

RESPONSE FORMS

FORM 1 - RESPONDENT DETAILS (Builders)



Name of organisation(s): TREND CONNECTION PTY LTD

ABN: 45 101 504 205

Business Address: UNIT 35, 5 INGLEWOOD PLACE,
BAULKHAM HILLS NSW 2153

Contact Person: MICHAEL ZOMAYA - 8824 4339
MICHAEL.ZOMA-1@TRENDCONNECTION.COM.AU

DECLARATION

I have reviewed the terms and conditions of this RFP document and the attached documents and agreements and agreed to those terms and conditions.

Signed: 

Name: MICHAEL ZOMAYA

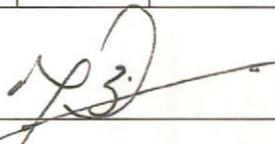
Position: DIRECTOR

Date: 6th MAY 2014

Parcel 8

Lot No	Lot Area	Lot Price	Option Type	Dwelling Type	Building Area	Estimated Building Contract Price	Provide a Concept Design
169	217	200,000	Call	Terrace + studio	179	\$ 359,955.58	Yes ✓
170	198	200,000	Call	Terrace (front loaded)	188	\$ 297,792.75	No
171	198	200,000	Call	Terrace (front loaded)	188	\$ 297,792.75	No
172	198	200,000	Call	Terrace (front loaded)	188	\$ 297,792.75	No
173	198	200,000	Call	Terrace (front loaded)	188	\$ 297,792.75	Yes ✓
174	198	200,000	Call	Terrace (front loaded)	188	\$ 297,792.75	No
175	198	200,000	Call	Terrace (front loaded)	188	\$ 297,792.75	No
176	198	200,000	Call	Terrace (front loaded)	188	\$ 297,792.75	No
177	288.2	220,000	Call	Terrace (front loaded)	203	\$ 328,231.26	Yes ✓

Signed:



Name:

MICHAEL ZOMAYA

Position:

DIRECTOR

Date:

6th MAY 2014

ESTIMATED BUILDING CONTRACT PRICE – House and Land Packages

Copy and complete this schedule for each Dwelling on each Lot in the Parcel

The Estimated Building Contract Price should also include:-

- Construction of the Dwelling to comply with the Design Kit and Guidelines;
- Site costs based on the site classification "M" and wind classification N2.;
- Include an "Amplimesh" or equal Security Screen Door to the Front Door;
- An allowance for landscaping costs including retaining walls, paths, driveways, letterboxes, fences, turf, and planting based each individual lot plan.
- Soft landscaping elements such as turf, and planting. (Include a PS of \$5,000 for turf, plants and trees on each lot);
- Allow a PS of \$ 5,000.00 for piers and drop edge beams
- Allow a PS of \$ 500.00 for preparation of a landscape plan
- Allow a PS of \$ 10,000.00 for air-conditioning.
 - Site will be NBN reticulated, assume base fibre optic installation (1 x data, 1 x phone and 1 x TV. No allowance for structured wiring and home hub).
 - Allow connections of services within 10 metres of the home.
 - Assume all services will be located inside the lot.
- Assume free for view TV will be part of the fibre.
- Project Sales Agents commission on the building contract (\$5,000 per dwelling).
- Details of any other provision sums/ allowances; and,
- Details of any exclusions.

Lot No 169

Provide a price breakdown including GST as follows for each lot

House Price (complies with the Design Kit and Guidelines)	\$ 309,455.58
Site Costs	\$ 16,000
Security Screen Door	\$ 1,000
Hard Landscaping (including retaining walls, driveways, paths and fences based on the actual lot dimensions)	\$ 8,000
Soft Landscaping (including allowance for \$5,000 for plants and trees)	\$ 5,000.00
Landscape Design allowance \$500 (including GST)	\$ 500.00
Piers and drop edge beams allow a PS of \$ 5,000.00 (including GST)	\$ 5,000.00
Air-conditioning allow a PS of \$ 10,000.00 (including GST)	\$ 10,000.00
Agents Commission allowance \$5,000 (including GST)	\$ 5,000.00
Total Building Contract Price (including GST)	\$ 359,955.58

ESTIMATED BUILDING CONTRACT PRICE – House and Land Packages

1. The estimated price is based on the following assumptions:

The Estimated Building Contract Price should also include:-

- Construction of the Dwelling to comply with the Design Kit and Guidelines;
- Site costs based on the site classification "M" and wind classification N2.;
- Include an "Amplimesh" or equal Security Screen Door to the Front Door;
- An allowance for landscaping costs including retaining walls, paths, driveways, letterboxes, fences, turf, and planting based each individual lot plan.
- Soft landscaping elements such as turf, and planting. (Include a PS of \$5,000 for turf, plants and trees on each lot);
- Allow a PS of \$ 5,000.00 for piers and drop edge beams
- Allow a PS of \$ 500.00 for preparation of a landscape plan
- Allow a PS of \$ 10,000.00 for air-conditioning.
 - Site will be NBN reticulated, assume base fibre optic installation (1 x data, 1 x phone and 1 x TV. No allowance for structured wiring and home hub).
 - Allow connections of services within 10 metres of the home.
 - Assume all services will be located inside the lot.
- Assume free for view TV will be part of the fibre.
- Project Sales Agents commission on the building contract (\$5,000 per dwelling).
- Details of any other provision sums/ allowances; and,
- Details of any exclusions.

Lot No 170

Provide a price breakdown including GST as follows for each lot

House Price (complies with the Design Kit and Guidelines)	\$ 253,292.75
Site Costs	\$ 12,000
Security Screen Door	\$ 1,000
Hard Landscaping (including retaining walls, driveways, paths and fences based on the actual lot dimensions)	\$ 6,000
Soft Landscaping (including allowance for \$5,000 for plants and trees)	\$ 5,000.00
Landscape Design allowance \$500 (including GST)	\$ 500.00
Piers and drop edge beams allow a PS of \$ 5,000.00 (including GST)	\$ 5,000.00
Air-conditioning allow a PS of \$ 10,000.00 (including GST)	\$ 10,000.00
Agents Commission allowance \$5,000 (including GST)	\$ 5,000.00
Total Building Contract Price (including GST)	\$ 297,792.75

ESTIMATED BUILDING CONTRACT PRICE - House and Land Packages

Estimated Building Contract Price for each lot including all allowances and exclusions

The Estimated Building Contract Price should also include:-

- Construction of the Dwelling to comply with the Design Kit and Guidelines;
- Site costs based on the site classification "M" and wind classification N2.;
- Include an "Amplimesh" or equal Security Screen Door to the Front Door;
- An allowance for landscaping costs including retaining walls, paths, driveways, letterboxes, fences, turf, and planting based each individual lot plan.
- Soft landscaping elements such as turf, and planting. (Include a PS of \$5,000 for turf, plants and trees on each lot);
- Allow a PS of \$ 5,000.00 for piers and drop edge beams
- Allow a PS of \$ 500.00 for preparation of a landscape plan
- Allow a PS of \$ 10,000.00 for air-conditioning.
 - Site will be NBN reticulated, assume base fibre optic installation (1 x data, 1 x phone and 1 x TV. No allowance for structured wiring and home hub).
 - Allow connections of services within 10 metres of the home.
 - Assume all services will be located inside the lot.
- Assume free for view TV will be part of the fibre.
- Project Sales Agents commission on the building contract (\$5,000 per dwelling).
- Details of any other provision sums/ allowances; and,
- Details of any exclusions.

Lot No 171

Provide a price breakdown including GST as follows for each lot

House Price (complies with the Design Kit and Guidelines)	\$ <u>253,292.75</u>
Site Costs	\$ <u>12,000</u>
Security Screen Door	\$ <u>1,000</u>
Hard Landscaping (including retaining walls, driveways, paths and fences based on the actual lot dimensions)	\$ <u>6,000</u>
Soft Landscaping (including allowance for \$5,000 for plants and trees)	\$ 5,000.00
Landscape Design allowance \$500 (including GST)	\$ 500.00
Piers and drop edge beams allow a PS of \$ 5,000.00 (including GST)	\$ 5,000.00
Air-conditioning allow a PS of \$ 10,000.00 (including GST)	\$ 10,000.00
Agents Commission allowance \$5,000 (including GST)	\$ 5,000.00
Total Building Contract Price (including GST)	\$ <u>297,792.75</u>

ESTIMATED BUILDING CONTRACT PRICE – House and Land Packages

Provide a price breakdown including GST as follows for each lot

The Estimated Building Contract Price should also include:-

- Construction of the Dwelling to comply with the Design Kit and Guidelines;
- Site costs based on the site classification "M" and wind classification N2.;
- Include an "Amplimesh" or equal Security Screen Door to the Front Door;
- An allowance for landscaping costs including retaining walls, paths, driveways, letterboxes, fences, turf, and planting based each individual lot plan.
- Soft landscaping elements such as turf, and planting. (Include a PS of \$5,000 for turf, plants and trees on each lot);
- Allow a PS of \$ 5,000.00 for piers and drop edge beams
- Allow a PS of \$ 500.00 for preparation of a landscape plan
- Allow a PS of \$ 10,000.00 for air-conditioning.
 - Site will be NBN reticulated, assume base fibre optic installation (1 x data, 1 x phone and 1 x TV. No allowance for structured wiring and home hub).
 - Allow connections of services within 10 metres of the home.
 - Assume all services will be located inside the lot.
- Assume free for view TV will be part of the fibre.
- Project Sales Agents commission on the building contract (\$5,000 per dwelling).
- Details of any other provision sums/ allowances; and,
- Details of any exclusions.

Lot No 173

Provide a price breakdown including GST as follows for each lot

House Price (complies with the Design Kit and Guidelines)	\$ 253,292.75
Site Costs	\$ 12,000
Security Screen Door	\$ 1,000
Hard Landscaping (including retaining walls, driveways, paths and fences based on the actual lot dimensions)	\$ 6,000
Soft Landscaping (including allowance for \$5,000 for plants and trees)	\$ 5,000.00
Landscape Design allowance \$500 (including GST)	\$ 500.00
Piers and drop edge beams allow a PS of \$ 5,000.00 (including GST)	\$ 5,000.00
Air-conditioning allow a PS of \$ 10,000.00 (including GST)	\$ 10,000.00
Agents Commission allowance \$5,000 (including GST)	\$ 5,000.00
Total Building Contract Price (including GST)	\$ 297,792.75

ESTIMATED BUILDING CONTRACT PRICE - House and Land Packages

Provide a price breakdown including GST as follows for each lot

The Estimated Building Contract Price should also include:-

- Construction of the Dwelling to comply with the Design Kit and Guidelines;
- Site costs based on the site classification "M" and wind classification N2.;
- Include an "Amplimesh" or equal Security Screen Door to the Front Door;
- An allowance for landscaping costs including retaining walls, paths, driveways, letterboxes, fences, turf, and planting based each individual lot plan.
- Soft landscaping elements such as turf, and planting. (Include a PS of \$5,000 for turf, plants and trees on each lot);
- Allow a PS of \$ 5,000.00 for piers and drop edge beams
- Allow a PS of \$ 500.00 for preparation of a landscape plan
- Allow a PS of \$ 10,000.00 for air-conditioning.
 - Site will be NBN reticulated, assume base fibre optic installation (1 x data, 1 x phone and 1 x TV. No allowance for structured wiring and home hub).
 - Allow connections of services within 10 metres of the home.
 - Assume all services will be located inside the lot.
- Assume free for view TV will be part of the fibre.
- Project Sales Agents commission on the building contract (\$5,000 per dwelling).
- Details of any other provision sums/ allowances; and,
- Details of any exclusions.

Lot No 174

Provide a price breakdown including GST as follows for each lot

House Price (complies with the Design Kit and Guidelines)	\$ 253,292.75
Site Costs	\$ 12,000
Security Screen Door	\$ 1,000
Hard Landscaping (including retaining walls, driveways, paths and fences based on the actual lot dimensions)	\$ 6,000
Soft Landscaping (including allowance for \$5,000 for plants and trees)	\$ 5,000.00
Landscape Design allowance \$500 (including GST)	\$ 500.00
Piers and drop edge beams allow a PS of \$ 5,000.00 (including GST)	\$ 5,000.00
Air-conditioning allow a PS of \$ 10,000.00 (including GST)	\$ 10,000.00
Agents Commission allowance \$5,000 (including GST)	\$ 5,000.00
Total Building Contract Price (including GST)	\$ 297,792.75

ESTIMATED BUILDING CONTRACT PRICE – House and Land Packages

Provide a price breakdown including GST as follows for each lot

The Estimated Building Contract Price should also include:-

- Construction of the Dwelling to comply with the Design Kit and Guidelines;
- Site costs based on the site classification "M" and wind classification N2.;
- Include an "Amplimesh" or equal Security Screen Door to the Front Door;
- An allowance for landscaping costs including retaining walls, paths, driveways, letterboxes, fences, turf, and planting based each individual lot plan.
- Soft landscaping elements such as turf, and planting. (Include a PS of \$5,000 for turf, plants and trees on each lot);
- Allow a PS of \$ 5,000.00 for piers and drop edge beams
- Allow a PS of \$ 500.00 for preparation of a landscape plan
- Allow a PS of \$ 10,000.00 for air-conditioning.
 - Site will be NBN reticulated, assume base fibre optic installation (1 x data, 1 x phone and 1 x TV. No allowance for structured wiring and home hub).
 - Allow connections of services within 10 metres of the home.
 - Assume all services will be located inside the lot.
- Assume free for view TV will be part of the fibre.
- Project Sales Agents commission on the building contract (\$5,000 per dwelling).
- Details of any other provision sums/ allowances; and,
- Details of any exclusions.

Lot No 175

Provide a price breakdown including GST as follows for each lot

House Price (complies with the Design Kit and Guidelines)	\$ 253,292.75
Site Costs	\$ 12,000
Security Screen Door	\$ 1,000
Hard Landscaping (including retaining walls, driveways, paths and fences based on the actual lot dimensions)	\$ 6,000
Soft Landscaping (including allowance for \$5,000 for plants and trees)	\$ 5,000.00
Landscape Design allowance \$500 (including GST)	\$ 500.00
Piers and drop edge beams allow a PS of \$ 5,000.00 (including GST)	\$ 5,000.00
Air-conditioning allow a PS of \$ 10,000.00 (including GST)	\$ 10,000.00
Agents Commission allowance \$5,000 (including GST)	\$ 5,000.00
Total Building Contract Price (including GST)	\$ 297,792.75

ESTIMATED BUILDING CONTRACT PRICE – House and Land Packages

Price includes a standard 100 sqm 3 bedroom house on each dwelling site (subject to actual lot area)

The Estimated Building Contract Price should also include:-

- Construction of the Dwelling to comply with the Design Kit and Guidelines;
- Site costs based on the site classification "M" and wind classification N2.;
- Include an "Amplimesh" or equal Security Screen Door to the Front Door;
- An allowance for landscaping costs including retaining walls, paths, driveways, letterboxes, fences, turf, and planting based each individual lot plan.
- Soft landscaping elements such as turf, and planting. (Include a PS of \$5,000 for turf, plants and trees on each lot);
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- Allow a PS of \$ 500.00 for preparation of a landscape plan
- Allow a PS of \$ 10,000.00 for air-conditioning.
 - Site will be NBN reticulated, assume base fibre optic installation (1 x data, 1 x phone and 1 x TV. No allowance for structured wiring and home hub).
 - Allow connections of services within 10 metres of the home.
 - Assume all services will be located inside the lot.
- Assume free for view TV will be part of the fibre.
- Project Sales Agents commission on the building contract (\$5,000 per dwelling).
- Details of any other provision sums/ allowances; and,
- Details of any exclusions.

Lot No 176

Provide a price breakdown including GST as follows for each lot

House Price (complies with the Design Kit and Guidelines)	\$ 253,292.75
Site Costs	\$ 12,000
Security Screen Door	\$ 1,000
Hard Landscaping (including retaining walls, driveways, paths and fences based on the actual lot dimensions)	\$ 6,000
Soft Landscaping (including allowance for \$5,000 for plants and trees)	\$ 5,000.00
Landscape Design allowance \$500 (including GST)	\$ 500.00
Piers and drop edge beams allow a PS of \$ 5,000.00 (including GST)	\$ 5,000.00
Air-conditioning allow a PS of \$ 10,000.00 (including GST)	\$ 10,000.00
Agents Commission allowance \$5,000 (including GST)	\$ 5,000.00
Total Building Contract Price (including GST)	\$ 297,792.75

ESTIMATED BUILDING CONTRACT PRICE – House and Land Packages

See Attachment 1 for details on the lot dimensions, landscaping and other lot in the Package

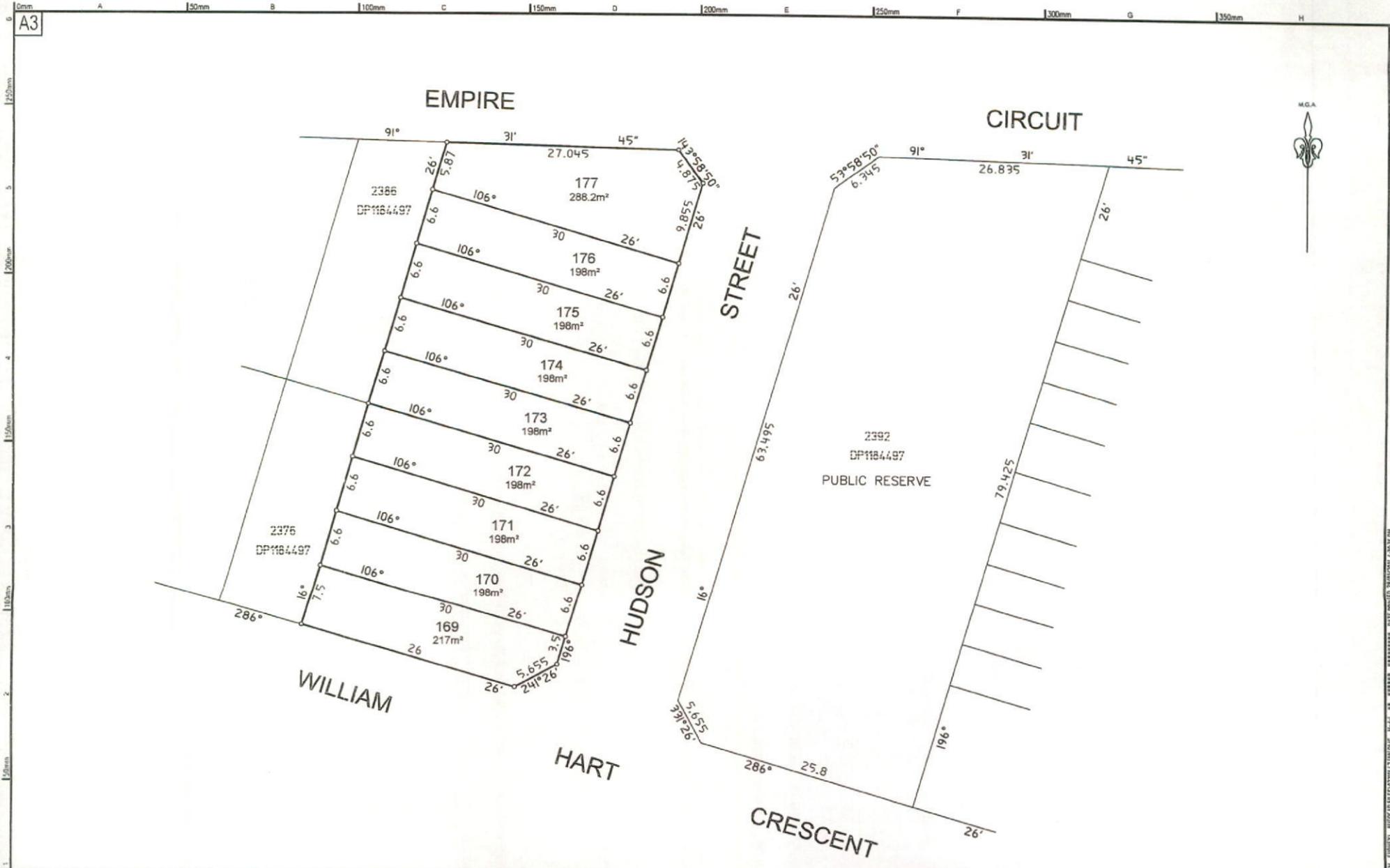
The Estimated Building Contract Price should also include:-

- Construction of the Dwelling to comply with the Design Kit and Guidelines;
- Site costs based on the site classification "M" and wind classification N2.;
- Include an "Amplimesh" or equal Security Screen Door to the Front Door;
- An allowance for landscaping costs including retaining walls, paths, driveways, letterboxes, fences, turf, and planting based each individual lot plan.
- Soft landscaping elements such as turf, and planting. (Include a PS of \$5,000 for turf, plants and trees on each lot);
- Allow a PS of \$ 5,000.00 for piers and drop edge beams
- Allow a PS of \$ 500.00 for preparation of a landscape plan
- Allow a PS of \$ 10,000.00 for air-conditioning.
 - Site will be NBN reticulated, assume base fibre optic installation (1 x data, 1 x phone and 1 x TV. No allowance for structured wiring and home hub).
 - Allow connections of services within 10 metres of the home.
 - Assume all services will be located inside the lot.
- Assume free for view TV will be part of the fibre.
- Project Sales Agents commission on the building contract (\$5,000 per dwelling).
- Details of any other provision sums/ allowances; and,
- Details of any exclusions.

Lot No 177

Provide a price breakdown including GST as follows for each lot

House Price (complies with the Design Kit and Guidelines)	\$ 281,731.26
Site Costs	\$ 14,000
Security Screen Door	\$ 1,000
Hard Landscaping (including retaining walls, driveways, paths and fences based on the actual lot dimensions)	\$ 6,000
Soft Landscaping (including allowance for \$5,000 for plants and trees)	\$ 5,000.00
Landscape Design allowance \$500 (including GST)	\$ 500.00
Piers and drop edge beams allow a PS of \$ 5,000.00 (including GST)	\$ 5,000.00
Air-conditioning allow a PS of \$ 10,000.00 (including GST)	\$ 10,000.00
Agents Commission allowance \$5,000 (including GST)	\$ 5,000.00
Total Building Contract Price (including GST)	\$ 328,231.26



Project: **NORTH PENRITH: LOT 2391 - PLAN OF PROPOSED SUBDIVISION**

Principal: URBANGROWTH NSW			
Scale: 1:400 @ A3	Date: 28/01/2014	Council Ref.	
Datum: N/A	L.G.A. PENRITH		
Calc's: GH	Drawn: GH	Proj.Man: DB	Client Ref.



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Our Ref. **072-10**
Deep File Ref. (Rev) - Sheet Ref.
07210L47 [00] - Model

CAD REF: 2102-010821-PENRITH - SUBDIVISION - AUTOCAD FILE: 20140128_1710.DWG - Title - 14 - 082108 - 1000000000 - DATE PLOTTED: 28/01/2014 4:30:26 PM

LOT 169 – Lot 177 Hudson Street Documents

1. UrbanGrowth Consent Letter
2. Architectural Plans
3. Landscape Plans
4. BASIX Certificate
5. Statement of Environmental Effects
6. Compliance Table
7. Waste Management Plan
8. Waste Management & Sediment Plan
9. Proposed Subdivision Plan



Development Application
Statement of Environmental Effects

North Penrith
Staged Integrated Housing Development
Submitted to Penrith City Council
On Behalf of UrbanGrowth

Thornton Terraces
Lot 169 – Lot 177 (Lot 2391 DA14/0923)
Hudson Street,
North Penrith NSW 2750

Instructions on how to complete the following Statement of Environmental Effects (SEE) Template

- This Statement of Environmental Effects (SEE) template includes a number of 'help boxes' located throughout the document to provide instructions on how to assist you with preparing and filling in the SEE for your project.
- Simply follow the advice in the box and then delete each box before finalising the SEE document ready for lodgement with the DA.
- Each section of the SEE template includes text that is highlighted in grey. These sections are to be replaced with specific information about the project (e.g. site area, lot numbers, etc.) or are to be amended to suit the development, or can be utilised if the text is considered an appropriate response.
- The SEE template has been prepared to cover a range of key and potential issues and may address matters which are not relevant to the application. Where matters are not deemed relevant, these should either be deleted or stated that these are not relevant.
- Key sections that must be completed include Sections 1.0 (Introduction), 2.0 (Site Analysis), 3.0 (Description of Proposed Development) and 4.0 (Conclusion). These sections have been prepared so that you need to insert relevant information specific to your specific development.
- Section 4.0 includes a range of key assessment matters that relate to the development. Please amend to suit the DA and add any additional written assessment as maybe relevant to the SEE.
- It is important to start with a fresh template each time an SEE is prepared in order to ensure that all the relevant matters are tailored to each DA/project

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1.0 Introduction

This Statement of Environmental Effects (SEE) is submitted to Penrith City Council in support of a Development Application (DA) for integrated housing as part of Stage 2C and 2D of the North Penrith project.

This DA seeks approval for:

- subdivision of Lot 1197 in DP1171491 to create future Lot 2391 as per DA14/0923 for 9 Torrens Title Lots; and
- construction of 9 abutting dwellings and associated landscaping and parking

The SEE has been prepared by Trend Connection Pty Ltd on behalf of UrbanGrowth, and is based on the Architectural Drawings provided by DKO Architecture the following reports:

- Subdivision Plans prepared by Craig & Rhodes
- Statement of Environmental Effects
- Compliance Table
- Landscape Plans prepared by Ecodesign
- BASIX Certificates
- Sediment and Erosion Control Plans
- Waste Management Plan

This report describes the site, its environs, the proposed development, and provides an assessment of the proposal in terms of the matters for consideration under Section 79C(1) of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

1.1 Planning Background

On 9 November 2011, the Minister for Planning approved Concept Plan (MP 09-04536) and gazetted an amendment to Schedule 3 of the State Environmental Planning Policy (Major Development) 2005 (Major Development SEPP) for the redevelopment of the North Penrith site.

The Concept Plan and the Schedule 3 amendment were intended to facilitate the development of a transit oriented and cohesive mixed uses development incorporating residential, retail, commercial, business, civic, community, industrial and recreation uses.

The NSW Minister for Planning then made the State Environmental Planning Policy Amendment (North Penrith) 2011 which amended the Penrith City Centre Local Environmental Plan 2008 (LEP 2008). Therefore the zoning, building height standards and heritage provisions that relate to North Penrith are now regulated under LEP 2008.

Various Project Applications have also been approved by the Minister for Planning in accordance with the Concept Plan for bulk earthworks, construction of roads and large lot subdivision.

1.2 Project Background

Each proposed development is subject to pre-assessment by UrbanGrowth before it is submitted to Penrith Council for DA assessment.

1.3 Site Location and Context

The North Penrith site is located approximately 50 km to the west of Sydney CBD on the northern side the Penrith CBD. The North Penrith site's southern boundary adjoins the Penrith Railway Station. The North Penrith site is between Lemongrove Road to the east and Castlereagh Road to the west both of which are accessible via Coreen Avenue to the north – see **Figure 1**.



Figure 1 – Location of North Penrith site

1.4 Site Description

The site of the proposed integrated development (herein referred to as 'the site') is 1891.2m² in area and is legally described as:

- Lot 2391 as per DA14/0923 currently with Penrith Coty Council.

A location plan of the site in its context to the rest of North Penrith is included with the Architectural Plans submitted with this DA.

The location of the site of the proposed development is within the residential precinct B5 as shown in **Figure 2** and within the Concept Plan site as shown on the Location Plan at **Figure 3**.



Figure 1 – Location plan

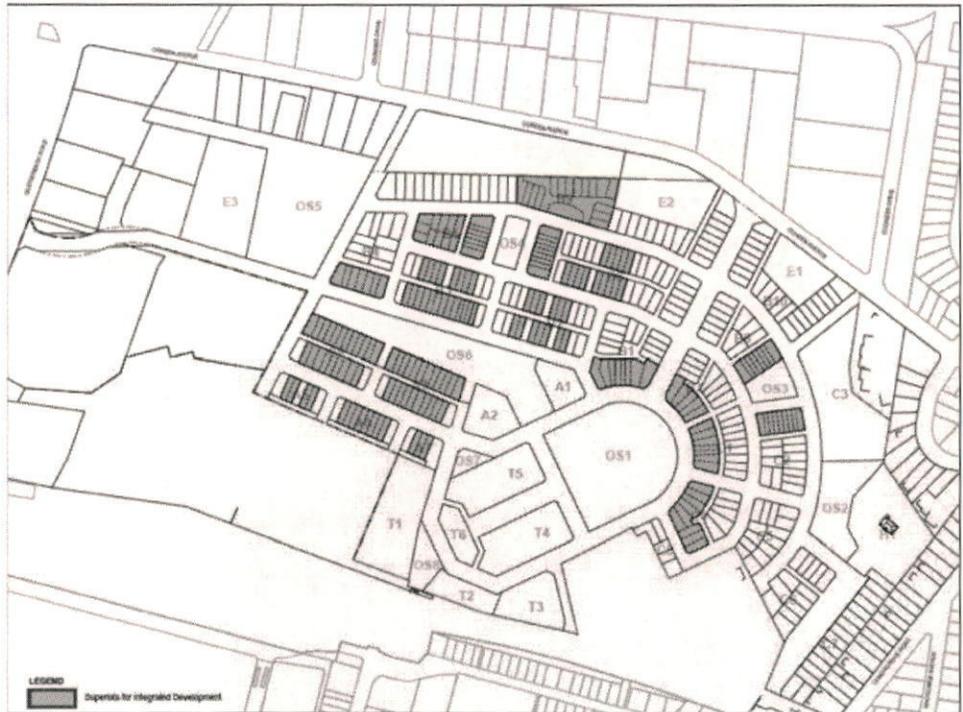


Figure 2 – Location of Integrated Housing development throughout North Penrith site

The site's levels are currently being prepared as part of a previously approved Project Application for earth works. Once completed the site will have a gradual slope to the south. The site is cleared of existing vegetation and does not contain any existing structures.

The site has direct frontage to Hudson Street and has rear access via William Hart Crescent.

2.0 Description of Proposed Development

This chapter of the report provides a detailed description of the proposed development. Architectural and Landscape drawings included with the DA.

This DA seeks approval for:

- construction of 9 abutting dwellings and associated landscaping and parking on Lot 2391 as per DA14/0923

Table 1 provides an overview of the key development information relating to the development.

2.1 Dwelling Designs

The architectural character of each of the proposed dwellings has been designed in accordance with the development principles included in the North Penrith Design Guidelines.

2.2 External Materials and Finishes

The proposed external materials and finishes are shown on the Architectural Plans have been selected from the Residential Design Palette included in the North Penrith Design Guidelines to provide a contemporary appearance and ensure use of modern and lightweight materials.

2.3 Subdivision

It is proposed to subdivide Lot 2391 into 9 Torrens Title allotments. The lots range from 198m² – 288.2m². A draft plan of the proposed subdivision is included with the DA.

2.4 Separate Construction and Occupation Certificates

To facilitate staged construction and occupation of each of the proposed dwellings, we request that Council insert the following as a condition of consent into the approved written consent for the development:

“Staging of construction and occupation – Notwithstanding any other condition of this consent, the consent permits separate Construction Certificates and Occupation Certificates to be issued for the development and approved by this consent for each approved dwelling, provided that all conditions of consent the relevant to that dwelling have been complied with prior to the release of the Construction Certificate or Occupation Certificate for that dwelling.”

Table 1 - Key development information

Dwelling - Key development information	Site Area (m ²)	GFA (m ²)	Height ¹ (m) & Storeys	Height of each floor	Front Setback (m)	Private Open Space (m ²)	Principal Private Open Space (m ²)	Car Spaces
Lot 169	217	242.2	7.860m & 2 Storeys	GF - 2.7m FF - 2.44m	4.245m	49.4	18	2
Lot 170	198	165.3	7.745m & 2 Storeys	GF - 2.7m FF - 2.44m	4.240m	77.7	18	1+1
Lot 171	198	158.8	7.390m & 2 Storeys	GF - 2.7m FF - 2.44m	4.240m	77.7	18	1+1
Lot 172	198	158.8	7.280m & 2 Storeys	GF - 2.7m FF - 2.44m	4.240m	77.7	18	1+1
Lot 173	198	165.3	7.320m & 2 Storeys	GF - 2.7m FF - 2.44m	5.240m	71.1	18	1+1
Lot 174	198	165.3	7.075m & 2 Storeys	GF - 2.7m FF - 2.44m	5.240m	71.1	18	1+1
Lot 175	198	158.8	6.745m & 2 Storeys	GF - 2.7m FF - 2.44m	4.240m	77.7	18	1+1
Lot 176	198	158.8	6.820m & 2 Storeys	GF - 2.7m FF - 2.44m	4.240m	77.7	18	1+1
Lot 177	288.2	171.6	7.220m & 2 Storeys	GF - 2.7m FF - 2.44m	4.740m	78	25.5	1+1

¹ **building height** (or **height of building**) means the vertical distance between ground level (existing) and the highest point of the building, including plant and lift overruns, but excluding communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like. (Standard Instrument (Local Environmental Plan) Order 2006

2.5 Easements

2.6 Landscape and Open Space

The proposed landscape treatment for each residential lot is shown in the proposed Landscape Plans and has been designed to contribute to the overall design of the dwelling and to provide versatile and functional outdoor living areas.

It should be noted that the landscape embellishment of the adjoining streetscape will be delivered as part of the approved and relevant Project Application for the North Penrith site.

2.7 Access and Parking for Dwellings

The majority of the residential lots and dwellings will be accessed from the roads they front onto via driveways leading directly from the roads.

Lots 169 are accessed via the rear of the lot via a secondary street. All dwellings are to have either single or double garages. Where single garages are proposed, sufficient driveway space to accommodate a second car space.

2.8 Stormwater & Sediment & Erosion Control

The drains will connect to the stormwater drainage infrastructure within the roads, as approved as part of the relevant approved Project Application. The proposed lots have been designed to allow stormwater to either drain directly to the roads which they front onto or via collective rear easements. All stormwater will ultimately drain into the overall integrated stormwater management system for the broader North Penrith site.

In carrying out subdivision works, control measures will be implemented during in accordance with the erosion and sediment control plans included with the DA.

2.9 Utility Services

Telephone, electricity, gas, water and sewer services will be installed underground within each of the adjoining road reserves. These services will be installed within trenches in the road reserves.

3.0 Assessment of Planning Issues

Under Section 79C(1) of the EP&A Act, in determining a development application the consent authority has to take into account a range of matters relevant to the development including the provisions of environmental planning instruments; impacts of the built and natural environment, the social and economic impacts of the development; the suitability of the site; and whether the public interest would be served by the development.

A number of planning issues which would usually be considered as part of a DA were addressed as part of the Concept Plan and Project Application Environmental Assessments. As the proposed development is consistent with the Concept Approval this does not require further assessment (see Section 4.2). The issues include:

- Social and Economic Issues
- Community Services and Facilities
- Transport and Accessibility
- European Heritage
- Indigenous Heritage
- Geotechnical, Soil and Contamination
- Biodiversity
- Visual Impact
- Water and Hydrology
- Ecological Sustainable Development
- Utilities and Infrastructure
- Crime and Public Safety

Pursuant to Section 75P(1)(a) of the EP&A Act, Schedule 3 of the North Penrith Concept Approval sets out specific future environmental assessment requirements that apply to the subject development under Part 4 of the EP&A Act.

Accordingly, the assessment provided in this SEE includes the aforementioned matters in addition to other potential planning issues which are relevant to the detailed design of the building under the Concept Approval.

3.1 Compliance with Relevant Strategic and Statutory Plans and Policies

The DA's consistency and compliance with the relevant statutory plans and policies is located in **Table 2** below. The detailed Tables of Compliance included with the DA demonstrates how the development complies with the North Penrith Design Guidelines. Variations to, and non-compliance with, the key standards and guidelines highlighted in the table are discussed in detail in the following sub-sections of this environmental assessment.

Table 2 – Summary of consistency with key strategic and statutory plans and policies

Instrument/Strategy	Comments
State Planning Instruments and Controls	
SEPP 55	The Stage Project Application will undertake/has undertaken the necessary works to ensure the site is suitable for the proposed residential use.
SEPP (BASIX)	BASIX Certificates are included with the DA

Instrument/Strategy	Comments	
SREP No. 20 Hawkesbury Nepean River	<p>The proposed development complies with the broad aims and objectives of the SREP in that it will not have any direct impact on any environmentally sensitive areas, or the water quality or quantity of the aquatic ecosystem on the site, which the SREP seeks to preserve.</p> <p>Consideration of the impacts of proposed development has been undertaken in accordance with the aims of the SREP and its strategies.</p> <p>Impacts of this proposal were considered during the Concept Plan and relevant Project Application before the preparation of this application.</p>	
Local Planning Instruments and Controls		
Penrith City Centre LEP 2008 (Part 7)	CI 49 - Zoning	The site is zoned as R1 General Residential
	CI 50 – Land Use Table – Zone R1	The proposed development is permissible within the R1 General Residential Zone.
	CI 51 - Height of Buildings	The proposed development will have a maximum height of 9 or 12m and as such complies with clause 51.
	CI 53 – Architectural Roof Features	The development does not include an architectural roof feature that exceeds the height limit set out in clause 51.
	CI 54 – Heritage Conservation	The site is not on land where a heritage item is located or in the vicinity of a heritage item.
	CI 55 - Earthworks	The proposal does not include substantive earthworks.
North Penrith Design Guidelines	<p>A detailed assessment of the development against the relevant controls of the Design Guidelines is included in the Tables of Compliance with this DA.</p> <p>The development is generally able to comply with the required controls in the Guidelines. Where the development is not able to comply with relevant requirement of the Guidelines justification is included in the Tables of Compliance included with the DA.</p>	

3.2 Consistency with the Concept Plan

The North Penrith Concept Plan Approval established the vision and planning framework to be used by Penrith Council to assess the detailed design of the future buildings on the site. The Concept Plan Approval contains:

- Terms of Approval;
- Future Environmental Assessment Requirements;
- Statement of Commitments; and
- North Penrith Design Code.

Development for the purpose of residential dwellings and the proposed subdivision layout is consistent with the Concept Plan Terms of Approval and Statement of Commitments.

3.3 Urban Design and Built Form

The proposed design and layout for development is considered suitable given that:

- the provision of more compact and efficiently shaped allotments enables affordable, yet amenable dwelling designs to be constructed;
- the subdivision pattern maximises the opportunity for a greater number of dwellings to obtain views across the public open space and the public domain; and
- the dwelling designs endeavour to ensure that a high quality product continues to be delivered within the North Penrith site.

All proposed dwelling allotments fully comply with the minimum allotment dimensions required by Section 3.2 of North Penrith Design Code.

Proposed residential subdivision allotments are accompanied by plans for the proposed dwellings on those lots.

3.3.1 Design Quality & Streetscape

The proposed dwelling designs ensure a high quality product continues to be delivered within the North Penrith site that generally accords with the objectives and outcomes sought by the North Penrith Design Guidelines. The proposed dwellings will have a positive impact upon the built environment and streetscape in that:

- a mix of one, two and three storey dwellings are provided, which provide built variety to the streetscape;
- the proposed dwellings are sympathetic in terms of scale, height, bulk and design in accordance with that envisaged in the Design Guidelines;
- the dwellings are appropriately designed to respond to the microclimate including sun, shade, breeze and general weather;
- the dwellings incorporate appropriate materials, textures, forms and colours that complement the local landscape and other future residential development;
- the proposed designs ensure that affordable housing designs are provided to the market; and
- the proposed designs are of a high quality contemporary architectural design which will contribute to the character of the local environment and provide an attractive visual outlook; and
- the use of architectural elements such as porches, define the dwelling entries and facades.

3.3.2 Building Envelopes

All proposed dwellings fully comply with the minimum required building envelope controls at Section 3.3 of the North Penrith Design Code.

Variations to these requirements for proposed Lots 169 is considered acceptable for the following reasons:

- The second storey depth exceeds the maximum 15m described in the design code and is 16.720m. This variation was required due to the dimensional constraints on the lot to achieve a function floor plan and adequate living areas. This is considered acceptable as it is on the southernmost lot and therefore has no adverse effect on neighbouring properties and allows for more generous living and bedroom areas within the dwelling.
- The second storey volume on lot 169 complies with the setback requirements detailed in Figure 9 of section 3.3 of the design code for corner lots with a frontage of less than 8m. It achieves the 2m minimum side setback and 3m front setback for

the primary building. This volume allows a greater expression of the architecture and is consistent with the modern design of the other dwellings in the Hudson Street streetscape. As this is on the southernmost lot there is no adverse effect on neighbouring properties.

- the aims and objectives of the Design Code are not compromised

Minor variations to these requirements for proposed Lots 173, 174 and 177 is considered acceptable for the following reasons:

- Lots 173, 174 and 177 have been set back an additional 1m from the adjacent dwellings. As such the front façade line is 5.240m, which is greater than the 3m to 4.5m in the design code. This variation is considered acceptable as it relieves the rear façade of the development and adds visual interest which will be visible on approach from Empire Circuit and William Hart Crescent. Additionally it provides greater streetscape articulation and variation to Hudson Street.
- the aims and objectives of the Design Code are not compromised

3.3.3 Overshadowing

The Architectural Plans include shadow diagrams depicting the shadows cast by each dwelling at 9am, 12noon and 3pm during the winter solstice.

With exception of Lots 169, these diagrams show that the development is able to achieve the required 2 hours of solar access between 9am and 3pm during the winter solstice.

The reduced provision of solar access to Lots 169 is considered acceptable for the following reasons:

- the other private open space areas on each lot receives adequate solar access between 9am and 3pm during the winter solstice;
- the private open space areas face south, however this orientation affords the opportunity of views and outlook;
- the east facing front yards could also be used as private open space given their relationship with the central open space opposite each of the lots;
- the private open space areas are directly accessible from the living rooms, maximise privacy for the occupants and neighbours and are suitably positioned away from the road;
- the proposed dwelling designs comply and exceed the minimum provision requirements for landscape open space and private open space; and
- the aims and objectives of the Design Code are not compromised.

3.3.4 Privacy

The proposed dwellings have been designed to minimise the potential for adverse visual and acoustic privacy impacts on the adjacent dwellings. The dwellings have been designed to ensure windows are off-set against windows of neighbouring dwellings, at both ground and first floor.

Furthermore, the main living rooms are all located on the ground floor – opening to the rear of the lot - and bedrooms are located on the first floor. All of the dwellings provide adequate setbacks, so as not to impact on the visual privacy of neighbouring dwellings.

3.3.5 Internal Amenity

The internal layouts of the dwellings provide open plan layouts for ease of movement and efficient use of space. All bedrooms are adequately sized, generally have built in storage and have easy access to bathrooms.

3.4 Landscape Design

Proposed landscaping for the development has been designed in accordance with the development controls for private open space and landscaping included at Section 3.5 of the North Penrith Design Guidelines.

The proposed landscaping for the development is appropriate for the site given that:

- the gardens are compatible in scale and form with the corresponding dwelling;
- the integrated outdoor and internal living areas, allow outdoor areas to act an extension of the internal living areas;
- reduced stormwater runoff, increased water infiltration and beneficial air and water exchange to tree roots through the use of porous and permeable paving solutions such as gravel; and
- it will integrate with and complement landscaping in the public domain of North Penrith.

3.5 Construction and waste management

The sediment and erosion plan submitted outlines the necessary measures that will ensure soil and sediment remains on site and is prevented from entering the broader stormwater system for the North Penrith site.

Further, all waste material resulting from construction and subdivision work on the site will be disposed of, recycled or reused in accordance with the parameters set out in the Waste Management Plan included with the DA.

3.6 Stormwater management

The proposed integrated approach to the stormwater management will:

- protect natural systems – including the rehabilitated lake system and further downstream, the protected wetland and the greater Hawkesbury- Nepean Catchment;
- integrate stormwater management with the provision of open space;
- protect water quality – by filtering stormwater from the urban environment prior to draining to the lake system;
- reduce run-off and peak flows – through localised detention measures; and
- add value while maintaining development costs in its construction and long term maintenance.

3.7 Contamination

Investigations undertaken as part of the Concept Plan assessment have concluded that the site is suitable for the proposed development without need for further investigations or remediation. Hence, the site is suitable for the proposed development with regard to the issue of contamination.

3.8 Social and Economic Impacts

This proposal will further commence the transformation of vacant and disused land into a functioning and attractive residential community.

During construction, construction personnel are likely to patronise local shops and services - providing a temporary economic benefit to these businesses. New residents will also patronise local shops and services and start to develop a residential community as envisaged.

3.9 Site Suitability

The site is considered suitable for the proposed development on the basis that it:

- does not contain any heritage items, nor is it associated with heritage values;
- contains the necessary services to support development such as water, sewer reticulation, electricity and telecommunications;
- will include the necessary infrastructure to support residential development including the provision of roads and stormwater measures.

The proposed development is suitable for the site in that it:

- is permissible with consent;
- adds to the diversity of residential development to be delivered throughout the North Penrith site;
- will provide diversity in the design outcomes for the streetscapes throughout the North Penrith site;
- the development generally complies with the relevant built form development controls within the North Penrith Design Guidelines; and
- will provide additional housing choice for local populations.

3.10 Public Interest

The development proposed in this application will contribute to the overall delivery of a unique residential development that will complement and support the Penrith Town Centre as envisaged by the approved Concept Plan and the North Penrith Design Guidelines. Hence, no element of the proposal will be detrimental to the public interest.

Table of Compliance – LOT 2391, North Penrith

Section	Provisions	Proposal	Compliance (Y/N or N/A)
North Penrith Design Code			
3.2 Subdivision	(1) All applications for Torrens title subdivision proposing residential allotments on land identified at Figure 7, or with a site area of less than 235m ² and with a lot width of less than 8m (as measured at the front facade line) are to be accompanied by plans for the proposed dwellings on those lots (ie an Integrated Development Application). The minimum number of allotments within an 'integrated development' is generally to be 3, except where indicated on Figure 7.	The proposal is for an integrated housing development that is consistent with the terms of the Concept Plan and the relevant Project Application.	Y
	(2) For residential allotments with a width greater than or equal to 8m (measured at the front facade line), the subdivision application must include a Building Envelope Plan. The Building Envelope Plan is to: <ul style="list-style-type: none"> demonstrate that an appropriate built form and residential amenity can be delivered on the allotment in compliance with the relevant provisions of this DCP, nominate elements such as front and side building setbacks, the location of zero lot lines, the preferred locations of private open space and garages and specific fencing requirements, nominate the minimum yield required of any 'super-lot' and / or for residual Integrated Development Application sites. 		N/A
	(3) The location of the zero lot line is to be determined with regard to allotment orientation and the ability to achieve with solar access provisions. Where a zero lot line is nominated on an allotment on the Building Envelope Plan, the adjoining allotment is to include a 900mm easement for maintenance of the boundary wall (and any services along the side of the dwelling / garage) on the adjoining property. No overhanging eaves or the like will be permitted within the easement. The s88B instrument supporting the easement is to be worded so that Council is removed from any dispute resolution process between adjoining allotments.	The proposed zero lot lines have been approved under the Building Envelopes Plan. The required maintenance easement will be created and is shown in draft form on the Draft Plan of Subdivision.	

Section	Provisions	Proposal	Compliance (Y/N or N/A)
	<p>(4) For residential development within the R1 zone (except for residential flat buildings):</p> <ul style="list-style-type: none"> the lot depth is generally to be between 25m and 30m, and the minimum lot width is 4.5m (for attached dwellings / semi-detached dwellings) and 8m for dwelling houses). 	<p>The Draft Plan of Subdivision demonstrates that the lots comply with the DCP controls, in that they:</p> <ul style="list-style-type: none"> are within the preferred range of lot depths of 25-30m; achieve the minimum lot widths of 6.6m; and are rectangular in shape and oriented to facilitate good dwelling siting and solar access to the POS. 	Y
	<p>(5) Residential allotments should be rectangular and be oriented to facilitate siting of dwellings and private open space to take advantage of winter solar access and summer sun deflection. The use of battle-axe lots is to be avoided where possible.</p>		
3.3 Building Envelopes	<p>(1) The maximum number of storeys for residential development is shown at Figure 8. The maximum number of storeys for the site is three (3).</p>	<p>The dwelling will have 2 storeys – which complies with the 3 storey height limit specified in Figure 8.</p>	Y
	<p>(2) For all residential development (excluding residential flat buildings), the floor area of the third storey is to be no more than 60% of the second storey.</p>	<p>No habitable third stories are proposed.</p>	N/A
	<p>(3) The location and siting of the third storey is to ensure adequate solar access and privacy for the lot and adjacent residential lots.</p>	<p>No habitable third storeys are proposed.</p>	N/A
	<p>(4) Development adjacent to a laneway (i.e. ancillary dwelling) is to be no more than 2 storeys.</p>	<p>The proposal does not include development adjacent to a laneway.</p>	N/A
	<p>(5) For 1 - 3 storey residential development within the R1 zone (except for ancillary dwellings), a minimum floor to ceiling height of 2,550mm is to be provided for all ground floor living spaces. A preferred height of 2,700mm is encouraged for enhanced internal amenity.</p>	<p>The dwellings have a ceiling height of 2.7m on the ground floor.</p>	Y

Section	Provisions	Proposal	Compliance (Y/N or N/A)
	<p>(6) The maximum depth of a dwelling (exclusive of roofs and privacy screens etc) from the front boundary is:</p> <ul style="list-style-type: none"> ▪ 15m for the second storey (identified as L2 on Figures 9-10 in DCP), ▪ 12m for any third storey component of a dwelling (identified as L3 on Figures 9-10 in DCP). 	<p>The maximum depth of the dwellings from the front boundary is 13.970m – 14.470m for the second storey and no third storey is proposed. With the exception of Lot 169, which is 16.720m</p>	<p>Y (refer SEE)</p>
	<p>(7) The maximum depth of an ancillary dwelling (exclusive of roofs and privacy screens etc) from the rear boundary is 8m.</p>	<p>The depth of the ancillary dwelling is 7.010m from the rear boundary.</p>	<p>Y</p>
	<p>(8) Front setbacks for residential development within the R1 Zone (except for residential flat buildings) are (see Figures 9 and 10 of Guideline):</p> <ul style="list-style-type: none"> ▪ between 3m and 4.5m (to the front facade line), except on the western side of H1 (Thornton Hall heritage carriageway) where the front setback from the boundary line is to accommodate tree retention and access driveway, ▪ a minimum 5.5m (and a minimum 1m behind the front facade line) for the garage, and ▪ 0m to the secondary street (for a corner allotment) except for the first 7m of allotment which to be setback at 2m to accommodate the articulation zone requirements at Section 3.4 (see Figures 9-10). 	<p>The dwellings are set back 4.240m – 5.240m to the front façade line.</p> <p>The garage is set back 5.5m – 6.5 m.</p> <p>If a corner allotment The first seven metres of the dwellings are set back 2 m from the secondary street frontage.</p>	<p>Y (refer SEE)</p>
	<p>(9) The rear setback for the ground floor level of a dwelling is 0.9m. This does not apply to garages and ancillary dwellings adjacent to a rear lane which may be built to the rear boundary. A rear setback of 3m is required for all allotments that back onto the existing residential allotments fronting Lemongrove Road and for Block C3.</p>	<p>The rear setback from the ground floor of the dwellings is 10.790m – 11.790m.</p> <p>The allotment does not back onto the existing residential allotments fronting Lemongrove Road.</p>	<p>Y</p>

Section	Provisions	Proposal	Compliance (Y/N or N/A)												
	<p>(10) The minimum side setback requirements for residential development within the R1 Zone (except for residential flat buildings) is to be consistent with the table below. Projections permitted into side and rear setback areas include sun hoods, gutters, down pipes flues, light fittings and electricity or gas meters, rainwater tanks and hot water units and the like.</p> <table border="1" data-bbox="544 464 1368 812"> <thead> <tr> <th data-bbox="544 464 958 514">Dwelling type</th> <th data-bbox="958 464 1368 514">Minimum side setbacks</th> </tr> </thead> <tbody> <tr> <td data-bbox="544 514 958 573">Ancillary dwellings</td> <td data-bbox="958 514 1368 573">0m on both sides 0m to rear lane</td> </tr> <tr> <td data-bbox="544 573 958 633">Multi-unit housing, attached dwellings</td> <td data-bbox="958 573 1368 633">0m on both sides</td> </tr> <tr> <td data-bbox="544 633 958 693">Semi-detached dwellings</td> <td data-bbox="958 633 1368 693">0m to 1 side 0.9m to 1 side</td> </tr> <tr> <td data-bbox="544 693 958 724">Dwelling houses (lots <8m wide)</td> <td data-bbox="958 693 1368 724">0m on both sides</td> </tr> <tr> <td data-bbox="544 724 958 812">Dwelling houses (lots 8m wide and greater)</td> <td data-bbox="958 724 1368 812">0m to 1 side 0.9m to 1 side - except for where permitted by (11) below</td> </tr> </tbody> </table>	Dwelling type	Minimum side setbacks	Ancillary dwellings	0m on both sides 0m to rear lane	Multi-unit housing, attached dwellings	0m on both sides	Semi-detached dwellings	0m to 1 side 0.9m to 1 side	Dwelling houses (lots <8m wide)	0m on both sides	Dwelling houses (lots 8m wide and greater)	0m to 1 side 0.9m to 1 side - except for where permitted by (11) below	<p>The minimum side setbacks are complied with as follows:</p> <ul style="list-style-type: none"> The proposed development is for abutting dwellings, and therefore achieve 0m on both sides, except for corner lots which is 0m on 1 side. 	Y
Dwelling type	Minimum side setbacks														
Ancillary dwellings	0m on both sides 0m to rear lane														
Multi-unit housing, attached dwellings	0m on both sides														
Semi-detached dwellings	0m to 1 side 0.9m to 1 side														
Dwelling houses (lots <8m wide)	0m on both sides														
Dwelling houses (lots 8m wide and greater)	0m to 1 side 0.9m to 1 side - except for where permitted by (11) below														
	<p>(11) Despite (3.3.10), zero setbacks on both side boundaries for ancillary dwellings and dwelling houses are permitted where the following conditions apply:</p> <ul style="list-style-type: none"> the dwellings are designed in a coordinated manner so as to ensure compliance with the relevant controls within this DCP, in particular, the private open space, privacy and solar access provisions; construction of adjoining dwellings is undertaken either concurrently or sequentially, reciprocal maintenance easements are included on adjoining allotment title (as per 3.2.3), and compliance with the relevant aspects of the Building Code of Australia. 	N/A	N/A												

Section	Provisions	Proposal	Compliance (Y/N or N/A)
	(12) Where a studio loft above a garage straddles a property boundary, the central maintenance setback is not required. Appropriate arrangements for maintenance are to be included within the stratum lot title for the studio loft.	The proposal does not include a studio loft above a garage that straddles a property boundary.	N/A
	(13) Variations to the building envelope controls contained within Section 3.3 are permitted where it is part of an 'Integrated Development Application' and the applicant can demonstrate that a good level of residential amenity can be achieved to both the proposed dwellings and adjacent properties.	The proposal is for an Integrated Development Application. The proposed variations to the building envelope controls identified above are supported on the following grounds: <ul style="list-style-type: none"> ▪ Please refer justification for variations made in the Statement of Environmental Effects 	N/A
3.4 Building Design and Articulation	(1) Particular attention is to be paid to the design quality of the front facade of a dwelling. An articulation zone is to be provided in front of the front facade line as illustrated at Figures 9 and 10. The articulation zone: <ul style="list-style-type: none"> ▪ is to be setback at least 1 metre from the front boundary, ▪ must extend at least 7m from the front boundary line along the secondary street frontage (for corner allotments), and ▪ may extend over 2 storeys (for 2 and 3 storey development). 	Articulation zones to the front façade of the dwellings have been incorporated on the dwellings in accordance with Figures 9 and 10 as follows: <ul style="list-style-type: none"> ▪ setback from the front boundary by 2.22m - 3.72m. ▪ extends 9 m from the boundary line along the secondary street frontage 	Y

Section	Provisions	Proposal	Compliance (Y/N or N/A)														
	<p>(2) The front articulation zone should include at least 1 primary element or 2 secondary elements from the list below. Where a primary element is included, it should have a minimum depth of 2m. The minimum depth for a secondary element is 500mm.</p> <table border="1" data-bbox="551 404 1265 675"> <thead> <tr> <th data-bbox="551 404 887 435">Primary elements</th> <th data-bbox="887 404 1265 435">Secondary elements</th> </tr> </thead> <tbody> <tr> <td data-bbox="551 435 887 467">Verandah / porch</td> <td data-bbox="887 435 1265 467">Entry feature or porticos</td> </tr> <tr> <td data-bbox="551 467 887 522">Balcony (incl upper level balcony over garage door)</td> <td data-bbox="887 467 1265 522">Awnings or other features over windows</td> </tr> <tr> <td data-bbox="551 522 887 553">Pergola</td> <td data-bbox="887 522 1265 553">Eaves and sun shading</td> </tr> <tr> <td data-bbox="551 553 887 584"></td> <td data-bbox="887 553 1265 584">Window box treatment</td> </tr> <tr> <td data-bbox="551 584 887 616"></td> <td data-bbox="887 584 1265 616">Recessed or projecting architectural elements</td> </tr> <tr> <td data-bbox="551 616 887 647"></td> <td data-bbox="887 616 1265 647">Bay windows</td> </tr> </tbody> </table>	Primary elements	Secondary elements	Verandah / porch	Entry feature or porticos	Balcony (incl upper level balcony over garage door)	Awnings or other features over windows	Pergola	Eaves and sun shading		Window box treatment		Recessed or projecting architectural elements		Bay windows	<p>The proposal includes Upper Level Balcony over entry/garage with a depth of 2.020m – 2.78m.</p> <p>OR</p> <p>The proposal includes Entry features and Window box treatments with depths of 750mm and 500mm respectively. (Corner Lots)</p>	Y
Primary elements	Secondary elements																
Verandah / porch	Entry feature or porticos																
Balcony (incl upper level balcony over garage door)	Awnings or other features over windows																
Pergola	Eaves and sun shading																
	Window box treatment																
	Recessed or projecting architectural elements																
	Bay windows																
	<p>(3) For corner allotments the articulation zone is to be a minimum depth of 2m from the primary and secondary frontages and may include either primary and / or secondary elements as listed above.</p>	<p>The site is a corner allotment with an articulation zone of 3m and 2m from the primary and secondary street frontages, respectively. The articulation zone includes Entry features and Window box treatments with depths of 750mm and 500mm respectively. (Corner Lots)</p>	Y														
	<p>(4) For allotments located on the southern, eastern and western side of a street, the articulation zone may be designed to incorporate private open space, including principal private open space.</p>	<p>The proposal include private open space.</p>	Y														
	<p>(5) Consideration should be given to expressing the third storey of a dwelling in a more lighter weight manner than the structure below, through the use of material and colours and the like.</p>	<p>The proposal does not incorporate third storeys.</p>	N/A														
	<p>(6) Eaves are to provide sun shading, to protect windows and doors and provide aesthetic interest. Subject to 3.2.3, eaves should have a minimum of 600mm overhang (measured to the fascia board). Council will consider alternative solutions to eaves so long as they provide</p>	<p>Pergola structures have been provided on western orientated living areas to shade from direct sun. Window boxes and overhangs on</p>	Y														

Section	Provisions	Proposal	Compliance (Y/N or N/A)																			
	appropriate sun shading to windows and display a high level of architectural merit.	corner lot facing north have been provided to shade from direct sun.																				
	(7) Building colours, materials and finishes are to be consistent the Residential Design Palette included at Appendix C.	The building colours, materials and finishes have been designed to be consistent with the Residential Design Palette.	Y																			
	(8) Multicoloured roof tiles are not permitted.	No multi-coloured tiles are proposed.	Y																			
3.5 Private Open Space and Landscaping	(1) Each dwelling is required to be provided with an area of Private Open Space (POS) and Principal Private Open Space (PPOS) consistent with the table below.	The proposal is on a lot with 6.6m, 7.5m and 13.5m wide. The proposal includes POS as follows: Lot 169 (7.5m) <ul style="list-style-type: none"> 23% of site area; and 2.7m dimension. Lot 170, 171, 172, 175 and 176 (6.6m) <ul style="list-style-type: none"> 39% of site area; and 6.6m dimension. Lot 173 and 174 (6.6m) <ul style="list-style-type: none"> 36% of site area; and 6.6m dimension. Lot 177 (13.5m) <ul style="list-style-type: none"> 27% of site area; and 8.7m dimension. The proposal includes PPOS as follows: Lot 169 (7.5m) <ul style="list-style-type: none"> 18 m2 of site area; and 3 m dimension. Lot 170, 171, 172, 173, 174, 175 and 176 (6.6m)	Y																			
	<table border="1"> <thead> <tr> <th></th> <th>Studio Loft</th> <th colspan="3">Multi-unit housing, attached & semi-detached dwellings and dwelling houses</th> </tr> <tr> <th>Lot width*</th> <th></th> <th><6m</th> <th>6-10m</th> <th>10m+</th> </tr> </thead> <tbody> <tr> <td>POS</td> <td>Studio and 1 bed: 4m² & min dimension 1m 2+ bed: 8m² & min dimension 1m</td> <td>Minimum 20% of site area & min dimension of 2m</td> <td>Minimum 20% of site area & min dimension of 2m</td> <td>Minimum 20% of site area & min dimension of 2m</td> </tr> <tr> <td>PPOS</td> <td>n/a</td> <td>16m² & min dimension of 3m</td> <td>18m² & min dimension of 3m</td> <td>24m² & min dimension of 4m</td> </tr> </tbody> </table>		Studio Loft	Multi-unit housing, attached & semi-detached dwellings and dwelling houses			Lot width*		<6m	6-10m	10m+	POS	Studio and 1 bed: 4m ² & min dimension 1m 2+ bed: 8m ² & min dimension 1m	Minimum 20% of site area & min dimension of 2m	Minimum 20% of site area & min dimension of 2m	Minimum 20% of site area & min dimension of 2m	PPOS	n/a	16m ² & min dimension of 3m	18m ² & min dimension of 3m	24m ² & min dimension of 4m	
	Studio Loft	Multi-unit housing, attached & semi-detached dwellings and dwelling houses																				
Lot width*		<6m	6-10m	10m+																		
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PPOS	n/a	16m ² & min dimension of 3m	18m ² & min dimension of 3m	24m ² & min dimension of 4m																		

Section	Provisions	Proposal	Compliance (Y/N or N/A)
		<ul style="list-style-type: none"> ▪ 18 m2 of site area; and ▪ 3 m dimension. Lot 177 (13.5m) <ul style="list-style-type: none"> ▪ 25.5 m2 of site area; and ▪ 4 m dimension. 	
	(2) The location of PPOS is to be determined having regard to allotment orientation, dwelling layout, adjoining dwellings, landscape features, and the preferred locations of PPOS illustrated at Figure 11. Where an allotment is located on the southern, eastern and western side of a street, the PPOS may be located at the front of the dwelling in the form of a front garden court, verandah or balcony. PPOS located in the front of a dwelling must be useable and adjacent to a living space.	The PPOS is located at the front/rear of the site in order to achieve the maximum solar access from the northern sun.	Y
	(3) Where the PPOS is a balcony or roof top area, it must be provided with a fence or landscaped screen at least 1m in height, and be directly accessible from a habitable room.	The proposal does not include a balcony or rooftop area.	N/A
	(4) The POS of the studio loft is to be located and designed so as to minimise visual and acoustic privacy impacts upon the principal dwelling and its associated POS.	The proposal is not for a studio loft.	N/A
	(5) (1) Fifty per cent of the area of the required PPOS (of both the proposed development and the adjoining properties) should receive at least 2	Shadow diagrams have been prepared for the development. They show that at least 50% of	Y

Section	Provisions	Proposal	Compliance (Y/N or N/A)
	<p>hours of sunlight between 9am and 3pm at the winter solstice (21 June). (2)"Despite Clause (5(1), at least 70% of the total number of dwellings that are proposed as part of an integrated development should receive a minimum of 2 hours direct sunlight between 9am and 3pm at the winter solstice (21 June) to at least fifty per cent of the area of the PPOS of each dwelling."</p>	<p>the PPOS receives at least 2 hours of sunlight on the winter solstice. Exception is made to Lot 169 where Clause (5(2) should apply</p>	
	<p>(6) The first 1m of a site, measured from the front boundary, (excluding driveways, footpaths etc) is to be soft landscaped. Landscaping within the front yard is to comprise species from the Residential Design Palette included at Appendix C.</p>	<ul style="list-style-type: none"> ▪ See Landscape Plans 	Y
3.6 Fencing	<p>(1) Front fencing is required for all residential allotments. Front fencing is to:</p> <ul style="list-style-type: none"> ▪ be between 700mm and 1.2m high (including feature elements), ▪ be generally open in design and may comprise a solid component that is no higher than 700mm, ▪ extend along the side boundaries to the front facade line (or at least 1m behind the front facade line for dwelling houses), ▪ extend along the secondary street frontage to match the length of the articulation zone, and ▪ are not to impede safe sight lines for pedestrians and / or traffic. 	<p>The proposal includes fencing of 1.2 m in height which is designed to comply with the fencing controls.</p>	Y
	<p>(2) The design, materials and colour of front fencing is to be consistent with the Residential Design Palette included at Appendix C of the Guidelines.</p>	<p>The design, materials and colours are consistent with the Residential Design Palette.</p>	Y
	<p>(3) Where a dwelling is located adjacent to open space, boundary fencing is to be of a high quality material and finish. Articulated post and paling fences (with exposed posts) are preferred in these locations. The design of the fencing is to permit casual surveillance of the open space and provide the dwelling with outlook towards the open space.</p>	<p>The proposed development will not directly abut open space.</p>	N/A
	<p>(4) Timber paling or lapped / capped fencing only can be used internally</p>	<p>No sheet metal fencing is proposed.</p>	Y

Section	Provisions	Proposal	Compliance (Y/N or N/A)
	between allotments. No sheet metal fencing is permitted within the project.		
3.7 Garages, Site Access and Parking	(1) The maximum parking rates for multi-unit housing, attached and semi-detached dwellings and dwelling houses are: <ul style="list-style-type: none"> ▪ 1-2 bedroom: 1 space per dwelling, and ▪ 3+ bedroom: 2 spaces per dwelling. 	The proposal is for a 3 bedroom dwellings and provides 2 car parking spaces per dwelling.	Y
	(2) All visitor parking is to be provided on-street.	Parking is available on street.	Y
	(3) Parking for affordable housing and seniors housing is to be in accordance with <i>State Environmental Planning Policy (Affordable Rental Housing) 2009</i> and <i>State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004</i> respectively.	The proposal is not for affordable housing or seniors housing.	N/A
	(4) The garage arrangement is to be consistent with Figures 12 and 13 in that: <ul style="list-style-type: none"> ▪ for lots less than 8m wide, all garaging is to be accessed from the rear lane (if rear loaded). If there is no rear laneway, a single / tandem garage is permitted at the front, ▪ for lots between 8m and 12m wide, garaging may comprise a single / tandem front loaded garage or a rear loaded, double / tandem garage, and ▪ for lots greater than 12m wide, garaging may either comprise a double front loaded garage or a rear loaded, double / tandem garage. 	<p>Lot 169 is 7.5m wide and provides a double garage from a secondary street</p> <p>Lot 170-176 is 6.6m wide and provides tandem garage at the front</p> <p>Lot 177 is 13.5m wide and provides tandem garage at the front</p>	Y
	(5) The maximum width of a garage door is 3.2m and 6m for single / tandem and double garages respectively. Where a studio loft is included, its own garage or carport requires access from the rear lane.	All single garage doors are 2.410m wide. All double garages doors are 4.820m wide.	Y
	(6) Carports and garages are to be treated as an important element of the dwelling facade and interface with the public domain. They are to be integrated with and complementary, in terms of design and material, to the dwelling design. Garage doors are to be visually recessive through	All garages have been designed specifically to match and complement the dwellings' design and materials.	Y

Section	Provisions	Proposal	Compliance (Y/N or N/A)
	use of materials, colours, overhangs and the like.		
	(7) The location of driveways is to be determined with regard to dwelling design and orientation, street gully pits and tree bays and is to maximise the availability of on-street parking.	All driveways have been designed having regard to the dwellings' design and orientation.	Y
	(8) All parking and driveway access is to comply with AS 2890.1 - 2004.	Parking and driveways comply with AS2890-2004.	Y
3.8 Visual and Acoustic Amenity	(1) Direct overlooking of main habitable areas and private open spaces of adjacent dwellings should be minimised through building layout, window and balcony location and design, and the use of screening devices, including landscaping.	Dwellings have been designed to minimise overlooking through building layout, window and balcony location and design, and the use of screening devices, including landscaping.	Y
	(2) Habitable room windows with a direct sightline to the habitable room windows in an adjacent dwelling within 3m are to: <ul style="list-style-type: none"> ▪ be obscured by fencing, screens or appropriate landscaping, or ▪ be offset from the edge of one window to the edge of the other by a distance sufficient to limit views into the adjacent window, or ▪ have sill height of 1.5m above floor level, or ▪ have fixed opaque glazing in any part of the window below 1.5m above floor level. 	The dwellings do not have any habitable room windows with a direct sightline to the habitable room windows in an adjacent dwelling within 3m.	N/A
	(3) A screening device is to have a maximum of 25% permeability to be considered effective.	No screening device is proposed or considered necessary.	N/A
	(4) The design of attached dwellings must minimise the opportunity for sound transmission through the building structure, with particular attention given to protecting bedrooms and living areas.	The design of the dwellings have minimised the opportunity for sounds transmission through the building structure.	Y
	(5) In attached dwellings, bedrooms of one dwelling are not to share walls with living spaces or garages of adjoining dwellings, unless it is demonstrated that the shared walls and floors meet the noise transmission and insulation requirements of the Building Code of	The dwellings will achieve the insulation requirements of the Building Code of Australia.	Y

Section	Provisions	Proposal	Compliance (Y/N or N/A)
	<p>Australia.</p> <p>(6) Residential development in close proximity to the railway corridor, Coreen Avenue, the east and west sides of the Boulevard, the upgraded commuter car park and those flanking the entry road from Coreen Avenue to the commuter car park, are to include design measures so as to achieve the following internal noise levels at these residences:</p> <ul style="list-style-type: none"> ▪ a target internal noise level of 35 dB(A) LAeq is to apply in the sleeping areas, and ▪ a target internal noise level of 40 dB(A) LAeq in other living areas. <p>To achieve these target levels, the acoustic performance of the most exposed facades of these residences are recommended to provide an Rw (weighted sound reduction index) + Ctr (spectrum adaptation factor) of not less than 50dB for the composite wall area. Reference can be made to the BCA for details on deemed-to-satisfy construction.</p>	<p>The proposal is not located in close proximity to the railway.</p>	<p>N/A</p>
	<p>(7) Residential buildings further within the development (and not affected by heavy vehicle noise along the Boulevard) may achieve a construction of 10 dB less than the above specified targets.</p>	<p>The site is located so as not to be affected by noise from the Boulevard.</p>	<p>N/A</p>
<p>3.9 Development in Proximity to a Rail Corridor</p>	<p>(1) The siting and design of developments on land sited on or within 60m of an operating rail corridor or land reserved for the construction of a railway line is to address matters raised in the Interim Guidelines for Applicants – consideration of rail noise and vibration in the planning process (RailCorp) and where appropriate, incorporate any recommendations into the design of the development.</p>	<p>The proposal is not within 60m of the railway corridor.</p>	<p>N/A</p>
	<p>(2) In assessing applications for development on land sited on or within 60m of an operating rail corridor or land reserved for the construction of a railway line, the consent authority is to have regard to the matters raised in the Interim Guidelines for Councils – consideration of rail noise and vibration in the planning process (RailCorp) and where appropriate, any matters raised by Rail Corporation New South Wales to the development.</p>		<p>N/A</p>

Section	Provisions	Proposal	Compliance (Y/N or N/A)
3.10 Specific Provisions - Key Sites	Entry Boulevard Lots <ul style="list-style-type: none"> ▪ A minimum building height of 2 storeys is required for all lots. A third storey is preferred on corner lots. ▪ Dwelling facades are to display high quality materials and finishes consistent with the Residential Design Palette (Appendix C). ▪ Despite Section 3.7, all garaging is to be from the rear lane. ▪ Front fencing is to generally consistent and assist in unifying the streetscape. 	The site is not an entry boulevard lot.	N/A
	'Dress Circle' Park Lots <ul style="list-style-type: none"> ▪ A building height of 3 storeys is encouraged for all dwellings (except for ancillary dwellings). ▪ A high level of consistency of built form and massing is required across the dwelling frontages to achieve a harmonious streetscape and a strong urban edge to the oval. ▪ Buildings are to take advantage of the location overlooking the oval with front balconies and terraces. ▪ Dwellings are to display high quality materials and finishes consistent with the Residential Design Palette (Appendix C). ▪ Identical facades are to be limited to no more than 4 dwellings in a row. ▪ Despite Section 3.7, all garaging is to be from the rear lane. 	The site is not an entry boulevard lot.	N/A
	Innovation Lots <ul style="list-style-type: none"> ▪ Housing is to demonstrate how compact, affordable dwellings can achieve a high level of internal amenity (see examples at Appendix B). ▪ Dwellings are to be single or double storey and may include 0m side and rear setbacks. 	The site is not an innovation lot.	N/A
	Canal Edge Lots <ul style="list-style-type: none"> ▪ A minimum building height of 3 storeys is encouraged for all residential dwellings (except for ancillary dwellings). ▪ Building form and massing is to create a strong consistent edge to the canal. 	The site is not a canal edge lot.	N/A

Section	Provisions	Proposal	Compliance (Y/N or N/A)			
	<ul style="list-style-type: none"> ▪ Entrances stairs to dwellings off the canal walk are to be paired together. ▪ The ground floor level and front yard / private open space of the dwellings is to be raised above the level of the pedestrian boardwalk to provide privacy for the dwellings. ▪ Detailing of front fencing and landscaping (fronting the canal) is to balance privacy and surveillance issues. The front fencing treatment is to be of high quality and consistent along the full length of the canal frontage. ▪ The dwelling facades are to display high quality materials and finishes consistent with the Residential Design Palette (Appendix C). ▪ Buildings are to take advantage of the location overlooking the canal and include high levels of glazing and front balconies and terraces. ▪ Despite Section 3.7, all garaging is to be from the rear lane. 					
	<p>Opportunity Site</p> <ul style="list-style-type: none"> ▪ The Opportunity Site may accommodate a variety of land uses, in addition to residential, such as commercial office, institution, education uses or the like, adjacent to the Village Centre. ▪ Non-residential uses fronting the canal should address the canal with semi-active uses. ▪ The road and block pattern within the site may vary in response to alternative uses. ▪ Building heights (of up to 6 storeys) are permitted for uses on the Opportunity Site. 	The site is not an opportunity site.	N/A			
3.12 Specific Provisions - Ancillary Dwellings	(1) Subdivision applications that involve the creation of a laneway are to nominate the preferred location of an ancillary dwelling so as to achieve an acceptable degree of passive surveillance within the laneway. The preferred locations for ancillary dwellings are shown at Figure 17.	The site is not for subdivision that involve the creation of a laneway.	N/A			
	<p>(2) Ancillary dwelling development is to be consistent with the controls in the table below.</p> <table border="1" data-bbox="555 1266 1339 1342"> <thead> <tr> <th data-bbox="555 1266 840 1304">Element</th> <th data-bbox="840 1266 1339 1304">Control</th> </tr> </thead> <tbody> <tr> <td data-bbox="555 1304 840 1342">Setbacks</td> <td data-bbox="840 1304 1339 1342">0m to sides and to laneway</td> </tr> </tbody> </table>	Element	Control	Setbacks	0m to sides and to laneway	<p>The ancillary dwellings (secondary dwelling that will be used in conjunction with the primary dwelling) comply with the controls as they:</p> <ul style="list-style-type: none"> ▪ have a building height of 2 storeys;
Element	Control					
Setbacks	0m to sides and to laneway					

Section	Provisions		Proposal	Compliance (Y/N or N/A)
	Max. building height	2 storeys (ie 1 floor above the garage)	<ul style="list-style-type: none"> ▪ have 0 car parking spaces. 	
	Private open space (required for studio lofts only)	Studio and 1 bed: 4m ² , min dimension 1m 2+ bed: 8m ² , min dimension 1m		
	Max car parking	Secondary dwellings - 0 spaces Studio lofts - 1 space		
(3)	The design and layout of studio lofts is to minimise overlooking and overshadowing of the private space of the principal dwelling and any adjacent dwellings.		The site is not a studio loft.	N/A
(4)	Strata title subdivision of a studio loft into a separate allotment will be permissible only where the following are provided: <ul style="list-style-type: none"> ▪ appropriate private open space, ▪ separate pedestrian access, ▪ one on-site car parking space, ▪ separate services for mail delivery and waste collection, and an on-site garbage storage area which is not visible from public street, ▪ separate connections and metering for utilities, and ▪ compliance with the Building Code of Australia. 		The proposal is not for strata title subdivision of studio lofts.	N/A

WASTE MANAGEMENT PLAN

DEMOLITION AND CONSTRUCTION

As a condition of consent, the applicable sections of this table must be completed and submitted to the Principal Certifying Authority.

Completing this table will assist you in identifying the type of waste that will be generated and in advising the Principal Certifying Authority how you intend to reuse, recycle or dispose of the waste.

The information provided on the form (and on your plans) will be assessed against the objectives of the DCP.

If space is insufficient in the table please provide attachments

Outline of Proposal

Site Address: Lot 169 – Lot 177 Hudson Street, North Penrith NSW 2570

Applicant's name and address: Trend Connection P/L U35, 5 Inglewood Pl, Baulkham Hills NSW 2153

Buildings and other structures currently on the site: Vacant

Brief Description of Proposal: New Integrated Double Storey Residence

SECTION ONE- DEMOLITION

This is the stage with the greatest potential for waste minimisation, particularly in Sydney where there are high levels of development, relatively high tipping charges and where alternative quarry materials are located on the outskirts.

Perhaps the first thing that applicants should consider is whether it is possible to re-use existing buildings, or parts thereof, for the proposed use.

With careful on-site and storage and by staging work programs it is possible to re-use many materials, either on-site or off-site.

In other words, to move from the attitude of “trashing the building” to “total recycling on-site”. This could require a number of colour-coded or clearly labelled bins on-site (rather than one size fits all).

The following table should be completed by applicants proposing any demolition work.

The following details should be shown on your plans

- Location of the on-site storage space for materials (for re-use) and containers for recycling and disposal. (Note the placement of waste containers is not permitted on footpaths, nature strips or roadways).
- Containers are to be located so as to not disrupt site works, or have a detrimental effect on sediment, erosion controls and tree protection sites.
- Containers to be maintained in a satisfactory condition while present on the site.
- Vehicle access to the site and to storage and container areas.
- Timing of the removal of containers is only to be carried out during permitted construction hours.
- Containers and all waste are to be removed prior to final inspection and occupation.
- A separate container is to be provided for the disposal of putrescible waste, such as lunch room and food scraps.
- The provision of tip fee or recycling processor's receipts will be required by Council upon completion of work.

Demolition stage 1

MATERIALS ON-SITE		DESTINATION		
		REUSE AND RECYCLING		
Type of materials	Estimated Volume (m3) area (m2)	ON-SITE Specify proposed reuse or on-site recycling methods	OFF-SITE Specify contractor and recycling outlet	DISPOSAL Specify contractor and landfill site
Excavation Materials	N/A	N/A	N/A	N/A
Green Waste	N/A	N/A	N/A	N/A
Bricks	N/A	N/A	N/A	N/A
Concrete	N/A	N/A	N/A	N/A
Asbestos Cement Roof & Wall Cladding	N/A	N/A	N/A	N/A
Note**: section labelled "other" includes mixed materials on the site including residual waste. Each material to be specified.				

MATERIALS ON-SITE		DEMOLITION		
		REUSE AND RECYCLING		
Type of materials	Estimated Volume (m3) area (m2)	ON-SITE Specify proposed reuse or on-site recycling methods	OFF-SITE Specify contractor and recycling outlet	DISPOSAL Specify contractor and landfill site
Timber- please specify	N/A	N/A	N/A	N/A
Plasterboard	N/A	N/A	N/A	N/A
Metals- please specify	N/A	N/A	N/A	N/A
Tiles	N/A	N/A	N/A	N/A
Other**- please specify	N/A	N/A	N/A	N/A

SECTION TWO- CONSTRUCTION STAGE

Section 2- Potential for Waste Minimisation During Construction Stage

You should consider the following measures that may also save resources and minimise waste at the construction stage.

Purchasing policy. Considering measures such as:

- Ordering the right quantities of materials prefabrication of materials where possible
- Reusing framework
- Minimising site disturbance, limiting unnecessary excavation
- Careful source separation of off-cuts to facilitate reuse, resale or efficient recycling
- Coordinating/sequencing of various trades.

Construction stage 2

MATERIALS ON-SITE		DEMOLITION		
		REUSE AND RECYCLING		
Type of materials	Estimated Volume (m3) area (m2)	ON-SITE Specify proposed reuse or on-site recycling methods	OFF-SITE Specify contractor and recycling outlet	DISPOSAL Specify contractor and landfill site
Excavation Material	18.0m3	Covered in section 1 as part of demolition	Re-sue on site	
Green Waste		Covered in section1 as part of demolition		
Bricks	7.0m3	Hallinans Recycling		Kemps Creek
Concrete	1.5m3	Re-use for Driveway		

Construction stage 2 continued

MATERIALS ON-SITE		DEMOLITION		
		REUSE AND RECYCLING		
Type of materials	Estimated Volume (m3) area (m2)	ON-SITE Specify proposed reuse or on-site recycling methods	OFF-SITE Specify contractor and recycling outlet	DISPOSAL Specify contractor and landfill site
Timber-please specify	8.0m3	Reuse framework. Chip suitable for use in landscaping	Hallinans Recycling	Kemps Creek
Plasterboard	16.2m3	Break-up and use in landscape	Hallinans Recycling	Kemps Creek
Metals-please specify	1.8m3		Hallinans Recycling	Kemps Creek
Tiles	25.0m3	Crush and use as granular fill in drainage excavations.	Hallinans Recycling	Kemps Creek
Other**-please specify	18.0m3 Plastic, PVC		Hallinans Recycling	Kemps Creek

Design facilities

TYPE OF WASTE TO BE GENERATED	EXPECTED VOLUME PER WEEK	PROPOSED ON-SITE STORAGE AND TREATMENT FACILITIES	DESTINATION
Please specify.. for example glass, paper, food waste, off-cuts etc	<ul style="list-style-type: none"> • Litres or m3 • See appendix 3 for estimates 	For example: <ul style="list-style-type: none"> • Waste storage and recycling area • Garbage chute • On-site composting • Compaction equipment 	<ul style="list-style-type: none"> • Recycling • Disposal • Specify contractor
Household recyclables (bottles, cans, paper)	495 litres	Storage in designated area waiting on collection	Council recycling service (weekly)
Other waste	700 litres	Stored in mobile garbage bins awaiting collection	To landfill by council (weekly)

On-going Management

Describe how you intend to ensure on-going
Management of waste on-site (eg; lease conditions
Caretaker/manager on-site)

- 1) The garbage and recycling bins in the residence will be clearly labelled to encourage source separation of materials

- 2) The residence will arrange their own garbage, recycling and composting arrangements with the facilities provided.

Thank you for the information.

BASIX[®]Certificate

Building Sustainability Index www.basix.nsw.gov.au

Single Dwelling

Certificate number: 562591S

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 29/06/2009 published by Planning & Infrastructure. This document is available at www.basix.nsw.gov.au

Director-General

Date of issue: Thursday, 24 July 2014

To be valid, this certificate must be lodged within 3 months of the date of issue.



Project summary		
Project name	TRE001 L169	
Street address	- William Hart Crescent PENRITH 2750	
Local Government Area	Penrith City Council	
Plan type and plan number	deposited 1184497	
Lot no.	2391	
Section no.	-	
Project type	attached dwelling house	
No. of bedrooms	4	
Project score		
Water	✓ 41	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 40	Target 40

Certificate Prepared by

Name / Company Name: Thermal Performance

ABN (if applicable): 64 137 428 767

Description of project

Project address

Project name	TRE001 L169
Street address	- William Hart Crescent PENRITH 2750
Local Government Area	Penrith City Council
Plan type and plan number	Deposited Plan 1184497
Lot no.	2391
Section no.	-

Project type

Project type	attached dwelling house
No. of bedrooms	4

Site details

Site area (m ²)	217
Roof area (m ²)	127
Conditioned floor area (m ²)	164
Unconditioned floor area (m ²)	11
Total area of garden and lawn (m ²)	73

Assessor details and thermal loads

Assessor number	20731
Certificate number	1006656779
Climate zone	28
Area adjusted cooling load (MJ/m ² .year)	64
Area adjusted heating load (MJ/m ² .year)	74

Other

none	n/a
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Project score

Water	✓ 41	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 40	Target 40

Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Fixtures			
The applicant must install showerheads with a minimum rating of 3 star (> 7.5 but <= 9 L/min) in all showers in the development.		✓	✓
The applicant must install a toilet flushing system with a minimum rating of 4 star in each toilet in the development.		✓	✓
The applicant must install taps with a minimum rating of 3 star in the kitchen in the development.		✓	
The applicant must install basin taps with a minimum rating of 5 star in each bathroom in the development.		✓	
Alternative water			
Rainwater tank			
The applicant must install a rainwater tank of at least 2000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	✓	✓	✓
The applicant must configure the rainwater tank to collect rain runoff from at least 73.3 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		✓	✓
The applicant must connect the rainwater tank to: <ul style="list-style-type: none"> • all toilets in the development • the cold water tap that supplies each clothes washer in the development • at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.) 		✓ ✓ ✓	✓ ✓ ✓

Thermal Comfort Commitments

Show on
DA plans

Show on CC/CDC
plans & specs

Certifier
check

Simulation Method

The applicant must attach the certificate referred to under "Assessor Details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for an occupation certificate for the proposed development.

The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.

The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX certificate, including the Cooling and Heating loads shown on the front page of this certificate.

The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Assessor Certificate 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. 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.

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.

The applicant must construct the floors and walls of the dwelling in accordance with the specifications listed in the table below.

Floor and wall construction

Area

floor - concrete slab on ground

All or part of floor area square metres

floor - suspended floor above garage

All or part of floor area

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Hot water			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: gas instantaneous with a performance of 5.5 stars.	✓	✓	✓
Cooling system			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The cooling system must provide for day/night zoning between living areas and bedrooms.		✓	✓
Heating system			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The heating system must provide for day/night zoning between living areas and bedrooms.		✓	✓
Ventilation			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: individual fan, not ducted; Operation control: manual switch on/off		✓	✓
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Laundry: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Artificial lighting			
The applicant must ensure that the "primary type of artificial lighting" is fluorescent or light emitting diode (LED) lighting in each of the following rooms, and where the word "dedicated" appears, the fittings for those lights must only be capable of accepting fluorescent or light emitting diode (LED) lamps:			
<ul style="list-style-type: none"> the kitchen; 		✓	✓

Energy CommitmentsShow on
DA plansShow on CC/CDC
plans & specsCertifier
check**Natural lighting**

The applicant must install a window and/or skylight in 3 bathroom(s)/toilet(s) in the development for natural lighting.

**Other**

The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling.



The applicant must install a fixed outdoor clothes drying line as part of the development.



Legend

In these commitments, "applicant" means the person carrying out the development.

Commitments identified with a ✓ in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).

Commitments identified with a ✓ in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.

Commitments identified with a ✓ in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate (either interim or final) for the development may be issued.

BASIX[®]Certificate

Building Sustainability Index www.basix.nsw.gov.au

Single Dwelling

Certificate number: 562590S

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 29/06/2009 published by Planning & Infrastructure. This document is available at www.basix.nsw.gov.au

Director-General

Date of issue: Thursday, 24 July 2014

To be valid, this certificate must be lodged within 3 months of the date of issue.



Project summary		
Project name	TRE001 L170	
Street address	- Hudson Street PENRITH 2750	
Local Government Area	Penrith City Council	
Plan type and plan number	deposited 1184497	
Lot no.	2391	
Section no.	-	
Project type	attached dwelling house	
No. of bedrooms	3	
Project score		
Water	✓ 41	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 40	Target 40

Certificate Prepared by

Name / Company Name: Thermal Performance

ABN (if applicable): 64 137 428 767

Description of project

Project address

Project name	TRE001 L170
Street address	- Hudson Street PENRITH 2750
Local Government Area	Penrith City Council
Plan type and plan number	Deposited Plan 1184497
Lot no.	2391
Section no.	-

Project type

Project type	attached dwelling house
No. of bedrooms	3

Site details

Site area (m ²)	198
Roof area (m ²)	100
Conditioned floor area (m ²)	126
Unconditioned floor area (m ²)	0
Total area of garden and lawn (m ²)	81

Assessor details and thermal loads

Assessor number	20731
Certificate number	1006656787
Climate zone	28
Area adjusted cooling load (MJ/m ² .year)	56
Area adjusted heating load (MJ/m ² .year)	66

Other

none	n/a
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Project score

Water	✓ 41	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 40	Target 40

Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Fixtures			
The applicant must install showerheads with a minimum rating of 3 star (> 7.5 but <= 9 L/min) in all showers in the development.		✓	✓
The applicant must install a toilet flushing system with a minimum rating of 4 star in each toilet in the development.		✓	✓
The applicant must install taps with a minimum rating of 3 star in the kitchen in the development.		✓	
The applicant must install basin taps with a minimum rating of 5 star in each bathroom in the development.		✓	
Alternative water			
Rainwater tank			
The applicant must install a rainwater tank of at least 2000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	✓	✓	✓
The applicant must configure the rainwater tank to collect rain runoff from at least 100 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		✓	✓
The applicant must connect the rainwater tank to: <ul style="list-style-type: none"> • all toilets in the development • the cold water tap that supplies each clothes washer in the development • at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.) 		✓ ✓ ✓	✓ ✓ ✓

Thermal Comfort Commitments

	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Simulation Method			
The applicant must attach the certificate referred to under "Assessor Details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for an occupation certificate for the proposed development.			
The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX certificate, including the Cooling and Heating loads shown on the front page of this certificate.			
The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Assessor Certificate 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. 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.			
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.		✓	✓
The applicant must construct the floors and walls of the dwelling in accordance with the specifications listed in the table below.	✓	✓	✓

Floor and wall construction	Area
floor - concrete slab on ground	All or part of floor area square metres

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Hot water			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: gas instantaneous with a performance of 5.5 stars.	✓	✓	✓
Cooling system			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The cooling system must provide for day/night zoning between living areas and bedrooms.		✓	✓
Heating system			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The heating system must provide for day/night zoning between living areas and bedrooms.		✓	✓
Ventilation			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: individual fan, not ducted; Operation control: manual switch on/off		✓	✓
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Laundry: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Artificial lighting			
The applicant must ensure that the "primary type of artificial lighting" is fluorescent or light emitting diode (LED) lighting in each of the following rooms, and where the word "dedicated" appears, the fittings for those lights must only be capable of accepting fluorescent or light emitting diode (LED) lamps: <ul style="list-style-type: none"> • the kitchen; 		✓	✓

Energy CommitmentsShow on
DA plansShow on CC/CDC
plans & specsCertifier
check**Natural lighting**

The applicant must install a window and/or skylight in 2 bathroom(s)/toilet(s) in the development for natural lighting.

**Other**

The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling.



The applicant must install a fixed outdoor clothes drying line as part of the development.



Legend

In these commitments, "applicant" means the person carrying out the development.

Commitments identified with a ✓ in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).

Commitments identified with a ✓ in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.

Commitments identified with a ✓ in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate (either interim or final) for the development may be issued.

BASIX[®] Certificate

Building Sustainability Index www.basix.nsw.gov.au

Single Dwelling

Certificate number: 562589S

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 29/06/2009 published by Planning & Infrastructure. This document is available at www.basix.nsw.gov.au

Director-General

Date of issue: Thursday, 24 July 2014

To be valid, this certificate must be lodged within 3 months of the date of issue.



Planning &
Infrastructure

Project summary

Project name	TRE001 L171
Street address	- Hudson Street PENRITH 2750
Local Government Area	Penrith City Council
Plan type and plan number	deposited 1184497
Lot no.	2391
Section no.	-
Project type	attached dwelling house
No. of bedrooms	3

Project score

Water	✓ 41	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 42	Target 40

Certificate Prepared by

Name / Company Name: Thermal Performance

ABN (if applicable): 64 137 428 767

Description of project

Project address

Project name	TRE001 L171
Street address	- Hudson Street PENRITH 2750
Local Government Area	Penrith City Council
Plan type and plan number	Deposited Plan 1184497
Lot no.	2391
Section no.	-

Project type

Project type	attached dwelling house
No. of bedrooms	3

Site details

Site area (m ²)	198
Roof area (m ²)	96
Conditioned floor area (m2)	111
Unconditioned floor area (m2)	7
Total area of garden and lawn (m2)	79

Assessor details and thermal loads

Assessor number	20731
Certificate number	1006656795
Climate zone	28
Area adjusted cooling load (MJ/m ² .year)	57
Area adjusted heating load (MJ/m ² .year)	51

Other

none	n/a
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Project score

Water	✓ 41	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 42	Target 40

Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Fixtures			
The applicant must install showerheads with a minimum rating of 3 star (> 7.5 but <= 9 L/min) in all showers in the development.		✓	✓
The applicant must install a toilet flushing system with a minimum rating of 4 star in each toilet in the development.		✓	✓
The applicant must install taps with a minimum rating of 3 star in the kitchen in the development.		✓	
The applicant must install basin taps with a minimum rating of 5 star in each bathroom in the development.		✓	
Alternative water			
Rainwater tank			
The applicant must install a rainwater tank of at least 2000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	✓	✓	✓
The applicant must configure the rainwater tank to collect rain runoff from at least 96 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		✓	✓
The applicant must connect the rainwater tank to: <ul style="list-style-type: none"> • all toilets in the development • the cold water tap that supplies each clothes washer in the development • at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.) 		✓ ✓ ✓	✓ ✓ ✓

Thermal Comfort Commitments

Show on DA plans	Show on CC/CDC plans & specs	Certifier check
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Simulation Method

The applicant must attach the certificate referred to under "Assessor Details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for an occupation certificate for the proposed development.

The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.

The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX certificate, including the Cooling and Heating loads shown on the front page of this certificate.

The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Assessor Certificate 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. 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.

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.

The applicant must construct the floors and walls of the dwelling in accordance with the specifications listed in the table below.

	✓	✓
✓	✓	✓

Floor and wall construction

Area

floor - concrete slab on ground

All or part of floor area square metres

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Hot water			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: gas instantaneous with a performance of 5.5 stars.	✓	✓	✓
Cooling system			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The cooling system must provide for day/night zoning between living areas and bedrooms.		✓	✓
Heating system			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The heating system must provide for day/night zoning between living areas and bedrooms.		✓	✓
Ventilation			
The applicant must install the following exhaust systems in the development: At least 1 Bathroom: individual fan, not ducted; Operation control: manual switch on/off		✓	✓
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Laundry: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Natural lighting			
The applicant must install a window and/or skylight in 2 bathroom(s)/toilet(s) in the development for natural lighting.	✓	✓	✓
Other			

Energy Commitments

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling.		✓	
The applicant must install a fixed outdoor clothes drying line as part of the development.		✓	

Legend

In these commitments, "applicant" means the person carrying out the development.

Commitments identified with a ✓ in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).

Commitments identified with a ✓ in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.

Commitments identified with a ✓ in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate (either interim or final) for the development may be issued.

BASIX[®]Certificate

Building Sustainability Index www.basix.nsw.gov.au

Single Dwelling

Certificate number: 562585S

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 29/06/2009 published by Planning & Infrastructure. This document is available at www.basix.nsw.gov.au

Director-General

Date of issue: Thursday, 24 July 2014

To be valid, this certificate must be lodged within 3 months of the date of issue.



Project summary

Project name	TRE001 L172
Street address	- Hudson Street PENRITH 2750
Local Government Area	Penrith City Council
Plan type and plan number	deposited 1184497
Lot no.	2391
Section no.	-
Project type	attached dwelling house
No. of bedrooms	3

Project score

Water	✓ 41	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 42	Target 40

Certificate Prepared by

Name / Company Name: Thermal Performance

ABN (if applicable): 64 137 428 767

Description of project

Project address

Project name	TRE001 L172
Street address	- Hudson Street PENRITH 2750
Local Government Area	Penrith City Council
Plan type and plan number	Deposited Plan 1184497
Lot no.	2391
Section no.	-

Project type

Project type	attached dwelling house
No. of bedrooms	3

Site details

Site area (m ²)	198
Roof area (m ²)	97
Conditioned floor area (m2)	111
Unconditioned floor area (m2)	7
Total area of garden and lawn (m2)	78

Assessor details and thermal loads

Assessor number	20731
Certificate number	1006656803
Climate zone	28
Area adjusted cooling load (MJ/m ² .year)	56
Area adjusted heating load (MJ/m ² .year)	63

Other

none	n/a
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Project score

Water	✓ 41	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 42	Target 40

Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Fixtures			
The applicant must install showerheads with a minimum rating of 3 star (> 7.5 but <= 9 L/min) in all showers in the development.		✓	✓
The applicant must install a toilet flushing system with a minimum rating of 4 star in each toilet in the development.		✓	✓
The applicant must install taps with a minimum rating of 3 star in the kitchen in the development.		✓	
The applicant must install basin taps with a minimum rating of 5 star in each bathroom in the development.		✓	
Alternative water			
Rainwater tank			
The applicant must install a rainwater tank of at least 2000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	✓	✓	✓
The applicant must configure the rainwater tank to collect rain runoff from at least 96 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		✓	✓
The applicant must connect the rainwater tank to: <ul style="list-style-type: none"> • all toilets in the development • the cold water tap that supplies each clothes washer in the development • at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.) 		✓ ✓ ✓	✓ ✓ ✓

Thermal Comfort Commitments

Show on
DA plans

Show on CC/CDC
plans & specs

Certifier
check

Simulation Method

The applicant must attach the certificate referred to under "Assessor Details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for an occupation certificate for the proposed development.

The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.

The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX certificate, including the Cooling and Heating loads shown on the front page of this certificate.

The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Assessor Certificate 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. 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.

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.

The applicant must construct the floors and walls of the dwelling in accordance with the specifications listed in the table below.

Floor and wall construction

Area

floor - concrete slab on ground

All or part of floor area square metres

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Hot water			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: gas instantaneous with a performance of 5.5 stars.	✓	✓	✓
Cooling system			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The cooling system must provide for day/night zoning between living areas and bedrooms.		✓	✓
Heating system			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The heating system must provide for day/night zoning between living areas and bedrooms.		✓	✓
Ventilation			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: individual fan, not ducted; Operation control: manual switch on/off		✓	✓
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Laundry: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Artificial lighting			
The applicant must ensure that the "primary type of artificial lighting" is fluorescent or light emitting diode (LED) lighting in each of the following rooms, and where the word "dedicated" appears, the fittings for those lights must only be capable of accepting fluorescent or light emitting diode (LED) lamps: • the kitchen;		✓	✓

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Natural lighting			
The applicant must install a window and/or skylight in 2 bathroom(s)/toilet(s) in the development for natural lighting.	✓	✓	✓
Other			
The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling.		✓	
The applicant must install a fixed outdoor clothes drying line as part of the development.		✓	

Legend

In these commitments, "applicant" means the person carrying out the development.

Commitments identified with a ✓ in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).

Commitments identified with a ✓ in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.

Commitments identified with a ✓ in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate (either interim or final) for the development may be issued.

BASIX[®]Certificate

Building Sustainability Index www.basix.nsw.gov.au

Single Dwelling

Certificate number: 562584S

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 29/06/2009 published by Planning & Infrastructure. This document is available at www.basix.nsw.gov.au

Director-General

Date of issue: Thursday, 24 July 2014

To be valid, this certificate must be lodged within 3 months of the date of issue.



Project summary

Project name	TRE001 L173
Street address	- Hudson Street PENRITH 2750
Local Government Area	Penrith City Council
Plan type and plan number	deposited 1184497
Lot no.	2391
Section no.	-
Project type	attached dwelling house
No. of bedrooms	3

Project score

Water	✓ 41	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 40	Target 40

Certificate Prepared by

Name / Company Name: Thermal Performance

ABN (if applicable): 64 137 428 767

Description of project

Project address	
Project name	TRE001 L173
Street address	- Hudson Street PENRITH 2750
Local Government Area	Penrith City Council
Plan type and plan number	Deposited Plan 1184497
Lot no.	2391
Section no.	-
Project type	
Project type	attached dwelling house
No. of bedrooms	3
Site details	
Site area (m ²)	198
Roof area (m ²)	101
Conditioned floor area (m2)	126
Unconditioned floor area (m2)	0
Total area of garden and lawn (m2)	79

Assessor details and thermal loads		
Assessor number	20731	
Certificate number	1006656811	
Climate zone	28	
Area adjusted cooling load (MJ/m ² .year)	56	
Area adjusted heating load (MJ/m ² .year)	63	
Other		
none	n/a	
Project score		
Water	✓ 41	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 40	Target 40

Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Fixtures			
The applicant must install showerheads with a minimum rating of 3 star (> 7.5 but <= 9 L/min) in all showers in the development.		✓	✓
The applicant must install a toilet flushing system with a minimum rating of 4 star in each toilet in the development.		✓	✓
The applicant must install taps with a minimum rating of 3 star in the kitchen in the development.		✓	
The applicant must install basin taps with a minimum rating of 5 star in each bathroom in the development.		✓	
Alternative water			
Rainwater tank			
The applicant must install a rainwater tank of at least 2000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	✓	✓	✓
The applicant must configure the rainwater tank to collect rain runoff from at least 100 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		✓	✓
The applicant must connect the rainwater tank to: <ul style="list-style-type: none"> • all toilets in the development • the cold water tap that supplies each clothes washer in the development • at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.) 		✓ ✓ ✓	✓ ✓ ✓

Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Simulation Method			
The applicant must attach the certificate referred to under "Assessor Details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for an occupation certificate for the proposed development.			
The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX certificate, including the Cooling and Heating loads shown on the front page of this certificate.			
The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Assessor Certificate 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. 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.			
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.		✓	✓
The applicant must construct the floors and walls of the dwelling in accordance with the specifications listed in the table below.	✓	✓	✓

Floor and wall construction	Area
floor - concrete slab on ground	All or part of floor area square metres

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Hot water			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: gas instantaneous with a performance of 5.5 stars.	✓	✓	✓
Cooling system			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The cooling system must provide for day/night zoning between living areas and bedrooms.		✓	✓
Heating system			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The heating system must provide for day/night zoning between living areas and bedrooms.		✓	✓
Ventilation			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: individual fan, not ducted; Operation control: manual switch on/off		✓	✓
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Laundry: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Artificial lighting			
The applicant must ensure that the "primary type of artificial lighting" is fluorescent or light emitting diode (LED) lighting in each of the following rooms, and where the word "dedicated" appears, the fittings for those lights must only be capable of accepting fluorescent or light emitting diode (LED) lamps: • the kitchen;		✓	✓

Energy CommitmentsShow on
DA plansShow on CC/CDC
plans & specsCertifier
check**Natural lighting**

The applicant must install a window and/or skylight in 2 bathroom(s)/toilet(s) in the development for natural lighting.

**Other**

The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling.



The applicant must install a fixed outdoor clothes drying line as part of the development.



Legend

In these commitments, "applicant" means the person carrying out the development.

Commitments identified with a ✓ in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).

Commitments identified with a ✓ in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.

Commitments identified with a ✓ in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate (either interim or final) for the development may be issued.

BASIX[®]Certificate

Building Sustainability Index www.basix.nsw.gov.au

Single Dwelling

Certificate number: 562583S

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 29/06/2009 published by Planning & Infrastructure. This document is available at www.basix.nsw.gov.au

Director-General

Date of issue: Thursday, 24 July 2014

To be valid, this certificate must be lodged within 3 months of the date of issue.



Project summary		
Project name	TRE001 L174	
Street address	- Hudson Street PENRITH 2750	
Local Government Area	Penrith City Council	
Plan type and plan number	deposited 1184497	
Lot no.	2391	
Section no.	-	
Project type	attached dwelling house	
No. of bedrooms	3	
Project score		
Water	✓ 41	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 40	Target 40

Certificate Prepared by

Name / Company Name: Thermal Performance

ABN (if applicable): 64 137 428 767

Description of project

Project address

Project name	TRE001 L174
Street address	- Hudson Street PENRITH 2750
Local Government Area	Penrith City Council
Plan type and plan number	Deposited Plan 1184497
Lot no.	2391
Section no.	-

Project type

Project type	attached dwelling house
No. of bedrooms	3

Site details

Site area (m ²)	198
Roof area (m ²)	100
Conditioned floor area (m ²)	126
Unconditioned floor area (m ²)	0
Total area of garden and lawn (m ²)	77

Assessor details and thermal loads

Assessor number	20731
Certificate number	1006656829
Climate zone	28
Area adjusted cooling load (MJ/m ² .year)	49
Area adjusted heating load (MJ/m ² .year)	67

Other

none	n/a
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Project score

Water	✓ 41	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 40	Target 40

Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Fixtures			
The applicant must install showerheads with a minimum rating of 3 star (> 7.5 but <= 9 L/min) in all showers in the development.		✓	✓
The applicant must install a toilet flushing system with a minimum rating of 4 star in each toilet in the development.		✓	✓
The applicant must install taps with a minimum rating of 3 star in the kitchen in the development.		✓	
The applicant must install basin taps with a minimum rating of 5 star in each bathroom in the development.		✓	
Alternative water			
Rainwater tank			
The applicant must install a rainwater tank of at least 2000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	✓	✓	✓
The applicant must configure the rainwater tank to collect rain runoff from at least 100 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		✓	✓
The applicant must connect the rainwater tank to: <ul style="list-style-type: none"> • all toilets in the development • the cold water tap that supplies each clothes washer in the development • at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.) 		✓ ✓ ✓	✓ ✓ ✓

Thermal Comfort Commitments

Show on
DA plans

Show on CC/CDC
plans & specs

Certifier
check

Simulation Method

The applicant must attach the certificate referred to under "Assessor Details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for an occupation certificate for the proposed development.

The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.

The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX certificate, including the Cooling and Heating loads shown on the front page of this certificate.

The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Assessor Certificate 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. 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.

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.

The applicant must construct the floors and walls of the dwelling in accordance with the specifications listed in the table below.

Floor and wall construction

Area

floor - concrete slab on ground

All or part of floor area square metres

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Hot water			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: gas instantaneous with a performance of 5.5 stars.	✓	✓	✓
Cooling system			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The cooling system must provide for day/night zoning between living areas and bedrooms.		✓	✓
Heating system			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The heating system must provide for day/night zoning between living areas and bedrooms.		✓	✓
Ventilation			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: individual fan, not ducted; Operation control: manual switch on/off		✓	✓
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Laundry: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Natural lighting			
The applicant must install a window and/or skylight in 2 bathroom(s)/toilet(s) in the development for natural lighting.	✓	✓	✓
Other			

Energy Commitments

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling.		✓	
The applicant must install a fixed outdoor clothes drying line as part of the development.		✓	

Legend

In these commitments, "applicant" means the person carrying out the development.

Commitments identified with a ✓ in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).

Commitments identified with a ✓ in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.

Commitments identified with a ✓ in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate (either interim or final) for the development may be issued.

BASIX[®] Certificate

Building Sustainability Index www.basix.nsw.gov.au

Single Dwelling

Certificate number: 562582S

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 29/06/2009 published by Planning & Infrastructure. This document is available at www.basix.nsw.gov.au

Director-General

Date of issue: Thursday, 24 July 2014

To be valid, this certificate must be lodged within 3 months of the date of issue.



Project summary		
Project name	TRE001 L175	
Street address	- Hudson Street PENRITH 2750	
Local Government Area	Penrith City Council	
Plan type and plan number	deposited 1184497	
Lot no.	2391	
Section no.	-	
Project type	attached dwelling house	
No. of bedrooms	3	
Project score		
Water	✓ 41	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 42	Target 40

Certificate Prepared by

Name / Company Name: Thermal Performance

ABN (if applicable): 64 137 428 767

Description of project

Project address

Project name	TRE001 L175
Street address	- Hudson Street PENRITH 2750
Local Government Area	Penrith City Council
Plan type and plan number	Deposited Plan 1184497
Lot no.	2391
Section no.	-

Project type

Project type	attached dwelling house
No. of bedrooms	3

Site details

Site area (m ²)	198
Roof area (m ²)	97
Conditioned floor area (m2)	111
Unconditioned floor area (m2)	7
Total area of garden and lawn (m2)	81

Assessor details and thermal loads

Assessor number	20731
Certificate number	1006656837
Climate zone	28
Area adjusted cooling load (MJ/m ² .year)	57
Area adjusted heating load (MJ/m ² .year)	51

Other

none	n/a
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Project score

Water	✓ 41	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 42	Target 40

Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Fixtures			
The applicant must install showerheads with a minimum rating of 3 star (> 7.5 but <= 9 L/min) in all showers in the development.		✓	✓
The applicant must install a toilet flushing system with a minimum rating of 4 star in each toilet in the development.		✓	✓
The applicant must install taps with a minimum rating of 3 star in the kitchen in the development.		✓	
The applicant must install basin taps with a minimum rating of 5 star in each bathroom in the development.		✓	
Alternative water			
Rainwater tank			
The applicant must install a rainwater tank of at least 2000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	✓	✓	✓
The applicant must configure the rainwater tank to collect rain runoff from at least 96 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		✓	✓
The applicant must connect the rainwater tank to: <ul style="list-style-type: none"> • all toilets in the development • the cold water tap that supplies each clothes washer in the development • at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.) 		✓ ✓ ✓	✓ ✓ ✓

Thermal Comfort Commitments

Show on
DA plans

Show on CC/CDC
plans & specs

Certifier
check

Simulation Method

The applicant must attach the certificate referred to under "Assessor Details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for an occupation certificate for the proposed development.

The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.

The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX certificate, including the Cooling and Heating loads shown on the front page of this certificate.

The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Assessor Certificate 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. 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.

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.

The applicant must construct the floors and walls of the dwelling in accordance with the specifications listed in the table below.

Floor and wall construction

Area

floor - concrete slab on ground

All or part of floor area square metres

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Hot water			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: gas instantaneous with a performance of 5.5 stars.	✓	✓	✓
Cooling system			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The cooling system must provide for day/night zoning between living areas and bedrooms.		✓	✓
Heating system			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The heating system must provide for day/night zoning between living areas and bedrooms.		✓	✓
Ventilation			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: individual fan, not ducted; Operation control: manual switch on/off		✓	✓
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Laundry: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Natural lighting			
The applicant must install a window and/or skylight in 2 bathroom(s)/toilet(s) in the development for natural lighting.	✓	✓	✓
Other			

Energy Commitments

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling.		✓	
The applicant must install a fixed outdoor clothes drying line as part of the development.		✓	

Legend

In these commitments, "applicant" means the person carrying out the development.

Commitments identified with a ✓ in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).

Commitments identified with a ✓ in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.

Commitments identified with a ✓ in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate (either interim or final) for the development may be issued.

BASIX[®]Certificate

Building Sustainability Index www.basix.nsw.gov.au

Single Dwelling

Certificate number: 561993S

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 29/06/2009 published by Planning & Infrastructure. This document is available at www.basix.nsw.gov.au

Director-General

Date of issue: Thursday, 24 July 2014

To be valid, this certificate must be lodged within 3 months of the date of issue.



Planning &
Infrastructure

Project summary

Project name	TRE001 L176
Street address	- Hudson Street PENRITH 2750
Local Government Area	Penrith City Council
Plan type and plan number	deposited 1184497
Lot no.	2391
Section no.	-
Project type	attached dwelling house
No. of bedrooms	3

Project score

Water	✓ 40	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 42	Target 40

Certificate Prepared by

Name / Company Name: Thermal Performance

ABN (if applicable): 64 137 428 767

Description of project

Project address

Project name	TRE001 L176
Street address	- Hudson Street PENRITH 2750
Local Government Area	Penrith City Council
Plan type and plan number	Deposited Plan 1184497
Lot no.	2391
Section no.	-

Project type

Project type	attached dwelling house
No. of bedrooms	3

Site details

Site area (m ²)	198
Roof area (m ²)	96
Conditioned floor area (m2)	111
Unconditioned floor area (m2)	7
Total area of garden and lawn (m2)	87

Assessor details and thermal loads

Assessor number	20731
Certificate number	1006656845
Climate zone	28
Area adjusted cooling load (MJ/m ² .year)	57
Area adjusted heating load (MJ/m ² .year)	48

Other

none	n/a
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Project score

Water	✓ 40	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 42	Target 40

Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Fixtures			
The applicant must install showerheads with a minimum rating of 3 star (> 7.5 but <= 9 L/min) in all showers in the development.		✓	✓
The applicant must install a toilet flushing system with a minimum rating of 4 star in each toilet in the development.		✓	✓
The applicant must install taps with a minimum rating of 3 star in the kitchen in the development.		✓	
The applicant must install basin taps with a minimum rating of 5 star in each bathroom in the development.		✓	
Alternative water			
Rainwater tank			
The applicant must install a rainwater tank of at least 2000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	✓	✓	✓
The applicant must configure the rainwater tank to collect rain runoff from at least 96 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		✓	✓
The applicant must connect the rainwater tank to: <ul style="list-style-type: none"> • all toilets in the development • the cold water tap that supplies each clothes washer in the development • at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.) 		✓ ✓ ✓	✓ ✓ ✓

Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Simulation Method			
The applicant must attach the certificate referred to under "Assessor Details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for an occupation certificate for the proposed development.			
The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX certificate, including the Cooling and Heating loads shown on the front page of this certificate.			
The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Assessor Certificate 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. 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.			
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.		✓	✓
The applicant must construct the floors and walls of the dwelling in accordance with the specifications listed in the table below.	✓	✓	✓

Floor and wall construction	Area
floor - concrete slab on ground	All or part of floor area square metres

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Hot water			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: gas instantaneous with a performance of 5.5 stars.	✓	✓	✓
Cooling system			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The cooling system must provide for day/night zoning between living areas and bedrooms.		✓	✓
Heating system			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The heating system must provide for day/night zoning between living areas and bedrooms.		✓	✓
Ventilation			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: individual fan, not ducted; Operation control: manual switch on/off		✓	✓
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Laundry: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Natural lighting			
The applicant must install a window and/or skylight in 2 bathroom(s)/toilet(s) in the development for natural lighting.	✓	✓	✓
Other			

Energy Commitments

Show on DA plans	Show on CC/CDC plans & specs	Certifier check
	✓	
	✓	

The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling.

The applicant must install a fixed outdoor clothes drying line as part of the development.

Legend

In these commitments, "applicant" means the person carrying out the development.

Commitments identified with a ✓ in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).

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Commitments identified with a ✓ in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate (either interim or final) for the development may be issued.

BASIX[®]Certificate

Building Sustainability Index www.basix.nsw.gov.au

Single Dwelling

Certificate number: 561988S

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 29/06/2009 published by Planning & Infrastructure. This document is available at www.basix.nsw.gov.au

Director-General

Date of issue: Thursday, 24 July 2014

To be valid, this certificate must be lodged within 3 months of the date of issue.



Planning &
Infrastructure

Project summary

Project name	TRE001 L177
Street address	- Hudson Street PENRITH 2750
Local Government Area	Penrith City Council
Plan type and plan number	deposited 1184497
Lot no.	2391
Section no.	-
Project type	attached dwelling house
No. of bedrooms	3

Project score

Water	✓ 40	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 40	Target 40

Certificate Prepared by

Name / Company Name: Thermal Performance

ABN (if applicable): 64 137 428 767

Description of project

Project address	
Project name	TRE001 L177
Street address	- Hudson Street PENRITH 2750
Local Government Area	Penrith City Council
Plan type and plan number	Deposited Plan 1184497
Lot no.	2391
Section no.	-
Project type	
Project type	attached dwelling house
No. of bedrooms	3
Site details	
Site area (m ²)	288
Roof area (m ²)	105
Conditioned floor area (m ²)	117
Unconditioned floor area (m ²)	14
Total area of garden and lawn (m ²)	128

Assessor details and thermal loads		
Assessor number	20731	
Certificate number	1006656852	
Climate zone	28	
Area adjusted cooling load (MJ/m ² .year)	70	
Area adjusted heating load (MJ/m ² .year)	62	
Other		
none	n/a	
Project score		
Water	✓ 40	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 40	Target 40

Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Fixtures			
The applicant must install showerheads with a minimum rating of 3 star (> 7.5 but <= 9 L/min) in all showers in the development.		✓	✓
The applicant must install a toilet flushing system with a minimum rating of 4 star in each toilet in the development.		✓	✓
The applicant must install taps with a minimum rating of 3 star in the kitchen in the development.		✓	
The applicant must install basin taps with a minimum rating of 5 star in each bathroom in the development.		✓	
Alternative water			
Rainwater tank			
The applicant must install a rainwater tank of at least 2500 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	✓	✓	✓
The applicant must configure the rainwater tank to collect rain runoff from at least 105 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		✓	✓
The applicant must connect the rainwater tank to: <ul style="list-style-type: none"> • all toilets in the development • the cold water tap that supplies each clothes washer in the development • at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.) 		✓ ✓ ✓	✓ ✓ ✓

Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Simulation Method			
The applicant must attach the certificate referred to under "Assessor Details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for an occupation certificate for the proposed development.			
The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX certificate, including the Cooling and Heating loads shown on the front page of this certificate.			
The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Assessor Certificate 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. 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.			
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.		✓	✓
The applicant must construct the floors and walls of the dwelling in accordance with the specifications listed in the table below.	✓	✓	✓

Floor and wall construction	Area
floor - concrete slab on ground	All or part of floor area square metres

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Hot water			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: gas instantaneous with a performance of 5.5 stars.	✓	✓	✓
Cooling system			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The cooling system must provide for day/night zoning between living areas and bedrooms.		✓	✓
Heating system			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The heating system must provide for day/night zoning between living areas and bedrooms.		✓	✓
Ventilation			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: individual fan, not ducted; Operation control: manual switch on/off		✓	✓
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Laundry: natural ventilation only, or no laundry; Operation control: n/a		✓	✓
Artificial lighting			
The applicant must ensure that the "primary type of artificial lighting" is fluorescent or light emitting diode (LED) lighting in each of the following rooms, and where the word "dedicated" appears, the fittings for those lights must only be capable of accepting fluorescent or light emitting diode (LED) lamps: • the kitchen;		✓	✓

Energy CommitmentsShow on
DA plansShow on CC/CDC
plans & specsCertifier
check**Natural lighting**

The applicant must install a window and/or skylight in 2 bathroom(s)/toilet(s) in the development for natural lighting.

**Other**

The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling.



The applicant must install a fixed outdoor clothes drying line as part of the development.



Legend

In these commitments, "applicant" means the person carrying out the development.

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