Introduction

This report discusses the review of the ability for Gordon Wilson Flats to be usefully adapted to provide an appropriate use in the foreseeable future; for VUW or others, and considers the following options:

1. Student accommodation – current building (flat / bedroom) configuration
2. Student accommodation – with additional bedrooms added within the current building envelope
3. Office or academic use

Summary of the building structure and shape

The building is a large 11 storey height slab block facing east and west. It is a purpose built housing complex in the mid-century modernist tradition and has many unique design features that influence its adaptation.

Primarily, the building has a reinforced concrete shear structure that divides a very tall and very long narrow building into many cellular spaces. Simply put, there are over 315 rectangular concrete rooms over 15 bays and 11 levels that average between 12m² (west side cells) and 20m² (east side cells) in size. Eastern and western cells are divided by a singular shear wall running north to south down the length. There are 14 shear walls running east west.

A standard bay is 12’ or approx. 3.6m wide and has a single unit over two floors with, bedrooms of approx. 10-12 m², 20 m² of living space, and 5 m² of kitchen space.

The sheer number and scale of these walls mean that this condition cannot be altered feasibly as part of adaptation. Consequently, we have looked at adaptation within that structure.

Adaptation to allow efficient student accommodation

In order to test the merit of converting the building into student accommodation, we have assumed again that the existing structure is retained in a systematic way.

To ensure that VUWs student accommodation can compete both nationally and internationally, the following minimum requirements for student rooms must be met:

- A minimum size of 10m²;
- have sufficient natural light;
- have opening windows;
- technology rich (incl. Wireless throughout); and
- ample breakout / touchdown / study space.

Living spaces can be shared to a greater or lesser extent, with a range of solutions from self-contained studios to dormitory rooms with shared kitchens and bathrooms. The style of development must reflect the need of the occupier. For example, 1st year students prefer catered halls with a higher level of pastoral care.

We have been asked to test the ability for Gordon Wilson Flats to be usefully adapted to provide student accommodation with an additional bedroom added within the current building envelope, so that this can help formulate a business case to test retention. We have tested 2 different ways of adding an additional bedroom to the two bed unit. Neither of these options would provide modern, well designed accommodation, hence would unlikely be competitive nationally, let alone internationally. The options, and identified design weaknesses, are attached in Appendix 1.
Adaptation to allow teaching or office function

The requirements of modern teaching spaces or modern offices, while not quite the same, are often very similar. Broadly, these spaces revolve around arranging people in different configurations or collaborative groups and a key spatial requirement is for relatively large contiguous floor plates with good headroom (this is a function of the size of the space and the level of servicing required to heat, cool, and ventilate it.)

Generally, classroom or office spaces must be 12-20m wide with good access to natural light on one or both sides depending on the depth of that space. Any space beyond 6-8m from natural light is considered secondary space and is less suited for long term occupation. These spaces tend to house services rooms.

There is often a requirement for a proportion of a space to have windowed offices in support of open plan or classroom environments. These are typically a small proportion - in the order of 10-15% of the area.

Based on the existing building structure, and restrictions of the multiple small cells within, this building is not able to be adapted for modern teaching or modern office spaces without substantial demolition of the existing building.

Conclusion

While there may be some limited ability to adapt a small part of the building for accommodation, this is limited and would require substantial design compromises or demolition. Neither can this building usefully be adapted to office or teaching space with any conventional planning rational.

We believe either of these options would be of limited appeal and may be difficult to achieve consent for against acceptable solutions with respect to accessibility and within a listed heritage building.