

Appendix VIII)

SEPP 65 Design Verification Statement

24 February 2016

The General Manager
Penrith City Council
Civic Centre, 601 High Street
Penrith, NSW, 2751

We confirm that Integrated Design Group has been engaged by CABA to prepare the architectural documentation for the proposed development application at 344 High Street, PENRITH.

Pursuant to the requirements of SEPP 65 - Design Quality of Residential Flat Developments, Part 4 - Development Applications, we advise;

- a) the design has been directed by Andrew Elia of Integrated Design Group who is registered in accordance with the Architects Act 1929, registration number: 7928.
- b) the design quality principles set out in Part 2 of State Environmental Planning Policy No 65 - Design Quality of Residential Flat Development are achieved for the residential flat development.

Please contact me if you have any queries.

Yours faithfully,



Andrew Elia
associate director |
architect | registration #7928

introduction

This report has been prepared in consideration of the proposed mixed commercial and residential units at 344 High Street, Penrith. The report will assess the design qualities of the proposed development and comment on the important components of the urban form having reference to the provisions of SEPP No. 65 and the Residential Flat Design Code, Liveable Housing Design and Penrith New West Objectives.

The proposed development consists of a mixed use building across two buildings with a shared basement level. Building A, facing high street, consists of 2 commercial levels and 5 residential levels containing 15 dwellings. Building B, accessed from John Cram Place, consists of 1 ground floor car parking and 6 residential levels containing 24 dwellings.

The proposed mixed development responds strongly to both the existing and intended urban context and contributes to the overall perception of a vibrant, lively and safe streetscape. Attention to form, massing and facade detail ensures that the buildings are a positive statement adjacent to the heritage items, whilst maintaining the desired street wall along High Street, and increased pedestrian activation in the precinct.

The mix of apartments ensures that a diversity of dwelling type is available to encourage occupation by a wide cross section of the community, and with its proximity to public transport and being in the heart of Penrith City, the units are well positioned, offering a range of lifestyle options.

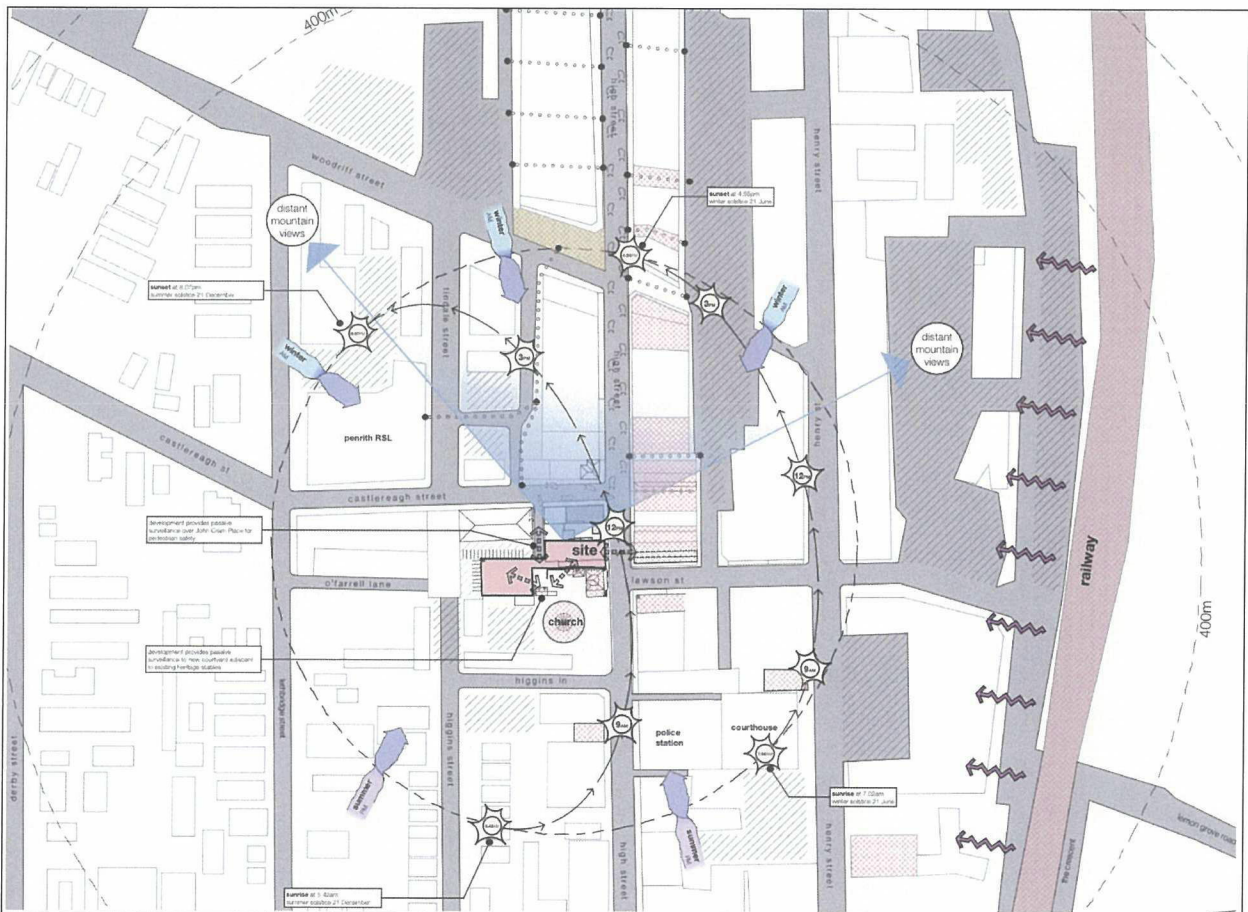
A thorough design process has been undertaken in the development of this building to ensure a high quality product is provided.

site and context

The report and associated architectural plans provide an analysis of the site conditions and their relationship to the surrounding context. The site analysis has detailed all aspects and constraints on both the site and surrounding development.

Well-designed buildings within close proximity of each other and within easy walking distance to amenities, can have the effect of transforming the overall impression of the streetscape and bring about vitality that is often lacking in medium density development, borne about by poor design, bulk, scale and landscape setting.

The subject site is located about 500m directly southwest of Penrith Station and within 700m walking distance. It is located on high street, one of the main retail streets in Penrith. The site is surrounded by mostly 2 storey commercial and retail development. The site is adjacent to and opposite to buildings of heritage significance. There are distant mountain views to the west.



DA 0100 : site analysis

design excellence | UDRP

A meeting with the Urban Design Review Panel was held on 16th March 2015 at Penrith Council.

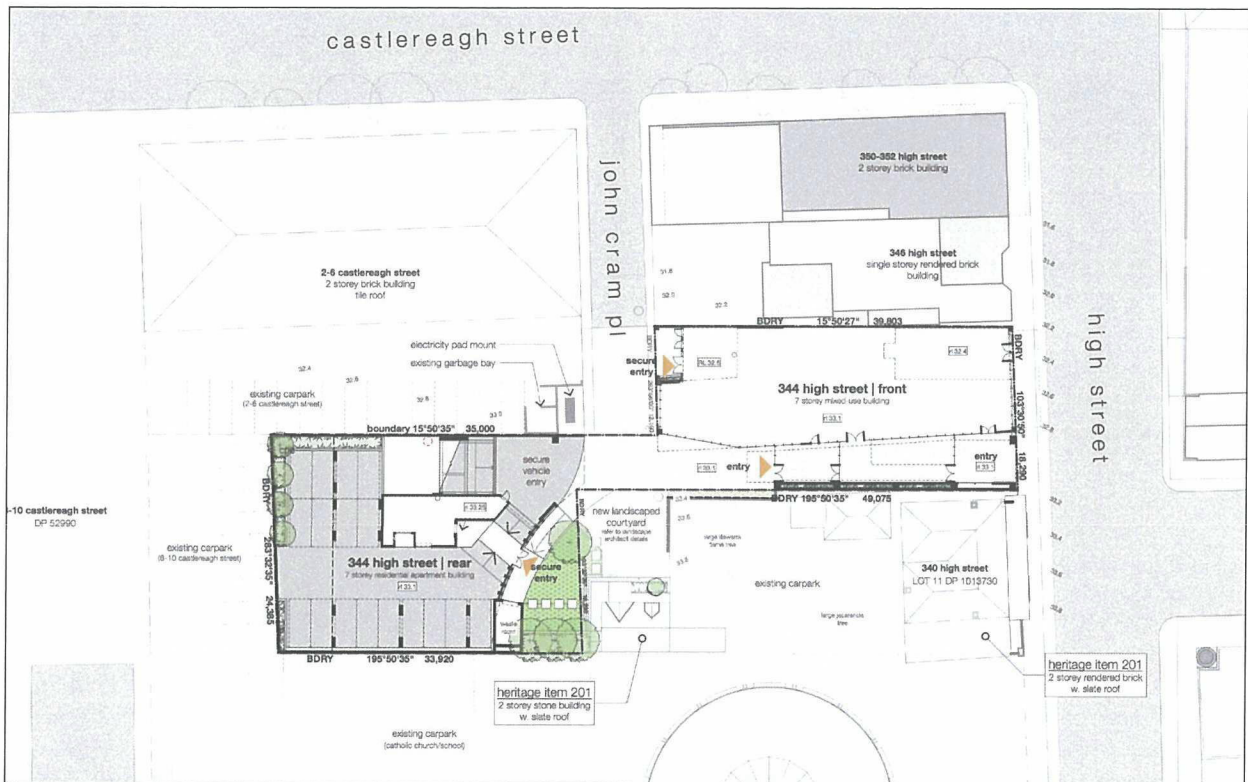
We proposed a variation and increase from the DCP limitations for FSR and height under LEP section 8.4 design excellence. Summarised comments from Council's Urban Design Consultant Brett Newbold:

Package of documents provide clear explanation of height and FSR which are sought by future development. Additional height and FSR is consistent to units in surrounding areas and complete street profile which is specified by DCP. Documentation is exemplary. Complements heritage items. But achieves height and density of Penrith CBD. Form and conceptual design provide a suitably neutral backdrop to heritage items and incorporate pedestrian links at ground level which would accentuate the form and value of existing buildings - John Cram place in particular. Detailed doc provide foundation for architectural design which would be appropriate in terms of scale to heritage items. Design development should consider matters such as vehicular access to parking, intersections between pedestrian and vehicular at perimeter of proposed courtyard and may require adjustment of basement area to accommodate medium sized tree adjacent to coach house. Urban design - positive starting point for discussions regarding technical town planning and non compliant height / floor space.

site planning principles

The proposal for this site seeks to continue the proposed street wall along High Street whilst at the same time creating an appropriate separation from the adjacent heritage building at 340 High Street (and coach house to the rear of the site) which creates a curtilage around the heritage items by providing an integrated facade between the front and rear buildings.

We note that the ground floor retail covers the entire frontage of High Street but is designed in such a way to provide pedestrian access through the retail space to the rear of the site. We are looking to bring pedestrian activity into the site by creating the possibility for a courtyard at the rear of the heritage building.



DA 0101 : site plan

building design principles

The development is built around the fundamentals of a typical floor plate (with a mixture of 1, 2 & 3 bedroom units) to assist efficiency in construction and in costs. From High Street, a large screen creates an integrated street wall to protect and create a backdrop to the heritage items on the neighbouring lot.

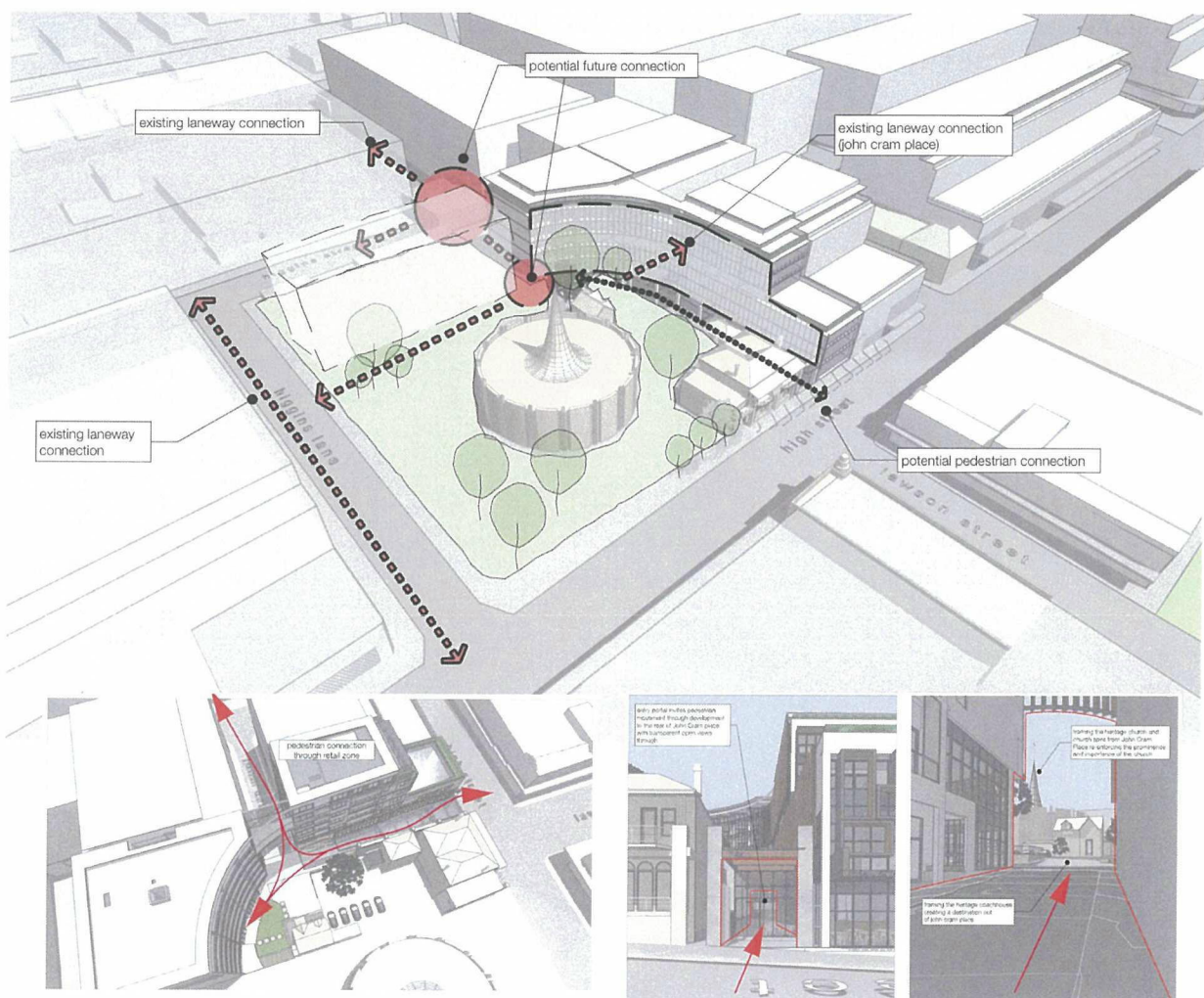
Buildings are designed for resident amenity and welfare through a planning arrangement with solar access and cross ventilation standards exceeding SEPP 65 requirements and the juxtaposition of building blocks providing passive surveillance of all open space and pedestrian approaches. Most units generally range from north to east, to limit south facing units.

The development provides a common basement car park with separate lifts to each building. This promotes pedestrian activity and movement around the buildings which is key to a successful active precinct. This is also re-enforced by upper floor apartments with direct surveillance of communal pedestrian areas.



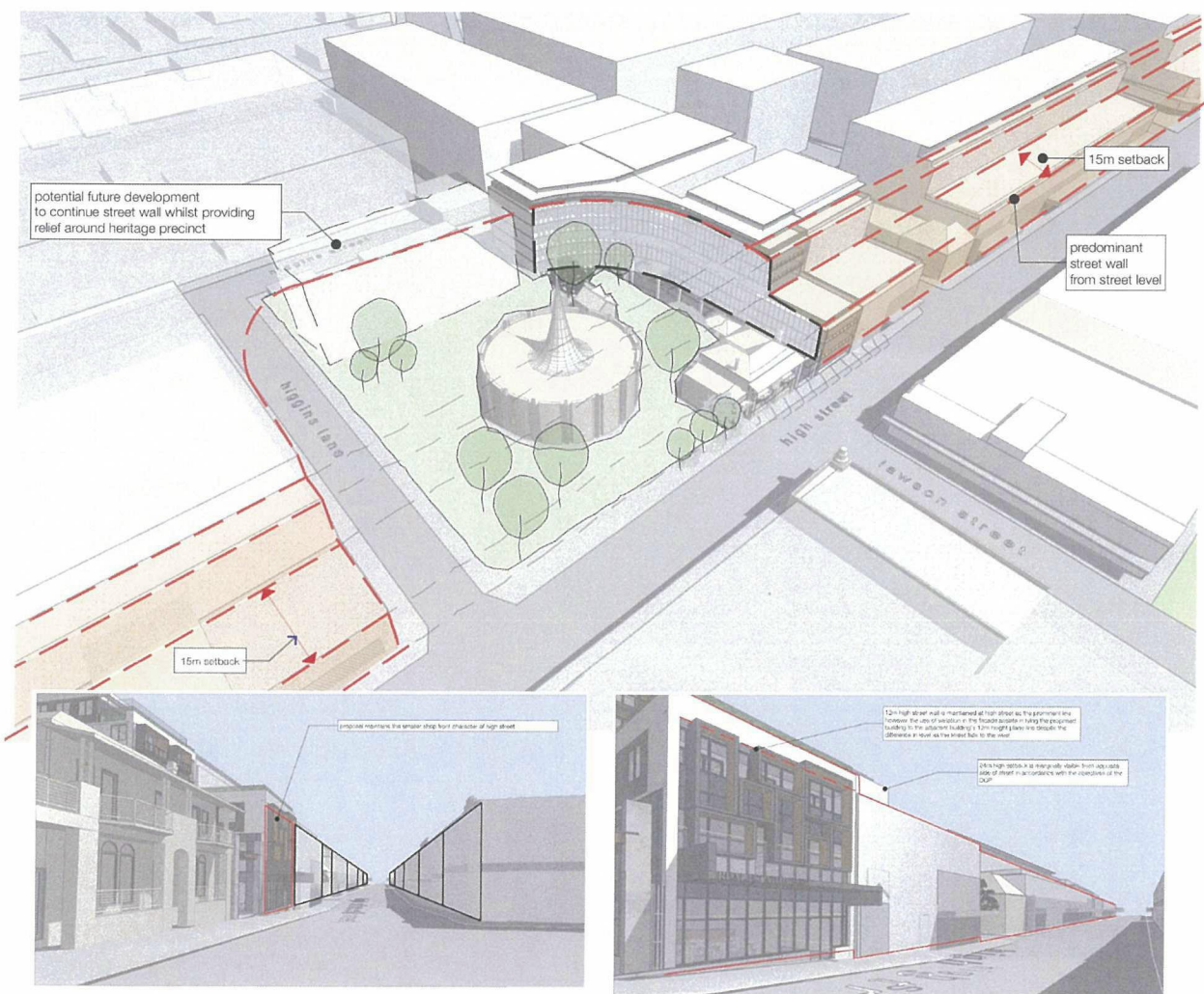
connection with the wider community

We are looking to bring pedestrian activity into the site by creating the possibility for a courtyard at the rear of the heritage building. This also provides a visible and clear entry for residents, and as such promotes a walkable community of residents who interact directly with the main street. This also provides good surveillance and activity in John Cram place. We note that the ground floor retail covers the entire frontage of High Street but is designed in such a way to provide pedestrian access through the retail space to the rear of the site.



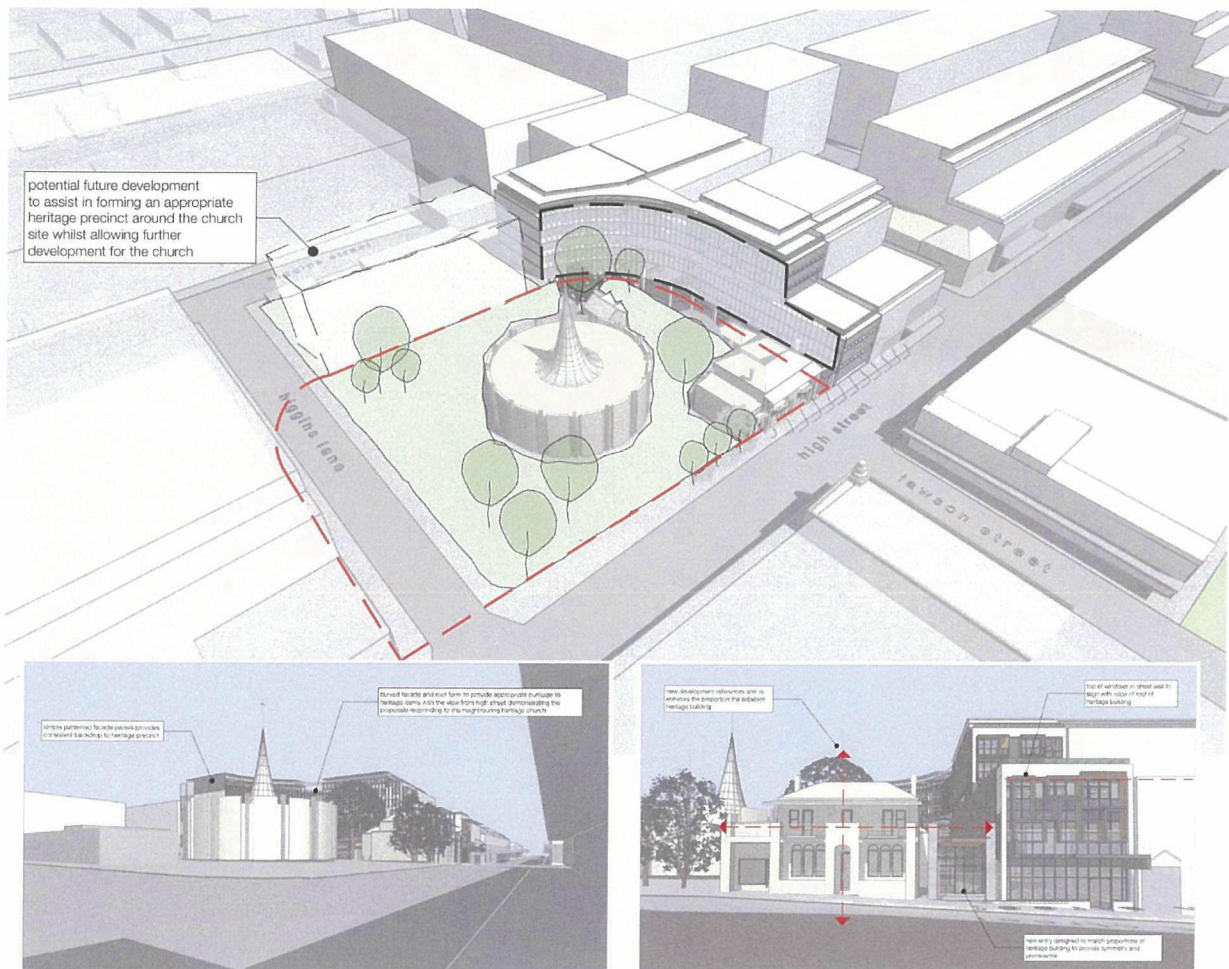
street wall

We understand that council's intention to maintain a 12m height limit along High Street to provide natural light to public spaces and to take into account a number of heritage buildings. This proposal maintains the DCP setbacks and heights for the streetscape. We also provide a more significant presence of the heritage building adjacent to our site but using the same proportions of that for our walkway entry.



heritage

We have pulled the building away from the adjacent heritage house and coach house and created a curtilage around this. Our new building wraps around the building (taking cues from the adjacent church building) and sets a back drop to the house which we believe is a more significant setting for the house. Sets up a view of the coach house and creates a destination at the end of John Cram Pl (rather than a left over laneway). As you walk up the lane the building then frames a view to the Catholic Church (also a heritage item).



councils key development standards

The following statement provides an assessment of the development against the Penrith Development Control Plan 2014 and Penrith Local Environmental Plan 2010

control	proposed	compliance
Floor Space Ratio <i>front site maximum FSR 2:1</i> <i>rear site maximum FSR 3:1</i>	<p>The proposed development has a FSR of 3:1.</p> <p>This exceeds the FSR allowable for the front site but is consistent with the FSR of adjoining properties.</p>	<p>NO <i>seek variation to LEP based on LEP Clause 4.6</i></p>
Height <i>12m maximum height</i>	<p>The proposed development has a street wall height of 11m, followed by a 15m setback and then a height of up to 25m.</p> <p>This exceeds the FSR allowable for the site but is consistent with the FSR of adjoining properties.</p>	<p>NO <i>seek variation to LEP based on LEP Clause 4.6</i></p>
Front Setbacks <i>0m setback</i>	<p>A 0m street setback is applied to the facades facing High Street and John Cram Place.</p>	<p>YES</p>
Side Setback (DCP) <i>Non residential uses up to 20m - 0m setback</i> <i>Residential uses up to 12m</i> <i>- non-habitable rooms 3m</i> <i>- habitable rooms 6m</i> <i>Residential uses up to 24m height:</i> <i>- non-habitable rooms 4.5m</i> <i>- habitable rooms 9m</i>	<p>A 0m setback is applied on the west side boundary of the Building A and to the west and east side boundary of Building B. This allows for the adjacent buildings to also build to the boundary, creating a street wall desired by the DCP.</p> <p>The proposed development tapers around the heritage building achieving 6.5m setback where it is closest at high street and 4m at the southern side of the front building.</p>	<p>NO <i>seek variation to DCP based on design merit and compliance with street wall characteristics</i></p>
Rear Setback (DCP) <i>minimum 2-3m</i>	<p>The proposed development achieves a 6m rear setback, which exceeds the minimum setback requirement</p>	<p>YES</p>

SEPP 65 key standards

The following statement provides an assessment of the development against the State Environmental Planning Policy No 65 - Design Quality of Residential Flat Developments, Design Quality Principles Part 2.

standard	comment
<p>Visual Privacy To provide visual privacy during day/night, maximise outlook and views from private open space without compromising visual privacy, with recessed balconies.</p>	<p>Building separation has been provided with the design incorporating solid facade relief elements and privacy screening where necessary. The buildings have been designed to minimise direct overlooking, and no living space is orientated to face another within the development.</p>
<p>Bicycle and Car Parking To minimise car dependency for commuting and promote alternative means of public transport, walking or bicycling. Underground parking where possible with ventilation. Safe and secure access for building users. Consider: - vegetation, canopy/shade trees, selection paving, screening from communal and private open space and bicycle parking</p>	<p>The proposed development will be serviced by public transport with Penrith Station approximately 300m walking distance away. As such a reduced car parking rate is applied and consistent with the Guide to Traffic Generating Development.</p> <p>Occupants will be able to store bicycles within the secured basement, in their secured storage cage.</p> <p>All car parking including the basement will be well lit for security and safety. Ventilation to basement car parking will be in accordance with BCA requirements.</p>
<p>Solar and Daylight Access To ensure that daylight provided to all habitable rooms, ambient lighting to minimise the need for artificial lighting. Living rooms and open space for at least 70% of apartments to receive 2 hours direct sunlight in winter. (in accordance with the SEPP allowance for urban areas).</p>	<p>29 of the 39 apartments receive minimum 2 hours direct sunlight on the 22 June between 9am and 3pm when assessing the building form.</p> <p>The development will comply with the required 70% solar access, achieving 74.3%</p>
<p>Common Circulation and Spaces To provide safety, amenity and durability as well as opportunity for casual social interactions among residents and assist with social recognition.</p>	<p>The maximum number of apartments sharing a circulation core is 4.</p> <p>Corridors are quite generous in size with ample circulation space as well as opportunities for interaction. Entries to units are orientated to maintain privacy.</p>
<p>Apartment Size and Layout To ensure that the apartments are functional, well organised, accommodate a variety of household activities and occupants needs. Single – aspect apartments should be limited in depth to 8m from a window. Cross over apartments 15 m deep should be 4m wide or wider to avoid narrow apartments. The back of the kitchens should be no more than 8m from window.</p>	<p>The design provides for a mix of apartment sizes with a variety of one, two and three bedroom units with options of study / dual access to suit different family size and needs.</p> <p>1 bedroom - 57.58m² 2 bedroom - 76.54m² - 79.06m² 85.70m² adaptable 96.96m² dual key 3 bedroom - 111.66m² 131.29m² unit dual key</p> <p>Single aspect apartments have been minimised and designed to be compliant with the SEPP 65 rules of thumb. Cross through units over 15m deep are wider than 4m and all kitchens (with exception of unit 2.05) are within 8m from a window.</p>

standard	comment
<p>Ceiling Height To provide a sense of space, penetration of daylight, flexibility of use, quality internal space.</p>	<p>The 2.7m floor to ceiling height is achieved for all units.</p>
<p>Private Open Space and Balconies To ensure apartments have private open space, which is functional for outdoor living. The design is integrated into the overall architectural form and to allow casual overlooking of street.</p>	<p>Balcony size varies from 1.1m to 3.4m.</p> <p>All primary balconies achieve the minimum requirements</p> <p>1 bed : 8m², 2m depth 2 bed -10m², 2m depth 3 bed - 12m², 2.4m depth</p> <p>The private open space area is functional and useable with a larger section to accommodate outdoor furniture. The provision of stacked sliding doors leading from living rooms to balconies ensures an extension of the living areas. Units provide direct casual surveillance of communal open spaces and adjoining streets.</p> <p>Unit 2.05 complies with the total area, and minimum size requirements for balconies off the living area, however due to the external facade treatment the balcony space off the living room has been separated into two separate balconies.</p>
<p>Natural Ventilation Provision of each apartment with direct access to fresh air and to assist in promoting thermal comfort for occupants. Natural ventilation in non-habitable rooms, where possible. The design is to reduce energy consumption. <i>Overall 60% of apartment should have cross ventilation.</i></p>	<p>All apartments will receive direct access to fresh air and 24 of the 39 apartments achieve cross ventilation. The prevailing north easterly and southerly aspect will provide thermal comfort to the occupants.</p> <p>The development will comply with the required 60% cross ventilation, achieving 62%.</p>
<p>Storage To ensure that each apartment has adequate storage at rate defined SEPP 65.</p>	<p>The design provides for required storage within each apartment with additional secured storage space provided in the carpark area of the units. Refer to area schedule.</p> <p>1 bedroom - 6m³ 2 bedroom - 8m³ 3 bedroom - 10m³</p>

design quality principles

The following statement provides an assessment of the development against the State Environmental Planning Policy No 65 - Design Quality of Residential Flat Developments, Design Quality Principles Part 2.

Principle One : Context and Neighbourhood Character	
Good design responds and contributes to its context (defined as the key natural and built features of an area).	
objective	comment
<p>Natural Features The building should respond to the natural characteristics of the site</p>	<p>The site is within an urban landscape. The site has an 18.3m frontage to high street, the main commercial street. The site has a significant west / north orientation but buildings are orientated to maximise on north and east orientation.</p>
<p>Built Features How does the proposed development respond to the adjoining developments.</p>	<p>There is no dominant character or scale along high street. The majority of existing buildings are 1 - 3 storeys retail and /or commercial. Street frontage varies between 4 - 60m in length. Only consistent feature is 0m allotment between boundaries the exception being the heritage building and church adjacent to the proposed site.</p> <p>The front facade of the proposed building responds to the height and scale of the adjoining heritage building. A glazed walkway adjacent to the heritage building is a modern interpretation of the heritage features and creates a greater setback between the two buildings than would a typical developer response would allow.</p> <p>The front facade is further broken down by smaller frames which is reflective of the transitional nature of the existing high street fabric, a patchwork of different shapes and sizes. The transitory nature of this frame which is fixed outside the building envelope allows for it to be adapted as the streetscape develops.</p> <p>The proposed development steps up to 25m height after a 15m front setback. This, along with the greater setback on the eastern boundary creates a consistent backdrop to the adjacent heritage buildings whilst reinforcing the desired future character for high street.</p> <p><i>refer to DA0102 streetscape elevations</i></p>

Principle Two : Built Form and Scale	
Good design provides an appropriate scale in terms of the bulk and height that suits the scale of the street and the surrounding buildings and an appropriate built form for a site and the building's purpose, in terms of building alignments, proportions, building type and the manipulation of building elements	
objective	comments
<p>Building Envelopes Building envelopes set appropriate scale of future development in terms of bulk and height in relation to street layout and lot size.</p>	<p>The proposed site has a smaller allowable floor space ratio and height allowance than the surrounding sites due to the adjacent heritage buildings. This would result in a disjointed street wall and the heritage items would only get lost in the building fabric amongst non heritage items. Following discussions with the urban design review panel, we agreed that a better approach is to have a consistent bulk and scale with the rest of the street in order to accentuate the heritage items.</p>

<p>Building Depth Objectives ensure adequate amenity for occupants – sun and ventilation. building depth 10-18m 60% of units to achieve cross ventilation, 25% of kitchens to have access to natural ventilation to comply with SEPP requirements</p>	<p>The apartments have a variety of depths, and use corner units, and cross through units to assist sunlight penetration and ventilation.</p> <p>There are only two unit types which exceed the building depth but other measures are applied to ensure quality design.</p> <p>Unit type 1 (Unit 1.01, 2.01, 3.01, 4.01, 5.01, 6.01) is a through unit in building B with north and south frontages. The unit is accessed from the centre where a light well further assists in ventilation through the unit.</p> <p>Unit type 9 (unit 2.05) is a single aspect 1 bedroom unit in Building A. It has a generous northerly aspect and the majority of habitable spaces (living and bedroom) is within 8m of the frontage. A skylight is proposed over the kitchen to achieve natural light access.</p>
<p>Building Separation The objective is to achieve appropriate massing and spaces between buildings</p>	<p>The site is adjacent to a two and one storey heritage building on its eastern boundary. The proposed development deliberately sets up a curtilage around these heritage items.</p> <p>To the eastern boundary a minimum 7m side setback is achieved exceeding the rule of thumbs set for buildings under 25m height. The western boundary of the site is set up with a 0m setback to continue a street wall along High Street.</p>
<p>Building Entry To provide desirable residential amenity and to contribute positively to the streetscape and building façade.</p>	<p>The residents have been provided with clearly defined and secure entries and building lobbies. Direct access is also available from the secured basement carparks. Entry to building lobbies are accessibly compliant with AS1428.1 (2009).</p>
<p>Open Space To achieve a passive recreational area for residents which is usable, safe and attractive</p>	<p>The development is within close proximity (<400m) to public open space, retail and transportation. Thus a reduced demand for open space is proposed and provided on the ground floor.</p>

<p>Principle Three : Density Good design has a density appropriate for a site and its context, in terms of floor space yields or number of units or residents.</p>	
<p>objective</p>	<p>comments</p>
<p>Floor Space Ratio To ensure development is within optimum capacity of site and local area, (modulation and depth of walls allow for habitable balconies).</p>	<p>The proposed development achieves an appropriate response to the adjacent heritage building and thus proposes a similar floor space ratio to the neighbouring sites.</p>

<p>Principle Four : Sustainability Good design makes efficient use of natural resources, energy and water throughout its full life cycle, including construction phases.</p>	
<p>objective</p>	<p>comments</p>
<p>Energy Efficiency To reduce the need for mechanical heating and cooling, reduce greenhouse gas emissions and support and promote renewable energy initiatives.</p>	<p>The proposed development is designed with passive environmental principles in planning and solar control but will also incorporate energy saving measures such as energy efficient hot water systems, water saving devices, including a relatively large native garden area, basement light sensors and timers.</p>

Principle Five : Landscape	
Good design recognises that together landscape and building operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for both occupants and the adjoining public domain.	
objective	comments
Landscape Design To provide residents with a quality of life in the development in the forms of privacy, outlook and views. To provide for improved micro climate and solar performance.	The landscaping has been designed to satisfy the objectives and Council's Landscape Code, by providing shade, screening, visual softening and improved energy efficiency and solar access.
Deep Soil Zones To assist water table and improve amenity through planting large - medium size trees.	A reduced deep soil zone is proposed due to site restraints and its urban context DCP requires 0% of the site to be deep soil
Fencing and Walls To provide privacy and security and to contribute to the public domain.	Low height planters define the rear boundary. The existing fence between our site and the adjacent site is proposed to be taken down and a courtyard be built, an outcome which can be beneficial to both sites. Secure entries control access to building A and B.
Principle Six : Amenity	
Good design provides amenity through the physical, spatial and environmental quality of a development.	
objective	comments
Flexibility To ensure that the design meets the broadest range of occupants' needs. To promote 'long life loose fit' buildings which can accommodate whole or partial changes of use.	The design of the residential apartments provides a variety of accommodation options and lifestyle preferences, though is generally sized to suit the new or smaller family market in the Penrith area.
Acoustic Privacy Each apartment is to achieve acoustic privacy between external and internal space.	The design where possible achieves active and noisy areas adjacent to each other: Living rooms to living rooms and quiet areas bedroom to bedroom. Visually screening is provided between balconies as required. Installing seals at the entry door in accordance with the BCA will reduce noise from common corridors.

Principle Seven : Safety Good design optimises safety and security, both internal to the development and for the public domain.	
objective	comments
Safety To ensure that Residential Flat Buildings (RFB) are safe and secure for residents and visitors, and the public domain.	The development reinforces the distinction between public and private utilising landscaping, terraces and variation in levels, clearly mark entry points. Well-lit access between car park and apartments and between basement car park and stairway. Unsecured concealed areas have been minimised and will be well lit. All common area and pathways will be illuminated. Lobbies are accessed via secure entries.

Principle Eight : Housing Diversity and Social Interaction Good design responds to the social context and needs of the local community in terms of lifestyle, affordability, and access to social facilities.	
objective	comments
Unit Mix Response to the needs of the local Community.	The proposed apartment buildings contain a wide range of apartment types, thus providing a number of options to various members of the community. The wide selection of unit types will make these buildings attractive to a broad cross section of the community. Adaptable apartments (4 in total) are provided in accordance with the recommendations of Penrith Councils DCP.
Location Access to the local community in terms of lifestyle, affordability, and access to social facilities.	The proposed development is in the Penrith City Centre and will be serviced by Penrith Railway Station about 300m away.

Principle Nine : Aesthetics Quality aesthetics require the appropriate composition of building elements, textures, materials and colours and reflect the use, internal design and structure of the development.	
objective	comments
Facades To promote high architectural quality in facades which define and enhance the public domain.	The facades of the building respond to the orientation and usage of the rooms within, providing liveable indoor and outdoor spaces therefore encouraging residents to utilise the threshold between semi private and the public domain. Articulation is achieved with balconies, sunshades and plug-on type details giving the buildings a 'human' scale. Whilst the development references a base finishes schedule, there are different palettes across the different buildings to ensure individual identity is maintained.
Roof Design Form and roof type relative to the precinct, and as part of the buildings sun control.	Defined horizontal edges is incorporated into the roof plane appear as an extended eave overhang. This structure conceals A/C, solar, and HW plant on the roof whilst at the same time reducing the scale of the building providing an eave line. Shading devices and balconies contribute to shading of the units and create the traditional 'Australian verandah' with a useable dimension.
Awning and Signage Awnings are to be provided to increase usability and amenity in public areas. Signage is an important aspect in mix residential development.	Awnings along high street is designed in accordance to the requirements in the DCP. A glazed awning continues through along the eastern boundary creating a pedestrian thoroughfare connecting high street to john cram place.

Universal Design

The proposed development is designed to incorporate universal standards.

The majority of units achieve the objectives of the Liveable Housing requirements at the silver level, and many at the gold level.

8 out of 39 (20%) achieve all of the Liveable Housing Guidelines Silver Level universal Design features. This includes 4 adaptable units, unit 2.08, 3.07, 4.07, 5.07 and a further 4 units 6.06, 3.06, 4.06, 5.06.

Many of the apartments also incorporate a flexible apartment design, in the form of dual key, to allow buildings to accommodate a diverse range of lifestyle needs such as different household structures, live/work housing arrangements and further change in use

objective	requirement	compliant
1. dwelling access <i>There is a safe, continuous, step-free pathway from the street entrance and/or parking area to a dwelling entrance that is level.</i>	silver level a. Provide a safe and continuous pathway from: i. the front boundary of the allotment; or ii. a car parking space, where provided, which may include the driveway on the allotment, to an entrance that is level (step-free) This provision does not apply where the average slope of the ground where the path would feature is steeper than 1:14. b. The path of travel as referred to in (a) should have a minimum clear width of 1000mm and – i. an even, firm, slip resistant surface; ii. a crossfall of not more than 1:40; iii. a maximum pathway slope of 1:14, with landings provided at no greater than 9m for a 1:14 ramp and no greater than 15m for ramps steeper than 1:20. Landings should be no less than 1200mm in length; and iv. be step-free c. A step ramp may be incorporated at an entrance doorway where there is a change in height of 190mm or less. The step ramp should provide: i. a maximum gradient of 1:10 ii. a minimum clear width of 1000mm (please note: width should reflect the pathway width) iii. a maximum length of 1900mm Level landings no less than 1200mm in length, exclusive of the swing of the door or gate than opens onto them, must be provided at the head and foot of the ramp.	100%
	gold level As for silver level except in (b) replace the minimum clear pathway width of 1000mm with 1100mm	100%

objective	requirement	compliant
	<p>platinum level As for silver level except in (b) replace with a minimum clear pathway width of 1100mm with 1200mm provided from:</p> <ul style="list-style-type: none"> i. the front boundary of the allotment, and ii. any car parking space, where provided, which may include the driveway on the allotment, to an entrance that is level (step-free) as specified in Element 2. 	0%
<p>2. dwelling entrance <i>There is at least one level (step-free) entrance into the dwelling to enable home occupants to easily enter and exit the dwelling.</i></p>	<p>silver level</p> <ul style="list-style-type: none"> a. The dwelling should provide an entrance door with - <ul style="list-style-type: none"> i. a minimum clear opening width of 820mm ii. a level (step-free) transition and threshold (maximum vertical tolerance of 5mm between abutting surfaces is allowable provided the lip is rounded or beveled); and iii. reasonable shelter from the weather. b. A level landing area of at least 1200mm x 1200mm should be provided at the level (step free) entrance door. c. Where the threshold at the entrance exceeds 5mm and is less than 56mm, a ramped threshold may be provided d. The level (step-free) entrance should be connected to the safe and continuous pathway as specified in Element 1. <p>Note: The entrance must incorporate waterproofing and termite management requirements as specified in the NCC.</p>	100%
	<p>gold level As for silver level except replace: (b) with a level landing area of at least 1350mm x 1350mm, and (a) (i) with minimum clear door opening width of 850mm</p>	100%
	<p>platinum level As for silver level except replace: (b) with a level landing area of at least 1500mm x 1500mm, and (a) (i) with a minimum clear door opening width of 900mm</p>	0%
<p>3. carparking <i>Where the parking space is part of the dwelling access it should allow a person to open their car doors fully and easily move around the vehicle.</i></p>	<p>silver level</p> <ul style="list-style-type: none"> a. Where the parking area forms part of the dwelling access the space should incorporate: <ul style="list-style-type: none"> i. minimum dimensions of at least 3200mm (width) x 5400mm (length); ii. an even, firm and slip resistant surface; and iii. a level surface (1:40 maximum gradient, 1:33 maximum gradient for bitumen). 	n/a
	<p>gold level As for silver level except replace: (b) with a level landing area of at least 1350mm x 1350mm, and (a) (i) with minimum clear door opening width of 850mm</p>	n/a
	<p>platinum level As for silver level except replace: (b) with a level landing area of at least 1500mm x 1500mm, and (a) (i) with a minimum clear door opening width of 900mm</p>	n/a

objective	requirement	compliant
4. Internal doors & corridors <i>Internal doors and corridors facilitate comfortable and unimpeded movement between spaces.</i>	silver level a. Doorways to rooms on the entry level used for living, dining, bedroom, bathroom, kitchen, laundry and sanitary compartment purposes should provide: i. a minimum clear opening width of 820mm (see Figure 2(a)); and ii. a level transition and threshold (maximum vertical tolerance of 5mm between abutting surfaces is allowable provided the lip is rounded or beveled). b. Internal corridors/passageways to the doorways referred to in (a) should provide a minimum clear width of 1000mm.	20% 2.08, 3.07, 4.07, 5.07, 6.06, 3.06, 4.06, 5.06.
	gold level As for the silver level except replace: (a)/(i) with a minimum clear opening width of 850mm (see Figure 2(b)), and (b) with a minimum corridor/passageway width of 1200mm.	0%
	platinum level As for the silver level except replace: (a)/(i) with a minimum clear opening width of 900mm (see Figure 2(c)), and (b) with a minimum corridor/passageway width of 1200mm.	0%
5. Toilet <i>The ground (or entry) level has a toilet to support easy access for home occupants and visitors.</i>	silver level a. Dwellings should have a toilet on the ground (or entry) level that provides: i. a minimum clear width of 900mm between the walls of the bathroom if located in a separate room; and ii. a minimum 1200mm clear circulation space forward of the toilet pan exclusive of the swing of the door in accordance with Figure 3(a). b. If the toilet is located within the ground (or entry) level bathroom, the toilet pan should be located in the corner of the room to enable the installation of grabrails.	20% 2.08, 3.07, 4.07, 5.07, 6.06, 3.06, 4.06, 5.06.
	gold level As for silver level except replace (a)/(i) with a minimum clear width of 1200mm between the walls of the bathroom if located in a separate room, or between amenities if located in a combined bathroom.	100%
	platinum level As for the gold level with the following features added to (a): iii. a toilet pan positioned between 450mm – 460mm from the nearest wall as measured from the centre line of the toilet; iv. 600mm minimum clearance forward of the cistern measured from the front of the cistern to the front of the toilet pan. 800mm (+/-10mm) clearance is required if the cistern is recessed; and v. a height for the pan of between 460mm - 480mm above the finished floor level as detailed in Figure 4.	0%
6. Shower <i>The bathroom and shower is designed for easy and independent access for all home occupants.</i>	silver level! a. One bathroom should feature a slip resistant, hobless (step-free) shower recess. Shower screens are permitted provided they can be easily removed at a later date. b. The shower recess should be located in the corner of the room to enable the installation of grab rails at a future date.	20% 2.08, 3.07, 4.07, 5.07, 6.06, 3.06, 4.06, 5.06.

objective	requirement	compliant
	<p>gold level As for silver level except: c. The hobless (step-free) shower recess described in (a) should: i. be located in a bathroom on the ground (or entry) level; ii. provide minimum dimensions of 900mm (width) x 900mm (length); and iii. provide a clear space of at least 1200mm (width) x 1200mm (length) forward of the shower recess entry as detailed in Figure 5(a).</p>	<p>20% 2.08, 3.07, 4.07, 5.07, 6.06, 3.06, 4.06, 5.06.</p>
	<p>platinum level As for gold level except: i. replace (c)/(ii) with dimensions of at least 1160mm (width) x 1100mm (length); and ii. replace (c)/(iii) with dimensions of at least 1600mm (width) x 1400mm (length) forward of the shower recess as detailed in Figure 5(b).</p>	<p>0%</p>
<p>7. Reinforcement of bathroom & toilet walls <i>The bathroom and toilet walls are built to enable grabrails to be safely and economically installed.</i></p>	<p>silver level a. Except for walls constructed of solid masonry or concrete, the walls around the shower, bath (if provided) and toilet should be reinforced to provide a fixing surface for the safe installation of grabrails. b. The fastenings, wall reinforcement and grabrails combined must be able to withstand at least 1100N of force applied in any position and in any direction. c. The walls around the toilet are to be reinforced by installing: i. noggings with a thickness of at least 25mm in accordance with Figure 6(a); or ii. sheeting with a thickness of at least 12mm in accordance with Figure 6(b). d. The walls around the bath are to be reinforced by installing: i. noggings with a thickness of at least 25mm in accordance with Figure 7(a); or ii. sheeting with a thickness of at least 12mm in accordance with Figure 7(b). e. The walls around the hobless (step-free) shower recess are to be reinforced by installing: i. noggings with a thickness of at least 25mm in accordance with Figure 8(a); or ii. sheeting with a thickness of at least 12mm in accordance with Figure 8(b)</p>	<p>100% possible commitment by builder</p>
	<p>gold level Silver level requirements apply.</p>	<p>100% possible commitment by builder</p>
	<p>platinum level Silver level requirements apply.</p>	<p>100% possible commitment by builder</p>
<p>8. Internal stairways <i>Where installed, stairways are designed to reduce the likelihood of injury and also enable future adaptation.</i></p>	<p>silver level a. Stairways in dwellings must feature: i. a continuous handrail on one side of the stairway where there is a rise of more than 1m.</p>	<p>n/a</p>

objective	requirement	compliant
enable future adaptation.	<p>gold level</p> <p>As for the silver level with the following additional features:</p> <ul style="list-style-type: none"> ii. a minimum clear width of 1000mm; iii. be straight in design; and iv. be positioned adjoining a load bearing wall. <p>Note: The steps must provide a slip resistant finish and suitable non-slip tread as specified in the NCC. Handrails on both sides of the stairway are preferred.</p>	n/a
	<p>platinum level</p> <p>As for the gold level with the following additional features:</p> <ul style="list-style-type: none"> v. closed risers; vi. continuous handrails on both sides of the stairway; and vii. minimum landing areas of 1200mm x 1200mm at the top and base of the stairway. <p>Note: The steps must provide a slip resistant finish and suitable non-slip tread as specified in the NCC</p>	n/a
<p>9. Kitchen space</p> <p>The kitchen space is designed to support ease of movement between fixed benches and to support easy adaptation.</p>	<p>silver level</p> <p>No requirements.</p>	100%
	<p>gold level</p> <p>a. The kitchen space should be designed to support ease of movement and adaptation with:</p> <ul style="list-style-type: none"> i. at least 1200mm clearance provided in front of fixed benches and appliances; and ii. slip resistant flooring. <p>b. Where practicable, floor finishes should extend under kitchen cabinetry to enable cupboards to be removed without affecting the flooring. An Assessor should ask the builder / client if he/she can confirm that flooring runs completely under cupboards. Sometimes it is relatively easy to confirm that floor coverings have been applied after cupboards have been installed and sometimes it is not so easy. If relying on advice from a third party, Assessors are advised to provide a note in the notes column of the Assessment.</p>	<p>10%</p> <p>2.08, 3.07, 4.07, 5.07 post adaptation</p>
	<p>platinum level</p> <p>As for the gold level except that the kitchen space described in (a) should be designed to support ease of movement and adaptation with:</p> <ul style="list-style-type: none"> i. at least 1550mm clearance should be provided in front of fixed benches and appliances; ii. slip resistant flooring; and iii. task lighting installed above workspaces. 	<p>10%</p> <p>2.08, 3.07, 4.07, 5.07 post adaptation</p>
<p>10. Laundry space</p> <p>The laundry space is designed to support ease of movement between fixed benches and to support easy adaptation.</p>	<p>silver level</p> <p>No requirements.</p>	100%
	<p>gold level</p> <p>As for silver level except:</p> <ul style="list-style-type: none"> a. The laundry space should be designed to support ease of movement and adaptation with: <ul style="list-style-type: none"> i. at least 1200mm clearance provided in front of fixed benches and appliances; and ii. slip resistant flooring. b. Where practicable, floor finishes should extend under laundry cabinetry to enable cupboards to be moved without affecting the flooring. 	<p>10%</p> <p>2.08, 3.07, 4.07, 5.07</p>

objective	requirement	compliant
	<p>platinum level As for the gold level except that the kitchen space described in (a) should be designed to support ease of movement and adaptation with:</p> <ul style="list-style-type: none"> i. at least 1550mm clearance should be provided in front of fixed benches and appliances; ii. slip resistant flooring; and iii. task lighting installed above workspaces. 	<p>10% 2.08, 3.07, 4.07, 5.07</p>
<p>11. Ground (or entry level) bedroom space <i>There is a space on the ground (or entry) level that can be used as a bedroom.</i></p>	<p>silver level No requirements.</p>	100%
	<p>gold level a. The dwelling should feature a space (or room) on the ground (or entry) level that:</p> <ul style="list-style-type: none"> i. is of at least 10m² with one wall a minimum length of 3m; ii. provides for a minimum path of travel of at least 1000mm on at least one side of the bed. 	100%
	<p>platinum level As for the gold level, but it also:</p> <ul style="list-style-type: none"> i. provides a space of at least 1540mm (width) x 2070mm (in the direction of travel) on the side on the bed that is closest to the door approach; and ii. provides for a minimum path of travel of 1000mm on the remaining side of the bed. <p>For Platinum level, It should be assumed that a bed with dimensions 1500mm x 2000mm (as shown on the sketch overleaf) is present. This will mean that the minimum clear dimensions of a room would need to be 3000mm x 4040mm to meet the Platinum level requirements. Where a bed is present (in the case of an As Built Inspection), the clearance should be measured to the edges of the bed for beds smaller than 1500mm x 2000mm. If the bed provided is larger than 1500mm x 2000mm compliance should be determined based upon a bed with dimensions 1500mm x 2000mm.</p>	<p>10% 2.08, 3.07, 4.07, 5.07</p>
<p>12. Switches and powerpoints <i>Light switches and powerpoints are located at heights that are easy to reach for all home occupants.</i></p>	<p>silver level No requirements.</p>	100%
	<p>gold level a. Light switches should be positioned in a consistent location:</p> <ul style="list-style-type: none"> i. between 900mm – 1100mm above the finished floor level; and ii. horizontally aligned with the door handle at the entrance to a room. <p>b. Powerpoints should be installed not lower than 300mm above the finished floor level.</p>	100% possible commitment by builder
	<p>platinum level As for gold level with the following feature:</p> <ul style="list-style-type: none"> c. Light and powerpoint switches should be rocker action, toggle or push pad in design with a recommended width of 35mm. 	100% possible commitment by builder
<p>13. Door and tap hardware <i>Home occupants are able to easily and independently open and close doors and safely use tap hardware.</i></p>	<p>silver level No requirements.</p>	100%
	<p>gold level a. Doorways should feature door hardware installed at between 900mm – 1100mm above the finished floor.</p>	100% possible commitment by builder

objective	requirement	compliant
	<p>platinum level As for gold level with the following features: b. Doorways should feature lever or D-pull style door hardware; and c. Basins, sinks and tubs should feature lever or capstan style tap hardware with a central spout. For Gold and Platinum level, the handle clearances for D-pull style door hardware should be the same as AS1428.1. AS 1428.1 is the most relevant set of specifications aimed at providing the greatest access to the greatest number of people and as such is an appropriate standard to reference for this Element.</p>	100% possible <i>commitment by builder</i>
<p>14. Family/living room space <i>The family/living room features clear space to enable the home occupant to move in and around the room with ease.</i></p>	<p>silver level No requirements.</p>	100%
	<p>gold level No requirements.</p>	100%
	<p>platinum level a. The family/living room should accommodate a free space, minimum 2250mm in diameter, to enable ease of movement clear of furniture.</p>	100% possible
<p>15. Window sills <i>Windows sills are installed at a height that enables home occupants to view the outdoor space from either a seated or standing position</i></p>	<p>silver level No requirements.</p>	100%
	<p>gold level No requirements.</p>	100%
	<p>platinum level a. Window sills on the ground (or entry) level in living areas and bedroom spaces should be positioned no higher than 1000mm above the finished floor level to enable enjoyment of the outlook. b. Window controls should be able to be easy to operate with one hand and located within easy reach from either a seated or standing position. Note: A concession from (a) is reasonable in kitchen, bathroom and utility spaces.</p>	100%
<p>16. Flooring <i>Floor coverings are slip resistant to reduce the likelihood of slips, trips and falls in the home.</i></p>	<p>silver level No requirements.</p>	100%
	<p>gold level No requirements.</p>	100%
	<p>platinum level a. All floor coverings should: i. be firm and even, and ii. feature a level transition between abutting surfaces (a maximum vertical tolerance of 5mm between abutting surfaces is allowable provided the lip is rounded or beveled).</p>	100% possible <i>commitment by builder</i>