CENTRAL HOBART BUILDING HEIGHT FEASIBILITY STUDY

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Prepared for
The Property Council of Australia
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EXECUTIVE SUMMARY

SGS Economics and Planning was commissioned by the Property Council of Australia to undertake feasibility testing of selected sites in Central Hobart. This testing considered the impacts of existing planning controls on the feasibility of new development.

Existing planning controls
The current planning controls in Central Hobart provide both acceptable and performance criteria for the assessment of building height and responses to sensitive heritage items. This flexible planning regime allows proponents to put forward a broad range of new development propositions, rather than strict planning controls.

Building Height Standards Review Project
In this context, the Building Height Standards Review (the Woolley report) has provided an assessment of the potential heights of new buildings in central Hobart, based on the impact of building height on the ‘townscape’ and particular views within and across Hobart. The report identified a number of urban blocks in Hobart’s inner core where new development might exceed 45 metres whilst still adhering to the structuring principles (the ‘Urban Amphitheatre’ and the ‘Amphitheatre to the Cove’) identified in the view and townscape analysis.

In determining appropriate building heights and other planning controls for Central Hobart, it is important to also consider a range of other matters, such as: site amalgamation opportunities, the resulting building typologies and their buildability, the total floor space capacity on viable development sites, and the likely floor space demand in the short to medium term (e.g. the next 10 to 20 years) and the feasibility of new development.

Development feasibility assessment
This study is an attempt to address the issue of development feasibility by modelling potential built form outcomes on three sites and considering the financial feasibility of hypothetical developments that span a range of densities and land uses.

Site selection
The three potential development sites were chosen to reflect a range of existing conditions:

1. 28-30 Davey Street: a smaller site covered by the Sullivans Cove Planning Scheme; has been the subject of a proposal for a hotel development.
2. 28-32 Elizabeth Street: a medium-sized site within the Hobart Planning Scheme area; significant adjacent heritage items; also subject to a proposal for a hotel development.
3. The K&D site: a larger site in the Hobart Planning Scheme area; relatively unencumbered with the exception of heritage items immediately adjacent, on Harington Street.

Development scenarios
The feasibility testing considered nine scenarios on the three sites; 27 feasibility tests in total. For each site, hypothetical development scenarios were generated by combining different development densities and land uses. The densities reflect development that comply with the Acceptable and Performance solutions in the relevant planning scheme and were informed by modelling provided by JMG Engineers and Planners. A third scenario that achieves a higher intensity of development than the Performance solution has been included for tolerance testing.
The feasibility testing considered residential, commercial office and hotel developments for each site and density combination.

**Findings**

The feasibility findings suggest that 8 of the 27 development scenarios considered are likely to be feasible.

In the table below shows the feasibility findings expressed as the ratio of the residual land value (RLV) for each scenario and the existing use value (EUV) of the relevant site. Where this ratio is less than 1, the development is unlikely to be feasible. Where the feasibility is marginal (that is, a ratio that is between 1 and 1.15 for residential or between 1 and 1.20 for the other land uses) the cell is coloured yellow. For scenarios where the ratio is greater than 1.15 or 1.20, the redevelopment is likely to be feasible.

On the Davey Street site all two hotel and two residential scenarios appear to be feasible. On both the Elizabeth Street site and the K&D site, only the higher yield performance solution hotel development and residential development scenarios were found to be feasible.

### FEASIBILITY FINDINGS – RATIO OF RLV TO EUV

<table>
<thead>
<tr>
<th>Use</th>
<th>Height</th>
<th>28-30 Davey</th>
<th>28-32 Elizabeth</th>
<th>K&amp;D site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>Acceptable solution</td>
<td>-1.30</td>
<td>-0.95</td>
<td>-2.96</td>
</tr>
<tr>
<td></td>
<td>Performance solution</td>
<td>-3.08</td>
<td>-0.95</td>
<td>-3.28</td>
</tr>
<tr>
<td></td>
<td>Performance solution (higher yield)</td>
<td>-3.49</td>
<td>-4.19</td>
<td>-3.68</td>
</tr>
<tr>
<td>Hotel</td>
<td>Acceptable solution</td>
<td>0.64</td>
<td>0.48</td>
<td>0.58</td>
</tr>
<tr>
<td></td>
<td>Performance solution</td>
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<td>0.48</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Performance solution (higher yield)</td>
<td>1.52</td>
<td>1.20</td>
<td>1.38</td>
</tr>
<tr>
<td>Residential</td>
<td>Acceptable solution</td>
<td>0.64</td>
<td>0.48</td>
<td>0.62</td>
</tr>
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<td>Performance solution</td>
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<td>0.48</td>
<td>1.02</td>
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<tr>
<td></td>
<td>Performance solution (higher yield)</td>
<td>1.54</td>
<td>1.25</td>
<td>1.41</td>
</tr>
</tbody>
</table>


**Discussion**

The development feasibility analysis suggests that both residential and hotel developments might be feasible on all three sites considered, provided sufficient density can be achieved to generate a residual land value that exceeds the existing use value by a sufficient margin.

The Acceptable solution scenarios are universally unfeasible. This density of development permitted under these scenarios is insufficient to generate a return to the developer and existing land owner.

Commercial development does not appear to be feasible on any site, regardless of the development density tested. This is not unexpected as the estimated returns for commercial development at $4,000 sqm per square of net saleable floor space are too low to cover even the construction costs without considering the developer’s margin or land purchase price.

It should be borne in mind that development feasibility is highly site specific and the findings of this analysis may not readily translate to other sites. Sites with lower existing use values are more likely to be feasible when compared to sites that host a current land use that generates good returns for the land owners. Furthermore, the size, shape and orientation of a site will affect the density of development that can be achieved within a given height limit.

That said, the general patterns in feasibility detected in the analysis are likely to hold for many potential development sites.
1. INTRODUCTION

1.1 Background
SGS Economics and Planning were commissioned by the Property Council of Australia to undertake feasibility testing of selected sites in Central Hobart. The testing considered the impacts of existing planning controls on the scale of new development and the subsequent feasibility impacts.

1.2 Feasibility testing approach
The feasibility testing used a residual land value (RLV) approach. The RLV approach estimates the value of a development site based on a hypothetical development proposal. This value is calculated by estimating the total revenues and deducting all costs, including the developer’s margin for profit and risk. This is shown conceptually in Figure 1. This is the conventional approach used by developers to estimate the price they can afford to pay for a development site while still achieving an appropriate profit given the scale of the development and the level of risk involved.

FIGURE 1: RESIDUAL LAND VALUE

To test if the hypothetical development is feasible, the estimated RLV is compared with the existing value of the site in question. If the RLV is higher than the existing site value by a reasonable margin, the development is likely to be viable as the incumbent land owner can expect a 'windfall' gain by selling their land to a developer. Details on the specific margins used in the feasibility testing are provided in Chapter 4.

1.3 Development scenarios considered
The feasibility testing considered three sites and nine hypothetical development scenarios on each site. The scenarios correspond to various combination of development scale (an acceptable solution, a lower yielding performance solution, and a higher yield performance solution) and primary land uses (commercial, hotel, residential).

1.4 Report structure
Chapter 2 provides an overview of the current planning controls and the Building Height Standards Review Project (‘the Woolley Report’). Chapter 3 describes the sites which were chosen for the feasibility testing. Chapter 4 contains the findings of the feasibility testing. Additional information is provided in the appendices.
2. EXISTING PLANNING CONTROLS

2.1 Central Hobart planning controls

The planning controls that apply to Central Hobart are set out in the Hobart Interim Planning Scheme (HIPS) 2015 and the Sullivans Cove Planning Scheme (SCPS) 1997.

Section 22.4 and Section 23.4 of the HIPS detail the current building height controls within the Central Business Zone and Commercial Zone, respectively.

The Sullivans Cove Planning Scheme 1997 provides guidance of buildings heights within the Sullivans Cove area which is immediate adjacent to the area that is covered by the HIPS.

A summary of the key planning controls that have informed the feasibly testing is provided below.

A brief discussion of the Building Height Standards Review Project (‘the Woolley Report’) has also been included at the end of this section.

Building height controls

HIPS Central Business Zone

For development in the Central Business Zone the acceptable solutions (A1) for the height of new development are as follows (Section 22.4.1 of HIPS):

▪ 15m if on, or within 15m of, a southwest or south-east facing frontage;
▪ 20m if on, or within 15m of, a northwest or northeast facing frontage;
▪ 30m if set back more than 15m from a frontage

Alternatively, development can address the performance criteria in the scheme. Under this assessment pathway (P1.1) development must comply with an Amenity Building Envelope (HIPS 2015, Fig. 22.3, reproduced below) and “must make a positive contribution to the streetscape and townscape, having regard to:

▪ the height, bulk and design of existing and proposed buildings;
▪ the need to minimise unreasonable impacts on the view lines and view cones in Figure 22.6 and on the landform horizons to kunanyi/Mt Wellington and the Wellington Range from public spaces within the Central Business Zone and the Cove Floor;
▪ the need to minimise unreasonable impacts on pedestrian amenity from overshadowing of the public footpath for city blocks with frontage to a Solar Penetration Priority Street in Figure 22.2; and
▪ the need to minimise unreasonable impacts on the amenity of public open space from overshadowing.”

On northwest and northeast facing street frontages the Amenity Building Envelope indicates a maximum 20 metre street wall face, above which a 31-degree building envelope rises to 45 metres. On southwest and southeast facing street frontages, a 15-metre street frontage height and 45 degree building envelope, also rising to 45 metres, seeks to maintain solar penetration to the opposite sides of the street.

Proposals for new development can breach the Amenity Building Envelope (P1.2), but in this case the development must "provide significant benefits for civic amenities such as public space, pedestrian links, public art or public toilets" as well as have regard to the four matters listed above and two further matters:
the need to minimise unreasonable impacts on pedestrian amenity from adverse wind conditions; and
the degree of consistency with the Desired Future Character Statements in clause 22.1.3.

Furthermore, development that is within 10 metres of a residential zone must be no more than 8.5 metres in height (A2) or, alternatively, "compatible with the building height of existing buildings on adjoining lots in the residential zone" (P2).

**FIGURE 2: HIPS AMENITY BUILDING ENVELOPE (HIPS, CBZ)**

**HIPS Commercial Zone**

Acceptable solutions (A1) for the height of new development in the Commercial Zone are as follows (Section 23.4.1 of HIPS):

- 11.5 metres and a maximum of 3 storeys; or
- 15 metres and a maximum of 4 storeys, if the development provides at least 50% of the floor space above ground level for residential use.

The performance criteria for the height of buildings (P1) requires new buildings to:

- be consistent with any Desired Future Character Statements provided for the area;
- be compatible with the scale of nearby buildings;
- not unreasonably overshadow adjacent public space;
- allow for a transition in height between adjoining buildings, where appropriate.

The provisions that apply in the Central Business Zone with respect to development adjacent to residential zone (A2/P2), also apply in the Commercial zone.

**Heritage considerations in the HIPS**

**HIPS Central Business Zone**

Heritage considerations for development within the Central Business Zone are outlined in Sections 22.4.1 (Building height controls) and 22.4.3 (Design controls) of the HIPS.

Under the height control provisions, new development on the same lot and located behind a heritage-listed building must maintain a setback of 5 to 10 metres and not exceed a height of 2 storeys or 7.5m or maintain a setback of over 10m and not exceed a height of 5 storeys or 15m (A4). These configurations are illustrated in Figure 3.
Further, proposed developments that are within 15m of a street frontage of a heritage building, and not separated by another lot that is greater than 5 meters in width, or a road, must not exceed the height of that heritage building by more than 1 storey or 4m (A5). If a proposed development is between two heritage buildings, it must not exceed the height of the taller heritage building. The circumstances under which this requirement applies are illustrated in Figure 4 and the height requirements are illustrated in Figure 5.

The performance solutions allow for alternative design solutions. P4, which applies to development on the same site as the heritage item, requires new buildings to “be designed, sited, arranged, finished, constructed or carried out so as to not unreasonably detract from those characteristics of the place which contribute to its historic cultural heritage significance”.

Performance criteria P5, which applies to development on sites adjacent to heritage items, requires new buildings to “not unreasonably dominate existing buildings of cultural heritage significance; and not have a materially adverse impact on the historic cultural heritage significance of the heritage place”.

Both of these performance standards also include an additional requirement for development with a frontage to Solar Penetration Priority Streets must either “not exceed the Amenity Building Envelope” or “demonstrated that the overshadowing of the public footpath on the opposite side of the Solar Penetration Priority Street does not unreasonably impact on pedestrian amenity.”

**HIPS Commercial Zone**

There are no explicit heritage considerations listed in the building height or design controls for the Commercial Zone in the HIPS.
FIGURE 4: LOTS IMPACTED BY ADJACENCY TO HERITAGE BUILDINGS (CBZ)

Source: HIPS, 2015.

FIGURE 5: REQUIREMENTS FOR DEVELOPMENT ADJACENT TO HERITAGE BUILDINGS (CBZ)

Source: HIPS, 2015.
Sullivans Cove Planning Scheme

One of the sites considered in the feasibility analysis (28-30 Davey Street) is within the Sullivans Cove Planning Scheme area, in the area designated Activity Area 2.0 Sullivans Cove ‘Mixed Use’.

The deemed to comply height for this area is 18m (Figure 8) and the plot ratio 4.0:1 (Clause 23.6.1A). Development that does not comply with these criteria can be approved, at the discretion of the Planning Authority, taking into consideration the objectives listed at Clause 23.2 of the scheme.

Heritage considerations in Sullivans Cove

The scheme goes onto suggest that 'discretionary' buildings can include:

*Any new buildings or works adjacent to a Place of Cultural Significance and which are not more prominent in the streetscape by strong contrast of scale, height, colour and tone with the buildings constructed on the place, and, which are not detailed in a manner which is similar to buildings of cultural significance or which adopts an “historic” appearance.*

The Davey Street site is adjacent to a "place of cultural significance" at 16 Elizabeth Street (Hobart City Council/former HEC/Hydro Building) and therefore new development of this site would need to address the issues identified in provision cited above.

The Building Height Standards Review Project

The Building Height Standards Review Project (‘the Woolley Report’) was commissioned by the City of Hobart with the following objectives:

i) To prepare height control planes for both the central area of Hobart and Sullivans Cove and consider appropriate maximum (non-discretionary) height limits for inclusion in the relevant Planning Scheme.

(ii) To identify additional important view lines and view protection planes in the central area of Hobart and Sullivans Cove for inclusion in the relevant Planning Scheme.

(iii) To define the urban context of Central Hobart and identify design principles for new buildings in the central area of Hobart and Sullivans Cove for inclusion in the relevant Planning Scheme.

The scope of project included the following tasks:

- Define the Urban Context of Hobart
- Prepare height control planes for both the CBD and the Cove and consider maximum (non-discretionary) height limits
- Designate additional important view lines and view protection planes
- Identify design principles for new buildings in the CBD which aim to protect the identified townscape and streetscape values.

Hobart as an urban amphitheatre

The report identifies two overarching or structuring principles that inform the subsequent building height recommendations. The first is the ‘Urban Amphitheatre’ which refers to the broader landscapes setting of Hobart which refers to the topographic and built landscape of Hobart. These are characterised by the elevated ranges at the edges of the amphitheatre that frame the urban settlement within the amphitheatre, and Central Hobart specifically.

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1 Described in the report as "The integration of natural features (landform, water, sky) contributing to the urban setting, when viewing to and from Central Hobart." (p21).
The second principle, ‘Amphitheatre to the Cove’ \(^2\) refers more specifically to the relationship between the Sullivans Cove area and the Amphitheatre. This relationship is characterised by a progressive scaling up of built form and topography from the waterfront, to the foreshore buildings, to the central city, to the foothills and to kunanyi/Mount Wellington beyond.

These principles (which are described in significantly more detail in the report) are used in the report to explore the role of building height in retaining these elements of Hobart’s character and identity.

**Building heights outside the ‘inner core’**

Drawing on these principles a series of Height Control Planes are described in the report. These zones and the indicative height planes are shown in Figure 6 below. The proposed height control dimensions for each plane is as follows:

- **Escarpment Zone:** 18 metres at the edge of the Cove Floor, (existing heritage, townscape and amenity provisions notwithstanding), rising to a maximum 30 metres, plus the landform rise across the zone.
- **Cove Face Zone:** Rising above the Escarpment Zone to a maximum 45 metres. Returning deeper into the Domain Rivulet ‘valley’ to ensure a reduction of scale adjacent the Queens Domain.
- **Inner Hills Zone:** Rising from an outer edge of 18 metres to a maximum 45 metres toward the centre.
- **Battery Point Edge Zone:** Transition in scale from the 18 metres escarpment edge to 12 metres across the headland.

**FIGURE 6: HEIGHT CONTROL PLANES OUTSIDE THE INNER CORE URBAN BLOCKS**

![Height Control Planes](image)

Note: Escarpment Zone = Purple; Cove Face Zone = Yellow; Hill Face Zone = Teal; Battery Point Edge Zone = Red

**Building heights within the inner core**

An inner core precinct was identified at the centre of these height controls planes. The report considered the potential for taller buildings on these urban blocks by modelled potential buildings envelopes generated by various view cones and view shafts (as described on pages 37-84). The resulting urban block envelopes are shown in Figure 6 below.

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\(^2\) Described in the report as “The layering of rising ground from water-plane to horizon, incorporating adjacent hills and ridges, climbing away from Sullivans Cove and its earlier rivulet outfalls, being the low point of the location and flanked by distinct headlands.” (p23).
These envelopes suggest that within the inner core precinct several blocks can accommodate development of over 45 metres in height, with some blocks having potential for buildings up to 75 metres, albeit, only towards the centre of the urban block (see page 102). The report therefore finds that “from significant viewpoints, potential height beyond the amenity building envelope, could be considered without detriment to views identified.” (p85).

FIGURE 7: CONCEPTUAL MASSING OF THE INNER CORE URBAN BLOCKS


Report recommendations
The report closes with the following recommendations:

▪ In considering appropriate height control planes for Sullivans Cove and Central Hobart the following are recommended:
  ▪ An Escarpment Zone rising from 18m to 30m (+ natural rise)
  ▪ A Cove Face Zone rising from 30m to 45m (+ natural rise)
  ▪ A Hill Face Zone rising from 18m to 45m (+ natural rise)

▪ Within the inner core precinct amenity, townscape and heritage provisions and identified view cones should determine height outcomes.

▪ The combination of proposed height control planes with view protection planes will assist in maintaining Central Hobart as a ‘compact’ and ‘contained’ urban form.
2.2 Synthesis

The current planning controls in Central Hobart provide both acceptable and performance criteria for the assessment of building height and responses to sensitive heritage items. This flexible planning regime allows proponents to put forward a broad range of new development propositions, rather than strict planning controls.

However, in practice, this approach has led to significant uncertainty for developers, landowners, and the broader community concerning the likely or acceptable scale and form of new development. Recent debates concerning appropriate building heights in Central Hobart highlight these issues.

In this context, the Building Height Standards Review has provided an assessment of the potential for new development in central Hobart, based on impacts of building height on the townscape and particular views within and across Hobart. The study concluded that, even when these considerations are taken into account, there are likely to be opportunities for new development to exceed 45 metres in height on a number of urban blocks in the Inner Core.

The narrow focus of the Review on the issues of views and townscape, without reference to other considerations, is a limitation. This is not intended to be a criticism of analysis in the study, which is thorough, or of its specific findings. However, the study was not tasked with considering a range of other issues that will impact the physical and commercial viability of future development in Central Hobart.

The likelihood of sites in Central Hobart being redeveloped will be influenced by a range of issues and their interactions, namely: the size and shape of existing allotments, land ownership patterns, the impact of heritage controls and other planning controls, and the resulting opportunities to develop viable building floorplates.

On this last issue, the triangular shaped building envelopes implied in the Woolley report modelling would present a particular challenge. The taller yet progressively smaller building footprints that would be generated by adherence to these envelopes are unlikely to be buildable due to the difficulties in arranging building cores (lifts and stairs), building entries and internal circulation within these tapered forms.

In determining appropriate heights (and other planning controls) for Central Hobart, it is important to also consider matters such as development feasibility, site amalgamation opportunities, likely building typologies and their buildability, the total floor space capacity on viable development sites, and the likely floor space demand in the short to medium term (e.g. the next 10 to 20 years).

The analysis set out in the remainder of study is an attempt to address the first issue, for a small selection of potential development sites, by modelling potential built form outcomes and considering the financial feasibility of hypothetical developments span various densities and land uses.
3. SITE SELECTION FOR FEASIBILITY TESTING

3.1 Initial short list of blocks and sites

The following blocks and sites were short-listed for consideration in the feasibility testing:

- Block D0 (south east of block D1): site at 28-30 Davey Street
- Block D2: site at 28-32 Elizabeth Street
- Block E6 (north west of E5): K&D site
- Block B5: sites in common ownership at corner of Argyle and Bathurst
- Block G2 (south west of block F2): site at 201 Macquarie Street and 49 Molle Street
- Block C3: site at 42 Argyle Street.

Block references are those shown in the figure below. Summary details of each block and site are provided below.

FIGURE 8: CENTRAL HOBART BLOCK NUMBER REFERENCES

Block B5

This block is bounded by Bathurst, Argyle, Melville and Campbell Streets. The three sites near the corner of Argyle and Bathurst (highlighted below) are in common ownership. The lots on this block are generally medium to large in size and regular (i.e. rectangular) in shape.

- Planning controls:
  - Zone: Central Business; deemed to comply height: 15/30 meters; discretionary planning pathway allows for taller development subject to Amenity Envelopes requirements or significant public benefits (i.e. no absolute height limit).
  - The heritage requirements of Clause 22.4.1 (Building height controls, A5 and P5) would apply to the development of this site as the Church and Rectory to the north are heritage items.

FIGURE 9: BLOCK B5 – CORNER OF ARGYLE AND BATHURST STREETS HIGHLIGHTED

Source: SGSEP, 2019; Nearmap.
Block C3
Bounded by Collins, Murray, Liverpool and Elizabeth Streets. Examples of a site with a recent development (42 Argyle Street; office and car park) that does not comply with Amenity Building Envelope requirements.

- Planning controls:
  Zone: Central Business; deemed to comply height: 20/30 meters; discretionary planning pathway allows for taller development subject to Amenity Envelopes requirements or significant public benefits (i.e. no absolute height limit).

FIGURE 10: BLOCK C3 - 42 ARGYLE STREET HIGHLIGHTED

Source: SGSEP, 2019; Nearmap.

FIGURE 11: 42 ARGYLE STREET
Block D0
The block is bounded by Davey, Murray, Morrison and Elizabeth Streets and subject to the Sullivans Cove Planning Scheme. The site at 28-30 Davey Street is the subject of the Fragrance Hotel proposal, a 126m, podium and tower configuration, with a 17m podium on Davey Street, 95 parking spaces below ground and 424 rooms. The site is currently occupied by 2 and 3 storey office/warehouse buildings. The site is 1,158 square metres in area.

- Planning controls:
  Zone: 2.0 Mixed Use; deemed to comply height: 18m; deemed to comply plot ratio: 4.0; discretionary planning pathway allows for taller development subject to consideration of the objectives of the scheme (i.e. no absolute height limit).
- Adjacent Place of Cultural Significance (former HEC/Hydro Building, 16 Elizabeth Street)
**Block D2**

The block is bounded by Elizabeth, Macquarie, Murray and Collins Streets. The site at 28-32 Elizabeth Street is subject to a proposal for a five-star hotel with 196 rooms. Car parking will be provided on-site in the podium levels. This is a smaller site of 874 square metres. There are heritage items to either side of the site. The lots on this block are generally smaller to medium sized and generally irregular (i.e. not rectangular) or compound shapes (from previously lot amalgamations).

- Planning controls:
  - Zone: Central Business; deemed to comply height: 20/30 meters; discretionary planning pathway allows for taller development subject to Amenity Envelopes requirements or significant public benefits (i.e. no absolute height limit).
  - The heritage requirements of Clause 22.4.1 (Building height controls, A5 and P5) would apply to the development of this site.

**FIGURE 14: BLOCK D2 – 28 ELIZABETH STREET HIGHLIGHTED**

Source: SGSEP, 2019; Neamap.
Block E6 (not numbered in Woolley report)

This block is bounded by Harrington, Melville, Murray and Brisbane Streets. It is a unique in Central Hobart in that it has a single large land holding of 11,445 square metres. The site is current occupied by the K&D Warehouse.

- Planning controls:
  Zone: Commercial; deemed to comply height: 11.5/15 meters; discretionary planning pathway allows for taller development subject to compliance with the performance standard requirements (i.e. no absolute height limit).

FIGURE 15: BLOCK E6 – K&D SITE HIGHLIGHTED

Source: SGSEP, 2019; Nearmap.
Block G2 (not numbered in Woolley report)
Block bounded by Macquarie, Molle, Collins and Barrack Streets. This block has two recent site sales. The site at 201 Macquarie Street is approximately 1,265 sqm for a reported price of $3M.\(^3\) This site slopes away from Macquarie Street towards the rivulet providing potential for more height towards the rear of the site. The site at 49 Molle Street is approximately 810 sqm and sold for $1.475M. The Motors site at north eastern end of the block is a relatively large site (7,500 sqm approx.) and represents a significant development opportunity. The lots on this bock are generally medium or larger in size.

- Planning controls:
  - Zone: Urban Mixed zone; deemed to comply height: 10 meters; discretionary planning pathway allows for taller development (i.e. no absolute height limit).

FIGURE 16: BLOCK G2 - 201 MACQUARIE STREET AND 49 MOLLE STREET HIGHLIGHTED

Source: SGSEP, 2019; Nearmap.

3.2 Sites selected for feasibility testing

From the six blocks and sites described above, three sites were selected for the feasibility testing. The selection was made to reflect a range of conditions: site sizes, planning scheme requirements and adjacency to heritage items.

The selected sites were:

1. **28-30 Davey Street:**
   A smaller site that is within the Sullivans Cove planning scheme area; subject to a proposal for a hotel development; adjacent to a heritage item.

2. **28 Elizabeth Street:**
   A medium sized site in the Hobart Interim Planning Scheme area; features a significant number of adjacent heritage items; also subject to proposal for hotel development.

3. **The K&D site:**
   A larger site in the Hobart Interim Planning Scheme area; relatively unencumbered; although there are some heritage items adjacent on Harington Street.
4. FEASIBILITY TESTING

4.1 Feasibility testing approach

Development feasibility analysis compared the costs and revenues of a hypothetical development scheme to determine whether the project would be financially viable.

A key test of development viability is to compare the residual land value (RLV) of the hypothetical development to the existing value of the site in question. If the RLV is higher than the existing value by a reasonable margin, then the development is deemed viable as the incumbent land owner could be enticed to sell their land by the would-be developer.

Further detail of the RLV assessment approach were provide in Section 1.2 above.

Feasibility assessment: residual land value vs existing site value

The feasibility assessment estimates the RLV of each hypothetical development scenario by deducting development costs from anticipated revenues. These values are then compared to the existing site value to assess whether the development is likely to be feasible.

For ease of comparison, the RLV and existing site value have been combined as a simple ratio (see Table 11.) This ratio is an indicator of the likelihood of a development being viable. A ratio of 1.25 indicates that the RLV of the site, based on the hypothetical development, is 1.25 times the existing site value. Under these circumstances, a developer could afford to pay a 25 percent premium on the existing site value to entice the incumbent land holder to sell their site.

For the feasibility assessments undertaken for this report, a premium of 20% on the existing site value has been deemed feasible for commercial and hotel developments. For residential development, this premium was 15%.4

Limitations

The feasibility analysis is based on high-level assumptions about development costs and revenues applied across all sites and development types.5 The actual costs and revenues for specific developments will vary on a site by site basis. The global assumptions used in the feasibility testing are listed in Appendix A.

The feasibility modelling takes no account of demand. It assumes that, regardless of the scale of the hypothetical development, there is sufficient market demand for the net saleable floor space provided, at the assumed market price.

4.2 Feasibility modelling inputs

Basic information about each site including the site area, existing floor space, current use and an estimate of current revenues, are set out in the table below.

The floor space and rent for 28-32 Elizabeth are figures used in the sale campaign for that site in 2015. Rents for the Davey Street site and K&D sites are estimates only.

---

4 Based on advice from the Property Council.
5 The only exception to being a application of a 33% premium to revenues for residential development for the Davey Street site, based on advice from the Property Council concerning likely sales prices for residential development in this premium location.
TABLE 1: SITE INFORMATION AND EXISTING USE

<table>
<thead>
<tr>
<th></th>
<th>28-30 Davey</th>
<th>28-32 Elizabeth</th>
<th>K&amp;D site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site area (sqm)</td>
<td>1,158</td>
<td>874</td>
<td>11,445</td>
</tr>
<tr>
<td>Current floor space estimate - NLA (sqm)</td>
<td>2,779</td>
<td>1,854</td>
<td>6,374</td>
</tr>
<tr>
<td>Current use</td>
<td>Office/warehouse</td>
<td>Office/retail</td>
<td>Bulky retail</td>
</tr>
<tr>
<td>Net rent per sqm NLA (estimated)</td>
<td>$125*</td>
<td>$269</td>
<td>na</td>
</tr>
<tr>
<td>Net rent per sqm site area (estimated)</td>
<td>na</td>
<td>na</td>
<td>$75*</td>
</tr>
</tbody>
</table>

Source: Various internet sources and Property Council advice. *These net rent values are estimates only.

Estimates of existing site values

Existing site values can be estimated using a variety of sources: the existing use value (EUV, which is the capitalised value based on the net rental return and an appropriate yield rate), Council's rated value (the Capital Improved Value or CIV), market evidence from the sale of comparable properties (if available), or, a recent sale price for the specific site in question.

The EUV is likely to be the lowest value as this reflects the return of the current land and improvements. Sale prices tend to be higher than EUV if the site is purchased with a view to being redeveloped for a higher and better use. Council valuations are typically prepared using mass valuation approaches which group similar properties together for the purpose of estimate values. This approach can have the effect of ‘blending’ EUV and speculative land values and might be between EUV and land prices reflected in recent transactions.

Three different estimates of existing site values are provided in the table below: EUV, CIV and a recent sale price.

For the purpose of feasibility testing, the EUV is the most appropriate benchmark land value as it reflects the actual value of the site to the incumbent landowner, based on the current use.

TABLE 2: EXISTING SITES VALUES FOR CASE STUDY SITES

<table>
<thead>
<tr>
<th></th>
<th>28-30 Davey</th>
<th>28-32 Elizabeth</th>
<th>K&amp;D site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing use value (EUV)</td>
<td>$3,474,000</td>
<td>$3,708,000</td>
<td>$8,583,750</td>
</tr>
<tr>
<td>Current rated value (CIV, 2014)</td>
<td>$3,550,000</td>
<td>$4,500,000</td>
<td>$8,625,000</td>
</tr>
<tr>
<td>Recent sale price</td>
<td>$5,365,000</td>
<td>$4,500,000</td>
<td>$30,000,000</td>
</tr>
</tbody>
</table>

Source: EUV estimates are based on net rents and areas in Table 1, assuming a yield of 10%; Rated value is the Capital Improved Value from 2014, sourced from Hobart City Council; Recent sales prices for Davey and Elizabeth Street sites are both from 2015 and are nominal; K&D recent sale price is from April 2019.

TABLE 3: EXISTING SITES VALUES FOR CASE STUDY SITES, PER SQUARE METRE SITE AREA

<table>
<thead>
<tr>
<th></th>
<th>28-30 Davey</th>
<th>28-32 Elizabeth</th>
<th>K&amp;D site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing use value (EUV) – per square metre</td>
<td>$3,000</td>
<td>$3,070</td>
<td>$750</td>
</tr>
<tr>
<td>Current rated value (CIV) – per square metre</td>
<td>$3,070</td>
<td>$5,150</td>
<td>$750</td>
</tr>
<tr>
<td>Recent sale price – per square metre</td>
<td>$4,630</td>
<td>$5,150</td>
<td>$2,620</td>
</tr>
</tbody>
</table>

Revenue assumptions

The revenue assumptions for all three land uses are shown in Table 4. Consistent revenue assumptions have been used for all sites and all development scenarios.
### TABLE 4: REVENUE ASSUMPTIONS – GRV PER SQUARE METRE

<table>
<thead>
<tr>
<th></th>
<th>Residential GRV (includes GST)</th>
<th>Hotel GRV</th>
<th>Commercial GRV</th>
<th>GRV for 80 sqm, 2 bed dwelling</th>
</tr>
</thead>
<tbody>
<tr>
<td>28-30 Davey St</td>
<td>$7,500</td>
<td>$6,000</td>
<td>$4,000</td>
<td>$600,000</td>
</tr>
<tr>
<td>28-32 Elizabeth St</td>
<td>$7,500</td>
<td>$6,000</td>
<td>$4,000</td>
<td>$600,000</td>
</tr>
<tr>
<td>K&amp;D site</td>
<td>$7,500</td>
<td>$6,000</td>
<td>$4,000</td>
<td>$600,000</td>
</tr>
</tbody>
</table>

Source: PC and SGS, 2019.

### 4.3 Development scenarios

For each site a series of hypothetical development scenarios were tested. The densities of these scenarios were derived from modelling of developments that comply with either the acceptable criteria or performance criteria solutions in the appropriate planning scheme. Modelling of the acceptable and performance solution scenarios was prepared by JMG Engineers and Planners and is reproduced in Appendix B.

A third scenario that achieves a higher intensity of development than the performance solution has been included for tolerance testing. These higher yielding development scenarios are not supported by any planning assessment or the JMG advice and do not reflect any particular policy position of the PCA. These scenarios have been designated as the ‘higher yield performance solution’.

For the Davey Street site, the higher yield performance solution is a 15-storey development, slightly taller than the 13-storey development assumed for the Performance solution.

For the Elizabeth Street site, the higher yield performance solution is similar in scale to the approved Palace Hotel development.

For the K&D site the higher yield solution is based on an early masterplan for this site, prepared for the University of Tasmania. Although this master plan is based on a mix of student accommodation, teaching and retail floor space, we have taken it to be indicative of the total quantum of floor space that might be accommodated on this site, regardless of the use.

The land uses tested were residential, hotel and commercial office. The combination of three densities and three land uses considered generated the nine scenarios.

The assumptions for each scenario are set out in the tables below. Representations of the three-dimensional envelopes for the Acceptable and Performance solutions from JMG Engineers and Planners have also been included.

To translate the building envelopes to gross floor area (GFA) we have assumed that 70% of the building envelope will be ‘built out’ on the Davey and Elizabeth Street sites and 40% of the K&D site. The higher share of ‘unbuilt’ area for the K&D site is intended to account for the large size of this site and the need for separation between buildings and areas of public realm to develop this site at higher densities.

The resulting gross floor area has been converted to net saleable area (NSA) using the following efficiency rates for each land use: 75% for residential; 75% for hotel, and 80% for commercial.

For simplicity, all scenarios assume a single use for all floor space. It is likely that an actual development will have some mix of uses, such as an amount of ground floor retail. For the sake of this exercise we have assumed that any floor space dedicated to alternative uses would provide the same return (that is, revenues minus costs) as the ‘primary’ uses. A slight change in the mix uses is likely to have a negligible impact on the feasibility findings.
In the base feasibility testing it was assumed that all parking is basement. Above ground parking configurations would reduce costs but also reduce revenues by reducing the total area of saleable floor space.

**Development scenarios for 28-30 Davey Street**

The table and figures below set out the development scenario assumption applied to the feasibility testing on the site at 28-30 Davey Street.

**TABLE 5: DEVELOPMENT SCENARIOS FOR 28-30 DAVEY STREET**

<table>
<thead>
<tr>
<th></th>
<th>Maximum height (metres)</th>
<th>Height residential and hotel (storeys)</th>
<th>Height commercial (storeys)</th>
<th>Residential net saleable area (sqm)</th>
<th>Hotel net saleable area (sqm)</th>
<th>Commercial net saleable area (sqm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptable solution</td>
<td>18</td>
<td>6</td>
<td>5</td>
<td>3,419</td>
<td>3,419</td>
<td>2,999</td>
</tr>
<tr>
<td>Performance solution</td>
<td>45</td>
<td>15</td>
<td>12</td>
<td>7,977</td>
<td>7,977</td>
<td>6,807</td>
</tr>
<tr>
<td>Performance solution (higher yield)</td>
<td>48</td>
<td>16</td>
<td>13</td>
<td>9,119</td>
<td>9,119</td>
<td>7,782</td>
</tr>
</tbody>
</table>

Source: JMG and SGS, 2019.

**FIGURE 17: ACCEPTABLE SOLUTION ENVELOPE FOR 28-30 DAVEY STREET**

Source: JMG Engineers & Planners.

**FIGURE 18: PERFORMANCE SOLUTION ENVELOPE FOR 28-30 DAVEY STREET**

Source: JMG Engineers & Planners.
Development scenarios for 28-32 Elizabeth Street

The table and figures below set out the development scenario assumption applied to the feasibility testing on the site at 28-32 Elizabeth Street. In this case the acceptable solution and the performance solution are the same due to the dual frontages and dimensions of the site. We have also assumed that the small portion of the envelope that is 30m in height would not be buildable and assumed 20m building height for this portion to match the remainder of the building envelope.

TABLE 6: DEVELOPMENT SCENARIOS FOR 28-32 ELIZABETH STREET

<table>
<thead>
<tr>
<th></th>
<th>Maximum height (metres)</th>
<th>Height residential and hotel (storeys)</th>
<th>Height commercial (storeys)</th>
<th>Residential net saleable area (sqm)</th>
<th>Hotel net saleable area (sqm)</th>
<th>Commercial net saleable area (sqm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptable solution</td>
<td>20</td>
<td>6</td>
<td>5</td>
<td>2,694</td>
<td>2,694</td>
<td>2,340</td>
</tr>
<tr>
<td>Performance solution</td>
<td>20</td>
<td>6</td>
<td>5</td>
<td>2,694</td>
<td>2,694</td>
<td>2,340</td>
</tr>
<tr>
<td>Performance solution (higher yield)</td>
<td>73</td>
<td>24</td>
<td>19</td>
<td>10,725</td>
<td>10,725</td>
<td>9,114</td>
</tr>
</tbody>
</table>

Source: JMG and SGS, 2019.

FIGURE 19: ACCEPTABLE & PERFORMANCE ENVELOPES FOR 28-32 ELIZABETH STREET

Source: JMG Engineers & Planners.

FIGURE 20: PERFORMANCE ENVELOPE (FRAGRANCE TOWER)

Source: JMG Engineers & Planners.
Development scenarios for the K&D site

The table and figures below set out the development scenario assumption applied to the feasibility testing on the K&D site.

**TABLE 7: DEVELOPMENT SCENARIOS FOR THE K&D SITE**

<table>
<thead>
<tr>
<th></th>
<th>Maximum height (metres)</th>
<th>Height residential and hotel (storeys)</th>
<th>Height commercial (storeys)</th>
<th>Residential net saleable area (sqm)</th>
<th>Hotel net saleable area (sqm)</th>
<th>Commercial net saleable area (sqm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptable solution</td>
<td>15</td>
<td>4</td>
<td>4</td>
<td>13,734</td>
<td>13,734</td>
<td>14,650</td>
</tr>
<tr>
<td>Performance solution</td>
<td>18</td>
<td>6</td>
<td>5</td>
<td>17,898</td>
<td>17,898</td>
<td>16,698</td>
</tr>
<tr>
<td>Performance solution (higher yield)</td>
<td>21</td>
<td>7</td>
<td>5</td>
<td>21,848</td>
<td>21,848</td>
<td>19,420</td>
</tr>
</tbody>
</table>

Source: JMG and SGS, 2019.

**FIGURE 21: ACCEPTABLE SOLUTION FOR THE K&D SITE**

Source: JMG Engineers & Planners; Property Council.

**FIGURE 22: PERFORMANCE SOLUTION ENVELOPE FOR THE K&D SITE**

Source: JMG Engineers & Planners; Property Council.
4.4 Estimated developments costs, net revenues and residual land values

The total development costs, revenues and resulting residual land value (RLV) for the various scenarios for each site are summarised in the tables below.

**TABLE 8: DEVELOPMENT COST ESTIMATES**

<table>
<thead>
<tr>
<th>Use</th>
<th>Height</th>
<th>28-30 Davey</th>
<th>28-32 Elizabeth</th>
<th>K&amp;D site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>Acceptable solution</td>
<td>$16,200,000</td>
<td>$12,600,000</td>
<td>$82,600,000</td>
</tr>
<tr>
<td></td>
<td>Performance solution</td>
<td>$37,200,000</td>
<td>$12,700,000</td>
<td>$93,200,000</td>
</tr>
<tr>
<td></td>
<td>Performance solution (higher yield)</td>
<td>$42,500,000</td>
<td>$51,100,000</td>
<td>$107,400,000</td>
</tr>
<tr>
<td>Hotel</td>
<td>Acceptable solution</td>
<td>$18,300,000</td>
<td>$14,400,000</td>
<td>$77,400,000</td>
</tr>
<tr>
<td></td>
<td>Performance solution</td>
<td>$43,300,000</td>
<td>$14,400,000</td>
<td>$98,400,000</td>
</tr>
<tr>
<td></td>
<td>Performance solution (higher yield)</td>
<td>$49,400,000</td>
<td>$59,900,000</td>
<td>$119,400,000</td>
</tr>
<tr>
<td>Residential</td>
<td>Acceptable solution</td>
<td>$20,500,000</td>
<td>$16,100,000</td>
<td>$85,800,000</td>
</tr>
<tr>
<td></td>
<td>Performance solution</td>
<td>$48,300,000</td>
<td>$16,100,000</td>
<td>$109,400,000</td>
</tr>
<tr>
<td></td>
<td>Performance solution (higher yield)</td>
<td>$55,100,000</td>
<td>$66,500,000</td>
<td>$132,800,000</td>
</tr>
</tbody>
</table>

Note: Costs include construction costs, developer’s margin, finance costs and planning fees, net of GST credit.

**TABLE 9: REVENUE ESTIMATES**

<table>
<thead>
<tr>
<th>Use</th>
<th>Height</th>
<th>28-30 Davey</th>
<th>28-32 Elizabeth</th>
<th>K&amp;D site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>Acceptable solution</td>
<td>$11,700,000</td>
<td>$9,100,000</td>
<td>$57,100,000</td>
</tr>
<tr>
<td></td>
<td>Performance solution</td>
<td>$26,500,000</td>
<td>$9,100,000</td>
<td>$65,100,000</td>
</tr>
<tr>
<td></td>
<td>Performance solution (higher yield)</td>
<td>$30,300,000</td>
<td>$35,500,000</td>
<td>$75,700,000</td>
</tr>
<tr>
<td>Hotel</td>
<td>Acceptable solution</td>
<td>$20,500,000</td>
<td>$16,200,000</td>
<td>$82,400,000</td>
</tr>
<tr>
<td></td>
<td>Performance solution</td>
<td>$47,900,000</td>
<td>$16,200,000</td>
<td>$107,400,000</td>
</tr>
<tr>
<td></td>
<td>Performance solution (higher yield)</td>
<td>$54,700,000</td>
<td>$64,300,000</td>
<td>$131,100,000</td>
</tr>
<tr>
<td>Residential</td>
<td>Acceptable solution</td>
<td>$22,700,000</td>
<td>$17,900,000</td>
<td>$59,100,000</td>
</tr>
<tr>
<td></td>
<td>Performance solution</td>
<td>$52,900,000</td>
<td>$17,900,000</td>
<td>$118,700,000</td>
</tr>
<tr>
<td></td>
<td>Performance solution (higher yield)</td>
<td>$60,500,000</td>
<td>$71,100,000</td>
<td>$144,900,000</td>
</tr>
</tbody>
</table>

Note: Revenues are net of selling costs and GST.

**TABLE 10: RESIDUAL LAND VALUE ESTIMATES**

<table>
<thead>
<tr>
<th>Use</th>
<th>Height</th>
<th>28-30 Davey</th>
<th>28-32 Elizabeth</th>
<th>K&amp;D site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>Acceptable solution</td>
<td>-$4,500,000</td>
<td>-$3,500,000</td>
<td>-$25,400,000</td>
</tr>
<tr>
<td></td>
<td>Performance solution</td>
<td>-$10,700,000</td>
<td>-$3,500,000</td>
<td>-$28,100,000</td>
</tr>
<tr>
<td></td>
<td>Performance solution (higher yield)</td>
<td>-$12,100,000</td>
<td>-$15,500,000</td>
<td>-$31,600,000</td>
</tr>
<tr>
<td>Hotel</td>
<td>Acceptable solution</td>
<td>$2,200,000</td>
<td>$1,800,000</td>
<td>$5,000,000</td>
</tr>
<tr>
<td></td>
<td>Performance solution</td>
<td>$4,600,000</td>
<td>$1,800,000</td>
<td>$8,500,000</td>
</tr>
<tr>
<td></td>
<td>Performance solution (higher yield)</td>
<td>$5,300,000</td>
<td>$4,500,000</td>
<td>$11,900,000</td>
</tr>
<tr>
<td>Residential</td>
<td>Acceptable solution</td>
<td>$2,200,000</td>
<td>$1,800,000</td>
<td>$5,300,000</td>
</tr>
<tr>
<td></td>
<td>Performance solution</td>
<td>$4,600,000</td>
<td>$1,800,000</td>
<td>$8,800,000</td>
</tr>
<tr>
<td></td>
<td>Performance solution (higher yield)</td>
<td>$5,300,000</td>
<td>$4,600,000</td>
<td>$12,100,000</td>
</tr>
</tbody>
</table>

Note: RLV is calculated by subtracting development costs from revenues.
4.5 Results

The findings of the feasibility analysis are shown in Table 11 as the ratio of the residual land value (RLV) from each scenario to existing use value (EUV) of the relevant site.

Where this ratio is greater than 1 the RLV is higher than the EUV, which suggests that the redevelopment is likely to be feasible. For a commercial or hotel scenario to be deemed feasible the ratio of RLV to EUV must exceed 1.20. For a residential scenario to be deemed feasible the ratio must exceed 1.15. Those development scenarios where these conditions are satisfied are highlighted as green cells in Table 11. Where the ratio is less than 1 the development is considered not feasible. These cells are coloured red. Where the feasibility is marginal (that is, a ratio that is between 1 and 1.15 for residential or between 1 and 1.20 for the other land uses) the cell is coloured yellow.

The analysis suggested that 8 of the 27 scenarios considered are likely to be feasible. On the Davey Street site, four scenarios appear to be feasible:

- Hotel development based on the Performance solution building envelope
- Hotel development based on the Higher yield performance solution building envelope
- Residential development based on the Performance solution building envelope, and
- Residential development based on the Higher yield performance solution.

On the Elizabeth Street site, two scenarios appear to be feasible:

- Hotel development based on the Higher yield performance solution, and
- Residential development based on the Higher yield performance solution.

On the K&D site, the two scenarios appear to be feasible:

- Hotel development based on the Higher yield performance solution building envelope, and
- Residential development based on the Higher yield performance solution building envelope.

Two scenarios appear to be on the margins of being feasible:

- Hotel development based on the Performance solution building envelope, and
- Residential development based on the Acceptable solution building envelope.

Both scenarios return estimated residual land values that are very close to the existing use values.

TABLE 11: FEASIBILITY FINDINGS – RATIO OF RLV TO EUV

<table>
<thead>
<tr>
<th>Use</th>
<th>Height</th>
<th>28-30 Davey</th>
<th>28-32 Elizabeth</th>
<th>K&amp;D site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>Acceptable solution</td>
<td>-1.30</td>
<td>-0.95</td>
<td>-2.96</td>
</tr>
<tr>
<td></td>
<td>Performance solution</td>
<td>-3.08</td>
<td>-0.95</td>
<td>-3.28</td>
</tr>
<tr>
<td></td>
<td>Performance solution – higher yield</td>
<td>-3.49</td>
<td>-4.19</td>
<td>-3.68</td>
</tr>
<tr>
<td>Hotel</td>
<td>Acceptable solution</td>
<td>0.64</td>
<td>0.48</td>
<td>0.58</td>
</tr>
<tr>
<td></td>
<td>Performance solution</td>
<td>1.31</td>
<td>0.48</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Performance solution – higher yield</td>
<td>1.52</td>
<td>1.20</td>
<td>1.38</td>
</tr>
<tr>
<td>Residential</td>
<td>Acceptable solution</td>
<td>0.64</td>
<td>0.48</td>
<td>0.62</td>
</tr>
<tr>
<td></td>
<td>Performance solution</td>
<td>1.32</td>
<td>0.48</td>
<td>1.02</td>
</tr>
<tr>
<td></td>
<td>Performance solution – higher yield</td>
<td>1.54</td>
<td>1.25</td>
<td>1.41</td>
</tr>
</tbody>
</table>

4.6 Discussion

The development feasibility analysis suggests that both residential and hotel developments might be feasible on all three sites considered, provided sufficient density can be achieved to generate a residual land value that exceeds the existing use value by a sufficient margin.

The Acceptable solution scenarios are universally unfeasible. This density of development permitted under these scenarios is insufficient to generate a return to the developer and existing land owner.

For the Davey Street site, the Performance solution and Higher yield performance solution both appear to provide feasible development scenarios. This is a reflection of the relatively high densities that can be achieved, and the lower existing use value of this particular site.

Development of the Elizabeth Street site was found to be not feasible based on the acceptable/performance solutions, but feasible at the higher density implied by the Higher yield performance solution with higher revenue assumptions. Development at the density implied by the current Palace Hotel proposal was found to be feasible, as either a hotel or residential development.

The redevelopment of the K&D site would appear to be feasible at the density implied by the Higher yield performance solution for both hotel and residential developments, but is marginal under the Performance solution density.

Commercial development does not appear to be feasible on any site, regardless of the development density tested. This is not unexpected as the estimate returns for commercial development at $4,000 sqm per square of net saleable floor space are too low to cover the even construction costs without consider the developer’s margin or the land purchase price.6

For a commercial development to be feasible, a pre-commitment to pay a significant price premium above current market rates would be required. This is perhaps most likely to come from government or larger corporate firms.

It should be borne in mind that development feasibility is highly site specific and the findings of this analysis may not readily translate to other sites. Sites with lower existing use values are more likely to be feasible when compared to sites that host a current land use that generates good returns for the land owner. Furthermore, the size, shape and orientation of a site will affect the density of development that can be achieved within a given height limit.

That said, the general patterns in feasibility detected in the analysis are likely to hold for many potential development sites.

---

6 The rates per square metre of gross floor area for construction, contingency and profession fees have been estimated at are between $3600 to $3800/sqm. Adding cost of finance increase these rates to between $3,800 to $4,000/sqm. Adding in sales and marketing cost, they are between $3,900 to $4,100/sqm.
4.7  Note on the RLV estimates compared to recent sale prices

The difference between the estimated RLVs for the three sites based on the Higher yield performance solutions and recent sales prices warrants further examination. In the case of the Davey Street and Elizabeth Street sites, the RLVs from the feasibility modelling are very similar to the recent sale prices, suggesting the modelling is reasonably calibrated to current market realities (see Table 12). However, the recent sale of the K&D site for $30 million to the University of Tasmania, exceeds the modelled RLV estimate by a significant margin.

There are several possible explanations for this particular difference. The first, is that the purchaser is anticipating a more intense redevelopment of the site than has been considered in our modelling. A higher density would, in turn, generate a high RLV.

Another possible explanation relates to the difference between the University’s ‘business model’ and that of a convention developer. While a development would seek an immediate return for undertaking the redevelopment of the site, the University will hold the site as a long-term asset and receive a return on the investment over several decades. Under these circumstances the value of the site to the University will be significant more than the value to an ordinary development seeking an ‘immediate’ return.

The other unique attribute of this site is its large size which would be particularly attractive to a large institutional that can secure a significant expansion opportunity in the inner city, through a single transaction.

For these reasons, we believe the high sale price for the K&D site, relative to our estimated RLV, reflects unique opportunity that this site offers to a unique buyer, rather than a fundamental error in the modelling.

TABLE 12: RLV ESTIMATES COMPARED TO RECENT SALES PRICES

<table>
<thead>
<tr>
<th>Value</th>
<th>28-30 Davey</th>
<th>28-32 Elizabeth</th>
<th>K&amp;D site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated RLV – hotel</td>
<td>$5,288,000</td>
<td>$4,459,000</td>
<td>$11,871,000</td>
</tr>
<tr>
<td>Estimated RLV – residential</td>
<td>$5,343,000</td>
<td>$4,634,000</td>
<td>$12,062,000</td>
</tr>
<tr>
<td>Recent sale price</td>
<td>$5,365,000</td>
<td>$4,500,000</td>
<td>$30,000,000</td>
</tr>
</tbody>
</table>

# APPENDIX A: FEASIBILITY ASSUMPTIONS

## TABLE 13: GLOBAL FEASIBILITY ASSUMPTIONS

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Quantity</th>
<th>Unit</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor to floor height commercial</td>
<td>1.75 m</td>
<td>m</td>
<td>JMG report</td>
</tr>
<tr>
<td>Floor to floor height residential</td>
<td>3.1 m</td>
<td>m</td>
<td>Tall Building Height Calculator</td>
</tr>
<tr>
<td>Efficiency commercial office</td>
<td>80% of GFA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Efficiency residential</td>
<td>75% of GFA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Efficiency hotel</td>
<td>75% of GFA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average site coverage residential</td>
<td>70% of planning envelope</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average site coverage commercial</td>
<td>70% of planning envelope</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average site coverage K&amp;D only</td>
<td>40% of planning envelope</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average dwelling size</td>
<td>80.00 sqm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parking rate - residential</td>
<td>1.00</td>
<td>per dwelling</td>
<td></td>
</tr>
<tr>
<td>Parking rate - residential</td>
<td>105.7</td>
<td>NLA per space</td>
<td></td>
</tr>
<tr>
<td>Parking rate - hotel</td>
<td>200</td>
<td>NLA per space</td>
<td>Planning scheme rate</td>
</tr>
<tr>
<td>Parking rate - commercial</td>
<td>200</td>
<td>NLA per space</td>
<td>Planning scheme rate</td>
</tr>
<tr>
<td>Parking - basement</td>
<td>$30,000</td>
<td>per space</td>
<td></td>
</tr>
<tr>
<td>Parking - sqm per space</td>
<td>21.00</td>
<td>per space</td>
<td></td>
</tr>
<tr>
<td>Marketing (res. and comm. only)</td>
<td>2.5%</td>
<td>of GRV</td>
<td></td>
</tr>
<tr>
<td>Site preparation</td>
<td>$500</td>
<td>per sqm site</td>
<td></td>
</tr>
<tr>
<td>Construction cost - mid rise</td>
<td>$3,000</td>
<td>per sqm GFA</td>
<td></td>
</tr>
<tr>
<td>Construction cost - high rise</td>
<td>$3,125</td>
<td>per sqm GFA</td>
<td></td>
</tr>
<tr>
<td>Construction cost - higher rise</td>
<td>$3,250</td>
<td>per sqm GFA</td>
<td></td>
</tr>
<tr>
<td>Construction contingency</td>
<td>5.0%</td>
<td>of const. cost</td>
<td></td>
</tr>
<tr>
<td>Professional fees</td>
<td>5.0%</td>
<td>of const. cost</td>
<td></td>
</tr>
<tr>
<td>Town planning fees</td>
<td>1.0%</td>
<td>of const. cost</td>
<td></td>
</tr>
<tr>
<td>Financing - loan establishment</td>
<td>2.5%</td>
<td>% of costs</td>
<td></td>
</tr>
<tr>
<td>Financing - interests</td>
<td>5.0%</td>
<td>% of costs</td>
<td></td>
</tr>
<tr>
<td>Developer's margin - residential</td>
<td>20.0%</td>
<td>% on costs</td>
<td>Lower profit; long term investment horizon</td>
</tr>
<tr>
<td>Developer's margin - commercial</td>
<td>20.0%</td>
<td>% on costs</td>
<td></td>
</tr>
<tr>
<td>Developer's margin - hotel</td>
<td>5.0%</td>
<td>% on costs</td>
<td></td>
</tr>
<tr>
<td>EUV+ ratio - residential</td>
<td>1.15</td>
<td>on EUV</td>
<td>Property Council</td>
</tr>
<tr>
<td>EUV+ ratio - commercial</td>
<td>1.20</td>
<td>on EUV</td>
<td>Property Council</td>
</tr>
<tr>
<td>EUV+ ratio - hotel</td>
<td>1.20</td>
<td>on EUV</td>
<td>Property Council</td>
</tr>
</tbody>
</table>

APPENDIX B: JMG BUILDING ENVELOPE MODELLING
Dear Brian,

**SGS BUILDING HEIGHTS REPORT**

The following letter provides a basic assessment of three sites within Hobart against currently planning provisions related to building height. The assessment is based on the acceptable solution and performance criteria for the relevant zone. Assumptions have been stated where the performance criteria is not measured quantitatively. Assumptions have also been made regarding the height of adjacent buildings and an average ceiling height per floor has been used.

The title boundaries of a site dictate the height, setback and building envelope together with external factors including heritage fabric. This is clear when development is proposed within a single title. The impact of site boundaries becomes more fluid when multiple titles are being used for a single development. The building is able to cross the shared site boundaries maintaining its bulk where a single title building would lose that bulk to comply with setback provisions. Similarly, a development may not be subject to frontage height provisions when setback a sufficient distance from the frontage, depending on the provision.

Site 1 is subject to the Sullivans Cove Planning Scheme 1997, while Sites 2 and 3 are subject to the Hobart Interim Planning Scheme 2015.

The Performance Solution (Fragrance Tower) for Site 2 (Elizabeth Street) is based on the approved development application PLN-15-01162-01 (Approved at Council Meeting on 18 April 2016). The dimensions used are approximate.

The ability to control development through planning provisions is tested when the performance criteria is not readily defined. This was evident in the building approval for Site 2. Without an overall plan for the Hobart City area it is possible to make a strong case for a building that well exceeds the acceptable solution.

The following site assessments demonstrate the diversity of height and setback provisions that currently exist in the planning schemes in Hobart. There are further iterations of height and setback provisions that apply dependent on the applicable zone, site and surrounding urban fabric.
1. 28-30 Davey Street

Scheme: Sullivans Cove Planning Scheme 1997
Zone: Mixed Use
Other: Adjacent Place of Cultural Significance

Table 1 - Maximum Building Height at 28-30 Davey Street, Hobart

<table>
<thead>
<tr>
<th>DTS/PC</th>
<th>Height</th>
<th>Storeys</th>
<th>Site Area</th>
<th>Gross Floor Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTS - 10 m from Heritage Building</td>
<td>15</td>
<td>4</td>
<td>435</td>
<td>1740</td>
</tr>
<tr>
<td>DTS - ≥ 10 m from Heritage Building</td>
<td>18</td>
<td>4.8</td>
<td>723</td>
<td>3470.4</td>
</tr>
<tr>
<td>PC - 10 m from Heritage Building</td>
<td>30*</td>
<td>8</td>
<td>435</td>
<td>3480</td>
</tr>
<tr>
<td>PC - ≥ 10 m from Heritage Building</td>
<td>45</td>
<td>12</td>
<td>723</td>
<td>8676</td>
</tr>
</tbody>
</table>

* To create staggered transition in height

Assumptions
- Adjacent heritage building is approximately 15 m
- 1 storey = 3.75 m
- PC based on approved heights in streetscape e.g. 15 Murray Street, and Amenity Building Envelope from Hobart Interim Planning Scheme 2015
Figure 1 - Maximum heights for building at 28-30 Davey Street under Acceptable Solution
Figure 2 - Building height for 28-30 Davey Street under Performance Criteria
2. 28 Elizabeth Street

Scheme: Hobart Interim Planning Scheme 2015
Zone: Central Business
Overlays: Central Business Core, Heritage Precinct H1, Active Frontage

Table 2 - Maximum Height of Building at 28 Elizabeth Street Hobart

<table>
<thead>
<tr>
<th>AS/PC</th>
<th>Height</th>
<th>Site Area*</th>
<th>Storeys</th>
<th>Gross Floor Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS - 15 m from North Frontage</td>
<td>20</td>
<td>319</td>
<td>5.33</td>
<td>1701.3</td>
</tr>
<tr>
<td>AS - 15 m from South Frontage</td>
<td>15</td>
<td>592</td>
<td>4.00</td>
<td>2368</td>
</tr>
<tr>
<td>AS - ≥15 m from frontage</td>
<td>30</td>
<td>43</td>
<td>8.00</td>
<td>344</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4413.3</td>
</tr>
<tr>
<td>AS - Heritage - 15 m from North Frontage</td>
<td>16.875</td>
<td>319</td>
<td>4.50</td>
<td>1435.5</td>
</tr>
<tr>
<td>AS - Heritage - 15 m from South Frontage</td>
<td>15</td>
<td>592</td>
<td>4.00</td>
<td>2368</td>
</tr>
<tr>
<td>AS - Heritage - ≥15 m from frontage</td>
<td>30</td>
<td>43</td>
<td>8.00</td>
<td>344</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4147.5</td>
</tr>
<tr>
<td>PC Based on Amenity Envelope</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PC - 15 m from North Frontage</td>
<td>20</td>
<td>319</td>
<td>5.33</td>
<td>1701.3</td>
</tr>
<tr>
<td>PC - 15 m from South Frontage</td>
<td>15</td>
<td>592</td>
<td>4.00</td>
<td>2368</td>
</tr>
<tr>
<td>PC - 15-30 m from South frontage</td>
<td>30</td>
<td>43</td>
<td>8.00</td>
<td>344</td>
</tr>
<tr>
<td>PC - ≥30 m from South frontage</td>
<td>45</td>
<td>N/A</td>
<td>12.00</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4413.3</td>
</tr>
<tr>
<td>PC - Fragrance Tower**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tower 1</td>
<td>73</td>
<td>257</td>
<td>19</td>
<td>4883</td>
</tr>
<tr>
<td>Tower 2</td>
<td>61</td>
<td>617</td>
<td>16</td>
<td>9872</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14755</td>
</tr>
</tbody>
</table>

* Site Area is approximate. **All dimensions used are approximate

Assumptions
- 22 Elizabeth St is approximately 6 storeys on north frontage and 3 storeys on south frontage
- 34 Elizabeth Street is approximately 3.5 storeys
- 1 storey = 3.75 m
Figure 3 - Maximum heights for building at 28 Elizabeth Street
Figure 4 - Building height for 28 Elizabeth Street under Performance Criteria
3. **K&D Site**

Scheme: Hobart Interim Planning Scheme 2015  
Zone: Commercial  
Overlays: N/A

**Table 3 - Maximum Height of Building at 103 Melville Street Hobart**

<table>
<thead>
<tr>
<th>AS/PC</th>
<th>Height</th>
<th>Site Area (m2)</th>
<th>Storeys</th>
<th>Gross Floor Area (m2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS - 4 storey max*</td>
<td>15 m</td>
<td>11445</td>
<td>4</td>
<td>45780</td>
</tr>
<tr>
<td>AS - 3 storey max</td>
<td>11.5 m</td>
<td>11445</td>
<td>3.07</td>
<td>35316</td>
</tr>
<tr>
<td>PC - 15 m from frontage</td>
<td>15 m</td>
<td>3695</td>
<td>4</td>
<td>14780</td>
</tr>
<tr>
<td>PC - ≥15 m from frontage</td>
<td>20 m</td>
<td>7480</td>
<td>5.33</td>
<td>39868.4</td>
</tr>
</tbody>
</table>

**Assumptions**

- One storey = 3.75 m
- Maximum height of 20 m with transition at frontage based on surrounding approved building heights e.g. 100 Melville Street.
Figure 5 - Maximum building height for 103 Melville Street under Acceptable Solution
Figure 6 - Building height for 103 Melville Street under Performance Criteria
If we can provide any further information, please contact me at delphinstone@jmg.net.au.

Yours faithfully

JOHNSTONE McGEE & GANDY PTY LTD

Dana Elphinstone
TOWN PLANNER