

Planning Enquiries

	Office Use Only	
HUME	Application No.:	Date Lodged:
CITYCOUNCIL	Application for	

Application for **Planning Permit**

If you need help to complete this form, read How to complete the Application for Planning Permit form.

Web: http://www.hume.vic.gov.au Clear Form	Any material submitted with this application, including plans and personal information, will be made available for public viewing, including electronically, and copies may be made for interested parties for the purpose of enabling consideration and review as part of a planning process under the Planning and Environment Act 1987. If you have any concerns, please contact Council's planning department. A Questions marked with an asterisk (*) are mandatory and must be completed. If the space provided on the form is insufficient, attach a separate sheet.
The Land 🚺 ① Addres	s of the land. Complete the Street Address and one of the Formal Land Descriptions.
Street Address *	Unit No.: St. No.: St. Name: Parton Place Suburb/Locality: Craigieburn Postcode: 3064
Formal Land Description * Complete either A or B. This information can be found on the certificate of title.	A Lot No.: 174
	Parish/Township Name: o more than one address, please click this button and enter relevant details. Add Address
	st give full details of your proposal and attach the information required to assess the application. ent or unclear information will delay your application.
For what use, development or other matter do you require a permit?	Select the focus of this application and describe below:
If you need help about the proposal, read: How to Complete the Application for Planning Permit Form	Development of new double storey Dwelling behind existing Dwelling
	Provide additional information on the proposal, including: plans and elevations; any information required by the planning scheme, requested by Council or outlined in a Council planning permit checklist; and if required, a description of the likely effect of the proposal.
3 Estimated cost of development for which the permit is required *	Cost \$\$500,000.00 You may be required to verify this estimate. Insert '0' if no development is proposed. If the application is for land within metropolitan Melbourne (as defined in section 3 of the Planning and Environment Act 1987) and the estimated cost of the development exceeds \$1 million (adjusted annually by CPI) the Metropolitan Planning Levy must be paid to the State Revenue Office and a current levy certificate must be submitted with the application. Visit www.sro.vic.gov.au for information.

Existing Conditions III Describe how the land is Residential used and developed now * eg. vacant, three dwellings, medical centre with two practitioners, licensed restaurant with 80 seats. Provide a plan of the existing conditions. Photos are also helpful. grazing. Title Information III 5 Encumbrances on title * Does the proposal breach, in any way, an encumbrance on title such as a restrictrive covenant, section 173 agreement or other obligation such as an easement or building envelope? If you need help about the title, read: Yes. (If 'yes' contact Council for advice on how to proceed before continuing with this application.) How to complete the Application for Planning Permit form Not applicable (no such encumbrance applies). Provide a full, current copy of the title for each individual parcel of land forming the subject site. (The title includes: the covering 'register search statement', the title diagram and the associated title documents, known as 'instruments', eg. restrictive covenants.)

Owner*

The person or organisation who owns the land

Where the owner is different from the applicant, provide the details of that person or organisation.

Declaration II

7) This form must be signed by the

Remember it is against the law to provide false or misleading information, which could result in a heavy fine and cancellation of the permit.

or unclear information may delay you 8 Has there been a pre-application meeting	No Yes	If 'yes', with whom?:	1
with a Council planning officer?		Date: day / month / year	
Checklist 1			
9 Have you:	Filled in the form	completely?	
		he application fee? Most applications require a fee to be paid. Confidermine the appropriate fee.	tact Council to
	Provided all nece	ssary supporting information and documents?	
		ppy of title information for each individual parcel of land forming the subject site	
	✓ A plan of existing	g conditions.	
		he layout and details of the proposal	×
	checklist.	required by the planning scheme, requested by council or outlined in a council plann	
	l-man-d	scription of the likely effect of the proposal (eg traffic, noise, environmental impacts). current Métropolitan Planning Levy certificate (a levy certificate expires 90 days after	
	on which it is is application is vo	sued by the State Revenue Office and then cannot be used). Failure to comply mean	is the
	Completed the re	levant Council planning permit checklist?	
	Signed the declar	ration (section 7)?	
Lodgement 🗓			
Lodge the completed and signed form, the fee payment and all documents with:	Hume City Council PO Box 119 Dallas V		
		roadmeadows VIC 3047	
	Contact Information Telephone: 61 03 920		
	Email: email@hume.v DX: 94718 Translation: 03 9205 2	ic.gov.au 200 for connection to Hume Link's multilingual telephone information	service
	Deliver application in	person, by fax, or by post:	
	Print Form	Make sure you deliver any required supporting information and nec when you deliver this form to the above mentioned address. This is local council but can sometimes be the Minister for Planning or and	usually your
	Save Form:	Section (Control of the Control of	and all the latest the statest of th
	Save Form To You	You can save this application form to your computer to complete or or email it to others to complete relevant sections.	review later

Application for Planning Permit 2007

VIC. Aus

of enabling its consideration and review as part of a planning



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The Victorian Government acknowledges the Traditional Owners of Victoria and pays respects to their ongoing connection to their Country, History and Culture. The Victorian Government extends this respect to their Elders,

REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

Page 1 of 1

VOLUME 09437 FOLIO 714

Security no : 124107418552H Produced 06/07/2023 02:51 PM

LAND DESCRIPTION

Lot 174 on Plan of Subdivision 127123. PARENT TITLE Volume 09175 Folio 338 Created by instrument LP127123 15/10/1981

REGISTERED PROPRIETOR

ENCUMBRANCES, CAVEATS AND NOTICES

MORTGAGE AU875865H 04/10/2021 PERPETUAL CORPORATE TRUST LTD

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan or imaged folio set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE LP127123 FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

-----END OF REGISTER SEARCH STATEMENT------

Additional information: (not part of the Register Search Statement)

Street Address: 3 PARTON PLACE CRAIGIEBURN VIC 3064

ADMINISTRATIVE NOTICES

NIL

eCT Control 18440T MSA NATIONAL Effective from 04/10/2021

DOCUMENT END

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Number of Pages	1
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Document Assembled	06/07/2023 14:54

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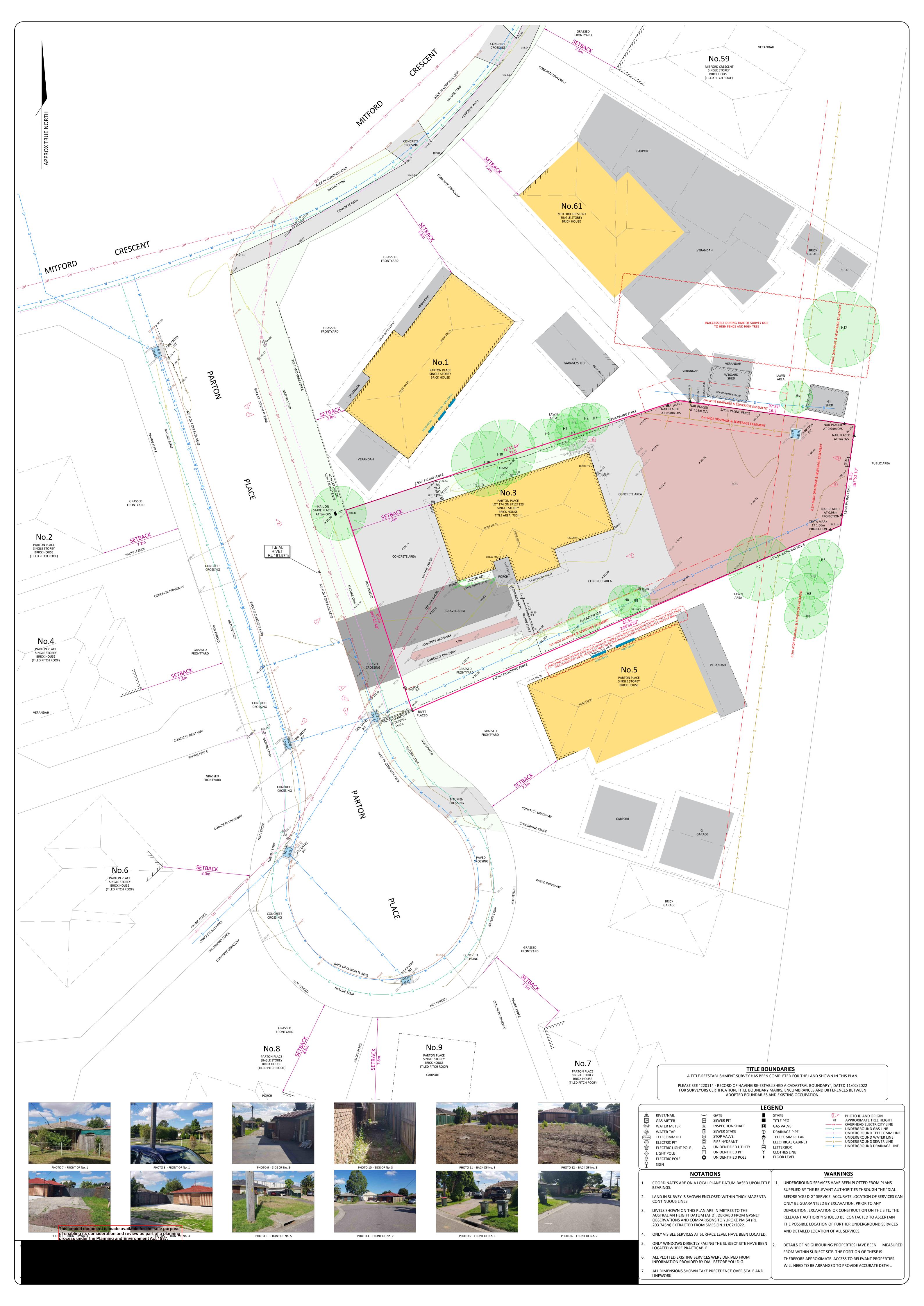
NOTATIONS **APPROPRIATIONS** LOTS 1-159 (INCLUSIVE), LOTS 190-259 (INCLUSIVE), LOTS 295 - 1578 SUBDIVISION BLUE - DRAINAGE AND SEWERAGE COS (INCLUSIVE), LITO 200 1010 (INCLUSIVE) AND LOTS 1583-1605 (INCLUSIVE) HAVE BEEN OMITTED FROM THIS PLAN. BROWN - WAY, DRAINAGE AND 16 CROWN SECTION OF PART SEWERAGE. YUROKE PARISH BOURKE OF COUNTY ARE

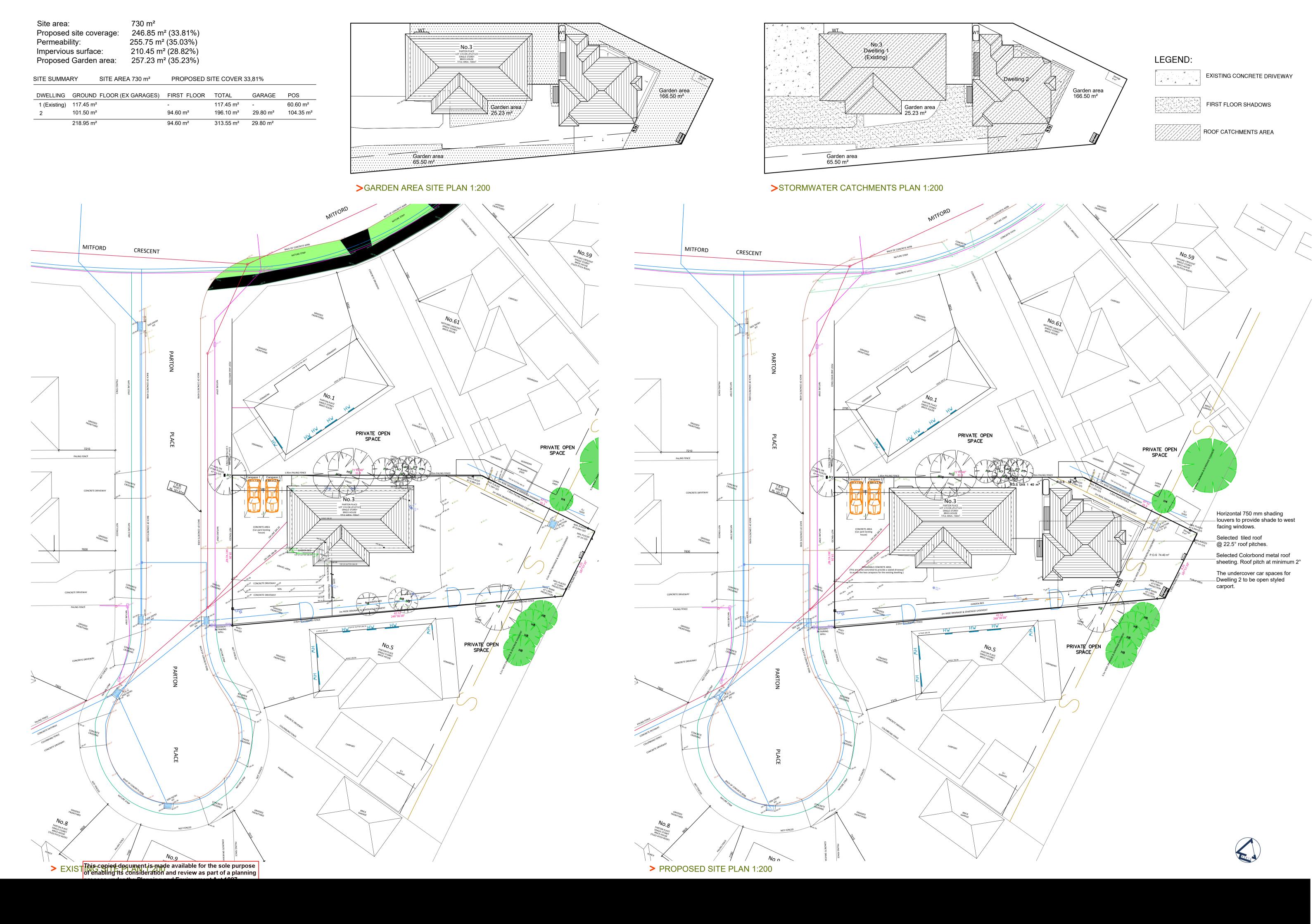
LP127123
EDITION 1
PARISHAT-SHIP/CHART

Vol. 9175 Fol 338

APPROVED 23/ 2 /81 COLOUR CONVERSION

BLUE = E-1 BROWN = E-2 160 SP 34544 RECREATION RESERVE 262 ৪ ই 264 ই PLACE E-1 166 SEDGEFIELD 282 289 (15:25) CLOS, 283 288 286 MITFORD E-2 181 1606 LONGTOWN 176 E-Z COURT 275° O' 56:07







NOTES:

WATER&STORMWATER:

- -Rainwater tanks to be 3000 liters for each dwelling.
- Proposed concrete driveway to be permeable concrete.
- Non-potable water source connected to toilets
- and washing machine stops of the proposed dwelling. - Water efficient landscaping to be installed.
- To improve water efficiency, efficient fixtures and fittings will be installed to ensure a reduction in the total water consumption at the premises.
- This will be achieved by installing appliances, fixtures and fittings are to meet the following water efficiency targets:
- * Showerheads: 4 Star WELS (>4.5 but <=6.0)
- *Kitchen Taps: 5 Star WELS * Bathroom Taps: 5 Star WELS

INDOOR ENVIRONMENT QUALITY

- Double glazed windows (or better) will be installed to most living areas and bedrooms to provide comfortable indoor spaces and reduce energy needed to heating and cooling.

TRANSPORT:

*WC: 4 Star WELS

- Proposed unit will contain a 'Towel Rail' bike rake for occupant use, installed on the long side of the carport wall.

WASTE:

- Facilities provided for on-site management of food and garden waste, compost bin.
- Separate receptacles that will be integrated into the kitchen cabinetry for sorting recyclable from general rubbish. - A commitment to a minimum 70% reuse/ recycling of construction and demolition waste will be made.

URBAN ECOLOGY:

- 35% of the site is covered with vegetation, expressed as a percentage of the total site area

ENERGY EFFICIENCY:

- Internal lighting achieves a maximum illumination
- power density of 4W/sqm throughout development. - Common area external lighting will be controlled by
- daylight sensors, motion sensors and/or time clocks. - The average 6 star Energy Rating for this development
- is 6.8 Stares. - 5 Star Gas Instantaneous hot water system will be installed
- into this development.

FOR MORE INFORMATION'S ON THE ABOVE NOTES CHECK SUSTAINABLE DESIGN REPORT.

PROPOSED STORMWATER TREATMENT MEASURES:

5 WATER SENSITIVE URBAN DESIGN (WSUD) RESPONSE

Rainwater will be collected from each roof area and stored in separate 3000L rainwater tanks located in the backyards of each dwelling. The rainwater will be used to flush toilets and be

connected to the washing machine stops to the proposed development. Melbourne Water recommends that proposed developments provide a Water Sensitive Urban

- Design Response with the following objectives (as outlined in Clause 22.18 Stormwater Treatment
- To improve stormwater discharge quality:
- Suspended Solids 80% retention of typical urban annual load
- Total Nitrogen 45% retention of typical urban annual load Total Phosphorus – 45% retention of typical urban annual load
- Litter 70% retention of typical urban annual load
- To promote stormwater re-use To mitigate the detrimental effect of development on downstream waterways
- To reintegrate urban water into the landscape to facilitate benefits such as microclimate cooling, local habitat and provision of attractive spaces for community use and well-being
- To minimise peak stormwater flows and stormwater pollutants.

A development is required to demonstrate that it meets the objectives of the clause by either:

- Meeting a 100% or higher rating on the STORM rating tool; or Meeting the required discharge quality using the MUSIC rating tool
- Additionally, adequate maintenance and management procedures are required to ensure the stormwater treatment/ reuse measures work as intended.

In the case of a charged pipe system, the pipes will not be running underneath the slab and the

stakeholders (builder/ developer/ architect) will be required to explicitly acknowledge the solution and have the capacity to install it.

5.2 STORM ASSESSMENT A Melbourne Water STORM assessment on the property has been undertaken in order to demonstrate compliance with best practice stormwater treatment objectives as set out in the Urban Stormwater Best Practice Environmental Management Guidelines (CSIRO, 1997).

Stormwater Treatment Objective – Relative Measure (STORM) was developed by Melbourne Water to simplify the analysis of stormwater treatment methods within a development. The calculator assess Water Sensitive Urban Design (WSUD) measures on project sites and delivers a percentage result, determining whether best practice targets have been achieved. A score of 100% or higher means the treatment features meet all objectives.

STORM Rating Report

Municipality: Rainfall Station:

Development Type: Allotment Site (m2): STORM Rating %:

139.90

0.00

MATERIALS + FINISHES SCHEDULE



FACE BRICKWORK HERITAGE LOOK BRICK

TILED ROOF

COLORBOND METAL ROOF



ANODISED ALUMINUM

ARCHI FOAM PANEL

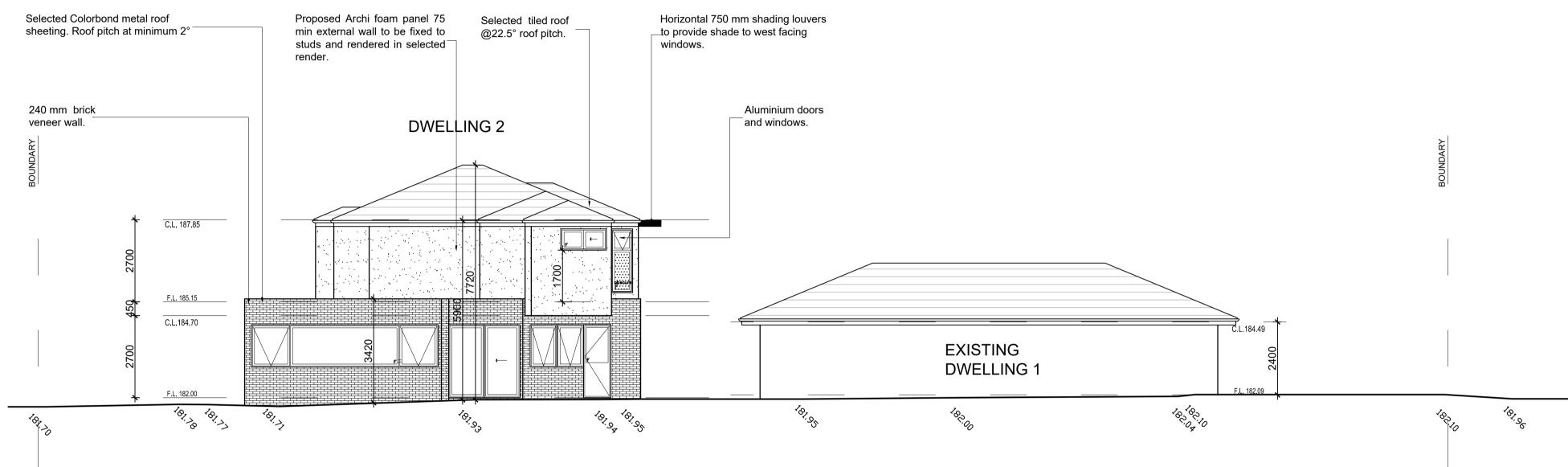


FACE BRICKWORK HAWTHORN RED

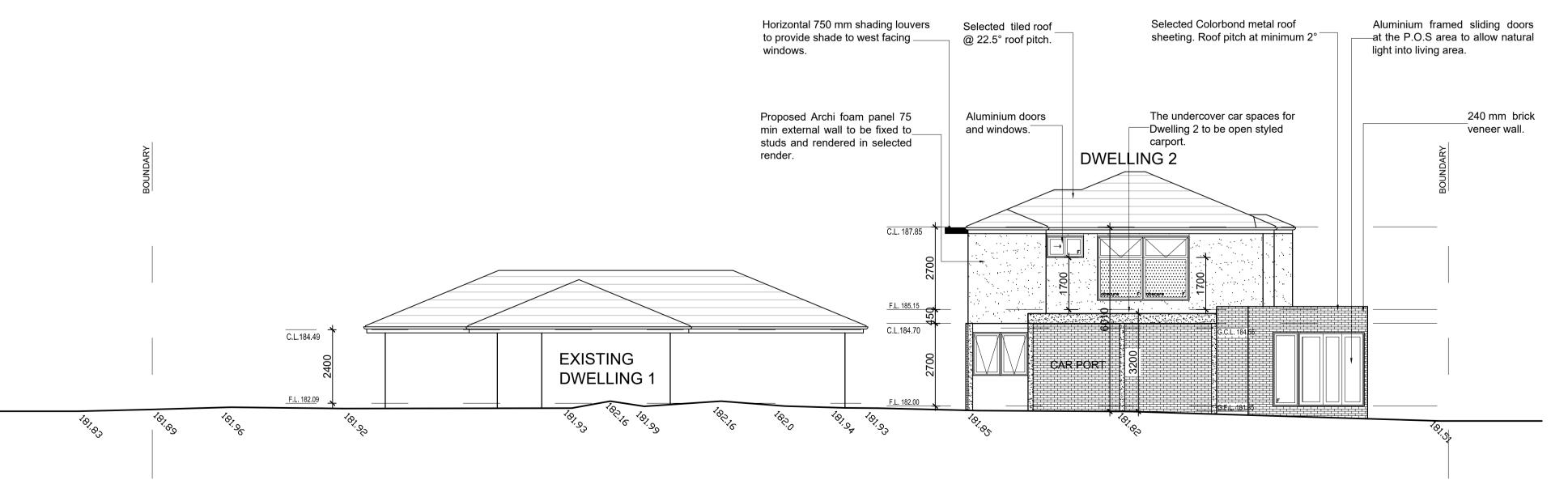


RED TERRACOTTA TILE ANODISED BLACK ALUMINUM FINISH

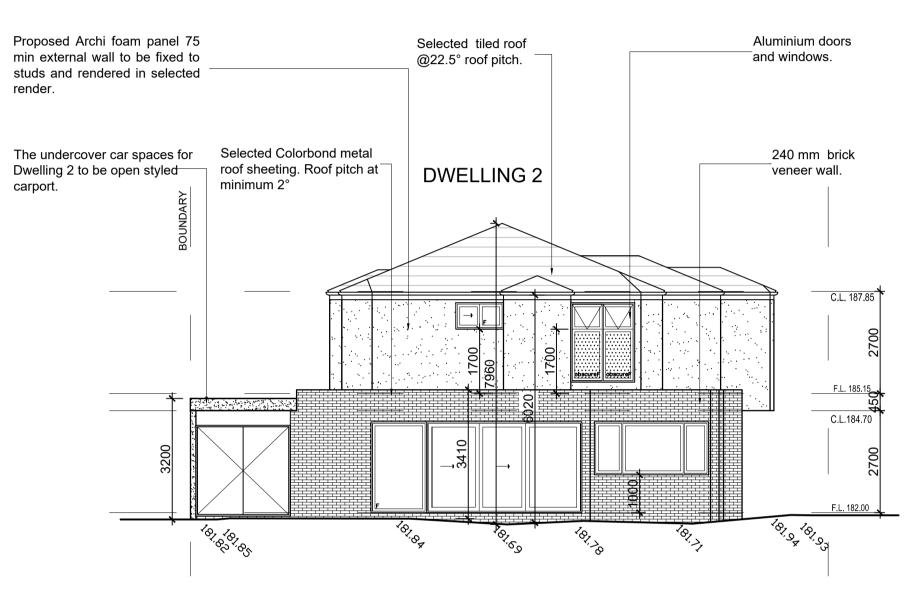
LEGEND FOR MATERIAL FINISHES/ COLOURS				
CODE	MATERIAL	COLOUR/FINISH		
BR 1	FACE BRICKWORK	HAWTHORN RED		
RF 1	TILED ROOF	RED TERRACOTTA TILE		
RF 2	METAL ROOF	COLORBOND GREY		
FR 1	ALUMINUM ANODISED	BLACK		
AF 1	ARCHI FOAM PANEL	BEIGE ROYAL HALFA192		



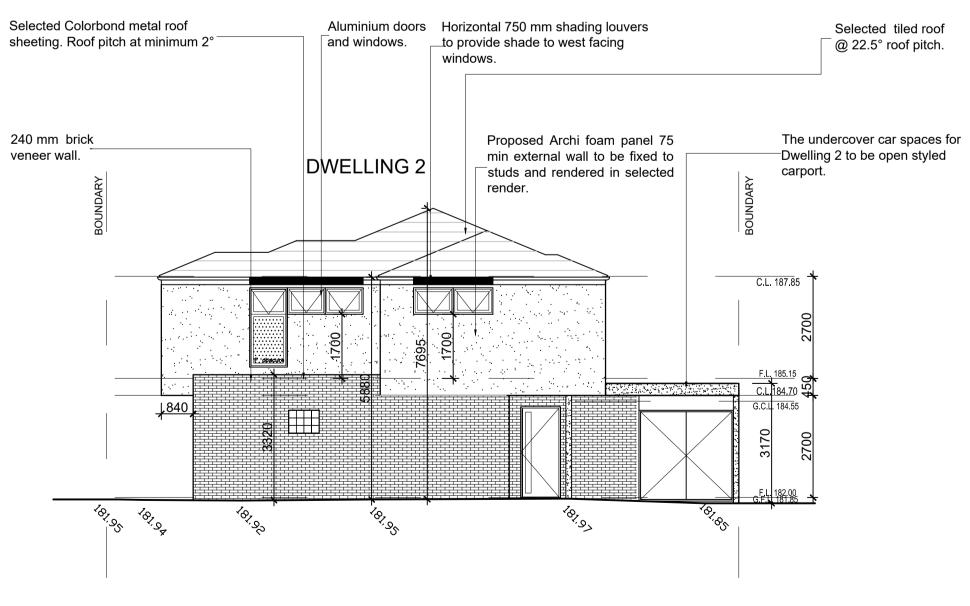




> SOUTH ELEVATION 1:100



> EAST ELEVATION 1:100



> WEST ELEVATION 1:100

<u>Schedule of external materials, colours</u> and finishes@ 3 Parton Place Craigieburn

External Materials:

The external wall for Dwelling is to be made of brickwork for ground level and rendered Archi-foam walls for the upper level.

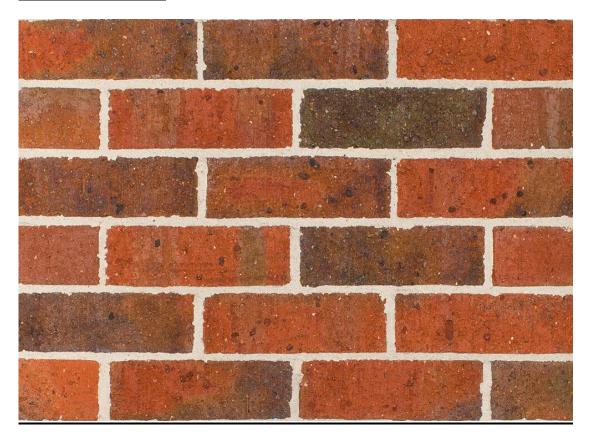
Dwelling 2 upper level to be rendered in Dulux Beige Royal Half.

RENDER:



Beige Royal Half A192

EXTERNAL WALL:



Selected external brick for external ground level Hawthorn Red.

ROOFING:

Dwelling 2 flat roof with minimum 2° to be grey Colorbond roofing.



COLORBOND ROOFING



TERRACOTTA TILE

Dwelling 2 tiled roof to be Terracotta tile at 22.5° roof pitch.

DOORS/WINDOWS

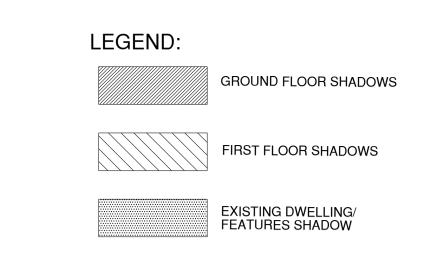
Dwelling 2 external doors and windows frames to be black aluminium frame. Gutters and the roof plumbing will made from zinc aluminium also in black colour to match windows and doors.

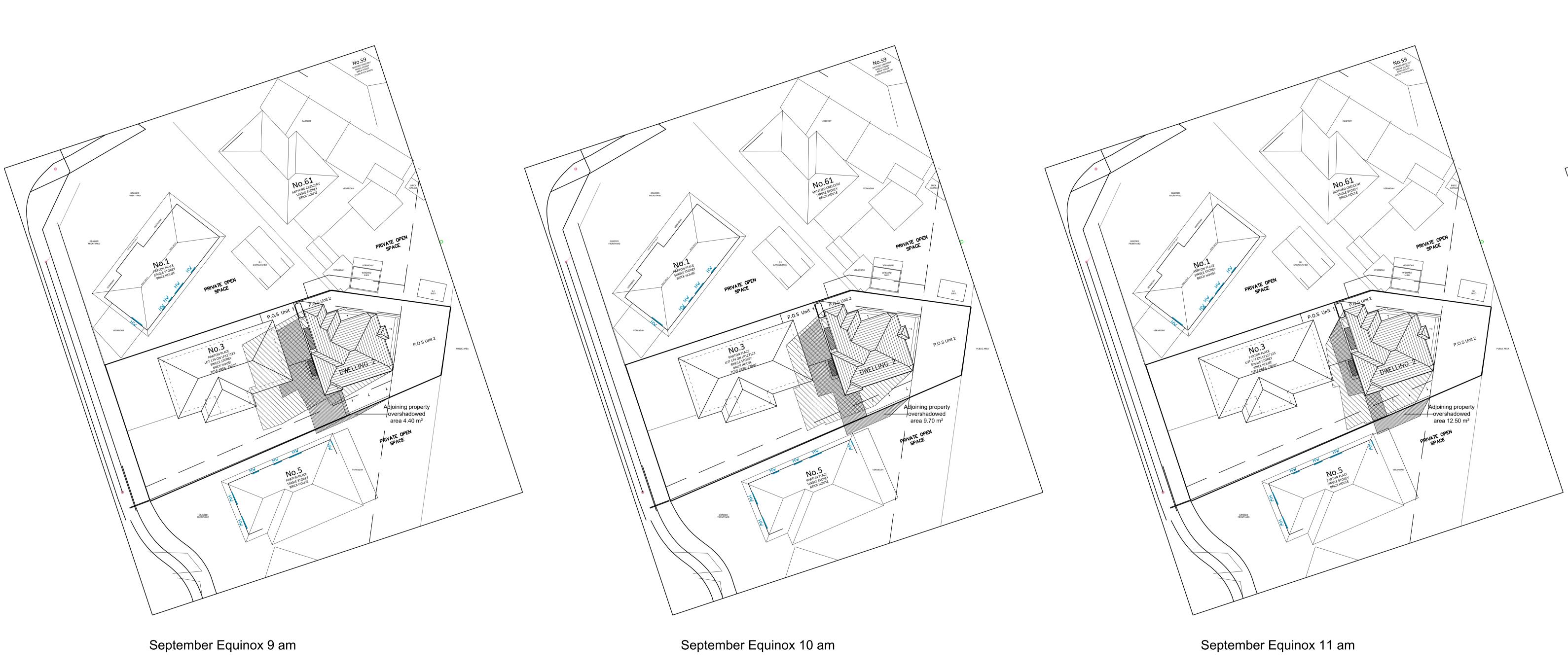


CONCRETE DRIVEWAY

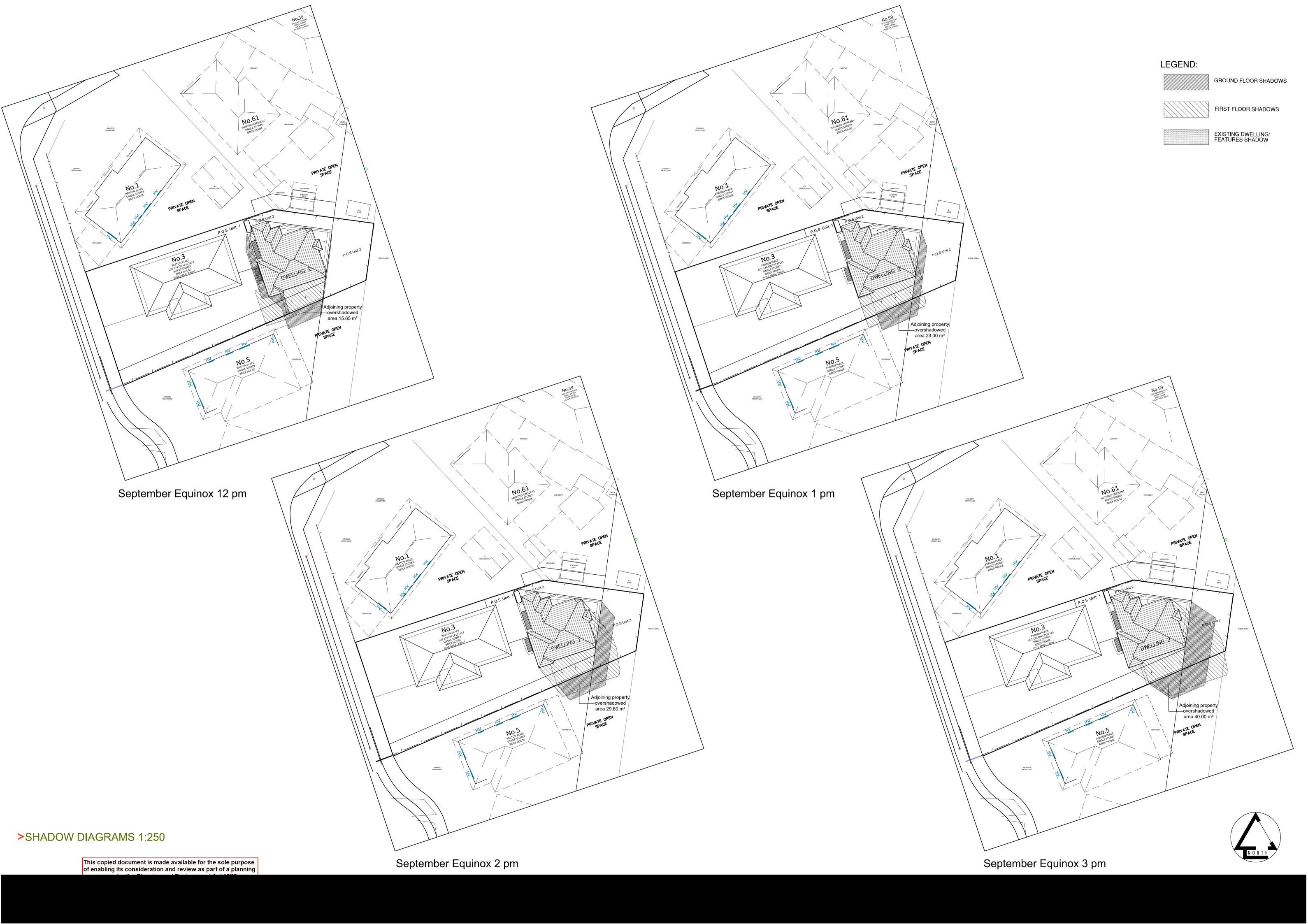
The driveway is to be constructed from light grey permeable concrete or other permeable material.











Hume City Council Planning Submission

Policy assessment and Clause 55 Report



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Introduction

This planning report provides relevant justification for the proposed development of 2 double storey dwellings at 3 Parton Place; Craigieburn.

It is submitted to Council that the proposal comprises a modern, high quality architecturally designed development, which will complement the subject site and surrounds. Given the size of the allotment it is submitted that a proposal for two dwellings is an appropriate infill development.

This report provides details regarding the site context and surrounding environs, details of the proposed development and assessment against the relevant policies of the Hume City Council Planning Scheme.

Overall, the report demonstrates that the proposal has a high level of compliance with the relevant Planning Scheme Provisions, Clause 55, neighbourhood character, and any other Strategic Planning Objectives.

Subject Site and Surrounds (55.01-1 Neighbourhood and site description)

The subject site is located on the eastern side of Parton Place.

The subject site has a frontage to Parton Place of 19.26 metres and a depth of 31.8 metres on the northern side and 42.52 metres on the southern side, 16.30 metres and 9.25 metres on the east side yielding a total site area of 730 sqm.

In relation to the topographical features of the subject site, the land has minimal slope with a 0.30-0.40 metre slope from east to west and similar slope with a 0.50 to 0.70 metre slope from north to south.



The immediate abuttals to the south and north comprise predominantly of single storey residential dwellings set on generously sized allotments. On the east side of the site there is a Public area and Train line. In relation to the wider context the subject site is located close to major arterial road known as Hume Highway which provides direct access from and into the CBD.

North of the site in close proximity is another major road Craigieburn Road and Craigieburn train station that provides direct access to CBD and also to Northern Melbourne suburbs.

North of the site is well known Craigieburn Plaza which comprises of some local shops which provides everyday convenience shopping as well as boutique style shops, cafes and restaurants. In close proximity to the site is Craigieburn Central shopping centre with large department stores, supermarkets etc.

Photos of surrounding properties









Proposal (55.01-2 Design Response)

The proposal seeks to construct 1 new double storey Dwelling at 3 Parton Place; Craigieburn, of at the back of the existing Dwelling. The proposed dwelling is to be constructed out of brickwork with selected lightweight rendered cladding for a second storey, for a contemporary light weight appearance, whilst provision of a hipped roof will provide reference to the predominant neighbourhood character within the immediate area.

The details of the proposal are as follows:

Dwelling 1

- No changes to Existing house that comprises od Living/Dining and three bedrooms
- Access to a 60.60 sq.m north facing secluded private open space is provided from the living and kitchen area with one part of P.O.S with a minimum area of 31.30 sq.m and a minimum dimension of approx. 4m
- Existing Two car parking spaces within front of the house is provided for dwelling 1 at which has direct access into the P.O.S.

Dwelling 2

- Ground floor comprises of an open plan kitchen living and dining area, including a ground floor bedroom with, Powder room with the shower, laundry and WC facilities. First level will have 3 bedrooms with ensuite and robe, whilst first floor comprises small study area that is accessible and available to all residents. Access to upper level via stairs and lift
- Access to a 72.95 sq.m northeast facing secluded private open space is provided from the living and kitchen area with one part of P.O.S with a minimum area of 60 sq.m and a minimum dimension of 6.78 m.
- One car parking space within a Carport is provided for dwelling 2 which has direct access into the P.O.S. Second car space to be provided for Dwelling 2 in front of the Carport.

Planning Permit Triggers

Planning Zone

The subject site is located in General Residential Zone (GRZ) Schedule 1 (GRZ1). The purpose of the General residential zone includes the following:

To encourage a diversity of housing types and housing growth particularly in locations offering access to services and transport; and

To encourage residential development that respects neighbourhood character.

Pursuant to Clause 32.08-6 of the Hume Planning Scheme a planning permit is required for construction of two or more dwellings on a lot. A planning permit required under the zone must also meet the objectives of Clause 55 - Construction of two or more dwellings on a lot.

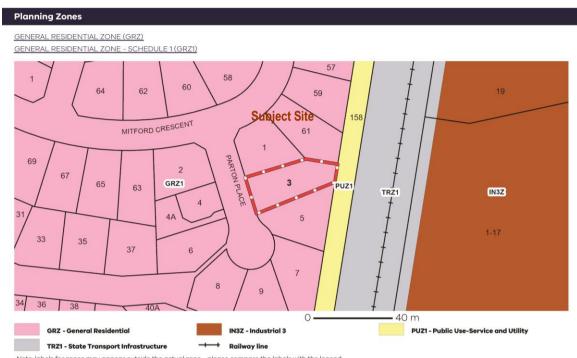
Without question, the proposal responds to this overarching principal of the GRZ, which advocated for increased residential densities within existing urban areas. Furthermore, it is noted that the site is not subject to a heritage overlay and as such is not of either cultural or heritage significance, that would warrant its protection via planning scheme overlays.

The relevant *purposes* of the Residential Zone (GRZ that would apply to a two dwelling development would be to:

• Implement the State Planning Policy Framework and the Planning Policy Framework, including the Municipal Planning Strategy and local planning policies.

- Provide for residential development at a range of densities with a variety of dwellings to meet the housing needs of all households.
- Encourage residential development that respects the neighbourhood character.

Zoning map



Note: labels for zones may appear outside the actual zone - please compare the labels with the legend

Planning Overlays

No planning overlay found

Planning Overlay

No Planning overlays on this land.

State & Local planning policy framework

It is submitted that the proposed two dwelling development on the subject site does not conflict with the State Planning Policy Framework section of the Hume Planning Scheme.

Clause 11 - Settlement

Objective:

-Planning is to anticipate and respond to the needs of existing and future communities through provision of zoned and serviced land for housing, employment, recreation and open space, commercial and community facilities and infrastructure.

Planning is to recognise the need for, and as far as practicable contribute towards:

- Health, wellbeing and safety.
- Diversity of choice.
- Adaptation in response to changing technology.
- Economic viability.
- A high standard of urban design and amenity.
- Energy efficiency.
- Prevention of pollution to land, water and air.
- Protection of environmentally sensitive areas and natural resources.
- Accessibility.
- Land use and transport integration.
- -Planning is to prevent environmental, human health and amenity problems created by siting incompatible land uses close together.
- -Planning is to facilitate sustainable development that takes full advantage of existing settlement patterns and investment in transport, utility, social, community and commercial infrastructure and services.

Also, the subject site is located within walking distance of the Craigieburn Secondary College and within close proximity to Our Lady's Catholic Primary School. Therefore, the type of housing being proposed would be highly suitable to younger families with children.

Clause 11.02 - Managing Growth

Objective:

-To ensure a sufficient supply of land is available for residential, commercial, retail, industrial, recreational, institutional and other community uses

By providing for additional housing within an area that is in relatively close proximity to an existing activity centre reduces pressure on supply of urban land.

Clause 11.03 – Activity Centres

Objective:

To encourage the concentration of major retail, residential, commercial, administrative, entertainment and cultural developments into activity centres that are highly accessible to the community.

-One of the strategies of this clause seeks the development of new sustainable communities that provide jobs and housing in growth areas of Craigieburn. The proposed development of two dwellings on the lot is consistent with the before mentioned strategy.

Clause 15 - Built Environment and heritage

Objective:

- -Planning is to recognise the role of urban design, building design, heritage and energy and resource efficiency in delivering liveable and sustainable cities, towns and neighbourhoods.
- -Planning should ensure all land use and development appropriately responds to its surrounding landscape and character, valued built form and cultural context.
- -Planning should protect places and sites with significant heritage, architectural, aesthetic, scientific and cultural value

The proposal contributes positively to local urban design and enhances liveability, diversity, amenity and safety of the public realm. The proposed dwelling is well-designed. The built form being proposed is mindful of the backyard of an adjacent single storey dwellings. The designer has ensured that the proposal is respectful in terms of scale and form.

The proposal seeks to construct 1 new dwelling at 3 Parton Place; Craigieburn The proposed new dwelling is to be constructed out of face brick wall for ground level and selected lightweight rendered cladding for a second storey, for a contemporary light weight appearance, whilst provision of a hipped end roof that will provide reference to the existing older dwellings within the immediate area.

Clause 15.01 - Urban Environment

Clause 15.01-1S Urban Design

Objective:

-To create urban environments that are safe, healthy, functional and enjoyable and that contribute to a sense of place and cultural identity.

The proposal will achieve high standards in architecture and urban design. Proposed development contributes to community and responded to its context in terms of character, natural features and surrounding landscapes.

Clause 15.02 – Sustainable Development

Clause 15.02-1S Energy and resources efficiency

Objective:

-To encourage land use and development that is energy and resource efficient, supports a cooler environment and minimises greenhouse gas emissions.

This development accords with the current State and Local Planning Policy which actively promotes urban consolidation.

The aspects of the proposed development that reflect environmentally sound design principles being incorporated within this proposal include:

- Both Dwellings 1 and 2 have living areas with a north-eastern orientation.
- The proposed new dwelling 2 having a concrete slab sub-floor (at ground level), as well as adequate wall insulation for both levels, provides for greater thermal massing.
- Windows and doors located in positions to enable effective cross-ventilation to minimise need for air-conditioning during summer months.
- The provision of outdoor clothes drying facilities for both dwellings.
- The requirement under the relevant building controls to achieve a six-star energy rating for the proposed development.

Clause 16 - Housing

Objective:

- -Planning should provide for housing diversity, and ensure the efficient provision of supporting infrastructure.
- -Planning should ensure the long-term sustainability of new housing, including access to services, walkability to activity centres, public transport, schools and open space.
- -Planning for housing should include the provision of land for affordable housing.

This clause encourages diversity for housing and convenient access (walkability) to activity centres, public transport, schools and open space. The provision of two dwellings on the subject site satisfies the intent of this clause.

Clause 16.01-1S - Housing Supply & Clause 16.01-2SHousing Affordability

Objective:

-To facilitate well-located, integrated and diverse housing that meets community needs.

16.01-2SHousing Affordability

Objective: To deliver more affordable housing closer to jobs, transport and services

Two dwellings' developments facilitate both housing diversity and affordability. Both dwellings being proposed are different in its layout and design appearance. Two-storey form of Dwelling 2 reflects housing suitable for younger occupants, which includes families with children but also for older people as it is adaptable with provision of lift.

The close proximity of a primary school, child care facilities, shops, bus stops and recreational facilities makes the proposal highly suitable for occupants that have schoolaged children.

It is important for all areas to have housing options to meet the increasingly diverse housing needs, which includes people that cannot afford the traditional detached dwelling on a large block of land. It is submitted that the proposal achieves the desired diversity and affordability.

Dwellings 1 and 2 would be suitable for single, two, three, four or more-person household, representing an adaptable form of housing that is suitable for a large cross-section of the population.

Therefore, it is also submitted that there is a strong link between improving housing choice through provision of medium-density housing and energy efficiency.

Clause 18 - Transport

Objective:

- Provides access to social and economic opportunities to support individual and community wellbeing.
- -Facilitates economic prosperity.
- -Actively contributes to environmental sustainability.
- -Facilitates network-wide efficient, coordinated and reliable movements of people and goods.
- -Supports health and wellbeing

The provision of additional housing within an area that is well-serviced by public transport (buses/trains), accords with the intent of this Clause.

Clause 55 Assessment

The purpose of Clause 55 is to ensure proposed new dwellings respect the existing neighbourhood character provides for appropriate on and off-site amenity. Clause 55 is divided in four sections which deal with character issues, layout and building massing, onsite and off-site amenity impacts and detailed design.

55.02 Neighbourhood Character and Infrastructure

55.02-1 Neighbourhood Character Objective

The existing neighbourhood character of the area consists mainly of single and some double storey dwellings that are constructed of brick and weatherboard and have a concrete or terracotta tiled hipped roof. Some double storey unit developments close to the subject site have contemporary look with combination of hip and gable end roofs, brick and rendered walls. As such the existing neighbourhood character is somewhat inconsistent. The design of the proposed new dwelling 2 complements the existing housing styles in the area and responds well to the features of the site. The setback of the development from existing dwellings and other dwellings in the area is consistent with other setbacks along the street and within the wider area and the proposed construction materials are typical of dwellings recently constructed. The setback of the development from the side boundaries is also reflective of the pattern of development in the area.

Car parking for the proposed dwellings are located on site. The location of the car parking and crossovers for the proposed development has been designed to ensure these elements do not dominate the streetscape or impact on the existing street trees or any Council assets.

Adequate open space will be provided for recreation, while opportunities are provided for landscaping for the site to blend in the development with the neighbourhood and soften the development when viewed from neighbouring residential properties and public areas.

55.02-2 Residential Policy Objectives

The proposal is within excellent proximity to public transport, local shops and public open space as well as Craigieburn Plaza and Craigieburn Rd shopping strip. Craigieburn Central Shopping Centre is at close proximity to the site. Site is in the proximity to Craigieburn Rd, Craigieburn Rd East/Craigieburn Bypass and Hume Highway Road as such provides an excellent location for the proposed development.

55.02-3 Dwelling Diversity Objective

The requirements of this standard apply to developments of 10 or more dwellings. This standard is not applicable to this application.

55.02-4 Infrastructure Objectives

The proposed development will not overload the existing infrastructure, and is able to be connected to all appropriate utility services.

55.02-5 Integration with the Street Objective

The proposed development will be integrated with the layout and built form present along Parton Place. Existing Dwellings 1 is orientated to have direct views of Parton Place. Dwelling 2 will be ordinated to face Parton Place from the back of the site with the entry door facing Parton Place and will have direct views from Living space as well as bedroom on the ground level. Proposed landscaping will provide a natural buffer to Parton Place. Proposed development meets the requirements of Standard B5. (Please read in conjunction with design response drawings).

55.03 Site Setbacks and Building Massing

55.03-1 Street Setback Objective

Surrounding areas Setbacks	
Setback of Parton Place	Average 8 m
Setback required by the standard	6-15 m
Proposed setback of new dwelling	Not applicable

Existing dwelling 1 has setback of 7.58 meter to the front which will not be changed. No work proposed to Existing house.

55.03-2 Building Height Objectives

Proposed maximum height of dwellings	7.96 meters
Height required by the standard Schedule 1 (GRZ1)	The building must no exceed 11 metres None specified
Does the application comply with Standard B7?	Yes

Maximum building height of the proposed development will be less than the 11.0 meters allowed by Standard B7.

55.03-3 Site Coverage Objectives

Proposed site coverage equates to 33.81% of the subject site, which is below the recommended 60% and allowed under Standard A5 and B8 and Schedule 1 which doesn't specify coverage percentage. This indicates that the proposed development comfortably fits within the parameters of the site and does not constitute over development.

55.03-4 Permeability Objectives

The proposal sets aside 35.03% of the overall area for permeable surfaces, above the minimum 30% recommended by Standard B9. The site will be able to provide for on-site stormwater filtration through high site permeability.

55.03-5 Energy Efficiency Objectives

The subject site has north-south orientation, as such both Dwellings will have access to either north or east and west sunlight. Provision of either solar panels or water tanks will be provided for the proposed development. Proposal meets the requirements of Standard B10.

55.03-6 Open Space Objectives

The proposed development does not provide any public or communal open space. This standard is not applicable to this application.

55.03-7 Safety Objectives

It is considered that the design and layout of the dwellings provides for the safety and security of residents and property. Dwelling entries are clearly identifiable and accessible to both the street and driveway area. The proposal provides adequate visual surveillance both external to and from within the development itself.

55.03-8 Landscaping Objectives

The proposal aims to maintain all existing trees and plants which are deemed to contribute to the streetscape and neighbourhood character. Some trees will be removed as applicable and will be replaced with new trees that will be in line with council requirements and standards.

Indicative landscaping will be provided; however, should a planning permit be issued landscaping plan can form part of the permit condition.

(Refer to existing drawings; design response drawings).

55.03-9 Access Objectives

The site relies on the existing crossover for vehicle access on Parton Place. This is an appropriate design response consistent with the neighbourhood character. The retention of the existing crossovers ensures no vegetation along the nature strip is adversely affected by the proposed development.

55.03-10 Parking Location Objectives

Proposed development will provide double car space and for both dwelling 1 and 2 being three -four bedrooms dwellings. Bicycle storage has not been formally nominated, however there is substantial amount of space within garage for the storage of bikes. (Refer to ground floor plan)

The car parking provision per dwelling has been provided as follows: -

Dwelling No	Bedrooms	Car Parking Provided	Res. Code Requirement.
1	3	2 Spaces	2 Spaces
2	4	2 Spaces	2 Spaces
Does the application comply with Standard B16?			Yes

55.04 Amenity Impacts

55.04-1 Side rear Setbacks objectives

Proposed side and rear setbacks are in accordance with Standard B17.

55.04-2 Walls on boundaries objectives

Proposed Unit will have only one Carport wall on the boundary (Dwelling 2). Refer to Ground floor plan.

Height of Wall on Boundary	Length of Wall on Boundary	Res. Code Allowable Length of Wall on Boundary Requirement	
3.2 m aver	5.75 m		
Does the application comply with Standard B18?		Yes	

The extent of the wall is compliant with standard B18 and will not cause adverse amenity impacts

55.04-3 Daylight to Existing Window Objective

Daylight to all existing habitable room windows of adjoining dwellings will not be affected by the proposal due to the existing large setbacks of adjoining dwellings from the site boundaries.

(Refer to design response drawings and proposed elevations drawings).

55.04-4 North-facing windows objectives

All existing habitable room windows to the north, east and west of the site will have access to ample amounts of daylight; the proposed development meets the requirements of Standard B19.

(Refer to design response drawings and elevations).

55.04-5 Over shadowing open space objectives

Existing open space either side of the subject site will not experience a significant reduction of sunlight access into their private open space, due to generous sizes and setbacks from the boundary.

(Refer to shadow diagrams; design response drawings).

55.04-6 Overlooking Objective

Overlooking of neighbouring secluded open space areas and windows has been protected through the provision of obscure and highlight windows. Protection of adjoining amenity is considered to be an important amenity feature and as such care has been taken to ensure no unreasonable impact occurs from overlooking.

(Refer to design response plan/elevations)

55.04-7 Internal Views Objectives

The development has been designed to prevent views into the open space and habitable room windows within the development.

55.04-8 Noise impacts objectives

The proposed development will be used of residential purposes consistent with the zone, therefore is unlikely to have adverse noise impacts.

55.05 On Site Amenity and Facilities

55.01 Accessibility Objectives

It is considered that the layout of the proposed Dwelling 2 development caters for disabled persons.

Each dwelling will be accessible by people with limited mobility, by ensuring habitable living areas and WC facilities are located on the ground floor.

55.05-2 Dwelling Enter Objectives

Each dwelling entry is visible either from the street or the shared access way and is easily identifiable through the provision of a porch over the entry to each dwelling. Existing and proposed dwelling entry points comply with standard B27.

55.05-3 Daylight to new windows objectives

All habitable rooms within the development will have adequate access to daylight as windows and living areas are located away from boundaries and walls which would have an adverse effect in relation to sunlight access. Proposal meets the requirements of Standard B26.

55.05-4 Private open space objectives

The design response strategically places private open space to interact with internal living arrangements adequately. The private open space required are achieved and adequately documented in the design response.

Access to a 60.60 sq.m north facing secluded private open space is provided from the living and kitchen area with one part of P.O.S with a minimum area of 31.30 sq.m and a minimum dimension of approx. 4m

Access to a 72.95 sq.m northeast facing secluded private open space is provided from the living and kitchen area with one part of P.O.S with a minimum area of 60 sq.m and a minimum dimension of 6.78 m.

55.05-5 Solar access to open space Objectives

All dwellings will receive direct northern sunlight to their open space areas. (See design response drawings).

55.05-6 Storage objective

Each dwelling will have access to 6 cubic square metres of storage within the secluded open space areas in accordance with standard B29.

55.06 Detailed Design

55.07 55.06-1 Design Detail Objective

It is considered that the facade design of the proposal is satisfactory, complementing the existing dwelling styles within the area. Although simple in appearance and design, the proposal includes similar design features that exist in the existing neighbourhood. Window location and sizes are appropriate, as is the proposed roof form, including the provision of entry canopy on the ground floor. The proposal is considered to be in keeping with the existing neighbourhood character.

55.06-2 Front Fences objectives

The proposed design aims to preserve the character of the existing front fences around the area. No new front fence proposed.

55.06-3 Common Property Objectives

There will be shared driveway between Dwelling 1 and 2 as a common property.

55.06-4 Site Services Objectives

Existing house has storage on the side of the house for rubbish and recycling bin. Rubbish and recycling bins can be stored within the proposed Carport of new dwelling 2.

Mailboxes will be provided along the street frontage in accordance with the requirements of Australia Post.

Conclusion

To conclude, it is submitting that the proposed redevelopment of the site for 2 dwellings on the site (1 Existing, 1 New) has strong planning merit, as well as policy support within the Hume City Council Planning Scheme and should be supported for the following reasons:

- -The proposal is consistent with the policies and controls of the Hume City Council Planning Scheme, in relation to provision of increased housing densities in areas which have good access to roads, public transport including community and commercial infrastructure;
- -The form and scale of the proposed development responds to the existing neighborhood character by containing proposed dwellings to a maximum height of two storey's consistent with the built form context of the surrounding environs;
- -The proposed development will not adversely affect the amenity of the adjoining properties in so far as overlooking, overshadowing and visual bulk, this is evident given the high level of compliance with Clause 55 provisions; and
- -The proposed development provides a good level of amenity for future residents and presents orderly planning of the areas.

For the reasons outlined above and throughout the report, it is respectfully requested that the Hume City Council support the application, through the issue of a planning permit.

Should you have any questions in relation to this matter please do not hesitate to contact the undersigned on 8394 9410.

Yours faithfully,





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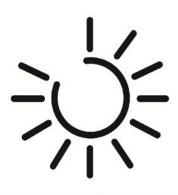


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1 INTRODUCTION

The following Sustainable Design Assessment (SDA) has been prepared by to provide an overall and a wider approach to assessing the sustainability of the proposed development. It offers an overview from various perspectives (energy, material etc.) for the relevant council officer to assess.

This development includes a wide range of holistic sustainability measures which have been carefully integrated into the design of the development so that the residents will have the opportunity to reduce their ecological footprint without compromising their quality of life.

1.1 STATUTORY FRAMEWORK

Hume City Council encourages the inclusion of Environmentally Sustainable Development (ESD) initiatives within the design process of new developments, which will result in more sustainable buildings within the community.

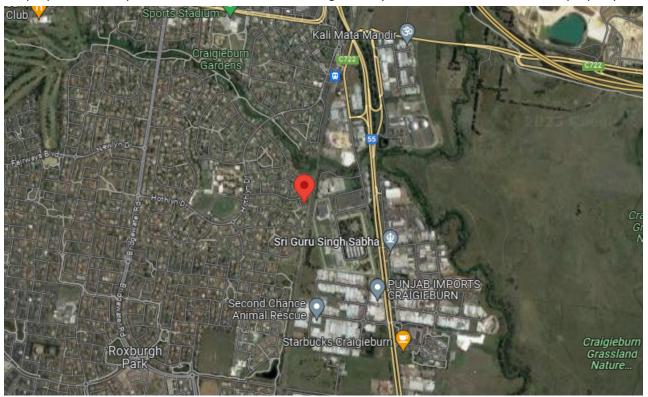
Odin Solutions have been engaged to undertake a Sustainable Design Assessment for the proposed townhouse located at 3 Parton place, Craigieburn.

The SDA report has identified the following key categories to be addressed;

- Water Resources
- Energy Performance
- Stormwater Management
- Indoor Environment Quality
- Construction, Building & Waste Management
- Building Materials
- Transport and
- Urban Ecology

1.2 SITE AND DEVELOPMENT DESCRIPTION

The subject property is located within Craigieburn, a suburb within the domains of Hume City Council. The site measures roughly 730m² where by a single storey dwelling is present. The proposed development will consist of an added single storey townhouse to the rear of the property.



Aerial view of the proposed development

2 ESD ASSESSMENT TOOLS

There are a number of calculators and modelling programs available to help assess proposed developments against benchmarks set by the Victorian State Government, City Councils and the Building Code of Australia. This report has utilised the Built Environment Sustainability Scorecard (BESS) system which covers the overall sustainability of the project, FirstRate5, which assesses the thermal performance of the building fabric of residential portion of the development (Class 2) and STORM, which analyses stormwater treatment onsite.

2.1 Built Environment Sustainability Scorecard (BESS)

All information and calculations necessary to produce the SDA report are provided by using the Built Environment Sustainability Scorecard (BESS). The BESS tool assesses energy and water efficiency, thermal comfort, and overall environmental sustainability performance of new buildings or alterations.

There are four are four mandatory categories with minimum score: Indoor Environment Quality (IEQ), Energy, Water, and Stormwater. The final BESS overall score is determined by the individual category scores:

- 'Best Practice' is defined within BESS as an overall score of 50% or above
- 'Excellence' is defined within BESS as an overall score of 70%.

2.2 STORM

Stormwater Treatment Objective – Relative Measure (STORM) was developed by Melbourne Water to simplify the analysis of stormwater treatment methods within a development. The calculator assess Water Sensitive Urban Design (WSUD) measures on project sites and delivers a percentage result, determining whether best practice targets have been achieved. A score of 100% or higher means the treatment features meet all objectives.

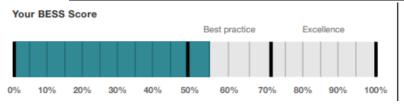
2.3 FIRSTRATE5

The thermal performance of dwellings is assessed using FirstRate5, an energy modelling software programme that rates dwellings on a 10 star scale. Using Accurate (a nationally recognised energy benchmarking tool) to rate dwellings based on climate zone, building orientation, construction materials and building sealing. Victorian townhouses are required to achieve a minimum 6 star rating to comply with the NCC.

3 ESD ACHIEVEMENTS

The following tables outline the scores achieved in each assessment tool used. This development has achieved a 'Pass' score in each.

BUILT ENVIRONMENT SUSTAINABILITY SCORECARD (BESS)						
% of Total	Category	Required Score	Project Score			
5%	Management	0%	40%			
9%	Water	50%	66%			
28%	Energy	50%	50%			
14%	Stormwater	100%	100%			
17%	IEQ	50%	60%			
9%	Transport	0%	50%			
6%	Waste	0%	50%			
6%	Urban Ecology	0%	57%			
9%	Innovation	0%	0%			
	Final BESS Score	50%	55%			



55%





PRELIMINARY 6 STAR ENERGY RATING RESULTS

Dwelling 2 6.8

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4 ESD INITIATIVES & IMPLEMENTATION

4.1 MANAGEMENT

	IMPLEMENTATION	RESPONSIBILITY
DESIGN REQUIREMENT	Stage	
Thermal Performance Modelling		
Preliminary NatHERS ratings have been completed for each thermally unique dwelling.	Planning Stage	Architect/ ESD Consultant
Additional information is provided in Appendix A of this SDA report.		

4.2 WATER CONSERVATION

	IMPLEMENTATION	RESPONSIBILITY
Decion Produpement		RESPONSIBILITY
DESIGN REQUIREMENT	Stage	
Potable Water Use Reduction (Interior Use)		1
To improve water efficiency, efficient fixtures and fittings will be	Planning Stage	Architect/ ESD
installed to ensure a reduction in the total water consumption at		Consultant
the premises.		
This will be achieved by installing appliances, fixtures and fittings		
are to meet the following water efficiency targets:		
- Showerheads: 4 Star WELS (>=6.0 but <=7.5)		
- Kitchen Taps: >5 Star WELS rating		
- Bathroom Taps: >5 Star WELS rating		
- WC: >4 Star WELS rating		
Rainwater Collection & Reuse		
Reducing potable (mains) water consumption through a	Planning Stage	Architect/ ESD
rainwater collection and re-use scheme ensures cost savings and		Consultant
the efficient use of water.		
All dwellings will contain a 3000 litre rainwater tank to drain a		
minimum 139m ² of rainwater for reuse.		
The non-potable water source to be connected to the toilets and		
washing machine stops of the proposed dwelling.		
Additional information is provided in the Water Sensitive Urban		
Design (WSUD) response.		
Water Efficient Landscaping		
Water efficiency principals will be implemented in the	Planning Stage	Architect/ ESD
landscaping area. This will be achieved by planting low water use		Consultant
plant selections.		

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4.3 ENERGY EFFICIENCY

	IMPLEMENTATION	RESPONSIBILITY
DESIGN REQUIREMENT	Stage	
Thermal Performance Rating – Residential		
The average 6 Star Energy Rating for this development is 6.8 Stars, exceeding the NCC minimum requirement of 6.0 stars. This will be achieved through the installation of double glazed windows in the habitable sections, insulation products, as well as excellent passive designs.	Planning Stage	Architect/ ESD Consultant
Heating & Cooling		
High efficiency reverse cycle air conditioning systems will be installed, giving occupants the ability to completely switch off the air conditioning when not required.	Planning Stage	Mechanical Engineer
 All A/C units are to meet the following requirement: Minimum 5 stars or within 1 star of the best; whichever option is greater. 		
Hot Water System		
Gas Instantaneous hot water systems will be installed into this development with a minimum 5 Star energy rating.	Planning Stage	Architect
Appliances		<u>'</u>
Appliances are a significant source of greenhouse gas emissions in a development. Every effort should be made to minimise the energy consumption of these items. Where appliances are provided in a dwelling, they will be selected to be within one star of the best available in its product range, using the Energy Star rating system.	Planning Stage	Architect
Clothes Drying		
Each dwelling will have a private outdoor clothesline. This will help reduce annual energy consumption.	Planning Stage	Architect
Lighting		
Internal lighting achieves a maximum illumination power density of 4W/sqm or less throughout the development.	Planning Stage	Architect
Common area external lighting will be controlled by daylight sensors, motion sensors and/or time clocks.		
	l .	1

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4.4 IEQ – INDOOR ENVIRONMENT QUALITY

	IMPLEMENTATION	RESPONSIBILITY
DESIGN REQUIREMENT	Stage	
Daylight Access		
All bedrooms/ living spaces incorporate an external window, providing high level of amenity and energy efficiency through design for natural light.	Planning Stage	Architect/ ESD Consultant
Double Glazing		
Double glazed windows (or better) will be installed to all living areas and bedrooms to provide comfortable indoor spaces and reduce energy needed for heating and cooling.	Planning Stage	Architect/ ESD Consultant
Orientation		
At least 50% of living areas are orientated to the north. This will provide comfortable indoor spaces and reduce energy needed for heating and cooling.	Planning Stage	Architect

4.5 SUSTAINABLE BUILDING MATERIALS

The choice of building materials for a project can have a significant impact on the projects overall environmental footprint. An overarching objective to select materials based on their probably environmental footprint has been implemented on this project. Materials will be selected based on the following attributes:

	IMPLEMENTATION	RESPONSIBILITY
Design Requirement	Stage	
Embodied Energy		
Total embodied energy is to be considered when selecting	Design Stage	Architect
materials. High embodied energy materials, such as concrete,		
aluminium and zinc are to be avoided where possible. When		
these materials are necessary, suppliers that provide percentage		
of recycled materials to be selected.		
Biodiversity and Habitat Destruction		
All timber used for the project must be from sustainably	Design Stage	Architect
managed sources. This must be demonstrated through		
appropriate certification schemes, such as PEFC or FSC.		
End Of Life		
Consideration must be given to how materials may be disposed	Design Stage	Architect
of. Recyclable materials must be chosen wherever possible.		
Preference must be given to suppliers with end-of-life recycling		
schemes.		
Toxicity		
Materials which have health risks during manufacture and	Design Stage	Architect
installation must be avoided where possible. Low VOC products,		
E0 or E1 wood products, best practice PVC should be selected		
wherever practical.		
Durability		
Consideration must be given to the life expectancy of materials.	Design Stage	Architect
Durable materials should be specified for relevant applications.		
Maintenance		
Materials that are easily maintained must be specified. This is	Design Stage	Architect
likely to increase the life expectancy of the material. Materials		
that require cleaning agents that have environmental impacts be		
avoided.		

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Material initiatives help to reduce the use of virgin materials, reduce waste and promote the use of materials with low embodied energy and environmental impacts.

	IMPLEMENTATION	RESPONSIBILITY
DESIGN REQUIREMENT	Stage	
Insulation Product		
All bulk thermal insulation used in the project will contain a	Design Stage	Builder
minimum of 20% post-consumer recycled material.		
Concrete		
A minimum of 50% of the concrete mix will contain recycled	Design Stage	Builder
water (rainwater or purchased recycled water).		
Steel		
Wherever possible, steel for the development will be sourced	Design Stage	Builder
from a Responsible Steel Maker. Reinforcing steel for the		
project will be manufactured using energy reducing processes		
commonly used by large manufactures such as Bluescope or		
OneSteel.		
Timber		
Wherever possible, timber used in the development will be	Design Stage	Builder
Forest Stewardship Council (FSC) or Program for the		
Endorsement of Forest Certification (PEFC) certified or recycled/		
reused.		
Frames and Finishes		
Where possible, components of roofing, ceiling, wall, cladding	Design Stage	Builder
and framing materials, classified as "environmentally innovative"		
will be specified.		
Non-toxic Durable Materials		
Materials used in the development will have longer warranties	Design Stage	Builder
(>7 years desired) were possible and will be non-toxic.		
Sustainable Materials		
Sustainable materials such as low VOC paints for internal walls	Design Stage	Builder
to be used.		







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Max TVOC Content Limits for Paint	s, Varnishes and Protective Coatings		
Carpet TVOC Emissions Limits	Max TVOC EmissionLimit (mg/m2 per hour)		
Total VOC Limit	0.5		
4-PC (4-Phenylcyclohexene)	0.05		
Max TVOC Content Limits for Adhesives and Sealants			
Product Type	Max TVOC Content (g/I of product)		
Indoor carpet adhesive	Latex primer for galvanized iron and zincalume		
Carpet pad adhesive	Interior latex undercoat		
Wood flooring and Laminate adhesive	Interior sealer		
Rubber flooring adhesive	One and two pack performance coatings for Floors		
Sub-floor adhesive	Any solvent-based coatings whose purpose is not covered in table		
Ceramic tile adhesive	65		
Cove base adhesive	50		
Dry Wall and Panel adhesive	50		
Multipurpose construction adhesive	70		
Structural glazing adhesive	100		
Architectural sealants	250		
Max TVOC Content Limits for Paint	s, Varnishes and Protective Coatings		
Walls and ceilings – interior semi-gloss	16		
Walls and ceilings – interior low sheen	16		
Walls and ceilings – interior flat washable	16		
Ceilings – interior flat	14		
Trim – gloss, semi-gloss, satin, varnishes and wood stains	75		
Timber and binding primers	30		
Latex primer for galvanized iron and zincalume	60		
Interior latex undercoat	65		
Interior sealer	65		
One and two pack performance coatings for Floors	140		
Any solvent-based coatings whose purpose is not covered in table	200		

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4.6 TRANSPORT

	IMPLEMENTATION	RESPONSIBILITY
DESIGN REQUIREMENT	Stage	
Walkable Location		
The walkability for the location has been assessed by		
walkscore.com. This site measures the walkability of any location		
in the world based on the distance to nearby amenities and		
pedestrian friendliness. The location is given a score out of a maximum of 100.		
maximum or 100.		
This site achieves a walk score of 41, which is classed as		
'Car-Dependent' – most errands require a car.		
·		
Transit Location		
This site achieves a transit score of 52, which is classed as		
'Good Transit' – many nearby public transportation options.		
This development is within a short drive (less than 10 minutes)		
to Craigieburn train station. There also is a nearby bus stop for		
residents to commute between Craigieburn train station and		
Craigieburn shopping centre (Route 528).		
Bicycle Parking		
Proposed unit will contain a 'Towel Rail' bike rake for occupant		
use, installed on the long side of the carport wall.		

Parking rail

Spatial requirements

Towel Rail

A space-effective solution for parking single bikes against a wall. Useful for short term parking, accommodates all types and sizes of bicycles.

3 Parton Place

Many nearby public transportation options.

- · wall mounted
- · recommended rail spacing centre to centre 1.8-2m.
- · mount approximately 0.7m above the floor
- bicycles will extend the width of a handlebar (up to 0.7m) from the wall



Add scores to your site

Craigieburn, Melbourne, 3064 Commute to Downtown Sunbury 43 min 60+ min 60+ min View Routes Favorite Map Nearby Apartments Car-Dependent Most errands require a car.

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About your score

4.7 WASTE

DESIGN REQUIREMENT	IMPLEMENTATION STAGE	RESPONSIBILITY
Food & Garden Waste		
Facilities provided for on-site management of food and garden waste.	Planning Stage	Architect/ ESD Consultant
Sorting of Recyclable/ General Waste		
Separate receptacles will be integrated into the kitchen cabinetry for sorting recyclable from general rubbish. This will promote occupants to recycle more and make the practice easier.	Planning Stage	Architect/ ESD Consultant
Construction Waste		
A commitment to a minimum 70% reuse/ recycling of construction and demolition waste will be made.	Construction Stage	Builder

4.8 URBAN ECOLOGY

Development in existing urban areas helps reduce the need for green field development and the associated environmental impacts, such as car dependency, increased need for infrastructure and displacement of agricultural land.

DESIGN REQUIREMENT	IMPLEMENTATION STAGE	RESPONSIBILITY
Vegetation		
35% of the site is covered with vegetation, as expressed as a percentage of the total site area.	Planning Stage	Architect/ ESD Consultant
30% or more vegetated area gains a 100% BESS score.		

5 WATER SENSITIVE URBAN DESIGN (WSUD) RESPONSE

Rainwater will be collected from each roof area and stored in separate 3000L rainwater tanks located in the backyards of each dwelling. The rainwater will be used to flush toilets and be connected to the washing machine stops to the proposed development.

Melbourne Water recommends that proposed developments provide a Water Sensitive Urban Design Response with the following objectives (as outlined in Clause 22.18 Stormwater Treatment Policy):

- To improve stormwater discharge quality:
 - Suspended Solids 80% retention of typical urban annual load
 - o Total Nitrogen 45% retention of typical urban annual load
 - o Total Phosphorus 45% retention of typical urban annual load
 - Litter 70% retention of typical urban annual load
- To promote stormwater re-use
- To mitigate the detrimental effect of development on downstream waterways
- To reintegrate urban water into the landscape to facilitate benefits such as microclimate cooling, local habitat and provision of attractive spaces for community use and well-being
- To minimise peak stormwater flows and stormwater pollutants.

A development is required to demonstrate that it meets the objectives of the clause by either:

- Meeting a 100% or higher rating on the STORM rating tool; or
- Meeting the required discharge quality using the MUSIC rating tool

Additionally, adequate maintenance and management procedures are required to ensure the stormwater treatment/ reuse measures work as intended.

In the case of a charged pipe system, the pipes will not be running underneath the slab and the stakeholders (builder/ developer/ architect) will be required to explicitly acknowledge the solution and have the capacity to install it.

5.2 STORM ASSESSMENT

A Melbourne Water STORM assessment on the property has been undertaken in order to demonstrate compliance with best practice stormwater treatment objectives as set out in the Urban Stormwater Best Practice Environmental Management Guidelines (CSIRO, 1997).

Stormwater Treatment Objective – Relative Measure (STORM) was developed by Melbourne Water to simplify the analysis of stormwater treatment methods within a development. The calculator assess Water Sensitive Urban Design (WSUD) measures on project sites and delivers a percentage result, determining whether best practice targets have been achieved. A score of 100% or higher means the treatment features meet all objectives.



Nelbourne STORM Rating Report

TransactionID: 1635618 Municipality: HUME Rainfall Station: HUME

Address: 3 Parton place

Craigieburn

VIC 3064

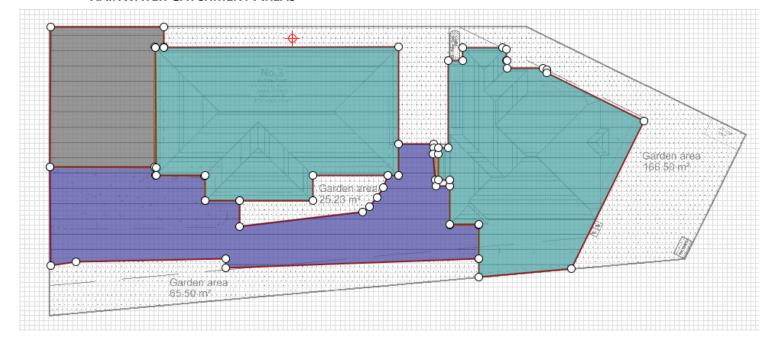
Assessor:

Development Type: Residential - Dwelling

Allotment Site (m2): 730.00 100 STORM Rating %:

Description	Impervious Area (m2)	Treatment Type	Treatment Area/Volume (m2 or L)	Occupants / Number Of Bedrooms	Treatment %	Tank Water Supply Reliability (%)
Existing Dwelling RWT	146.80	Rainwater Tank	3,000.00	2	95.70	100.00
Dwelling Two RWT	139.50	Rainwater Tank	3,000.00	5	139.90	87.20
Existing Driveway	61.10	None	0.00	0	0.00	0.00

RAINWATER CATCHMENT AREAS



LEGEND

DESCRIPTION	QUANTITY	Unit
EXISTING DWELLING RWT	146.80	m2
DWELLING 2 RWT	139.50	m2
EXISTING DRIVEWAY	61.10	m2
PERMEABLE CONCRETE	136.30	m2

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5.3 CONSTRUCTION SITE MANAGEMENT PLAN

The following requirements are to be met during onsite works to prevent excessive pollutants entering the local waterways.

- Temporary drains are to be installed to minimise overland water flows and prevent erosion, especially in areas where water is likely to pool;
- Temporary silt fences are to be installed on the lower end of the site to prevent excessive sedimentation from entering the stormwater system;
- Temporary side entry filters to be installed to council stormwater pits to prevent sediment entering the stormwater system at the kerb inlet;
- Stockpiles to be located away from the predominant overland stormwater pathway;
- All site litter to be collected and placed in bins (covered if appropriate) so that it cannot end up in the stormwater systems; and
- Waste bins to be provided onsite for workers.

The builder will follow the process outlined in "Keeping Our Stormwater Clean - A Builder's Guide".



Copies of "Keeping Our Stormwater Clean – A Builder's Guide" booklet can be obtained from Melbourne Water by ringing on 131 722 or can be downloaded from the following website. https://www.clearwatervic.com.au/user-data/resource-files/Keeping Our Stormwater Clean-A Builders Guide%5b1%5d.pdf

5.4 Maintenance Requirements

The following maintenance measures are required to be undertaken at 6 monthly intervals, when it is evident that a blockage has occurred or after a storm event. The individual property owners are responsible for the maintenance of the stormwater system.

- All screens to be checked for blockages and cleaned if necessary
- Sweep, wet vacuum or pressure hose courtyards and laneways to remove accumulated sediment and debris.
- Clear any drainage pipes in the courtyards and laneways that direct water to the stormwater system.

If used; all pumps or specialist equipment to be installed as part of this system is to be maintained in accordance with the manufacturer's specifications.

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6 MANAGEMENT, MAINTENANCE & MONITORING

To ensure that the initiatives outlined in this report are implemented and maintained over time a copy this report will be provided to the owners' corporation.

Inefficiently performing services impact on indoor environment qualities and may increase running costs and greenhouse gas emissions. The owners' corporation will monitor all sustainability initiatives on-site, and will schedule regular fine-tuning of building services and their ongoing maintenance, ensuring the building's maximum environmental performance is achieved at all times.

This development includes a wide range of holistic sustainability measures which have been carefully integrated into the design of the development so that the residents will have the opportunity to reduce their ecological footprint without compromising their quality of life. The proposed design and site specific initiatives will contribute to Hume City Council's sustainable development vision.

7 APPENDICES

7.1 APPENDIX A: PRELIMINARY 6 STAR ENERGY RATING RESULTS

The thermal performance of dwellings is assessed using FirstRate5, and energy modelling software programme that rates dwellings on a 10 star scale. Using Accurate (a nationally recognised energy benchmarking tool) to rate dwellings based on climate zone, building orientation, construction materials and building sealing. Victorian multi developments are required to achieve an average of 6 stars.

This development achieves and average Nathers Star Rating of 6.8. All relevant design features have been included in the energy calculations, such as orientation, form, shading, building fabric and glazing.

BUILDING MATERIALS (DWELLING 2)

BUILDING ELEMENT	CONSTRUCTION ASSUMPTIONS	ADDED R-VALUE
Wall Insulation	Various cladding Added R2.0 bulk insulation	R2.0
Roof Insulation	Added minimum R5.0 Bulk Insulation at ceiling level	R5.0
Window Frames	Aluminium	

GLAZING

	WINDOW P		
WINDOW TYPE	U- VALUE (W/m2K) SHGC		TYPICAL GLAZING SOLUTION
Awning Windows	≤ 5.79	0.65	Single glazed clear
Awning Windows	≤ 3.53	0.55	Double glazed clear
Awning Windows	≤ 2.98	0.39	Double glazed clear
Sliding Doors	≤ 2.79	0.60	Double glazed clear

GENERAL RATING INPUTS

ELEMENT	DESCRIPTION
Floor Coverings	 Tile flooring to kitchens, living areas and corridors Carpet to upstairs and bedrooms Tiles to wet areas
Downlights	 Recessed LED downlights in ceiling/ roof space to be fitted with fire proof unvented downlight covers (external roof areas only) to provide air tightness and contact with insulation
Draught Proofing	 Weather strips to all entry and external doors and windows Sealed exhaust fans

ENERGY RATING RESULTS

		ENERGY USAGE (MJ/M2)					
	Star Rating	TOTAL	HEATING	COOLING			
Dwelling 2	6.8	106.7	106.7 77.0				
Estimated Average	6.8	106.7	77.0	29.7			

The energy ratings detailed above shows that the development meets the standard required by the National Construction Code (NCC) of Australia 2019 in relation to residential energy efficiency.

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Nationwide House Energy Rating Scheme NatHERS Certificate

Generated on 18 Aug 2023 using FirstRate5: 5.3.2b (3.21)

Property

Address 2, 2/3 Parton place, Craigieburn, VIC, 3064

Lot/DP -

NCC Class* Class 1a

Type New Home

Plans

Main plan R.F.I Planning 6-07-2023
Prepared by H2Q Architecture & Design

Construction and environment

Assessed floor area (m²)* Exposure type

Conditioned* 151.5 suburban

Unconditioned* 11.6 NatHERS climate zone

Total 163.1 60 Tullamarine

Garage ___



Name Odin Solutions
Business name Odin Solutions

Email odinsolutions@outlook.com

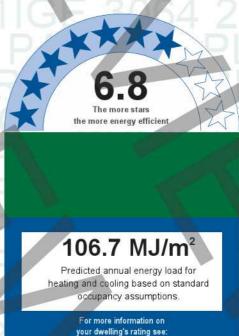
Phone 0416378099

Accreditation No. DMN/18/1868

Assessor Accrediting Organisation

Design Matters National

Declaration of interest Declaration completed: no conflicts



www.nathers.gov.au

Thermal performance

Heating Cooling

77 29.7

MJ/m² MJ/m²

About the rating

NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans

Verification

To verify this certificate, scan the QR code or visit When using either link, ensure you are visiting www.FR5.com.au.

National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements.

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Certificate Check

Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling's rating.

Genuine certificate

Does this Certificate match the one available at the web address or QR code in the verification box on the front page? Does the set of NatHERS-stamped plans for the dwelling have a Certificate number on the stamp that matches this Certificate?

Ceiling penetrations*

Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate? Substituted values must be based on the Australian Fenestration Rating Council (AFRC) protocol.

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Additional Notes

Window and glazed door type and performance

Default* windows

			30	Substitution tolerance ranges		
Window ID	Window description	Maximum U-value*	SHGC*	SHGC lower limit	SHGC upper limit	
No Data Availa	ble					

Custom* windows

				Substitution to	ierance ranges
Window ID	Window description	Maximum U-value*	SHGC*	SHGC lower limit	SHGC upper limit
A&L-001-04 A	Al Awning SG 4Clr	5.79	0.65	0.62	0.68
A&L-004-01 A	Al Awning Window DG 3/12/3	3.53	0.55	0.52	0.58
A&L-013-05 A	Al Sliding Door DG 4/10Ar/4EA	2.79	0.6	0.57	0.63
A&L-004-08 A	Al Awning Window DG 3Sn/12Ar/3	2.98	0.39	0.37	0.41

Window and glazed door Schedule

			_	Height	Width				shading
	Location	Window ID	Window no.	(mm)	(mm)	Window type	Opening %	Orientation	device*
Thi	Laundry	A&L-001-0	4 A Opening 2 available for the so	1500	1600	awning	90.0	NNW	No
			avanable for the so ld∕revieWpansingsart of			awning	90.0	SSE	No
pro	cess under t	the Planning and	d Environment Act 1	1987.					

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NatHERS Certificate

6.8 Star Rating as of 18 Aug 2023

Entry	A&L-013-05 A	Opening 7	2400	2300	sliding	40.0	NNW	No
Kitchen/ Living	A&L-013-05 A	Opening 11	2400	6000	sliding	40.0	E	No
Kitchen/ Living	A&L-004-08 A	Opening 10	1500	6500	awning	30.0	N	No
Bedroom 2	A&L-004-01 A	Opening 14	600	3000	awning	90.0	WSW	No
Bedroom 2	A&L-004-01 A	Opening 15	1200	900	fixed	0.0	wsw	No
Bedroom 2 Ensuite	A&L-001-04 A	Opening 16	600	1450	sliding	45.0	NNW	No
Bedroom 3	A&L-004-01 A	Opening 17	2100	700	awning	30.0	NNW	No
Bedroom 3	A&L-004-01 A	Opening 20	600	2100	awning	90.0	WSW	No
Bedroom 3 Ensuite	A&L-001-04 A	Opening 23	600	1200	sliding	45.0	SSE	No
Bedroom 4	A&L-004-01 A	Opening 24	2100	1650	awning	30.0	ENE	No
Bedroom 4 Ensuite	A&L-001-04 A	Opening 25	600	1200	sliding	45.0	ENE	No
Study	A&L-004-01 A	Opening 28	2100	3000	awning	30.0	SSE	No

Roof window type and performance value

Default* roof windows

No Data Available

		Substitution tolerance ranges
Window ID Window description	Maximum U-value* SHGC*	SHGC lower limit SHGC upper limit
No Data Available		
Custom* roof windows		
		Substitution tolerance ranges
Window ID Window description	Maximum U-value* SHGC*	SHGC lower limit SHGC upper limit

Roof window schedule

-				Alea		Outdoor	muoor	
Location	Window ID	Window no.	Opening %	(m²)	Orientation	shade	shade	
No Data Available			_			-	,	1

Skylight type and performance

Skylight ID Skylight description No Data Available

Skylight schedule

		Skylight	Skylight shaft	Area Orient-	Outdoor		Skylight shaft
Location	Skylight ID	No.	length (mm)	(m²) ation	shade	Diffuser	reflectance
No Data Available			- 4				

External door schedule

Location		Height (mm)	Width (mm)	Opening %	Orientation	
Laundry		2340	920	100.0	NNW	
Entry	10	2340	070	100.0	IVICIVI	

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External wall type

		Solar	Wall shade		Reflective
Wall ID	Wall type	absorptance	(colour)	Bulk insulation (R-value)	wall wrap*
1	FR5 - Brick Veneer	0.5	Medium	Glass fibre batt: R2.0 (R2.0)	Yes
2	FR5 - 75mm Expanded Polystyrene Clad	0.5	Medium	Glass fibre batt: R2.0 (R2.0)	Yes

External wall schedule

Location	Wall	Height (mm)	Width (mm)	No.	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Laundry	1	2700	3382	NNW	0	Yes
Laundry	1	2700	2126	WSW	0	Yes
Laundry	1	2700	500	ENE	0	Yes
Powder	- 34	2700	873	WSW	0	Yes
Bedroom 1	1	2700	2024	SSE	2566	Yes
Bedroom 1	1	2700	4649	WSW	0	Yes
Entry	1	2700	1482	WSW	1980	Yes
Entry	1	2700	4029	SSE	4502	Yes
Entry	1	2700	286	ENE	0	Yes
Entry	1	2700	2565	NNW	0	Yes
Kitchen/ Living	1	2700	3554	SSE	4502	Yes
Kitchen/ Living	1	2700	6194	E	0	Yes
Kitchen/ Living	1	2700	7108	N	0	Yes
Bedroom 2	2	2700	1380	NNW	0	No
Bedroom 2	2	2700	3507	WSW	747	Yes
Bedroom 2	2	2700	1541	ENE	0	Yes
Bedroom 2 Ensuite	2	2700	2052	WSW	0	No
Bedroom 2 Ensuite	2	2700	1407	ENE	0	Yes
Bedroom 2 Ensuite	2	2700	2490	NNW	0	No
Bedroom 3	2	2700	890	NNW	0	Yes
Bedroom 3	2	2700	3507	WSW	739	No
Bedroom 3 Ensuite	2	2700	1985	WSW	0	No
Bedroom 3 Ensuite	2	2700	2194	SSE	0	No
Bedroom 3 Ensuite	2	2700	322	ENE	0	Yes
Bedroom 3 Ensuite	2	2700	1424	SSE	0	No
Bedroom 4	2	2700	601	SSE	0	Yes
Bedroom 4	2	2700	1426	ENE	0	No
Bedroom 4	2	2700	603	NNW	0	Yes
Bedroom 4	2	2700	1936	ENE	0	Yes
Bedroom 4	2	2700	1089	N	0	No
copiedrdecument is made available for the	sole2pu	ırøðse		NNW	0	Yes
nabling its consideration and review as part	of a ₂ pla	алдыдд	2493	ENE	0	Yes

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NatHERS Certificate

6.8 Star Rating as of 18 Aug 2023

Study	2 2700	5642 SSE	0	No
Study	2 2700	683 E	0	No
Study	2 2700	940 ENE	0	Yes
Study	2 2700	1075 NNW	0	Yes

Internal wall type

Wall ID	Wall type	Area (m²) Bulk insulation
	Truit typo	/ ii ou (iii) = uiit ii loulutioli

FR5 - Internal Plasterboard Stud Wall 150.4

Floor type

Location	Construction	Area (m²)	Sub-floor ventilation	Added insulation (R-value)	Covering
Laundry	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	1.5	Enclosed	R0.0	Tiles
Laundry	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	5.7	Enclosed	R0.0	Tiles
Powder	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	0.6	Enclosed	R0.0	Tiles
Powder	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	3.8	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	1	Enclosed	R0.0	Carpet
Bedroom 1	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	14.5	Enclosed	R0.0	Carpet
Entry	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	1.3	Enclosed	R0.0	Tiles
Entry	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	22.4	Enclosed	R0.0	Tiles
Kitchen/ Living	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	7.7	Enclosed	R0.0	Tiles
Kitchen/ Living	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	1.1	Enclosed	R0.0	Tiles
Kitchen/ Living	FR5 - 300mm waffle pod, 85mm concrete (R0.63)	28.6	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - Timber	15	Enclosed	R0.0	Carpet
Bedroom 2 Ensuite	FR5 - Timber	3.4	Enclosed	R0.0	Tiles
Bedroom 2 Ensuite	FR5 - Timber	1.7	Elevated	R2.0	Tiles
Bedroom 3	FR5 - Timber	0.5	Elevated	R2.0	Carpet
Bedroom 3	FR5 - Timber	13	Enclosed	R0.0	Carpet
Bedroom 3 Ensuite	FR5 - Timber	1.3	Enclosed	R0.0	Tiles
Bedroom 3 Ensuite	FR5 - Timber	4.6	Elevated	R2.0	Tiles
Bedroom 4	FR5 - Timber	14.1	Enclosed	R0.0	Carpet
Bedroom 4 Ensuite	FR5 - Timber	5.5	Enclosed	R0.0	Tiles
Study	FR5 - Timber	21.5	Enclosed	R0.0	Carpet
Study	FR5 - Timber	2.8	Elevated	R2.0	Carpet

Ceiling type

Location	Construction material	l/type	include edge batt value	
Laundry	Plasterboard		R5.0	Yes
Laundry	FR5 - Timber		R0.0	No
Powder	Plasterboard		R5.0	Yes
	nent i ≶™hade av ailable f		R0.0	No
of enabling its cor process under the	nsideration and review a Planning and Environr	as part of a planning ment Act 1987.	R5.0	Yes

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Bedroom 1	FR5 - Timber	R0.0	No
Entry	Plasterboard	R5.0	Yes
Entry	FR5 - Timber	R0.0	No
Kitchen/ Living	Plasterboard	R5.0	Yes
Kitchen/ Living	Plasterboard	R5.0	Yes
Kitchen/ Living	FR5 - Timber	R0.0	No
Bedroom 2	Plasterboard	R5.0	Yes
Bedroom 2 Ensuite	Plasterboard	R5.0	Yes
Bedroom 2 Ensuite	Plasterboard	R5.0	Yes
Bedroom 3	Plasterboard	R5.0	Yes
Bedroom 3	Plasterboard	R5.0	Yes
Bedroom 3 Ensuite	Plasterboard	R5.0	Yes
Bedroom 3 Ensuite	Plasterboard	R5.0	Yes
Bedroom 4	Plasterboard	R5.0	Yes
Bedroom 4 Ensuite	Plasterboard	R5.0	Yes
Study	Plasterboard	R5.0	Yes
Study	Plasterboard	R5.0	Yes

Ceiling penetrations*

Location	Quantity	Type	Diameter (mm)	Sealed/unsealed
Laundry	1	Exhaust Fans	200	Sealed
Laundry	2	Downlights	90	Sealed
Powder	1	Exhaust Fans	200	Sealed
Powder	2	Downlights	90	Sealed
Bedroom 1	4	Downlights	90	Sealed
Entry	5	Downlights	90	Sealed
Kitchen/ Living	10	Downlights	90	Sealed
Bedroom 2	4	Downlights	90	Sealed
Bedroom 2 Ensuite	1	Exhaust Fans	200	Sealed
Bedroom 2 Ensuite	2	Downlights	90	Sealed
Bedroom 3	4	Downlights	90	Sealed
Bedroom 3 Ensuite	1	Exhaust Fans	200	Sealed
Bedroom 3 Ensuite	2	Downlights	90	Sealed
Bedroom 4	4	Downlights	90	Sealed
Bedroom 4 Ensuite	1	Exhaust Fans	200	Sealed
Bedroom 4 Ensuite	2	Downlights	90	Sealed
Study	8	Downlights	90	Sealed

Ceiling fans

Location Quantity Diameter (mm)

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Roof type

Construction	Added insulation (R-value)	Solar absorptance	e Roof shade
Framed:Flat - Flat Framed (Metal Deck)	0.0	0.5	Medium
Cont:Attic-Continuous	0.0	0.5	Medium

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Explanatory Notes

About this report

A Nathers rating is a comprehensive, dynamic computer modelling evaluation of a home, using the floorplans, elevations and specifications to estimate an energy load. It addresses the building layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings), but does not cover the water or energy use of appliances or energy production of solar panels.

Ratings are based on a unique climate zone where the home is located and are generated using standard assumptions, including occupancy patterns and thermostat settings. The actual energy consumption of a home may vary significantly from the predicted energy load, as the assumptions used in the rating will not match actual usage patterns. For example, the number of occupants and personal heating or cooling preferences will vary.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparing different dwelling designs and to demonstrate that the design meets the energy efficiency requirements in the National Construction Code. Homes that are energy efficient use less energy, are warmer on cool days, cooler on hot days and cost less to run. The higher the star rating the more thermally efficient the dwelling is.

Accredited assessors

To ensure the NatHERS Certificate is of a high quality, always use an accredited or licenced assessor. NatHERS accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

Australian Capital Territory (ACT) licensed assessors may only produce assessments for regulatory purposes using software for which they have a licence endorsement. Licence endorsements can be confirmed on the ACT licensing register

AAOs have specific quality assurance processes in place, and continuing professional development requirements, to maintain a high and consistent standard of assessments across the country.

Non-accredited assessors do not have this level of quality assurance or any ongoing training requirements.

Any questions or concerns about this report should be directed to the assessor in the first instance. If the assessor is unable to address these questions or concerns, the AAO specified on the front of this certificate should be contacted.

Disclaimer

The format of the NatHERS Certificate was developed by the NatHERSAdministrator. However the content of each individual certificate is entered and created by the assessor to create a NatHERS Certificate. It is the responsibility of the assessor who prepared this certificate to use NatHERS accredited software correctly and follow the NatHERS Technical Notes to produce a NatHERS Certificate.

The predicted annual energy load in this NatHERS Certificate is an estimate based on an assessment of the building by the assessor. It is not a prediction of actual energy use, but may be used to compare how other buildings are likely to perform when used in a similar way. Information presented in this report relies on a range of standard assumptions (both embedded in NatHERS accredited software and made by the assessor who prepared this report), including assumptions about occupancy, indoor air temperature and local climate.

Not all assumptions that may have been made by the assessor while using the NatHERS accredited software tool are presented in this report and further details or data files may be available from the assessor.

Glossary

Annual energy load	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
Assessed floor area	the floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the floor area in the design documents.
Ceiling penetrations	features that require a penetration to the ceiling, including downlights, vents, exhaust fans, rangehoods, chimneys and flues. Excludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and heating and cooling ducts.
Conditioned	a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some circumstances it will include garages.
Custom windows	windows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating Scheme) rating.
Default windows	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
Entrance door	these signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ventilated corridor in a Class 2 building.
Exposure category - exposed	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
Exposure category - open	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
Exposure category - suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category - protected	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.

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6.8 Star Rating as of 18 Aug 2023

	onal Construction Code C) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.
Ope	ning Percentage	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Prov	visional value	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the Nathers Technical Note and can be found at www.nathers.gov.au
Refleas fo		can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
Roo	f window	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser.
Sha	ding device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
Sha	ding features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
Sola (SHC	ar heat gain coefficient GC)	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
Skyl lights		for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
U-va	alue	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unc	onditioned	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions.
Vert	ical shading features	provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).

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7.2	APPENDIX B: BUILT ENVIRONMENT SUSTAINABILITY SCORECARD (BESS) REPORT
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BESS Report

Built Environment Sustainability Scorecard



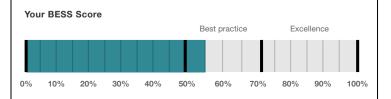






This BESS report outlines the sustainable design commitments of the proposed development at 3 Parton PI Craigieburn Victoria 3064. The BESS report and accompanying documents and evidence are submitted in response to the requirement for a Sustainable Design Assessment or Sustainability Management Plan at Hume City Council.

Note that where a Sustainability Management Plan is required, the BESS report must be accompanied by a report that further demonstrates the development's potential to achieve the relevant environmental performance outcomes and documents the means by which the performance outcomes can be achieved



55%

Project details

Address 3 Parton PI Craigieburn Victoria 3064

 Project no
 18B1A98F-R1

 BESS Version
 BESS-7

Site type Single dwelling

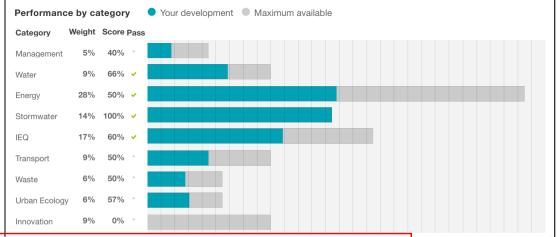
Account

Application no.

Site area 730.00 m^2 Building floor area 196.00 m^2

 Date
 22 August 2023

 Software version
 1.8.0-B.401



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nent (CASBE).

Dwellings & Non Res Spaces

Dwellings

Name	Quantity	Area	% of total area	
Detached dwelling				
Dwelling	1	196 m²	100%	
Total	1	196 m²	100%	

Supporting information

Floorplans & elevation notes

Credit	Requirement	Response	Status
Water 3.1	Annotation: Water efficient garden details	To be printed Shown On Plans	~
Energy 3.3	Annotation: External lighting controlled by motion sensors	To be printed Shown On Plans	~
Energy 3.4	Location of clothes line (if proposed)	To be printed Shown On Plans	~
Stormwater 1.1	Location of any stormwater management systems (rainwater tanks, raingardens, buffer strips)	To be printed Shown On Plans & SDA Report	~
IEQ 3.1	Annotation: Glazing specification (U-value, SHGC)	To be printed Shown On Plans & SDA Report	~
IEQ 3.3 North-facing living areas		To be printed Shown On Plans	~
Transport 1.1 Location of residential bicycle parking spaces		To be printed Shown On Plans	~
Waste 2.1	Location of food and garden waste facilities	To be printed Shown On Plans	~
Urban Ecology 2.1	Location and size of vegetated areas	To be printed Shown On Plans	~

Supporting evidence

Credit	Requirement	Response	Status
Management 2.1	Preliminary NatHERS assessment	'	-
Energy 3.5	Average lighting power density and lighting type(s) to be used -		-
Stormwater 1.1	STORM report or MUSIC model -		-
EQ 3.1 Reference to floor plans or energy modelling showing the glazing specification (U-value and Solar Heat Gain Coefficient, SHGC)		-	
IEQ 3.3	Reference to the floor plans showing living areas orientated to the north		-

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Credit summary

Management Overall contribution 4.5%

		40%	
	1.1 Pre-Application Meeting	0%	,
	2.1 Thermal Performance Modelling - Single Dwelling	100%	

Water Overall contribution 9.0%

	Minin	num required 5	50%	66%	✓ Pass
1.1 Potable Water Use Reduction				60%	
3.1 Water Efficient Landscaping				100%	

Energy Overall contribution 27.5%

	Minimu	m required 50% 50%	✓ Pass
1.2 Thermal Performance Rating - Residential		16%	
2.1 Greenhouse Gas Emissions		100%	
2.2 Peak Demand		0%	
2.3 Electricity Consumption		100%	
2.4 Gas Consumption		100%	
2.5 Wood Consumption		N/A	Scoped Out
		No wood	heating system present
2.6 Electrification		0%	O Disabled
	Credit is	available when project is declared to he	ave no gas connection.
3.2 Hot Water		100%	
3.3 External Lighting		100%	
3.4 Clothes Drying		100%	
3.5 Internal Lighting - Houses and Townhouses		100%	
4.4 Renewable Energy Systems - Other		0%	O Disabled
		No other (non-solar PV) rene	ewable energy is in use.
4.5 Solar PV - Houses and Townhouses		0%	O Disabled
		No solar PV rene	ewable energy is in use.

Stormwater Overall contribution 13.5%

	Minimum requi	red 100% 100%	✓ Pass
1.1 Stormwater Treatment		100%	

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	Minimum required 50%	60%	✓ Pass
2.2 Cross Flow Ventilation		0%	
3.1 Thermal comfort - Double Glazing		100%	
3.2 Thermal Comfort - External Shading		0%	
3.3 Thermal Comfort - Orientation		100%	
ansport Overall contribution 9.0%		50%	
1.1 Bicycle Parking - Residential		100%	
2.1 Electric Vehicle Infrastructure		0%	
1.1 - Construction Waste - Building Re-Use		50%	
1.1 - Construction Waste - Building Re-Use		0%	
2.1 - Operational Waste - Food & Garden Waste		100%	
an Ecology Overall contribution 5.5%		57%	
2.1 Vegetation		100%	
2.2 Green Roofs		0%	
		0%	
2.3 Green Walls and Facades			

Ī		 	0%	
	1.1 Innovation		0%	

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Credit breakdown

Management Overall contribution 2%

1.1 Pre-Application Meeting	0%
Score Contribution	This credit contributes 60.0% towards the category score.
Criteria	Has an ESD professional been engaged to provide sustainability advice from schematic
	design to construction? AND Has the ESD professional been involved in a pre-
	application meeting with Council?
Question	Criteria Achieved ?
Project	No
2.1 Thermal Performance Modellin	g - Single Dwelling 100%
Score Contribution	This credit contributes 40.0% towards the category score.
Criteria	Has a preliminary NatHERS rating been undertaken?
Question	Criteria Achieved ?
Detached dwelling	Yes

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Water Overall contribution 6% Minimum required 50%

Water Approach	
What approach do you want to use for Water?:	Use the built in calculation tools
Project Water Profile Question	
Do you have a reticulated third pipe or an on-site water recycling system?:	No
Are you installing a swimming pool?:	No
Are you installing a rainwater tank?:	Yes
Water fixtures, fittings and connections	
Showerhead:	4 Star WELS (>= 6.0 but <= 7.5)
Bath:	Scope out
Kitchen Taps:	>= 5 Star WELS rating
Bathroom Taps:	>= 5 Star WELS rating
Dishwashers:	>= 3 Star WELS rating
WC:	>= 4 Star WELS rating
Urinals:	Scope out
Washing Machine Water Efficiency:	Occupant to Install
Which non-potable water source is the dwelling/space connected to?:	RWT 2
Non-potable water source connected to Toilets:	Yes
Non-potable water source connected to Laundry (washing machine):	Yes
Non-potable water source connected to Hot Water System:	No
Rainwater Tank	
What is the total roof area connected to the rainwater tank?: RWT 2	140 m²
Tank Size: RWT 2	3,000 Litres
Irrigation area connected to tank: RWT 2	-
Is connected irrigation area a water efficient garden?: RWT 2	No
Other external water demand connected to tank?: RWT 2	-

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1.1 Potable Water Use Reduction	60%
Score Contribution	This credit contributes 83.3% towards the category score.
Criteria	What is the reduction in total potable water use due to efficient fixtures, appliances,
	rainwater use and recycled water use? To achieve points in this credit there must be
	>25% potable water reduction.
Output	Reference
Project	203 kL
Output	Proposed (excluding rainwater and recycled water use)
Project	166 kL
Output	Proposed (including rainwater and recycled water use)
Project	109 kL
Output	% Reduction in Potable Water Consumption
Project	46 %
Output	% of connected demand met by rainwater
Project	100 %
Output	How often does the tank overflow?
Project	Often
Output	Opportunity for additional rainwater connection
Project	40 kL
3.1 Water Efficient Landscaping	100%
Score Contribution	This credit contributes 16.7% towards the category score.
Criteria	Will water efficient landscaping be installed?
Question	Criteria Achieved ?
Project	Yes

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Energy Overall contribution 14% Minimum required 50%

Dwellings Energy Approach		
What approach do you want to	use for Energy?:	Use the built in calculation tools
Project Energy Profile Quest	ion	
Are you installing any solar pho	otovoltaic (PV) system(s)?:	No
Are you installing any other rer	newable energy system(s)?:	No
Energy Supply:		Electricity & Natural Gas
Dwelling Energy Profile		
Below the floor is:		Ground or Carpark
Above the ceiling is:		Outside
Exposed sides:		4
NatHERS Annual Energy Load	s - Heat:	77.0 MJ/sqm
NatHERS Annual Energy Load	s - Cool:	29.7 MJ/sqm
NatHERS star rating:		6.8
Type of Heating System:		Reverse cycle space
Heating System Efficiency:		5 Star
Type of Cooling System:		Refrigerative space
Cooling System Efficiency:		5 Stars
Type of Hot Water System:		Gas Instantaneous 6 star
% Contribution from solar hot	water system:	-
Clothes Line:		Private outdoor clothesline
Clothes Dryer:		Occupant to Install
1.2 Thermal Performance Ra	ting - Residential	16%
Score Contribution	This credit contrib	outes 27.3% towards the category score.
Criteria	What is the averag	ge NatHERS rating?
Output	Average NATHERS	S Rating (Weighted)
Detached dwelling	6.8 Stars	
2.1 Greenhouse Gas Emissio	ns	100%
Score Contribution	This credit contrib	outes 9.1% towards the category score.
Criteria	What is the % red	luction in annual greenhouse gas emissions against the benchmark?
Output	Reference Building	g with Reference Services (BCA only)
Detached dwelling	7,818 kg CO2	
Output	Proposed Building	g with Proposed Services (Actual Building)
Detached dwelling	3,577 kg CO2	
Output	% Reduction in G	HG Emissions
Detached dwelling	54 %	

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2.2 Peak Demand	0%
Score Contribution	This credit contributes 4.5% towards the category score.
Criteria	What is the % reduction in the instantaneous (peak-hour) demand against the
	benchmark?
Output	Peak Thermal Cooling Load - Baseline
Detached dwelling	27.7 kW
Output	Peak Thermal Cooling Load - Proposed
Detached dwelling	26.5 kW
Output	Peak Thermal Cooling Load - % Reduction
Detached dwelling	4 %
2.3 Electricity Consumption	100%
Score Contribution	This credit contributes 9.1% towards the category score.
Criteria	What is the % reduction in annual electricity consumption against the benchmark?
Output	Reference
Detached dwelling	6,735 kWh
Output	Proposed
Detached dwelling	2,835 kWh
Output	Improvement
Detached dwelling	57 %
2.4 Gas Consumption	100%
Score Contribution	This credit contributes 9.1% towards the category score.
Criteria	What is the % reduction in annual gas consumption against the benchmark?
Output	Reference
Detached dwelling	18,464 MJ
Output	Proposed
Detached dwelling	13,332 MJ
Output	Improvement
Detached dwelling	27 %
2.5 Wood Consumption	N/A 🌣 Scoped C
This credit was scoped out	No wood heating system present
2.6 Electrification	0% Ø Disabl

Credit is available when project is declared to have no gas connection.

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This credit is disabled

3.2 Hot Water		100%		
Score Contribution	This credit contributes 4.5% towards the cate	egory score.		
Criteria	What is the % reduction in annual energy con	sumption (gas and electr	icity) of	f the hot
	water system against the benchmark?			
Output	Reference			
Detached dwelling	18,464 MJ			
Output	Proposed			
Detached dwelling	13,498 MJ			
Output	Improvement			
Detached dwelling	26 %			
3.3 External Lighting		100%		
Score Contribution	This credit contributes 4.5% towards the cate	egory score.		
Criteria	Is the external lighting controlled by a motion	detector?		
Question	Criteria Achieved ?			
Detached dwelling	Yes			
3.4 Clothes Drying		100%		
Score Contribution	This credit contributes 4.5% towards the cate	egory score.		
Criteria What is the % reduction in annual e		sumption (gas and electr	icity) fr	om a
	combination of clothes lines and efficient drie	rs against the benchmarl	</td <td></td>	
Output	Reference			
	751 kWh			
Detached dwelling	/ ST KWII			
Detached dwelling Output	Proposed			
Output	Proposed			
Output Detached dwelling	Proposed 150 kWh			
Output Detached dwelling Output	Proposed 150 kWh Improvement 80 %	100%		
Output Detached dwelling Output Detached dwelling	Proposed 150 kWh Improvement 80 %			
Output Detached dwelling Output Detached dwelling 3.5 Internal Lighting - Houses	Proposed 150 kWh Improvement 80 % and Townhouses	egory score.	of 4W/	sqm or
Output Detached dwelling Output Detached dwelling 3.5 Internal Lighting - Houses a	Proposed 150 kWh Improvement 80 % and Townhouses This credit contributes 4.5% towards the cate	egory score.	of 4W/	/sqm or
Output Detached dwelling Output Detached dwelling 3.5 Internal Lighting - Houses a	Proposed 150 kWh Improvement 80 % and Townhouses This credit contributes 4.5% towards the cate Does the development achieve a maximum ill	egory score.	of 4W/	sqm or
Output Detached dwelling Output Detached dwelling 3.5 Internal Lighting - Houses a Score Contribution Criteria	Proposed 150 kWh Improvement 80 % and Townhouses This credit contributes 4.5% towards the cate Does the development achieve a maximum ill less?	egory score.	of 4W/	'sqm or
Output Detached dwelling Output Detached dwelling 3.5 Internal Lighting - Houses and Score Contribution Criteria Question	Proposed 150 kWh Improvement 80 % and Townhouses This credit contributes 4.5% towards the cate Does the development achieve a maximum ill less? Criteria Achieved? Yes	egory score.		/sqm or
Output Detached dwelling Output Detached dwelling 3.5 Internal Lighting - Houses and Score Contribution Criteria Question Detached dwelling	Proposed 150 kWh Improvement 80 % and Townhouses This credit contributes 4.5% towards the cate Does the development achieve a maximum ill less? Criteria Achieved? Yes	egory score. umination power density 0%		
Output Detached dwelling Output Detached dwelling 3.5 Internal Lighting - Houses and Score Contribution Criteria Question Detached dwelling 4.4 Renewable Energy Systems	Proposed 150 kWh Improvement 80 % and Townhouses This credit contributes 4.5% towards the cate Does the development achieve a maximum ill less? Criteria Achieved? Yes s - Other No other (non-solar PV) renewable energy is in	egory score. umination power density 0%	0	

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Stormwater Overall contribution 14% Minimum required 100%

Which stormwater mod	lelling are you using?: Melbourne Water STORM tool
1.1 Stormwater Treatm	nent 100%
Score Contribution	This credit contributes 100.0% towards the category score.
Criteria	Has best practice stormwater management been demonstrated?
Question	STORM score achieved
Project	100
Output	Min STORM Score
Project	100

IEQ Overall contribution 10% Minimum required 50%

	*
2.2 Cross Flow Ventilation	0%
Score Contribution	This credit contributes 20.0% towards the category score.
Criteria	Are all habitable rooms designed to achieve natural cross flow ventilation?
Question	Criteria Achieved ?
Detached dwelling	No
3.1 Thermal comfort - Double Gla	azing 100%
Score Contribution	This credit contributes 40.0% towards the category score.
Criteria	Is double glazing (or better) used to all habitable areas?
Question	Criteria Achieved ?
Detached dwelling	Yes
3.2 Thermal Comfort - External S	shading 0%
Score Contribution	This credit contributes 20.0% towards the category score.
Criteria	Is appropriate external shading provided to east, west and north facing glazing
Question	Criteria Achieved ?
Detached dwelling	No
3.3 Thermal Comfort - Orientatio	n 100%
Score Contribution	This credit contributes 20.0% towards the category score.
Criteria	Are at least 50% of living areas orientated to the north?
Question	Criteria Achieved ?
Detached dwelling	Yes

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Transport Overall contribution 4%

1.1 Bicycle Parking - Residential	100%
Score Contribution	This credit contributes 50.0% towards the category score.
Criteria	How many secure and undercover bicycle spaces are there per dwelling for residents?
Question	Bicycle Spaces Provided ?
Detached dwelling	1
Output	Min Bicycle Spaces Required
Detached dwelling	1
2.1 Electric Vehicle Infrastructure	0%
Score Contribution	This credit contributes 50.0% towards the category score.
Criteria	Are facilities provided for the charging of electric vehicles?
Question	Criteria Achieved ?
Project	No

Waste Overall contribution 3%

1.1 - Construction Waste - B	uilding Re-Use	0%
Score Contribution	This credit contributes 50.0% towards th	e category score.
Criteria	If the development is on a site that has b	een previously developed, has at least 30% of
	the existing building been re-used?	
Question	Criteria Achieved ?	
Project	No	
2.1 - Operational Waste - Fo	od & Garden Waste	100%
Score Contribution	This credit contributes 50.0% towards th	e category score.
Criteria	Are facilities provided for on-site manage	ement of food and garden waste?
Question	Criteria Achieved ?	
Project	Yes	

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Urban Ecology Overall contribution 3%

	2.1 Vegetation	100%
	Score Contribution	This credit contributes 57.1% towards the category score.
	Criteria	How much of the site is covered with vegetation, expressed as a percentage of the
		total site area?
	Question	Percentage Achieved ?
	Project	35 %
	2.2 Green Roofs	0%
	Score Contribution	This credit contributes 14.3% towards the category score.
	Criteria	Does the development incorporate a green roof?
ĺ	Question	Criteria Achieved ?
	Project	No
	2.3 Green Walls and Facades	0%
	Score Contribution	This credit contributes 14.3% towards the category score.
	Criteria	Does the development incorporate a green wall or green façade?
Ì	Question	Criteria Achieved ?
	Project	No
	3.1 Food Production - Residential	0%
	Score Contribution	This credit contributes 14.3% towards the category score.
	Criteria	What area of space per resident is dedicated to food production?
	Question	Food Production Area
	Detached dwelling	-
	Output	Min Food Production Area
	Detached dwelling	1 m²

Innovation Overall contribution 0%

1.1 Innovation	0%
Score Contribution	This credit contributes 100.0% towards the category score.
Criteria	What percentage of the Innovation points have been claimed (10 points maximum)?

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