



DEVELOPMENT APPLICATION

PDPLANPMTD-2026/062275

PROPOSAL: Additions & Alterations (Single Dwelling)

LOCATION: 21 Derwent Avenue, Geilston Bay

RELEVANT PLANNING SCHEME: Tasmanian Planning Scheme - Clarence

ADVERTISING EXPIRY DATE: 16/09/2026 00:00:00

The relevant plans and documents can be inspected at the Council offices, 38 Bligh Street, Rosny Park, during normal office hours until 16/09/2026 00:00:00. In addition to legislative requirements, plans and documents can also be viewed at www.ccc.tas.gov.au during these times.

Any person may make representations about the application to the Chief Executive Officer, by writing to PO Box 96, Rosny Park, 7018 or by electronic mail to clarence@ccc.tas.gov.au. Representations must be received by Council on or before 16/09/2026 00:00:00.

To enable Council to contact you if necessary, would you please also include a day time contact number in any correspondence you may forward.

Any personal information submitted is covered by Council's privacy policy, available at www.ccc.tas.gov.au or at the Council offices.

Planning Application

Use this form to obtain planning approval for the use and development of land, including change of use, subdividing land into smaller lots, lot consolidation, or signage.

Please refer to the Planning Application checklist on the following pages to determine what documentation must be submitted with your application.

Proposal: Renovation and Extension, Landscaping.

Location: 21 Derwent Avenue, Geilston Bay, 7015

Personal Information Removed



exemptions may apply which may save you time on your proposal.

If you had pre-application discussions with City of Clarence, please provide planner's name:

Current use of site: **Residential Home**

Does the proposal involve land administered or owned by the Crown or Council? Yes ☐ No ☒

Declaration

- I have read the Certificate of Title and Schedule of Easements for the land and am satisfied that this application is not prevented by any restrictions, easements or covenants.
- I authorise the provision of a copy of any documents relating to this application to any person for the purposes of assessment or public consultation. I agree to arrange for the permission of the copyright owner of any part of this application to be obtained. I have arranged permission for Council's representatives to enter the land to assess this application
- I declare that, in accordance with Section 52 of the Land Use Planning and Approvals Act 1993, that I have notified the owner of the intention to make this application. Where the subject property is owned or controlled by Council or the Crown, their signed consent is attached.
- I declare that the information in this declaration is true and correct.

Acknowledgement

- I acknowledge that the documentation submitted in support of my application will become a public record held by Council and may be reproduced by Council in both electronic and hard copy format in order to facilitate the assessment process; for display purposes during public consultation; and to fulfil its statutory obligations. I further acknowledge that following determination of my application, Council will store documentation relating to my application in electronic format only.

Personal Information Removed



Planning Application checklist

Mandatory Documents

This information is required for the application to be valid. We are unable to proceed with an application without these documents.

- ☐ Details of the location of the proposed use or development.
- ☐ A copy of the current Certificate of Title, Sealed Plan, Plan or Diagram and Schedule of Easements and other restrictions for each parcel of land on which the use or development is proposed.
- ☐ Full description of the proposed use or development.
- ☐ Description of the proposed operation. May include where appropriate: staff/student/customer numbers; operating hours; truck movements; and loading/unloading requirements; waste generation and disposal; equipment used; pollution, including noise, fumes, smoke or vibration and mitigation/management measures.
- ☐ Declaration the owner has been notified if the applicant is not the owner.
- ☐ Crown or Council consent (if publically-owned land).
- ☐ Any reports, plans or other information required by the relevant zone or code.
- ☐ Fees prescribed by the City of Clarence.

Application fees (please phone 03 6217 9550 to determine what fees apply). An invoice will be emailed upon lodgement.

Additional Documents

In addition to the mandatory information required above, Council may, to enable it to consider an application, request further information it considers necessary to ensure that the proposed use or development will comply with any relevant standards and purpose statements in the zone, codes or specific area plan, applicable to the use or development.

- ☐ Site analysis and site plan, including where relevant:
 - Existing and proposed use(s) on site.
 - Boundaries and dimensions of the site.
 - Topography, including contours showing AHD levels and major site features.
 - Natural drainage lines, watercourses and wetlands on or adjacent to the site.
 - Soil type.
 - Vegetation types and distribution, and trees and vegetation to be removed.
 - Location and capacity of any existing services or easements on/to the site.
 - Existing pedestrian and vehicle access to the site.
 - Location of existing and proposed buildings on the site.
 - Location of existing adjoining properties, adjacent buildings and their uses.
 - Any natural hazards that may affect use or development on the site.
 - Proposed roads, driveways, car parking areas and footpaths within the site.
 - Any proposed open space, communal space, or facilities on the site.
-



- Main utility service connection points and easements.
 - Proposed subdivision lot boundaries.
- ☐ Where it is proposed to erect buildings, detailed plans with dimensions at a scale of 1:100 or 1:200 showing:
- Internal layout of each building on the site.
 - Private open space for each dwelling.
 - External storage spaces.
 - Car parking space location and layout.
 - Major elevations of every building to be erected.
 - Shadow diagrams of the proposed buildings and adjacent structures demonstrating the extent of shading of adjacent private open spaces and external windows of buildings on adjacent sites.
 - Relationship of the elevations to natural ground level, showing any proposed cut or fill.
 - Materials and colours to be used on rooves and external walls.
- ☐ Where it is proposed to erect buildings, a plan of the proposed landscaping showing:
- Planting concepts.
 - Paving materials and drainage treatments and lighting for vehicle areas and footpaths.
 - Plantings proposed for screening from adjacent sites or public places.
- ☐ Any additional reports, plans or other information required by the relevant zone or code.
-

This list is not comprehensive for all possible situations. If you require further information about what may be required as part of your application documentation, please contact City of Clarence Planning team on (03) 6217 9550.



SEARCH OF TORRENS TITLE

VOLUME 197728	FOLIO 1
EDITION 4	DATE OF ISSUE 23-Feb-2026

SEARCH DATE : 01-May-2026

SEARCH TIME : 11.45 am

DESCRIPTION OF LAND

City of CLARENCE

Lot 1 on Plan [197728](#)

Derivation : Part of 194 Acres Gtd to E P Wilson & Ors

Prior CT [4002/40](#)

SCHEDULE 1

[E146293](#) TRANSFER to MICHAEL FRANZ BAUKES and EVA DANIELLE
BAUKES Registered 14-Aug-2018 at 12.01 pm

SCHEDULE 2

Reservations and conditions in the Crown Grant if any
BENEFITING EASEMENT: a right of way and right for the
registered proprietors of the said land within
described to construct a street over the strip of
land marked W.X.Y.Z. on Plan No. [197728](#)

BENEFITING EASEMENT: a right of drainage over the strips of
land marked "Drainage Easement 1.52 wide" on Plan No.
[197728](#)

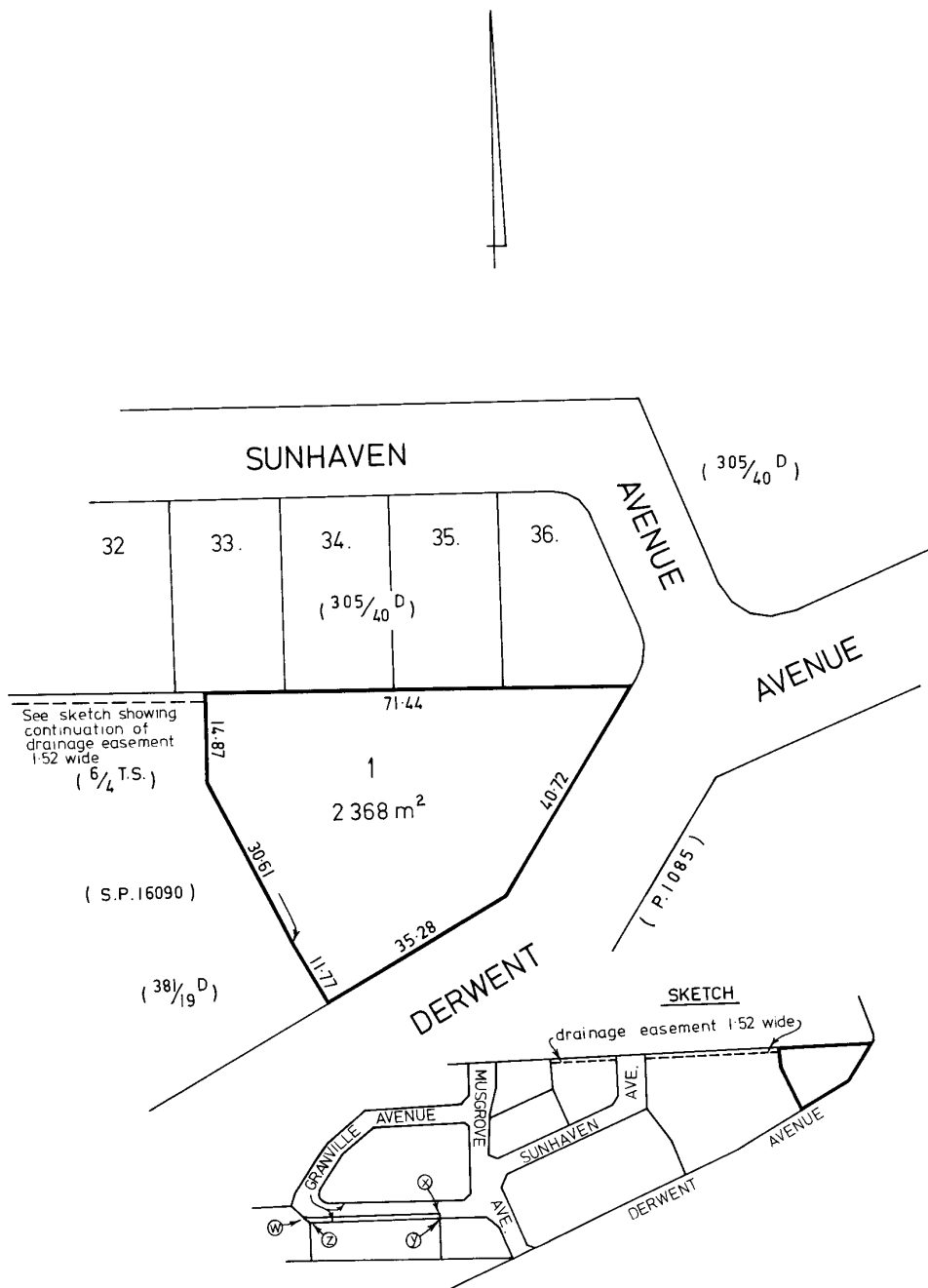
BENEFITING EASEMENT: such rights of drainage (if any) over the
lots shown on Diagram No. 220/16 and Diagram Nos.
196/28 & 243/34 as are set forth in the respective
Certificate of Title to such lots

[E146295](#) MORTGAGE to Australia and New Zealand Banking Group
Limited Registered 14-Aug-2018 at 12.02 pm

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

OWNER		PLAN OF TITLE		Registered Number
FOLIO REFERENCE CT.4002/40		LOCATION CITY OF CLARENCE		P 197728
GRANTEE		FIRST SURVEY PLAN No.		APPROVED 22 MAY 1997
		COMPILED BY L.T.O.		<i>Handwritten Signature</i> Recorder of Titles
		SCALE 1: 750		LENGTHS IN METRES
MAPSHEET MUNICIPAL CODE No. 107 (522523)	LAST UPI No 1418234	LAST PLAN No.	ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN	



A 143



GLENFERRIE

for

Mike Baukes

Project Number: 260419

Date: Tuesday, 18 August 2026

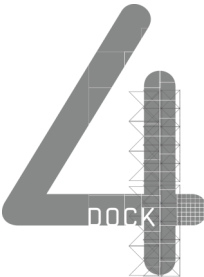
Site Address: 21 Derwent Ave Geilston Bay TAS 7015

Status
PLANNING APPLICATION

ID	SHEET	REV.
	COVER	01
1.01	SITE PLAN	01
1.02	DEMOLITION PLAN	01
1.03	FLOOR PLAN	01
1.04	ROOF PLAN	01
1.05	HYDRAULIC PLAN	01
2.01	ELEVATIONS	01
2.02	ELEVATIONS	01
2.03	SECTIONS CUT&FILL BUILDING ENV	01



LOCATION PLAN
1:5000



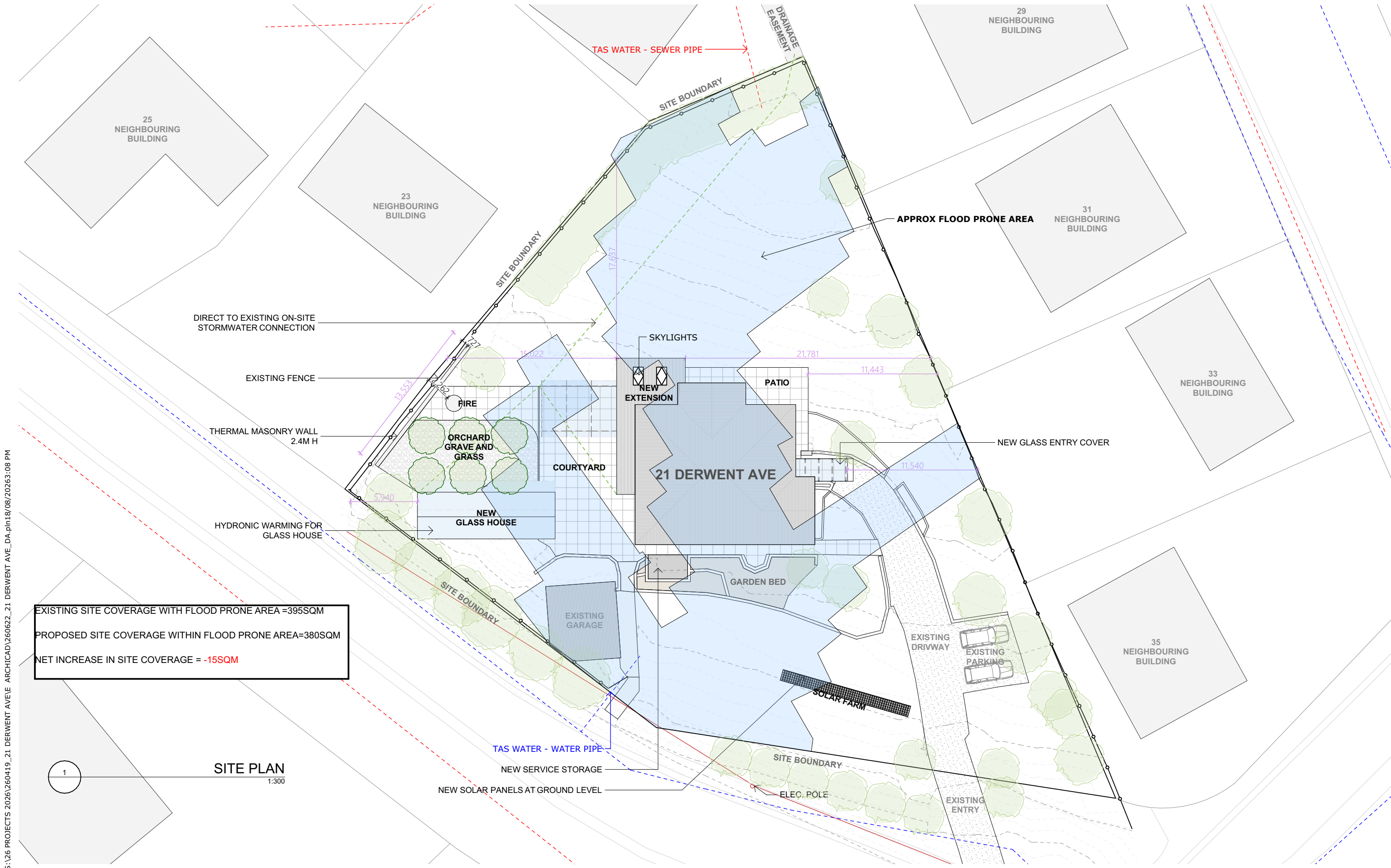
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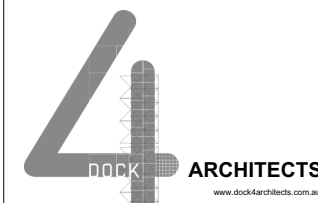
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EXISTING SITE COVERAGE WITH FLOOD PRONE AREA =395SQM
PROPOSED SITE COVERAGE WITHIN FLOOD PRONE AREA=380SQM
NET INCREASE IN SITE COVERAGE = -15SQM

SITE PLAN
1:300



Document Set ID: 6022647
Version: 1, Version Date: 21/08/2026

Mike Baukes

Date	Change Name	ChID	RevID
28/07/2026			01

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REPLACE EARLIER ISSUE

GLENFERRIE

21 Derwent Ave Geilston Bay TAS
7015

Status
PLANNING APPLICATION

Date generated
18/08/2026

Project number
260419

Format
A3

Drawn
GE

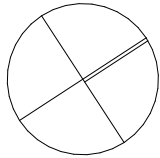
Approved
RL

Accredited Designer: Richard Loney CC 6198Y

ARCHITECTURAL
SITE PLAN

Drawing number
1.01

Revision
01



ALL SANDSTONE IS TO BE RETAINED, CLEANED STORED ON SITE AND REUSED IN THE RENOVATION WORKS

NOTE:
RETAIN ALL
SANDSTONE, TO BE
CLEANED AND STORED
ON SITE, FOR REUSE

DEMOLISH EXISTING WALL FOR
OPENING, MAKE GOOD ADJOINING
WALLS

GLAZING TO BE REMOVED,
RETAIN ON SITE FOR REUSE

DEMOLISH EXISTING WALL
FOR OPENING, MAKE GOOD
ADJOINING WALLS

REMOVE EXISTING SHED

EXISTING SHED

REMOVE TILE FLOOR FINISH,
STRUCTURAL FLOOR TO BE RETAINED

DEMOLISH EXISTING WALL AND DOOR,
MAKE GOOD ADJOINING WALL SECTIONS

REMOVE TILE FLOOR FINISH,
STRUCTURAL FLOOR TO BE RETAINED

REMOVE EXISTING KITCHEN

— DEMOLISH GARDEN WALL

— DEMOLISH GARDEN WALL

DEMOLISH JOINERY

DEMOLISH EXISTING WALL FOR
— OPENING, MAKE GOOD ADJOINING
WALLS

EXISTING GARAGE OFFICE
NO WORKS

DEMO FLOOR PLAN

1:100

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Format
A.3

Drawn
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Drawing title

ARCHITECTURAL
DEMOLITION PLAN

Drawing number

Revision

1.02

01

Accredited Designer: Richard Loney CC 6198Y

Mike Baukes

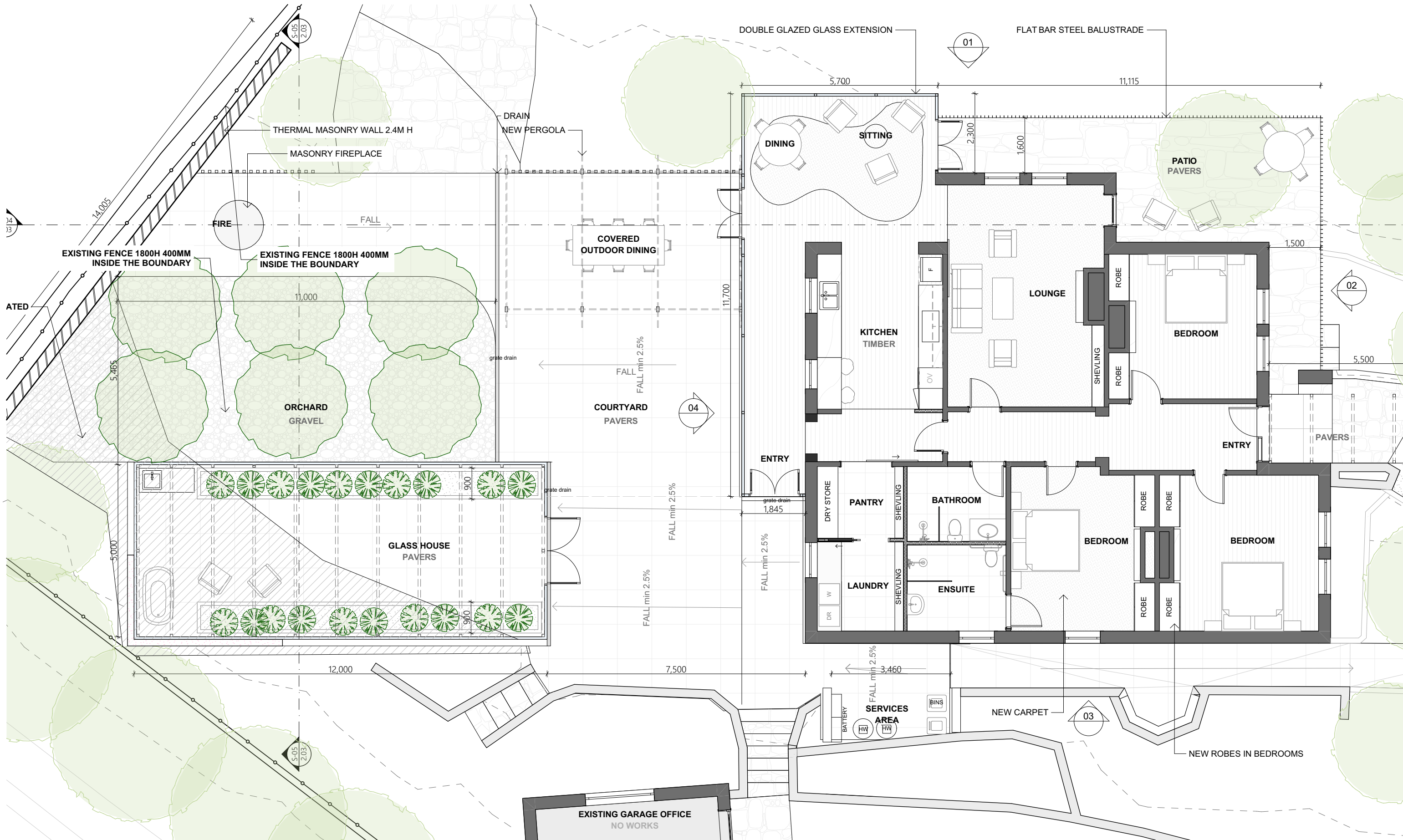
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FLOOR PLAN

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Format
A3

Drawn
GE

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260419

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RL

Accredited Designer: Richard Loney CC 6198Y

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ARCHITECTURAL FLOOR PLAN

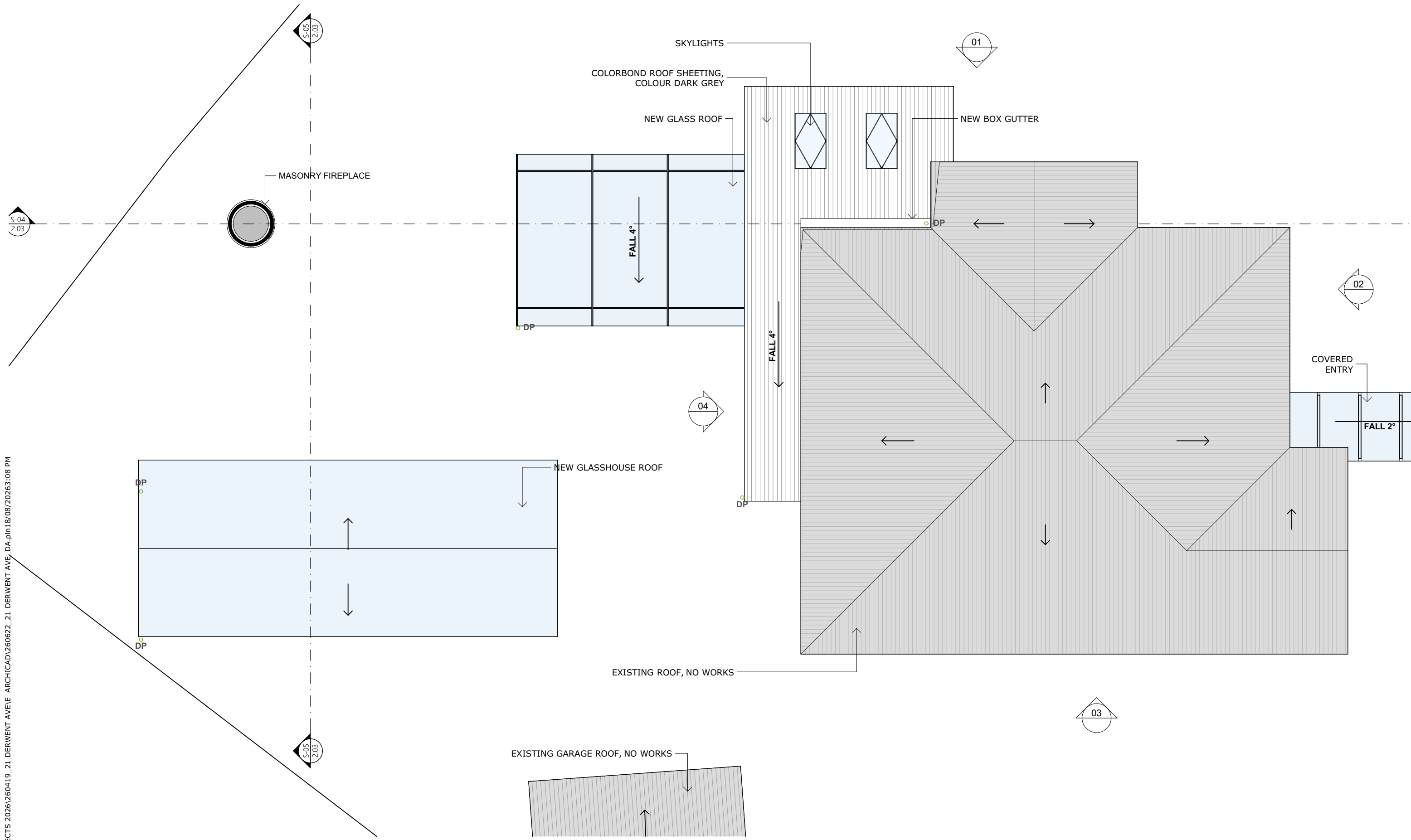
Drawing number

revision

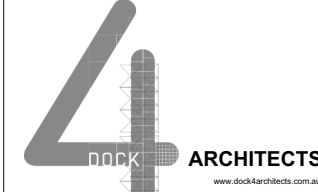
1.03

01

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1 ROOF PLAN
1:100



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21 Derwent Ave Geilston Bay TAS 7015

PLANNING APPLICATION

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Accredited Designer: Richard Loney CC 6198Y

Drawing title

ARCHITECTURAL ROOF PLAN

Drawing number **1.04** Revision **01**

THE INCREASE IN SITE RUNOFF IS
CONFIRMED TO BE MINOR DUE TO
THE FACTED THAT THE EXISTING
PAVED AREA IS REDUCED
CONSIDERABLE IN SIZE:

PROPOSED - 275 Sqm INCLUDING
(PAVED AREAS AND NEW ROOF AREA
(NOT INCLUDING THE EXISTING HOUSE
ROOF AREA)

EXISTING - 210 Sqm INCLUDING
(PAVED AREA AND ROOF AREA NOT
INCLUDING EXISTING HOUSE ROOF
AREA)



squires plumbing

Squires Plumbing
32 Gormanston Rd
Moonah TAS 70
Tel. 03 6228 0566

admin@squiresplumbing.com.au
www.squiresplumbing.com.au
ABN 46717080379
Licence # 1102375

PLEASE PAY BY	AMOUNT	INVOICE DATE
28/07/2026	\$1 083.50	21/07/2026

TAX INVOICE NO. 9985

Order No.:
Site: 21 DERWENT AVENUE
Job No.: 70097

Description
LOCATE STORMWATER SERVICES AND CONNECTION POINT TO COUNCIL INFRASTRUCTURE IF IT EXISTS

Thomas Coad and Keith Wales (09/07/2026) - Work Note
Obtained drawings from Clarence City Council and attended site.
On site, assessed the lay of the land and where rough services would be located. Took measurements of the SW drain throughout the property and through to the neighbours. Drawings show a submerged pit, which was not obvious, that was uncovered and could then use CCTV equipment to inspect the remaining parts of the S/W drain to the edge of the property boundary.

The existing drainage plan does accurately display the locations of the services with the addition of the stormwater pit adjacent to the driveway.

See attached photos and plans for reference.

This claim was made under the Building and Construction Security of Payment Act 2009 (TAS).	Sub-Total ex GST	\$985.00
All goods remain the property of Squires Plumbing until such time as this invoice is paid in full.	GST	\$98.50
	Total inc GST	\$1,083.50
	Amount Applied	\$0.00
	Balance Due	\$1,083.50

MINIMUM LABOUR CHARGE ONE HOUR

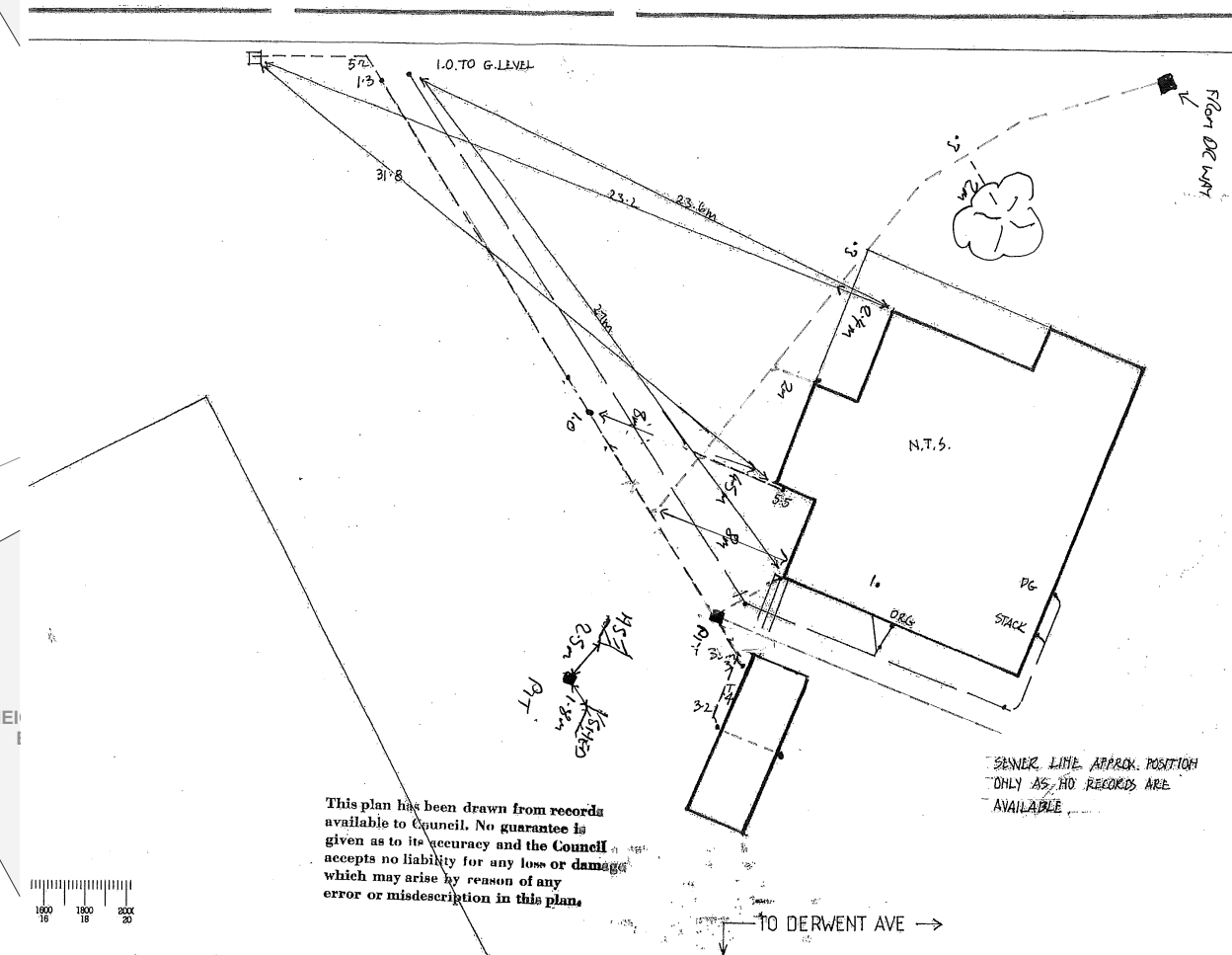
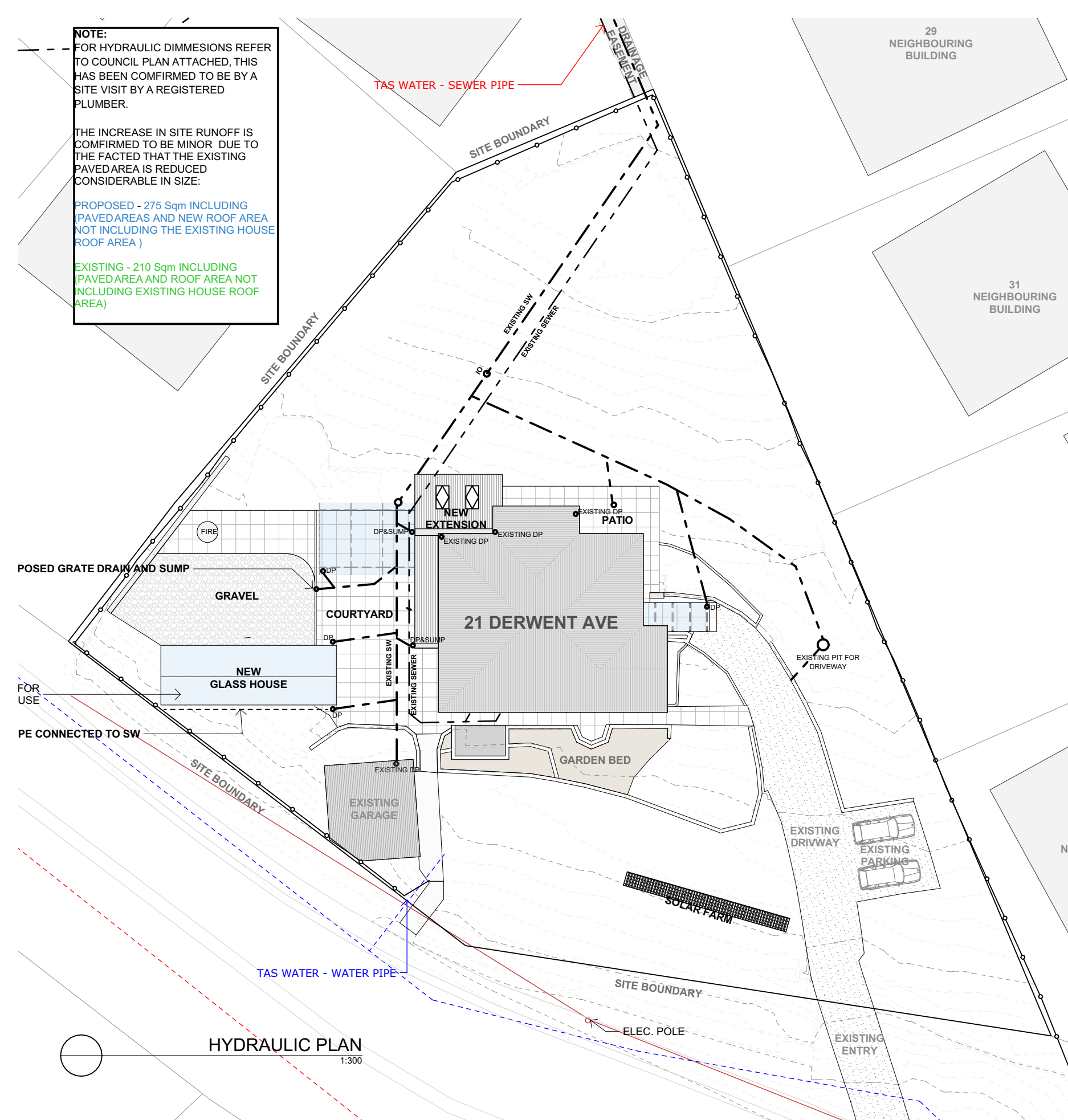
How To Pay

Credit Card (MasterCard or Visa)
ALL CREDIT CARD PAYMENTS WILL INCUR A
1.227% SURCHARGE
ALL OTHER EFTPOS TRANSACTIONS WILL
INCUR A \$0.2190 SURCHARGE

PLEASE CALL 03 62280566 TO PROCESS
PAYMENT VIA PHONE CALL

Direct Deposit
Bank ANZ
Acc. Name Squires Family Plumbing Pty Ltd
BSB 017010
Acc. No. 15344295

Page 1/1



SCANNED PRINTED MAY 2008		DATUM	DATE
3	24/7/87	DRAWN A.E.	15-5-79
		TRACED	
		DESIGNED	
		CHECKED	
		EXAMINED	
		APPROVED	



R. MARTIN 21 DERWENT AVENUE		
REFERENCE DRAWINGS	CONTRACT No:	
PLAN No. 2361	JOB No.	A3

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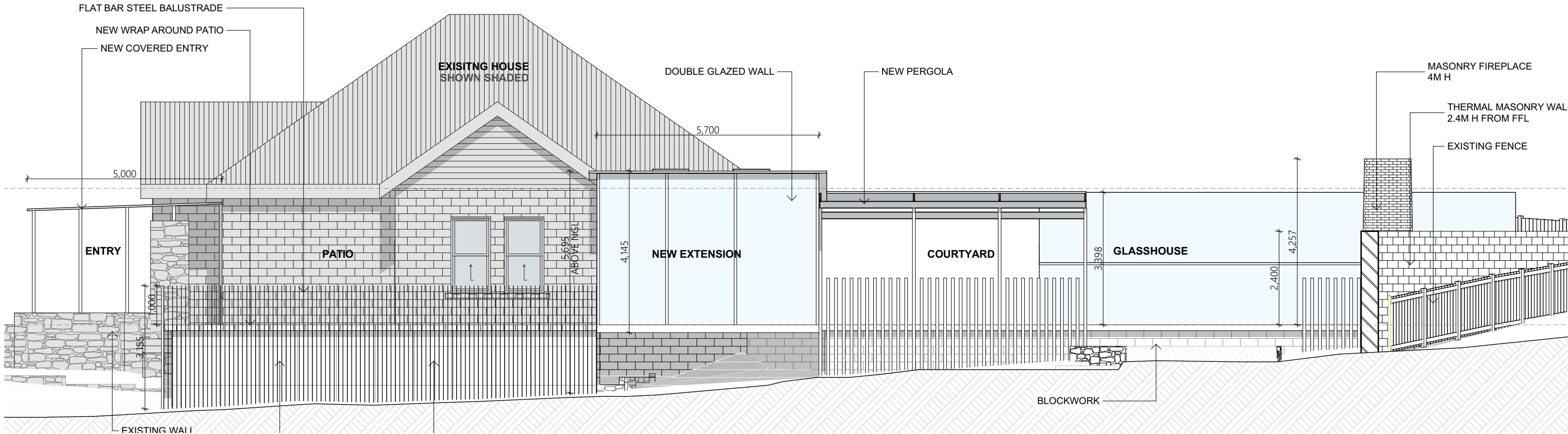
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7015

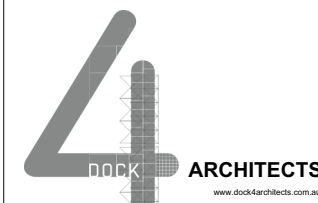
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PLANNING APPLICATION	260419		
Date generated	Format	Drawn	Approved
18/08/2026	A3	GE	RL

Accredited Designer: Richard Longey CC 61084

Drawing title	
ARCHITECTURAL HYDRAULIC PLAN	
Drawing number	Revision
1.05	01

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Accredited Designer: Richard Loney CC 6198Y

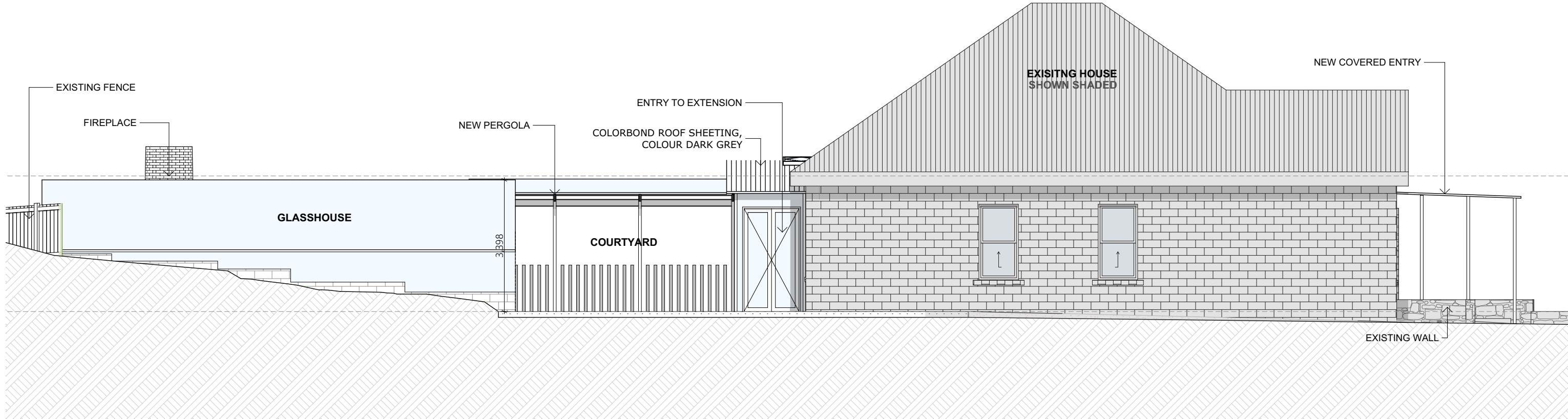
Project number
260419

Architectural ELEVATIONS

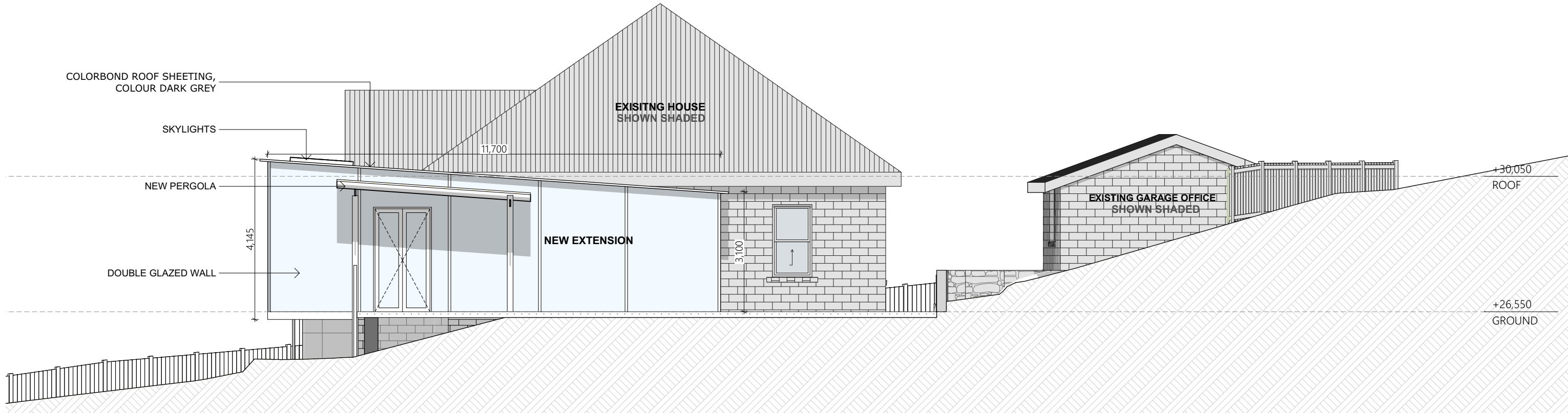
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2.01

Drawing title
ARCHITECTURAL ELEVATIONS

Revision
01

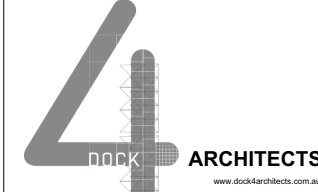


03 ELEVATION
1:100



04 ELEVATION
1:100

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21 Derwent Ave Geilston Bay TAS 7015

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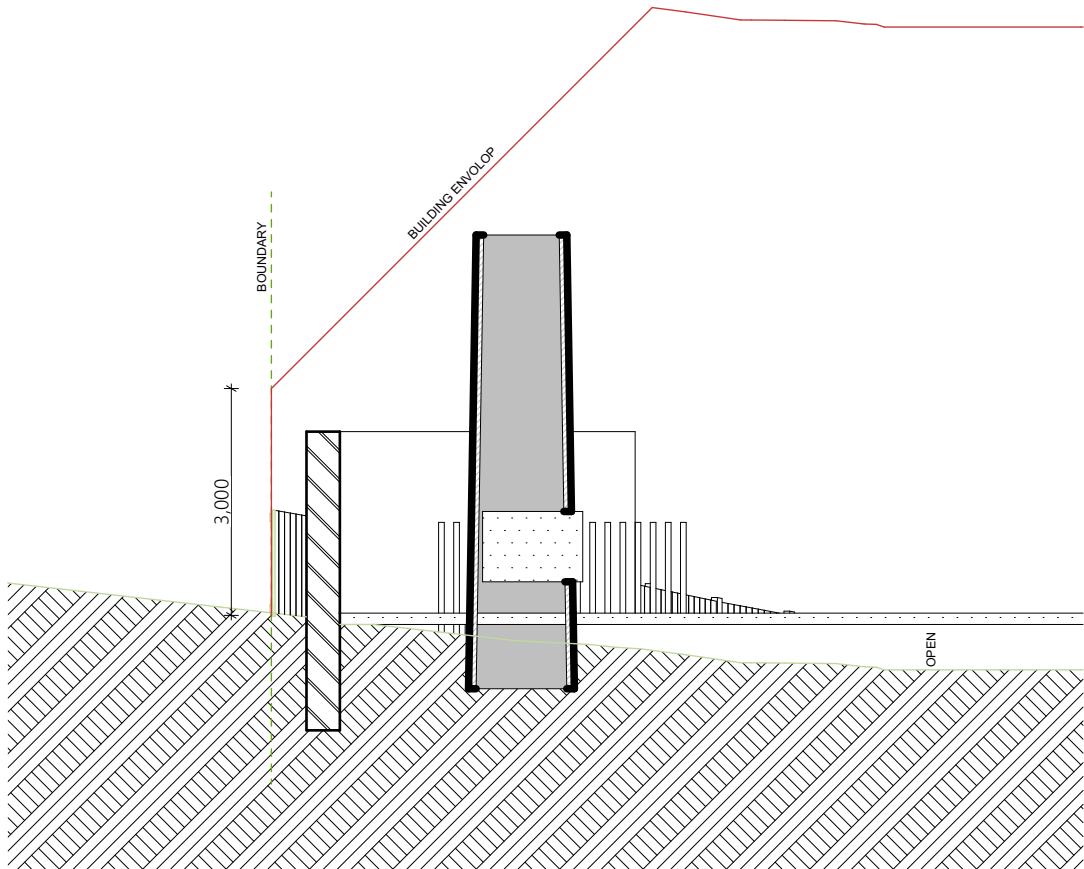
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Drawing title
ARCHITECTURAL ELEVATIONS

Drawing number
2.02

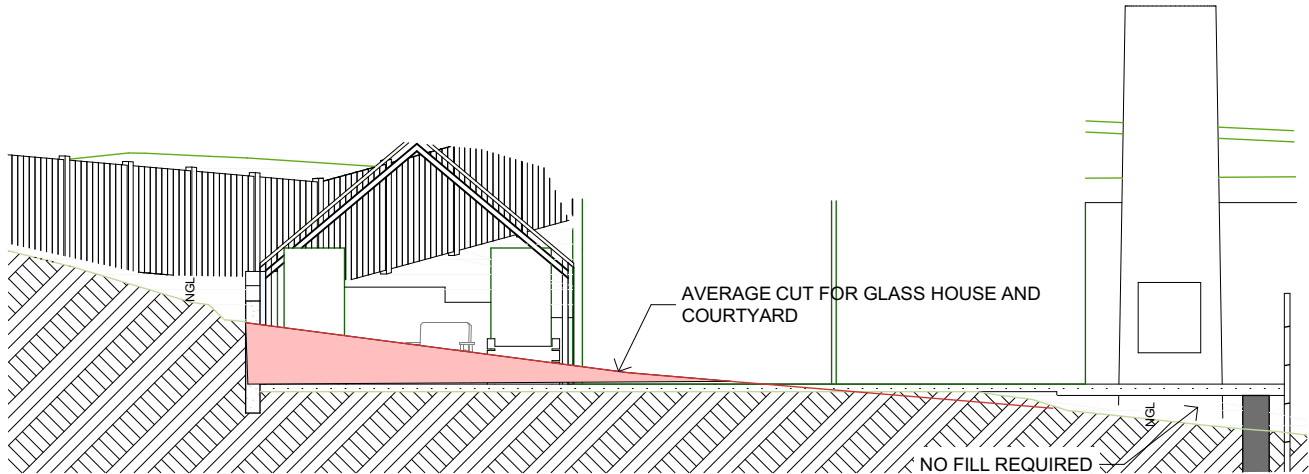
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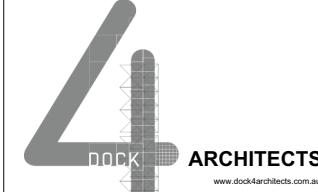
S-04

MASONRY CHIMNEY&WALL
1:100



S-05

SECTION
1:100



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Mike Baukes

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Date generated: 18/08/2026

Format: A3

Drawn: GE

Approved: RL

Accredited Designer: Richard Loney CC 6198Y

Project number: 260419

ARCHITECTURAL

SECTIONS CUT&FILL BUILDING ENV

Drawing number: 2.03

Revision: 01

Document Set ID: 6022647

Version: 1, Version Date: 21/08/2026

Prepared for:
Dock4 Architects

21 Derwent Avenue GEILSTON BAY

FLOOD HAZARD REPORT



FE_26138

20 August 2026

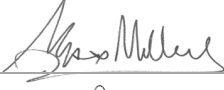
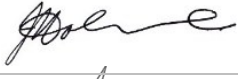
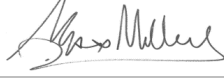


L4/ 116 BATHURST ST
HOBART TASMANIA 7000
ABN: 16 639 276 181

Document Information

Title	Client	Document Number	Project Manager
21 Derwent Avenue, Geilston Bay Flood Hazard Report	Dock4 Architects	FE_26138	Max W. Möller <i>BEng, FIEAust, EngExec, CPEng, NER, APEC Engineer, IntPE (Aus.)</i> Principal Hydraulic Engineer

Document Initial Revision

REVISION 00	Staff Name	Signature	Date
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Acronyms

AEP: Annual Exceedance Probability
 ARR: Australian Rainfall and Runoff
 CC: Climate Change
 ARR: Australian Rainfall and Runoff
 TPS: Tasmanian Planning Scheme
 DEM: Digital Elevation Model
 RAFTS: Runoff Analysis Flow Training System
 SSP: Shared Socioeconomic Pathways
 LiDAR: Light Detection and Ranging
 GIS: Geographic Information System
 AHD: Australian Height Datum
 FFL: Finished Floor Level

1. Introduction

Flüssig Engineers have been engaged by **Dock4 Architects**, to undertake a Flood Hazard Report for the development at 21 Derwent Avenue, Geilston Bay in the **Clarence City Council** municipality. The purpose of this report is to determine the flood inundation characteristics on the existing and post-development hazard scenarios for the 1% AEP plus climate change (1% AEP + CC), for the purpose of development.

1.1 Development

The proposed development at 21 Derwent Avenue Geilston Bay involves alterations to the existing dwelling, including a new extension, internal reconfiguration and associated external works. The proposal also includes construction of a new approximately 50 m² glasshouse, a 2.4 m high masonry wall, paved courtyard and outdoor areas, and a new entry to the south-western side of the dwelling. The existing dwelling has an approximate building footprint of 195 m², while the proposed dwelling will have a footprint of approximately 230 m². The existing driveway and garage are to be retained.

The proposed development and associated works extend into the mapped flood-prone area affecting the site. The proposal therefore triggers assessment against the Tasmanian Planning Scheme C12.0 Flood-Prone Areas Hazard Code, with this report assessing the potential flood impacts and suitability of the proposed development.

1.2 Objectives and Scope

This flood hazard report has been prepared for the development at 21 Derwent Avenue, Geilston Bay. The assessment has been undertaken to establish the level of development risk associated with overland flooding at the site. The objectives of this study are:

- Provide an assessment of the site's flood characteristics under the combined 1% AEP + CC scenario.
- Provide comparison of flooding for pre- and post-development through mapping and analysis.
- Provide flood mitigation recommendations for the development, where appropriate.
- Assess changes in flood depth, velocity, discharge and hazard resulting from the proposed development.
- Consider the proposed development against the relevant provisions of the Flood-Prone Areas Hazard Code in the Tasmanian Planning Scheme.

1.3 Scope Limitations

This study is limited to the objectives of the engagement by the client, the availability and reliability of data, and including the following:

- The flood model is limited to a 1% AEP + CC worst case temporal design storm.
- All parameters have been derived from best practice manuals and available relevant studies (if applicable) in the area.
- All provided data by the client or government bodies for the purpose of this study is deemed fit for purpose.
- The study is to determine the effects of the new development on flooding behaviour and should not be used as a full flood study into the area without further assessment.

1.4 Relevant Planning Scheme Requirements

The table below summarises the relevant requirements of the Tasmanian Planning Scheme C12.0 Flood-Prone Areas Hazard Code applicable to the proposed development.

Table 1. Tasmanian Planning Scheme Requirements

Planning Scheme Code	Objective
C12.5.1 Uses within a flood-prone hazard area	That a habitable building can achieve and maintain a tolerable risk from flood
C12.6.1 Buildings and works within a flood-prone hazard area	(a) building and works within a flood-prone hazard area can achieve and maintain a tolerable risk from flood; and (b) buildings and works do not increase the risk from flood to adjacent land and public infrastructure.

2. Model Build

2.1 Overview of Catchment

The contributing catchment for 21 Derwent Avenue, Geilston Bay is approximately 8.8 ha, extending generally south of the site across the slopes of Natone Hill. The catchment has an average slope from the upper catchment to the site of approximately 16–20%.

Land use within the catchment comprises Open Space, General Residential and Utilities, with the subject site located within the General Residential zone. Runoff from the upper catchment generally drains downslope toward the residential area surrounding Derwent Avenue, with the site located near the downstream extent of the local catchment.

Figure 1 below outlines the approximate contributing catchment for the site at 21 Derwent Avenue, Geilston Bay.



Figure 1. Contributing Catchment for 21 Derwent Avenue, Geilston Bay

2.2 Hydrology

The table below shows the adopted hydrological parameters for the RAFTS catchment.

Table 2. Parameters for RAFTS catchment

Catchment Area (ha)	Initial Loss Perv/imp (mm)	Continuing Loss Perv/imp (mm/hr)	Manning's N pervious	Manning's N impervious	Non-linearity factor
8.8	28/1	3.7/0.0	0.045	0.02	-0.285

2.2.1 Design Rainfall Events

The model utilised 1% AEP (100yr ARI) flood events for the life of the development. Therefore, the design events assessed in this analysis are limited to the 1% AEP + CC design events. Due to the size and grade of the catchment the peak rainfall time was restricted to between 1 hour – 6 hrs.

The model shows that the 1% AEP 10-minute storm temporal pattern 9 was the worst-case median storm for the full catchment. Therefore, those storm events were used within the hydraulic model.

Figure 2 shows the box and whisker output of the model run.

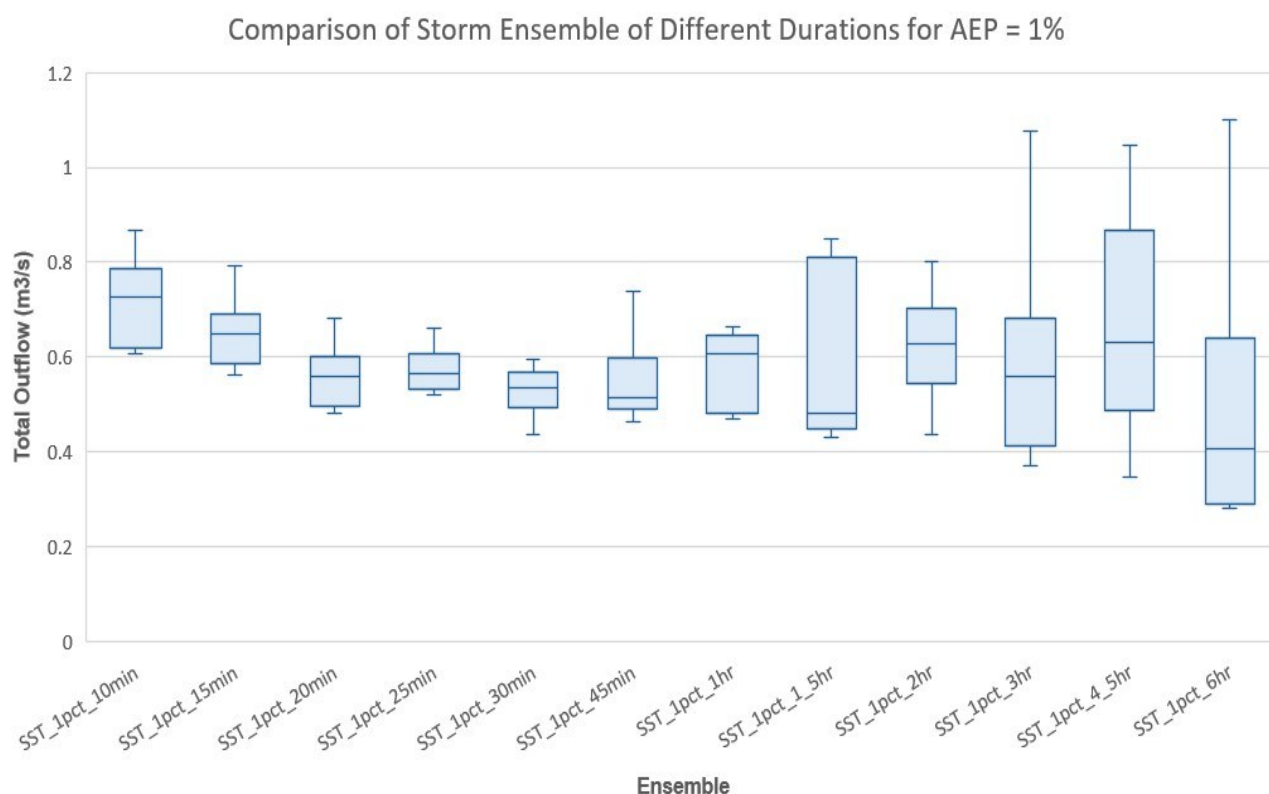


Figure 2. 1% Box and Whisker Plot, Full Catchment Flood Event Model

2.2.2 Climate Change

The ARR 2019 Guide for Flood Estimation, Version 4.2, is regarded as the industry standard for assessing projected increases in rainfall under climate change conditions for the year 2100 scenario.

The adopted climate change scenario is SSP3-7.0, which represents a relatively high future greenhouse gas emissions pathway used in climate projections. For the 2100 planning horizon, ARR provides rainfall intensity uplift factors corresponding to this scenario.

According to Table 3 shown below, a multiplication factor of 1.66 is adopted for the 10-minute rainfall duration for the localised catchment. This corresponds to a 66% increase in rainfall intensity and has been adopted by Clarence City Council for the assessment. The resulting 1% AEP + CC event represents the future design condition assessed within the hydraulic model.

Table 3. Climate Change Increases

Parameter	Localised Catchment SSP3-7.0 @ 2100
< 1 Hour Rainfall Intensity	66% Increase

2.2.3 Calibration/Validation

This catchment has no stream gauge to calibrate the model against a real-world storm event. Similarly, there is little historical information available, and limited available past flood analysis undertaken to validate against the flows obtained in the model.

2.3 Hydraulics

A detailed one-dimensional–two-dimensional (1D–2D) hydraulic model was developed to simulate and quantify flood behaviour across the target study area. The 1D component of the model was configured to represent any existing infrastructure, enabling accurate routing of flows through defined hydraulic structures. This ensured that conveyance within the formal drainage system was properly captured, including surcharge behaviour during periods of high flow.

2.3.1 Survey

The 2D surface model was taken from LiDAR to create a 1m and cell size DEM. For the purposes of this report, 1m cells are enough to capture accurate flow paths. This approach improves representation of local road drainage behaviour and the interaction between road runoff and adjacent overland flow paths.

The DEM with hill shading can be seen below in Figure 3.



Figure 3. 1m DEM (Hill shade) of Lot Area, 21 Derwent Avenue, Geilston Bay.

2.3.2 Roads

Roads often form the basis for overland flow in high frequency events. However, kerb and channel features are not always adequately represented within the DEM surface. To improve representation of road drainage lines, mesh polygons were used to define road corridors, with z-lines incorporated along the gutter to ensure the kerb invert is represented within the hydraulic mesh.

2.3.3 Structures

In the process of crafting a two-dimensional grid to depict the ground surface of the floodplain, we initiated by re-sampling high-resolution LiDAR data to generate a digital elevation model (DEM) through the utilisation of GIS software.

Particular attention was given to identifying and incorporating relevant features such as residential buildings, walls, fences and roadways. These features can influence local flow direction, conveyance and ponding behaviour and were therefore included where considered hydraulically significant. The inclusion of these features improves representation of the existing built environment and supports a more reliable assessment of flood behaviour across the modelled area.

2.3.4 Walls

All significant fences and retaining structures were incorporated into the 2D model as 2D linear wall elements. Paling fences were modelled with a maximum height of 250 mm, representing the estimated depth at which they are likely to collapse during a 1% AEP rainfall event.

Solid material walls were modelled using a realistic height to reflect their structural integrity and expected behaviour under flood conditions.

2.3.5 Key Stormwater Assets including Pipes and Pits

Pipes and pits were modelled as 1D underground network within the localised catchment model to provide insight into the capacity of the stormwater system. Where data was missing, this was inferred from surrounding data and where invert levels were missing, a 600 mm cover was applied.

2.3.6 Buildings

Specifically, residential houses and buildings were integrated into the DEM by elevating the corresponding grid cells representing these structures by a standardised height of 0.3 meters above the natural ground surface. Subsequently, the re-sampled grids were utilised to establish the Infoworks ICM model, thus forming a foundational framework for the subsequent analysis and simulation of flood dynamics.

This method allows for flow through the building if the flood levels/ pressure become great enough. The aim is to mimic flow through passageways such as doors, windows, and hallways.

2.3.7 Roughness (Manning's n)

Table 4 shows Manning's values used in the model. Values for this layer were derived from the ARR 2019 Guidelines. The values were assigned based on the corresponding land use and surface characteristics, with reference to the ARR 2019 Guidelines. These values were applied to represent the relative hydraulic resistance of the different surface types across the modelled area.

Table 4. Manning's Coefficients (ARR 2019)

Land Use	Roads	Open Channel	Rural	Residential	Parks	Buildings	Piped Infrastructure
Manning's n	0.018	0.035	0.04	0.045	0.05	0.3	0.013

3. Model Results

The result of 1% AEP + CC were run through the pre-development and post-development model scenarios to compare the changes to flooding onsite and to surrounding properties.

3.1 Pre-Development Scenario

The pre-development modelling results, shown in Figure 4, confirm that 21 Derwent Avenue is subject to overland flooding during the 1% AEP climate change 2100 event. The mapped flood behaviour is driven by runoff originating from the south, entering the site from the southern boundary before flowing through the central portions of the lot and continuing towards the northwestern corner. This flow pattern is consistent with the local topography and the broader drainage behaviour through the surrounding residential area.

The mapped overland flow path is generally shallow and dispersed as it enters the allotment, continuing through the centre of the site adjacent to the existing building areas and driveway before moving towards the northwestern boundary. Existing buildings, driveway areas, fences and walls locally influence the distribution of shallow flow across the site, with some ponding occurring where runoff is intercepted by boundary features and local changes in ground level. The existing dwelling is affected by shallow inundation around parts of the building footprint. However, the deeper and more concentrated flow remains generally associated with localised ponding in the northwestern boundary corner.

Flood depths across the subject site are generally shallow, with representative depths ranging from approximately 0.03 m to 0.07 m. The maximum modelled flood depth within the lot is approximately 0.47 m, occurring near the northwestern corner of the site. This maximum appears to be localised and associated with ponding near the downstream boundary, where shallow overland flow is constrained by the existing boundary fence.

Modelled velocities within the site are generally low, with velocities ranging from approximately 0.31 m/s to 0.56 m/s. The maximum modelled velocity is approximately 1.096 m/s, occurring along the northern boundary as flow is collected by the existing boundary fence and conveyed west. This maximum is localised and does not affect neighbouring properties or increase flood hazard.

Based on the modelled depth and velocity results, the majority of the flood hazard within the subject site is classified as H1, with a maximum localised H2 hazard classification. This localised increase occurs in the northwestern corner of the lot and is attributed to minor increases in flood depth due to ponding against the existing boundary fences. The results indicate that the site is primarily affected by shallow overland flooding, with the principal consideration being the preservation of the south to northwest flow path and the direction of flow around the proposed works, while avoiding concentration or redirection of runoff onto adjoining properties.

3.2 Post-Development Scenario

The post-development modelling results, shown in Figure 5, confirm that 21 Derwent Avenue remains subject to overland flooding during the 1% AEP climate change 2100 event. The mapped flood behaviour remains generally consistent with the pre-development scenario, with runoff originating from the south, entering the site along the southeastern boundary before flowing through the central portions of the lot and continuing towards the northwestern corner.

The proposed development includes removal of existing shed, new building areas, extensions to existing building areas, paved areas and a proposed wall. These works locally influence the distribution of shallow inundation around the central portion of the site, however, the overall direction of flow remains comparable to the pre-development scenario. The post-development layout appears to maintain the broader southern to northwest overland flow path, with the increased runoff potential from the proposed paved areas remaining shallow and generally conveyed around the proposed building footprint towards the lower lying areas of the property.

The post-development flow path remains broadly similar to the pre-development scenario, with overland flow passing adjacent to the existing shed towards the existing building before moving through

the centre of the site. As the entrance to the proposed extension sits directly within this path, managing local stormwater conveyance is essential to preventing water ingress to the dwelling.

To manage local flood risks and control shallow flows around the new extension on the southwestern side of the building, a 200 mm wide by 200 mm deep grated trench is recommended to capture and connect local runoff directly into the existing stormwater system. Additionally, all proposed paved areas are to be graded away from the building footprints at a minimum slope of 2.5%. Together, the recommended grated trench and surface grading manage overland flow paths and direct runoff away from the new entrances.

While the proposed building footprints, paved areas, wall, and grated trench slightly modify the local distribution of shallow inundation, the development maintains the broader southern to northwest flow direction across the site without increasing flood risk to adjoining properties and within the site.

Flood depths across the subject site remain generally shallow, with representative depths ranging from approximately 0.03 m to 0.08 m. The maximum modelled flood depth within the lot is approximately 0.47 m, occurring near the northwestern corner of the site. This maximum remains localised and is again associated with ponding near the northwestern corner, where shallow overland flow is constrained by the existing boundary fence and local topography.

Modelled velocities within the site remain low, with velocities ranging from approximately 0.32 m/s to 0.59 m/s. The maximum modelled velocity is approximately 1.14 m/s, occurring along the northern portion of the flow path as water is conveyed towards the northwest. This maximum is localised and does not indicate a broader increase in velocity across the site, with only a minimal increase observed from the pre-development scenario, likely associated with the increased impervious area.

Based on the modelled depth and velocity results, the majority of the flood hazard within the subject site remains classified as H1, with a maximum localised hazard of H2 observed in the same location as the pre-development scenario. The modelled 1% AEP + climate change flood extent does not intersect the external walls or building entrances of the proposed development. Accordingly, the proposed building is not directly affected by the modelled flood extent and the flood-related requirements of the Building Regulations are not considered applicable. The results indicate that the proposed development does not materially alter the existing flood behaviour, provided the proposed building areas, walls, paved areas and grated trench maintain the southern to northwest overland flow path.



Figure 4. Pre-Development 1% + CC Flood Depths and Extents



Figure 5. Post Development 1% + CC Flood Depth and Extents

3.3 Displacement of Overland Flow on Third Party Property

Figure 5 presents the post-development flood results for 21 Derwent Avenue, Geilston Bay and shows that, when compared with the pre-development scenario, there is no apparent increase in flood extent, depth or hazard on adjoining properties. The broader overland flow behaviour remains generally consistent with the existing condition, with runoff entering from the southeastern boundary, passing through the central portions of the lot and continuing towards the northwestern corner.

The post-development layout locally modifies the distribution of shallow inundation within the subject site due to the proposed building areas, paved areas, wall and flow management measures. However, these changes remain confined to the development area and do not materially alter the broader overland flow to the northwest. The proposed works redirect shallow flow around the building extents while maintaining the existing downstream conveyance path towards the northwestern boundary.

The post-development results further indicate that flood hazard on neighbouring properties and surrounding infrastructure remains consistent with the pre-development condition. No new areas of increased hazard are identified outside the subject site. **It is therefore considered that the post-development model does not adversely affect flood depths, flow behaviour or flood hazard on surrounding third party properties.**

3.4 Development Effects on Stormwater Discharge

Figure 6 below shows the discharge hydrograph at the cross-sectional results line for 21 Derwent Avenue lot area only. The hydrograph was obtained from both the pre-development and post-development model runs and combined to allow direct comparison of the modelled discharge between the two scenarios.

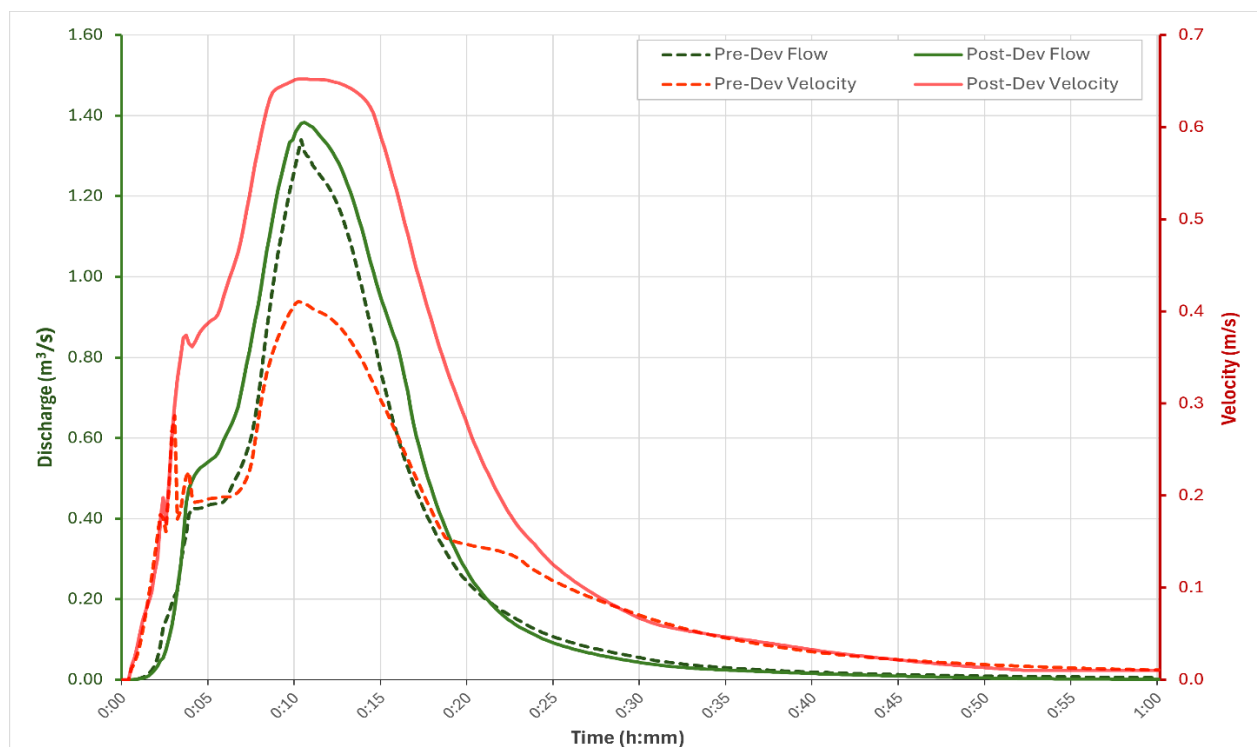


Figure 6. Pre and Post Development Net Discharge 1% AEP +CC, 21 Derwent Avenue

The results are from the west and northeast boundaries including the northwestern boundary corner which shows that flood velocity and discharge show a minor variation between the pre-development and post-development scenarios. Velocity demonstrates a minor increase of 0.24 m/s from 0.41 m/s to 0.65 m/s and similarly discharge shows a small increase of 1.34 m³/s to 1.38 m³/s, resulting in only a minor observable change at the assessed cross-section. This increase presents no dramatic increase in flood hazard within the site or onto neighbouring properties, the impacts are attributed to localised ponding as flow conveyance is still maintained.

As seen from the results, the impact on stormwater discharge from the proposed development is negligible.

3.5 Model Summary

The key results between the pre-development and post development are shown in Table 5 below.

Table 5. Pre- and post-development results at the cross-sectional line within the lot

	Pre-development	Post-development	Net Change
Depth (m)	0.47	0.47	-
Velocity (m/s)	0.41	0.65	+ 0.24
Discharge (m ³ /s)	1.34	1.38	+ 0.04

4. Flood Hazard

Appendix A presents the pre-development and post-development flood depth, velocity and hazard mapping for 21 Derwent Avenue and the surrounding area. The mapping allows the existing flood behaviour to be compared with the developed condition, including the proposed building areas, paved areas, wall and grated trench.

Under the pre-development scenario, the subject site is affected by shallow overland flooding during the 1% AEP climate change 2100 event. Flooding originates from the south, enters the site along the southeastern boundary and continues through the central portions of the lot towards the northwestern corner. Representative flood depths within the site range from approximately 0.03 m to 0.07 m, with a maximum modelled depth of approximately 0.47 m occurring near the northwestern corner of the site. This maximum depth is localised and associated with ponding where shallow overland flow is constrained by the existing boundary fence and local topography. Modelled velocities generally range from approximately 0.31 m/s to 0.56 m/s, with a maximum velocity of approximately 1.09 m/s along the northern boundary where flow is conveyed towards the northwest.

Based on the adopted Australian Flood Resilience and Design Handbook hazard classifications, these conditions correspond predominantly with the H1 hazard band, with a localised area of H2 hazard classification near the northwestern corner. This localised increase is associated with the minor increase in depth caused by ponding against existing boundary fence.

Following inclusion of the proposed plans, the post-development results remain broadly consistent with the pre-development condition. Representative flood depths range from approximately 0.03 m to 0.08 m, with a maximum modelled depth of approximately 0.47 m occurring in the same northwestern portion of the lot. Modelled velocities generally range from approximately 0.32 m/s to 0.59 m/s, with a maximum velocity of approximately 1.14 m/s along the northern portion of the flow path.

The post-development hazard remains predominantly within the H1 hazard band, with a localised H2 classification occurring in the same location as the pre-development scenario. The modelling indicates that the proposed development does not materially alter the existing flood hazard behaviour, provided the proposed grated trench drain is incorporated and the paved areas are graded to direct runoff away from the proposed entrance and towards the existing downstream flow path.

The pre-development and post-development hazard maps included in Appendix A show that the proposed development does not materially change the hazard behaviour outside the subject site. This assessment is limited to flood behaviour within the subject site and surrounding area and does not include assessment of public road access during a flood event.

A summary of the hazard ratings is shown in Figure 7.

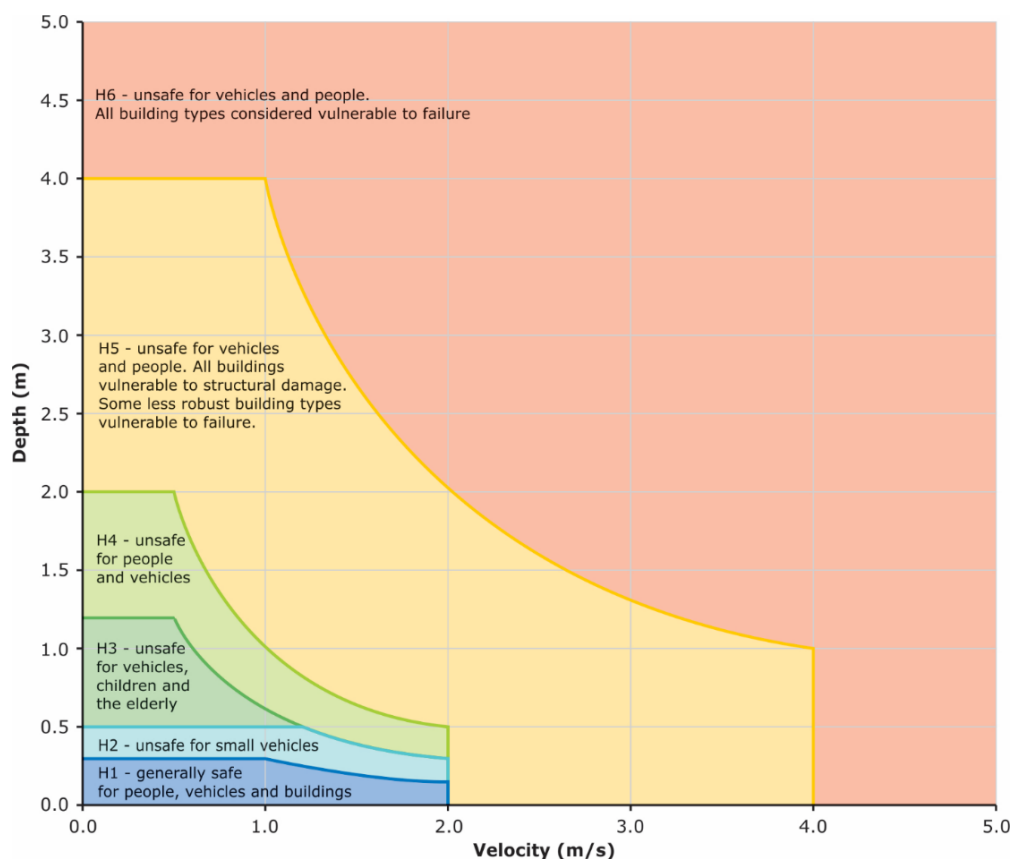


Figure 7. Hazard Categories Australian Disaster and Resilience Handbook

4.1 Tolerable Risk

This flood assessment represents an evaluation of the proposed site layout at 21 Derwent Avenue, Geilston Bay. The results indicate that the proposed development is affected by shallow overland flooding during the 1% AEP climate change 2100 event, with runoff originating from the south, entering along the southeastern boundary and passing through the central portions of the lot towards the northwestern corner.

The post-development results show that flood depths and velocities remain broadly consistent with the pre-development scenario. The flood hazard within the subject site remains predominantly within the H1 hazard band, with localised H2 hazard confined to the northwestern corner of the lot where minor ponding occurs against the existing boundary fence. These results indicate that the proposed development does not materially increase flood hazard within the site or on adjoining land, provided the southern to northwest overland flow path is maintained.

The identified flood risk is considered tolerable, subject to implementation of the recommendations contained within this report. The final design should ensure that the proposed building areas, paved areas, wall and grated trench maintain shallow overland flow conveyance through the site and avoid concentrating or redirecting runoff onto adjoining properties.

If all recommendations contained within this report are implemented and maintained throughout the structure's life, the proposed Class 1a dwelling, designed for a fifty-year asset life in accordance with BCA 2022, can achieve a tolerable level of flood risk. This means the expected flood behaviour is manageable, and the structure can perform safely under the assessed design conditions without unacceptable impacts to property or occupant safety.

5. Tasmanian Planning Scheme Summary

The following tables summarise the proposed development's response to the applicable Flood-Prone Areas Hazard Code provisions.

Table 6. Tasmanian Planning Scheme - C12.5.1

C12.5.1 Uses within a flood prone hazard area			
Objectives: That a habitable building can achieve and maintain a tolerable risk from flood			
Performance Criteria			
P1.1		P1.1	
A change of use that, converts a non-habitable building to a habitable building, or a use involving a new habitable room within an existing building, within a flood-prone hazard area must have a tolerable risk, having regard to:		Response from flood report	
(a)	the location of the building;	(a)	Proposed residential dwelling extension and new glasshouse including new paved areas and a wall within a lot affected by a shallow overland flood path.
(b)	the advice in a flood hazard report;	(b)	Assuming recommendations of this report are implemented, no additional flood protection measures required for the life expectancy of the building.
(c)	any advice from a state authority, regulated entity or a council;	(c)	N/A
P1.2		P1.2	
A flood hazard report also demonstrates that:		Response from flood report	
(a)	any increase in the level of risk from flood does not require any specific hazard reduction or protection measures;	(a)	The post development modelling indicates no increase in flood risk compared with the pre-development scenario and no material increase in flood depth, velocity, discharge or hazard within the site or on neighbouring land.
(b)	the use can achieve and maintain a tolerable risk from a 1% annual exceedance probability flood event for the intended life of the use without requiring any flood protection measures	(b)	The site of the proposed development is generally subject to H1 flood hazard, with localised H2 hazard near the northwestern boundary corner. The modelling indicates that the proposed use can achieve and maintain a tolerable level of flood risk during the 1% AEP climate change 2100 event over the intended life of the dwelling.

Table 7. Tasmanian Planning Scheme - C12.6.1

C12.6.1 Building and works within a flood prone area			
Objective: (a) building and works within a flood-prone hazard area can achieve and maintain a tolerable risk from flood; and, (b) buildings and works do not increase the risk from flood to adjacent land and public infrastructure.			
Performance Criteria			
P1.1		P1.1	
Buildings and works within a flood-prone hazard area must achieve and maintain a tolerable risk from a flood, having regard to:		Response from flood report	
(a)	the type, form, scale and intended duration of the development;	(a)	Proposed residential dwelling extension and new glasshouse including new paved areas and a solid landscaping wall.
(b)	whether any increase in the level of risk from flood requires any specific hazard reduction or protection measures;	(b)	No increase in risk following construction of the new building areas and other works, therefore, no requirement to provide hazard reduction protection measures.
(c)	any advice from a State authority, regulated entity or a council; and	(c)	N/A
(d)	the advice contained in a flood hazard report.	(d)	Flood report and recommendations provided within.
Performance Criteria			
P1.2		P1.2	
A flood hazard report also demonstrates that the building and works:		Response from Flood Report	
(a)	do not cause or contribute to flood on the site, on adjacent land or public infrastructure; and	(a)	No significant increase in the level of risk from proposed development.
(b)	can achieve and maintain a tolerable risk from a 1% annual exceedance probability flood event for the intended life of the use without requiring any flood protection measures.	(b)	The site of the proposed extension is generally subject to H1 flood hazard, with localised H2 hazard near the northern western boundary corner. The proposed development can achieve and maintain a tolerable level of flood risk during the 1% AEP climate change 2100 event over the intended life of the dwelling.

6. Conclusion

This assessment has been undertaken with consideration of the Flood-Prone Areas Hazard Code provisions of the Tasmanian Planning Scheme. The assessment compares the pre-development condition with the post-development condition, including the proposed residential dwelling extension, new glasshouse, paved areas and wall under the 1% AEP climate change 2100 event.

The hydraulic modelling indicates that the proposed development results in no material change to flood behaviour within the site or on neighbouring lots. Flood depths, velocities and hazard outcomes remain broadly consistent between the pre-development and post-development scenarios. The broader overland flow behaviour also remains consistent with the existing condition, with runoff originating from the south, entering the site along the southeastern boundary and continuing through the central portions of the lot towards the northwestern corner.

Hazard mapping indicates that the subject site remains predominantly within the H1 hazard band, with localised H2 hazard classification occurring near the northwestern corner in the same location for both pre- and post- development scenarios. This localised hazard is associated with ponding against the existing boundary fence and local topography, rather than a material change caused by the proposed development.

Subject to the recommendations outlined within this report, including maintaining the southern to northwest overland flow path and ensuring that the proposed building areas, walls, paved areas and grated trench do not redirect runoff onto adjoining land, the proposed development is considered capable of achieving and maintaining a tolerable level of flood risk over its intended design life and is consistent with the relevant requirements of the Tasmanian Planning Scheme.

7. Recommendations

Flüssig Engineers therefore recommends the following engineering design be adopted for the development and future use to ensure the works meets the Flood Prone Areas Hazard Code:

1. A minimum 200 mm deep, 200 mm wide grated trench drain is to be provided immediately before the proposed entrance and connected to the existing stormwater system.
2. The proposed paved areas are to be graded at a minimum 2.5% fall away from the building, to manage localised surface runoff and minimise ponding adjacent to the building, with runoff directed towards the internal stormwater infrastructure.
3. Any material change to the assessed development, including changes to building layout, finished surface levels, grading, earthworks or additional structures within the mapped flood extent, may require further flood assessment.
4. Future use of areas affected by flooding is to remain consistent with the applicable flood hazard classifications identified in this report.

8. Limitations

Flüssig Engineers was engaged by **Dock4 Architects**, to conduct a to undertake a site-specific flood assessment for the property located at 21 Derwent Avenue, Geilston Bay in accordance with C12 Flood Prone Areas Hazard Code of the Tasmanian Planning Scheme.

The results, findings, and interpretations contained in this report are based on the existing site conditions, available LiDAR surface data, hydraulic modelling, and other third-party information provided to Flüssig Engineers. Should any aspect of the site, catchment, or proposed development design change, including modifications to ground levels, drainage patterns, or surrounding infrastructure, the flood behaviour and associated risks may also change.

This assessment has been undertaken based on the development layout and indicative finished surface levels available at the time of assessment and does not constitute detailed civil design. Material changes to the proposed layout, earthworks, finished levels or drainage may alter flood behaviour and require further assessment.

Flüssig Engineers accepts no liability for localised surface water ingress where the recommended drainage and grading measures are not installed, maintained and operational

This report must be read and used in its entirety. It may not be quoted, reproduced, or relied upon in part or for any purpose other than that expressly stated within, unless prior written consent is obtained from Flüssig Engineers.

Flüssig Engineers accepts no responsibility or liability for errors or inaccuracies arising from information supplied by external sources, third-party consultants, or other data providers used in preparing this report. The outcomes and conclusions presented herein are valid only for the conditions and assumptions explicitly described in this document.

9. References

- Australian Disaster Resilience Guideline 7-3: Technical flood risk management guideline: Flood hazard, 2014, Australian Institute for Disaster Resilience CC BY-NC
- Austroads 2013, Guide to Road Design Part 5: Drainage-General and Hydrology Considerations
- Ball J, Babister M, Nathan R, Weeks W, Weinmann E, Retallick M, Testoni I, (Editors), 2019, Australian Rainfall and Runoff: A Guide to Flood Estimation, Commonwealth of Australia
- Grose, M. R., Barnes-Keoghan, I., Corney, S. P., White, C. J., Holz, G. K., Bennett, J., & Bindoff, N. L. (2010). Climate Futures for Tasmania: General Climate Impacts Technical Report.
- T.A. Remenyi, N. Earl, P.T. Love, D.A. Rollins, R.M.B. Harris, 2020, Climate Change Information for Decision Making –Climate Futures Programme, Discipline of Geography & Spatial Sciences, University of Tasmania.
- Climate change impacts On Clarence coastal areas Clarence City Council. (2008). <https://www.ccc.tas.gov.au/wp-content/uploads/2018/10/Climate-change-impacts-on-Clarence-coastal-areas-Final-Report-April-2009.pdf>
- Department of Climate Change, Energy, the Environment and Water, 2022, *Guidance on Climate Resilient Flood Risk Management*, Australian Government

10. Appendices

Appendix A Flood Maps

PRE 1% AEP + CC @ 2100



Legend

- 21 Derwent Avenue
- Boundary Lines
- Existing Fences
- Site Area
- Existing Building Areas
- Existing Driveway
- Existing Walls

PRE 1% AEP + CC @2100

Depth (m)

- <= 0.03
- 0.03 - 0.05
- 0.05 - 0.10
- 0.10 - 0.30
- 0.30 - 0.60
- 0.60 - 0.80
- 0.80 - 1.00
- 1.00 - 1.50
- > 1.50



0 9 18 m
meters



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Hobart, 7000, TASMANIA

PRE 1% AEP + CC @ 2100



Legend

- 21 Derwent Avenue
- Boundary Lines
- Existing Fences
- Site Area
- Existing Building Areas
- Existing Driveway
- Existing Walls

PRE 1% AEP + CC @2100

Velocity (m/s)

- <= 0.50
- 0.50 - 1.00
- 1.00 - 1.50
- 1.50 - 2.00
- > 2.00



0 9 18 m
meters



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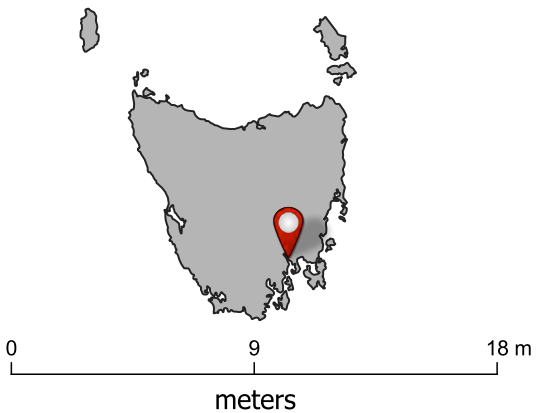
Legend

- 21 Derwent Avenue
- Boundary Lines
- Existing Fences
- Site Area
- Existing Building Areas
- Existing Driveway
- Existing Walls

PRE 1% AEP + CC @2100

Hazard

- H1
- H2
- H3
- H4
- H5
- H6



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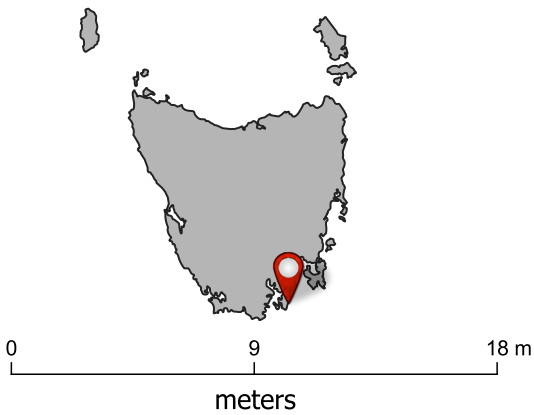
Legend

- 21 Derwent Avenue
- Boundary Lines
- Existing Fences
- Site Area
- Retained Building Areas
- Retained Driveway
- Retained Walls
- Proposed Building Areas
- Proposed Paved Areas
- Proposed Wall
- Proposed Grated Trench

POST 1% AEP + CC @2100

Depth (m)

- <= 0.03
- 0.03 - 0.05
- 0.05 - 0.10
- 0.10 - 0.30
- 0.30 - 0.60
- 0.60 - 0.80
- 0.80 - 1.00
- 1.00 - 1.50
- > 1.50



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Legend

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- Proposed Wall
- Proposed Grated Trench

POST 1% AEP + CC @2100

Velocity (m/s)

- ≤ 0.50
- 0.50 - 1.00
- 1.00 - 1.50
- 1.50 - 2.00
- > 2.00



0 9 18 m
meters



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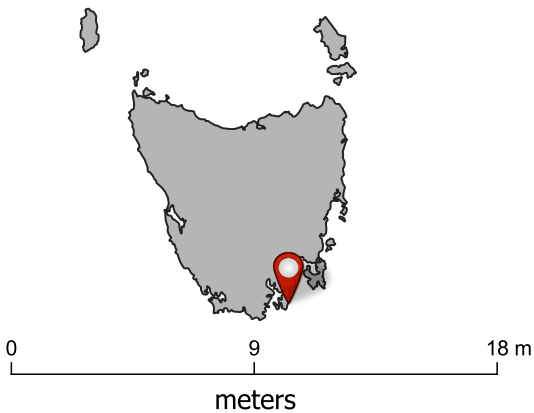
Legend

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POST 1% AEP + CC @2100

Hazard

- H1
- H2
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Richard Loney
Dock4 Pty Ltd
Level 1, 27B Hunter St
HOBART, TAS 7000

06 July 2026

Attention: Ryan Peterson, Planner
Application: PDPLANPMTD-2026/062275
Property: 21 Derwent Avenue, Geilston Bay
Applicant: Dock4 Architects

Dear Ryan,

We refer to Council's request for further information dated 3 July 2026.

Please find below our response to each matter raised, together with the accompanying amended architectural drawings and supporting documentation.

1. General Residential Zone — Clause 8.4.2

Masonry fireplace and thermal masonry wall

The revised drawings show a **4 m high masonry fireplace** and an associated **2.4 m high thermal masonry wall** near the western/north-western boundary. The fireplace and wall form part of the proposed external courtyard and productive garden area.

Proposed performance response

The proposed masonry fireplace and thermal masonry wall are considered to satisfy the applicable Performance Criteria for the following reasons:

(a) Existing and proposed buildings on the site

The fireplace and thermal masonry wall are detached from the principal dwelling and are substantially lower and smaller in scale than the existing house. They are located within the landscaped western portion of the site and form part of a broader external courtyard, orchard and glasshouse arrangement.

The structures do not increase the apparent bulk of the existing dwelling when viewed from adjoining residential properties or the public realm. The masonry elements read as landscape and garden structures rather than an extension of the principal building mass.

(b) Topography of the site

The property has a pronounced slope, and the proposed structures are located within the lower western portion of the site. The existing topography, established landscaping, boundary treatment and separation from adjoining dwellings reduce the apparent height and visual prominence of the structures.

The fireplace is a narrow vertical element rather than a broad building wall. Its limited footprint substantially reduces its effect compared with a conventional building mass of equivalent height.

(c) Amenity of adjoining properties

The proposal will not cause an unreasonable loss of amenity to adjoining properties because:

- the structures have limited bulk and footprint;
- the fireplace is a narrow vertical element now reduced in height to 4m and moved away from the boundary.
- the 2.4 m masonry wall is associated with the external courtyard and productive garden;
- existing boundary fencing and vegetation provide screening along with a 600mm setback from the boundary.
- the structures do not contain windows or habitable spaces capable of overlooking adjoining properties;
- their location and orientation minimise unreasonable visual impact;
- the proposal will not cause unreasonable overshadowing of adjoining habitable rooms or principal private open space.

The structures therefore represent a site-responsive solution that provides reasonable privacy and functionality for the subject property without causing an unreasonable impact on adjoining residential amenity.

Flood overlay and exemption assessment

The amended architectural drawings show the extent of the Flood-Prone Hazard Area overlay affecting the property and identify all existing and proposed buildings and works within the mapped area

Existing site coverage within flood-prone hazard area: **395m²**

Proposed site coverage within flood-prone hazard area: **380m²**

Net increase in site coverage: **-15 m²** **This reduction has been achieved due to the removal of paved areas in the flood prone area.**

Cut, fill and regrading

The amended plans identify all cut, fill, retaining structures and regrading associated with the development. Earthworks have been limited to those necessary to accommodate the proposed, patio, courtyard works. Refer to Drawings 2.03

3. Local Historic Heritage Code

Heritage design response

The proposal has been designed to retain the principal heritage building and maintain its prominence and legibility.

New work is generally positioned to the side and rear of the principal dwelling and uses a contemporary architectural language to distinguish new fabric from the historic building, it's unlikely that the new works could be viewed from the street frontage.

C6.6.1 — Demolition

The proposed demolition is limited and utilities existing opens improving access and the connection of the new extension.

Importantly, the drawings state that removed sandstone is to be retained, cleaned, stored on site and reused.

Demolition has been limited to fabric necessary to facilitate the adaptive reuse and continued occupation of the dwelling. The principal heritage building, primary elevations, roof form and overall architectural character are retained.

Where existing sandstone is required to be removed, it will be carefully salvaged, cleaned, stored on site and reused within the development.

The proposed demolition does not remove the principal heritage characteristics of the place and enables the ongoing functional use and conservation of the property.

C6.6.3 — Height and bulk

The new extension is substantially subordinate to the existing dwelling in height and visual mass.

Its low roof form sits below the dominant roof form of the heritage building, ensuring that the original dwelling remains the principal built element on the site.

The extensive use of glazing reduces the perceived solidity and visual bulk of the addition and provides a clear distinction between the historic masonry building and contemporary new work.

The elevations support this approach: the existing pitched roof remains dominant, while the new extension is lower and visually lightweight.

C6.6.4 — Siting

The new work has been positioned predominantly to the side and rear of the principal heritage building to retain the established presentation and legibility of the original dwelling.

The siting maintains the principal heritage building as the dominant element when viewed from the public realm. The additions respond to the existing topography and established pattern of development on the property.

C6.6.7 — Building alterations

Alterations to the existing building have been designed to retain the principal form, scale and material character of the heritage place.

New work is deliberately contemporary and distinguishable from the historic fabric rather than attempting to replicate the original building.

The junction between old and new is visually legible, and the lightweight glazed character of the extension allows the original masonry building to remain clearly identifiable.

C6.6.8 — Outbuildings and structures

The proposed glasshouse, pergola, fireplace and thermal masonry wall are located within the secondary garden areas of the property and are subordinate to the principal heritage building.

The glasshouse and pergola are lightweight structures with a high degree of visual transparency. Their scale, form and siting ensure they are read as garden structures rather than competing buildings.

The fireplace and thermal masonry wall are landscape elements associated with the courtyard and productive garden. Their limited footprint and location away from the principal heritage façade ensure that the heritage building remains the dominant built form.

Existing Street Frontage imagery from Derwent Avenue





Existing Street Frontage imagery from Sun Haven Avenue





Proposed Street Frontage imagery from Derwent Avenue.



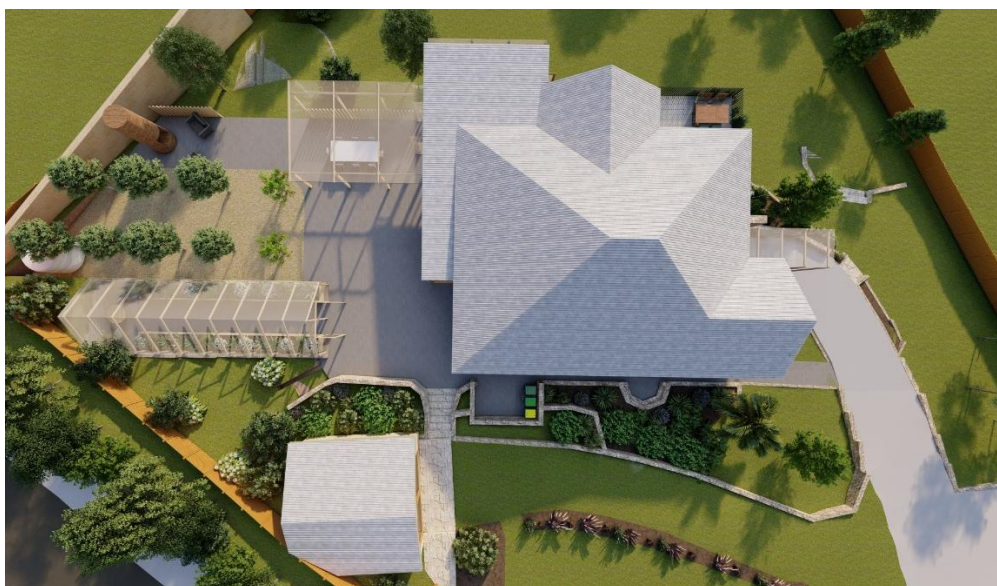
Proposed Street Frontage imagery from Derwent Avenue.



Proposed Street Frontage imagery from Derwent Avenue.



1. **western garden looking toward the extension showing the transparency of the proposed extension** and how the heritage building façade still is visible and complete.



2. courtyard showing the relationship between the existing dwelling, new glazed extension, pergola, glasshouse and masonry structures and how the extension isn't visible from the street.

4. Stormwater and Council Asset Management

Suggested written response

A Stormwater Management Plan has been prepared showing all existing and proposed stormwater infrastructure, roof drainage, downpipes, surface drainage, water storage and the existing lawful point of discharge.

Stormwater generated by the additional roofed and impervious areas will be collected and conveyed through the on-site drainage system to the existing lawful point of discharge.

Surface levels and drainage have been designed to prevent uncontrolled runoff onto adjoining properties. The proposed development will not redirect or concentrate stormwater onto neighbouring land or adversely affect Council infrastructure.

Refer to Drawing 1.05.01 and the accompanying stormwater documentation.

Sincerely,

Richard Loney
Dock4 Pty Ltd

A handwritten signature in black ink, appearing to be 'Richard Loney', written over a horizontal line.