary

83. This evidence refers to the subdivision plans and associated report notes that form part of the application information. The relevant application information is:

    (a) Plans (**Appendix G**):

        (i) Sheet dated 31/01/17 and numbered 1.

        (ii) Sheet dated 31/01/17 and numbered 1 (with aerial photograph underlay).

        (iii) Sheets dated 28/03/17 and numbered 1-6.

    (b) Report: dated 31/01/17 (**Appendix H**).

Copies of the above plans and reports are attached to this evidence bundle.

Fee Simple Subdivision

84. The fee simple subdivision plan titled 'Lots 1 and 2 DP 507559 (Subdivision by Dunedin City Council)' illustrates the 2-Lot subdivision that is yet to be completed by the current landowner of the Hotel site in support of the necessary ownership transfer of the application land. This plan has also been supplied with an aerial photograph underlay. This subdivision is expected to be completed in a timely manner following issue of consent for the Hotel activity.

85. The fee simple subdivision information has been provided as reference material. The applicant is not seeking resource consent for the fee simple subdivision. The current owner of the land will be responsible for obtaining the fee simple subdivision consent, and for completing the fee simple subdivision, under a separate development process.

Unit Title Subdivision

86. The purpose of the unit title subdivision is to separate the ownership of the private apartments and penthouse units from the Hotel ownership. This will enable the private apartments and penthouse units to be purchased by discrete individuals or entities.

87. The concept unit title plan supplied is reasonably simple. This plan essentially creates three groups of areas-

    (a) Unit 1 is all of the parts of the Hotel building that will form part of the Hotel operation.

    (b) Common Property is all of the parts of the Hotel building that will be needed to support both the Hotel operation and the new private apartments and penthouse units.

    (c) All other labelled units are those individual private apartments and penthouse units that will be offered for sale.

88. The plan sheets dated 28/03/17 and numbered 1-7 should be read in conjunction with the X-Section AA plan (the sheet dated 28/03/17 and numbered 8) for the reader to properly appreciate the shapes of the various units.

89. I note that there is a 0.200m difference in the elevation levels between the architectural plans submitted with the application and the unit title subdivision plans. This difference appears to arise from rounding processes employed from the independent design processes. While this difference exists, it is not of a size that I consider would either i) materially affect the various assessments that have been undertaken, or ii) materially affect the accurate interpretation of the proposed activity.

90. There are likely to be a number of accessory units required as part of the subdivision process. These will likely be for the purposes of allocated car parks and other exclusive areas. These are not indicated on the unit title plans at this time as the location of these areas is not currently known.

91. The Common Property areas will be managed by a Body Corporate. It is likely that the Hotel operation will maintain a majority control of the Body Corporate so that the Common Property areas can be managed and maintained in an integrated and comprehensive manner.

S42A Report

92. Paragraph 35 of the s42a report states:

> "*The unit title subdivision is a Non-Complying Activity in accordance with Rule 18.5.3, given that Rule 18.5.3 requires that every lot in a subdivision must have both a legal access and vehicle access to a formed road. The rules for subdivision do not expressly provide for unit title divisions where the allotment created may comprise multiple units within a building*."

93. My interpretation of Rule 18.5.3 is that when applied to allotments within the Activity Zones only legal access is required (i.e. not vehicle access). This is based on the Rule reading as:

> *"Rule 18.5.3 Access: Every allotment shall have both legal access and vehicle access to a formed road, except in the Activity Zones where every allotment shall have legal access…"*

94. The definition of allotment includes 'any unit on a unit plan' (RMA, section 218(2)(c).

95. The proposed unit title subdivision activity includes a parcel of Common Property that connects each of the units to the Moray Place street frontage. Common Property is owned by all of the unit owners in undivided shares. In this way, all of the units will achieve the purpose of the Rule, which is to ensure that each 'property' has legal access.

96. As recognised in the s42a report, the Dunedin City District Plan does not expressly provide for unit title divisions. The concept that Common Property is jointly owned between the unit owners is not recognised.

97. The conclusion in the s42a report, that the unit title activity is non-complying due the units not having frontage to a legal road, appears to be technically correct (this approach is consistent with consent consideration applied to other unit title subdivision activities within Dunedin over recent years), although it is my opinion that the actual intent of the Rule is in fact suitably achieved by the proposed activity.

K A Bowen

Date: 14 July 2017