DA Number	DA18/0132
LGA	Penrith City Council
Proposed Development	Construction of a Five (5) Storey Residential Flat Building containing 17 Apartments & Two (2) Levels of Basement Car Parking
Street Address	29 – 31 Castlereagh Street Penrith
Applicant	CAD Plans Pty Ltd
Owner	BB & B Penrith Pty Ltd
Date of DA Lodgement	14 February 2018
Local Planning Panel Criteria	Residential Flat Building under the Provisions of State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development
Addendum Report Author	Lauren Van Etten, Development Assessment Planner, Penrith City Council
Addendum Report Date	10 December 2019

Further Assessment Report Addendum

Background

This report provides a further addendum to the previous Assessment Reports prepared by Council officers dated 5 September, 2019 and 15 October 2019 and associated memorandums to the Penrith Local Planning Panel on the 11 September 2019 and 16 October 2019.

On 11 September 2019, Development Application DA18/0132 was reported to a Penrith Local Planning Panel meeting for determination with a recommendation for approval. The Panel unanimously agreed to defer determination of the application for further information to be provided and amendments to be made to the built form to achieve greater compliance with setback and separation requirements and improved landscape design outcomes having regard to the site being located within a heritage conservation area pursuant to Penrith Local Environmental Plan 2010.

The resolution of the Panel provided for the following amendments to be made:-

- The Panel is of the opinion that the plans as amended have not adequately resolved the previously identified issues. Specifically, setbacks to the southern boundary should be no less than 6metres for a distance of at least 13meters measured from the front boundary.
- Landscaping is unsatisfactory because it relies predominantly on planter boxes over carpark, has inadequate deep soil planting, excessive 1.8metre high privacy fencing within the site and to the frontage.
- The roof terrace has poor amenity for occupants as it is lacking shade and landscaping.

- The Panel requires that all of the requirements under the original deferred commencement condition be completed prior to the proposal being referred back to the Panel.

On 15 October 2029, Development Application DA18/0132 was reported back to a Penrith Local Planning Panel for determination with a further recommendation for approval. While it was acknowledged that the amendments proposed by applicant did not strictly comply with the terms of the preceding panel resolution, the amendments were considered by Council officers to provide a suitable setback, separation and landscape outcome that still maintained a suitable ground streetscape presentation and apartment configuration. The Panel however unanimously agreed to defer determination of the application again for further amendments to be made in line with the original resolution of 11 September 2019.

As a result of this second resolution, further amendments have been made by the applicant to respond to those requirements.

This further report addendum provides information on the further modifications made to the application with a further recommendation for approval subject to conditions of consent.

Proposed Design Amendments to the Built Form in Response to Panel Resolutions

Below is further consideration of the individual matters resolved to be addressed by the Panel and the amended plans subsequently submitted:-

a) Setbacks to the southern boundary should be no less than 6metres for a distance of at least 13meters measured from the front boundary.

Comments in Response:

The proposal has been further amended to provide a 6m setback, for a depth of 13m as measured from the front property boundary. The amended proposal is compliant with the resolution of the Panel and is considered to improve separation and landscaping opportunities in the setback zone that is better reflective of the heritage conservation character of the area.

Units 2 and 3 have also been amended in size and layout in order to achieve the required 6m setback. More specifically, Unit 2 has altered from a studio to a 1-bedroom unit which is now orientated towards the southern side setback. Unit 3 has reduced from a 2-bedroom unit to a 1-bedroom unit however it retains the same orientation and thus retains solar access as well.

The units, as amended, are now suitably sized and dimensioned to be functional and enable furniture and suitable circulation. In addition, the private open space for both units is 16m² which remains compliant with the design criteria for private open space for dwellings on the ground floor (Section 4E-1, 2.)

The layout of Unit 2 is now more optimal given it is orientated towards the side setback and thus further separated from the waste area that is orientated towards the street and only includes a small window with fixed glass. The amended unit layout also has direct connectivity to the open space to enhance liveability, which is also separated from the waste area by a landscape buffer.

b) Landscaping is unsatisfactory because it relies predominantly on planter boxes over carpark, has inadequate deep soil planting, excessive 1.8metre high privacy fencing

within the site and to the frontage.

Comments in Response:

The landscape plan no longer relies upon planter boxes over basement carparking but rather has increased the number of trees proposed within the deep soil pockets within the increased front and rear setbacks on the site. The planting pot size and species allows for diverse and appropriate planting that will be viable, sustainable and provide for shade as well as screening. It is noted that half of the trees are proposed with 45L pots whereas the remainder are proposed with 25L pots.

Council's Landscape Architect reviewed the proposal and noted that there is a balance of evergreen and deciduous trees to provide shading in summer and sunlight access in winter subject to a few species amendments in red pen upon the stamped approved plan.

In addition, 2 replacement street trees have been proposed adjacent to the indented bay to compensate for the additional hardstand area along the verge. Council's Landscape Architect reviewed the proposed species and noted that it is preferable for either brushbox or lophotemon confertus to be proposed and this has been amended in red on the proposed landscape plan and is recommended to be reflected within conditions of consent.

The landscape plan is also recommended to be amended in red pen to ensure all pot sizes for proposed trees are 75L to provide for a better landscape outcome for the site.

As the panel requested, the pavers along the southern side setback, which indicate the egress path from the basement stairs to the front of the site, have been removed and proposed as grass instead. A grass pathway is acceptable in accordance with the Building Code of Australia. This allows for planting along the southern side setback to be viable without pavers.

The 1.8m high privacy fencing within the site and facing the street frontage has been removed and replaced with a 400mm high horizontal slat timber fence on top of an 800mm high masonry planter bed. The amended design is in accordance with the Apartment Design Guide as front fences and walls along street frontages should use visually permeable materials and treatments with solid components limited to 1m to provide transition between private and public domain without compromising safety and security.

The private open space area associated with Unit 2 was re-located and reconfigured from within the front setback to the southern side setback. This enables greater planting opportunities in the front setback to compensate for the street tree loss and verge treatment from the indented bay.

Overall, the revised design is more viable, enhances the environmental performance of the development and contributes to the streetscape and amenity in accordance with the Apartment Design Guide design objectives.

c) The roof terrace has poor amenity for occupants as it is lacking shade and landscaping.

Comments in Response:

The amended plans increase the number of trees proposed within the roof terrace, increased the planter bed area and increase the area covered by shade structures i.e. pergolas. Therefore, the revised proposal now allows for a common open space that is usable and provides opportunities for embellished landscaping.

The perimeter planting bed now functions as a screen between the users of the open space and adjoining properties, while also providing a more substantial area for planting and more shade as well

d) The Panel requires that all of the requirements under the original deferred commencement condition be completed prior to the proposal being referred back to the Panel.

Comments in Response:

Revised civil plans have been submitted and considered by Council's Development Engineers who have raised no objection to the proposed changes.

The overall storm water management plan for the site will not change as a result of the proposed shift of infrastructure within the rear setback in order to allow for deep soil plating pocket in the south-western corner.

One recommendation from the Engineers is to include access steps to the above ground basin given the level difference proposed. This is recommended to be marked as an amendment in red on the stamped plans if the application is approved.

e) Submission of an amended BASIX Certificate that reflects the amended development resulting from the above requirements.

Comments in Response:

A revised BASIX Certificate has been submitted and all resulting revised Development Application commitments have been reflected within amended plans.

The revised information demonstrates compliance with set sustainability targets for water and energy efficiency and thermal comfort and the information submitted with the development application and accompanying BASIX certificate were assessed to satisfy the provisions of the Policy.

Conclusion and Recommendation

The further amended plans which are addressed within the body of this further report are considered to have sufficiently addressed and resolved the matters raised within the issued statement of reasons from the Local Planning Panel on 11 September and 23 October, 2019.

The amended development provides for improved building separation to the side setback and is also considered to provide for adequate landscaping opportunities within the site.

Given the amended plans and supporting documents, all of the requirements of the original recommended deferred commencement condition have been completed and there is no longer a deferred commencement condition recommended.

It is therefore considered that the DA18/0132 for the demolition of existing structures and construction of a five (5) storey residential flat building containing 17 apartments and two (2) basement car parking is now supportable and is recommended for approval subject to the imposition of amended recommended conditions of consent.

CONDITIONS SUMMARY

Application Number:	DA18/0132
Assessing Officer	Lauren Van Etten
Land to be developed (Address):	Lot 2 DP 1190616 29 - 31 Castlereagh Street PENRITH NSW 2750
Proposed Development:	Construction of a Five (5) Storey Residential Flat Building containing 17 Apartments & Two (2) Levels of Basement Car Parking

General

1 The development must be implemented substantially in accordance with the following plans stamped approved by Council, BASIX Certificate, the application form and any supporting information received with application, except as may be amended in red on the approved plans and by the following conditions.

Plan	Prepared by	Dated
DA00 Cover Page	Pens Design Studio	Rev F 06/11/19
DA01 Site Context	Pens Design Studio	Rev F 06/11/19
DA02 Site Plan	Pens Design Studio	Rev F 06/11/19
DA03 Basement Plan Level 2	Pens Design Studio	Rev F 06/11/19
DA04 Basement Plan Level 1	Pens Design Studio	Rev F 06/11/19
DA05 Ground Floor Plan	Pens Design Studio	Rev F 06/11/19
DA06 Level 1	Pens Design Studio	Rev F 06/11/19
DA07 Level 2	Pens Design Studio	Rev F 06/11/19
DA08 Level 3	Pens Design Studio	Rev F 06/11/19
DA09 Level 4	Pens Design Studio	Rev F 06/11/19
DA10 Roof Terrace	Pens Design Studio	Rev F 06/11/19
DA11 Elevations	Pens Design Studio	Rev F 06/11/19
DA12 Elevations	Pens Design Studio	Rev F 06/11/19
DA13 Sections	Pens Design Studio	Rev F 06/11/19
DA14.1 Shadow Diagrams	Pens Design Studio	Rev F 06/11/19
DA14.2 Shadow Diagrams	Pens Design Studio	Rev F 06/11/19
DA14.3 Solar Study	Pens Design Studio	Rev F 06/11/19

DA14.4 Solar Study	Pens Design Studio	Rev F 06/11/19
DA14.5 Solar Study	Pens Design Studio	Rev F 06/11/19
DA14.6 Solar Study	Pens Design Studio	Rev F 06/11/19
DA15 View from Sun	Pens Design Studio	Rev F 06/11/19
BASIX Certificate 806709M (as amended)		
Stormwater Design Statement Report 17DZ1289.DSWC1	Zait Engineering Solutions	28/3/17
MUSIC Model and associated MUSIC-link report 08812	Zait Engineering Solutions	27/4/17
Stormwater Drainage Plans	Zait Engineering Solutions	
Periodic Maintenance Procedures and Operations and Maintenance Manual 08812	Stormwater360	26/4/17
Survey Plans 4104-16DET	C&A Surveyors	19/4/16
Geotechnical Report	Brink & Associates	8/6/2004
Waste Management Plan	CAD Plans	undated
Access Report	Ergon Consulting	Revision C

- The development shall not be used or occupied until an Occupation Certificate has been issued.
- Prior to the issue of an Occupation Certificate, a lighting system shall be installed for the development to provide uniform lighting across common areas and driveways. Exterior lighting shall be located and directed in such a manner so as not to create a nuisance to surrounding land uses. The lighting shall be the minimum level of illumination necessary for safe operation. The lighting shall be in accordance with AS 4282 "Control of the obtrusive effects of outdoor lighting" (1997).
- The finishes of all structures and buildings are to be maintained at all times and any graffiti or vandalism immediately removed/repaired.
- A Construction Certificate shall be obtained prior to commencement of any building works.
- Prior to the issue of a Construction Certificate, further details on the type and location of all mechanical plant and equipment associated with the development are to be provided to Council for consideration and approval. Suitable data and information on the noise impacts associated with this plant and equipment is also to be supplied to demonstrate compliance with the established noise criteria.
- Prior to the issue of a Construction Certificate, details of a sign posted 'loading zone' associated with the indented waste servicing bay are to be prepared, submitted to Council's Traffic Management Team and reported to Council's Local Traffic Committee for consideration and endorsement.

Prior to the issue of an Occupation Certificate, the sign posting required above is to be implimented and installed at no cost to Council.

- Any plant or unsightly structures installed on the external facades or rooftop must be screened from view.
- Prior to the erection of any crane or any temporary construction structure at a height greater than the roof of the subject development, written notice shall be provided to Council and the Nepean Blue Mountains Local Health District at least 21 days prior to its erection, indicating at least the following:
 - Name of responsible company and relevant contact details.
 - Dimensions (height, length, etc).
 - Position and orientation of boom/jib and counter boom/jib.
 - Length of time that such a crane or structure will be erected on site.
 - The management plan and measures that will ensure that the crane or structure will be of least possible impact on flight operations for Ambulance NSW.

Any crane or any temporary construction structure erected at a height greater than the roof of the subject development shall comply with the following:

- Be equipped with medium intensity steady red lighting positioned at the highest point and both ends of the boom/jib and counterboom/jib, such that the lighting will provide an indication of the height of the crane and the radius of the crane boom/jib. Such lighting, which should be displayed at night, should be positioned so that when displayed it is visible from all directions.
- When a crane is unattended for a period of time ensure the crane's boom is retracted and lowered as far

- as possible.
- No part of the crane or structure shall extend beyond the boundaries of the subject development site
 unless approved by Penrith City Council in consultation with the Nepean Blue Mountains Local Health
 District. Any encroachment beyond the boundaries of the subject site shall be the minimum amount
 required to facilitate construction and access all parts of the construction site.
- 10 **Prior to the issue of a Construction Certificate,** a dilapidation report prepared by a structural engineer shall be submitted recording the condition of any dwelling or ancillary structures on the northern, southern and western adjoining properties within the likely zone of influence from any excavation, dewatering or construction induced vibration. The report is to be submitted to Council and the appointed certifying authority.
- 11 Prior to the issue of an Occupation Certificate, an updated dilapidation report must be prepared and submitted to Council and the Certifying Authority. The updated report must identify any damage to adjoining properties and the means of rectification for the approval of Council.
- 12 **Prior to the Issue of a Construction Certificate**, a suitably qualified accessibility consultant is to certify that the overal development and design requirements identified as being "capable of complying at CC stage" within the Access Report prepared by Eegon Consulting (Revision C) have been suitably addressed and compliance with relevant accessbility provisions demonstrated.
- 13 Prior to the issue of an Occupation Certificate, 2.1m high fencing shall be erected along side and rear property boundaries (behind the building line). Such fencing and any required retaining walls shall be constructed entirely at the expense of the persons having the benefit of this consent. Timber retaining walls are not permitted.
- 14 Prior to the issue of a Construction Certificate for the development, development consent No. 13/0443 shall be surrendered to Penrith City Council in accordance with the provisions of the Environmental Planning and Assessment Act 1979.
 - If Council is not the certifier issuing the Construction Certificate then before the Construction Certificate is issued a letter from Council is to be provided to the certifier stating that the development has ben surrendered to Council.
- 15 Prior to the issue an Occupation Certificate, the property owner or agent acting for the owner shall arrange for the commencement of a domestic waste service with Council. The service is to be arranged no earlier than two days prior to occupancy and no later than two days after occupancy of the development. All requirements of Council's domestic collection service must be complied with at all times. Please telephone Council on (02) 4732 7615 for the commencement of waste services.
- 16 The following community safety and crime prevention through environmental design (CPTED) requirements are required to be implemented:

Lighting

All outdoor/public spaces throughout the development, in particular all entrances and pathways, must be
lit to the minimum Australian Standard of AS 1158. Lighting must be consistent in order to reduce the
contrast between shadows and illuminated areas and must be designed in accordance with AS 4282 Control of the obtrusive effects of outdoor lighting.

Basement Car Parking

- A security system must be installed on any pedestrian and vehicle entry/exit points to the car park, including the lift and stairwell, to minimise opportunities for unauthorised access.
- All areas of the car park must be well-lit, with consistent lighting to prevent shadowing or glare.
- Car park surfaces including walls and ceilings are to be light coloured with details included with the **Construction Certificate** application.

Building Security & Access Control

- Intercom, code or card locks or similar must be installed for all entries to the building and the unit complex grounds.
- Australian Standard 220 door and window locks must be installed in all dwellings.
- CCTV is to be provided to cover communal public space areas. Cameras must be of sufficient standard
 to be useful for police in the event of criminal investigations. Lighting must be provided to support
 cameras at night (alternatively infra-red cameras are recommended). Signage must be displayed to
 indicate that CCTV cameras are in use.
- Letterboxes (which are not detailed on the plans) must be incorporated near the front entry point, with access for residents from within a secure lobby area.

Graffiti/Vandalism

- Graffiti resistant coatings must be used to external surfaces where possible, including signage, furniture, retaining walls etc.
- Procedures must be in place to ensure the prompt removal and/or repair of graffiti or vandalism to the buildings, fencing, and common areas. This includes reporting incidents to police and/or relevant authorities.

Landscaping

All vegetation must be regularly pruned to ensure that sight lines are maintained.

Environmental Matters

- 17 Erosion and sediment control measures shall be installed **prior to the commencement of works on site** including approved clearing of site vegetation. The erosion and sediment control measures are to be maintained in accordance with the approved erosion and sediment control plan(s) for the development and the Department of Housing's "Managing Urban Stormwater: Soils and Construction" 2004.
- 18 No fill material is to be imported to the site without the prior approval of Penrith City Council in accordance with Sydney Regional Environmental Plan No.20 (Hawkesbury- Nepean River) (No.2-1997). No recycling of material for use as fill material shall be carried out on the site without the prior approval of Council.
- 19 All waste materials stored onsite are to be contained within a designated area such as a waste bay or bin to ensure that no waste materials are allowed to enter the stormwater system or neighbouring properties. The designated waste storage areas shall provide at least two waste bays / bins so as to allow for the separation of wastes, and the areas are to be fully enclosed when the site is unattended.
- 20 All excavated material and other wastes generated as a result of the development are to be re-used, recycled or disposed of in accordance with the approved waste management plan.

Waste materials not specified in the approved waste management plan are to be disposed of at a lawful waste management facility. Where the disposal location or waste materials have not been identified in the waste management plan, details shall be provided to the Certifying Authority as part of the waste management documentation accompanying the Construction Certificate application.

All receipts and supporting documentation must be retained in order to verify lawful disposal of materials and are to be made available to Penrith City Council on request.

- 21 The operating noise level of plant and equipment shall not exceed 5dB(A) above the background noise level when measured at the boundaries of the premises. The provisions of the Protection of the Environment Operations Act 1997 apply to the development, in terms of regulating offensive noise.
- 22 Only clean and unpolluted water is to be discharged into Penrith City Council's stormwater drainage system. Liquid wastes suitable for discharge to the mains sewerare to be discharged in accordance with Sydney Water requirements.

If mains sewer is not available or if Sydney Water will not allow disposal to the sewer then a licensed waste contractor is to remove the liquid waste from the premises to an appropriate waste facility.

The waste contractor and waste facility are to hold the relevant licenses issued by the NSW Environment Protection Authority.

- 23 Dust suppression techniques are to be employed during demolition and construction to reduce any potential nuisances to surrounding properties.
- 24 Mud and soil from vehicular movements to and from the site must not be deposited on the road.
- 25 Should any "unexpected finds" occur during the excavation and earthworks, including, but not limited to, the identification/finding of contaminated soils, buried building materials, asbestos, odour and/or staining, works are to cease immediately and Council is to be notified. Any such "unexpected finds" shall be addressed by an appropriately qualified environmental consultant, including preparation of an environmental management plan to be submitted to and approved by Council.

All remediation works within the Penrith Local Government Area are considered to be Category 1 works under State Environmental Planning Policy No. 55 - Remediation of Land. Should any contamination be found during development works and should remediation be required, development consent is to be sought from Penrith City Council prior to remediation works commencing.

- 26 Prior to the issue of a Construction Certificate, the following is to be reflected on the plans:
 - All on-site waste collection infrastructure, doors and access points are to be locked through Councils Abloy Key System. System specifications are outlined in section 3.5.5 of the 'Residential Flat Building Guideline' document.
 - All on-site waste collection infrastructure are to provide wash facilities through the use of a centralised mixing valve and hose cock. Respective drainage and water proofing to be installed to support the use of hose facilities
 - The Bulky Households Waste Room to replace the roller door with 1.8m wide, outwards opening dual doors.
- 27 Prior to the issue of an Occupation Certificate, and only where Council's waste collection service is being relied upon, the developer is to enter into a formal agreement with Penrith City Council for the utilisation of Councils Waste Collection Service. This is to include Council being provided with indemnity against claims for loss and damage.

Note: By entering into an agreement with Council for Waste Collection, the development will be required to operate in full compliance with Penrith City Councils Waste Collection and Processing Contracts for Standard Waste Collection. The provision of Councils waste collection service will not commence until formalisation of the agreement.

BCA Issues

- 28 All aspects of the building design shall comply with the applicable performance requirements of the Building Code of Australia so as to achieve and maintain acceptable standards of structural sufficiency, safety (including fire safety), health and amenity for the on-going benefit of the community. Compliance with the performance requirements can only be achieved by:
 - (a) complying with the deemed to satisfy provisions, or
 - (b) formulating an alternative solution which:
 - complies with the performance requirements, or
 - is shown to be at least equivalent to the deemed to satisfy provision, or
 - (c) a combination of (a) and (b).
- 29 Access and sanitary facilities for persons with disabilities are to be provided and maintained in accordance with the requirements of the Building Code of Australia and AS 1428 "Design for Access and Mobility". Details of compliance are to be provided in the relevant plans and specifications accompanying the Construction Certificate application.
- 30 A fire safety list of essential fire or other safety measures shall be submitted to Penrith City Council prior to the issue of the Construction Certificate. The fire safety list shall specify all measures (both current and proposed) that are required for the building so as to ensure the safety of persons in the building in the event of fire. The fire safety list must distinguish between:
 - the measures that are currently implemented in the building premises,
 - and the measures that are to be proposed to be implemented in the building premises, and must specify the minimum standard of performance for each measure.
- 31 The owner of a building, to which an essential fire safety measure is applicable, shall provide Penrith City Council with an annual fire safety statement for the building. The annual fire safety statement for a building must: (a) deal with each essential fire safety measure in the building premises, and (b) be given:
 - within 12 months after the last such statement was given, or
 - if no such statement has previously been given, within 12 months after a final fire safety certificate was first issued for the building.

As soon as practicable after the annual fire safety statement is issued, the owner of the building to which the statement relates:

- must also provide a copy of the statement (together with a copy of the current fire safety schedule) to the Commissioner of New South Wales Fire Brigades, and
- prominently display a copy of the statement (together with a copy of the current fire safety schedule) in the building.
- 32 All aspects of the building design shall comply with the applicable performance requirements of the Building Code of Australia so as to achieve and maintain acceptable standards of structural sufficiency, safety (including fire safety), health and amenity for the on-going benefit of the community. Compliance with the performance requirements can only be achieved by:
 - (a) complying with the deemed to satisfy provisions, or
 - (b) formulating an alternative solution which:
 - complies with the performance requirements, or
 - is shown to be at least equivalent to the deemed to satisfy provision, or
 - (c) a combination of (a) and (b).

It is the owner's responsibility to place on display, in a prominent position within the building at all times, a copy of the latest fire safety schedule and fire safety certificate/ statement for the building.

- 33 The external walls of the building including attachments must comply with the relevant requirements of the National Construction Code (NCC). Prior to the issue of a Construction Certificate and Occupation Certificate the Certifying Authority and Principal Certifying Authority must:
 - (a) Be satisfied that suitable evidence is provided to demonstrate that the products and systems proposed for use or used in the construction of external walls including finishes and claddings such as synthetic or aluminium composite panels comply with the relevant requirements of the NCC; and
 - (b)Ensure that the documentation relied upon in the approval processes include an appropriate level of detail to demonstrate compliance with the NCC as proposed and as built.

Health Matters and OSSM installations

34 The rainwater tank must be maintained so as not to create a nuisance and it must be protected against mosquito infestation.

Utility Services

35 A Section 73 Compliance Certificate under the Sydney Water Act 1994 shall be obtained from Sydney Water. The application must be made through an authorised Water Servicing Coordinator. Please refer to "Your Business" section of Sydney Water's website at www.sydneywater.com.au then the "e-developer" icon, or telephone 13 20 92.

The Section 73 Compliance Certificate must be submitted to the Principal Certifying Authority prior to the issue of an Occupation Certificate.

36 Prior to the issue of a Construction Certificate, a written clearance is to be obtained from Endeavour Energy stating that electrical services have been made available to the development or that arrangements have been entered into for the provision of services to the development.

In the event that a pad mounted substation is necessary to service the development, Penrith City Council shall be consulted over the proposed location of the substation before the Construction Certificate for the development is issued as the location of the substation may impact on other services and building, driveway or landscape design already approved by Council.

- 37 **Prior to the issue of a Construction Certificate**, the Principal Certifying Authority shall be satisfied that telecommunications infrastructure may be installed to service the premises which complies with the following:
 - The requirements of the Telecommunications Act 1997;
 - For a fibre ready facility, the NBN Co's standard specifications current at the time of installation; and
 - For a line that is to connect a lot to telecommunications infrastructure external to the premises, the line shall be located underground.

Unless otherwise stipulated by telecommunications legislation at the time of construction, the development must be provided with all necessary pits and pipes, and conduits to accommodate the future connection of optic fibre technology telecommunications.

Prior to the issue of an Occupation Certificate, written certification from all relevant service providers that the telecommunications infrastructure is installed in accordance with the requirements above and the applicable legislation at the time of construction, must be submitted to the Principal Certifying Authority.

Construction

38 Stamped plans, specifications, a copy of the development consent, the Construction Certificate and any other Certificates to be relied upon shall be available on site at all times during construction.

The following details are to be displayed in a maximum of 2 signs to be erected on the site:

- the name of the Principal Certifying Authority, their address and telephone number,
- the name of the person in charge of the work site and telephone number at which that person may be contacted during work hours,
- that unauthorised entry to the work site is prohibited,
- the designated waste storage area must be covered when the site is unattended, and
- all sediment and erosion control measures shall be fully maintained until completion of the construction phase.

Signage but no more than 2 signs stating the above details are to be erected:

- at the commencement of, and for the full length of the, construction works onsite, and
- in a prominent position on the work site and in a manner that can be easily read by pedestrian traffic.

All construction signage is to be removed when the Occupation Certificate has been issued for the development.

- 39 Prior to the commencement of construction works:
 - (a) Toilet facilities at or in the vicinity of the work site shall be provided at the rate of one toilet for every 20 persons or part of 20 persons employed at the site. Each toilet provided must be:
 - a standard flushing toilet connected to a public sewer, or
 - if that is not practicable, an accredited sewage management facility approved by the council, or
 - alternatively, any other sewage management facility approved by council.
 - (b) All excavations and backfilling associated with the erection or demolition of a building must be executed safely and in accordance with the appropriate professional standards. All excavations associated with the erection or demolition of a building must be properly guarded and protected to prevent them from being dangerous to life or property.
- (c) If an excavation associated with the erection or demolition of a building extends below the level of the base of Document Sethen: 85000 of a building on an adjoining allotment of land, the person causing the excavation to be made: Version: 1, Version Date: 12/12/2019 Page 6 of 13

- must preserve and protect the building from damage, and
- if necessary, must underpin and support the building in an approved manner, and
- must, at least 7 days before excavating below the level of the base of the footings of a building on an adjoining allotment of land, give notice of intention to do so to the owner of the adjoining allotment of land and furnish particulars of the excavation to the owner of the building being erected or demolished. The owner of the adjoining allotment of land is not liable for any part of the cost of work carried out for the purposes of this condition, whether carried out on the allotment of land being excavated or on the adjoining allotment of land, (includes a public road and any other public place).
- (d) If the work involved in the erection or demolition of a building is likely tocause pedestrian or vehicular traffic in a public place to be obstructed orrendered inconvenient, or involves the enclosure of a public place, ahoarding or fence must be erected between the work site and the public place:
- if necessary, an awning is to be erected, sufficient to prevent any substance from, or in connection with, the work falling into the publicplace,
- the work site must be kept lit between sunset and sunrise if it is likely to be hazardous to persons in the public place, and
- any such hoarding, fence or awning is to be removed when the work has been completed.
- 40 Residential slabs and footings shall be designed and certified by a qualified practising Structural Engineer or a suitably qualified person in accordance with the requirements of AS2870-1996 "Residential Slabs and Footings". Details are to be provided for consideration and approval prior to the issue of a Construction Certificate.
- 41 Details of the proposed termite management system shall be submitted for consideration and approval prior to the issue of a Construction Certificate. Council recommends that consideration be given to protection against subterranean termites in situations where termite resistant construction is used.
- 42 A certificate from a qualified practising Structural Engineer shall accompany the Construction Certificate application, certifying the structural adequacy of all load bearing walls prior to their erection.
- 43 The building shall be set out by a registered surveyor. A Survey Certificate shall be undertaken and submitted to the Principal Certifying Authority when the building is constructed to ground floor slab level.
- 44 Glass installations within the building shall comply with AS 1288 and the Building Code of Australia. On completion of the glass installation, a report shall be submitted certifying compliance with AS 1288.
- 45 Clothes drying facilities are to be positioned and screened from public view.
- 46 The rainwater tank(s) is to be:
 - erected on a self-supporting base in the approved location on the property in accordance with the stamped- approved site plans for the development,
 - structurally sound and constructed in accordance with AS/NZS 3500 1.2- 1998: National Plumbing and Drainage - Water Supply - Acceptable Solutions,
 - fully enclosed and all openings sealed to prevent access by
 - mosquitoes, fitted with a first flush device,
 - fitted with a trickle system to top up from mains water,
 - provided with an air gap, and
 - installed by a licensed plumber in accordance with Sydney Water's "Plumbing requirements Information for rainwater tank suppliers and plumbers April 2003" and the NSW Code of Practice: Plumbing and Drainage.

Additionally, the following are to be provided:

- A back flow prevention device shall be provided at the water meter in accordance with Sydney Water requirements.
- In the event of a power failure, a back up supply of mains water shall be provided to at least one toilet in the dwelling.
- The rainwater tank(s) and associated piping is to be labelled 'Rainwater Not for Drinking' in accordance with Sydney Water requirements.
- The rainwater tank and pipework is to be painted in colours matching the external finishes of the dwelling and is to be of non-reflective finish.
- The overflow for the rainwater tank is to be connected into the existing stormwater disposal system on the site.

Before a rainwater tank(s) can be used, a certificate or suitable document is to be submitted to the Principal Certifying Authority stating that the rainwater tank has been installed in accordance with:

- the Manufacturer's Specifications, and
- Sydney Water and NSW Health
- requirements.

This certificate or documentation is to be provided by the licensed plumber who installed the rainwater tank on the property, and is to be submitted prior to the issue of the Occupation Certificate.

collected and includes gutters. To ensure a safe supply of water:

- roof catchment areas must be kept clear of overhanging vegetation,
- gutters must have sufficient fall to downpipes to prevent pooling of
- water.
- overflow, discharge from bleed off pipes from roof mounted appliances such as airconditioners, hot water services and solar heaters must not discharge into the rainwater catchment area,
- for roofs containing lead based, tar based or asbestos material the tank supply must not be connected to drinking, bathing and gardening tap water outlets,
- appropriate measures must be installed to prevent foreign materials from contaminating the water which
 enters the rainwater tank.
- 48 The rainwater tank supply must not be connected to drinking and bathing water tap outlets.
- 49 The rainwater tank pump must not exceed 5dBA above ambient background noise level at the nearest residential property boundary. The provisions of the Protection of the Environment Operations Act 1997 apply to the development, in terms of regulating offensive noise.
- 50 Construction works or subdivision works that are carried out in accordance with an approved consent that involve the use of heavy vehicles, heavy machinery and other equipment likely to cause offence to adjoining properties shall be restricted to the following hours in accordance with the NSW Environment Protection Authority Noise Control Guidelines:
 - Mondays to Fridays, 7am to 6pm
 - Saturdays, 7am to 1pm (if inaudible on neighbouring residential premises), otherwise 8am to
 - 1pm No work is permitted on Sundays and Public Holidays.

Other construction works carried out inside a building/tenancy and do not involve the use of equipment that emits noise are not restricted to the construction hours stated above.

The provisions of the Protection of the Environment Operations Act, 1997 in regulating offensive noise also apply to all construction works.

- 51 The Construction Certificate must be accompanied by certification from an accredited Access Consultant confirming that the adaptable dwellings are capable of being modified, when required by the occupant, to comply with the Australian Housing Standard (AS 4299- 2009).
- 52 The building construction materials shall have low reflective qualities to minimize glare.

Engineering

- 53 All roadworks, stormwater drainage works, associated civil works and dedications, required to effect the consented development shall be undertaken at no cost to Penrith City Council.
- 54 An Infrastructure Restoration Bond is to be lodged with Penrith City Council for development involving works around Penrith City Council's Public Infrastructure Assets. The bond is to be lodged with Penrith City Council prior to commencement of any works on site or prior to the issue of any Construction Certificate, whichever occurs first. The bond and applicable fees are in accordance with Council's adopted Fees and Charges.

An application form together with an information sheet and conditions are available on Council's website.

Contact Penrith City Council's City Works Department on (02) 4732 7777 or visit Penrith City Council's website for more information.

- 55 Prior to the issue of any Construction Certificate, a Section138 Roads Act applications, including payment of application and inspection fees, shall be lodged and approved by Penrith City Council (being the Roads Authority for <u>any works required</u> in a public road). These works may include but are not limited to the following:
 - a) Vehicular crossings (including kerb reinstatement of redundant vehicular crossings)
 - b) Concrete footpaths and or cycleways
 - c) Road opening for utilities and stormwater (including stormwater connection to Penrith City Council roads and other Penrith City Council owned drainage)
 - d) Road occupancy or road closures
 - e) The placement of hoardings, structures, containers, waster skips, signs etc. in the road reserve
 - f) Temporary construction access

All works shall be carried out in accordance with the Roads Act approval, the development consent, including the stamped approved plans, and Penrith City Council's specifications, guidelines and best engineering practice.

Contact Penrith City Council's City Works Department on (02) 4732 7777 or visit Penrith City Council's website for more information.

Note:

- a) Where Penrith City Council is the Certifying Authority for the development, the Roads Act approval for the above works may be issued concurrently with the Construction Certificate.
- b) Separate approvals may also be required from the Roads and Maritime Services for classified roads.
- c) All works associated with the Roads Act approval must be completed prior to the issue of any Occupation Certificate or Subdivision Certificate as applicable.
- d) On completion of any awning over the road reserve, a certificate from a practising structural engineer certifying the structural adequacy of the awning is to be submitted to Council before Council will inspect the works and issue its final approval under the Roads Act
- 56 The stormwater management system shall be provided generally in accordance with the MUSIC modelling and associated concept plan/s lodged for development approval, prepared by Zait Engineering Solutions reference 17DZ1289, drawings D01 to D11 issue B dated 6/6/2019.

 The stormwater treatment systems shall include a minimum of 6 * 460mm Stormwater 360 Stormfilter Cartridges and per the WSUD Strategy and supporting MUSIC modelling.

Engineering plans and supporting calculations for the stormwater management systems are to be prepared by a suitably qualified person and shall accompany the application for a Construction Certificate.

Prior to the issue of a Construction Certificate the Certifying Authority shall ensure that the stormwater management system has been designed in accordance with Council's Stormwater Drainage for Building Developments and Water Sensitive Urban Design Policy.

57 The stormwater management system shall be provided generally in accordance with the concept plan/s lodged for development approval, prepared by ZAIT Engineering Solutions, reference number 17DZ1289, revision B, dated 06 June 2019.

Engineering plans and supporting calculations for the stormwater management systems are to be prepared by a suitably qualified person and shall accompany the application for a Construction Certificate.

Prior to the issue of any Construction Certificate, the Certifying Authority shall ensure that the stormwater management system has been designed in accordance with Penrith City Council's Stormwater Drainage for Building Developments, Water Sensitive Urban Design (WSUD) policies and the following items are addressed:

- The above ground Onsite Stormwater Detention basin shall be constructed of masonry walls and water tight. The above ground basin shall be designed and constructed to allow for stormwater ponding to reach the designed Top Of Water level in the 1% AEP storm event.
- The section detail of the DCP 1 on drawing D09 shows the top of masonry wall lower than the Top of Water Level of the Onsite Stormwater Detention (OSD) system. As such, this will not allow the OSD system to function as intended. In this regard, the plans shall be amended accordingly.
- 58 Prior to the issue of any Construction Certificate, the Certifying Authority shall ensure that the stormwater drainage system for the basement car park has been designed in accordance with the requirements for pumped systems in AS3500.3 (or as amended) (Plumbing and Drainage Stormwater Drainage).
- 59 Prior to the issue of any Construction Certificate, the Certifying Authority shall ensure that vehicular access, circulation, manoeuvring, pedestrian and parking areas associated with the subject development are in accordance with AS 2890.1, AS2890.2, AS2890.6 and Penrith City Council's Development Control Plan.
- 60 Prior to the commencement of any works on-site (including demolition works) or prior to the issue of any Construction Certificate, whichever occurs first, a Construction Traffic Management Plan (CTMP) shall be submitted to Council for approval. The CTMP shall be prepared in accordance with Council's Engineering Construction Specification for Civil Works. The CTMP shall be prepared by a suitably qualified consultant with appropriate training and certification from the Roads & Maritime Services (RMS), and in accordance with Council's Engineering Construction Specification for Civil Works. Approval of the CTMP may require approval of the Local Traffic Committee.
- 61 Prior to the issue of a Construction Certificate the Certifying Authority shall ensure that a Geotechnical investigation, report and strategy has been conducted to ensure stability of the Council infrastructure and surrounding developments. The geotechnical investigation, report and strategy shall comply with the recommendations contained in the technical direction GTD 2012/001 prepared by the Road and Maritime Services as amended. The development shall undertake a dilapidation report for all surrounding buildings and Council owned infrastructure that confirms that no damage occurs due to the excavations associated with the development. If Council is not the Certifying Authority the dilapidation report shall be submitted to Council prior to Construction Certificate and then updated and submitted prior to any Occupation Certificate confirming no damage has occurred.
- 62 Prior to the issued of any Construction Certificate issued for internal works associated with the development the site must be services by a legal point of discharge including and required infrastructure drainage works. The drainage works may include inter-allotment drainage construction, upgrades and / or road drainage extensions

63 Prior to commencement of works sediment and erosion control measures shall be installed in accordance with the approved Construction Certificate and to ensure compliance with the Protection of the Environment Operations Act 1997.

The erosion and sediment control measures shall remain in place and be maintained until all disturbed areas have been rehabilitated and stabilised.

64 Prior to commencement of any works associated with the development, a Traffic Control Plan, including details for pedestrian management, shall be prepared in accordance with AS1742.3 "Traffic Control Devices for Works on Roads" and the Roads and Maritime Services' publication "Traffic Control at Worksites" and certified by an appropriately accredited Roads and Maritime Services Traffic Controller.

Traffic control measures shall be implemented during the construction phase of the development in accordance with the certified plan. A copy of the plan shall be available on site at all times.

Note:

- a) A copy of the Traffic Control Plan shall accompany the Notice of Commencement to Penrith City Council.
- b) Traffic control measures may require road occupancy / road closure approvals issued under Section 138 of the Roads Act by Penrith City Council prior to the issue of a Construction Certificate.
- 65 Upon completion of all works in the road reserve, all verge areas fronting and within the development are to be turfed. The turf shall extend from the back of kerb to the property boundary, with the exception of concrete footpaths, service lids or other infrastructure which is not to be turfed over. Turf laid up to concrete footpaths, service lids or other infrastructure shall finish flush with the edge.
- 66 All existing (aerial) and proposed services for the development, including those across the frontage of the development are to be located or relocated underground in accordance with the relevant authorities regulations and standards.
- 67 Prior to the issue of any Occupation Certificate, the Principal Certifying Authority shall ensure that all works associated with a S138 Roads Act approval or S68 Local Government Act approval have been inspected and signed off by Penrith City Council.
- 68 Prior to the issue of an Occupation Certificate, works-as-executed drawings, final operation and maintenance management plans and any other compliance documentation shall be submitted to the Principal Certifying Authority in accordance with Penrith City Council's Engineering Construction Specification for Civil Works, WSUD Technical Guidelines and Stormwater Drainage for Building Developments.

An original set of works-as-executed drawings and copies of the final operation and maintenance management plans and compliance documentation shall also be submitted to Penrith City Council with notification of the issue of the Occupation Certificate where Council is not the Principal Certifying Authority.

- 69 Prior to the issue of an Occupation Certificate the Principal Certifying Authority shall ensure that the:
 - Stormwater management systems (including on-site detention and water sensitive urban design)
 - Have been satisfactorily completed in accordance with the approved Construction Certificate and the requirements of this consent.
 - Have met the design intent with regard to any construction variations to the approved
 - design. Any remedial works required to been undertaken have been satisfactorily completed.

Details of the approved and constructed system/s shall be provided as part of the works-as-executed drawings.

70 Prior to the issue of a Occupation Certificate, works-as-executed drawings, final operation and maintenance management plans and any other compliance documentation shall be submitted to the Principal Certifying Authority in accordance with Penrith City Council's Engineering Construction Specification for Civil Works, WSUD Technical Guidelines and Stormwater Drainage for Building Developments.

An original set of Works As Executed drawings and copies of the final operation and maintenance management plans and compliance documentation shall also be submitted to Penrith City Council with notification of the issue of the Occupation and / or Subdivision (Strata) Certificate where Penrith City Council is not the Principal Certifying Authority.

- 71 Prior to the issue of an Occupation Certificate a restriction as to user and positive covenant relating to the:
 - a) Stormwater management systems (including on-site detention and water sensitive urban design)

Document Set ID: 8961623

Shall be registered on the title of the property. The restriction as to user and positive covenant shall be in Penrith City Council's standard wording as detailed in Penrith City Council's Stormwater Drainage for Building Development.

- 72 Prior to the issue of any Occupation Certificate, the Principal Certifying Authority shall ensure that the:
 - a) Stormwater management systems (including on-site detention and water sensitive urban design)
 - Have been satisfactorily completed in accordance with the approved Construction Certificate and the requirements of this consent.
 - Have met the design intent with regard to any construction variations to the approved
 - design. Any remedial works required to been undertaken have been satisfactorily completed.

Details of the approved and constructed system/s shall be provided as part of the Works As Executed drawings.

- 73 Prior to the issue of any Occupation Certificate, a restriction as to user and positive covenant relating to the:
 - a) Stormwater management systems (including on-site detention and water sensitive urban design)

Shall be registered on the title of the property. The restriction as to user and positive covenant shall be in Penrith City Council's standard wording as detailed in Penrith City Council's Stormwater and Drainage for Building Developments policy.

- 74 The stormwater management systems shall continue to be operated and maintained in perpetuity to the satisfaction of Council in accordance with the final operation and maintenance management plan. Regular inspection records are required to be maintained and made available to Council upon request. All necessary improvements are required to be made immediately upon awareness of any deficiencies in the treatment measure/s.
- 75 (a) All car parking and manoeuvring must be in accordance with AS 2890.1-2004; AS 2890.6-2009 and Council's requirements.
 - (b) All vehicles are to enter and exit in a forward direction.
 - (c) The ramp to the basement car park is to be fitted with an appropriately placed access-point traffic light system and convex mirror/s to ensure that vehicles due not simultaneously traverse the basement ramp in opposing directions. Signage is required indicating that vehicle headlights are to be switched on when entering or exiting via the ramp. The traffic light system and convex mirrors are to be maintained in good working order and in perpetuity, for the life of the development.
 - (d) The required sight lines around driveway entrances are not to be compromised by landscaping, fencing, signage or other obstructions.
 - (e) All car spaces are to be line marked and dedicated for the parking of vehicles only and not to be used for storage of materials and/or waste materials, etc.
- 75 **Prior to the issue of a Construction Certificate**, steps are to be incorporated into the civil design plans enabling access into the above ground stormwater detention basin on the western side.

Landscaping

76 All landscape works are to be constructed in accordance with the stamped approved plan Landscape Plan 17082 DA 1 prepared by Vision Dynamics, Sections F5 "Planting Techniques", F8 "Quality Assurance Standards" and F9 "Site Management Plan" of Penrith Council's Landscape Development Control Plan.

Landscaping shall be maintained:

- in accordance with the approved plan, and
- in a healthy state, and in perpetuity by the existing or future owners and occupiers of the property.

If any of the vegetation comprising that landscaping dies or is removed, it is to be replaced with vegetation of the same species and, to the greatest extent practicable, the same maturity as the vegetation which died or was removed.

- 77 The approved landscaping for the site must be constructed by a suitably qualified and experienced landscape professional.
- 78 Upon completion of the landscape works associated with the development and prior to the issue of an Occupation Certificate, an Implementation Report must be submitted to the Principal Certifying Authority attesting to the satisfactory completion of the landscaping works for the development.

An Occupation Certificate should not be issued until such time as a satisfactory Implementation Report has been received. If Penrith City Council is not the Principal Certifying Authority, a copy of the satisfactory Implementation Report is to be submitted to Council together with the Occupation Certificate for the development.

- 79 All landscape works are to meet industry best practice and the following relevant Australian Standards: AS 4419 Soils for Landscaping and Garden Use,
 - AS 4454 Composts, Soil Conditioners and Mulches,
 - and AS 4373 Pruning of Amenity Trees.
- 80 No trees are to be removed, ringbarked, cut, topped or lopped or wilfully destroyed (other than those within the proposed building footprint or as shown on the approved plans) without the prior consent of Penrith City Council and in accordance with Council's Tree Preservation Order and Policy.

Development Contributions

81 This condition is imposed in accordance with Penrith City Council's Section 94 Contributions Plan(s) for Cultural Facilities. Based on the current rates detailed in the accompanying schedule attached to this Notice, \$6,464 is to be paid to Council prior to a Construction Certificate being issued for this development (the rates are subject to quarterly reviews). If not paid within the current quarterly period, this contribution will be reviewed at the time of payment in accordance with the adopted Section 94 plan. The projected rates of this contribution amount are listed in Council's Fees and Charges Schedule.

Council should be contacted prior to payment to ascertain the rate for the current quarterly period. The S94 invoice accompanying this consent should accompany the contribution payment. The Section 94 Contributions Plan for Cultural Facilities may be inspected at Council's Civic Centre, 601 High Street, Penrith.

82 This condition is imposed in accordance with Penrith City Council's Section 94 Contributions Plan(s) for District Open Space. Based on the current rates detailed in the accompanying schedule attached to this Notice, \$61,120 is to be paid to Council prior to a Construction Certificate being issued for this development (the rates are subject to quarterly reviews). If not paid within the current quarterly period, this contribution will be reviewed at the time of payment in accordance with the adopted Section 94 plan. The projected rates of this contribution amount are listed in Council's Fees and Charges Schedule.

Council should be contacted prior to payment to ascertain the rate for the current quarterly period. The S94 invoice accompanying this consent should accompany the contribution payment. The Section 94 Contributions Plan for District Open Space may be inspected at Council's Civic Centre, 601 High Street, Penrith.

83 This condition is imposed in accordance with Penrith City Council's Section 94 Contributions Plan(s) for Local Open Space. Based on the current rates detailed in the accompanying schedule attached to this Notice, \$22,093 is to be paid to Council prior to a Construction Certificate being issued for this development (the rates are subject to quarterly reviews). If not paid within the current quarterly period, this contribution will be reviewed at the time of payment in accordance with the adopted Section 94 plan. The projected rates of this contribution amount are listed in Council's Fees and Charges Schedule.

Council should be contacted prior to payment to ascertain the rate for the current quarterly period. The S94 invoice accompanying this consent should accompany the contribution payment. The Section 94 Contributions Plan for Local Open Space may be inspected at Council's Civic Centre, 601 High Street, Penrith.

Payment of Fees

- 84 All roadworks, dedications and drainage works are to be carried out at the applicant's cost.
- 85 Prior to the commencement of any works on site, all fees associated with Penrith City Council-owned land and infrastructure shall be paid to Council. These fees include Road Opening fees and Infrastructure Restoration fees.

Certification

86 An Occupation Certificate is to be obtained from the Principal Certifying Authority on completion of all works and prior to the occupation of the building/tenancy and commencement of the approved use. The Occupation Certificate shall not be issued if any conditions of this consent, but not the conditions relating to the operation of the development, are outstanding, and/or if the development does not comply with the provisions of the Environmental Planning and Assessment Act and Regulation.

Before the Occupation Certificate can be issued for the development, Fire Safety Certificates issued for the building are to be submitted to Penrith City Council and the New South Wales Fire Brigades.

A copy of the Occupation Certificate and all necessary documentation supporting the issue of that Certificate including the abovementioned documents shall be submitted to Penrith City Council, if Council is not the Principal Certifying Authority.

- 87 Prior to the commencement of any earthworks or construction works on site, the proponent is to:
 (a) employ a Principal Certifying Authority to oversee that the said works carried out on the site are in accordance with the development consent and related Construction Certificate issued for the approved development, and with the relevant provisions of the Environmental Planning and Assessment Act and accompanying Regulation, and
 - (b) submit a Notice of Commencement to Penrith City Council.

The Principal Certifying Authority shall submit to Council an "Appointment of Principal Certifying Authority" in accordance with Section 81A of the Environmental Planning and Assessment Act 1979.

Information to accompany the Notice of Commencement

Two (2) days before any earthworks or construction/demolition works are to commence on site (including the clearing site vegetation), the proponent shall submit a "Notice of Commencement" to Council in accordance with Section 81A of the Environmental Planning and Assessment Act 1979.

EXECUTIVE SUMMARY

EXECUTIVE SUMMART			
	REQUIRED		PROPOSED
01. SITE AREA	800.00m²		887.00m²
02. ZONE	R4		R4
03. BUILDING HEIGHT	MAX. 18m		17.80m
04. FSR	-		-
FSA	-		-
05. SITE COVERAGE	MAX. 443.50m ² (50% OF SITE)		329.10m²/ 887.00m² 37.10% OF SITE
			PROVIDED OPEN SPACE: 535.325m² =60.35% OF SITE
06. DEEP SOIL ZONE	133.05m²	2)	240.70m²
OZ LANDSCADE	15% OF SITE (ADC	,	27.14% OF SITE
07. LANDSCAPE	310.45m² 35% OF SITE	Ground 316.80m ² 35.72%	346.80m ² 39.10% OF SITE
		Roof Terrace 30.00m ² 3.38%	
08.COMMUNAL OPEN	221.75m²	Ground 163.60m ²	305.60m²
SPACE	25% OF SITE	18.44% Roof Terrace 142.00m ² 16.00%	34.45% OF SITE
09. NUMBER OF UNITS			17 UNITS 1 BEDROOM=7 2 BEDROOM=8 3 BEDROOM=2
10. CAR SPACE			
1 BEDROOM	1per UNIT	7 UNIT=7	7 SPACES
2 BEDROOM	1per UNIT	8 UNIT=8	8 SPACES
3 BEDROOM	1.5 per UNIT	2 UNIT=3	3 SPACES
VISITOR	1 SPACE per 5 UNI	T 17/5=4	4 SPACES
	CAR SPACES REC	QUIRED =22	22 SPACES
ADAPTABLE	17(10%)	=2	2 SPACES
BICYCLE	3 per UNIT 17/3	3 =5.66	6 SPACES
11. SOLAR ACCESS	70% OF UNITS TO 2HRS OF SOLAR A		82.40%(14/17 UNITS)
12. CROSS VENTILATION	60% OF UNITS TO CROSS VENTILAT		94.12%(16/17 UNITS)
13. ADAPTABLE UNIT	10% OF 17 UNITS=	-2	2 UNITS
14. LIVABLE UNIT	20% OF 17 UNITS=	-4	4 UNITS Including the 2 adaptable units

NatHERS Thermal Performance Specifications (BASIX Thermal Comfort) 29-31 Castlereagh Street, Penrith

These are the Specifications upon which the NatHERS Assessment is based. If details included in these Specifications vary from other drawings or written specifications, these Specifications shall take precedence. If only one specification option is detailed for a building element, that specification must analyte all instances of the element for the project.

Windows	Glass	Frame	U value	SHGC	Detail
Default	Single glazed, clear	Aluminium	6.7	0.57	Generally for window types: Awning, bi-fold, casement, tilt 'n' turn
Default	Single glazed, clear	Aluminium	6.7	0.70	Generally for window types: Sliding window/ door, double hung, fixed, louvre
Default	Single glazed, low E high solar gain	Aluminium	5.4	0.58	To unit: 1 – east facing glazing
Default	Double glazed, low E high solar gain	Aluminium	4.3	0.53	To unit: 1 – south facing glazing
Default	Double glazed, low E low solar gain	Aluminium	4.9	0.33	To units: 15, 16, 17 – all glazing

Skylights	Glass	Frame	U value	SHGC	Detail	
External walls	Construction	Added In	sulation	Detail		
Brick veneer	00//01/401/01/	R 2.0	Januarion	As per drawings		
Hebel panel		R 2.0		As per drawings		
Framed with me	tal cladding	R 2.5		As per drawings		

Internal walls	Construction	Added Insulation	Detail	
Plasterboard on	studs	None	Within units	
Hebel		None	Party/ common walls generally	
Hebel / Concrete	Hebel / Concrete		Internal apartment walls adjoining common lobbies, lift core, stairwells to units: 1, 2, 3, 7, 16	

Floors	Construction	Added Insulation	Detail	
Concrete		None	Generally	
Concrete		R 1.0	To units: 4	
Concrete		R 1.5	To units: 1, 2, 3	_

Concrete		R 1.5 To units: 1, 2, 3		
Ceilings	Construction	Added Insulation	Detail	
Plasterboard	1	(see roof detail belo	w)	

Roof	Construction	Added Insulation	Detail	
Concrete		R 1.0	To units: 1, 2, 3, 6, 7, 13, 14	
Concrete		R 2.5	To units: 15, 16, 17	

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Α	23.5.17	ISSUE FOR D.A.	(ΔI)	Plans
В		ISSUE FOR D.A.		i lallo
С	30.11.18	REFER TO NOTES AS REQUESTED BY COUNCIL	DESIGN	Solutions
D	30.08.19	AMENDED AS REQUESTED BY COUNCIL DATED 29-08-19	39 Cumberland Rd Auburn NS	W 2144
E	14.10.19	AMENDED AS REQUESTED BY COUNCIL	P: (02) 8068 2177	ABN 88 606 740 381
F	06.11.19	AMENDED AS REQUESTED BY PANEL	 M: 0416009172 E: info@cadplans.net. 	011
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RESIDENTIAL BUILDING DEVELOPMENT 29-31 CASTLEREAGH ST, PENRITH, NSW 2750

SHEET TITLE:			- 1
COVE	R PAGE		
DESIGN:	DRAWN:	DATE:	SCALE:

PERSPECTIVE-CAMERA VIEW FROM CASTLEREAGH STREET

ARCHITECTURAL DRAWINGS ARCHITECTURAL DRAWINGS

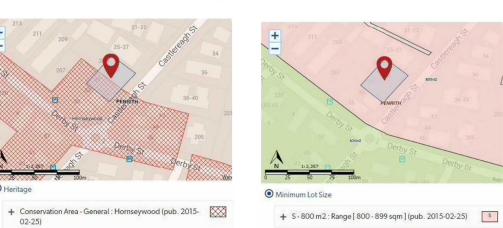
DRAWING NUMBERS	SHEET NAME	Issue	DRAWING NUMBERS	SHEET NAME	Issue
16011 DA00	COVER PAGE	F	16011 DA14	SHADOW DIAGRAMS	F
16011 DA01	SITE CONTEXT	F	16011 DA14.1	SHADOW DIAGRAMS	F
16011 DA02	SITE PLAN	F	16011 DA14.2	SHADOW DIAGRAMS	F
16011 DA03	BASEMENT PLAN LVL-2	F	16011 DA14.3	SHADOW DIAGRAMS	F
16011 DA04	BASEMENT PLAN LVL-1	F	16011 DA14.4	SOLAR STUDY	F
16011 DA05	GROUND FLOOR PLAN	F	16011 DA14.5	SOLAR STUDY	F
16011 DA06	LEVEL-1	F	16011 DA14.6	SOLAR STUDY	F
16011 DA07	LEVEL-2	F	16011 DA14.7	SOLAR STUDY	F
16011 DA08	LEVEL-3	F	16011 DA14.11	SOLAR ANALYSIS	F
16011 DA09	LEVEL-4	F	16011 DA14.12	SOLAR ANALYSIS	F
16011 DA10	ROOF TERRACE	F	16011 DA14.13	SOLAR ANALYSIS	F
16011 DA11	ELEVATIONS	F	16011 DA14.14	SOLAR ANALYSIS	F
16011 DA12	ELEVATIONS	F	16011 DA15	VIEW FROM SUN	F
16011 DA13	SECTIONS	F			

PROPOSED RESIDENTIAL DEVELOPMENT 29/31 CASTLEREAGH STREET PENRITH, NSW 2750

JUNE 2016 A3 - 1:200 16011 DA00

+ P-18 m: Range [17.0-18.9 m] (pub. 2015-02-25)

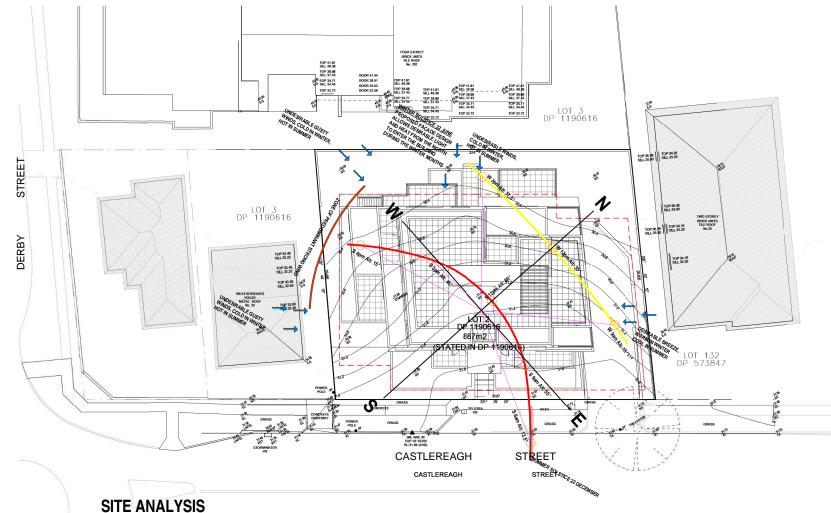




LEP MAPS



SITE LOCATION





VIEW FROM CASTLEREAGH STREET-THE SITE



VIEW FROM DERBY ST-APARTMENT BLDG.

PROJECT STATUS:



VIEW FROM CASTLEREAGH STREET-PENRITH RSL



VIEW FROM CASTLEREAGH STREET



VIEW FROM DERBY STREET-PENRITH BOWLING CLUB VIEW FROM DERBY STREET-KMART

Design Studio

C 30.11.18 REFER TO NOTES AS REQUESTED BY COUNCIL
D 30.08.19 AMENDED AS REQUESTED BY COUNCIL DATED 29-08-19
 E
 14.10.19
 AMENDED AS REQUESTED BY COUNCIL

 F
 06.11.19
 AMENDED AS REQUESTED BY PANEL

 ISSUE
 DATE
 AMENDMENT

CAD Plans

DESIGN Solutions

DIAL BEFORE YOU DIG

DEVELOPMENT APPLICATION

RESIDENTIAL BUILDING DEVELOPMENT 29-31 CASTLEREAGH ST, PENRITH,NSW 2750

SITE CONTEXT

DATE: | SCALE: | A1 - 1:100 | A3 - 1:200 | 16011 DA01

BASIX COMMITMENTS

ili) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comitor Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	4		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		~	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		~	~
(g) Where there is an in-slab heating or cooling system, the applicant must:	~	~	-
(aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or			
(bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.			
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	V	₩	· ·

		Thermal loads				
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)				
1	60.6	31.9				
2	55.9	26.9				
3	59.7	25.5				
4	39.8	25.5				
5	40.8	48.6				
6	53.9	44.8				
7	49.4	36.9				
8	12.7	27.6				

	Thermal loads				
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)			
9	22.2	43.4			
10	51.2	38.0			
11	11.7	20.7			
12	22.4	43.4			
13	57.6	43.1			
14	12.3	35.6			
15	36.8	53.8			
16	63.0	54.5			
All other dwellings	42.8	61.3			

	Common area	ventilation system	Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Car park area, basement LVL1	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	fluorescent	motion sensors	No
Car park area, basement LVL2	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	fluorescent	motion sensors	No
Lift car (No.1)	-	Refe	compact fluorescent	connected to lift call button	No
Garbage rooms	ventilation exhaust only	147	fluorescent	motion sensors	No
Other internal, storage	ventilation supply only	time clock or BMS controlled	fluorescent	motion sensors	No
Ground floor lobby types	no mechanical ventilation	*	compact fluorescent	manual on / timer off	No
Hallway/lobby types	no mechanical ventilation	140	compact fluorescent	manual on / timer off	No

Central energy systems	Туре	Specification
Central hot water system (No. 1)	gas-fired storage (manifolded)	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm) (b) Piping internal to building: R1.0 (~38 mm)
Lift (No. 1)	gearless traction with V V V F motor	Number of levels (including basement): 8

18.0 M BUILDING HEIGHT LIMIT @ BUILDING LINE

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifie
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		<u> </u>	-
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	~	~	V
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	v.	<u> </u>	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		V	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		<u> </u>	~
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		~	· ·

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washer	s rating		
All common areas	no common facility	4 star	4 star	no common laun	common laundry facility		
(ii) Energy		Show on DA plans	Show on CC/CDC plans & specs	Certifie			
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.					Y .	~	
specified in	the table below, the lighting spe int must also install a centralised	cified for that common area. This I	e of artificial lighting" for each commo ighting must meet the efficiency meas Management System (BMS) for the o	sure specified.	~	~	
		extures specified in the "Central en	ergy systems" column of the table bel	low. In each	24.	114	

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		¥	~
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Contral systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	×	~	~
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	<u> </u>	~	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		V	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		~	-
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		~	V

ociiiiiioii aica	Choncineuca rating	Tonets rating	Tapo Tutting	Olothica washic	i o ruting	
All common areas	no common facility	4 star	4 star	no common laur	ndry facility	
(ii) Energy				Show on DA plans	Show on CC/CDC plans & specs	Certifie
			service a common area specified in non area, and must meet the efficienc		~	~
specified in	the table below, the lighting spe int must also install a centralised	cified for that common area. This li	e of artificial lighting" for each commo ighting must maet the efficiency meas Management System (BMS) for the	sure specified.	✓	~
(c) The applica case, the sy	nt must install the systems and ystem or fixture must be of the ty	lixtures specified in the "Central en rpe, and meet the specifications, lis	ergy systems" column of the table be sted for it in the table.	low. In each	~	~

AREA SCHEDULES

		DOLLO						
UNIT NUMBER	NO. OF BED	UNIT AREA (m²)	BALCONY AREA (m²)	SOLAR ACCESS	CROSS VENTILATION	STORAGE UNIT (m³)	STORAGE BASEMENT(m³)	STORAGE TOTAL (m³
1	1 BED	50.00m ²	18.00m²	YES	YES	4.23m³	4.20m³	8.43m³
2	1 BED	51.90m²	23.30m²	NO	YES	4.00m³	4.20m³	8.20m³
3	1 BED	55.00m²	16.40m²	YES	YES	4.00m³	4.66m³	8.66m³
4	2 BED	76.80m²	16.20m²	YES	YES	4.30m³	8.00m³	12.30m³
5	1 BED	50.40m²	8.20m²	YES	YES	3.50m³	4.66m³	8.16m³
6	2 BED	70.00m²	10.10m²	NO	YES	4.00m³	5.52m³	9.52m³
7	2 BED	70.00m²	10.10m²	YES	YES	4.00m³	5.14m³	9.14m³
8	2 BED	70.10m²	10.00m²	YES	YES	4.00m³	5.14m³	9.14m³
9	2 BED	70.10m²	10.10m²	YES	YES	4.00m³	5.14m³	9.14m³
10	3 BED	90.10m²	12.10m²	NO	YES	5.00m³	5.52m³	10.52m³
11	2 BED	70.10m²	10.00m²	YES	NO	4.00m³	8.72m³	12.72m³
12	2 BED	70.10m²	10.00m²	YES	YES	4.00m³	8.72m³	12.72m³
13	3 BED	90.10m²	12.10m²	YES	YES	5.00m³	10.42m³	15.42m³
14	2 BED	70.10m²	10.00m²	YES	NO	4.00m³	8.72m³	12.72m³
15	1 BED	59.80m²	8.00m²	YES	YES	4.00m³	4.80m³	8.80m³
16	2 BED	76.20m²	10.60m²	YES	YES	4.00m³	12.48m³	16.48m³
17	1 BED	51.29m²	8.00m²	YES	NO	3.20m³	4.80m³	8.00m ³



18.0m BUILDING HEIGHT LIMIT @ STAIR CASE 18.0M BUILDING HEIGHT LIMIT @ BUILDING LINE ROOF TERRACE VRL 46.600
CEILING LINE VRL 46.300 CEILING LINE - L3 ∇ RL 43.250 ___LEV<u>E</u>L-3_**▼** RL 40.550 CEILING LINE - L2 V CASTLEREAGH STREET

SCALE 1:100@A1 1:200@A3

pens **Design** Studio

				PTY LTD
Α	23.5.17	ISSUE FOR D.A.	$C\DeltaD$	Plans
В		ISSUE FOR D.A.		lalis
С	30.11.18	REFER TO NOTES AS REQUESTED BY COUNCIL	DESIGN	Solutions
D	30.08.19	AMENDED AS REQUESTED BY COUNCIL DATED 29-08-19	39 Cumberland Rd Auburn NSW 2	144
E	14.10.19	AMENDED AS REQUESTED BY COUNCIL	P: (02) 8068 2177	ABN 88 606 740 381
F	06.11.19	AMENDED AS REQUESTED BY PANEL	M: 0416009172 E: info@cadplans.net.au	
		·	L. IIIIU & caupidi 15.1181.au	

DIAL BEFORE YOU DIG

DEVELOPMENT APPLICATION

PROJECT STATUS:

RESIDENTIAL BUILDING DEVELOPMENT
29-31 CASTLEREAGH ST, PENRITH,NSW
2750 CLIENT:

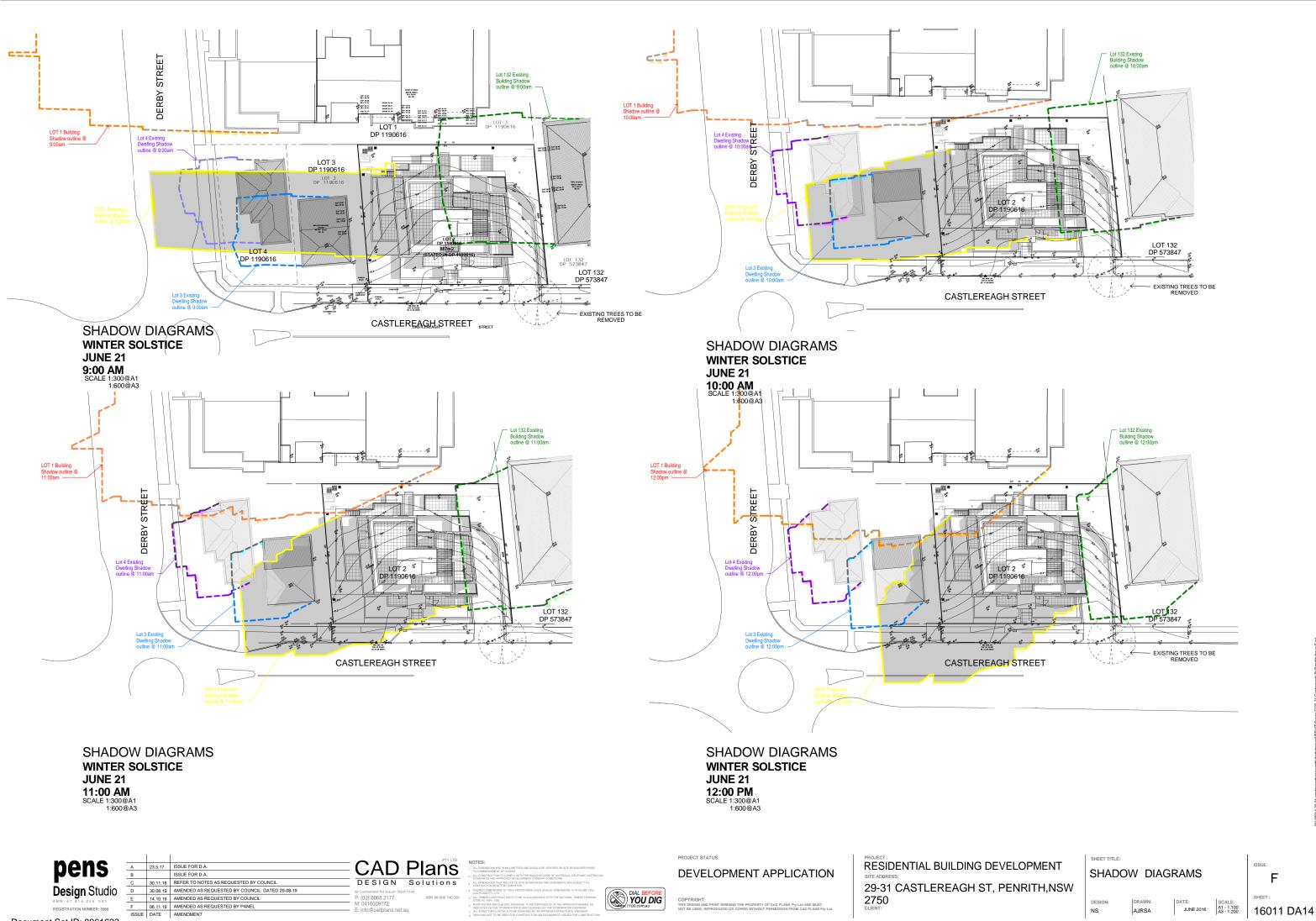
EAST ELEVATION

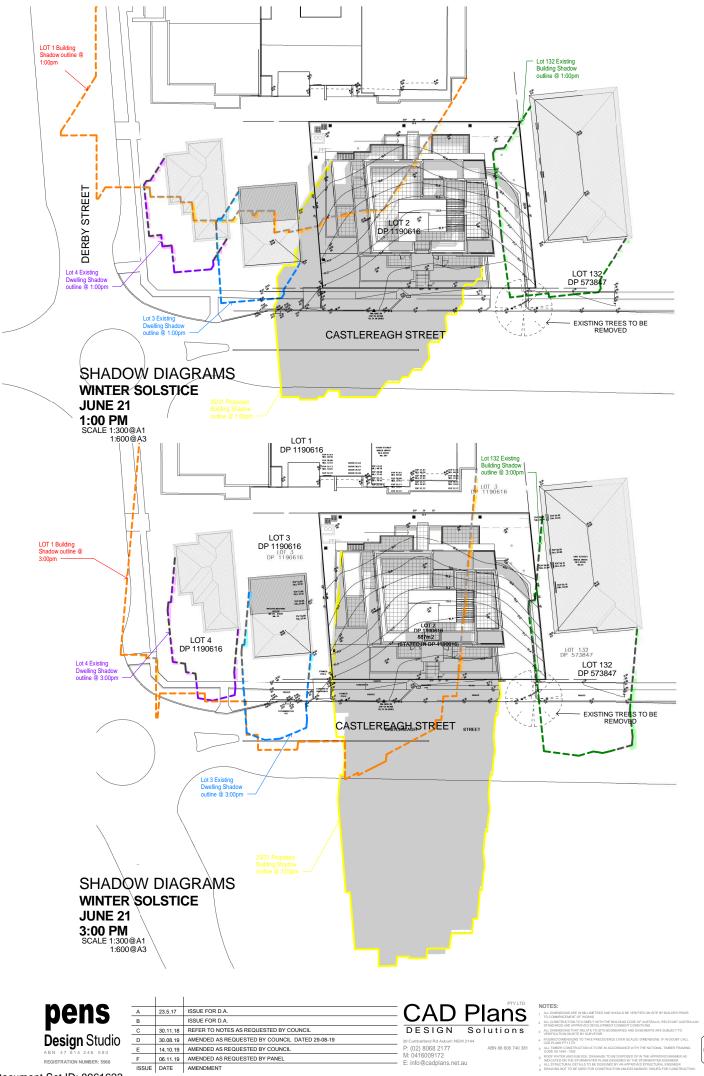
SCALE 1:100@A1 1:200@A3

ELEVATIONS

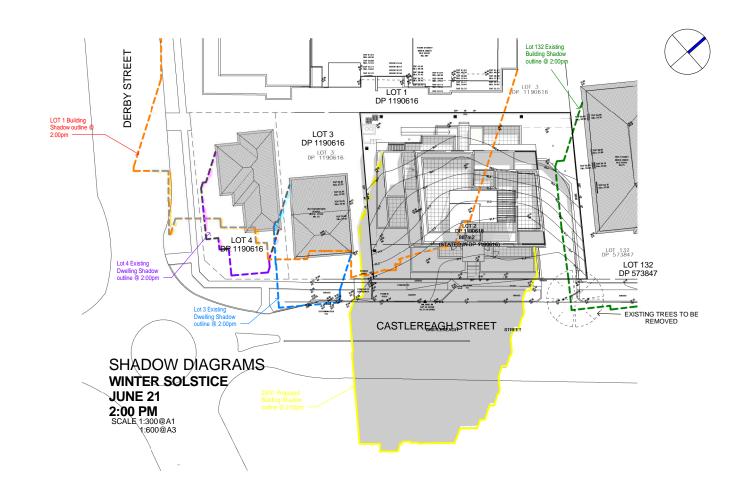
16011 DA11

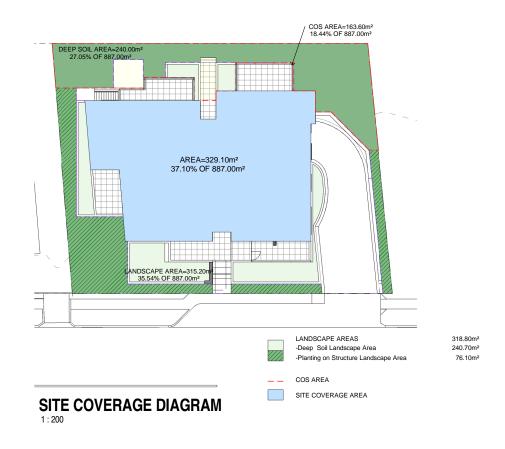






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DEVELOPMENT APPLICATION

PROJECT STATUS:

RESIDENTIAL BUILDING DEVELOPMENT 29-31 CASTLEREAGH ST, PENRITH, NSW 2750

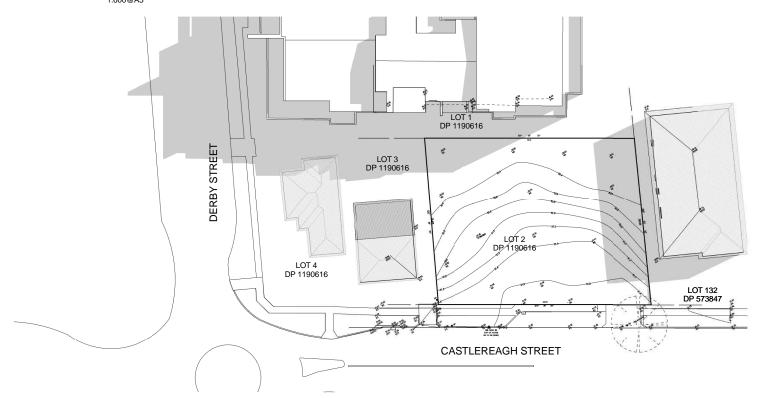
SHADOW DIAGRAMS

16011 DA14.1

Document Set ID: 8961623 Version: 1, Version Date: 12/12/2019

Design Studio

SHADOW DIAGRAMS WINTER SOLSTICE **JUNE 21** 9:00 AM SCALE 1:300@A1 1:600@A3



SHADOW DIAGRAMS WINTER SOLSTICE **JUNE 21** 10:00 AM SCALE 1:300@A1 1:600@A3

pens **Design** Studio

A 23.5.17 ISSUE FOR D.A.

B ISSUE FOR D.A.

C 30.11.18 REFER TO NOTES AS REQUESTED BY COUNCIL.

D 30.08.19 AMENDED AS REQUESTED BY COUNCIL. DATED 29-08-19

E 14.10.19 AMENDED AS REQUESTED BY COUNCIL.

F 06.11.19 AMENDED AS REQUESTED BY PANEL.

ISSUE DATE AMENDMENT CAD Plans DESIGN Solutions E: info@cadplans.net.au

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DEVELOPMENT APPLICATION

RESIDENTIAL BUILDING DEVELOPMENT 29-31 CASTLEREAGH ST, PENRITH, NSW

LOT 1 DP 1190616

LOT 2 * DP 1190616

CASTLEREAGH STREET

LOT 1 DP 1190616

LOT 2 * DP 1190616

CASTLEREAGH STREET

LOT 3 DP 1190616

LOT 4 DP 1190616

LOT 3 DP 1190616

SHADOW DIAGRAMS AJRSA

PROJECT STATUS:

2750

SHADOW DIAGRAMS

WINTER SOLSTICE

JUNE 21

11:00 AM SCALE 1:300@A1 1:600@A3

16011 DA14.2

LOT 132 DP 573847

LOT 132 DP 573847

Document Set ID: 8961623 Version: 1, Version Date: 12/12/2019 SHADOW DIAGRAMS **WINTER SOLSTICE JUNE 21** 10:00 AM SCALE 1:300@A1 1:600@A3

STREET

SHADOW DIAGRAMS WINTER SOLSTICE **JUNE 21** 1:00 PM SCALE 1:300@A1 1:600@A3

> LOT 1 DP 1190616 DERBY STREET LOT 4 DP 1190616 **CASTLEREAGH STREET**

SHADOW DIAGRAMS WINTER SOLSTICE **JUNE 21** 3:00 PM SCALE 1:300@A1 1:600@A3

pens **Design** Studio

A 23.5.17 ISSUE FOR D.A.

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C 30.11.18 REFER TO NOTES AS REQUESTED BY COUNCIL.

D 30.08.19 AMENDED AS REQUESTED BY COUNCIL. DATED 29-08-19

E 14.10.19 AMENDED AS REQUESTED BY COUNCIL.

F 06.11.19 AMENDED AS REQUESTED BY PANEL.

ISSUE DATE AMENDMENT M: 0416009172 E: info@cadplans.net.au

CAD Plans

DESIGN Solutions 9 Cumberland Rd Aubur P: (02) 8068 2177

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RESIDENTIAL BUILDING DEVELOPMENT 29-31 CASTLEREAGH ST, PENRITH,NSW 2750

LOT 1 DP 1190616

LOT 2 * DP 1190616

CASTLEREAGH STREET

LOT 3 DP 1190616

LOT 4 DP 1190616

SHADOW DIAGRAMS AJRSA

16011 DA14.3

LOT 132 DP 573847

PROJECT STATUS:

DEVELOPMENT APPLICATION

DERBY STREET

SHADOW DIAGRAMS WINTER SOLSTICE

JUNE 21

2:00 PM SCALE 1:300@A1 1:600@A3

Eastern Solar Analysis-10 00am - Unit 1,5,9,12,15

__ <u>LEVEL-3</u> **V**_ RL 40.550

GROUND FLOOR V



1:200 @ A3

Eastern Solar Analysis-9 00am-Unit 1,5,9,12,15

Eastern Solar Analysis-9 00am - Unit 1,5,9,12,15



Eastern Solar Analysis-11 00am-Unit 1,5,9,12,15 Eastern Solar Analysis-11 00am - Unit 1,5,9,12,15 1:200 @ A3

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CAD Plans DESIGN Solutions
 E
 14.10.19
 AMENDED AS REQUESTED BY COUNCIL

 F
 06.11.19
 AMENDED AS REQUESTED BY PANEL

 ISSUE
 DATE
 AMENDMENT

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PROJECT STATUS: **DEVELOPMENT APPLICATION**

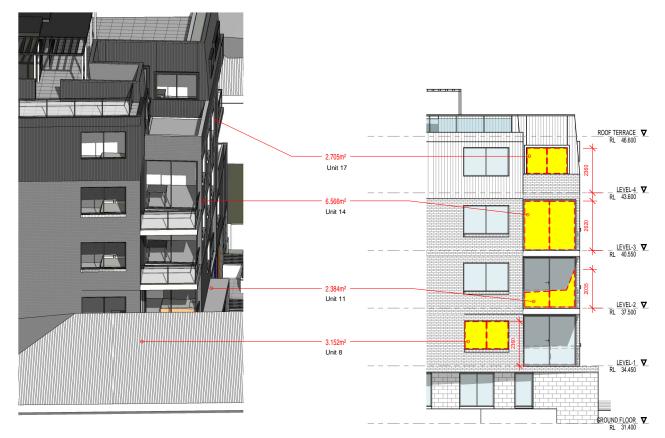
RESIDENTIAL BUILDING DEVELOPMENT 29-31 CASTLEREAGH ST, PENRITH,NSW 2750

SOLAR ANALYSIS

16011 DA14.11

Eastern Solar Analysis-9 00am-Unit 8,11,14,17

Eastern Solar Analysis-9 00am - Unit 8,11,14,17 1:200 @ A3



Eastern Solar Analysis-10 00am-Unit 8,11,14,17

Eastern Solar Analysis-10 00am - Unit 8,11,14,17 1:200 @ A3



Eastern Solar Analysis-11 00am-Unit 8,11,14,17

Eastern Solar Analysis-11 00am - Unit 8,11,14,17 1:100 @ A1 1:200 @ A3

pens
 A
 23.5.17
 ISSUE FOR D.A.

 B
 ISSUE FOR D.A.

 C
 30.11.18
 REFER TO NOTES AS REQUESTED BY COUNCIL

 D
 30.08.19
 AMENDED AS REQUESTED BY COUNCIL DATED 29-08-19
 Design Studio
 E
 14.10.19
 AMENDED AS REQUESTED BY COUNCIL

 F
 06.11.19
 AMENDED AS REQUESTED BY PANEL

 ISSUE
 DATE
 AMENDMENT

CAD Plans DESIGN Solutions

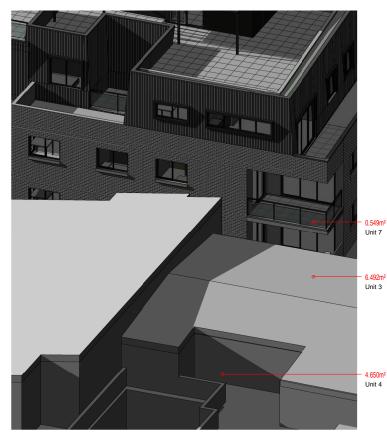
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DEVELOPMENT APPLICATION

RESIDENTIAL BUILDING DEVELOPMENT 29-31 CASTLEREAGH ST, PENRITH,NSW 2750

SOLAR ANALYSIS

16011 DA14.12



Northern Solar Analysis-9 40am-Unit 3,4,7



Northern Solar Analysis-9 40am - Unit 3,4,7



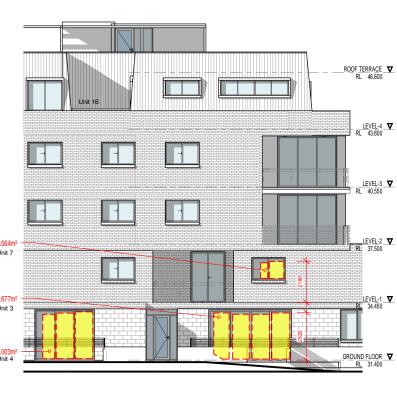
Northern Solar Analysis-11 40am-Unit 3,4,7

CAD Plans

DESIGN Solutions



Northern Solar Analysis-10 40am-Unit 3,4,7



Northern Solar Analysis-10 40am - Unit 3,4,7

1:200 @ A3



Northern Solar Analysis-11 40am - Unit 3,4,7

1:200 @ A3

PROJECT STATUS:

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DEVELOPMENT APPLICATION

29-31 CASTLEREA 2750

RESIDENTIAL BUILDING DEVELOPMENT	
29-31 CASTLEREAGH ST, PENRITH,NSW	
2750 CLIENT:	

N	SOLAR ANALYSIS					
	DESIGN:	DRAWN: AJRSA	DATE: JUNE 2016			

16011 DA14.13

Document Set ID: 8961623

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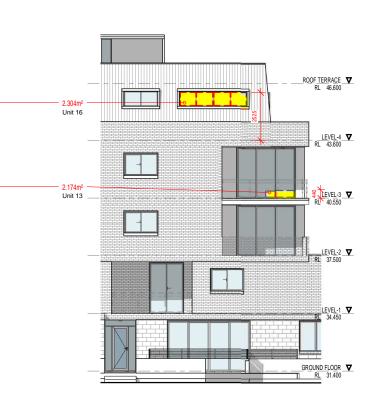
 E
 14.10.19
 AMENDED AS REQUESTED BY COUNCIL

 F
 06.11.19
 AMENDED AS REQUESTED BY PANEL

 ISSUE
 DATE
 AMENDMENT
 Version: 1, Version Date: 12/12/2019



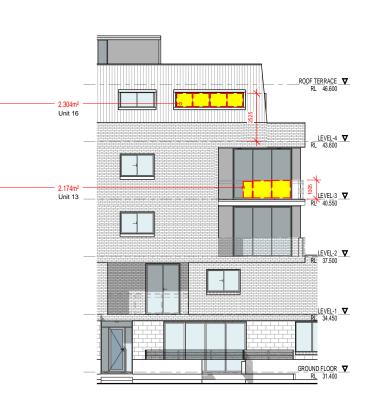
Northern Solar Analysis-12 30pm-Unit 13,16



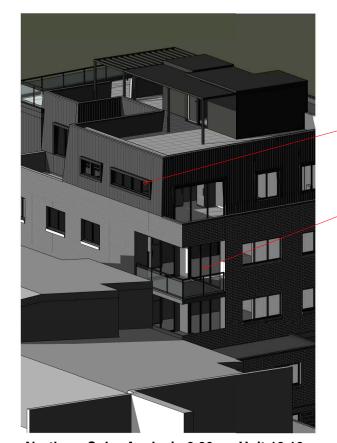
Northern Solar Analysis-12 30pm - Unit 13,16
1:100 @ A1
1:200 @ A3



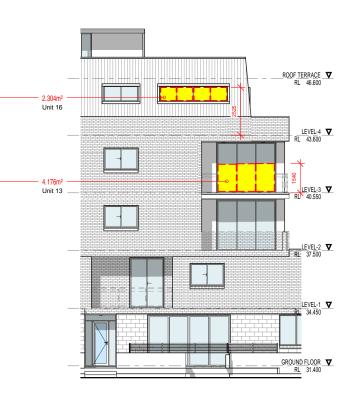
Northern Solar Analysis-1 30pm-Unit 13,16



Northern Solar Analysis-1 30pm - Unit 13,16
1:100 @ A1
1:200 @ A3



Northern Solar Analysis-2 30pm-Unit 13,16



Northern Solar Analysis-2 30pm - Unit 13,16 1:100 @ A1 1:200 @ A3

NOTES:

CAD Plans

DESIGN SOLUTIONS

30 Curbonicand Rd Aubum NSW 2144
P. (02) 8068 2177

ABN 88 606 740 381

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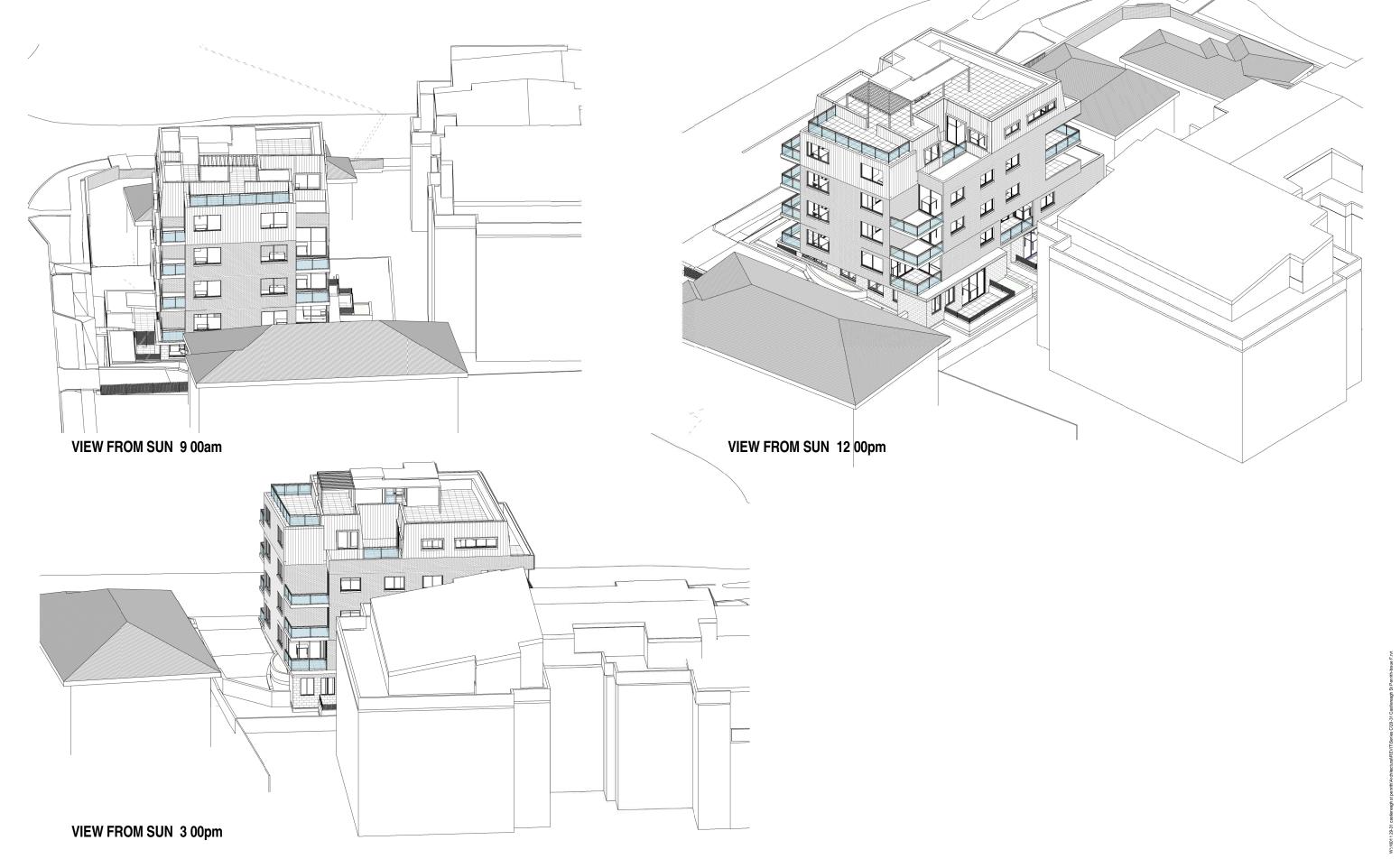
DEVELOPMENT APPLICATION

RESIDENTIAL BUILDING DEVELOPMENT SITE ADDRESS: 29-31 CASTLEREAGH ST, PENRITH,NSW 2750 CLIENT:

	SHEET TITLE:					
ı	SOLAR ANALYSIS					
,	DESIGN: NS	DRAWN: AJRSA	DATE: JUNE 2016	SCALE: A1 - 1:100 A3 - 1:200		

F sheet: 16011 DA14.14

pens
Design Studio
ABN 47 814 224 580





A 23.5.17 ISSUE FOR D.A.

B ISSUE FOR D.A.

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D 30.08.19 AMENDED AS REQUESTED BY COUNCIL. DATED 29-08-19

E 14.10.19 AMENDED AS REQUESTED BY COUNCIL.

F 06.11.19 AMENDED AS REQUESTED BY PANEL.

ISSUE DATE AMENDMENT CAD Plans

DESIGN Solutions

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DEVELOPMENT APPLICATION

PROJECT STATUS:

RESIDENTIAL BUILDING DEVELOPMENT 29-31 CASTLEREAGH ST, PENRITH,NSW 2750

VIEW FROM SUN

DATE: SCALE: A1 - 1:100 A3 - 1:200 A3 - 1:200 A5 - 1:20